BrailleNote mPower BT

USER GUIDE

V7.2

11 Mary Muller Drive
P.O. Box 3044, Christchurch, New Zealand.
Telephone +64 3 3844555. Fax +64 3 3844933
E-mail: info@humanware.com
World Wide Web: http://www.humanware.com

P/N NT293

Corporate Headquarters

HumanWare Limited
11 Mary Muller Drive, P.O. Box 3044
Christchurch, New Zealand

Phone: +64 3 384 4555
Fax: +64 3 384 4933
e-mail: info@humanware.com
Web: www.humanware.com

North America

175 Mason Circle
Concord, CA 94520, USA

Phone: (800) 722 3393
Fax: (925) 681 4630
e-mail: us.sales@humanware.com

1030 René-Lévesque, Drummondville,
Québec, CANADA

Phone: 1-888-723 7273
Fax: (819) 471 4828
e-mail: ca.sales@humanware.com

Europe

Russell Smith House
2 Bullmatt Business Centre
Northampton Road, Rushden, Northamptonshire NN10 6AR
United Kingdom

Phone: 01933 415800
Fax: 01933 411209
e-mail: eu.sales@humanware.com

Bredaseweg 108a, 4914 NS Oosterhout
The Netherlands

Phone: 31 162 437 910
Fax: 31 162 437 904

Sjouddev. 8, 35246 Växjö
Sweden

Phone: 46 470 764 490
Fax: 46 470 711 088

Australia Asia

Suite 2, 7-11 Railway Street, P O Box 944, Baulkham Hills
NSW 2153, Australia

Phone: (02) 9686 2600
Fax: (02) 9686 2855
e-mail: au.sales@humanware.com

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This product complies with the requirements of EMC Directive 89/336/EEC.

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The patent for the touch cursor technology incorporated in the BrailleNote is owned by ALVA BV.

Authorised European Union Representative:

HumanWare
Russell Smith House
2 Bullmatt Business Centre
Northampton Road, Rushden
Northamptonshire NN10 6AR
United Kingdom
phone: +44 (0) 1933 415 800
fax: +44 (0)1933 411 209
e-mail: eu.info@humanware.com
web: www.humanware.com

Susceptibility to Interference.

There may be temporary degradation of the image when the BrailleNote mPower BT is subjected to a strong radio-frequency field, electro-static discharge or transient electrical noise.

FCC Warning.

This equipment generates and uses radio frequency energy and if not installed and used properly, in accordance with the manufacturer's instruction, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B digital device in accordance with Subpart B of Part 15 of FCC Rules and Regulations, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient the receiving antenna.
2. Relocate the equipment with respect to the receiver.
3. Move the equipment away from the receiver.
4. Plug the equipment into a different outlet so that the equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the booklet prepared by the Federal Communication Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4.

Shielded cables and certified Class B peripherals must be used on this product. Using unshielded cables or uncertified peripherals may result in this unit not complying with FCC Rules Part 15. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Notice for Canada.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment regulations.

Modem Information (USA ONLY)

This equipment complies with Part 68 of the FCC rules. Located on the equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN). If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total REN's contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company-provided coin service. Connection to Party Line Service is subject to State Tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact:

HumanWare

175 Mason Circle

Concord CA 94520

Phone 800-722-3393

If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

This equipment uses the following USOC jacks: RJ11C

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightening strikes and other electrical surges.

This equipment is Hearing-Aid Compatible (HAC).

The telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

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1 Getting Started.

Welcome to the BrailleNote mPower BT, an innovative personal productivity system, from HumanWare. The BrailleNote mPower BT incorporates a Braille style keyboard, a choice of 18 or 32 cell Braille display, high quality responsive speech and a suite of powerful applications running under the Windows CE operating system, all packaged into a truly portable system. This User Guide tells you all about them.

Note: For ease of reading, the BrailleNote mPower BT will be referred to as BrailleNote BT throughout most of this user guide.

1.1 Equipment Checklist.

Carefully unpack your BrailleNote BT. Save the box and packing materials for future use. Your BrailleNote BT package comprises the following items:

BrailleNote mPower BT;

AC adapter;

Slim line carrying case;

Earphones;

Modem data cable;

Serial communications cable;

9 to 25 pin cable adapter;

Audio CD containing a "Getting Started Tutorial;"

Getting Started Guide in embossed Braille;

Command summary in ink-print;

PC software for BrailleNote Family on CD-ROM.

Your BrailleNote BT may also include a modem cable adapter if you live in the UK, Australia or New Zealand.

1.1.1 Optional items include:

BrailleNote GPS.

Braille Manual.

Multilingual – add on languages including french, german and spanish.

Software Maintenance agreements.

1.2 General Features.

The BrailleNote BT is a compact portable Personal Organizer with an ergonomic Braille keyboard, and a Braille display. The Braille display may be either 18 or 32 cells with each cell comprising 8 dots, allowing for both the display of 6 dot and 8 dot Braille. Each cell of the Braille display has an associated cursor routing button. Four thumb keys on the front of the BrailleNote BT supplement the Braille display and provide convenient navigation control.

The BrailleNote BT also has synthesized speech output that can be used in conjunction with the Braille display or on its own.

The BrailleNote BT runs on AC power or batteries. Indications of battery and charger status are displayed on the Braille display and spoken.

The BrailleNote BT runs under the Windows CE 4.2 operating system. It has serial, USB client and host ports and a Bluetooth transceiver as well as a high-speed infrared port. The BrailleNote BT has 128MB of flash memory technology to retain information indefinitely even if the batteries run flat.

A Type 2 CompactFlash slot and a Type 2 PC card slot allow for additional storage and LAN and/or wireless Network options. The Secure Digital (SD) card slot allows for another 1 Gigabyte of memory, and the USB host port will take a range of memory devices.

1.3 Software Features.

A multi-purpose program, called **KeySoft,** running under the Windows CE operating system, is especially designed for people with a visual impairment. KeySoft provides the following functions:

A word processor called **KeyWord** that is powerful yet surprisingly simple to learn. KeyWord has most of the features of an office word processor, including unlimited text insertion, search and replace, indents, clipboard operations, spell check and so on. It can even directly import and export the popular Microsoft Word format documents.

An e-mail program called **KeyMail** that lets you send and receive electronic mail. **KeyMail** works using a standard e-mail connection. You can also send and receive attachments with your e-mail.

An internet browser called **KeyWeb**, that allows you to search and use the world wide web and also read locally stored html documents.

A **Media player** that plays a range of audio format files and allows you to record and play back memos. It also provides you with an FM Radio that can be automatically tuned and have multiple stations preset.

A calendar, scheduler and planner called **KeyPlan**. Your entries may include alarms that sound even if the BrailleNote BT is switched off.

An address list manager called **KeyList** that sorts your entries and allows flexible searching. Addresses can be copied into letters and e-mail.

A synchronization Tool called **KeySync** that works in conjunction with KeyPlan and KeyList to keep their records up to date with MS Outlook on a PC.

A 10 digit scientific calculator called **KeyPlus.** Support is provided for both Nemeth and British Braille mathematics.

A book reader called **KeyBook** that enables you to read Braille books, or books in any standard text format including Microsoft Word format. Books opened in **KeyBook** are protected from accidental editing.

A **Keyboard Learn** function that helps you to learn the keyboard layout and the available quick key functions.

A **File Manager** that allows folder management and files to be copied, renamed, protected, deleted or translated.

A program called **ActiveSync** that allows the BrailleNote BT disk structure to be viewed and managed on a PC running Microsoft Windows.

A Database Manager called **KeyBase** that allows you to develop new databases and modify the definition of existing databases.

An application that enables you to play text adventure games, also known as Interactive Fiction. These games are played using text-based input and output.

A **Remote Synthesizer** mode that allows the BrailleNote BT to act as a speech synthesizer for other computers.

You can switch easily between these KeySoft tasks, which are fully integrated so you can transfer information between them.

KeySoft has both forward and back translators, so a text document can be imported into the BrailleNote BT and translated automatically into an uncontracted (grade 1) or contracted (grade 2) Braille document, and vice versa.

The BrailleNote BT can output its display to a separate visual display. Sighted observers or teachers can use the visual display screen to view what you are doing on the BrailleNote BT. A remote screen viewer based on the Palm hand-held computer is also available.

Information can be transferred to and from another computer such as a PC or Apple Macintosh, or specialized equipment such as a self-contained scanning system.

BrailleNote BT has a one-handed Braille input keyboard mode, providing convenience for people restricted to the use of one hand.

1.3.1 The Windows CE Operating System.

The Windows CE operating system version 4.2 is a modern, powerful operating system designed for small hand-held computers. It supports many technologies such as e-mail, desktop PC synchronization, portable mass storage and more.

1.4 Orientation.

BrailleNote BT is supplied in a slim line wrap around leather carry case. To open the case, lift the flap on the front edge. Fold back the case to allow operation of the BrailleNote BT. On the front edge of the BrailleNote BT you will find 4 buttons called thumb keys. Position the BrailleNote BT with these keys facing you. You can operate the BrailleNote BT while it is in its carry case.

1.5 Thumb Keys.

The four keys facing you are normally operated by your thumbs so we call them "Thumb keys" to differentiate them from the main keyboard keys. They are used in conjunction with the Braille display when reading and navigating menus and lists. They can be operated using your thumbs without moving your fingers from the Braille display discussed in the next section.

The thumb keys can be set up for left-handed or right-handed operation. You can also create a custom thumb key set up to suit your personal preference as discussed in 5.4.15 Thumb Key Set. The factory setting is right-handed.

The thumb keys are named as follows: ***PREVIOUS, BACK, ADVANCE*** and ***NEXT***. In the right-handed configuration the key functions are assigned from left to right in that order with ***PREVIOUS*** on the left and ***NEXT*** on the right. For the left-handed configuration the functions are assigned in the reverse order with ***PREVIOUS*** on the far right and ***NEXT*** on the far left.

1.6 Braille Display.

If you put your thumbs on the thumb keys and drop your fingers, they will be positioned on or about the Braille display. The electronic Braille display comprises either eighteen or thirty-two identical eight dot cells that can display any Braille symbol. Each dot of the Braille display is, in fact, a pin that is controlled electronically. To display a dot the pin is raised and the pin is lowered when there is no dot. When the display is off all dots are raised slightly and are somewhat spongy to touch. The Braille display is able to be refreshed; it can be written and re-written repeatedly.

1.7 Touch Cursor.

If you run your finger up past Braille cell, you will notice that there is a curved, springy strip above it with a raised vertical ridge through the middle. This is the touch cursor button for that Braille cell. It is especially useful when editing a document. In KeyWord, for example, when you press a touch cursor button, the cursor moves to that cell. You can then edit the character displaying on that cell, if any. This is discussed in chapter 3.

The touch cursor can also be used to select an item from a menu or list.

1.8 Keyboard.

On the top surface of the BrailleNote BT you will find the Braille keyboard. It is like a Braille writer, with eight keys and a space bar. The two extra keys on the extreme left and right are for your little fingers. The left-hand key is called ***BACKSPACE***, or sometimes ***dot 7***, and the right-hand key is called ***ENTER***, or ***dot 8***. The single space bar is in the usual place.

In this User Guide, key presses are described in the following way. The instruction:

Press H means that you should press the dots for the letter ***H***, which are ***1, 2,*** and ***5***, then release them. This instruction may also be presented as:

Press ***dots 1-2-5***.

The order in which you press the keys does not matter. The character is typed when the keys are released.

You will also encounter instructions such as: "press ***SPACE with H***". This means that you press the space bar as well as ***dots 1-2-5***, and then release them. This may seem very strange at first, because you are probably accustomed to pressing the space bar by itself to create a space between words. In KeySoft, the space bar pressed by itself produces a space in the same way but in addition, it is used in combination with other keys to obtain many KeySoft commands. Similarly, the ***BACKSPACE*** and ***ENTER*** keys can be used on their own or in combination with other keys.

1.9 Power Switch.

From the front edge of your BrailleNote BT, move your hand along the left side of the case and towards the rear and you will come upon a rocker type power switch surrounded by a raised rectangular frame. To switch the BrailleNote BT on, press the power switch near the front of the rocker. A power on message is displayed, the content of which will depend on where the BrailleNote BT was when you last switched off. To switch off, press the power switch near the rear of the rocker.

Every time you switch the BrailleNote BT on, its operation resumes in exactly the same place as it was when you switched it off. If you are not sure if the BrailleNote BT is on or off, feel the position of the power switch.

If you don't use the BrailleNote BT for approximately 10 minutes it will enter hibernate mode, where the power drawn from the battery is the same as if the unit was switched off. Pressing any key will end the hibernate mode, but it is recommended that you momentarily press ***BACKSPACE with ENTER*** to end the hibernate mode. This will avoid the possibility of inserting unwanted characters if a document was open when the unit entered the hibernate mode.

If your BrailleNote BT displays "Battery low," or does not come to life, you should plug in the AC adapter. The power socket is located at the rear of the BrailleNote BT on the extreme left. Locate the socket then the small plug on the end of the AC adapter cable. Plug the small AC adapter plug into the socket. Plug the AC adapter into a wall socket. The message "AC adapter on" is displayed to confirm battery charging is in progress.

If the BrailleNote BT does not start, wait 30 seconds or so and try switching it off then on again. If this does not work then press the Reset button. The BrailleNote BT immediately beeps to confirm that it has been reset. After about 10 seconds, KeySoft displays a sign on message and resumes from the Main Menu.

1.9.1 Resetting the BrailleNote BT.

The Reset button is located just behind the Power switch. The Reset button is recessed to avoid accidental operation, so you may need to use a pointed object to press it.

Details of when and how to reset the BrailleNote BT are mentioned in context throughout this user guide. There is also a detailed description of each type of reset in Appendix C Troubleshooting, as well as reference to each type under Reset Topics in the online index.

1.10 Speech.

You can listen to the BrailleNote BT using either the built-in loudspeaker at the center back of the BrailleNote BT or headphones. If headphones are plugged in, the loudspeaker is automatically disabled.

The headphone socket is on the left hand side of the unit, the first one you encounter as you slide your hand from front to back.

The speech volume, speed and pitch can all be controlled by keyboard commands. These commands are described fully in 1.15.6 Setting Speech Volume Speed and Pitch, but nevertheless it is important to know how to control the volume of the speech right now.

To increase the volume press ***ENTER with dot 4*** To gradually increase the volume you can hold down the ***ENTER*** key and tap the ***dot 4*** key repeatedly.

To decrease the volume press ***ENTER with dot 1***.

The speech supplements the Braille display. You might prefer the Braille display when editing text, reading detailed material or accessing notes during meetings but prefer speech for reading longer documents such as novels when reading for pleasure. We will explain how to turn off the speech or the Braille display later.

1.11 Earphones.

BrailleNote BT comes with a set of earphones.

To use the earphones, adjust the volume to a comfortable level after fitting the earphones and while the BrailleNote BT is speaking. The BrailleNote BT will also work with a wide range of other popular ear- and headphone styles.

1.12 KeySoft Concepts.

Learning to use the BrailleNote BT is easy because the User Interface is very consistent. Similar operations in different parts of KeySoft are carried out in similar ways. This section covers the concepts behind the way KeySoft operates.

1.12.1 Help Messages.

At any point in KeySoft you can get information about the options that are available. To do this, press ***SPACE with H***. KeySoft help is context sensitive, which means that you are only given help relevant to your current situation. Remember to press ***SPACE with H*** for Help when you need it. It does not affect your work in any way, and after you have finished reading the Help message, you are returned to the point at which you selected Help.

When the help system is being used to review a list of available commands, pressing ***ENTER*** on the displayed command will cause that command to be executed.

To read a longer Help message on the Braille display, use the ***ADVANCE*** thumb key and to review the message use the ***BACK*** thumb key.

The Braille grade used when displaying text can be selected. The factory setting is Grade 2 Braille. You can change the setting as described in 5.4.6 Preferred Reading Grade.

1.12.2 Prompts.

Whenever KeySoft requires input from you, a brief message called a prompt is displayed. The prompt indicates what input is required from you. If you are unsure how to respond, press ***SPACE with H*** for help. Where possible, KeySoft offers reasonable suggested choices.

BrailleNote BT provides prompts in Braille, speech or both together. The factory set up turns on both the Braille display and speech and the following discussion assumes that both are on. You can read the Braille display or listen to the voice or do both. When this User Guide states that the BrailleNote BT "displays a message" it is referring to both the message appearing on the Braille display and being spoken. You will notice that the prompt that appears on the Braille display is often in shorter form than the announced version, which is the one quoted in this User Guide. For example, the BrailleNote BT will announce, "Folder name? Press ***ENTER*** for General" while it displays, "Folder name? General".

You can turn off one or other of the outputs; refer to 1.15.1 Turning the Braille Display On or Off and 1.15.2 Turning Speech On or Off.

1.12.3 Reading Prompts on the Braille Display.

Generally the prompts displayed in Braille are identical to what is spoken. Sometimes there are slight differences because what is appropriate in speech does not need to be displayed in Braille. Also, because the Braille display has a limited length, Braille output is limited to the number of whole words that fit on the display. If a prompt is longer than the Braille display or you are reading a long passage of Braille, you can scroll the Braille display to see the next group of words by pressing the ***ADVANCE*** thumb key. In the following discussion it is assumed that you will scroll to read the full prompt as necessary. Remember you can also scroll back to see the previous display by pressing the ***BACK*** thumb key**.**

To help reading longer messages and prompts you can press ***PREVIOUS*** together with ***BACK*** to move the Braille display one word to the left. Pressing ***PREVIOUS*** together with ***ADVANCE*** moves the Braille display one word to the right.

You can return to the previous prompt by pressing ***PREVIOUS*** at any time.

1.12.4 Repeating Spoken Prompts.

If you miss hearing a prompt when it is spoken the first time, don't worry. You can listen to it again by pressing ***SPACE with R***.

1.12.5 Automatic Cut-off of Prompts.

KeySoft gives detailed spoken prompts and messages to help you learn the system. To prevent these messages slowing down an experienced user, speech is cut off automatically by the next keystroke.

1.12.6 Menus.

KeySoft uses a series of menus to provide a quick and easy way of performing many complex functions. Each menu contains a list of options from which to choose. For example, the Main Menu allows you to select the Word Processor, Planner, Address List, and so on. The selection of items is described in 1.13.3 Reviewing the Main Menu.

Many of the more frequently used functions are also available via short-cut key combinations. These are mentioned in context throughout this user guide, as well as being listed in the Command Summary.

1.12.7 Exiting the Current Activity.

Another concept used throughout KeySoft is that of exiting what you are doing and taking one step back to the previous option point.

You can do this by pressing ***SPACE with E*** particularly while using the keyboard, or the ***PREVIOUS*** thumb key particularly when you are using the Braille display.

1.12.8 Instant Access.

You can switch from one KeySoft task to another with a simple key sequence. For example, you can switch from the Word Processor to the Planner, and then return to the same point in your document. For information on how to do this, refer to 1.16 Switching Between Tasks.

1.12.9 Braille Documents.

KeySoft assumes that you want to create Braille documents, so that is the suggested choice.

You also have the option of generating text documents directly.

1.13 The KeySoft Menus.

1.13.1 Structure.

The entry point to KeySoft is the Main Menu, which contains 17 items. You can display each of these items in turn, and select one.

When you have done this, you are generally presented with another menu. The system may extend to 3 or 4 levels of sub-menu. This structure is an important aspect of KeySoft. Items are grouped together for easy location, so a huge range of functions can be found from one starting point, the Main Menu.

For example, if you start at the Main Menu and choose the Word processor option, you are presented with the KeyWord menu. This contains the following items: Create a document, Open a document, Emboss a document, Print a document, and Setup options. These all relate to word-processing.

If you choose to Emboss a document, you are presented with a further choice of Embossing, or Setting up the embosser, and so on.

Now let's see how the Main Menu works.

1.13.2 Reading a List or Menu.

You can read through any menu or list using only the thumb keys and Braille display. Consequently, you can keep your hands on the Braille display avoiding the need to go back and forwards between the Braille display and keyboard.

The thumb keys perform the following functions:

To step ***forwards*** through a menu - press the ***ADVANCE*** thumb key. Menu items are displayed one at a time.

To step ***back*** through a menu - press the ***BACK*** thumb key**.** Menu items are displayed one at a time in reverse order.

To ***select*** a menu item - press the ***NEXT*** thumb key.

To ***exit*** a menu - press the ***PREVIOUS*** thumb key.

1.13.3 Reviewing the Main Menu.

To start with, go to the Main Menu by pressing ***SPACE with dots 1 through to 6***. KeySoft displays: "Main Menu."

To display the first item of the Main Menu, press ***SPACE or ADVANCE*** . KeySoft displays: "Word processor."

You could select the word processor at this point, but our present object is to review all the items in the Main Menu. So, press ***SPACE or ADVANCE*** repeatedly, pausing to read and listen to each of the 17 options in the menu, which are:

Word Processor;

Planner;

Address List;

E-mail;

Internet;

Media Center, which includes the Media Player, audio recording options and the FM Radio;

Book Reader;

Scientific Calculator;

Database Manager;

Games;

File Manager, which allows files to be copied, translated, etc;

Utilities, which is a group of general purpose functions;

Terminal for Screen Reader, which allows the BrailleNote BT to act as a Braille display for other computers;

Remote Synthesizer, which makes the BrailleNote BT act as a speech synthesizer for other computers;

Keyboard Learn, which helps you to learn the Braille keyboard functions;

For Information press ***SPACE with I***, which provides information about the BrailleNote BT such as the serial number and software version**.**

For the Options Menu, press ***SPACE with O***, anywhere, which is a reminder of how to access the Options Menu.

The last item is: "End of Menu." Having stepped forward along the menu by pressing ***SPACE or ADVANCE*** repeatedly, you can step back by pressing ***BACKSPACE or BACK*** repeatedly.

When using speech, if you don't want to hear a complete announcement, you can cut it off and move to the next item by pressing ***SPACE*** or ***BACKSPACE***. This speech cut-off occurs at all points in KeySoft.

1.13.4 Selecting from the Main Menu.

When KeySoft displays the option you want, press the ***ENTER*** key. The exceptions are Information and Options Menu, which contain directions on how to access them. Don't worry about getting in over your head, because you can always back out of a selection by pressing ***SPACE with E*** for exit on the keyboard.

When you have selected an item from the Main Menu, you are generally presented with another menu, from which you can again select an item. To display a Help message describing your options at any point, press ***SPACE with H***. To return to the previous menu, press ***SPACE with E***. To go directly to the Main Menu, press ***SPACE with dots 1 through to 6***.

1.13.5 Keyboard shortcuts.

As well as moving through the menus an item at a time as described in the previous section, you can take a keyboard shortcut directly to the menu item by typing its first letter. This automatically selects the item, so instead of having to press ***ENTER*** when the item is displayed, KeySoft takes you straight to the action selected when you would have pressed ***ENTER***.

For example, if you were at the Main Menu and you wanted to go to the Word processor, you could press ***W***. Instead of "Word processor", KeySoft will go straight to "KeyWord Menu". Press ***O*** and instead of "Open a Document", KeySoft will go straight to "Folder Name". This is a real time saver.

1.14 A First Experience.

Most people hate reading User Guides. They would much rather just have a go, on the presumption that if the product is any good, it should be obvious how it works.

If that's you, then this is your section. We'll go through two simple demonstrations: in the first we'll create a basic word processor document, and in the second we'll do an addition with the calculator. You should only need the simple commands that have been introduced so far.

If you are not keen on jumping in at the deep end, don't panic. It's not essential to follow these demonstrations, because after this part we'll revert to normal manual mode, and describe in detail all the wonderful things that the BrailleNote BT can do.

1.14.1 Writing a Simple Document.

The aim of this first exercise is to write a very simple document with the word processor.

To reach a common starting point, go to the Main Menu by pressing ***SPACE with dots 1 through to 6***. Your BrailleNote BT displays: "Main menu."

To get to the word processor, press ***W***. Your BrailleNote BT displays: "KeyWord menu."

To Create a document, press ***C***, for Create, and your BrailleNote BT displays: "Folder name? General,"

KeySoft is asking which part of its filing system you want to use, and is offering the "General" folder. This is fine for now, so follow the prompt and press ***ENTER***. KeySoft then displays: "Document to create?"

You are being asked to provide a name for the new document, so Braille a name such as: "test." You can do this in Grade 1, as: ‘t e s t’, or in Grade 2 as: ‘t e’ followed by the ‘s t’ sign. A capital sign is optional because KeySoft does not take them into account when finding documents.

When you have typed the name, press ***ENTER***. Your BrailleNote BT displays: "Top of document. Blank."

This means that you have created a new document named “Test,” and the cursor is sitting at the top of it. The Braille display is completely blank.

You are now free to Braille whatever you like. For this demo, just Braille a simple sentence such as: "This is a test of my new BrailleNote BT." You can use Grade 1 or Grade 2 as you wish. Braille the first word and press ***SPACE***. The characters are displayed on the Braille display as you Braille. The cursor, dots 7-8, appears to the right of the last character Brailled. This shows where the next character will be entered. Each word is spoken when the space bar is pressed. Complete your sentence.

That's all we'll write for now. To finish this little exercise, press ***SPACE with E.*** Your BrailleNote BT displays: "KeyWord menu." You are back at the Word processor menu, and your new document has been automatically saved. If you press ***SPACE with E*** again you arrive back where you started, at the Main Menu.

1.14.2 Trying Out the Calculator.

You might also like to try out the Calculator, which you can do without any extensive knowledge of the BrailleNote BT. From the Main Menu, go to the Scientific Calculator by pressing ***S.*** You hear: "KeyPlus. Zero." On the Braille display, just 0, number sign followed by the letter J, is displayed.

This means that the Calculator is ready. If someone has previously used the Calculator and it displays a number other than 0, you can clear it by pressing ***SPACE with dots 3-5-6.***

Both the Nemeth Braille Code for Mathematics and the UK Braille Mathematics Notation are supported. The correct code for your country is automatically selected when you set up your Calculator Braille Language as described in 5.4.11 Computer Braille Language.

Let's try calculating 2 + 3. The BrailleNote BT knows that you are using the Calculator, so you don't need to use any number signs. The numbers 1 through 9 and zero are just the letters A through J. Input the following key sequence without using the ***SPACE*** bar in between entries. First Braille ***2,*** the "plus" operand, then Braille ***3***. Complete the calculation by pressing ***ENTER***. The number 5 will be displayed.

You can review the calculation by pressing the ***PREVIOUS*** and ***NEXT*** thumb keys together. The Braille display will show 2 + 3 = 5. Pressing the ***PREVIOUS*** and ***NEXT*** thumb keys again will return to just displaying the answer. If the speech is on, the speech will mirror the content on the Braille display.

To complete the exercise, press ***SPACE with dots 1 through to 6***, to return to the Main Menu.

1.15 General Functions.

Some useful general functions are available wherever you are in KeySoft. These functions may be accessed from the Options Menu, or often more conveniently via a Quick Command sequence.

The general functions allow you to control the configuration of Time, Date, Braille settings and so on. You could be using the Word processor, or using the Calculator, or reading a menu when you request one of these functions. After display of the requested function you are returned to the place from where you initiated the request.

The Quick Commands typically use the ***SPACE, BACKSPACE*** or ***ENTER*** key in combination with another letter. For example, ***ENTER with T*** displays the current time.

Not all items on the Options Menu have an associated Quick Command key combination.

Pressing ***SPACE with O*** anywhere in KeySoft will access the Options Menu. KeySoft displays: "Options menu." The Options Menu can then be reviewed by pressing the ***SPACE*** and ***BACKSPACE*** keys on the keyboard. The Options Menu comprises a long list of items. Only some of the items are relevant at this point but the complete list is provided so you know what to expect when you read the menu. Where applicable, the equivalent Quick Command is also given.

The Options Menu contains the following items:

Date;	***ENTER with D***.
Time Options;	For Time press ***ENTER with T***.
	For Stopwatch press ***ENTER with W***.

Grade of Braille for Keyboard entry;

Braille Display Options;

Keyboard settings;	***BACKSPACE with ENTER with K***.
Review voice;	***BACKSPACE with ENTER with R***.

Connectivity;

Visual display;

Next appointment;	***ENTER with N***.

Power and Battery status;

User Guide; ***BACKSPACE with ENTER with H***.

Insertion; ***ENTER with I***.

Spell. Repeat and spell; ***ENTER with S***.

Hear punctuation. Repeat with maximum punctuation; ***ENTER with H***.

Move to another task; ***SPACE with dots 2-3-5***.

and finally the speech settings, a list of 6 items that tell you how to adjust the volume, speed and pitch of KeySoft's speech, and the 2 media player volume commands complete the Options menu.

The "Insertion" item is displayed only when it is appropriate to insert such things as the date or time such as in KeyWord.

To select an item, move through the menu until the required item is displayed, and then press ***ENTER***. Alternatively, from anywhere in the Options menu, press the initial letter of your choice. This does not apply to the speech settings, which are discussed in 1.15.6 Setting Speech Volume Speed and Pitch.

We will now deal with some of the more commonly used items in the Options menu. All the functions in the Options Menu are detailed in Chapter 5.

1.15.1 Turning the Braille Display On or Off.

To turn off the Braille display, hold down the ***NEXT*** thumb key, press ***SPACE***, then release both keys. The same key combination turns the Braille display on.

Note that if the Braille display is turned off when speech is off, speech is forced on. This avoids having both Braille and speech off simultaneously.

The function to turn the Braille display off is also available from the Options Menu, under Braille Display Options.

1.15.2 Turning Speech On or Off.

There are three speech options: Speech On, Speech on Request and Speech Off. If speech is currently on, hold down the ***PREVIOUS*** thumb key, press ***SPACE***, then release both keys to select Speech on Request. KeySoft displays: "Speech on request."

To select the next option, Speech Off, press the same key combination again. KeySoft confirms that speech is off by displaying "Speech off" only on the Braille display. To turn Speech On again, press that key combination again. KeySoft displays: "Speech on."

You are returned to where you started with Speech On.

When the Speech on Request option is selected, KeySoft only speaks when you use a command that is a specific speech command. For example, in KeyWord, the word processor, when you move forward word-by-word using ***SPACE with dot 5***, nothing is spoken. However if you use the dedicated "Speak Word under Cursor" command, ***SPACE with dots 2-5,*** the word under the cursor is spoken.

Note that if speech is turned off when the Braille is off, the Braille display is forced on. This avoids having both Braille and speech off simultaneously.

The function to select Speech On, Speech on Request, or Speech Off is also available from the Options Menu, under Review Voice.

1.15.3 Start-up Braille and Speech Mode.

The BrailleNote BT may be forced to start in one of three modes when it is switched on. You may choose to start with Braille only, speech only, or both Braille and speech.

This feature is very convenient if, for example, you have previously been using both Braille and speech, but you are now attending a meeting and for privacy you wish to start in the Braille only mode.

As you turn on the switch, simply hold down one of the following key combinations:

Speech only: ***dot 2***;

Braille only: ***dot 3***;

Speech and Braille: both ***dots 2 and 3***.

1.15.4 Setting the Keyboard Voice.

The first of these settings determines how KeySoft speaks what you type. Press ***SPACE with O***, then ***K*** for Keyboard. KeySoft displays: "Keyboard voice? Words."

The options are as follows:

To turn off speech altogether, press ***F*** followed by ***ENTER***;

To spell words as they are typed, press ***S*** followed by ***ENTER***;

To speak whole words, press ***W*** followed by ***ENTER***;

To both spell and speak words, press ***B*** followed by ***ENTER***;

Or just press ***ENTER*** to leave the selection unchanged.

The suggested setting is "Words."

You can request help, using ***SPACE with H*** for a reminder of these options.

Three further Keyboard settings are then presented relating to your preferred typing Braille grade, alerting of prompts requiring input of computer Braille and whether you wish to use 6 or 8 dot computer Braille. See 5.5.1 Preferred Keyboard Braille Grade.

To leave the Keyboard Settings, press ***SPACE with E.***

1.15.5 Repeating an Announcement.

As we have already mentioned, you can get KeySoft to say a prompt again by pressing ***SPACE with R*** if you didn't quite catch it. To repeat the prompt with variables such as file names or folder names spelled out, press ***ENTER with S***.

To reveal the most detail, you can repeat the last prompt with full punctuation and spaces. To do this, press ***ENTER with H***.

After either command you are returned to your original place in KeySoft.

1.15.6 Setting Speech Volume Speed and Pitch.

The characteristics of BrailleNote BT's voice can be changed anywhere in KeySoft, as follows:

For higher volume, press ***ENTER with dot 4***;

For lower volume, press ***ENTER with dot 1;***

For faster speech, press ***ENTER with dot 6***;

For slower speech, press ***ENTER with dot 3***;

For higher pitch, press ***ENTER with dot 5;***

For lower pitch, press ***ENTER with dot 2***.

There are 32 volumes, 16 speeds and 16 pitches, and they change one step at each key press. A reminder of the commands is given in the Options Menu, at the end of the list.

1.15.7 Power and Battery Status.

The BrailleNote BT Power & Battery status can be obtained at any time. Press ***SPACE with O,*** then ***P***.

KeySoft displays the battery charge level as a percentage of fully charged, and whether the AC Adapter is On or Off. For more details, refer to 2.1.2 Checking Power Status.

1.16 Switching Between Tasks.

KeySoft allows you to move directly from one KeySoft task to another without returning to the Main Menu. You can switch between the Word processor, Scientific Calculator, Planner, Address List, E-Mail, etc. For example, if you are writing a document and you need an address, you can switch directly to the Address List, look up the address, and then return to the Word processor. You are placed back at the same point in your document.

The following hot keys are available for switching tasks:

To select the Word Processor press ***BACKSPACE with ENTER with W***;

To select the Scientific Calculator press ***BACKSPACE with ENTER with S***;

To select the Database Manager press ***BACKSPACE with ENTER with D***;

To select the Games press ***BACKSPACE with ENTER with G***;

To select the Planner press ***BACKSPACE with ENTER with P***;

To select the Address List press ***BACKSPACE with ENTER with A***;

To select the E-mail system press ***BACKSPACE with ENTER with E***;

To select the Book Reader press ***BACKSPACE with ENTER with B***;

To select the Internet browser, press ***BACKSPACE with ENTER with I***;

To select the Media Player, press ***BACKSPACE with ENTER with M***;

To select the FM Radio, press ***BACKSPACE with ENTER with F***.

There is also a Task menu available. To access this, either:

1. Press ***SPACE with O*** for the Options menu then ***M*** for Move to another task, or
2. Press ***SPACE with dots 2-3-5***.

KeySoft displays: "Task menu."

You can make a selection by either:

1. Review the menu items using ***SPACE or ADVANCE*** and select one by pressing ***NEXT or ENTER***. or,
2. Press the initial letter of the task; for example, ***W*** for Word Processor.

Remember that, if necessary, you can always get back to the Main Menu by pressing ***SPACE with dots 1 through to 6***.

1.17 Pasting Text into a Field.

Are you feeling tired of typing long website addresses, phone numbers that are too hard to remember and complicated addresses?

The ability to copy and paste a line of text , is yet another useful feature of KeySoft. You can easily copy and paste a website address from KeyWord or KeyMail when you encounter the address prompt in KeyWeb. You can also copy and paste phone numbers and addresses from KeyMail or KeyList fields.

To copy and paste a line of text from fields within KeyList, KeyMail and KeyWeb, use the following commands:

Copy to the clipboard: ***BACKSPACE with K***

Paste text into a field: ***BACKSPACE with V***

1.18 Keyboard Assistance.

There are two ways of getting help with keyboard input. The first is available from the Main Menu, and is called "Keyboard Learn." In Keyboard Learn, KeySoft displays the letter or sign of any dot combination that you press and also speaks it, but no further action results. It also displays the function of the thumb keys and key commands that are always available. For example, pressing ***ENTER with T*** will give the response "display the time."

Keyboard Learn is invaluable for familiarizing yourself with the keyboard layout and Quick Commands that are available at any point within KeySoft.

The second mode works in the Word Processor, Web Browser, Scientific Calculator, Planner and Book Reader. It is called Announce Key mode, and can be entered by pressing ***SPACE with W***. In addition to displaying letters and signs, the function of any key or key combination is displayed. For example, in the Word processor, ***SPACE with dot 2*** displays: "Back one word," without causing any further action.

Announce Key mode is helpful for learning the commands available in the selected KeySoft application.

You can exit either mode by pressing ***SPACE with E***.

1.19 One-Handed Mode.

BrailleNote BT provides a one-handed mode for users restricted to the use of one hand for Braille input. To turn on this mode, hold down ***BACKSPACE*** while switching on your BrailleNote BT, and keep holding it down until "One-handed mode" is displayed. This mode stays in effect until it is deliberately turned off.

To type a character in one-handed mode you can press the dots at any time and in any order. When you have pressed all the required dots, press ***SPACE,*** and the character is entered. To enter the letter ***J***, for example, you might press ***dot 2*** first, and then ***dots 4 and 5*** separately or together. After releasing the keys, press ***SPACE***, and ***J*** is entered. To speed input the concluding ***SPACE*** may be performed in conjunction with key input. For example, to enter the letter ***J***, you could press ***dot 2*** first, and then ***dots 4-5*** and the ***SPACE*** bar together.

A command that includes ***SPACE*** can be obtained by pressing ***SPACE*** both before and after the other keys. For example, to return to the Main Menu, press and release ***SPACE***, then press and release dots 1 to 6 in any combination or order, then press and release ***SPACE*** again.

To make a space between words, press ***SPACE*** twice, after pressing ***SPACE*** once to enter the last character typed.

The operation of the thumb keys remains the same as in two-handed mode.

To return to two-handed mode, hold down the ***ENTER*** key while switching on the BrailleNote BT, and keep holding it down until KeySoft starts normally. If one-handed mode is on, the BrailleNote BT will advise this each time it is powered on, and will also advise what to do to return to the standard two-handed mode.

1.20 Saving before Switching off.

Before you switch off your BrailleNote BT, it is good practice to return to the Main Menu first. This ensures your current work is saved. If you don't do this, and subsequently the battery becomes discharged, the current version of your work will be lost. That's fairly unlikely, but it's good insurance for the cost of one keystroke.

If you have storage cards and/or an external memory drive , you should consider backing up your work regularly. It's a common thing to do with any computer. It minimizes the amount of data you could lose should a computer or software "crash" occur. You can back up all your working files by using the Back up function in the Utilities menu, as described in 15.1.1 Backing Up.

1.21 Setting Time and Date.

When you first get your BrailleNote BT you should check that the time, date and Time Zone settings are correctly set. By selecting your correct time zone, you can have the BrailleNote BT's clock adjust automatically when you select whether you are in or out of daylight saving time.

If the BrailleNote BT's battery goes completely flat, the system will advise that the time and date need to be set when the machine is restarted.

To display the current day and date, press ***ENTER with D***.

To display the current time, press ***ENTER with T***.

These commands are available from any place within KeySoft. If either the date or the time is incorrect you can set new values and have them displayed in your preferred format from the "Date and Time Set" option in the Utilities Menu.

To set the Date and time, follow this procedure. Remember that on-line help is available at any point by pressing ***SPACE with H***, and that if you wish to leave a displayed value unchanged, just press ***ENTER*** to move onto the next item in the list. You may exit the setup list at any point by pressing ***SPACE with E***.

1. Return to the Main Menu by pressing ***SPACE with dots 1 through to 6.***
2. Press ***U*** to go to the Utilities Menu.
3. Press ***D*** to go to the Date and Time set option.
4. Choose your preferred date format. For USA format where the date is in the form month/day/year press ***S***, or for UK format where the date is in the form day/month/year press ***K***. To save your entry, press ***ENTER***.

5. Choose your preferred time format, 12 or 24 hour. For a 12-hour clock press ***A***, for a 24-hour clock press ***B*** then complete your entry by pressing ***ENTER.***
6. Select your Time Zone. To cycle through the list of time zones, press ***SPACE with dots 3-4.*** Alternatively press the initial letter. Complete your entry by pressing ***ENTER.***
7. In daylight saving time: Press ***Y*** if you are in daylight saving time, or ***N*** if you are not, followed by ***ENTER***.
8. Enter the current time. Press ***SPACE with H*** to display instructions on how to enter the time in the format you have selected.
9. Enter the current date. Press ***SPACE with H*** to display instructions on how to enter the date in the format you have selected.

After setting the time and date you will be returned to the Utilities Menu.

Note: It is possible to set up the time to synchronize every time you use ActiveSync. This is covered in 13.14.7.1 Synchronizing Time in ActiveSync.

1.22 User Settings.

BrailleNote BT provides many user definable options. As you get to know more about how your BrailleNote BT works, you can change the way it behaves to better suit your personal preferences. Your BrailleNote BT supplier will most probably have set the User settings most appropriate to your needs. The following items will be of principal interest:

Speech; volume, rate, and pitch;

Time and date correctly set, and in preferred format;

Keyboard input voice setting; words, characters, or off;

Review or reading voice settings; punctuation settings, numbers or digits;

Braille language; US, UK, or Australian;

Braille grade for keyboard input; grade 1, 2 or computer Braille;

Calculator language Nemeth or UK math;

Computer Braille language; US, UK, or Australian;

Preferred cursor shape on Braille display;

Preferred Braille reading grade;

Computer Braille 6 dot or 8 dot;

thumb key layout;

Spelling checker dictionary language installed;

Address list database installed;

E-mail database installed.

Some of these items have already been covered in this chapter, but for convenience, Appendix A of the User Guide provides additional assistance and, if appropriate, a reference to the relevant section in the User Guide. The next section explains how to use the Electronic User Guide to read a particular section of the user guide. After reading this next section, you could use the Electronic User Guide to read Appendix A, User settings for the BrailleNote BT.

1.23 User Guide.

The User Guide is built into KeySoft, so that you can look it up any time you want. Using either the Table of Contents or the Index to locate a reference, the User Guide will take you directly to the topic you wish to read.

If you wish to read the User Guide like a book rather than look up specific references, simply open the chapter or appendix in the Book Reader like any other book file. You will find the files in the Manuals folder on your KeySoft System Disk.

Alternatively, the entire User Guide is available in several PC friendly formats on the CD-Rom that came with your BrailleNote BT. This gives you the option of working through a chapter trying things out on the BrailleNote BT while reading the user guide on a PC, printing or embossing a copy etc.

The rest of this section concentrates on the on-board User Guide, how to access it and how to use it.

1.23.1 Electronic User Guide.

The text of this user guide is stored in your BrailleNote BT and is available for reference at any time. It is accessed through the Options Menu, or by the quick command ***BACKSPACE with ENTER with H***. You can look up a topic in the Table of Contents or Index, and read that section of the user guide. When you are finished with that section, you can return to the Table of Contents or Index or exit the user guide. You are returned to your original place in KeySoft when you exit.

If you have edited your user guide KeyWord Text files in any way (a practice we do not recommend as it can interfere with the table of contents and index functions) it is important to note that the user guide files are loaded on every reset. This means that to save any edited copies, you should first change the file names so the newly loaded copies do not over write them.

To refer to the User Guide press ***SPACE with O*** for the Options menu, then ***U*** for the User Guide.

If this is the very first time you have accessed the Electronic User Guide your BrailleNote BT displays: "Look up Table of Contents or Index?"

Press ***T*** to select the Table of Contents or ***I*** to select the Index. KeySoft confirms your selection.

If you have accessed the User Guide before, your BrailleNote BT prompts: "Continue reading (reference)?"

where "reference" is the last topic accessed. If you press ***Y*** to continue you are returned to that topic. If you press ***N*** you go to the Table of Contents or Index.

Use the ***SPACE*** or ***BACKSPACE*** to move through the Table of Contents or Index listing, which is in alphabetical order. Press any letter to jump to the items starting with that letter.

Once the desired item has been found, press ***ENTER*** to select it. If the item has sub-indexes, repeat the selection procedure.

Once you have entered the User Guide at a particular place, the following review commands are available for reading the content:

To read from the start of the previous sentence, press ***SPACE with dot 1***;

To read from the start of the current sentence, press ***SPACE with dots 1-4***;

To read from the start of the next sentence, press ***SPACE with dot 4***;

To read from the start of the previous paragraph, press ***SPACE with dots 2-3***;

To read from the start of the current paragraph, press ***SPACE with dots 2-3-5-6***

To read from the start of the next paragraph, press ***SPACE with dots 5-6***;

To skip back one section, press ***SPACE with dots 1-2-3***;

To advance one section, press ***SPACE with dots 4-5-6***;

To go back to the Table of Contents or Index press ***BACKSPACE***;

To exit the User Guide and return to your original place in KeySoft press ***SPACE with E***.

To continuously read a section of the User Guide using speech, select your starting point from the Table of Contents or Index as discussed above, then press ***SPACE with G***. To pause reading, press ***BACKSPACE with ENTER***.

You can issue the review commands while reading is in progress or after it has stopped. If you give a command while reading is in progress, what is currently being read is cut off and reading begins immediately from the new position. This provides a very convenient method of quickly panning through a section of the User Guide. If you are reading continuously, you are able to jump forward or back through the text by sentence or paragraph without halting the continuous reading function.

To read the User Guide continuously from the Braille display, select your starting point and press ***SPACE with dots 1 through to 6***. To stop the Braille display advancing, press ***PREVIOUS*** and ***NEXT*** together. You can adjust the rate at which the Braille display advances. Press ***PREVIOUS*** to slow down and ***NEXT*** to speed up the refresh rate.

1.23.2 Location of User Guide Files.

As an alternative to accessing the Electronic User Guide through its Table of Contents or Index, you can also read the User Guide as a number of KeyWord documents. Each chapter and appendix is a separate KeyWord text document. As of version 5.0 of KeySoft, you may notice that each file name ends with a two letter code such as bb, bq, pk, vb or vq. This identifies the model type – the first letter is b for BrailleNote or v for VoiceNote, the second letter is b for BT, q for QT. The PK files have pk after them. If the code is not correct for your model, contact your distributor.

These files are all stored in a folder called "Manual" on your KeySoft System Disk drive.

1.23.2.1 User Guide Version Check.

There is a simple version check built into the User Guide. Simply access the Index, and select the "Version" entry in the usual way. When you press ***ENTER*** it will announce "This manual is for the BrailleNote BT using version x.x of KeySoft." If the model name or version is not what you expected, contact your distributor.

1.23.2.2 Version.

This manual is for the BrailleNote BT using version 7.2 of KeySoft.

1.24 Where to Now.

By now you should have a good basic knowledge of the BrailleNote mPower BT and KeySoft. The entire User Guide is stored in the BrailleNote BT so you can read each chapter at your leisure.

The User Guide can be read using your BrailleNote BT as previously described. A good starting point is to browse through the Table of Contents, as this will provide you with an appreciation of the topics covered in the User Guide.

Please read the next chapter, which concerns practical hardware matters like the batteries, port connectors and card slots. To read chapter 2, follow the procedure discussed in the previous section. You will find chapter 2 in the Table of Contents so you can select it from there and start reading.

After Chapter 2, most of the remainder of the User Guide is all about KeySoft and you can pick and choose what to read. If you are new to KeySoft, you might want to work through Chapter 3, which introduces the basic Word processor functions. You might then want to read Chapter 5, which deals with the functions available via the Options Menu, or Chapter 7 for advanced word processing features. Chapter 4 covers the book reader, and how to download books from Bookshare.org, if this site is available in your area. And chapter 6 covers how to emboss or print documents. Alternatively, you can read Chapter 8 on the Calculator, Chapter 9 on the Planner, or Chapter 10 on the Address List.

If you are interested in using e-mail or accessing the internet, and/or using the other connectivity options the BrailleNote BT offers, read Chapter 13 on Connectivity, then Chapter 11 on E-mail, or Chapter 12 on the Web Browser, depending on your interest and requirements.

Chapter 14 describes use of the File and Folder Manager, and the translation of files from Text to Braille and other formats. Chapter 15 covers the Utilities menu, where topics like backing up, restoring files and software upgrades are discussed.

Chapter 16 covers the Media Player and audio recording facilities. It also includes how to access the FM Radio.

Chapter 17 covers the Database Manager.

If you are keen for a bit of a distraction from your work or want to sharpen your mind, read Chapter 18 to learn how to play games on your BrailleNote BT.

Chapter 19 provides a convenient listing of all the keyboard commands for the BrailleNote BT. These are categorized under general commands as well as commands for each of the applications of KeySoft.

You might find it tedious to read a User Guide, but we have endeavored to make sure it is full of useful information, and it's surprising what sticks in your memory. When people say, "I didn't know you could do that!" it usually means that they haven't read the User Guide.

And remember; please make frequent use of BrailleNote BT's superb Help that you can access at any point by pressing ***SPACE with H***. It's a valuable source of information, whatever part of KeySoft you are using.

End of Getting Started Chapter.

2 BrailleNote mPower BT Hardware.

2.1 The Battery.

The BrailleNote mPower BT can operate from its internal rechargeable battery or from its AC adapter. The length of time you can run the BrailleNote BT from a fully charged battery is typically over 20 hours before it becomes flat. Activities like embossing, e-mailing and using ports or wireless connectivity increase the drain on the battery. Using the built-in modem also drains the battery more than, say, editing documents. Storage cards and USB devices that draw their power from the BrailleNote BT's battery, also reduce the available battery life.

The BrailleNote BT warns you if the battery is getting low. When the battery gauge indicates that the battery is down to 10% full or less the following warning is displayed periodically: "Battery is low."

If possible, connect the AC adapter to re-charge the battery now. You typically have about 2 hours of battery life remaining. If the battery continues to run down and becomes nearly flat, KeySoft displays the following message: "Battery is critical."

If this message is displayed you should act within the next minute or your BrailleNote BT may switch itself off. The time available to switch off may be as little as 1 minute but it is typically 5 to 10 minutes if you are not using high current accessories. You have two options. You can connect the AC adapter and carry on working indefinitely, or you can save your current work and switch off. To save your work, just return to the Main Menu. If the BrailleNote BT switches itself off, it cannot be switched on again until it is powered from the AC adapter.

If the battery becomes flat, the BrailleNote will switch itself off and will not switch on again until you connect the AC adapter. If you connect the AC adapter within an hour or two you will not lose work that was in progress and your BrailleNote will resume where it left off. However, if you leave it longer, any unsaved work may be lost. It is therefore important to heed the battery warnings!

Your BrailleNote BT automatically manages its power usage to give you the maximum life from the battery. It will enter into hibernate mode after about 10 minutes of inactivity and stay in that mode until you next press a key. You can help by switching off your BrailleNote BT when you are not going to be using it for a while. Remember that you can switch your BrailleNote BT off and on without affecting your work in any way and your BrailleNote BT resumes from where you were when you switched off.

2.1.1 Charging the Battery.

To charge the battery, simply plug the AC adapter in and the BrailleNote BT looks after the battery charging itself. There is no chance of overcharging and damaging your batteries, so don't be afraid to leave the AC adapter connected at all times. Once the battery is fully charged, only a very small amount of power is used. Leaving the AC adapter connected ensures that the BrailleNote BT remains fully charged ready for when you next need to use it on battery power.

If the battery is flat and the AC adapter is connected, the battery is fast charged in about 5 hours. Charging takes less time if the battery is only partially discharged. You can charge the battery and use the BrailleNote BT simultaneously although the battery may take longer to charge. To ensure that the battery charges correctly, only charge in ambient temperatures between 41 and 95 degrees Fahrenheit, that is, 5 to 35 degrees Celsius.

If the ambient temperature is too high, there is a risk that the battery will not charge. We therefore recommend that if the temperature is nearing 95 degrees Fahrenheit, that is, 35 degrees Celsius, leave your BrailleNote BT to charge in a cool place with the carry bag lid open. There is no danger in doing this, and no harm can come to your BrailleNote BT!

To connect the AC adapter, locate the power socket on the back of the BrailleNote BT, near the left-hand corner of the case. Insert the plug on the AC adapter cable into the socket, and plug the AC adapter into a wall socket. The BrailleNote BT displays: "*AC adapter on.*"

The message is displayed even if the BrailleNote BT is switched off. If this message is not displayed after a second or two, check that the AC supply is switched on, and that the plug on the end of the AC adapter cord is inserted securely into the BrailleNote BT's power socket.

When the battery is charging, if the AC supply is interrupted, or the AC adapter is disconnected the BrailleNote BT displays: "*AC adapter off.*"

This message, too, is displayed even if the BrailleNote BT is switched off.

The messages are both spoken and appear on the Braille display, assuming both speech and Braille are on. Of course, if speech is off, the message only appears on the Braille display. If the Braille display is off the message is only spoken.

2.1.2 Checking Power Status.

You can check the state-of-charge of the battery and whether the AC adapter is connected from anywhere in KeySoft by pressing ***SPACE with O, then P***.

First, the battery state-of-charge in percent is displayed: "Level c percent," where c is the battery's state-of-charge.

Then the AC adapter status is displayed: "Adapter (status)," where "status" is either "on" or "off." After these messages are displayed, you are returned to your original place in KeySoft. To clear the battery status message from the Braille display, press ***ADVANCE***.

2.1.3 Battery Care.

Like all rechargeable batteries, as the BrailleNote BT battery ages, its capacity reduces. If your BrailleNote BT is used and charged every day, we expect that the battery will typically last 18 months before its capacity is noticeably lower than it was when new. To have the battery replaced, send the BrailleNote BT back to an authorized Service Center. Do not attempt to replace it yourself. Replacement batteries are expected to typically last 18 months before they too, need replacing.

To ensure the battery achieves its maximum life, we recommend that you "condition" the battery every month or so. To condition the battery you don't have to stop using the BrailleNote, simply fully charge it, disconnect the AC adapter, use it on battery power until "Battery is critical" is displayed, and then as soon as you can, reconnect the adapter and fully charge it again. If you haven't conditioned the battery for a while, the BrailleNote BT will remind you by including the message "Battery conditioning recommended" when you check the Power Status.

2.1.4 The Battery Gauge.

BrailleNote BT incorporates a battery gauge that keeps track of the battery's state of charge. To operate correctly, this gauge must remain calibrated. It is originally calibrated at the factory and for best performance needs to recalibrate periodically as the battery ages. This will happen automatically when you condition the battery as described in 2.1.3 Battery Care.

On rare occasions the battery gauge might become too inaccurate for KeySoft to give a percentage state of charge when you check the power status. If this is the case, KeySoft will display: "AC Adapter (status). The gauge needs recalibrating and is not accurate enough to give a percentage reading", when you request the power status. If the AC Adapter is not plugged in, KeySoft will also display: "The battery is critical" or "The battery is not critical." You can continue using the BrailleNote BT, but will not be able to find out the percentage power status or receive "Battery low" messages. However, you will still receive "Battery critical" messages if the battery level becomes critical.

If KeySoft tells you that the battery gauge needs recalibrating, you can either condition the battery as described in 2.1.3 Battery Care or recalibrate it manually as described in 2.1.5 How to manually recalibrate the Battery.

2.1.5 How to manually recalibrate the Battery.

To manually set up the BrailleNote BT to recalibrate its battery, you will need a spot where it can chatter away to itself without disturbing anyone, with a nearby power socket to connect the AC adapter.

1. On the BrailleNote BT, make sure you have no unsaved work. It is very important that you remove any storage cards, or card or USB devices.
2. Go to the Options Menu by pressing ***SPACE with O***.
3. Press ***SPACE with I***. KeySoft will display "Support Information Mode".
4. Select the "Recalibrate the Battery gauge" option by pressing ***R***. If you haven't already plugged in the AC Adapter, you will be asked to do so.

5. What KeySoft does next depends on how much charge is left in the battery at this time, however it is all automatic. It may not happen initially but when the process gets to the point of discharging the battery, KeySoft will talk repetitiously to help it to do so, thus the need to choose a spot where the noise won't bother you. Once the battery is flat, KeySoft will automatically initiate the recharging cycle. When the whole cycle is complete, KeySoft will display: "Battery Test Completed."

You can check the status of the recalibration process at any time by pressing ***SPACE***. This will give you the times for the various charge and discharge stages depending on which stage it is in.

2.1.6 Checking Battery Information.

As well as recalibration, you can also check a range of battery and battery gauge characteristics using the Support Information mode. To enter the Support Information mode from anywhere in KeySoft press ***SPACE with O***, followed by ***SPACE with I***. You can now select the following options and in all cases, you are returned to Support Information Mode after the command has been executed:

1. To find out if the battery gauge has recalibrated and is accurate, press ***A***.
   If the battery gauge is calibrated, KeySoft will prompt, "Gauge is accurate, Error: plus or minus 2%."

   If the battery has not been conditioned for a while, KeySoft will prompt, "Battery conditioning recommended, Error: plus or minus x%." See 2.1.3 Battery Care for details on conditioning the battery.

   If the gauge is inaccurate, KeySoft will prompt, "Gauge is not accurate, Error: plus or minus 100%." The battery gauge needs recalibrating. See 2.1.4 The Battery Gauge for details.
2. To determine when and for how long the battery was last charged, press ***B***. The reported time indicates how long the AC adapter was connected. The report is in the form:

   Last charge: 234 minutes.

   Completed: Friday, February 9, at 2:47pm.

   Started: Friday, February 9, at 10:53am.
3. To determine the charge available from the battery, press ***C***. For example, a typical message is: "Nominal available charge 980."

   The higher the value the greater the charge.

4. To determine the last measured discharge of the battery and its design capacity, press ***D***. The last measured discharge is the capacity measured the last time the battery gauge was calibrated. For example, a typical discharge message is: "Last measured discharge 1638. Design capacity 1650."

   The higher the value the greater the capacity available from the battery when it is fully charged.

5. To determine the charging status, press ***S***. For example, if the AC adapter is connected, the BrailleNote BT displays: "Fast charging", or "Trickle charging." If not, the BrailleNote BT displays "Discharging."

6. To display the voltage of the battery, press ***V***. For example: "Battery voltage 7.2 Volts"

To return to the place where you selected the Options menu, press ***SPACE with E***.

2.2 Long Term Storage.

If you store a fully charged BrailleNote for more than two weeks, the battery will become completely flat. If the battery was less than fully charged prior to storing the BrailleNote, the time for the battery to become fully flat will be shorter. This is because the battery self discharges internally and because the BrailleNote BT draws a very small amount of current, even when it is switched off. When the battery becomes completely flat, the battery gauge may become inaccurate and will need recalibrating as described in 2.1.4 The Battery Gauge.

If you intend to leave the BrailleNote switched off for more than a few days, fully charge the battery beforehand, or leave the AC adapter connected, if convenient. If you intend to store a BrailleNote for more than two to three weeks without the AC adapter connected, ensure your work is saved by returning to the Main Menu, and fully charging the battery before putting the BrailleNote into storage.

When you take a BrailleNote out of long-term storage, first connect the AC adapter and recharge the battery BEFORE switching the BrailleNote BT on. If it does not resume normally, press the Reset switch with a pointed object. The BrailleNote will beep to confirm that it has been reset. Wait a few seconds while the BrailleNote initializes itself. If the battery has gone quite flat, you will be prompted to reset the time and date and so on. Press ***ENTER*** several times if you want to leave that for later or refer to Appendix C, which describes the procedure for initializing the BrailleNote.

2.3 Using the Serial Port.

Place the BrailleNote BT in front of you with the keyboard oriented as you would use it.

The many sockets and connectivity ports are arranged around the sides and back of the BrailleNote BT. Starting from the front of the left side, and working around to the back, you will find:

The small record button, the audio output socket for earphones, the audio input socket for a microphone, the power switch and the recessed reset button.

Reach beyond the keyboard to the back of your BrailleNote BT and investigate the layout of the back of your BrailleNote BT.

From the left there is the small round AC Adapter socket. Keep moving to the right and you will notice that the bottom half of the back is recessed. This is a metal panel that holds most of the ports. They are recessed to protect them from being easily knocked.

The first port in this panel is the USB client port above an SD card slot. Moving right from there is the CompactFlash slot, a 9 pin serial port, two horizontal USB host ports, one above the other, and a modem jack.

On the far right, back on the casing again, there is an infrared port set between two slightly raised vertical ridges.

Down the right side of the unit, you will find the PCMCIA card slot. This has a recessed ejector button on the side furthest from you.

Each of these ports is discussed in more detail directly following this section.

Please note that if you inadvertently or deliberately remove a card or a plug from the BrailleNote BT while it is active, that is while data is being passed through the connection, it may result in a loss of data, an error message, or even in some cases, corruption of the file or software.

2.3.1 Using the Infrared Port.

The infrared port is located at the rear of your BrailleNote BT on the right, directly behind the ***ENTER*** key. Run your hand across the back of the BrailleNote BT on the extreme right and you will feel a vertical channel. The infrared port communicates though a window that is located in the channel.

The BrailleNote BT's infrared port conforms to the Infrared Data Association specification for infrared communications. This standard is called "IrDA" for short. This type of infrared communication can work up to a high speed.

The BrailleNote BT's infrared port can be used for printing or for communicating with a remote visual display. You can also run ActiveSync on a PC and access your BrailleNote BT through the Infrared port like an extension of the PC.

Using the infrared port, you can print to a printer equipped with an infrared port. You can also print to a printer that is connected to an IrDA compatible accessory such as the JET EYE printer adapter. This adapter is normally connected between a PC and a printer without an infrared port. Embossing and printing using the infrared port is described in 6.8.7 Embosser Port.

To communicate with a remote visual display using the infrared connection, an IrDA compatible port is needed on the PC. The JET EYE PC is an accessory that provides such a port. It is designed for use in conjunction with a PC or a lap top computer, plugging into a serial port on the host computer. Terminal software running on the PC enables the PC's screen to display output from the infrared port of the BrailleNote BT. This provides a sighted teacher with a text display matching the BrailleNote BT display. Using BrailleNote BT's infrared port to communicate with a remote visual display is described in 2.8 Using a Remote Visual Display.

IrDA compatible infrared communications work over a distance of up to about three feet (1 meter) for standard power devices and up to at least eight inches (200 millimeters) for low power devices. The BrailleNote BT is a standard power device. The host's and BrailleNote BT's infrared ports must face each other but they do not have to be lined up exactly because the infrared beam is quite wide. After a little experimentation, you will be able to determine the most convenient arrangement of equipment that works reliably.

2.3.2 Using the Modem.

The internal modem can be used for sending and receiving e-mail.

A modem port is located on the far right of the recessed rear panel. Your BrailleNote BT is supplied with a modem cable for connecting BrailleNote BT's modem to a phone line.

If you live in UK, Australia or New Zealand, an adapter that plugs into a standard "BT" type phone jack is also supplied with your BrailleNote BT. The modem cable plugs into the adapter and the adapter plugs into a phone jack.

The modem cable has a phone type plug at either end of the cable. Insert one plug into the BrailleNote BT modem port and the other end into a phone jack. To do this, locate the locking clip on one side of the plug. Orient this side to the bottom of the modem port, engage the plug in the socket and push the plug home. A latch holds the plug that should hold when the cable is lightly pulled. To unplug, squeeze the clip in towards the plug and pull the cable. The case bottom is scalloped under the modem port so that you can easily get your fingertip under the clip. When the plug is unclipped it releases freely.

Don't forget to disconnect the cable when you are done. As a precaution check for anything connected to your BrailleNote BT **before transporting it.**

2.3.3 USB Client Port.

The USB client port is located above the SD card slot on the left hand end of the back recessed panel. It is a completely different shape to the USB host ports, being small and shaped a little like a miniature 9 pin port set flush into the panel. It is oriented so that the wider side is facing up, just like the 9 pin serial port.

The primary purpose of this port is to connect your BrailleNote BT to a PC via ActiveSync. For details on how to do this, refer to 13.14.5 ActiveSync using USB.

2.3.4 Using the Serial Port.

The serial port is on the recessed rear panel of your BrailleNote BT, to the left of the Compact Flash card slot. It is a nine pin male port with the usual screw holes on each side to secure the plug.

The serial port can be used to provide a connection to a visual display, PC or other equipment. You can use the serial port to connect to a terminal, an embosser or printer that has a serial interface, a modem or to other computers to import and export documents and files. You can use the BrailleNote BT as a remote speech synthesizer by connecting the serial port to a suitable driver. You can also run ActiveSync on a PC and access your BrailleNote BT through the serial port like an extension of the PC.

Your BrailleNote BT is supplied with a serial cable that has two identical nine pin plugs on each end of the cable. You don't have to identify which is the right end of the cable, either end will do. The connectors can only be plugged in one way. To plug in the connector hold the plug horizontal and push it gently into the socket. If it does not engage turn it through 180 degrees and try again.

The cable supplied is called a "null modem cable." This cable works with most equipment except external modems. A different cable is needed to communicate with a modem and equipment that emulates a modem.

The 9 pin plugs on each end of the serial cable incorporate two locking screws designed to secure the plug when it is plugged in. Use of these screws is recommended to prevent the plug falling out in use. The screws can be tightened and undone by hand. In the usual way, turning them clockwise does them up and turning them anti-clockwise undoes them. Do not over tighten the screws; a light force is sufficient to hold the connector.

Don't forget to disconnect the cable when you are done. As a precaution check for anything connected to your BrailleNote BT before transporting it.

2.3.5 USB Host Ports.

The two ports to the right of the serial port are USB host ports. They are stacked one on top of the other. USB host ports on the BrailleNote BT allow you to use the BrailleNote BT with a range of USB-compatible devices including:

External floppy disk drive,

USB memory drive,

Some USB printers, and

An external memory card reader.

The two ports between them have a total power supply of 500 milli-Amps, so if using both at once it is important to ensure that the devices plugged in do not require more than this between them.

As well as this, you can plug in a USB qwerty keyboard, as discussed in 2.7.1.1 Connecting to a USB keyboard.

2.3.6 Audio Sockets.

On the left side of the unit, there is a microphone input socket, an audio output socket and a record button.

The microphone input socket takes a high impedance electret microphone with a 3.5mm plug. There is also a built in microphone.

The audio output socket is stereo and works with most head or earphones with a 3.5mm plug. It will also connect to a set of mini speakers, as used with a PC. Remember that these will also need to be plugged in to a wall socket.

2.4 PC Cards.

The BrailleNote BT has a slot for plug-in PC cards, also known as PCMCIA cards. These cards are about the size of a credit card, only thicker. The PC card slot can be used for a microdrive or PC storage card, or an approved type of wireless card as discussed in 13.4.1 Creating a new Wireless Configuration. To find out what PC card accessories are available or will become available call your BrailleNote BT distributor.

CompactFlash cards can be used in the PC card slot as well as in the dedicated CompactFlash slot in the rear panel, as discussed in the next section. An adapter is available into which you slide the card before inserting it into the slot as described below.

Feel along the right-hand edge of the BrailleNote BT and you will find a horizontal slot. The card eject button is located in a recess behind the slot.

2.4.1 Inserting and Removing PC Cards.

PC or PCMCIA cards can be installed only one way. A polarizing key prevents a card from being fully plugged in if it is the wrong way up. A simple strategy for finding the correct orientation is to just try gently plugging it in. If it engages, gently push it home. If it stops with a "clunk" with the card protruding some 10 mm from the slot, take it out, invert it and try again.

You can also identify the correct orientation by touch. The front of the PC card is the short edge on which there are many indentations along its entire length. Hold the front edge away from you. Run your fingers along this edge and just around the corners, where you will find some polarizing ridges. If the card is facing upward, there will be two ridges on the right-hand side. The groove between them can be detected with your fingernail. On the left, there will be one ridge. If necessary, turn the card over so that there are two ridges on the right and one on the left.

You could label the PC card once you have identified the correct orientation.

PC cards should be inserted with the BrailleNote BT switched on. When you do so the BrailleNote BT displays: "Card Ready."

To remove a PC card, firmly push the PC card eject button. Remember it is located behind the PC card slot. This disengages the card from its connector and pushes the card out about a quarter of an inch. Always use the eject button even if the card has a cable with a grip. You can now pull the PC card completely out of the slot. If the card is removed with the power on, BrailleNote BT displays: "Please wait..." and after a few seconds the prompt "Card removed" will confirm that the card is disengaged.

2.4.2 Accessing files on the PC Card.

The PC card slot is treated as a drive by KeySoft. To access files on the PC Card, at any file prompt, go to the drive list and press ***P*** for PC card. Proceed as normal.

2.5 Compact FlashCards.

A CompactFlash card is 3.5cm by 4cm, about the size of a matchbook. It provides considerable extra data storage, and cards come in a large range of capacities running into several gigabytes.

The BrailleNote BT has a card slot for CompactFlash cards. This slot is located on the back of the unit. As well as allowing you to use Compact Flash cards for extra data storage, the CompactFlash card slot can be used for data storage using a CF memory card, or as a plug for CompactFlash card type accessories.

CompactFlash cards can be used in the PC card slot as well. An adapter is available into which you slide the CompactFlash card before inserting it into the PC card slot as described in 2.4 PC Cards.

2.5.1 Inserting and Removing CompactFlash Cards.

The CompactFlash card is wider than it is long, so it is important to orient the card correctly, as attempting to plug the shorter side in may damage the pins in the back of the slot. Also, a polarizing key makes the card more difficult to plug in if it is the wrong way up. A simple strategy for finding the correct orientation is to just try gently plugging it in. If it engages, gently push it home. If it resists being inserted, take it out, invert it and try again.

You can also identify most CompactFlash cards' correct orientation by touch. The front of the CompactFlash card is the longer side that has two rows of pin sized indentations. The bottom side of most CompactFlash cards has a slight grip ridge along the opposite edge.

You could label the CompactFlash card once you have identified the correct orientation.

Compact cards should be inserted with the BrailleNote BT switched on. When you do so the BrailleNote BT displays: "Card ready."

To remove a CompactFlash card, hold the card firmly and pull it out. This is quite tricky if you have big fingers or no fingernails. Most CompactFlash cards have a grip ridge that makes them easier to grasp. If the card is removed with the power on, BrailleNote BT displays: "Please wait..." and after a few seconds the prompt "Card removed" will confirm that the card is disengaged.

2.5.2 Accessing files on the CompactFlash Card.

The CompactFlash card slot is treated as a drive by KeySoft. To access files on the CompactFlash Card, at any file prompt, go to the drive list and press ***C*** for CompactFlash card. Proceed as normal.

2.6 Secure Digital Cards.

On the back of the unit, underneath the USB Client port, there is a card slot for Secure Digital cards, also known as SD cards. These cards are only 32mm x 24mm x 2mm big i.e. less than a quarter of the size of a CompactFlash card, and yet can hold up to 1 Gigabyte of data at time of publishing. This is a very new technology and it won't be long until the capacity will increase. For up to date information on the latest developments, check out our website; www.humanware.com.

The BrailleNote BT uses SD cards for memory only. It does not support SD accessories such as wireless or Bluetooth cards.

2.6.1 Inserting and Removing SD Cards.

The SD card is about the size of a postage stamp, and only 2mm thick. One corner is cut off at a diagonal, which makes it easy to orient it by touch. The short edge of this cut off corner is the end that is inserted into the SD card slot. You will notice that on one surface of the card, there is a row of ridges along that edge; this side faces down.

On each long edge is a notch. If you hold the card as if you were going to insert it, i.e. with the cut off corner and ridged end away from you, along the right side the notch is small, only 2mm long and 1mm deep. However on the left side, the notch is longer and houses a sliding lock mechanism. When the slider is pushed away from you, the card is unlocked and is read/write. When the slider is pushed toward you, the card's memory is read only.

SD cards should be inserted with the BrailleNote BT switched on. When you do so the BrailleNote BT displays: "Card ready." Push it gently in until you hear it click.

To remove an SD card, push it in gently until it clicks then release it. The card will pop out far enough for you to grasp and remove it. If the card is removed with the power on, BrailleNote BT displays: "Please wait..." and after a few seconds the prompt "Card removed" will confirm that the card is disengaged.

2.6.2 Accessing files on the SD Card.

The SD card slot is treated as a drive by KeySoft. To access files on the SD Card, at any file prompt, go to the drive list and press ***S*** for SD card. Proceed as normal. Likewise if you wish to save a file to the SD card. If you find that you can't save a file to the card, check the sliding lock mechanism on its left edge, as this may be in the "read-only" position, which is closest to the end that goes into the slot first.

2.7 USB Peripherals.

As mentioned earlier, there are a range of devices available to work with the BrailleNote BT, that offer a broad range of data storage options, as well as printer access. These are all discussed in turn below.

2.7.1 Using a Computer Keyboard with your BrailleNote BT

As well as the Braille keyboard, you can use a normal qwerty keyboard for input into your BrailleNote BT. This works with keyboards with two types of connection - USB and Bluetooth. First we will look at how a qwerty keyboard interacts with the BrailleNote BT, and then at how to connect to a USB keyboard. To connect to a Bluetooth keyboard, simply follow the instructions in 13.12.3 Pairing with another Bluetooth device.

The qwerty keyboard can be used to create or edit KeyWord text (kwt) or other types of text documents. If you create a new document while the keyboard is plugged in, it will default to kwt format. The Braille keyboard still operates, so you can swap between them if you wish. The Braille display will also behave as normal, as its Braille grade is set separately to input.

What you cannot do is use the qwerty keyboard to input into a Braille document, even if the grade is changed to computer Braille using the ***BACKSPACE with J*** command. However, if you think about it, there is not really any reason why one would want to do this. The whole purpose of having the option of a qwerty keyboard input is for typing a lot of text, and that usually means a text document.

2.7.1.1 Connecting to a USB keyboard.

USB is one of the standard connection types available for modern keyboards. It is a flat, narrow rectangular plug, as opposed to the round PS2 type plug that is also common.

USB keyboards are readily available and usually very reasonably priced. If you have a PC, it may have a USB keyboard already.

Simply plug the keyboard into one of the USB host ports on the recessed back panel of your BrailleNote BT, and you are ready to go. We recommend that you plug in the USB keyboard while you are in the Main Menu.

2.7.2 USB Storage Devices.

There are a range of storage devices that work with the BrailleNote BT. Which ones you wish to work with will probably be determined by the other technology you are using and what storage media works best with it.

In all cases, when the device is plugged into one of the USB host ports on the back of the BrailleNote BT, it will appear on the drive list as whatever name the device provides. When at a file or folder prompt, simply select that drive.

Here is some background information on each type of storage device:

External floppy drive: This technology has been around the longest, and offers storage on standard 1.44MB floppy disks. This is a small capacity compared to the other devices, but the universal availability and affordability of floppy disks still makes them a viable storage choice.

USB Memory drive: Sometimes known as a USB key, stick or thumb. This is a small device with a USB plug set into one end of it. They vary in shape, size and storage capacity, which can range from 128MB to 1GB. These devices are convenient as they don't have cables, are highly portable, and can be used with a PC without the need for an external card reader, unlike the CompactFlash, PC and SD cards.

External card reader: There are card readers available that can be used with the BrailleNote BT as well as a PC. There are card readers for all the types of storage cards, and some take more than one kind. While this may seem a bit redundant when there are three card slots in the BrailleNote BT itself already, it is nevertheless possible.

When plugged in, these storage devices show up in the drive list as Hard Drive.

2.8 Using a Remote Visual Display.

BrailleNote BT can provide a text output via the serial or infrared ports to a visual display. Sighted observers or teachers can use the visual display screen to view KeySoft's prompts and help messages, and your text if you are typing a document. The visual display can be a terminal or a PC, laptop or hand-held computer running terminal emulation software. The terminal or terminal emulation software must emulate a DEC VT100 or an ANSI terminal.

For PC's running Windows, "HyperTerminal" is provided as part of the communications accessories and can be used as the terminal software. To facilitate the use of HyperTerminal as the remote Visual Display for the BrailleNote BT, a program shortcut is provided on the CD-Rom supplied as part of the BrailleNote BT package.

2.8.1 Connecting a Remote Visual Display to the Serial Port.

In the following discussion when we refer to a terminal, we mean either a dedicated terminal or a PC running terminal emulation software.

The following procedure might require the help of a technician if the terminal is unfamiliar to you. The procedure involves connecting the BrailleNote BT to the terminal using a cable and setting up the terminal to communicate at a certain speed and format. This can be done manually for some terminals. Or if the terminal is intelligent, done by the terminal itself as it automatically detects the serial speed and format. The necessary settings are:

bit rate: 38400 bps.

parity: none.

data bits: 8.

stop bits: 1.

1. To connect BrailleNote BT's serial port to a terminal, first plug one end of the serial communications cable into the serial port as described in 2.3.4 Using the Serial Port.
2. Plug the other end of the cable into a matching socket on the terminal. If the terminal has a 25 pin D type connector instead, use the 9 pin to 25 pin adapter. Ensure the terminal is switched on.

3. Finally, direct the BrailleNote BT to drive the serial port by selecting the remote visual display output as described in 2.8.3 Turning the Visual Display On and Off below. Now, when the BrailleNote BT displays something such as a prompt the terminal should also display the corresponding prompt. If the terminal responds when the connected BrailleNote BT displays something but the terminal's display is not intelligible then the speed and/or format are probably not right. Correct the settings and retry.
4. Ensure that the COM port that you are going to use for this connection is not being used by another software application or hardware device.

2.8.2 Connecting a Remote Visual Display using the Infrared Port.

A suitable remote visual display for use with the infrared port is either a portable computer or a PC equipped with an IrDA port. Although there are many IrDA devices available, they are not all compatible. Check first that the computer has an IrDA compatible port.

The following procedure might require the help of a technician if the equipment is unfamiliar to you. First set up the terminal software on the computer to receive its input from its infrared port. Next, position the computer so the infrared port on the BrailleNote BT is facing the infrared port on the remote display device. Finally, direct the BrailleNote BT to send display output to the infrared port as described in 2.8.3 Turning the Visual Display On and Off.

2.8.3 Turning the Visual Display On and Off.

The last step towards providing a visual display is to have your BrailleNote BT send text to the serial or infrared outputs. Press ***SPACE with O***, then ***V*** for Visual display. KeySoft displays: "Visual display, Currently off."

The options are:

To send the visual display to the Serial port press ***S*** then ***ENTER***;

To send the visual display to the Infrared port press ***I*** then ***ENTER***;

Or just press ***ENTER*** to leave the selection unchanged.

To turn the visual display off again after use, press ***F*** for OFF then ***ENTER***.

Use the serial port if you are using a standard computer terminal or a PC running a terminal emulator program. Use the infrared port if you are using a desktop or hand held PC with an infrared port and running a terminal emulator program.

2.9 BrailleTerminal for Screen Reader.

BrailleNote can act like a remote Braille line or terminal. You can then run a screen reader, for example Window Eyes, JAWS, or HAL on a desktop PC, using the BrailleNote BT as its Braille display. If you want to operate Bluetooth, you will need to configure your screen reader to open the serial port from which Bluetooth services are offered. To find out what port Bluetooth services are offered, check the Bluetooth software on your PC. Note that this is most likely to be Com 7, 8 or 9.

The serial communications or null modem cable provided with your BrailleNote BT should be used to connect the PC to your BrailleNote BT. If your PC's serial port has a 25 pin connector you will need to use the 9 pin to 25 pin adapter also provided. Plug the cable into the serial port on the rear of BrailleNote BT as described in 2.3.4 Using the Serial Port. Plug the other end into a serial port on your PC.

To access the Braille Terminal, either go to the Main Menu and press ***T***, or from anywhere, press ***BACKSPACE with ENTER with T***. KeySoft prompts either: "Braille Terminal Port? Currently Serial" or "Braille Terminal Port? Currently Bluetooth" according to which port you used previously. To select serial, press ***S*** and to select Bluetooth, press ***B***. Press ***ENTER*** and KeySoft displays: "Braille Terminal."

If you select the serial port, the BrailleNote BT now acts as a Braille display connected to the serial port of the desk-top PC. You are able to run a screen reader from the desk-top keyboard, and BrailleNote BT displays text on its display. Refer to your screen reader documentation for details of how the screen reader interacts with the BrailleNote BT. The screen reader will have an associated driver, and maybe other configuration files, that determine the function of the BrailleNote BT keyboard when it is being used as a Braille display.

If you select the Bluetooth port, it is likely that a dialog box will appear on your PC that requests permission for the BrailleNote to connect. "Braille Terminal" will not be announced until you have authenticated the connection from the PC. To activate this connection, you must first pair your BrailleNote BT to the PC. Refer to 13.12.1, 13.12.2 and 13.12.3 for information on pairing.

BrailleNote BT cannot be used for its normal functions while it is acting as a remote Braille display, however, you can use the "Change Task" option to temporarily leave the Braille Terminal. For example, during a screen reading session, you may wish to temporarily switch to the Planner to add an appointment, and then switch back to using the Braille Terminal mode. To exit the Terminal for Screen Reader mode, press ***SPACE with E*** and you are returned to the Main Menu.

You should plug in the AC adapter if you intend to use your BrailleNote BT as a remote display for an extended period.

2.10 Remote Synthesizer.

Your BrailleNote BT can act like a Keynote Gold Stand Alone speech synthesizer. You can then run a screen reader on a desktop PC, using your BrailleNote BT as its synthesizer. If you want to operate Bluetooth, you will need to configure your screen reader to open the serial port from which Bluetooth services are offered. To find out what port Bluetooth services are offered, check the Bluetooth software on your PC. Note that this is most likely to be Com 7, 8 or 9.

You must connect your BrailleNote BT to your PC as described for the Braille Terminal in.

On your BrailleNote BT, at the Main Menu, press ***R***. KeySoft prompts either: "Remote Synthesizer Port? Currently Serial" or "Remote Synthesizer Port? Currently Bluetooth" according to which port you used previously. To select Serial, press ***S*** and to select Bluetooth, press ***B***. Press ***ENTER*** and KeySoft displays: "Remote synthesizer ready."

If you select the Bluetooth port, it is likely that a dialog box will appear on your PC that requests permission for the BrailleNote to connect. "Remote synthesizer ready" will not be announced until you have authenticated the connection from the PC. To activate this connection, you must first pair your BrailleNote BT to the PC. Refer to 13.12.1, 13.12.2 and 13.12.3 for information on pairing.

The BrailleNote BT now acts as a Keynote Stand Alone synthesizer.

On the Braille display, the message "Remote synthesizer ready" will remain while the BrailleNote BT is being used in this mode.

BrailleNote BT cannot be used for its normal functions while it is acting as a synthesizer. To exit the Remote Synthesizer mode, press ***SPACE with E*** and you are returned to the KeySoft Main Menu. You should plug in the AC adapter if you intend to use your BrailleNote BT as a remote synthesizer for an extended period.

2.11 Braille Display Care.

Each cell of the Braille display has eight pins. For each pin there is a special crystal that lifts the pin to make a dot, and allows the pin to drop when there is no dot. The pins have to be able to move freely. In normal use dirt unavoidably accumulates on the display and around the touch cursor buttons. To prevent the pins from jamming, the display and touch cursor should be cleaned regularly. Cleaning the Braille display is not straightforward. We recommend that you send the BrailleNote BT back to an authorized BrailleNote BT service center every twelve months to clean the Braille display.

Making sure that your hands are always clean is a good start towards minimizing problems with your Braille display. We suggest that once per week you wipe the surface of the Braille display using a soft damp cloth. The cloth should be squeezed hard to ensure that all excess moisture has been removed. Use only warm water on the cloth.

2.12 General Care.

Apart from re-calibrating the battery gauge and cleaning the case, the BrailleNote BT needs no special maintenance. The internal battery should last typically 18 months before needing replacement and this must be done by an authorized service agent. Keep beverages like tea and coffee away from the BrailleNote BT. Periodically wipe the case down with a warm damp cloth. Don't use any cleaning compounds.

End of Hardware Chapter.

3 Word Processor.

This chapter introduces the basics of KeyWord, the word processor part of KeySoft, and describes how to create, read and edit a document. Advanced aspects of KeyWord, including creating documents with more complex formats, and quickly making extensive changes to a document, are covered in Chapter 7.

In the following discussion, the general terms "announcements," "prompts" and "reading" apply to any of the outputs available in the BrailleNote family of products. If your model is a VoiceNote, they refer to audio output only. For BrailleNote models, they can refer to either the Braille display, the audio output, or both.

3.1 What is a Word Processor.

A word processor is like a sophisticated Braille writer or typewriter. The difference is that you do not have to get the document right first time. You can add, delete and change things to your heart's content, and all the time your work is stored in BrailleNote BT's memory. You only need emboss or print your document when you are entirely satisfied with it.

There are other advantages too. You can make changes at a later date, and you can keep all the various versions. It's easy to make copies of documents, and filing and retrieving is much simpler than with hard copy.

Besides writing documents, KeyWord is useful just for reading documents such as e-mailed documents that have originated elsewhere. These can be read directly without translating them to Braille.

3.2 Braille and Text.

When you start to compose a document, KeyWord assumes that you want to do it in Braille, so the layout and format are for a Braille page, as it would appear when embossed. This doesn't mean that you are committed to a Braille document, however. You can send it to an ink printer or another computer or e-mail it, and KeySoft automatically translates it into a suitable format.

Alternatively, you have the option of creating a text document directly, with a layout and format for an ink-print page. A text document requires the use of Computer Braille, which is discussed in 7.17 Computer Braille. A text document may be printed directly or embossed using automatic Braille translation.

Unlike some other word processors, KeyWord allows you to work with the layout of a document as it will be embossed or printed. This means that you are working with the actual layout while you are editing, and you do not have to make allowances for any effects of formatting commands.

KeyWord allows you to format a document for embossing and independently format the same document for printing. The two sets of formatting controls are independent. Consequently the layout of a document, either Braille or text, can be precisely controlled without making changes between embossing and printing. The document remains unchanged when you send it to an embosser or printer.

3.3 The KeyWord Menu.

To select the word processing functions, start from the Main Menu and press ***SPACE*** repeatedly until "Word processor" is displayed, and then press ***ENTER***. Alternatively, just press ***W***. If you have the Braille display on, you can also use the ***ADVANCE*** thumb key to step through the menu and the ***NEXT*** thumb key to select an item. KeySoft displays: "KeyWord Menu."

Press ***SPACE*** to display the first item in the KeyWord Menu, which is: "Create a document."

As the prompt suggests, you use this option when you want to create a new document. Press ***SPACE*** again, and KeySoft displays the second item, which is: "Open a document."

You use the "Open" option to read an existing document, or to make changes to one.

3.4 Documents Folders and Drives.

3.4.1 Documents.

Documents are the most common type of file you will use on the BrailleNote BT. You must give each document a unique name enabling KeySoft to distinguish one document from another. For example, when you use KeyWord to write a letter, that letter is stored as a document. Every document name should indicate what type of information it contains. A document name can be up to 250 characters long, including spaces. It cannot contain the following characters: \ / : * ? " < > |

3.4.2 Folders.

When you have been using your BrailleNote BT for a while you could very easily accumulate several hundred documents, and it could become tedious to find any particular one. To make life easier, documents can be organized into groups called "Folders." Initially, there are folders named "General," and "My Books," together with a number of others which KeySoft uses. Besides these, you can create as many new folders as you wish.

If you have a lot of files to organize and are comfortable with the concept, you might want to create a directory structure of folders, where there is more than one layer of folders. Details about how to do this and all other aspects of folder and file management are covered in Chapter 14.

Folders can contain both Braille and text documents. Folder names can be up to 250 characters long, and can consist of any Braille signs except those for the following characters: \ / : * ? " < > |

3.4.3 Drives.

Documents can be stored by different pieces of hardware in the BrailleNote BT, called disk drives, or just drives. BrailleNote BT incorporates a type of memory called flash memory. The associated drive is referred to as a Flash Disk. It provides fast, secure storage, retaining its contents even if the battery is flat. It is the memory you normally use to save your documents. You can copy, rename, erase or edit and re-save documents to the Flash Disk.

Another drive is the KeySoft System Disk. This drive stores information installed in the factory. This includes the main operating software, User Guide, and a sample book. Information installed at the Factory is retained even if the battery goes flat, but user information stored in the KeySoft System Disk will be lost. It is therefore not recommended that you save documents in the KeySoft System Disk, but you can open documents like the sample book and the BrailleNote BT user guide that are stored in it. If you do save documents in the KeySoft System Disk, be aware that they will be lost if the battery goes flat or you do a Reset with ***dots 4-5-6*** held down.

You can also add external drives to the BrailleNote BT.

3.4.4 Changing the Current Drive.

There is a way of selecting a drive in KeySoft generally, which is not restricted to KeyWord. If you are at a prompt for a file name or folder name, and you have not had the opportunity to select a drive, then press ***BACKSPACE***. KeySoft displays: "Drive? (Last drive used)."

To step through the list of available drives press ***SPACE***. The list comprises the Flash Disk and KeySoft System Disk, and if in use, the CompactFlash card, PC card, SD card and Network. To select a drive, either step through the list of available drives press ***SPACE or ADVANCE*** then press ***NEXT or ENTER,*** or just type the first letter of the drive name.

3.5 Opening a Document.

Several documents are provided with KeySoft. If you want to read one of them, how do you select it? From the KeyWord menu, select "Open a document." Or press ***BACKSPACE with ENTER with W*** to go directly there. KeyWord displays: "Folder name? Press ***ENTER*** for (name)," where the word "name" between the brackets is really the name of the last folder used.

To select a document you must first select the appropriate folder. There are three different methods of doing this:

1. To select the offered folder, just press ***ENTER***. This is the folder that was last used.
2. To look through the list of available folders, press ***SPACE or ADVANCE*** repeatedly. When the name of the folder you require is displayed, select it by pressing ***NEXT or ENTER***. You can move back along the list by pressing ***BACKSPACE or PREVIOUS*** repeatedly.

   While scanning the list you can quickly relocate to an alphabetical position in the list by pressing a letter. For example, pressing ***T*** puts you at the beginning of the list of folders starting with ***T***. If you keep on pressing ***T***, you cycle through all the names starting with that letter.
3. Type the name of the folder you require, and press ***ENTER***. With this method, remember that you must type the name exactly or this will not work.

You can change the current drive by pressing ***BACKSPACE*** at the "Folder name?" prompt. The Flash Disk is assumed here. If another drive was previously selected, a drive prompt is given as described in 3.4.4 Changing the Current Drive above.

When you have selected a folder, KeyWord asks: "Document to open? Press ***ENTER*** for (name)," where (name) is the name of the last document you accessed.

Just like folder selection, the same three methods are available for selecting a document. Select the offered document by just pressing ***ENTER***, or review the list of documents by pressing ***SPACE*** repeatedly and select a document by pressing ***ENTER***, or Braille the document name and press ***ENTER***.

This selection procedure is significant because it is general throughout KeySoft, and is not restricted to just opening a document.

3.6 Naming a Document.

In the next section we talk about creating a document, but first we discuss names. Each document must have a unique, meaningful name so that it can be stored and later retrieved by specifying its name. You can use whatever name you like, with up to 250 Braille characters and spaces, in Grade 1 or Grade 2 as you wish.

If you have several documents on a similar subject, you may find it helpful to put the common part of the name first. For example, you might have:

"Club minutes, January,"

"Club minutes, February,"

and so on. These document names would be grouped together alphabetically for easy location. If the months are put first, the documents are scattered through the list of documents.

Documents can be grouped into folders to make them easier to find. As an example, the documents just mentioned might all be put into a folder called "Club minutes 2001." If you do this, it may then be easier to name your documents without the common part of the name, for example, "January" and "February". The rules for naming a folder are the same as for naming a document.

Some characters are reserved and you may not use them in a document name. They are: \ / : " < > | * and ?.

3.7 Creating a Document.

We now create a trial document. From the Main Menu, select the Word Processor option. From the KeyWord menu select "Create a document." KeySoft prompts: "Folder name? General."

The General folder is fine, so press ***ENTER*** to accept KeySoft's suggestion. You are then asked: "Document to create?."

Type in the name: "Sample", with or without a capital sign as you wish, and press ***ENTER***. KeySoft says: "Top of Document. Blank."

The Braille display is blank. You are now at the top left-hand corner of an empty Braille document.

Press a character. Why are there two dots on the Braille display below and to the right of your character? It's the BrailleNote BT's standard Braille cursor. The cursor shows where the next character will go. It is discussed in more detail below.

Without worrying about mistakes, Braille half a dozen sentences, using either Grade 1 or Grade 2. Each character is displayed on the Braille display as you Braille it. Each word is spoken only when you have pressed the space bar to complete the word. You can change the Keyboard Voice so that KeySoft speaks each letter as it is Brailled, or both words and letters, or nothing at all. How to change the Keyboard Voice was discussed in 1.15.4 Setting the Keyboard Voice.

You may also notice that you can Braille indefinitely without worrying about the right margin. This is because KeyWord automatically starts a new line if it cannot fit another word onto the current line. This process is known as word wrapping. The start of a new line is shown on the Braille display as dots 1-2-4-6, followed by the letter L. You probably know dots 1-2-4-6 as the grade 2 contraction "ed." It is also the dollar sign in computer Braille. The symbols $l indicate a line break. There are many of these special format indicators that start with "ed" or $ such as this. They are described in more depth in 3.12 Format Indicators.

Also notice that when you fill the Braille display KeySoft automatically moves so that there is room to show the last complete word at the right of the display.

Start a new Braille paragraph by pressing ***ENTER*** to start a new line, followed by two spaces, and Braille a few more sentences. Places where you have pressed ***ENTER*** to start a new line are shown on the Braille display as dots 1-2-4-6 or "ed" followed by the letter p. This is also discussed again later.

When you have finished Brailling, press ***SPACE with E***. Your document is saved, and you are returned to the KeyWord menu.

3.8 Reading a Document.

We now discuss the various commands for reading a document. We recommend you open your "Sample" document, or the "Demonstration Document" that comes with KeySoft, so that you can practice using the reading commands. The "Demonstration Document" is found in the "General" folder. Open the document as explained in 3.5 Opening a Document.

Reviewing the document by reading the Braille display is, of course, quite different from listening to the document so these two methods are discussed separately below. First we discuss reviewing using the Braille display.

Note: If you are ever unsure which document you are reading, press ***SPACE with I*** then ***F*** for file name**.** This will display the name of the document.

3.8.1 Reading on the Braille Display.

You can read through the document up to eighteen or thirty-two symbols at a time. This depends on the width of the Braille display of your BrailleNote BT and the number of whole words that fit on the display. KeySoft avoids breaking the last word by leaving the last few cells blank.

The Braille display provides a window into the document. You can step this window forwards or backwards through the document using the thumb keys. ***ADVANCE*** steps forward one window and ***BACK*** steps back a window. After reading across the display press ***ADVANCE*** to display the next window.

Repeat the procedure to read through the document. You can go back if necessary by pressing ***BACK***. You can also move the display to the left or right a word at a time. To move the display back a word in the document, press ***PREVIOUS*** with ***BACK*** at the same time. To move the display forward a word, press ***PREVIOUS*** with ***ADVANCE***.

The function of the ***PREVIOUS*** and ***NEXT*** thumb keys is defined in the Braille Display Options. For information on how to change the setting, refer to 5.4.4 Function of Previous and Next thumb Keys.

The default setting is Up and Down, and using this setting ***PREVIOUS*** steps directly up and ***NEXT*** steps directly down where the document has text organized in columns or tables. When text is arranged in sentences the cursor moves to the same place in the line directly above or below.

The function of ***PREVIOUS*** and ***NEXT*** can also be set to move back or forward by sentence or paragraph. By changing the cursor movement mode within the document, these thumb keys commands move by line rather than sentence, and section rather than paragraph. Cursor movement modes are discussed in 7.6 Cursor Movement Modes.

To return to the top of the document, press ***SPACE with dots 1-2-3***. KeySoft displays a window of text starting at the very first symbol in the document.

To jump directly to the end of the document, press ***SPACE with dots 4-5-6***. KeySoft displays a window of text ending with the last symbol in the document.

Experiment with the thumb to become familiar. Try reading your "sample" document or the "Demonstration Document" in this way.

3.8.1.1 Auto-Advancing the Braille Display.

You can set your BrailleNote BT to automatically advance the display without you having to press ***ADVANCE*** all the time. Each Braille window is displayed for a time before the next window is displayed. You can set the speed to suit your particular preference. To start the automatic advance press ***SPACE with dots 1-2-4-5-6***. Press ***NEXT*** to speed up and ***PREVIOUS*** to slow down the display rate. You can stop by pressing ***PREVIOUS*** and ***NEXT*** or ***BACKSPACE with ENTER*** simultaneously. Re-start by pressing ***SPACE with dots 1-2-4-5-6*** again.

3.8.2 Listening to a Document.

When you are reading sentences or paragraphs, you may be simply listening to the text, or checking it in detail for errors. You can choose to hear the amount of detail you require by setting the punctuation level. You may also choose whether numbers are spoken as words or as digits.

You use the keyboard to enter commands when listening to BrailleNote BT's speech. To listen to a document without stopping, press ***SPACE with G***, for "Go." KeySoft continues reading to the end of the document unless you stop by pressing ***BACKSPACE with ENTER***. You can start and stop as you wish with these two commands.

To return to the top of the document, press ***SPACE with dots 1-2-3***. KeySoft says: "Top of document." and announces the first word of the document.

To jump directly to the end of the document, press ***SPACE with dots 4-5-6***.

Experiment with the Go, Stop, Beginning and End commands until you are happy that you understand their effects.

There are several other important commands for moving around the text. There is an important convention here:

To move back and read something, use the left-hand keys;

To move forward and read something, use the right-hand keys;

To read something without moving, use both left and right-hand keys.

For example, try the commands for reading characters:

To move back a character and read it, press ***SPACE with dot 3***;

To read the current character, press ***SPACE with dots 3-6;***

To move forward a character and read it, press ***SPACE with dot 6.***

This convention also applies to reading whole words, as follows:

To move back a word and read it, press ***SPACE with dot 2;***

To read the current word, press ***SPACE with dots 2-5;***

To move forward a word and read it, press ***SPACE with dot 5.***

You may be able to guess the next triplet of commands:

To move back a sentence and read it, press ***SPACE with dot 1;***

To read the current sentence, press ***SPACE with dots 1-4;***

To move forward a sentence and read it, press ***SPACE with dot 4.***

You may have noticed another scheme in use. The outer fingers, on ***dots 3 and 6***, are used to read small elements, or characters. The inner fingers, on ***dots 1 and 4***, are used for larger elements like sentences. A similar convention applies for previous, current, and next paragraphs:

To move back a paragraph and read it, press ***SPACE with dots 2-3;***

To read the current paragraph, press ***SPACE with dots 2-3-5-6;***

To move forward a paragraph and read it, press ***SPACE with dots 5-6.***

You can follow a sentence or paragraph read command with another sentence or paragraph read command to immediately change the prose being read.

Try reading your "Sample" document or the "Demonstration Document" with these commands. You can refresh your memory by pressing ***SPACE with H,*** for Help, and opening the "Review Commands" list. Alternatively you can enter the Announce Key mode by pressing ***SPACE with W*** and practice the review keystrokes.

When using several review commands one after the other, you do not have to wait for speech to finish, nor do you have to release ***SPACE*** after each command. Here is an example where we move back several words and then move forward a character at a time. First press, and hold down, ***SPACE*** with either thumb. Now, with ***SPACE*** held down, tap ***dot 2*** several times, to move back several words. With the ***SPACE*** still held down, tap ***dot 6*** several times to move forward several characters. Finally release the SPACE bar.

The ***BACKSPACE*** and ***ENTER*** keys operate in the same way when they are used for deleting and formatting text as described later. You will find this feature very convenient to use and easy on your wrists.

3.8.3 Review Voice.

The Review Voice settings determine when KeySoft speaks and how much detail KeySoft includes when reading. When you hold down the ***PREVIOUS*** thumb key, press ***SPACE*** and release both keys, KeySoft displays the current Review Voice. The options are; Speech On, Speech On Request, and Speech Off.

The Review Voice settings can also be accessed by pressing ***SPACE with O*** then ***R***, anywhere in KeySoft. KeySoft might prompt: "Speech? Currently on."

The options are as follows:

To have speech and sounds on, press ***N*** for ON.

To have speech on Request, press ***R***.

To turn off speech and all sounds except alarms, press ***F*** for OFF.

When the Speech on Request option is selected, KeySoft only speaks when you use a command that is a specific speech command. For example, in KeyWord, the word processor, when you move forward word by word using ***SPACE with dot 5***, nothing is spoken. However if you use the dedicated "Speak Word under Cursor" command, ***SPACE with dots 2-5***, the word under the cursor is spoken.

After selecting the speech setting above, or pressing ***ENTER*** to leave the current level unchanged, KeySoft displays: "Punctuation level? (number)."

where the word "number" shown in brackets is really an actual number from 1 to 5. At level 1, no punctuation is announced. At level 5, all characters are spelt out, along with all punctuation. The default setting is 2. The intermediate levels are described in 5.6.3 Punctuation level. This setting applies whenever you are editing or reviewing documents or text.

To leave the setting unchanged, press ***ENTER***. To select a particular punctuation level, press a number from ***1*** to ***5***, then press ***ENTER***.

KeySoft then prompts: "Number Format? (Words)."

where the word shown in brackets is really the currently selected option either "Words" or "Digits." The options are ***W***, for numbers spoken as words, or ***D***, for numbers spoken digit by digit. If you select the word format, the number 1942 is spoken as "nineteen forty two," since it is assumed to be a date. The sequence $25.15 is spoken as "twenty five dollars and fifteen cents."

If you select the digits option, the number 1942 is spoken digit by digit. The choice is a matter of personal preference.

To leave a setting unchanged, just press ***ENTER***, or press ***W*** or ***D*** for the option you prefer, followed by ***ENTER***. You are returned to the point at which you selected the Review Voice settings.

3.8.4 Identifying Indistinctly Spoken Characters.

When you read a character by pressing ***SPACE with dots 3-6***, it is sometimes difficult to distinguish between letters that sound similar. If you press ***SPACE with dots 3-6***, twice, KeySoft expands the current character into its "military call sign", for example ***A*** - Alpha, ***B*** - Bravo, etc.

3.8.5 Spelling Out a Word.

If you press ***SPACE with dots 2-5*** twice, KeySoft spells the current word.

In a Braille document three presses of ***SPACE with dots 2-5*** causes KeySoft to spell a translated version of the word. If the word in question contains one or more grade 2 contractions, those contractions are expanded to their equivalent characters and the expanded word is spelt out. For example, the word "time" is spelled as "dot 5 T" on the second press but "t i m e" on the third press.

3.9 Review Commands.

The following discussion is applicable when reading the Braille display and when listening to a document.

3.9.1 Moving to Either End of a Line.

You can position to the start of the current line by pressing ***SPACE with dots 1-3***. To move to one position past the last word in the line, press ***SPACE with dots 4-6***.

3.9.2 Selecting Review-Only Mode.

If you are reading a document that you don't wish to alter, you can avoid having to press ***SPACE*** with all the reading commands. To enter this Review-Only Mode, press ***SPACE with X***.

You can then use all the reading commands without needing to press ***SPACE***. For example, to read the current word, just press ***dots 2-5***. This mode continues until you press ***SPACE with X*** again or exit the word processor.

3.10 The Cursor.

The cursor is an important concept because many KeyWord commands use the cursor as a reference to determine where to apply the command. It is also very important to understand exactly where the cursor is in your document so that your changes occur as you intend. Otherwise you may find the changes you make are wrong.

The cursor is a pointer to a single character in a document. The cursor is normally indicated on the Braille display as two dots below the usual six dot Braille cell; dots 7 and 8, This is the factory setting form of the cursor. To find out how to change the form of the cursor, refer to 5.4 Braille Display Options. When you are using speech you can tell which character the cursor is on by pressing ***SPACE with dots 3-6***. You can use the read current word, sentence and paragraph commands to determine the context of the cursor.

Editing takes effect at the cursor position. Whether you are using the Braille display or listening to the voice, if you want to edit the document, you must position the cursor at the point you want the change to start. The cursor indicates the position in the document where the next character will appear when it is Brailled. The character is inserted at the cursor position and everything to the right, including the cursor, is shifted one character to the right to make room. Pressing ***BACKSPACE*** deletes the character immediately to the left of the cursor, and everything to the right of the cursor is moved one character to the left to fill the vacated space.

3.10.1 Using the Touch Cursor.

Remember that the buttons immediately behind each cell of the Braille display comprise the touch cursor. To position the cursor at a particular cell you only have to press the cursor button associated with that cell. This is convenient to start editing at that point. First find the Braille cell in the Braille display where you want to start editing. Now move your finger directly above that cell and away from yourself until you feel a vertical ridge that curves upwards slightly. Press this and you notice a tactile action that confirms your press. Read the cell again. You find that the cursor is now positioned at the cell because dots 7 and 8 are displayed, assuming that you are using the standard cursor form. It is as simple as that.

3.10.2 Displaying the Cursor.

Having the cursor always displayed on the Braille display can make reading awkward, but it is needed for editing. KeySoft provides several Braille display modes to suit the situation. When you first enter KeyWord, Automatic mode is the default. You will probably use this mode most of the time when you are Brailling and/or proofreading. Here the cursor is turned on automatically when you are editing and turned off when you are reading. Reading with the ***ADVANCE*** and ***BACK*** thumb keys leaves the cursor position unchanged so that you can read the context without losing your place.

You can always bring the cursor to a particular cell in any of the following ways:

Press the touch cursor directly behind the cell;

Press ***SPACE with dots 3-6*** to read the current character or ***SPACE with dots 2-5*** to read the current word;

Bring the cursor to the first cell of the display by pressing ***BACK*** and ***ADVANCE*** together.

Some format indicators are displayed only if the cursor is on the indicator, others are displayed always. Format indicators are discussed later in 3.12 Format Indicators.

3.11 Braille Display Modes.

In KeyWord you use the Braille display for three purposes:

Reading. For example, your own notes, or a document someone has given or sent you, or an e-mail. You are interested in just reading the text as efficiently as possible. You are not interested in how the author has laid out the text as long as you can tell where paragraphs begin. You definitely don't want a cursor getting in the way of your reading.

Editing and proofreading. Here you need to move the cursor around the document and read all detailed formatting information.

Checking the layout for printing or embossing. You want to check what the margins, indents, tabs, centering, and so on, will actually be like before you convert your document to a format that can be embossed or printed. For example, when editing, a tab appears as a special marker. This is so that you know it is a tab rather than just several spaces. In layout mode the symbol disappears and the display shows how the tab will appear on paper.

To allow you to use the Braille display efficiently for each of these purposes, KeyWord has four Braille display modes. You can check which mode you are in and change the mode using the Braille Display Options in the Options menu. Alternatively you can check or change the mode by pressing the ***PREVIOUS and NEXT*** thumb keys together. The first press displays the current mode; subsequent presses cycle through the modes.

3.11.1 Automatic Mode.

Automatic mode is the default setting for KeyWord. This is a combination of the reading and editing modes and you will probably use this mode most of the time when you are Brailling and/or proof reading. Here the cursor is turned on automatically when you are editing and turned off when you are reading. Reading with ***ADVANCE*** and ***BACK*** leaves the cursor position unchanged so that you can read the context without losing your place. You can always bring the cursor to a particular position by using the touch cursor or bring the cursor to the first cell of the display by pressing ***BACK and ADVANCE*** together. Detailed information such as format indicators are displayed only if the cursor is on the indicator.

3.11.2 Reading Mode.

Use this mode for straight reading. In this mode the cursor is never displayed but always resides on the left-most cell of the display. The only formatting indicated is what is necessary for reading, such as new line indicators and tabs. The format indicator for displaying new lines and tabs is by default based on those recommended by the Braille Authority of North America. If desired you may change the method by which new lines are indicated. This is covered in more detail in 3.12.3 New Line Indicator.

3.11.3 Editing Mode.

In this mode the cursor is always on and all formatting information is displayed.

3.11.4 Layout Mode.

In this mode the document is laid out on the Braille display in the same way as it will appear on paper when it is printed, in the case of text documents, or embossed, in the case of Braille documents. Each line starts with a Braille format indicator, $p, $f, or $l to show whether it is the first line of a page, paragraph, etc. The line is then shown complete with margins, indents, etc., and ends with another Braille format indicator. The display is not word wrapped and does not wrap around lines. Each press of ***ADVANCE*** or ***BACK*** moves the display by exactly one display width along the line or starts a new line. The ***NEXT*** and ***PREVIOUS*** thumb keys move the display up and down.

3.12 Format Indicators.

To tell you how a document is formatted, KeySoft places special format indicators at particular points in a document. These format indicators are both spoken and displayed on the Braille display. You may have encountered a number of special groups of symbols on the Braille display when you were reviewing your "Sample" document. They tell you how the document is formatted. When displaying format indicators KeySoft follows the guidelines set for literary Braille format established by the Braille Authority of North America.

When using speech, format indicators are identified by their names. If the cursor is positioned over an indicator, the name of the indicator is displayed. On the Braille display, if the cursor is positioned under a format indicator, it appears under each of the characters of the format indicator.

3.12.1 Common Indicators.

Format indicators are groups of symbols that always start with a computer Braille dollar sign, $. In US computer Braille this is ***dots 1-2-4-6*** which is the same as the grade 2 "ed" contraction. In UK computer Braille it is ***dots 4-5-6.*** There is always a space before the $ and another space after the group of symbols. The symbol or symbols following the $ determine what the format indicator is showing.

For example, the new line indicator, which usually indicates the end of a paragraph, is a space followed by the dollar sign, followed by the letter p, and terminated by a space.

Common format indicators are:

LINE BREAK: KeySoft automatically started a new line because there wasn't any more room on the current line. A line break indicator is shown as the dollar sign followed by the letter l, $l. KeySoft automatically word wraps meaning that it starts a new line if it runs out of room on the current line. A line break indicator is inserted into the text showing you where a new line is started. The line break indicator is announced as "line break".

NEW LINE: A new line was started by pressing ***ENTER***. A new line is shown as the dollar sign followed by the letter p, $p. Often a new line indicator marks the beginning of a new paragraph. The new line indicator is announced as "new line".

PAGE BREAK: KeySoft started a new page because the previous page was full in much the same way that word wrap starts a new line when the previous line is full. The page break indicator always appears in conjunction with a line break or new line indicator in a document and is indicated by the addition of an f for new form after the $l or $p indicators. For example, $lf or $pf. The page break indicator is announced as "page break." The position of a page break varies as you add or delete lines of text.

NEW PAGE: The start of a new page is forced by pressing ***SPACE with P***. The new page indicator is shown in Braille as the dollar sign followed by the letter f for form, $f. The new page indicator is announced as "new page."

Don't forget that all of the indicators have a space before them and after them.

The positions of block markers, place markers and a range of other formatting markers described in this chapter and in Chapter 7, are also indicated in a document. The full set of format indicators used by KeyWord is below. If you don't recognize all of them or what they do, don't worry as they are all mentioned in context elsewhere in the user guide.

Line Break:	$l.
New Line:	$p.
Page Break:	$lf or $pf.
New page:	$f.
Placemarker:	$plc
New layout:	$nl
Indent:	$i
Tab:	$t
Tab 2:	$t#2
Center line:	$c
Right Justify Line:	$r
Paragraph Style:	$sp
Heading style:	$h
Sub heading:	$h#n
Outline style:	$ou
Line style:	$sl
Identical to Source:	$si
Ink print layout:	$nli
Ink print Indent:	$ii
Ink print exclusion:	$xis
End ink print exclusion:	$xie
Translation option:	$txi
Ink print page setting:	$psi
Top Block Marker:	$blt
Insert date:	$dtp

Binding space:	$bsp
Start Underline:	$fsu
End Underline:	$feu
Font start:	$fsn
Font end:	$fen
New Braille Layout:	$nlb
Braille indent:	$ib
Braille only inclusion:	$ob
Start Braille exclusion:	$xbs
End Braille exclusion:	$xbe
Braille Grade 0 indicator :	$g#0.
Braille Grade 1 indicator :	$g#1.
Braille Grade 2 indicator :	$g#2.
Braille page setting:	$psb
Braille Translation Indicator:	$txb
Extended character:	$ch
Extended symbol:	$m

3.12.2 Searching for Format Indicators.

If you wish to introduce changes to the layout or presentation of a document, you may need to locate format indicators such as layout indicators, font indicators, underline indicators, etc. If you want to change the format of paragraphs, you may need to locate new line indicators.

The Find command, ***SPACE with F***, and the Find and Replace command, ***BACKSPACE with F***, can be used to locate any of these format indicators. To go to the next occurrence of the selected format indicator, press ***SPACE with N***.

You can use the following command sequences to search for these indicators, and also to insert Format indicators into a document when entered at the "Replace with?" prompt:

New Line:	***SPACE with dots 2-6***.
New Page:	***SPACE with P***.
New Layout:	***BACKSPACE with L***.
Underline On:	***ENTER with U N***.
Underline Off:	***ENTER with U F***.
Font On:	***ENTER with T X N***.
Font Off:	***ENTER with T X F***.
Center Line:	***ENTER with C***.
Right Justify:	***ENTER with R***.
Indent:	***ENTER with I***.
Start Braille or ink-print exclusion:	***BACKSPACE with ENTER with dots 3-4***.
End Braille or ink-print exclusion:	***BACKSPACE with ENTER with dots 2-6***.
Translation Options indicator:	***BACKSPACE with ENTER with O***.
Text or Braille only inclusion:	***BACKSPACE with ENTER with I***.
Text or Braille layout:	***BACKSPACE with ENTER with L***.
Style of presentation indicator:	***BACKSPACE with S***.
Template Menu:	***BACKSPACE with ENTER with dots 2-3-4-6***.

Change Braille grade: ***BACKSPACE with G***.

3.12.3 New Line Indicator.

When reading large amounts of text you may find the new line indicator annoying. It is possible to change the way in which new lines are indicated.

This option is available within a document, an e-mail, or within the Planner. It determines how the start of a new line or paragraph is shown on the Braille display.

For linear Braille format where the start of a new line is indicated by the Computer Braille "dollar sign" then p, (dots 1-2-4-6 p), press ***L***.

For the new line or paragraph to start at the beginning of the display after a one cell indent, press ***A***.

For the beginning of the display after a two cell indent, press ***B***.

For the beginning of the display with no indent, press ***N***.

For two spaces anywhere they happen to fall on the display, press ***dots 2-3***.

For three spaces anywhere they happen to fall on the display, press ***dots 2-5***.

For just one space anywhere it happens to fall on the display, press ***dot 2***.

3.13 Editing a Document.

We have described how to create a new document and review its contents. This section introduces the basic text editing commands. The most common forms of editing are deleting or inserting characters, words, or sentences. These commands are described here, along with searching, search and replace, defining pages, and moving to particular points in a document. Advanced word processing commands are covered in Chapter 7.

3.13.1 Inserting Text.

To insert a character, word, sentence, or any amount of text, you need only to position the cursor at the point where you want to insert the text, and start Brailling. No special command is required because KeyWord is always in the insert mode.

Text is inserted at the cursor position. The character that was at the cursor, and all following characters, move to the right to make room. Experiment with this by inserting some words in your "Sample" document.

3.13.2 Deleting Text.

There are seven different delete commands available with KeyWord, allowing for the deleting of sections of text from one character to the whole document.

Delete current character -

Press ***BACKSPACE with dots 3-6.***

This deletes the character under the cursor. A short beep is sounded followed by announcement of the new character under the cursor. This command is also available by holding down SPACE and pressing D twice. The text to the right of the character is all moved one character to the left to fill the gap. The cursor is now placed on the next character and this character is displayed.

Delete last character -

Press ***BACKSPACE.***

This deletes the previous character, that is, the last character entered if you are typing. The character deleted is displayed followed by a short beep.

Delete current word -

Press ***BACKSPACE with dots 2-5.***

This deletes the word under the cursor together with any following spaces. A short beep is sounded and the text to the right of the word is all moved to the left to fill the gap. The cursor is now on the first character of the next word and this word is displayed. If the cursor is on a space, all spaces up to the beginning of the next word are deleted and the cursor is placed on that word.

Delete previous word -

Press ***BACKSPACE with dot 2.***

The word before the cursor is deleted, together with any following spaces.

Delete to end of sentence -

Press ***BACKSPACE with dots 1-4.***

KeySoft prompts you to make sure that you really mean to delete such a significant amount of text. If you press ***Y***, all text will be deleted from the cursor position to the end of the current sentence. The cursor will be placed on the first character of the next sentence.

Delete to end of paragraph -

Press ***BACKSPACE with dots 2-3-5-6.***

KeySoft prompts you to make sure that you really mean to delete such a significant amount of text. If you press ***Y***, all text will be deleted from the cursor position to the end of the current paragraph. The cursor remains in the same position.

Delete to end of document -

Press ***BACKSPACE with dots 4-5-6.***

KeySoft prompts you to make sure that you really mean to delete such a significant amount of text. If you press ***Y***, all text will be deleted from the cursor position to the end of the document. The cursor remains in the same position.

There is no specific command to delete all text from a document, but this can easily be done by pressing ***SPACE with dots 1-2-3*** to move to the top of the document and then pressing ***BACKSPACE with dots 4-5-6***.

Note that the keys used to delete a particular section of text correspond to the commands for reading the same section of text except that the ***BACKSPACE*** key is used in place of the ***SPACE*** key.

In summary, the full set of delete commands is:

Delete current character, ***BACKSPACE with dots 3-6***;

Delete previous character ***BACKSPACE***;

Delete current word, ***BACKSPACE with dots 2-5***;

Delete previous word, ***BACKSPACE with dot 2***;

Delete to end of sentence, ***BACKSPACE with dots 1-4***;

Delete to end of paragraph, ***BACKSPACE with dots 2-3-5-6***;

Delete to end of document, ***BACKSPACE with dots 4-5-6***.

In case it is not obvious, if you press one wrong key while you are typing, you will want to delete the character to the left of the cursor position, not the blank which is currently under the cursor. For this reason you should use ***BACKSPACE*** if you have just made a single typing mistake. Use ***BACKSPACE*** also to correct mistakes during entry of file names, search strings, etc.

For the same reason, if you realize that the word you have just typed is wrong when KeySoft echoes it, use the delete-previous-word command to remove it.

On reading your document again, you may find a word misspelled. When using speech it is often simpler to delete the word and retype it correctly, followed by a single space, rather than delete one or two characters and correct on a letter by letter basis.

3.14 Breaking your Document into Pages.

You can force a new pages in your text manually at any point you choose by putting the cursor where you definitely want a new page to start, such as the start of new chapters and pressing ***SPACE with P***.

KeyWord breaks the remaining text into pages automatically, so that the maximum number of lines fit onto each page.

When you have finished editing the document, check that it breaks into pages to your satisfaction. You can examine each page break to verify that important text is not split between pages. If you are not satisfied, you can force a new page before a page break by pressing ***SPACE with P***.

To examine each page break, you can move to the start of the next page by using the "Go To" command, ***SPACE with dots 1-2-6***, followed by ***SPACE with dots 1-2-6 then SPACE with dot 4***. You can also move back a page at a time by pressing ***SPACE with dots 1-2-6,*** followed by ***SPACE with 1-2-6 then SPACE with dot 1***. The "Go To" command is described further in 3.18 Going to a Specified Position.

To cancel a new page, move to the position where the "New Page" indicator is displayed, and use the "delete-current-character" command to delete it.

3.15 Checking the Word Count and File name.

If at any time while in a document, you wish to check the file name or word count, press ***SPACE with I***. This will give you the Information Menu, with two items, File name and Word Count. Select an option in the usual manner.

If you select File name, the name will be displayed. If you select Word count, KeySoft will display "Please wait..." and after a brief pause, the total word count.

3.16 Searching a Document.

The Search Command allows you to find a particular string of text within a large document. The term "string" refers to a sequence of characters which may be part of a word, a whole word, or 2 or 3 words. Searches may be either backwards or forwards from the current cursor position.

Press ***SPACE with F*** to initiate the search. KeySoft prompts: "Search forward or back?."

3.16.1 Searching Forward.

Press ***F*** to search forward from the current cursor position. KeySoft displays: "Find?."

The last string searched for, if any, is offered as a suggestion.

Press ***ENTER*** to select the suggested text, or type the text string to be found, and press ***ENTER***. KeySoft starts to search the document. If the text is found, the cursor jumps to the first occurrence of that text.

KeySoft displays: "Found (word)."

where word is the first word of the text string that was entered. If the text string cannot be found, KeySoft displays: "Cannot find (string)."

Either press ***ADVANCE*** or ***PREVIOUS*** to return the display to the document.

If you want to carry on searching forward for the next occurrence of the same text, press ***SPACE with N***. In a large document the search may take a few seconds.

If searching for a particular e-mail, use the binding space command ***ENTER with B*** to put spaces between words. This is not necessary in other contexts.

3.16.2 Searching Back.

You can search back from the current cursor position by pressing ***B***, instead of ***F***, at the Search Forward or Back prompt. The rest of the procedure for searching back is the same as that just described for searching forward.

3.16.3 The Search String.

The Search string can be up to 50 characters long and it can contain words separated by spaces.

Either upper or lower case letters may be used as the search process will locate text regardless of capitalization.

It is also possible to search for special indicators such as New Line or New Page markers, printer control markers, underline markers, etc. For information on the way to specify these markers, refer to 3.12.2 Searching for Format Indicators.

3.16.4 Find and Replace.

In addition to searching for a particular word or string of characters, you can also replace one string with another. Only whole words are replaced. This is useful, for instance, if you discover you have misspelled a word which is frequently used throughout a lengthy document.

The command for "Find and Replace" is ***BACKSPACE with F***. This command is followed by ***F*** for a forward search, or ***B*** for a back search. KeySoft prompts: "Find? (Search string),"

where "search string" is the text string used last time a search was made. The very first time you use your BrailleNote BT or if you reset it, there is nothing to display. Type the new word or words to find and press ***ENTER***, edit the previous search string and press ***ENTER***, or just press ***ENTER*** to search for the same string again.

KeySoft prompts: "Replace with (replacement text),"

where "replacement text" is the last entry you made here. Type up to 50 characters of replacement text and then press ***ENTER***, edit the previous replacement text and press ***ENTER***, or just press ***ENTER*** to replace the same text as last time. KeySoft then prompts: "Replace all or first?."

To avoid the problem of words which happen to be embedded in other words, KeyWord replaces whole words only.

If you want to replace all occurrences, forward or back as appropriate, with the new text, press ***A***. To replace just the first occurrence, press ***F***.

If the word you are searching for does not occur within the document being searched, KeySoft displays: "Can't find (search string)," where search string is the text string used.

It is important to remember whether you are searching forwards or backwards in a document. The "Can't find" message means that a word cannot be found in the direction that is currently being searched. For instance, if you search forward from the middle of a document, you will miss an occurrence in the first half.

KeySoft always remembers the most recent search and replacement text, and these become the new suggested strings. Special indicators such as New Line Marker and New Page Marker can be replaced in the same way.

3.17 Checking the Cursor Position.

To check where the cursor is currently positioned, press ***SPACE with wh sign (dots 1-5-6)***. KeySoft responds with the page number, line number and column number of the cursor position. To return the Braille display to the document, press either ***ADVANCE*** or ***PREVIOUS***.

Used in conjunction with the cursor movement commands, this is a useful way of checking your page layout for printing or embossing. For example, you can position the cursor on the first character of a particular line by pressing ***SPACE with dots 1-3,*** and then check the cursor position to find out which column this line starts on. This enables you to check margin settings.

3.18 Going to a Specified Position.

The cursor can be moved to any chosen page, line or column with the "Go To" command. To do this, press ***SPACE with dots 1-2-6,*** then enter a page, line and column position in the document, and press ***ENTER***. This command is very flexible, and you can make entries such as the following:

C6 moves the cursor to Column 6 on the current line. ***P3*** moves the cursor to Page 3, Line 1, Column 1.

P 5 L10 moves the cursor to Page 5, Line 10, Column 1.

You can also go to the top of the next or previous page by pressing ***SPACE with dots 1-2-6,*** followed by ***SPACE with dot 4 or 1***.

3.19 Marking Places for Quick Reference.

Up to 26 positions in a document may be marked with Place Markers, enabling instant future reference. Place Markers are identified by letters. Typically, you might put a place marker where you are editing a document. You can then move to another part of the document, and return quickly to the edited text.

Place Markers are not retained in non-KeyWord documents when they are saved.

A Place Marker is announced as "Place Marker c," where c is a letter which names the Place Marker. It does not affect the document format and is not embossed or printed.

3.19.1 Place Markers on Braille display.

A Place Marker is displayed on the Braille display as $pla where a is the letter of the alphabet which identifies the place marker. It does not affect the document format and is not embossed or printed.

3.19.2 Define a Place Marker.

Position the cursor at the point you wish to mark, and press ***BACKSPACE with D***. KeySoft prompts: "Define Place Marker. Letter?."

Press a letter, such as ***A***, to name the Place Marker. KeySoft displays: "Place A."

When you mark your document with a place marker, you may be surprised to see the cursor, usually dots 7 and 8, under each of the four characters of the place marker. KeySoft treats the place marker as a single object which cannot be split so it marks the whole group.

3.19.3 Jump to a Place Marker.

Press ***SPACE with J***. KeySoft prompts: "Jump to Place Marker. Letter?"

Press the letter corresponding to the Place Marker. The cursor is placed just to the right of the Place Marker itself.

3.19.4 Delete a Place Marker.

Locate the Place Marker you wish to delete, using the Jump to Place Marker command. This places the cursor just to the right of the Place Marker, so delete the marker by pressing ***BACKSPACE***.

3.20 The Spelling Checker.

The Spelling Checker can be used in the Word processor or Planner. It finds typing and spelling mistakes in the current document by looking up each word in a dictionary of 65,000 words.

The Spelling Checker can check the whole document or part of a document. Select the Spelling Checker by pressing ***SPACE with dots 1-6, the ch sign***. If the Spelling Checker has not been used since KeySoft was installed, you are asked to install the language. There is an American English spelling dictionary and a United Kingdom English spelling dictionary available. Press ***SPACE or ADVANCE*** until your dictionary of choice is displayed, and select it by pressing ***NEXT or ENTER***.

The Spelling Checker menu contains 6 items:

Document Check: check the whole document;

Lookup Word: lookup any word;

Word Check: check the word under the cursor;

Paragraph or Section Check: check paragraph or section;

Check from Cursor: check from cursor to end of document;

Select language.

If the Spelling Checker finds a word which is not in its dictionary, it displays the word and then: "Option?"

There are 7 possible actions at this point. You may wish to press ***SPACE with H*** for assistance. After you have selected your action, checking continues. When the checking has finished, you hear the total number of words checked and the number of unknown words found. The cursor then returns to its original position.

The seven options are now discussed.

3.20.1 Review the Word Using Speech.

If you want to hear the word again, press ***SPACE with dots 2-5.*** On the first press the word is spoken. On the second press the word is spelled out. This sequence repeats on subsequent presses.

You can also review the word in context at the "Option?" prompt as follows:

1. To read the current sentence, press ***SPACE with dots 1-4.***

2. To read the current paragraph, press ***SPACE with dots 2-3-5-6.***

If Line Reading mode has been selected, these two commands speak the current line or section instead. You can set the Reading Mode at the "Option?" prompt by pressing ***SPACE with M.*** Reading modes are discussed in 7.6 Cursor Movement Modes.

3.20.2 Skip this occurrence of the word.

To skip the current occurrence of the word and leave it unchanged, press ***SPACE with dot 5.*** If the word occurs elsewhere, the Spelling Checker queries it again.

3.20.3 Ignore the word.

To leave all instances of the word unchanged, press ***I***, for Ignore. Use this option to ignore a name or specialized word which occurs throughout the document, but is not recognized by the spelling checker, and which you do not wish to add to the dictionary.

3.20.4 Add the word to the dictionary.

To add the current word to the user dictionary, press ***A.*** The word will never again be displayed as an unknown word when the Spelling Checker is used. Use this option for names, technical terms, etc which you often use. For more information on the User Dictionary, refer to 3.20.10 The User Dictionary.

3.20.5 Correct the Word.

To correct the word being queried, press ***C***, and KeySoft displays: "Enter replacement."

Type the replacement word or edit the existing word, and press ***ENTER***. The Spelling Checker looks up your entry in its dictionary before accepting it. If it can't find it, the Spelling Checker asks for confirmation by prompting: "Word not in dictionary. Use?"

Press ***Y*** to use the new word, or ***N*** and then re-enter the correction.

If you correct a missing space between two words, KeySoft checks each separate word before accepting your correction.

In case the word you are correcting occurs more than once in the document, the Spelling Checker also asks: "Correct all or first?"

To correct this and all subsequent occurrences of the word in the document, press ***A***, for All. To correct only this first instance, press ***F***, for First.

When making corrections, don't worry about capital signs or capital letters because the Spelling Checker leaves them as they are.

3.20.6 Review Suggestions.

To obtain a "Suggestions list," press ***S***. This is a list of words which resemble the original, and may be reviewed by pressing ***SPACE or ADVANCE*** or ***BACK or BACKSPACE***. The following 3 options are then available:

1. To display the original word, press ***I***. In speech, subsequent presses alternately spell out and speak the word.
2. To replace the misspelled word in your document with the current suggestion, press ***NEXT*** or ***ENTER***. You are given the option of replacing all occurrences or just the first one.
3. To spell out the current suggestion using speech, press ***SPACE with O,*** then ***S.***

If you don't like the suggestions, press ***SPACE with E*** to go back to the "Option?" prompt.

3.20.7 Look up the Word in the Dictionary.

This option allows you to browse the dictionary, word by word, until you have found the correct spelling. You can then replace the misspelled word with the correct one.

At the "Option?" prompt, press ***L***, and KeySoft asks: "Word to look up? Press ***ENTER*** for (word),"

where "word" is the unknown word. You normally press ***ENTER*** to select the unknown word. Alternatively, you can enter a possible alternative spelling, or just the first few letters, followed by ***ENTER***.

You are then placed at the word in the dictionary which most closely matches the letters you have typed. To browse through the dictionary until you find the word you are looking for, use ***SPACE or ADVANCE*** or ***BACK or BACKSPACE***.

There are 4 options here, similar to the Suggestions options. These are:

1. To replace the misspelled word in your document with the current dictionary word, press ***NEXT or ENTER***. You are asked whether you want to replace the first occurrence or all, in case there are multiple occurrences.
2. To return to the "Word to lookup?" prompt, press ***SPACE with E.*** You can then type another alternative spelling, or press ***SPACE with E*** again to return to the "Option?" prompt.
3. To display the original word, press ***I.*** In speech, subsequent presses alternately spell and speak the word.
4. To spell the current word in the dictionary, press ***SPACE with O***, then ***S.***

3.20.8 Leaving the Spelling Checker.

To exit from the Spelling Checker, press ***SPACE with E.*** The cursor is placed at the point where the Spelling Checker was interrupted. To restart the spelling check from where you left off, press ***SPACE with dots 1-6, the ch sign***, then ***C.***

3.20.9 Browse The Dictionary.

You can look up any word, and browse the spelling dictionary, without having first found the word with the Spelling Checker. From anywhere in the document, press ***SPACE with dots 1-6, the ch sign***, then ***L***, and KeySoft prompts: "Word to look up?"

Type the word, or just the first few letters, and press ***NEXT or ENTER***. You are placed at the word in the dictionary which most closely matches the letters you have typed, and the word is displayed. To browse through the dictionary until you find the word you are looking for, use thumb keys ***SPACE or ADVANCE*** or ***BACK or BACKSPACE***.

There are three options available while browsing through the dictionary, as follows:

1. To insert the current dictionary word into your document at the present cursor position, press ***NEXT or ENTER***. No spaces are included, so you may need to add a space if the word is inserted in a sentence. No capital signs are included so you may need to add these, if necessary.
2. To return to the "Word to lookup?" prompt, press ***SPACE with E.*** You can then narrow down the options by typing more starting letters, or enter a different word. To return to the document, press ***SPACE with E*** again.
3. To spell the current word in the dictionary, press ***SPACE with O***, then ***S.***

3.20.10 The User Dictionary.

When you use the "Add to dictionary" option, the new word is stored separately in a KeyWord text document called "User dictionary." The words are arranged one per line. You can review the User Dictionary using KeyWord, and correct or remove words. If you edit the User Dictionary, use only lower case letters and apostrophes.

The User Dictionary is saved in the "Dictionaries" folder.

3.21 Opening ASCII and Plain Braille format Documents.

Documents in KeyWord's native format, as well as Microsoft Word, RTF, or WordPerfect documents precisely specify their contents and formatting. However, the contents and formatting of documents containing plain ASCII text and the formatting of plain Braille documents are not at all precisely defined, so it is necessary to give you control over how KeyWord interprets them. This is done through a list of options presented when you open such a document. The initial settings for these options are either the ones you established last time you opened the same document, or if you have never opened the document before, settings that KeyWord assumes are most appropriate for the document and therefore usually you will not need to make any changes. So that you can tell whether or not you have opened this document before, the wording of the prompt changes from "Review the options?" to "Review previous options?" accordingly. To continue and open the document without reviewing the options, just press ***ENTER***. To review the options, press ***Y.***

The options given when opening a document are as follows:

"Is this a Braille or Text document?"

If the name extension is .brl or .brf indicating that it will be a Braille file, then this option will have already been set to Braille. When open, these documents default to a reading grade of contracted Braille, regardless of the preferred reading grade set, as most Braille documents are in contracted Braille.

If the document is not .brf or .brl but contains Braille, then select "Braille" by pressing ***B***. Otherwise select "Text" by pressing ***T***. Follow either entry with ***ENTER***.

"Use Line or Paragraph format when opening the document? currently Paragraph."

When opening a document, it is important that KeyWord knows the difference between the ends of lines within a paragraph and the end of the paragraph itself. Without this knowledge, paragraphs might be run together, or each line within a paragraph may be taken as the end of a paragraph, causing the speech to pause in the wrong places, and stopping the proper reformatting of lines within a paragraph when a change is made. Plain text or plain Braille documents use the same "control characters," for example, "carriage returns" and "line feeds" to show where lines within paragraphs end as they use to show where a paragraph ends. This option allows you to control how KeyWord interprets these control characters to distinguish between ends of lines and end of paragraphs.

The option you choose here depends on the way the document you are opening is formatted:

The Paragraph format option assumes that a single carriage return and/or line feed character sequence, that is not followed by an indent of more than one space, denotes the end of a line within a paragraph and is therefore removed so that KeyWord can reformat the paragraph within the margins that you have set. A sequence of two or more carriage return and/or line feed characters or a single sequence followed by an indent is interpreted as being the start of a new paragraph and is substituted for KeyWord's New Line markers. This option is the initial setting when you first open a document and is the one that you will need for most prose type documents.

The Line format option retains every carriage return and/or line feed sequence as a New Line in KeyWord. Use this setting when opening documents containing lists or documents where each paragraph is formatted as one long line.

To retain "Paragraph" format when opening the document, just press ***ENTER***. To select "Line" format, press ***L*** followed by ***ENTER***.

"Use Line or Paragraph format when saving the document? Currently Paragraph."

In a similar way to the previous option for opening documents, this option controls the use of carriage returns and line feeds when a plain text or plain Braille document is saved. Paragraph option puts carriage return/line feed sequences only where New Line markers occurred while the document was being edited. Line option puts them where either Line Break indicators or New Line markers occur.

If you are saving a document for use again in KeySoft or for transferring to another word processor, use Paragraph format. This will ensure that all paragraphs, headings, list, etc. are properly formatted when the document is opened next time. However each paragraph will appear as one long line, so if you are saving the document for use on a system which may not be able to handle this, then save using Line format.

To retain "Paragraph" format when saving the document, just press ***ENTER***. To select "Line" format, press ***L*** followed by ***ENTER***.

You may have worked out that if you open a document using Paragraph format and then save it using Paragraph format, then you must open it next time using Line format. KeyWord changes the setting automatically for you so that if you have saved a document using paragraph format, next time you open it, the opening setting will be Line format.

Whether or not KeyWord uses Line Feed control characters in addition to Carriage Return characters is controlled by the "Use of Line Feed characters?" option in the ASCII Translation Options in the Translation Menu. The use of the ASCII End of File character is controlled by the "Use of End of File character" option in the same list.

"Extended ASCII character option? Currently Retain."

The standard ASCII character set uses numbers between 0 and 127 to denote each character within the set. It does not make provision for accented characters and other special symbols, so where necessary this is done by extending this set with numbers greater than 127. This option controls how KeyWord interprets these characters.

Sometimes extended characters occur not because they are accented characters or special symbols, but because the file has been transmitted through a communications system that has added a "parity bit" which in effect has added an offset to some of the characters. To adjust for this, use the "Convert to standard ASCII" option, by pressing ***C***, followed by ***ENTER***.

Sometimes the extended characters are used purely for visual effects such as boxes around paragraphs, etc. In these cases the document will be easier to read if the extended characters are removed altogether, use the "Ignore" option for this.

To retain the extended characters when the document is opened, select "Retain." On selection of Retain, another option is presented:

"Extended character set? Currently ANSI."

More than one system has been used for extended characters, therefore you must tell KeyWord which one to use for this document. The options are the "ANSI" character set and the "MSDOS" character set. If you don't know which one to use, try one and if the extended characters do not come out correctly, try the other. For the "MSDOS" set press ***M*** followed by ***ENTER***. For the "ANSI" set press ***A*** followed by ***ENTER***.

KeySoft will now display: "End of list."

When you are ready to open the document, press ***SPACE with E***.

3.22 Large Documents.

There is no significant limit to the size of a document, but as it gets bigger, some operations take longer to perform. For instance, when you press ***SPACE with E*** to exit a document, a delay of several seconds may occur. Moving to the top or bottom of a document may also take a few seconds. In such instances KeySoft displays: "Please wait", or "Repositioning," depending on the situation. Keystrokes are not actioned until such an operation has been completed. If necessary, divide large documents into two or more smaller ones to speed the editing of the text.

3.23 Switching Between Documents.

There may be times when you are working with two or more documents. This can happen when you are modifying a document and need to refer often to the original. While you can close one document by pressing ***SPACE with E,*** opening the other can involve several keystrokes.

There is a quicker way. From the current document, press ***SPACE with dots 1-2-5-6.*** This closes the current document, and places you at the "Document to open?" prompt. KeySoft then offers the name of the document which was opened before the last one. To open this, press ***ENTER***. This means that you can switch back and forth between your two most recent documents just by pressing ***SPACE with dots 1-2-5-6***, followed by ***ENTER***.

This scheme also works if you are working with several documents, because the document name that KeySoft offers when you press ***SPACE with dots 1-2-5-6*** is just the first in a list. If you press ***SPACE with dots 5-6,*** KeySoft offers the next most recent document, and you can work down the list towards progressively older documents. You can also work back up the list by pressing ***SPACE with dots 2-3.*** When you find the one you want, press ***ENTER***.

To provide fast access to recently used documents and folders, ***SPACE with dots 5-6*** is available at most document and folder prompts throughout KeySoft.

End of Word Processing Chapter.

4 Book Reader.

BrailleNote mPower BT has a book reader called KeyBook. It enables you to read electronic books in the following formats: KeyWord text and Braille, Microsoft word, ASCII text, RTF, WordPerfect 5.1 and plain Braille files with a BRF or BRL extension. KeyBook has the same reading commands as KeyWord, but KeyBook does not allow the book contents to be modified.

4.1 Instant Braille Transcription.

If the book is in text format, KeyBook can transcribe the text into your preferred reading grade instantly, as you read. For example, if your preferred reading grade is Grade 2 Braille, KeyBook automatically displays the book in Grade 2 as you read. However, the underlying text is still in its original form, and you can examine it in computer Braille, at any time, should you wish.

4.2 Reading the Sample Book.

After selecting KeyBook from the Main Menu, KeyBook displays: "Read book in which folder? Press ***ENTER*** for My Books."

Press ***ENTER***. If this is the very first time a book is read, the book name must be selected from the list of books in the Books folder. Press ***SPACE*** repeatedly to display the list; then press ***ENTER*** when "A Christmas Carol" is displayed.

KeyBook prompts: "Review the options?" Press ***ENTER*** to accept the default options, and the book will load. For more information about reviewing the options, see 4.8 Reading Books Stored on Other Drives.

Note: If a book has been read before, KeyBook will prompt: "Book name?" Press ***ENTER*** for a Christmas Carol."

To load the book, press ***ENTER***. Once the book is loaded, the beginning of the text will display and, if the speech is on, KeyBook announces: "Top of document." You are now ready to start reading.

4.3 Braille Display thumb key commands.

The same commands that are used in KeyWord also apply to KeyBook. The following commands can be used to read using the Braille display:

To advance the display forward by one width, press ***ADVANCE;***

To move the display back by one width, press ***BACK;***

To move the display forward by a chosen amount of text, press ***NEXT.***

You can set the amount of text at sentence, paragraph or line in the "Function of ***PREVIOUS*** and ***NEXT*** thumb keys" option as described in 5.4.4 Function of Previous and Next thumb Keys.

Likewise, to move the display back by the chosen amount of text, press ***PREVIOUS.***

The following commands control the automatic Braille display advance mode:

To start the display advancing automatically, press ***SPACE with dots 1-2-4-5-6***;

To decrease the speed of advance of the Braille display, press ***PREVIOUS;***

To increase the speed of advance of the Braille display, press ***NEXT;***

To stop the Braille display advancing, press ***BACKSPACE with ENTER*** together;

To move the display back a word, press ***PREVIOUS with BACK;***

To move the display forward a word, press ***PREVIOUS with ADVANCE;***

To turn the Braille display on or off, press ***SPACE with NEXT***. This was described in more detail in 1.15.1 Turning the Braille Display On or Off;

To turn speech on or off, first press ***PREVIOUS***, then ***SPACE*** and then release both keys. This was described in more detail in 1.15.2 Turning Speech On or Off;

To route the cursor to the beginning of the Braille display, press ***BACK with ADVANCE***.

To cycle through the four Braille display modes, press ***PREVIOUS with NEXT*** repeatedly. The Braille display modes are discussed in 3.11 Braille Display Modes. The Factory setting is "Automatic." Leave it this way until you are acquainted with 3.11 Braille Display Modes. To change the text document reading grade, press ***ADVANCE with NEXT*** repeatedly. This only applies to a book in text format. The options are your preferred Braille grade, 6 dot computer Braille or 8 dot computer Braille.

Alternatively, for on the fly translation to your preferred reading grade, press ***P***. For 6 dot computer Braille, press ***F***. For 8 dot computer Braille, press ***H***.

4.4 The Review Cursor.

When you are reading, the cursor is hidden because it serves no useful purpose. However, in the automatic Braille display mode, when you are reviewing character by character, the cursor is shown to indicate the current character. For grade 1 or grade 2 Braille, the cursor is both ***dots 7 and 8*** by default. For computer Braille the cursor is ***dot 8*** only. Remember that KeyBook automatically displays the book in your preferred grade of Braille if the original book is in text format. If you move the cursor onto a word, however, that word is displayed in computer Braille. This gives you a one-to-one correspondence between the Braille display and the word you are reviewing. Of course, if the original book is in Braille there is no change as you move the cursor.

When the cursor is under a format indicator, the cursor spans all of the cells of the indicator.

4.5 Additional Reading Commands.

KeyBook's reading commands are the same as KeyWord's, but KeyBook does not allow the book to be edited. This feature prevents intentional or unintentional modification to the text of the book being read.

The following commands can be used to listen to the book that has been opened:

To go forward reading, press ***SPACE with G***.

Note that while you are continuously reading, you can skip back or forward by sentences or paragraphs without stopping the continuous reading function. This feature is extremely useful if you want to quickly browse forward or back from your current reading position.

To stop reading, press ***BACKSPACE with ENTER*** together.

The following 6 commands can be used both while KeyBook is continuously reading and when you are reviewing:

To move back a sentence, press ***SPACE with dot 1***;

To hear the current sentence, press ***SPACE with dots 1-4***;

To move forward a sentence, press ***SPACE with dot 4***;

To move back a paragraph, press ***SPACE with dots 2-3***;

To hear the current paragraph, press ***SPACE with dots 2-3-5-6***;

To move forward a paragraph, press ***SPACE with dots 5-6***.

The other commands available when reviewing are:

To go to the beginning of the book, press ***SPACE with dots 1-2-3***;

To go to the end of the book, press ***SPACE with dots 4-5-6***;

To find a text string in the book, press ***SPACE with F***. This command is described in 3.16 Searching a Document.

To move back a character, press ***SPACE with dot 3***;

To hear the current character, press ***SPACE with dots 3-6***. (Press this command once to hear the character spoken. Press it again, and if the character is a letter, you will hear its "call sign" e.g. Alpha for ***A***, Bravo for ***B*** etc.)

To move forward a character, press ***SPACE with dot 6***;

To move back a word, press ***SPACE with dot 2***;

To hear the current word, press ***SPACE with dots 2-5***. The first time you press this command, the word is spoken. The second time the word is spelled out;

To move forward a word, press ***SPACE with dot 5***;

To enter Announce Key Mode, press ***SPACE with W***;

To query the cursor position, press ***SPACE with wh sign (dots 1-5-6)***;

To go to any page, line, or column, press ***SPACE with dots 1-2-6***. This command is described in 3.18 Going to a Specified Position.

Besides accepting the ***SPACE with dot*** combinations, KeyBook also accepts the commands without the ***SPACE*** because the meaning is clear. This is the same as KeyWord's "review only" mode that was discussed in 3.9.2 Selecting Review-Only Mode.

This is quite a long list to remember, but assistance is always available by pressing ***SPACE with H.***

4.6 Miscellaneous commands.

KeyBook has a group of block commands. These commands are the same as KeyWord's block commands. To go to the block commands menu, press ***SPACE with B***. The block commands are described in 7.5 Block Commands, 19.2.7 Block Commands.

To open another book, press ***SPACE with dots 1-2-5-6***. KeyBook prompts: "Book name? Press ***ENTER*** for (book title)" where book title is the name of the last book read. You can type the name of the book that you want to load or review the list of books in the current folder by pressing ***SPACE or ADVANCE***. You can then select the book you want by pressing ***NEXT or ENTER***.

If you want to change the folder, press ***BACKSPACE*** at the "Book name?" prompt. KeySoft displays: "Folder name? (Last used folder)."

To step through the list of folders, press ***SPACE or ADVANCE***. This procedure was described in more detail in 3.21 Opening ASCII and Plain Braille format Documents. When you have selected a folder, KeyWord asks for the book name as before.

To check what document you have selected, press ***SPACE with I*** and KeySoft will display the document name.

4.7 Review Book Opening Options.

Books in KeyWord's native format, as well as Microsoft Word, RTF and WordPerfect format, precisely specify their contents and formatting. However, the contents and formatting of books in ASCII text or plain Braille are not at all precisely defined, so it is necessary to give you control over how KeyBook interprets them. This is done through a list of options presented when you open such a book. The initial settings for these options are either the ones you established last time you opened the same book, or if you have never opened the book before, settings that KeyBook assumes are most appropriate for the book. Because of this, you usually won't need to make any changes. So that you can tell whether you have opened this book before, the wording of the prompt used changes from "Review the options?" to "Review previous options?" accordingly. To continue and open the book without reviewing the options, just press ***ENTER***. To review the options, press ***Y***.

The options given when opening a book are as follows: "Is this a Braille or Text document?."

If the file extension is .brl or .brf (plain Braille) then this option will have already been set to Braille. If not, you must respond to the question before moving on.

If the book contains grade 1 or grade 2 Braille, then select "Braille" by pressing ***B***. Otherwise select "Text" by pressing ***T***. Follow either entry with ***ENTER***. KeySoft then prompts: "Use Line or Paragraph format when opening the document? currently Paragraph."

When opening a book, it is important that KeyBook knows the difference between the ends of lines within a paragraph and the end of the paragraph itself. Without this knowledge, paragraphs might be run together, or each line within a paragraph might be treated as a separate paragraph. This would cause the speech to pause in the wrong places, and make it impossible to skim by paragraph. Plain text and plain Braille books use the same "control characters," for example, "carriage returns" and "line feeds," to show where lines within paragraphs end. This option allows you to control how KeyBook interprets these control characters to distinguish between ends of lines and ends of paragraphs.

The option you choose here depends on the way the book you are opening is formatted:

The Paragraph format option assumes that a single carriage return or carriage return/line feed pair that is followed by one or no spaces, denotes the end of a line within a paragraph. This end of line marker is removed so that KeyBook can reformat the paragraph within the margins that you have set. A sequence of two or more carriage return and/or line feed characters or a single sequence followed by an indent of two or more spaces is interpreted as the start of a new paragraph. This option is the default setting when you first open a book, and is the one that you will need for most prose books.

The Line format option retains every carriage return and/or line feed sequence as a New Line in KeyWord. Use this setting when opening books containing lists, or poetry, or books where each paragraph is formatted as one long line.

To retain "Paragraph" format when opening the book, just press ***ENTER***. To select "Line" format, press ***L*** followed by ***ENTER***. KeySoft then prompts:

"Use Line or Paragraph format when saving the document? Currently Paragraph."

Because KeyBook does not allow the text within a book to be modified or added to, just press ***ENTER*** to confirm the prompted option. KeySoft then prompts: "Extended ASCII character option? Currently Retain."

The most common writing system used by computers is ASCII. In this system, each letter, number, and commonly used punctuation mark is represented by a number between 0 and 127 (Since the system was developed in the U.S., "commonly used" means commonly used in the U.S.) There is no way to represent accented characters and other special symbols, so the system has been extended with numbers greater than 127. The Extended ASCII option controls how KeyBook interprets these characters represented by numbers greater than 127, so-called "extended characters."

Sometimes extended characters occur not because they are accented characters or special symbols, but because the file has been transmitted through a communications system that has added a "parity bit" which in effect has added an offset to some of the characters. To adjust for this, use the "Convert to standard ASCII" option, by pressing ***C***, followed by ***ENTER***.

Sometimes the extended characters are used purely for visual effects such as boxes around paragraphs, etc. In these cases the book will be easier to read if the extended characters are removed altogether; use the "Ignore" option for this.

To retain the extended characters when the book is opened, select "Retain" by pressing ***R***, or press ***ENTER*** as this is the default setting. If you select Retain, another option is presented: KeySoft prompts: "Extended character set? Currently ANSI."

More than one system has been used for extended characters; therefore you must tell KeyWord which one to use for this book. The options are the "ANSI" character set and the "MSDOS" character set. If you don't know which one to use, try one and if the extended characters do not come out correctly, try the other. For the "MSDOS" set, press ***M*** followed by ***ENTER***. For the "ANSI" set, press ***A*** followed by ***ENTER***.

KeySoft will now prompt: "End of list."

When you have made all your selections, press ***SPACE with E***.

4.8 Reading Books Stored on Other Drives.

The sample book is stored in the Books folder on the KeySoft System Disk. You should be careful about storing other books in the KeySoft System Disk, because any book other than the sample book will be lost if the battery goes flat, or the BrailleNote BT is reset with ***dots 4-5-6*** held down.

If you have a backup of the book, or are not concerned about the possibility of losing it, then storing your books on this drive means that you don't use space on the Flash Disk.

The Flash Disk is shared by the other programs like KeyWord and KeyMail, and its contents are preserved much like files on a conventional hard drive. There is an empty folder called My Books provided on the Flash Disk. However the Flash Disk has limited storage capacity and you would probably not want to store more than six or seven books in it. Many users who have a large collection of books prefer to keep these on a storage card.

4.8.1 Selecting a Drive.

We have previously discussed the selection of files and folders within KeyBook, but we haven't described the selection of a drive. You can change the current drive at any time that you are prompted for a folder name by pressing ***BACKSPACE***. For example when you select KeyBook, it prompts: "Read book in which folder? (Books)."

Press ***BACKSPACE***. KeyBook then prompts: "Drive? Press ***ENTER*** for (last drive used)."

You can select the last drive used by pressing ***NEXT or ENTER***, or you can review the list of drives by pressing ***SPACE*** repeatedly. You can select a drive by pressing ***ENTER*** when the required drive is displayed, or by typing a letter. There are always at least two drive options available. These are:

To select the Flash Disk, press ***F***.

To select the KeySoft System Disk, press ***K***.

To select a storage card, press ***P*** for PC, ***C*** for CompactFlash, or ***S*** for SD.

For an external drive, step through the list of drives and select it from the list.

4.8.2 Loading a Book from Another Drive.

After you have selected a drive, KeySoft prompts: "Read book in which folder? Press ***ENTER*** for none."

Select the folder in the usual way. When you have selected a folder, KeyBook asks for the book name as before.

4.8.3 Advanced Storage Methods.

Another way of storing a large book library is to do so on a PC or laptop. There are several methods available for transferring files to and from a PC, including ActiveSync, using Network client, or a card reader attached to your PC. These are all discussed in the Connectivity chapter of this user guide.

You could either transfer the book or books to the "Books" folder on the KeySoft System Disk, create your own folder, or leave them stored on a memory card.

4.9 Exiting KeyBook.

Exit KeyBook in the usual way by pressing ***SPACE with E*** to take you back to the Main Menu. The book is closed when you exit. To reopen the book from anywhere in the Main Menu, press ***B***, then ***ENTER*** twice. You are returned to the place where you were last reading.

Remember that you can switch to another task while using KeyBook, as described in 1.16 Switching Between Tasks. For example, to make an entry in the Planner, press ***BACKSPACE with ENTER with P***. When you have completed your entry, press ***BACKSPACE with ENTER with B*** to return to KeyBook. The BrailleNote BT may beep once or twice, indicating it is busy preparing to resume from where you were when you switched tasks.

4.10 Bookshare.

Bookshare.org is an online service that provides electronic format books that are both in and out of copyright. It is possible to access Bookshare books via KeyWeb on your BrailleNote BT, and read them using KeyBook. Bookshare.org's public domain content is available to anyone, but copyrighted material is available only to members.

For information about Bookshare.org, who is eligible to join and how to join, check out www.bookshare.org, or for more specific URLs, please refer to Appendix B. Note that a URL (Uniform Resource Locator) is another name for a website address. HumanWare expects that persons utilizing the Bookshare.org service from their BrailleNote BT will honor the criteria for usage outlined in their membership agreement with Benetech.

In this section on how to access Bookshare.org, it is assumed that you have already set up your BrailleNote BT to use KeyWeb, and are a member of Bookshare.org and have created access codes and passwords etc. Be assured that the Bookshare.org site is very user friendly and set up to be easily accessible using a screen reader like KeyWeb. For information on how to use KeyWeb, please refer to Chapter 12.

4.10.1 How Books from Bookshare work.

When first downloaded from the site, Bookshare.org books are "packed" into a special compressed format that has a .bks file extension, regardless of what book format you have chosen.

Once the book is downloaded, it is then possible to "unpack" it from the .bks file into its normal format such as .brf or .txt. Once this is done, you can then delete the .bks file. To make this clearer, you could think of the .bks file as the bag that Bookshare.org put your book into, and once you have taken it out of its bag, you can throw the bag away.

All copyrighted Bookshare.org books are password protected to help prevent them being used or distributed in ways contrary to the terms and conditions of membership. To unpack the book, you need to enter your password. Books that are in the public domain, that is, out of copyright, do not require a password even though the prompt will still come up. In these cases, you can still enter your password, or just press ***ENTER*** to pass over the field.

4.10.2 Supported formats.

Bookshare.org has books in several electronic formats, some titles in more than one format. The BrailleNote BT supports books in brf, txt and DAISY formats, but not HTML format. If you download a book in an unsupported format, KeyBook will allow you to unpack it, but before the process is complete, it will prompt to say that the format is not available. Books can only be "unpacked" in KeyBook.

4.10.3 Bookshare Favorites.

The Bookshare.org home page is already set up as a favorite in KeyWeb. However if you intend to use Bookshare regularly, it might pay to set up the login page as a favorite instead. For information on how to do this, refer to 12.8.1 Adding a Favorite page.

4.10.4 Existing Bookshare books.

If you are already a Bookshare.org member and have packed or unpacked books on your PC, you can simply transfer them to your BrailleNote BT via ActiveSync, and open them in KeyBook. The only difference to the procedures below is that when you open KeyBook, you will have to select a folder or drive in the usual way, as it will not default to the correct location.

4.10.5 How to download a book from Bookshare.

Follow the steps below to use KeyWeb to download a book from Bookshare.org.

1. Go to KeyWeb on your BrailleNote BT by either pressing ***I*** in the Main Menu, or ***BACKSPACE with ENTER with I*** anywhere. KeyWeb will prompt you for a URL.
2. Select Bookshare from your favorites. The BrailleNote BT will connect to the web and you will be in the Bookshare homepage.
3. Navigate to the Login page and log in using your member details. You will end up in a personalized welcome page.

4. Locate the book that you wish to read, and download it in a supported format (all books are available as brf; public domain ones are also in txt), and download it to the folder and drive of your choice. For Download instructions refer to 12.12 How to Download a file.

4.10.6 Unpacking the book for reading.

Follow the steps below to unpack your book:

1. Go to KeyBook by pressing ***BACKSPACE with ENTER with B***.
2. KeyBook will offer you the folder into which you downloaded the book as default. Press ***ENTER***, and it will offer you the book as the default file. If you downloaded several books, it will offer the last one downloaded. To select the book, press ***ENTER*** again.
3. KeyBook prompts: "Folder for unpacked Bookshare book? Press ***ENTER*** for My Books." Either press ***ENTER*** straight away or select another file location.
4. You will be prompted for your Bookshare.org password. Type it in and press ***ENTER***, or if no password is required, simply press ***ENTER***.
5. The book will now unpack. There will be some progress beeps during this time. When complete, KeyBook prompts: "Delete the original packed Bookshare book?." Press ***Y***.

   Note 1: If the book format is not supported, KeyBook will tell you at this point and return to the main menu.

   Note2: If there is not enough memory available to unpack the book, KeyBook will prompt – "Could not save unpacked Bookshare book. Disk is full."
6. KeyBook displays the name of the file, including the file extension, for example, "Harry_Po_b_fl.brf". To open it, press ***ENTER***.
7. KeyBook will ask "Review the options?" as it does for every book in a non-native KeySoft format the first time. As the file will have been set up automatically with the correct settings, press ***ENTER*** or ***N***.
8. The book is now ready to read. If you exit the book before completing it, KeyBook will bookmark it for you and the next time you open it, it will open to the same place.

Note: If instead of downloading books directly onto your BrailleNote BT from Bookshare, you have transferred them from a PC or they are on a storage card, the same procedure applies. The only difference is that at step 2, you would navigate to the appropriate location, then continue as above.

4.11 DAISY Book Reader.

KeyBook now allows you to read DAISY books. DAISY is an acronym which stands for "Digital Accessible Information SYstem".

DAISY books have several advantages over other talking books. These include:

1. Use of an actual human narrator, not just a computer generated voice.
2. A structure allowing quick and easy navigation through the book. For example, moving by chapter or page. Each book includes its own structure thereby making navigation the most suitable for that particular book.
3. Some books contain text which you can read on the Braille display or search.

The majority of DAISY books that are currently available, contain audio only. However, there are a number of books, for example, books from bookshare.org, which contain text only and others which contain both audio and text.

Throughout the description of the DAISY Book Reader, it has been assumed that you are familiar with the existing functionality of KeyBook.

4.11.1 Searching for a Book.

Although DAISY books are made up of many files, KeyBook allows you to search for books by just selecting the book title.

As typical for any other type of electronic book, begin the search for a DAISY book by first selecting KeyBook from the Main Menu and then selecting the folder containing the book you want to read.

The most recently read book will be offered as the default. If you want to read a different book, press ***SPACE*** at this point. A list of all the books in the current folder will then be presented.

4.11.2 Reading Options.

4.11.2.1 Listening to the Book.

Once a DAISY book has been loaded, you can listen to the book using the following commands:

To start listening: press ***SPACE with G***.

To stop listening: press ***BACKSPACE with ENTER***.

You can change the volume by using the following commands:

To increase the volume: press ***ENTER with dots 4-6***.

To decrease the volume: press ***ENTER with dots 1-3***.

Note that these volume control commands are relative to the main volume. This means that to turn the volume up further or decrease it, you will need to increase or decrease the main volume using the following commands:

To increase the main volume: press ***ENTER with dot 4***.

To decrease the main volume: press ***ENTER with dot 1***.

It is also possible to alter the speed and tone of the narrator using the following commands:

To speak slower: press ***ENTER with dot 3***.

To speak faster: press ***ENTER with dot 6***.

To increase speech tone: press ***ENTER with dot 5***.

To decrease speech tone: press ***ENTER with dot 2***.

4.11.3 Navigation Options.

The structure of a DAISY book is arranged into levels. There are a maximum of six levels of navigation available, although many books contain only 2 or 3. Each level provides an increasingly more precise way to navigate the content within DAISY books. For example, level 1 may be a chapter heading; level 2 sub headings within the chapter and level 3 paragraphs. Using these levels effectively allows you to quickly gain access to any position within the book.

As well as the above levels, other options may be available depending on the type of book you are reading. For instance most books also allow you move by phrase or page and audio books also allow you to jump by 1 minute intervals.

These levels and other navigation items such as page, phrase and time jump are referred to as DAISY elements.

4.11.3.1 DAISY Navigation.

As was mentioned in the overview, you can navigate through the book using the available DAISY elements. You navigate the book by first selecting an element, for example level 1, and then use the forward or back commands to skip to the previous or next level 1 positions. If you wish to move by a different element simply select it and then the forward and back commands will move by the new element.

Use the following commands to navigate using the DAISY elements:

To move forward by the currently selected element: press ***SPACE with dot 4-6***.

To move back by the currently selected element: press ***SPACE with dot 1-3***.

To select the element to be used for navigation, press ***SPACE with T***. Note that the first time you press this command, the current element will be displayed. Press this command repeatedly to cycle through all the available elements for that book until the element you require is displayed.

4.11.3.2 List of Headings.

KeyBook can list all the headings in a book in the hierarchy dictated by the book level structure. In most cases this is simply the Table of Contents.

To access the List of Headings, press ***SPACE with V***.

Generally, all the headings at Level 1 will be displayed first. If any of these headings contain sub headings, that is, Level 2 headings then the text "has subheadings", will be displayed. If you press ***ENTER*** at this point, you will be shown the list of Level 2 headings. Once you have found the heading for the section you want to read, press ***ENTER*** and you will be taken to that position within the book. Note that the heading you are currently closest to will be displayed when you first enter the List of Headings.

4.11.3.3 Navigating by Text.

If the book contains text, the standard KeyBook commands to browse by sentence, paragraph, line, section, word and character can be used.

There are two reading modes available for DAISY books, "sentence and paragraph" and "line and section". The current mode determines the functionality of the following commands:

To move forward one sentence or line:	press ***SPACE with dot 4***.
To move back a sentence or line:	press ***SPACE with dot 1***.
To read the current sentence or line:	press ***SPACE with dots 1-4***.
To move forward a paragraph or section:	press ***SPACE with dots 5-6***.
To move back a paragraph or section:	press ***SPACE with dots 2-3***.
To read the current paragraph or section:	press ***SPACE with dots 2-3-5-6***.
To move forward a word:	press ***SPACE with dot 5***.
To move back a word:	press ***SPACE with dot 2***.
To read the current word:	press ***SPACE with dots 2-5***.
To spell the current word:	press ***SPACE with dots 2-5*** twice.
To move forward a character:	press ***SPACE with dot 6***.
To move back a character:	press ***SPACE with dot 3***.
To read the current character:	press ***SPACE with dots 3-6***.
To change the current reading mode:	press ***SPACE with M***.

4.11.3.4 Finding Text.

The standard KeyBook commands to find text can be used in all books containing text.

To find text in the book, press ***SPACE with F***. Press ***F*** (for forward) or ***B*** (for back), type the text you wish to find, and press ***ENTER***.

To find the next occurrence of the text: press ***SPACE with N***.

4.11.3.5 Jumping to a Page.

It is also possible to jump directly to a particular page number. This is only supported if the book is broken into a page structure and fortunately the majority of DAISY books are structured this way.

To go to a page, press ***SPACE with dots 1-2-6***. Type ***P*** for page, then type the required page number and press ***ENTER***.

4.11.4 Listening Options.

As previously mentioned, most currently available DAISY books are audio only. In audio only books, you will hear a narrator (that is, the recorded voice included with the book.) In books containing text only, you will hear the KeySoft text to speech voice. With these types of books, the voice used is predetermined and therefore not controllable.

However, some books contain both audio and text and you can choose to listen to either the recorded narrator or to the text to speech voice. You do this by turning the narrator on or off (to toggle the narrator on or off, press ***ENTER with V***.) If the narrator is on, the recorded voice supplied with the book will do the reading. If you turn the narrator off, the voice that reads the book will be determined by your current KeySoft voice settings.

Note that if you have KeySoft speech turned off, you will still be able to read the book using the braille display.

4.11.5 Reading with the Braille Display.

You can use the Braille Display to read DAISY books containing text. This allows you to read a book, even if the audio (the recorded narrator or KeySoft text to speech voice), is turned off.

All the commands included in the previous DAISY Book Reader sections, will update the Braille Display. For example, if you press ***SPACE with dot 4*** to move to the next sentence, the next sentence will be displayed with the Braille cursor placed at the beginning. Similarly, if you press ***SPACE with dot 5*** to move forward by one word, the Braille cursor will be advanced to the next word.

When reading DAISY books, the ***BACK*** and ***ADVANCE*** thumb keys will allow you to read back or forward through the book. The ***PREVIOUS*** and ***NEXT*** thumb keys can be programmed to move by either:

1. DAISY element. For example, level or phrase, or
2. Paragraph or section or sentence or line. Note that this option is dependent upon the the Reading Mode you have selected, such as, sentence and paragraph or line and section.

To change the function of the ***PREVIOUS*** and ***NEXT*** thumb keys, go to the Options Menu and select Braille Options by pressing ***SPACE with O*** followed by ***B***. Use ***SPACE*** to scroll down the list of Braille Options, until "Function of previous and next thumb keys" is displayed. Scroll through the options using ***SPACE with dots 3-4***, until the function you want is displayed and then press ***ENTER***. To exit the Braille Options, press ***SPACE with E***.

4.11.6 Placemarkers.

As with all other types of books, it is possible to use Place Markers in your DAISY book and these are retained when the book is closed.

Place Markers, or bookmarks as are often called, are handy for a number of reasons including keeping track of your progress as you read a book or the location of information you wish to find again. For example, you are reading a book about dog breeds and are particularly interested in any information on Poodles which are mentioned in Chapters 6, 8 and 24 of your DAISY book. Since you are keen to re-read these chapters, you will add three Placemarkers to your book.

Place Markers are identified by the letters, A to Z.

To define a Place Marker, press ***BACKSPACE with D***, from any position in the book and enter a letter that you wish to associate with that Place Marker, in this case, "P" for Poodles.

To jump to any defined Place Marker, press ***SPACE with J***, followed by the identification letter for that Place Marker.

4.11.7 Text Notes.

As well as being able to add Place Markers to a DAISY book, you also have the option of inserting Text Notes. These can be just a few words, a sentence or a whole paragraph long. Text Notes allow you to add notes to a DAISY book as you are reading it. This is a useful feature if you want to make comments at a particular point in the book.

To insert a text note, press ***BACKSPACE with N***. Enter the identification number of the text note that you want to insert and press ***ENTER***. Try to use meaningful numbers if possible, for example text note 1 could refer to chapter 1, text note 12 could represent chapter 12 or chapter 1; sub heading 2. You then need to type the required text and press ***ENTER***.

To view a text note, press ***BACKSPACE with N***. Enter the identification number and press ***ENTER***. The text note will be displayed and you will be taken to the appropriate position within the book. You have the option to edit the text if you wish and it will be saved when you press ***ENTER***. If there is no note for the number you have entered, a new one will be created for the current position within the book.

4.11.8 Clipboard.

For DAISY books that contain text, the existing KeySoft clipboard functions are available for you to use when you need to copy information from a DAISY book. See 7.5 Block Commands, 19.2.7 Block Commands for further details.

4.11.9 Obtaining Book Information.

It is possible to obtain information regarding the book you are reading. There are two types of information available; book information and current position information.

Book information provides details such as the book title, the number of pages in the book, total time to read the book using the narrator etc. The actual details available may vary from book to book.

To obtain book information: press ***SPACE with I***.

Current position information provides details such as the current heading for the section you are in and the page number. Again, the actual information available may be different depending on the book you are reading.

To obtain current position information: press ***SPACE with wh sign (dots 1-5-6)***.

4.11.10 Managing DAISY Books.

DAISY books are available from various sources. For example, they are distributed on CD and are able to be downloaded from the Internet. DAISY books are generally too large (some books are 600-700MB), to be stored on the Flash Disk of your BrailleNote BT. We therefore recommend that you use large capacity external media, such as an SD card or CompactFlash card to store your DAISY books.

In managing DAISY books, it is very important that you are aware of the following::

1. A DAISY book is made up of several files, none of which may include the actual title of the book.
2. All files in a single book must be managed as a whole.
3. The File Manager allows you to open, copy and delete DAISY books by their title.
4. You cannot rename or move DAISY books.

5. To have the titles of the DAISY books listed in a list of files, change the file view to 'List of All Books' or 'List of DAISY Books', by repeatedly pressing ***SPACE with X*** until the desired view is displayed.
6. Never rename or delete individual files that make up a book or you risk rendering the book unreadable.

Note that some of the files making up a DAISY book can share the same name as files in other books. Therefore, if you decide to copy book files individually, you must ensure that all the files making up a book are stored together in a folder unique to that book. Copying files for a book into a folder that already contains another book, will result in files being overwritten and both books being rendered unreadable. Consequently, is best to use the File Manager to manage your books since it will ensure the above rules are followed.

End of Book Reader Chapter.

5 General Functions.

This chapter discusses the functions listed on the Options Menu, which was introduced briefly in 1.15 General Functions. A number of these functions are discussed in other sections of this User Guide as appropriate, and the main purpose of this chapter is to summarize all the Option Menu functions in one place.

The Options Menu comprises general functions that are available wherever you are in KeySoft. You could be using the Word processor, sending or receiving e-mail, using the Calculator, or reading a menu. After using one of these functions, you are returned to the place you were at previously.

To access the Options Menu from anywhere in KeySoft, press ***SPACE with O***, and KeySoft will prompt: "Options menu." You can then review the items by pressing ***SPACE or ADVANCE*** or ***BACK or BACKSPACE***.

The Options Menu comprises the following items:

Date;

Time Options;

Grade of Braille for Keyboard Entry;

Braille display options;

Keyboard settings;

Review voice;

Connectivity;

Visual display;

Next appointment;

Power and battery status;

User guide;

Insertion;

Spell. Repeat and spell;

Hear punctuation. Repeat with maximum punctuation;

Move to another task;

Speech settings.

To select an item, move through the menu until the required item is displayed, and then press ***ENTER***. Alternatively, from anywhere in the Options menu, press the initial letter of your choice. This does not apply to the speech settings, which are discussed in 1.15.6 Setting Speech Volume Speed and Pitch.

Selecting a menu item takes at least two key combinations, for example, ***SPACE with O*** then ***D*** to hear the date. For really fast access, many items are also available through quick commands. These are listed in 1.15 General Functions, as well as being mentioned in each relevant section of this chapter.

Some items on the Options Menu will always display the same style of information, for example the time and date functions, while for other options the response will vary depending on where you are in KeySoft when you select the item. An example of this is "Calculator Braille Language," which is only displayed when the Calculator is in use.

The Connectivity option is discussed in detail in the Connectivity Chapter of this user guide.

5.1 Date.

To display the current day and date, press ***SPACE with O***, then ***D***.

After the date is displayed, return to your original place in KeySoft by pressing ***ADVANCE***.

The quick key for this function is ***ENTER with D.***

5.2 Time Options.

There are two time options available – the clock (current time), and the stopwatch.

5.2.1 Current time.

To display the current time, press ***ENTER with T***. To access the current time through the time menu, press ***SPACE with O, then T***, then ***C*** for Clock.

After the time is displayed you will be returned to your original place in KeySoft.

5.2.2 Stopwatch.

The stopwatch operates in a similar way to a mechanical stopwatch. It keeps time down to one hundredth of a second, can be stopped, started or returned to zero, and the time display can be copied to the clipboard for pasting into documents or e-mails.

5.2.2.1 Running in the Background.

Once it has started, the stopwatch will keep running until you press the stop command, or reset the BrailleNote BT. Even if you switch to another task, or switch the BrailleNote BT off, it will still keep running in the background, although it won't display any times automatically. To check on the elapsing time, simply access the stopwatch by pressing ***ENTER with W***.

The stopwatch will display the elapsing time.

5.2.2.2 Stopwatch commands.

To access the stopwatch, press ***ENTER with W***. Or you can press ***SPACE with O then T, then S*** for stopwatch. The first time you use it, The stopwatch will be at zero.

There are three settings – stop, start and zero. The zero setting resets the time to zero – however we are not referring to it as reset, as "Reset" has a very different meaning on the BrailleNote BT already!

To zero the time, press ***BACKSPACE with dots 1-4***.

To start or stop the stopwatch, press ***SPACE***. This is a toggle command.

To stop the stopwatch altogether, first stop it by pressing ***SPACE*** then zero it by pressing ***BACKSPACE with dots 1-4***.

To copy the time to the clipboard, press ***BACKSPACE with K***. You can do this at any time, even when the stopwatch is running.

5.2.2.3 Stopwatch on Display.

The time shows on the Braille display as hours, minutes, and seconds in this format: h:mm:ss

The Braille display updates every second while the stopwatch is running.

When the stopwatch is stopped, the elapsed time displays to the hundredth second like this: h:mm:ss.cc

To the right of the time, the display also shows current status, for example: 1:23:45 Running

or 0:34:21.04 Stopped

When the stopwatch is returned to zero while stopped, the BrailleNote BT displays "Zero" and the display shows "0:00:00.00"

5.2.2.4 Stopwatch Announcements.

The running stopwatch will display the time every minute unless you turn speech off. For example: "7 minutes" or "3 hours, 46 minutes"

Any other time, you can hear the elapsing time to the second by pressing ***SPACE with R***. For example: "1 hour, 5 minutes, 48 seconds"

To hear the same time repeated, press ***L***.

When the stopwatch is stopped, you can hear the elapsed time by pressing ***SPACE with R***.

5.3 Grade of Braille for Keyboard Entry.

If you are typing a Braille document in Grade 2 and want to enter something that could be ambiguous, such as a list of last names and initials, you can temporarily select Grade 1 through this item on the Options Menu. After you have entered the word or passage, you can switch back to Grade 2.

Another choice when typing Grade 2 is to switch to computer Braille, perhaps for a file name such as "program.exe" that contains a period, or for an e-mail address. If your preferred Braille grade is Grade 2, KeySoft will occasionally override your preference and force Grade 1.

To find out what Braille grade KeySoft is expecting, or to change the current grade of Braille, press ***SPACE with O***, then ***G***.

This is the grade of Braille used for prompts, help messages, books and documents. For Grade 1, press ***A***, for Grade 2, press ***B*** and for Computer Braille, press ***C*** or just press ***ENTER*** to return to your original place in KeySoft.

If you want to change the grade of Braille and don’t care which grade KeySoft is expecting, use the following quick keys: for Grade 1, ***BACKSPACE with A***; for Grade 2, ***BACKSPACE with B***; and for computer Braille, ***BACKSPACE with J.***

5.4 Braille Display Options.

To review the Braille Display Options list anywhere in KeySoft, press ***SPACE with O,*** then ***B.*** The list of options presented will depend where you are in KeySoft when you select the Braille Display Options. Experiment at the Main Menu, within a document, and in the Calculator to see how the list of items changes. The complete Braille Display Options list comprises the following items:

Braille On?

Braille Display Mode;

Show new lines in Reading Mode as;

Function of Previous and Next thumb keys;

Cursor shape for standard Braille;

Preferred reading grade;

Text document reading grade;

Braille display intensity;

Braille language;

Calculator Braille code;

Computer Braille code;

Cursor shape for computer Braille;

Display computer Braille using 6 or 8 dots;

Message display time;

thumb key set.

After each item, KeySoft will announce the current setting for that item.

You can move forward or back through the items in the usual way. To leave any option unchanged, just press ***ENTER***. To change any option, enter a new setting and press ***ENTER***.

5.4.1 Turning the Braille Display On and Off.

To turn the Braille display on press ***Y***. To turn it off, press ***N***. You can also turn the Braille display on or off by pressing the ***NEXT*** and ***SPACE*** keys together. Note that if speech is turned off when the Braille display is off, the Braille display is forced on. This avoids having both Braille and speech off simultaneously.

5.4.2 Braille Display Mode.

This option is available within a document, an e-mail, or within the Planner and allows you to choose the amount of formatting information that is presented on the Braille Display and whether the cursor is displayed. There are four modes; Automatic, Reading, Edit and Layout. You may also cycle through the four modes by pressing ***PREVIOUS*** with ***NEXT***.

The Braille Display Modes are discussed more fully in 3.11 Braille Display Modes but briefly:

Automatic mode: press ***A***. The cursor is turned on when you are editing and off when you are reading.

Reading mode: press ***R***. Used for reading. The cursor is never displayed. Only formatting necessary for reading is displayed.

Edit mode: press ***E***. The cursor is always on and all formatting information is displayed.

Layout mode: press ***L***. The document is laid out on the Braille display in the same way as it will appear on paper when it is embossed.

5.4.3 Show New Lines in Reading Mode as.

This option is available within a document, an e-mail, or within the Planner. It determines how the start of a new line or paragraph is shown on the Braille display.

For linear Braille format where the start of a new line is indicated by the Computer Braille "dollar sign" then p, (dots 1-2-4-6 p), press ***L***.

For the new line or paragraph to start at the beginning of the display after a one cell indent, press ***A***.

For the beginning of the display after a two cell indent, press ***B***.

For the beginning of the display with no indent, press ***N***.

For two spaces anywhere they happen to fall on the display, press ***dots 2-3***.

For three spaces anywhere they happen to fall on the display, press ***dots 2-5***.

For just one space anywhere it happens to fall on the display, press ***dot 2***.

5.4.4 Function of Previous and Next thumb Keys.

This option is available within a document, an e-mail, or within the Planner. The function of the ***PREVIOUS*** and ***NEXT*** thumb keys can be defined to suit your personal reading preference.

To have them move Up and Down, press ***U***.

To have them move by Sentence or Line, press ***S***. Whether they move by sentence or line is determined by the reading mode, as set via ***SPACE with M***.

To have them move by Paragraph or Section, press ***P***. Whether they move by paragraph or section is determined by the cursor movement mode, as set via ***SPACE with M***. Cursor movement Mode is discussed more fully in 7.6 Cursor Movement Modes.

To save the settings, return to the Main Menu.

5.4.5 Cursor Shape for Standard Braille.

This setting determines which dots are used to indicate the cursor is in a particular cell. The default setting for grade 1 and 2 Braille is dots 7 and 8, but you may also choose to have dot 7 only, dot 8 only, dots 1-2-3-4-5-6, or all 8 dots of the cell.

To select the cursor for both dots 7 and 8, press ***B***. For dot 7 only, press ***G***. For dot 8 only, press ***H***. For a 6 dot cell, press ***F***. For a whole 8 dot cell, press ***W***.

5.4.6 Preferred Reading Grade.

This is the grade used for prompts, help messages, documents, e-mail, etc. The factory default is Grade 2. If you prefer to read in Grade 1, press ***A***. If you prefer to read in Grade 2, press ***B***. If you prefer Computer Braille, press ***C***.

5.4.7 Braille display intensity.

This setting allows you to adjust the pressure of the pins on the Braille display. The settings are a range of numbers from 1 to 9. The softest is 1, and the pins will feel quite spongy to the touch. The hardest is 9, and the pins will feel firm with very little yield to the touch. The default setting is 9. To change this, select another number from 1 to 9.

5.4.8 Text Document Reading Grade.

This option is available within a document, an e-mail, or within the Planner. It allows you to select how text documents are displayed on the Braille display. The default setting is the "Preferred reading grade," which is generally Grade 2. Text documents include BrailleNote BT .kwt files, Microsoft Word, ASCII text and other forms of text documents that you may choose to read or edit.

For on the fly translation to your preferred reading grade, press ***P***. For 6 dot computer Braille, press ***F***. For 8 dot computer Braille, press ***H***. To change the text document reading grade using the thumb keys, press ***ADVANCE with NEXT*** repeatedly.

5.4.9 Braille Language.

BrailleNote BT provides a choice of three Grade 1/Grade2 Braille languages, namely USA, UK and Australian Braille.

For USA Braille, press ***S***. For UK Braille, press ***K***. For Australian Braille, press ***A***.

This setting determines the way grade 1 and grade 2 Braille are represented inside the BrailleNote BT and when it is embossed. It also controls how Braille is translated to text, and vice versa. Usually this setting will have already been set for you before you receive your BrailleNote BT. Be careful about changing it because files created in one language will not be read or embossed properly if another language is selected.

5.4.10 Calculator Braille Language.

This option is only available within the Calculator. Calculations are displayed in your preferred Braille grade on the Braille display in either the Nemeth Braille Code for Mathematics or the UK Braille Mathematics Notation.

For Nemeth code, USA, press ***N***. For UK Mathematics Notation, press ***U***.

5.4.11 Computer Braille Language.

The BrailleNote BT is supplied with two Computer Braille tables, namely USA and UK. However, the user may create or install additional Computer Braille tables.

For USA computer Braille, press ***S***. For UK computer Braille, press ***K***. To cycle through all the available Computer Braille tables, press ***SPACE with dots 3-4.***

5.4.12 Cursor Shape for Computer Braille.

This setting determines which dots are used to indicate the cursor when Computer Braille is being displayed. The setting is independent from the cursor shape used to display standard Braille. The default setting is dot 8, but you may also choose to have dot 7 only, dots 7 and 8 only, dots 1-2-3-4-5-6, or all 8 dots of the cell.

To select the cursor for both dots 7 and 8, press ***B***. For dot 7 only, press ***G***. For dot 8 only, press ***H***. For a 6 dot cell, press ***F***. For a whole 8 dot cell, press ***W***.

5.4.13 Display Computer Braille using 6 or 8 dots.

The default setting is 6 dot Computer Braille, but 8 dot Computer Braille is available for those involved with software programming and other tasks requiring an extended range of characters.

To display Computer Braille in 6 dot format, press ***F***. For 8 dot format, press ***H***.

5.4.14 Message Display Time.

This sets the time in seconds that messages, such as error messages, will remain on the Braille display before the next prompt is displayed. By setting this to 0, the message will remain until you press a thumb key. The time may be set between 0 and 30 seconds.

5.4.15 Thumb Key Set.

The thumb key set can be set up for left-handed or right-handed operation. You can also create a custom key set to suit your personal preference. The factory setting is right-handed.

To select the standard right-handed set, press ***R***. The function of the thumb keys from left to right is: ***PREVIOUS***, ***BACK***, ***ADVANCE***, and ***NEXT***.

To select the left-handed set, press ***L***. The function of the thumb keys from left to right is: ***NEXT, ADVANCE, BACK,*** and ***PREVIOUS***.

For a custom set, press ***C***, then ***ENTER***. You must then define the function of each of the thumb keys, starting with the left thumb key. For each thumb key in turn, select its function and press ***ENTER***.

For a thumb key to perform the ***PREVIOUS*** function, press ***P***. For a thumb key to perform the ***BACK*** function, press ***B***. For a thumb key to perform ***ADVANCE***, press ***A***. For a thumb key to perform ***NEXT***, press ***N***. Alternatively, as the thumb key is announced, press ***SPACE with dots 3-4*** to review the options.

The thumb keys in the custom set are set independently of each other, so there is nothing to stop you from setting all thumb keys to the same function. A good way to check the function of your custom set is to enter the Keyboard Learn mode from the Main Menu. You can then press each thumb key to determine its assigned function.

5.5 Keyboard Settings.

To review the Keyboard settings list anywhere in KeySoft, press ***SPACE with O*** for the Options Menu, then ***K***. Press ***SPACE with E*** to leave the Keyboard settings list and return to your original place in KeySoft.

The quick key for this function is ***BACKSPACE with ENTER with K***.

A detailed explanation of each Keyboard Setting option follows:

5.5.1 Preferred Keyboard Braille Grade.

The setting determines the grade of Braille in which you prefer to type. To select Grade 1 Braille, press ***A;*** Grade 2 Braille, press ***B;*** and to input Computer Braille, press ***C*** or ***J***. To leave this option unchanged, just press ***ENTER***. The factory setting is Grade 2.

5.5.2 Setting the Keyboard Voice.

The first of these settings determines how much KeySoft speaks as you type. KeySoft prompts: "Keyboard voice? Currently Words."

The options are as follows:

To turn off speech altogether, press ***F*** followed by ***ENTER***;

To spell words as they are typed, press ***S*** followed by ***ENTER***;

To speak whole words, press ***W*** followed by ***ENTER***;

To both spell and speak words, press ***B*** followed by ***ENTER***;

To cycle through all the items above, press ***SPACE with dots 3-4***.

Or just press ***ENTER*** to leave the selection unchanged.

The suggested setting is "Words." If you are learning to type, you may prefer the "Spell" option or the "Both" option. If you can type quickly, you might select the "Words" option, or turn off speech altogether.

You can press ***HELP*** for a reminder of these options.

5.5.3 Advise when Computer Braille is required.

To be advised when Computer Braille is required, press ***Y***. For no warning, press ***N***. To leave this option unchanged, just press ***ENTER***. The factory setting is Yes.

Using this setting will cause KeySoft to advise whenever Computer Braille input is required, such as in e-mail addresses.

5.5.4 Select 6 or 8 dot Computer Braille.

When you are typing in Computer Braille, this setting determines how you will input dots 7 and 8 if they are required. If you select 6 dot Braille, you must press ***SPACE with U*** before typing any character that requires a dot 7. For example, in US Computer Braille, "at" sign used in e-mail addresses is written with ***dots 4-7***. If you have chosen 6 dot entry, press ***SPACE with U***, then ***dot 4***, to write this symbol.

If you choose 8 dot Computer Braille, the ***BACKSPACE*** key becomes ***dot 7***, and ***ENTER*** becomes ***dot 8***. So in the "at" sign example, you would press ***BACKSPACE with dot 4*** to write the symbol. To have the ***BACKSPACE*** and ***ENTER*** keys perform their usual functions, simply press ***SPACE*** at the same time. So to perform an ***ENTER***, press ***ENTER with SPACE***. The ***BACKSPACE*** and ***ENTER*** keys only act in this way when you are working in Computer Braille.

To select 6 dot Braille, press ***F***. For 8 dot, press ***H***.

5.6 Review Voice.

To examine the Review Voice settings anywhere in KeySoft, press ***SPACE with O*** for the Options Menu, then ***R***. Press ***SPACE with E*** to leave the Review Voice settings and return to your original place in KeySoft.

The quick key for this function is ***BACKSPACE with ENTER with R***.

The Review Voice settings are:

Whether the speech is On, On Request, or Off;

The volume of speech;

The level of punctuation spoken by the Review Voice;

The manner in which numbers are displayed;

Whether the Speech Synthesizer is using KeyNote Gold or Eloquence;

The speech voice and hyperlink speech voice;

The volume of the delete and error alert tones;

The volume of the progress tones.

5.6.1 Speech On or Off.

This option displays the current speech status; On at all times, On request, or Off. Press ***ENTER*** to accept the prompted option, or press the appropriate letter followed by ***ENTER*** to select your chosen option.

To have speech on at all times, press ***N***. To have speech only when requested, press ***R***. To turn all speech and sound off, with the exception of alarms, press ***F***. These commands have the same effect as cycling through the speech options by pressing ***PREVIOUS*** with ***SPACE***, as discussed in 1.15.2 Turning Speech On or Off.

If you select Speech on Request, KeySoft only speaks when you use a command that is a specific speech command. For example, in the word processor, when you move forward word by word using ***SPACE with dot 5***, nothing is spoken. However, if you use the dedicated "Speak Word under Cursor" command, ***SPACE with dots 2-5***, the word under the cursor is spoken. You can use:

SPACE with G to read continuously;

SPACE with dots 2-3-5-6 to read the current paragraph;

SPACE with dots 2-5 to read the current word;

SPACE with dots 3-6 to hear the current character;

SPACE with R to hear a prompt.

Note that if speech is turned off when the Braille display is off, the Braille display is forced on. This avoids having both Braille and speech off simultaneously.

For details on how to change the settings at start up, refer to 1.15.3 Start-up Braille and Speech Mode.

5.6.2 Speech and Braille shortcuts.

You can easily specify whether you want speech only, Braille only or both, when you switch on the BrailleNote BT. As you turn on the switch, simply hold down one of the following key combinations:

Speech only: ***dot 2;***

Braille only: ***dot 3;***

Speech and Braille: both ***dots 2 and 3.***

5.6.3 Punctuation level.

To select a different level, press a number between 1 and 5. The Factory setting is 2. To leave this option unchanged, just press ***ENTER***.

The way the 5 levels treat punctuation and format indicators is described below.

1. All punctuation is ignored except for '\'.
2. This is the factory setting. The following punctuation is pronounced: & / > < * + ^ [ ] | \ = % $ #
3. All punctuation is pronounced except for: , . ? ! ; : space, and single quotes within words.
4. All punctuation is pronounced except for single spaces between words and single quotes within words. All special indicators are announced. Spaces nested between the end of a word and a period, comma, semicolon or colon are also announced. Capital letters are indicated by raising the pitch. If the first letter of a word, or all of the word is in capitals, the pitch is raised for the whole word. If a word contains an unusual mixture of capital and non-capital letters, then the pitch is raised even higher as an alert.
5. All text is spelled. This level is not recommended for reviewing text, but it can be of use for other applications. When computer Braille or text is being read, capital letters are spoken by announcing "CAP" before the letter. If the whole word is in capital letters, the spelling of the word is prefixed with the announcement "CAP ALL".

5.6.4 Number format.

For digits, press ***D***. For words, press ***W***. To leave this option unchanged, just press ***ENTER***.

The Factory setting is words. For word format, the number 2010 is spoken as "twenty ten," since it is assumed to be a date. The sequence $20.15 is spoken as "twenty dollars and 15 cents."

If you select the digits option, the number 2010 is spoken digit by digit. The choice is a matter of personal preference and may depend upon the document with which you are working.

5.6.5 Speech Synthesizer.

You have the option of using either KeyNote Gold or Eloquence for the Speech Synthesizer.

5.6.6 Speech.

To select Eloquence or KeyNote, press ***SPACE with O*** for the Options Menu, then ***R***. Following the Speech Synthesizer prompt, ***E*** to select Eloquence or ***K*** for KeyNote Gold.

Eloquence offers a choice of five voices (Adult Male, Adult Female, Elderly Male, Elderly Female and Child). Eloquence speech is the modern version of KeyNote Gold. It has clear and smooth diction which makes it somewhat easier to understand than KeyNote Gold speech.

When Eloquence is active, you may also choose to have hyperlinks voiced in a different Eloquence voice when using KeyWeb.

5.6.7 Delete Alert Tone Volume.

The delete tone sounds when characters are deleted with either the ***BACKSPACE*** or any delete option. The delete tone does not sound when the speech is turned off To change the volume of the tone, press a number between ***0*** and ***6***. ***0*** disables the tone; ***6*** is loudest. To leave the setting unchanged, just press ***ENTER***. The factory setting is 4.

5.6.8 Error Alert Tone Volume.

The error tone sounds when you press an invalid key combination, or make some other error. The delete tone does not sound when the speech is turned off. To change the volume of the tone, press a number between ***0*** and ***6***. ***O*** disables the tone; ***6*** is loudest. To leave the setting unchanged, just press ***ENTER***. The factory setting is 4.

5.6.9 Progress tones.

Progress tones are there to let you know a page is loading or a download is progressing normally. To change the volume of the tone, type a number between ***0*** and ***6***. Zero disables the tone, 6 is loudest. To leave the setting unchanged, just press ***ENTER***. The factory setting is ***4***.

5.7 Visual Display.

Using and connecting a visual display is described in 2.8 Using a Remote Visual Display. To select visual display, press ***SPACE with O***, then ***V***.

5.8 Next Appointment.

To find your next appointment, press ***SPACE with O***, then ***N*** for the "Next appointment" option.

The appointment details are displayed. When you are finished, press ***ADVANCE*** to return to the point at which you selected the Options menu. See also 9.6.2 Checking Your Next Appointment.

The quick key for this function is ***ENTER with N***.

5.9 Power and Battery Status.

To determine the power and battery status, press ***SPACE with O***, then ***P***. See also 2.1.2 Checking Power Status.

5.10 User Guide.

To access the User Guide, press ***SPACE with O***, then ***U.***

Accessing the User Guide is fully described in 1.23 User Guide.

5.11 Insertion.

The "Insertion" item only appears on the Options menu when you are in a KeySoft function where insertion is possible. For example, if you are in the Main Menu, it will not appear, but it will when in a document in KeyWord.

This item takes you to a menu with several options:

Time,

Date,

Calculator Result,

Unicode Character,

File (only when in KeyMail)

The quick command to go directly to the Insertion Menu is ***ENTER with I***.

5.11.1 Insert Date or Time.

To insert the time, press ***ENTER with I*** then ***T***.

To insert the date, press ***ENTER with I*** then ***D***.

After choosing to insert the date, you are asked if you want to insert the current date or the printing date. To insert today's date, press ***T***. To insert the printing date, press ***P***, and an "Insert date" marker is placed in the document. When the document is printed, the date on the day of printing is automatically inserted.

5.11.2 Insert Calculator Result.

To insert the calculator result, press ***ENTER with I*** then ***C***.

You are asked if you want to insert the calculator result or the whole calculation. To insert the result, press ***R***. To insert the whole calculation, press ***C***. For example, if the calculation was 3+4=7, pressing ***R*** would enter “7” in the document.

Pressing ***C*** would enter “3+4=7” into the document.

5.11.3 Insert Unicode Character.

To insert a Unicode character, press ***ENTER with I*** then ***U***.

After choosing to insert a Unicode character, KeySoft will prompt for the character. Let's assume you want to enter an "e acute." Type "e acute" at the prompt for the Unicode character. KeySoft will respond with the character "cap e acute," so press ***SPACE*** to find the next "e acute" character. When the desired character is displayed, press ***ENTER*** to insert the character.

The Quick Key for inserting a Unicode character is ***BACKSPACE with dots 3-5***.

For more information, see also 7.20 Extended Characters.

5.12 Repeat and Spell.

To repeat a prompt with the important parts spelled out, press ***SPACE with O***, then ***S*** for "Spell."

You are returned to your original place in KeySoft. This is like repeating an announcement, but with more detail.

The quick key for this function is ***ENTER with S***.

This function works on prompts, and file and folder names.

5.13 Hear Punctuation.

To reveal the most detail, you can repeat the last prompt with full punctuation and spaces. To do this, press ***SPACE with O***, then ***H*** for "Hear punctuation."

You are returned to your original place in KeySoft. See also 1.15.5 Repeating an Announcement.

The quick key for this function is ***ENTER with H***.

5.14 Move to Another Task.

KeySoft allows you to move directly from one KeySoft task to another without returning to the Main Menu. You can switch between the Word processor, Scientific Calculator, Planner, Address List, E-Mail, etc. For example, if you are writing a document and you need an address, you can switch directly to the Address List, look up the address, and then return to the Word processor. You are placed back at the same point in your document.

The following hot keys are available for switching tasks:

To select the Word processor press ***BACKSPACE with ENTER with W***;

To select the Scientific Calculator press ***BACKSPACE with ENTER with S***;

To select the Planner press ***BACKSPACE with ENTER with P***;

To select the Address List press ***BACKSPACE with ENTER with A***;

To select the E-mail system press ***BACKSPACE with ENTER with E***;

To select the Book Reader press ***BACKSPACE with ENTER with B***;

To select the Internet browser, press ***BACKSPACE with ENTER with I***;

To select the Media Center, press ***BACKSPACE with ENTER with M***;

To select the Remote Sythesizer, press ***BACKSPACE with ENTER with R***;

To select the FM Radio, press ***BACKSPACE with ENTER with F***;

To select the Database Manager, press ***BACKSPACE with ENTER with D***;

To select the Games, press ***BACKSPACE with ENTER with G***.

There is also a Task menu available. To access this, either:

1. Press ***SPACE with O*** for the Options menu then ***M*** for Move to another task, or
2. Press ***SPACE with dots 2-3-5***.

KeySoft displays: "Task menu."

You can make a selection by either:

1. Review the menu items using ***SPACE or ADVANCE*** and select one by pressing ***NEXT or ENTER***. or,
2. Press the initial letter of the task; for example, ***W*** for Word Processor.

Remember that, if necessary, you can always get back to the Main Menu by pressing ***SPACE with dots 1 through to 6***.

5.15 Front Thumb Keys On/Off.

If you are traveling in a car or public transport, you may wish to turn off the front thumb keys to prevent their accidental activation.

press ***SPACE with O***, then ***F***.

This is an On/Off toggle command; in other words it will alternate between on and off each time you press ***SPACE with O,*** then ***F***. When the thumb keys are off, a beep will sound when any thumb key is pressed, providing the speech is on.

5.16 Change Speech Volume Rate and Pitch.

The Options Menu reminds you how to change the speech volume, rate and pitch. The following commands can be used from anywhere in KeySoft:

To speak louder, press ***ENTER with dot 4***;

To speak softer, press ***ENTER with dot 1***;

To speak faster, press ***ENTER with dot 6***;

To speak slower, press ***ENTER with dot 3***;

To increase speech pitch, press ***ENTER with dot 5***;

To decrease speech pitch, press ***ENTER with dot 2***.

There are 32 volumes, 16 speeds and 16 pitches, and they change one step at each key press.

This is the end of the Options Menu.

5.17 Editing at a Prompt.

When you type in response to a KeySoft prompt, you can edit your input with KeyWord commands. You might read on the Braille display what you have typed before you press ***ENTER***. If you find a mistake, you can use the touch cursor to position the cursor on the character where you want to start editing. You can edit your input with these standard commands:

Delete character before cursor: ***BACKSPACE***;

Delete character at cursor: ***BACKSPACE with dots 3-6;***

Delete word at cursor: ***BACKSPACE with dots 2-5***;

Delete word before cursor: ***BACKSPACE with dot 2***;

Delete to end of entry: ***BACKSPACE with dots 1-4***.

You can also use these commands to edit the last-used entry that KeySoft offers at various points. For example, you may have two documents named: "Expenses Quarter 1," and "Expenses Quarter 2." Let's assume you had previously been working with "Expenses Quarter 1." When you go to open the second document, KeySoft prompts: "Document to open? Expenses Quarter 1."

Instead of typing a whole new name, you could use the review and edit commands to change the "1" into "2". Find "1," press the associated touch cursor button, then press ***BACKSPACE with dots 3-6*** to delete the character at the cursor and press ***2***. You are done entering the document name. Press ***ENTER***, and the document "Expenses Quarter 2" will be opened.

Note that an existing string can be edited only if your first action is a reading or editing command. If you press even one letter, the whole existing string is replaced by your new entry.

When using speech, you can make use of the ***SPACE with dots 2-5*** and ***SPACE with dots 1-4*** commands to review the prompt.

End of General Functions Chapter

6 Embossing and Printing Documents.

If an embosser or printer is connected to your BrailleNote mPower BT, you can emboss or print documents and e-mail, as well as parts of the planner and address list.

The embossing option can be used for either Braille or text documents, the latter being automatically translated before embossing. Similarly, the print option can be used for text or Braille documents.

Set-up options are provided for both embossers and printers, and the use of test documents is described. The selection and operation of embossers and printers is outside the scope of this user guide.

6.1 Setting Up the Embosser or Printer.

You can emboss or print from the BrailleNote BT's serial, USB or infrared ports, or the Bluetooth transceiver. Selecting the appropriate connection for your embosser or printer hardware is described later, in 6.8.7 Embosser Port.

6.2 Printing with Infrared.

You can print or emboss using BrailleNote BT's infrared port if you have either an IrDA equipped printer or embosser, or an IrDA compatible accessory such as the **JETEYE** printer adapter. If a **JETEYE** printer adapter is used it also needs to be set up. BrailleNote BT's infrared port needs to face the infrared port on the printer or embosser or adapter at a distance of up to three feet (1 meter). The **JETEYE** printer adapter's port is at the rounded corner of the housing. The infrared ports do not have to be lined up exactly because the infrared beam is quite wide. After a little experimentation, you will be able to determine the most convenient arrangement of equipment that works reliably.

6.3 Printing with USB.

USB is now the universal standard for connecting to printers. Simply plug the USB printer into one of your BrailleNote BT's USB host ports, and select USB as your printer port, as explained in 6.8.7 Embosser Port.

6.3.1 Printing to a Parallel Port printer.

Although the BrailleNote BT does not have a parallel port, it is still possible to use a printer or embosser that only has a parallel connector. Using an Inside Out Networks - Edgeport /421 multi-interface converter, you can print to a parallel printer or embosser by plugging in the USB cable of the converter to the BrailleNote BT, and the parallel cable of the printer into the converter hub. The Inside Out Networks - Edgeport /421 multi-interface converter requires a special driver to work on the BrailleNote BT, but as this is already in the software, you will not need to reload it.

If using this converter with a parallel port printer or embosser, you must select USB as your printer port.

6.4 Printing with Bluetooth.

To use a Bluetooth printer with your BrailleNote BT, first you will need to get the bluetooth connection working.

1. Go to the Options Menu by pressing ***SPACE with O***, then ***C*** for the Connectivity Menu.
2. Select Bluetooth and press ***ENTER***. KeySoft prompts: "Bluetooth on? Currently Yes/No." Press ***Y***.
3. KeySoft prompts: "Search for Bluetooth devices?" Press ***Y.*** KeySoft displays, "Searching for Bluetooth devices, please wait..." This may take a few seconds during which you will hear progress beeps.

   When the search is complete, KeySoft will display: "List of Bluetooth devices."
4. Select the printer from the list.
5. Now you have an active Bluetooth pairing set up, go to the Embossing Set-up list and select Bluetooth as your printing port, as discussed in 6.8 The Embosser Set-up List.

6.5 Embossing or Printing a Document.

The procedures for printing and embossing are exactly the same, except for the prompts that refer to either "print" or "emboss." To avoid repetition, we only discuss embossing.

To emboss a document, start at the KeyWord Menu and select "Emboss a Document." KeySoft prompts: "Emboss or Set up embosser?"

The Emboss option leads to a series of prompts to select and emboss a document. The Set Up option allows the BrailleNote BT to be matched to the embosser. Details on the set up process are in 6.8 The Embosser Set-up List.

Assuming that the embosser has already been set up, you can proceed to emboss a document. Press ***E*** for Emboss, and KeySoft prompts: "Folder name?"

If the document you want is not on the current drive, select a new drive, then choose the folder and file names. KeySoft prompts: "Embosser ready?

When you reach the "Embosser Ready?" prompt for the first time in a session, it is a good idea to turn the embosser off, then on again. This ensures that its memory is cleared, and avoids spurious characters at the top of the page.

To emboss just one copy of the whole document, press ***Y*** for Yes. Embossing starts and you are returned to the KeyWord menu.

If an embosser connected to the serial port produces random characters or nothing at all, the communications parameters are wrongly set. These can be changed from the Embosser Set Up List. This list is explained in 6.8 The Embosser Set-up List.

6.6 Embossing Options.

If you only want to emboss certain pages, or you want several copies, then reply to the "Embosser Ready?" prompt by pressing ***N*** for No. There follows a list of 3 settings that you may want to change:

1. KeySoft prompts: "Start page number?" Enter the page number to start embossing from and press ***ENTER***. The suggested setting is the first page. To check the page number range for the document, press ***SPACE with H***.
2. After this setting, KeySoft prompts: "Finish page number?" Enter the page number to finish embossing at and press ***ENTER***. The suggested setting is the last page.

3. KeySoft prompts: "Number of copies? Press ***ENTER*** for one" The suggested setting is one. Type the number of copies you require and press ***ENTER***.

KeySoft prompts: "Embosser Ready?" Press ***Y*** and the embosser should start immediately.

KeySoft provides a means of pausing or abandoning output from BrailleNote BT to an embosser. However many modern embossers store large amounts of data in their memory. This allows your BrailleNote BT to transfer the data almost instantaneously. Your chances of stopping the transfer of a large amount of information once started are slight. You are left with the only option of turning off the power to the embosser to flush the unwanted data. However if your embosser does not have a large memory, the ability to pause or abandon embossing is still useful. To pause or abandon embossing once started, you must select the "Emboss a Document" option from the KeyWord menu again. KeySoft now prompts: "Embossing (name)," where name is the name of the document being embossed. To emboss another document, press ***ENTER***. To pause embossing, press ***SPACE***. KeySoft displays: "Embossing of (name) Paused."

To restart embossing, press ***SPACE*** again.

To abandon embossing the current document, press ***BACKSPACE with dots 1-4*** followed by ***SPACE with E*** to exit. You are returned to the KeyWord Menu.

6.7 Embossing a Group of Documents.

You may wish to emboss or print all documents with a certain group of characters in their names. To accomplish this, wild card characters can be included in a document name. For details of wild card use, refer to 14.14 Groups of Files and Wild Cards.

As an example, entering the document name ***"NOTES,"*** followed by the single character wild card, which is ***SPACE with dots 2-3-6***, would cause all these documents to be selected:

NOTES1;

NOTES2;

NOTES3.

You can also emboss or print all the documents in one folder. To do this, proceed as for a single document, but at the document name prompt, press ***SPACE with dots 3-5***, which is the multi-character wild card. Remember that ***HELP*** provides a convenient list of the options available.

6.8 The Embosser Set-up List.

When you first connect an embosser or printer to the BrailleNote BT, you should review the embosser/printer set-up list and change any settings as necessary. You need to know about the paper size, the type of feed, and so on. If you plan to use an embosser with a serial interface, you will also need to know its serial communications parameters before you can complete the setup.

Once you have set up KeySoft for the embosser the first time, it is strongly recommended that you emboss a test document as described in 6.10 Testing the Embosser.

To check or change the Embosser Set-up List, start at the "Emboss or Set-Up?" prompt and press ***S*** for Set up. KeySoft prompts: "Embosser Set-Up List."

To move along the list without changing values, press ***SPACE or ADVANCE*** repeatedly. To move back along the list without changing values, press ***BACK or BACKSPACE*** repeatedly. You can change settings by entering an appropriate new setting and pressing ***ENTER***. The items in the Embosser Set-up List are as follows:

6.8.1 Paper Length and Paper Width.

These two prompts are for the length and the width of the paper used in the embosser, measured in embossed lines and cells. Typical values are 25 and 40, but if you are not absolutely sure, use the test document described in 6.10 Testing the Embosser to determine what these settings should be.

6.8.2 Use Form Feeds Between Pages.

The factory setting for this item is Yes.

6.8.3 Pause After Each Page.

For automatic sheet feeding or continuous stationery, leave this item at the factory setting of No. If you have to feed individual sheets into the embosser, you should set it to Yes. When you are actually using the embosser, load a new sheet when prompted to do so, and press ***ENTER*** to continue.

6.8.4 Does Your Embosser Emboss Both Sides of the Page.

If your embosser embosses both sides of the paper, you should set this item to "Yes". Otherwise, leave it set to the factory setting of "No." If you want to emboss a particular document single-sided, the appropriate setting should be changed in the Document Layout list, not here. This is described in 7.3.2 Layout of a Braille Document.

6.8.5 Page Offset.

This defines the position of the left margin of the embossing, in cells from the left edge of the paper. It is like an overall left margin which affects all embossing. The factory setting is zero. Values from 0 to 50 are allowable.

6.8.6 Embosser Braille Table.

Following the prompt: "Embosser braille table?", press ***SPACE with dots 2-3*** to step through the available tables, for example, KeySoft 6-dot English Embosser. Press ***ENTER*** to make your selection.

6.8.7 Embosser Port.

You can select any of the following ports on the back of your BrailleNote BT as the embosser port:

USB port; press ***U*** then ***ENTER***. KeyWord displays: "USB."

Bluetooth port, press ***B*** then ***ENTER***. KeyWord displays: "Bluetooth." Note: You can only select Bluetooth as a port when there is an active Bluetooth pairing as discussed in 6.4 Printing with Bluetooth.

Serial port; press ***S*** then ***ENTER***. KeyWord displays: "Serial cable on COM1."

Infrared port, press ***I*** then ***ENTER***. KeyWord displays: "Infrared."

File, press ***F*** then ***ENTER***. KeyWord displays: "File."

If you choose the USB port or the infrared port, this is the end of the Embosser Set-up List. Exit the list by pressing ***SPACE with E***, confirm any changes you have made, and you are placed back at the "Emboss or Set-Up?" prompt. If you have made any changes, you are strongly advised to use the test document to check the embosser set-up.

If you plan to use an embosser connected to the serial port on the back of the BrailleNote BT, press ***S*** at the "Embosser Port?" prompt. There are 4 further items in the Embosser Set-up List, relating to the serial connection, as follows.

6.8.8 Baud Rate.

You can type a standard baud rate to suit the embosser, or to step through the available rates, press ***SPACE with dots 3-4***.

6.8.9 Parity.

The options are ***N, E,*** or ***O,*** for None, Even, or Odd parity respectively. Press ***ENTER*** to complete the entry. "Number of Data Bits?."

The options are ***7*** or ***8***. Press ***ENTER*** to complete the entry.

6.8.10 Handshaking.

Responses are ***S*** for software handshaking, or ***H*** for hardware, then press ***ENTER*** to complete the entry. This setting determines the way in which the embosser instructs KeySoft to start and stop the flow of data so that it can keep up. Software handshaking is sometimes known as XON/XOFF handshaking.

This is the end of the Embosser Set-up List for the serial port option. To exit the list, press ***SPACE with E***. You are asked to confirm any changes you have made and you are then returned to the "Emboss or Set-Up?" prompt. If you have made any changes, you should use the test document to check the embosser set-up.

6.9 Printing a Braille Document.

When a Braille translation is involved during printing or embossing, you can decide whether to include page breaks you inserted in the original document into the new one. For example, if the Braille document contains 6 pages each marked by "New Page" markers, these same 6 pages can be printed on the ink printer. This feature may either be on a document-by-document basis or can be set to apply to all newly created documents.

To access this feature on a document-by-document basis, open the document and go to the Format menu, Ink Print Settings, Translation Options, and move through the list to the "Suppress New Page Markers" item. Set the "Suppress new page markers" to "No" which means that new page markers in a Braille document will cause new pages in the print document.

If you want this to be the default setting for all newly created documents, from the Main Menu go to the File Menu, Translate File, Back Translation Options. The "Suppress New Page Markers" option is the sixth item in this list. Set it to "No." if you want a one-to-one correspondence between Braille pages marked with a new page marker and the translated print page.

6.10 Testing the Embosser.

Once KeySoft has been set up for the embosser, it is strongly recommended that you carry out a test. This can be very instructive because embossers behave in various ways, and may have internal settings which are not obvious. Common problems are incorrect page length or width settings, which result in lines occasionally overflowing onto the next line, or pages with only one or two lines embossed on them.

The only foolproof check is a real test. KeySoft is supplied with two test documents for this purpose, and we strongly recommend that you use them when the embosser is first connected, or if changes are made to its set-up.

To emboss the first test document, start from the Main Menu and press ***W*** for the Word processor, then ***E*** for Emboss a document, and ***E*** for Emboss. Select the General folder, and then the document called "Embosser Test A." Proceed to emboss this single page and examine the result. The first line consists of a repeated sequence of the letters A to J. The number of repeats in the top line, plus the last character, indicates how many cells can be embossed across the page. For example, if there are 3 full repeats, and the last letter is I, you know that 39 cells can be embossed across the width of the page.

Sometimes an embosser cannot emboss the far left-hand side of the page, and misses the first one or two cells, so you should also check that the first character of the first line is the letter A. If not, note how many cells are missing and put this number in the Page Offset setting in the Embosser Set-up list. Then repeat "Embosser Test A" to find the true embossed width of the page.

Now emboss the second document, called "Embosser Test B." This consists of two pages, with a number at the beginning of each line. The lines are numbered sequentially. Check the number on the last line on the first page, which might be 24, for example. This is the number of lines that can be embossed on a page.

Return to the Embosser Set-up list and set the Paper Length and Paper Width to the values determined in the tests. This completes the Embosser set-up. You should not need to change the settings in the Embosser Setup List, or carry out the embosser test again, unless a different type of embosser or paper is used.

6.11 The Printer Set-Up List.

This list contains similar items to the embosser set-up list, with some differences. There is no double-sided option, and there is an additional item called "Printer Type," which determines how the font commands embedded in your text are translated for the printer. The "standard" option is programmed into KeySoft and this is suitable for most printers if you do not require any special fonts. If you require Bold and Italics to be printed you should choose a driver appropriate to your printer. If you want to change the Printer Type, press ***Y*** and ***ENTER***, and KeySoft prompts: "Printer name? Press ***ENTER*** for (name)."

Select a printer name in the same way as choosing a file name, by pressing ***SPACE*** repeatedly to review the list of files and selecting one by pressing ***ENTER***. Printer Types for a range of popular printers are included in a folder on the KeySoft System Disk called "Printers." If your printer model is not in the list, it will probably print special fonts correctly if you select "HP DeskJet and LaserJet."

6.12 Testing the Printer.

There are two printer test documents that may be used to check the printer set-up, in a similar way to the embosser. You may require sighted assistance to check the results of this test.

Print the first document, called "Printer Test A." Check the top line, which consists of the repeated sequence of the digits 1 through 9 and zero. Use the number of full repeats and the final digit to determine the number of printable columns across the width of the page. If a number of digits are missing at the start of the line, set the Page Offset to this number and run "Printer Test A" again to determine the printable page width.

Print the second test document, called "Printer Test B," and count the number of lines that can be printed on a page.

Return to the Printer Set-up list, and set the Paper Length and Paper Width to the values determined in the tests. This completes the tests. You should not need to change the settings in the Printer Setup List, or carry out the printer test again, unless a different type of printer or paper is used.

End of Embossing and Printing Documents Chapter.

7 Advanced Word Processing.

This chapter describes the advanced features of KeyWord that allow you to create documents with more complex formats, and quickly make extensive changes to a document. It also discusses the ink-printing of Braille documents and handling documents of differing types, such as text or Microsoft Word.

Although the KeyWord functions covered in this chapter are often complex, you will find that often the default format settings will cover your document formatting needs. We suggest that you read the overview presented in the next section, then read only the sections of specific interest to you. As you become more familiar with KeyWord, revisit specific sections to maximize your understanding and use of the BrailleNote mPower BT.

7.1 Overview.

This chapter starts by defining the difference between "Braille" and "text" documents and how the BrailleNote BT handles them. A Braille document is prepared for reading in Braille, either embossed or refreshable. An ink-print document is prepared for presentation in ink-print format.

Because this User Guide concerns the BrailleNote BT fitted with a Braille style keyboard, we assume that you will primarily be working with Braille documents. For this reason, Braille documents are covered first. Towards the end of the chapter we look at working with text documents.

First we look at how to control the format of a Braille document, covering Line layout, Page settings, and commands for centering and justifying Braille.

This is followed by the parameters associated with taking a Braille document, and performing the "on-the-fly" translation of this document to provide output to a standard ink printer.

Following that is a section on Block commands, looking at the capability to quickly manipulate large blocks of text and generate form letters.

Next are several sections on ways to make it easier to read a document's content, inserting dates, times and calculator results, binding spaces and pasting details from the Address list.

Saving a document to the same or a different disk drive is covered next, along with abandoning the document without saving changes. The procedure to save documents as different document types is also discussed.

KeyWord's ability to create and open text documents is looked at next, together with the "on-the-fly" translation of these documents for Braille embossing.

Finally, there is saving and restoring default format settings for a document and Unicode character support for extended characters.

7.2 Document Types.

It is worth remembering that for a BrailleNote or VoiceNote fitted with a Braille style keyboard, the default factory setting creates all new documents in Braille format. Conversely, for a BrailleNote or VoiceNote with a computer style keyboard, the default factory setting creates a text document. If you don't wish to use these default settings, you have the option of selecting your own desired document type from the Setup Options in the KeyWord menu.

For convention, documents created by BrailleNote BT and stored in KeyWord Braille format, are referred to as Braille documents. BrailleNote BT can also create and open documents that have other file types. For example, text documents, Microsoft Word, Rich Text Format, ASCII, WordPerfect 5.1 for DOS, and KeySoft Version 2 Braille and text.

For the purposes of this chapter, the term text document encompasses all file types except Braille documents. That is, KeyWord Text, Microsoft Word, Rich Text Format, ASCII, WordPerfect 5.1, and KeySoft Version 2 Text documents are all considered to be text documents.

Text documents are often created to share information via the ink-print medium, or via a computer screen. As such, the page and line layout of a text document is often related to standard paper sizes handled by ink-print printers.

Braille documents, on the other hand, are usually created with the intention of being embossed on Braille paper, or read on an electronic Braille display.

One of KeyWord unique features is the ability to open and create documents of different types. Documents created on the BrailleNote BT are predominantly KeyWord Braille documents. These documents can be 'seamlessly' shared with other products in the BrailleNote family, output to a Braille embosser, or printed on an ink print printer. Printing a KeyWord Braille document is as simple as choosing the print option rather than the emboss option from the KeyWord Menu.

KeyWord can save documents to any of the file types listed earlier. These documents can be reviewed and edited using standard commands. Because KeyWord can open these differing document types, you can directly open a Microsoft Word document, for example:

Text documents can be opened or created, and reviewed and edited from the BrailleNote BT Braille style keyboard. Text may be input using 6 or 8 dot computer Braille and BrailleNote BT provides computer Braille tables for both the US and British conventions. Printing or embossing a text document is as simple as choosing either the printer or embosser option from the KeyWord Menu.

7.3 Formatting a Braille Document.

The format of a Braille document, that is a document prepared for reading on the BrailleNote BT or embossing, is determined by the settings in the Layout List, Page Settings List, and by individual commands for centering and justifying Braille text.

The settings associated with taking a Braille document and performing the "on-the-fly" translation of this document to properly formatted print are determined by the items in the Style of Presentation List, and the Ink-print Settings Menu.

The preparation of "Template documents" for use with the address list and print files is controlled from the Template Menu. All of these menus and options are available from the Format menu.

7.3.1 The Format Menu.

Commands and settings to format Braille text are grouped under the Format Menu. To access the Format menu while you are editing a document, press ***SPACE with "t h e" sign,*** which is ***SPACE with dots 2-3-4-6.*** As usual with menus, you can review the menu by pressing ***SPACE or ADVANCE*** repeatedly and select an item by pressing ***NEXT or ENTER***, or just press an initial letter. For really fast access, many items are also available through Quick Commands. These are key combinations using ***SPACE***, or ***BACKSPACE***, or ***ENTER***. The Quick Commands for the Format Menu are listed in the Command Summary, Chapter 19.

In the following discussion a paragraph is defined as a group of words that ends with a new line indicator.

The Format menu for a Braille document comprises the following 7 items:

Layout: Review and change options that control the layout or formatting of the Braille document, such as tabs, indents, page numbering, etc.

Center a line: Center a line or paragraph.

Right Justify a line: Align a line or paragraph so that each line ends at the right margin.

Style of presentation: Used when a Braille document is translated and reformatted into a text document, for example, before being printed. They allow you to control the way paragraphs, headings, etc. are formatted in the text document independently of the Braille document's formatting.

Ink-print settings: Review and change options that affect the way a Braille document is translated or reformatted as a text document.

Page settings: Review or change the page layout of the Braille document.

Template menu: Options for preparing a Template Document to use with the Address List.

Each of these items is discussed in detail in this chapter.

7.3.2 Layout of a Braille Document.

The Layout option presents a list of settings that determine the layout of a Braille document, such as the left and right margins. You can change a layout setting at any point in a document. The setting takes effect from the last new line indicator and a new layout indicator appears immediately after the new line indicator to indicate that one or more layout settings have changed at that point. On the Braille display the new layout indicator is shown as dollar sign nl. The dollar sign sign is the same as the ed sign, ***dots 1-2-4-6.***

Remember that this indicator is never embossed; it is there to indicate that the layout changes at this point. It is the effect of the layout change that you will see when you emboss the document not the indicator itself. You can always check the layout on the Braille display using the Layout Mode.

The New Layout affects only settings that you actually change. Settings that you do not change continue as they were in the previous paragraph. A change to a setting applies from that point until the end of the document, or until the same setting is changed again. Whether or not a setting has been changed in the current paragraph is indicated by the word "changed" or "unchanged" in the prompt for each setting. For example, if you change the Left Margin, it is displayed in the form: "Left Margin 12. (changed)."

The word "changed" indicates that settings earlier in the document do not affect the left margin of this or subsequent paragraphs. For example, a document has a suggested left margin of 10, and it contains 3 paragraphs. Assume that you change the left margin of the second paragraph to 15, so it is announced as "changed." The left margin for paragraph 1 is 10, and the left margin for paragraphs 2 and 3 is 15.

If you now set the left margin of the first paragraph to 12, the left margins are 12, 15, and 15 for paragraphs 1, 2 and 3 respectively. Notice that the margins of the second and third paragraphs have remained at 15.

Now if you need to change the right margin for the whole document, move to the top of the document and use the Layout List to make the change. The new right margin applies to the whole document. New Layout does not affect it in the second paragraph because only the Left Margin was changed at that point.

To check or change Layout settings, position the cursor anywhere in the paragraph where you require the change and either enter the Format menu by pressing ***SPACE with dots 2-3-4-6*** and select the "Layout" option, or press ***BACKSPACE with L***. KeySoft displays: "Layout List."

You can review the settings by pressing ***SPACE***. Make changes by Brailling a new value when the current one is displayed, followed by ***ENTER***. If a setting has been changed in a paragraph, you can clear it so that the setting in the preceding paragraph continues to take effect. To do this, use the Clear Field command, ***SPACE with dots 3-5-6***.

The Layout List for a Braille document consists of the following items:

Indent first line of paragraph;

Indent rest of paragraph;

Tab stops;

Line Spacing;

Emboss page numbers;

Page number position;

Emboss both sides of the paper;

Left margin;

Right margin;

Word wrap.

The items in the Layout List are now discussed.

7.3.2.1 Indent First Line and Indent Rest of Paragraph.

These settings allow a number of indenting styles to be set up. For example, they can provide the Braille convention of starting each paragraph with two spaces, indent a whole paragraph, or provide a "hanging indent" where the first line of a paragraph starts at the left margin but subsequent lines are indented.

Indent First Line causes just the first line of each paragraph to be indented from the left margin by a chosen number of cells. Indent Rest of Paragraph causes all lines in a paragraph, except the first, to be indented by a chosen number of cells. A whole paragraph can be indented by setting Indent First Line and Indent Rest of Paragraph to the same number of cells. Remember that if these settings are changed, the changes apply for the remainder of the document or until the settings are changed again.

To change a setting, type the required number of cells and press ***ENTER***. A number sign is not required.

The settings for Indent First Line and Indent Rest of Paragraph are entirely independent of the Tab Settings that can also be used to indent a paragraph.

The indent indicator is dollar sign i. Remember the dollar sign sign is the same as the ed sign, ***dots 1-2-4-6.***

7.3.2.2 Tabs.

Tabs provide a way of moving the cursor to predetermined positions on the line, and are mainly used to align columns of text. There are 10 tab stops, numbered 1 to 10. The first is measured in cells from the left margin, then each subsequent stop is measured from the previous one. Each tab stop has an initial setting of 3 cells, so the actual positions are 4, 7, 10, 13, etc.

Suppose you are editing and the cursor is at cell 8. Insert a tab indicator by pressing ***SPACE with T,*** and the cursor will move to the next Tab stop, which is cell 10. If you then start typing, the text starts at cell 10. If you do the same on subsequent lines, a column of text is formed, starting at cell 10. The Tab appears on the Braille display as dollar sign t. When the Braille display is in Editing Mode or when the cursor is on a tab indicator the dollar sign t expands to show the tab number, for example dollar sign t#2. If you want to see the effect the tab will have on an embossed version of the document, use the Braille display's Layout Mode.

To review the tab stop settings, enter the Format menu by pressing ***SPACE with dots 2-3-4-6*** and select the Layout option. Press ***SPACE*** repeatedly until "Tab stops" is displayed, and press ***ENTER.*** You can then review the tab settings by, once again, pressing ***SPACE*** repeatedly. To determine which column number a particular tab falls on, you can press ***SPACE with wh sign (dots 1-5-6)*** while reviewing the tab list.

When setting up tabs, first determine the number of columns you need and the maximum width each column must be. Now set Tab 1 to the width of the first column, Tab 2 to the width of the second column, and so on. If you later need to adjust the width of a particular column, simply change the setting for that particular tab stop. The width of all other columns remains the same, but if you increase a tab setting, check that you have not pushed a high-numbered tab stop off the page. To change a Tab stop, move to the tab stop number that you want, as if you were reviewing the setting, then type the required value and press ***ENTER***; a number sign is not required. Make any other changes you require and then press ***SPACE with E***.

7.3.2.3 Indenting Tabs.

Any tab stop can be defined as an "Indenting Tab." Indenting tabs allow you to inset either a whole paragraph, or all but the first line of a paragraph. They are most often used when creating numbered lists and outlines, where the first line of each paragraph starts with a number followed by a tab and the rest of the paragraph is indented underneath that tab. The indent created by an Indenting Tab applies only to the paragraph containing the Tab. Forcing a new line by pressing ***ENTER*** releases the indent and the text continues back at the left margin. This is the main difference between Indenting Tabs and indents created using the settings described in 7.3.2.1 Indent First Line and Indent Rest of Paragraph.

To set any particular Tab stop to be an Indenting Tab, type the letter ***I*** before the value. For instance, typing: ***"letter sign (dots 5-6), I, number sign (dots 3-4-5-6) 5,"*** after the value of Tab 1 is displayed, makes Tab 1 an indent 5 cells in from the left margin. With an indent set in this way, you can inset a paragraph by 5 cells by pressing ***SPACE with T*** once at the start of the paragraph and the entire paragraph is indented 5 cells.

The Indenting Tab indicator is shown on the Braille display as dollar sign t while in Reading Mode. When the Braille display is in Editing Mode or when the cursor is positioned on an Indenting Tab indicator, it expands to dollar sign ti#n where n is the indent value.

7.3.2.4 Semicolon Tabs.

Presenting data in columns within the available page width is not always possible in Braille. Where this is the case, columns are often denoted by a semi-colon and a space. You could do this by simply typing a semicolon after each column entry, but if you also want to translate the document into print with columns instead of semicolons, Tabs must be used. To provide for this, a special Semi-colon Tab is available. This appears as a "Tab" in the Braille document that always takes up two cells. When the document is embossed, a semicolon and a space are embossed. When the document is translated to a text document, the text is lined up in columns. If you want to use this convention, set each Tab stop by typing the letter ***S***, and no number.

The Semicolon Tab indicator is shown on the Braille display as a semicolon while reading. When the Braille display is in Editing Mode or when the cursor is positioned on an Indenting Tab indicator it expands to dollar sign t; or dollar sign, t, semicolon.

7.3.2.5 Line spacing.

This allows single or double line spacing to be selected. To change the setting, type ***S*** for single, or ***D*** for Double.

7.3.2.6 Emboss Page Numbers.

You can choose to have pages automatically numbered or not as you wish. Press ***Y*** or ***N*** as required. If you do not want a number on the first page of a document, turn off the page numbering at the start of the first page, and then turn it on at the start of the second page.

7.3.2.7 Page Number Position.

If you choose to emboss page numbers, they can be placed in one of 6 positions on the page. You can select the top or bottom line by pressing ***T*** or ***B***, then select left, center or right by pressing ***L***, ***C***, or ***R***. If there is no top or bottom margin to accommodate the page number, the center position is not available, and a clearance of two spaces is put between the page number and the text when the left and right positions are used.

7.3.2.8 Emboss Both Sides.

If you have selected the double-sided option in the Embosser Set-up List, you can choose whether to emboss the current document on one side or both sides of the paper. This choice is not presented if your embosser is set up as single-sided. This option would normally be set at the beginning of a document. If you want to change this setting part way through a document, the safest way is to force a new page then change the setting at the beginning of the new page. The results may be unpredictable if the setting is changed in the middle of a page.

7.3.2.9 Left Margin.

This is the position of the left edge of the embossing, counted in cells from the extreme left embossing position. A left margin of 0 means that embossing starts as far left as the embosser can go. The left margin is usually set at 0 when a new document is started. No number sign is needed when entering a value.

7.3.2.10 Right Margin.

This is the position of the right edge of the text, counting back from the last cell position on a line. The assumed value is 0. No number sign is needed when entering a value.

7.3.2.11 Word Wrap.

This is the process by which text automatically continues on the next line when there is not enough space for another word on the current line. The initial setting of Word Wrap for a new document is "*On*" and, unless you plan to write computer programs using KeyWord, you will probably always leave it switched on. Computer programmers may want to switch it off and use a very large Paper Width setting to avoid carriage returns being inserted automatically in their program lines.

If word wrap is switched off, a beep sounds 10 cells before the right margin is reached, and you must decide where to start a new line by pressing ***ENTER***. To change the word wrap setting, press ***N*** to switch it On or ***F*** to switch it Off.

This is the last item in the Layout list. Methods of reverting to initial settings and changing initial values used for new documents are discussed in 7.19 Initial Format Settings in a Document.

7.3.2.12 Layout Indicator.

When you change one or more layout settings, a New Layout indicator appears at the start of the paragraph to indicate that the layout has changed at that point. The new layout indicator was introduced in 3.12 Format Indicators. Remember also that a paragraph is a group of words that ends with a new line indicator. You can locate Layout markers with the Find command, ***SPACE with F,*** using the search string ***BACKSPACE with L.*** A Layout indicator can be deleted like any other character. This has the effect of canceling all changes made by the new layout, leaving all layout settings the same as they were in the previous paragraph.

The layout indicator appears on the Braille display as $nl.

7.3.3 Page Settings for a Braille Document.

This group of settings applies to the entire current document. The Page Settings List contains 5 items, as follows:

First page number;

Paper length;

Paper width;

Top margin;

Bottom margin.

You can change the Page Settings at any point in the document, and the change applies to that whole document. Either enter the Format Menu by pressing ***SPACE with dots 2-3-4-6***, and select the "Page settings" option, or press ***BACKSPACE with P***. KeySoft displays: "Page Settings list."

This is a list of the current settings for that document. You can review the values by pressing ***SPACE*** repeatedly. Make changes by typing a new value when the current one is announced, followed by ***ENTER***. To return to the document, press ***SPACE with E***. If you have made changes, KeySoft prompts: "Confirm changes?"

Press ***Y*** to confirm the new settings, or ***N*** to abandon the changes. You are then returned to the document.

The Page Settings List for a Braille document consists of the following 5 items:

7.3.3.1 First Page Number.

This is the number that appears on the first page of the document, if you choose to have your pages numbered. When you create a new document this is set to 1, but if your document was just one chapter of a larger document, you might want to start numbering at a higher number.

Suppose you had typed a large report as two separate documents. The first document might contain pages 1 to 12, and the second, pages 13 onward. The first document would be printed with a "First Page Number" of 1, the second with 13.

7.3.3.2 Paper Length and Width.

These settings define the length and width of the paper that is used when this document is embossed.

Usually you will use your standard Braille paper when embossing a document and you will have already set the Page Length and Page Width settings in the Embosser Setup list to the correct values for this Braille paper, as discussed in 6.8 The Embosser Set-up List. In this case, leave the Paper Length and Width settings in the Page Settings List set to the standard embosser settings. If you later change the size of the Braille paper you are using in your embosser, you only have to change the settings in the Embosser Setup List. However, if you always want to use a special Paper Length or Page Width for a particular document, then change the settings for that document here accordingly.

If the Paper Length is set to the standard embosser settings when you review the Page Settings list, the following prompt is displayed: "Paper length? Using the standard embosser setting of x."

This indicates that the setting is the same as the value in the Embosser Setup list. If you change the setting here in the Page Settings List, the prompt is: "Paper length? l,"

where l is the paper length in lines. In this case the embosser setting is being over-ridden for this document. To reset the paper length or width to match the value in the Embosser Setup list, use the Clear Field command, ***BACKSPACE with dots 1-4***.

7.3.3.3 Top and Bottom Margins.

These are the number of blank lines left at the top and bottom of the page when embossing. The initial values for a new document are both zero.

These are the last items in the Page Settings list. The method of changing the initial values is discussed in 7.19 Initial Format Settings in a Document.

7.3.4 Center a Braille Line.

You can position a line of text mid-way between the left and right margins. To do this, place the cursor anywhere on the line, and either press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***C*** for Center, or press ***ENTER with C***. The line of text is centered horizontally. To maintain the centering effect with long lines, text in excess of 90% of the usable page width overflows onto the next line. Centering applies to the whole of a paragraph.

To indicate centered lines a special indicator dollar sign c appears at the beginning of the line.

7.3.5 Right Justify a Braille Line.

A line of text can be right-justified so that the last character is positioned on the right margin. To do this, place the cursor anywhere on the line, and either press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***R*** for Right Justify, or press ***ENTER with R***. Right justification applies to the whole of a paragraph. A line cannot be both centered and right justified; it can only be one or the other.

To indicate a right justified lines a special indicator dollar sign r appears at the beginning of the line.

7.4 Formatting a Braille Document for Ink-printing.

When you compose a Braille document, you normally follow Braille layout conventions. However, when you come to translate a Braille document to a print text document as described in Chapter 14, you may want to use different layout conventions for ink print text, especially if you intend to print out the document on a PC. For example, new paragraphs can be indicated differently, attributes such as bold can be used, and even the text itself can be different in places. You could translate the Braille document into a text document, and then use KeyWord to format the text document according to ink-print conventions, before printing it. However that task would soon become tedious, especially if you then modify the Braille document and have to repeat the entire process. You would also have a Braille and a text version of the same document, and these could easily get out of step if you make modifications.

KeySoft therefore allows you to control the ink-print layout from within the Braille document, so that it can be translated directly from source and is formatted in ink-print completely independently of its Braille formatting. The Format menu contains two items for this, called: "Style of Presentation," and "Ink-print settings."

7.4.1 Style of Presentation linked with a Braille Document.

KeySoft allows you to indicate various ink-print styles. These do not affect the layout of the Braille document, but when you print it, or translate it to a text document, KeySoft uses the indicated styles to translate the layout from the Braille convention to an ink-print convention. For example, in Braille you might have sub-headings on a new line and indented 4 spaces. In ink-print, however, you might want a sub-heading in bold print with a blank line before and after it.

There are 6 styles of presentation that cover the presentation styles found in most documents. These are as follows:

Paragraph;

Heading;

Sub-heading;

Outline;

Lines;

Identical to source.

To check or change a style, locate the cursor anywhere in the paragraph and press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***S*** for Style of presentation, or press ***BACKSPACE with S***. KeySoft displays the style of the current section of text. If you wish to leave the Style unchanged, press ***ENTER***. Alternatively, you can review the available Styles by pressing ***SPACE*** repeatedly and choose a new Style by pressing ***ENTER,*** or press the initial letter of your choice. Settings apply from the start of the current paragraph following a New Line indicator, and a change is indicated by a "Style" indicator. There are different indicators for each style.

Use the styles by marking the beginning of each part of your document according to its style, whether it is a heading, subheading, paragraphs of text, an outline or numbered list, or just single lines of information, such as the address at the top of a letter. When you then print or translate the document, the styles are used to reformat each part appropriately. While the names represent typical uses, the format produced by each style can be altered to suit your taste or purpose.

Setting styles is best done as you are Brailling the document, but you can always go back and set them later. Get into the habit of doing it and you will have perfectly formatted print documents.

The Styles are now described.

7.4.1.1 Paragraph.

This is the initial style for a new document style. While paragraphs in Braille might start on a new line indented by two spaces, paragraphs in a text document might have no indentation, and be separated by a blank line. While this is the formatting convention for paragraphs, the options described in 14.19.9 Reviewing and Setting Back Translation Options, allow you to change it to suit your needs. The paragraph style indicator is $sp.

7.4.1.2 Heading.

Regardless of how a heading is formatted in Braille, in ink-print a blank line is placed both above and below the heading and it is centered and in bold font. If a heading takes up more than one line, each subsequent line is also centered and in bold font. A blank line in Braille produces a blank line in ink-print. The heading style continues until another style indicator changes it, or two or more blank lines are encountered. In the latter case the style reverts to "Paragraph." Once again, this is the suggested formatting convention for headings. It can be changed by altering the options described in 14.19.9 Reviewing and Setting Back Translation Options. The heading style indicator is dollar sign h.

7.4.1.3 Sub-heading.

In print format, a blank line is left before and after a sub-heading. The sub-heading is bold, and starts at the left margin. Sub-headings can take up more than one line, but the first blank line returns the style to "Paragraph."

7.4.1.4 Outline.

This style is used where you have numbered paragraphs or an outline. Usually each item starts on a new line, with subsequent lines belonging to that item being indented. This format is retained in ink-print, and a blank line is left between items whether or not there is a blank line in Braille. Another style indicator or two or more blank lines terminates Outline Style, and in the latter case the style reverts to "Paragraph."

The outline style indicator is $ou.

7.4.1.5 Lines.

This style is used to show that the print text is a series of separate lines all starting at the left margin. It might be used for the address at the top of a letter, for example. Each New Line in Braille starts a New Line in print. Each blank line in Braille causes a blank line in print. This style stays in effect until another style indicator is encountered, or two or more blank lines causes the style to revert to "Paragraph."

The line style indicator is $sl.

7.4.1.6 Identical to Source.

You can use this style to preserve the formatting of a section in a Braille document when it is translated. This style continues in effect until another style is encountered.

The Identical to Source style indicator is dollar sign si.

The Identical to Source style indicator is $si.

7.4.2 Ink-Print Settings linked with a Braille Document.

These settings can be used when you are editing a Braille document to control the format of the document when it is translated to a text document. To access the Ink-print settings menu when you are editing a Braille document, press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***I*** for Ink-print settings. You can review the list and select an item in the same way as all KeySoft menus. The Ink-print settings menu contains the following 6 items:

Layout;

Inclusion;

Start ink-print exclusion;

End ink-print exclusion;

Translation options;

Page settings.

These items are discussed now.

7.4.2.1 Ink-print Layout.

The settings for a Braille document, such as left and right margin, are accessed from the Format menu by selecting Layout. In contrast, when you are preparing a Braille document for printing or translation, you may need to check or change the settings that are used for ink-print. These can be accessed from the Format menu by selecting Ink-print Settings, and then Layout, or by pressing ***BACKSPACE with ENTER with L***.

The Ink-print Layout list contains a similar group of settings to the Braille list, including indents, left and right margins, tabs, page number enabling, line spacing and word wrap, but the values are for print. The initial values for new documents are Left and Right Margins of 10 columns, or one inch, and Tab Stops of Indent 5.

An additional setting in the Ink-print Layout list is Justification. This style is used in most printed newspapers and magazines, and spreads the words out so the last character of each line is at the right margin. It gives the text a tidy appearance, with both sides of the text being straight, but spacing between some words is increased. It is a matter of preference which way you set this option. The initial setting is off. To change the setting, press ***N*** for ***On*** or ***F*** for ***Off***.

Values that you set in the Ink-print Layout are used when your Braille document is translated to a text document. They do not affect the layout of the Braille document. A change to the ink-print layout is shown in a Braille document by the indicator $nli. An ink-print indent indicator is $ii.

7.4.2.2 Ink-print only Inclusion.

You may want to include text or formatting commands in the print version that are not required in the Braille version. For example, you could add an explanatory note, underline a word, or force a new page. To do this, either select the "Inclusion" option in the Ink-print Settings Menu, or press ***BACKSPACE with ENTER with C***. KeySoft prompts: "Ink-print-only inclusion?"

In response to this prompt, type the text that you want to appear in the print version and press ***ENTER***. You can also include the following formatting commands:

New line:	press ***SPACE with en sign, dots 2-6***;
New page:	press ***SPACE with P***;
Tab:	press ***SPACE with T***;
Center line:	press ***ENTER with C***;
Right justify line:	press ***ENTER with R***;
Underline:	press ***ENTER with U***;
Font:	press ***ENTER with F***.

There is a description of the last two items, Underline and Font, in 7.18.2 Underlining and 7.18.3 Font.

You can review the document for inclusion markers, and delete them like any other character. To review or edit the text of an inclusion, position the cursor on the inclusion marker and select the Inclusion option again.

7.4.2.3 Ink-print Exclusion.

Conversely, there may be text or formatting commands in the Braille document, such as the description of a table layout, which you may want to exclude from the print version. This is done by marking the start and end of the text or formatting commands you want excluded, as follows: With the cursor at the required point, either select "Start ink-print exclusion" from the Ink-print settings menu or press ***BACKSPACE with ENTER with dots 3-4***. KeyWord marks the position with a special "Start ink-print exclusion" indicator $xis. Now type the text or formatting commands that you do not want to appear in the print version, and either select "End ink-print exclusion" from the Ink-print Settings Menu or press ***BACKSPACE with ENTER with dots 2-6***. KeyWord marks the position with a special "End ink-print exclusion" indicator $xie.

Note that you can also add these markers to existing text, if you wish.

7.4.2.4 Translation Options.

This group of 9 settings affects the way in which the current Braille document is reformatted when it is translated to a text document. The Translation option indicator is $txi. Settings apply from the start of the current paragraph, and can be changed at chosen points throughout the document. The initial values are covered in 14.19.9 Reviewing and Setting Back Translation Options, as well as other translation settings that are not available while editing.

To access the print translation options, either select the "Translation options" from the Ink-print Settings Menu, or press ***BACKSPACE with ENTER with O***. The settings are as follows:

What type of paragraph boundary is used in the source document?

Interpret larger boundaries as paragraphs also?

New Line translation option?

Convert Braille italics to italics font?

Include two spaces between sentences?

Suppress New Page markers?

Include a blank line between items in outline style?

Revert to Paragraph Style After How Many Blank Lines?

Translation find and replace.

The last item allows you to replace a particular formatting sequence with another, as part of the translation process. For example, the Braille document might use 3 spaces anywhere on a line to indicate the start of a new paragraph, and New Line indicators in the text document could replace these.

To set up this sequence, at the "Find?" prompt press the binding space command ***ENTER with B,*** three times, followed by ***ENTER***.

This sets up the "Find?" string of 3 spaces, then at the "Replacement for 3 spaces?" prompt type:

SPACE with dots 2-6 followed by ***ENTER***.

This sets up the "Replacement?" string of one New Line.

7.4.2.5 Ink-Print Page Settings.

When you translate a Braille document to a text document, a group of page settings is used for the entire text document. To access the Ink-print Page Settings, select "Page Settings" from the Ink-print Settings Menu. KeySoft displays: "Ink-Print Page settings list."

This is a similar group of settings to the Braille list, comprising first page number, paper size, and top and bottom margins. The initial values for Page Length and Page Width follow the values in the Printer Set-up List, and a prompt indicates if a setting is changed. The initial top and bottom margins are 6 lines, or one inch, suitable for print. The Ink-print Page Settings indicator is $psi and it is positioned at the top of the document.

Values that you set here are used in the translated versions of your Braille document.

7.5 Block Commands.

The ability to manipulate blocks of text is an invaluable editing aid because it lets you mark a passage and delete it, move it, or copy it. This saves typing time and avoids the introduction of new typing errors. Blocks can be moved from one location to another within a document, copied repeatedly throughout a document, or transferred from one document to another. A block can be copied from one KeySoft task to another. For example, you can copy text between the Word Processor, Planner, E-mail, Address List, Database Manager, and Games.

A "block" of text means any continuous section of text. A block can be any size from a single character, a few words, a sentence, a couple of paragraphs, all the way up to an entire document. You define a block of text by marking one end and then moving the cursor to the other end of the block. If you want to keep the block marked for future reference you can insert markers at each end of the block. You can then move or copy the marked block in a three-step procedure:

1. Move or copy the block to the clipboard;
2. Move to where you want to insert the block;
3. Paste the clipboard to the required place in the text.

The clipboard is simply a temporary storage place for the block of text. It is provided automatically when you use a command that requires the clipboard. The word "paste" comes from the old practice of cutting out a section of printed text from its page and pasting it back in a different place.

7.5.1 Block Commands Menu.

This menu provides all the commands needed to mark a block and manipulate it. These Block Commands are accessed through the Block Commands Menu, which you can enter by pressing ***SPACE with B***. There are 13 items in the menu, in order as follows:

Append block to clipboard;

Copy block to clipboard;

Delete block;

Insert file;

Move block to clipboard;

Paste clipboard;

Read block;

Store block;

Top marker insertion;

Bottom marker insertion;

Erase file and exit Keyword;

Zap, erase the block markers;

Grade. Correct Braille grade of block.

Items on the menu can be selected in either of the usual ways.

7.5.2 Marking a Block.

Before performing any block operation, you must define the block. Marking the top and bottom of the text you wish to manipulate does this, or alternatively you can mark one end of the block of text and move the cursor to the other. Follow these steps to mark a block:

1. Move the cursor onto the first character you want included in the block.
2. Enter the Block Commands Menu by pressing ***SPACE with B***.
3. Select the "Top marker insertion" option. You are returned to the document and a marker appears in the document to indicate the top of the block. The marker is $blt.
4. Now move the cursor just past the last character you want included in the block. You are now ready to enter the Block Commands Menu and move, copy, or delete the block of text. Alternatively, you can enter a bottom block marker, so that the chosen block remains defined. The marker is $blb.

Another way of marking a block is with a Quick Mark command. These commands automatically mark a character, word, sentence, line, paragraph or section. Just position the cursor, select the Block Menu and use the following commands:

Mark character under cursor, press ***SPACE with dots 3-6***;

Mark word under cursor, press ***SPACE with dots 2-5***;

Mark sentence under cursor, press ***SPACE with dots 1-4***;

Mark paragraph under cursor, press ***SPACE with dots 2-3-5-6***.

The selection of sentences and paragraphs can be changed to lines and sections by the Reading Mode, as described in 7.6 Cursor Movement Modes.

Although it is called "Top of Block" it does not matter which way around you mark a block of text. Only one block can be marked within a document at a time. To move the block marker, just mark a different position. You can check the position of the block marker by reviewing the text with commands such as reading forward a word using ***SPACE with dot 5***. You can perform other editing functions without affecting the block marker. It is even saved with a document.

7.5.3 Read Block.

You can have KeySoft speak a block of text to check that you have marked it correctly. To read a block, press ***SPACE with B,*** for the Block Menu, then ***R***, for "Read." KeySoft says, "Block read," speaks the text in the block and returns you to the Block Menu. Like the other reading commands, you can press ***BACKSPACE with ENTER*** at any time to stop the cursor at that point, or press ***SPACE with E*** to abandon the reading and move the cursor to its final position.

7.5.4 Copy Block to Clipboard.

This command allows you to copy a block of text to the clipboard. To do this, first mark the block of text you wish to copy. Then enter the Block Commands Menu, select the "Copy block to clipboard" option and the marked block of text is copied into the clipboard replacing any text already in there. The original text and the cursor position remain unchanged.

Block commands can take a few seconds if a large block of text is involved.

7.5.5 Append Block to Clipboard.

This command is similar to "Copy Block to Clipboard." The difference is that the marked block of text is added to, or appended to, the current contents of the clipboard instead of replacing it. This allows you to build up a phrase or a list of items in the clipboard. To append a block to the clipboard, first mark a block of text. Then enter the Block Commands Menu, select "Append block to clipboard," and the marked block of text is copied into the clipboard and placed after any existing contents. The original text, including the block markers and the position of the cursor remains unchanged.

7.5.6 Move Block to Clipboard.

This command allows you to remove or cut a block of text from its place in the document, and put it into the clipboard. To do this, first mark the block you wish to move. Then, enter the Block Commands Menu, select "Move block to clipboard" and the marked block of text is removed from the document and placed in the clipboard replacing any text already there.

7.5.7 Paste Clipboard.

This command allows you to copy the contents of the clipboard into a document. Before using the "Paste" command, you should have copied or moved the required block of text into the clipboard. To paste the clipboard, position the cursor at the exact spot that the first character of the text in the clipboard should appear. This can be in the original document, or you can exit the original document and select another.

Enter the Block Commands Menu, select "Paste block," and the text in the clipboard is inserted at the cursor position. The cursor is on the first character of the pasted block, and the word under the cursor is spoken. There is no block marker in the pasted text.

The original text and the cursor position remain unchanged by the pasting operation. This allows you to paste the same block of text to various places without needing to copy or move the block to the clipboard again.

The contents of the clipboard are preserved while you carry out any other functions with the BrailleNote BT. For example, you can copy a passage to the clipboard, select the Planner, then return to the Word Processor and the clipboard contents are unchanged.

If necessary, the contents of the clipboard are translated to suit the type of document it is being pasted into. This means that you can directly paste a section of a text document into a Braille document, for example, and the text is translated into Braille of the grade in use at the insertion point.

7.5.8 Delete Block.

This function completely removes a marked block from your document. It is useful for deleting large amounts of text. To delete a block, first mark the block of text you wish to delete. Then enter the Block Commands Menu and select "Delete block." KeySoft prompts: "Delete block. Sure?" To confirm the deletion, press ***Y***, or, if you decide not to delete the block, press ***N***.

7.5.9 Changes to Text Format.

When you paste a passage into an existing document, make sure that any spaces at the beginning or end are correct. The most common problems are too few spaces at the beginning, or too many at the end. The marked block can contain formatting indicators like New Page indicators, and these are copied or moved and pasted with the block. The exceptions are indicators such as Line Break and Page Break, which are only relevant to the original document. After doing a Block Move, Copy, Delete, or File Insert, you should check the document layout to ensure that it has not been upset by the block manipulation.

7.5.10 Store Block.

This command allows you to store a block of text in another file, instead of in the clipboard. The other file may already exist, or you can create it as part of the Store Block process. To store a block, first mark the block of text you wish to store. Then press ***SPACE with B*** for the Block menu, followed by ***S***, for "Store." KeySoft prompts for the drive, folder and name of the file to store the block in. Select these in the usual way.

If you are storing the block in an existing file, you are offered the options of appending the block to the bottom of the file, or replacing the complete file.

You can store a block of text directly to a file of another type if you wish. This might be a text document when you are editing a Braille one, or it could be a Microsoft Word document, for example. To create a file of another type press ***SPACE with X*** repeatedly at the file name prompt until the type of file you are looking for is displayed. To select an existing file, type its name or use the list of files to find it. In the list of files you can change the type of the file displayed by pressing ***BACKSPACE with X*** repeatedly. To change between Braille and computer Braille entry at the file name prompt, press ***SPACE with X*** repeatedly. Braille is suitable for entry of KeyWord document names and computer Braille is suitable for entering the name of any file.

If you need information about the selection of a directory or file name, you can find this in 14.16 Creating Renaming and Erasing Sub-Directories. When storing to an ASCII file, KeySoft uses the options in the ASCII Translation Set Up List, as described in 14.19.8 Reviewing and Setting ASCII Translation Options.

The process of storing a block does not remove that block from the current document.

7.5.11 Insert File.

The Insert File command allows you to insert the complete contents of another document into your existing document at the current cursor position. This feature is useful if you wish to send the same letter to a number of different people, as described in the next section. To insert a file, position the cursor at the point where you want the first character of the inserted file to appear, select the Block Menu, and then press ***I***, for "Insert." KeySoft prompts for the drive, folder and name of the file to insert. Select these in the usual way.

As well as inserting KeyWord documents you can insert a file of any type supported by KeySoft, for example, a Microsoft Word document. If you need information about the selection of a directory or file name, you can find this in 14.16 Creating Renaming and Erasing Sub-Directories. When inserting an ASCII file, KeySoft uses the options setup in the ASCII Translation Set Up List, as described in 14.19.8 Reviewing and Setting ASCII Translation Options.

After the file insert, the cursor is positioned immediately after the inserted text. That is, the file is inserted as though it had just been typed.

7.5.12 Merging Documents.

The Insert File feature is useful for merging a form letter into a number of letters, each addressed to a different person or company. In fact, this feature makes the preparation of any document that contains some standardized text and layout much easier. Follow these steps to generate personalized memos:

1. Prepare a document containing the text that is common to all recipients;
2. Open another document for the first memo. Type the first person's name and any personal text;
3. Now insert the common text in the memo by positioning the cursor at the appropriate point and pressing ***SPACE with B***, then ***I.*** Follow the procedure outlined in the previous section to select the document containing the common text. Then save this memo, and open another document for the next memo.

7.5.13 Erase File.

This option provides a convenient method of completely removing a file and its contents. If you are unsure as to whether you wish to delete a particular file you can open the file, and after determining it is no longer needed, delete it using the Erase File option on the Block menu. This saves you from having to exit the file and delete it using the File Manager. KeySoft will request confirmation before removing the file.

7.5.14 Zap Block Markers.

If required, the Block Markers can be removed after a block function has been completed. To erase, or "zap," the block markers, enter the Block menu by pressing ***SPACE with B***, and select the "Zap" option. The cursor position remains unaltered.

7.5.15 Correct Grade of Block.

This menu item allows you to change the Braille grade assigned to a block of text after you have already typed it. Imagine you want to type an e-mail address in the middle of a document. You change to computer Braille to do this, but forget to change the setting back to contracted Braille. Everything is fine on the Braille display, but on review with speech, or e-mailing the text, the text that KeySoft recognizes as computer Braille but is actually contracted Braille comes out looking very strange indeed.

To use this function, first mark the block of text. Go to the Block Commands menu by pressing ***SPACE with B***, then press ***G***. KeySoft will prompt you for the Braille grade you wish to assign to the block. Select your Braille grade using ***A*** for grade 1, ***B*** for grade 2, or ***C*** for computer Braille. You will then be returned to the document, where the block is now in the correct Braille grade.

7.6 Cursor Movement Modes.

KeySoft has a range of specific moving commands designed to make moving around a document quick and accurate. These were listed in 3.8.2 Listening to a Document. When you are reading text organized in sentences and paragraphs, then commands to move the cursor by sentence or paragraph are very useful. For example:

SPACE with dot 4 moves the cursor to the beginning of the next sentence;

SPACE with dots 5-6 moves the cursor to the beginning of the next paragraph.

However when working with poetry or lists, it would be more convenient to move by a line at a time than by sentence. To allow the most efficient cursor movement for the text you are working with, KeySoft provides 3 cursor movement modes; sentence and paragraph, line and sentence, and column. When you change the cursor movement mode, the moving commands themselves don't change, just the way in which they direct the cursor to move around the text.

To change the cursor movement mode while in a document, press ***SPACE with M*** repeatedly, until you get to the one you want. These affect the operation of the ***SPACE with dot 1, SPACE with dot 4, SPACE with dots 2-3*** and ***SPACE with dots 5-6*** reading commands. They also affect what is spoken by these commands and by the ***BACKSPACE with dots 2-3-5-6*** and ***BACKSPACE with dots 1-4*** commands.

The default cursor movement mode is **Sentence and Paragraph**. When in **Line and Sentence** Mode:

SPACE with dot 4 reads the next line; ***SPACE with dots 2-3*** reads the next section. Likewise, ***SPACE with dot 1*** reads the previous line and ***SPACE with dots 2-3*** reads the previous section.

In Line Mode, the word "section" has a specific meaning. The Current Section starts at the last blank line before the cursor, and continues until the first blank line after the cursor. Similarly, the Next Section starts at the first blank line after the cursor, and continues until the following blank line. Line Mode is useful when you are concerned with the layout of the document. Among other purposes, it's a good way of checking for blank lines.

The third Reading Mode is called **Column Mode**, and acts as follows:

SPACE with dot 4 moves the cursor down a line but keeping it in the same column. It reads the current word on this line;

SPACE with dots 5-6, reads the next section.

Column Mode is effective for reviewing text that is laid out in a table. It allows you to move up or down a column in a table, reading entries one at a time.

Although we have only given two examples, the current cursor movement mode affects all reading commands that relate to sentences and paragraphs. This is also true for deletion commands. For instance, in Sentence and Paragraph mode, ***BACKSPACE with dots 1-4*** deletes to the end of the sentence, but in Line Mode it deletes to the end of the line. The cursor movement mode also affects the Quick Mark commands in the Block Menu.

7.7 Moving to the Start of the Next Line.

It is possible to move the cursor to the first position on the next line without inserting a New Line in the document. To do this, press: ***SPACE with dots 4-5***.

KeySoft will move the cursor to the next Tab position and display the word under the cursor.

If speech is on KeySoft says "New Line," or "Line Break," followed by the first word on the next line.

7.8 Moving to the Next Tab.

It is possible to move the cursor to the next tab position without inserting a tab into the document. To do this, press: ***BACKSPACE with T.***

Note that this command jumps to the next tab position, regardless of whether there is actually a tab indicator in the text.

7.9 Inserting the Time Date or Calculator Result.

You can insert the time, date or calculator result directly into a document instead of typing them. With the cursor in the appropriate place in your current document, press ***ENTER with I***. In the Insert Menu select Date, Time, or Calculator result as required.

If you select the date, KeySoft prompts: "Insert today's date or printing date?"

If you press ***T***, KeySoft inserts today's date. If you press ***P***, KeySoft puts in a special "Insert date" indicator $dtp, and the current date is substituted whenever the document is embossed or printed, or when it is used as a template file.

If you choose to insert from the Calculator, KeyPlus prompts: "Insert result or whole calculation?"

Press ***R*** to insert the Result or ***C*** to insert the whole calculation.

The most recent result from the calculator is inserted into the document, which saves you having to remember and re-type it. If you select ***C***, the whole calculation is entered, for example "3 + 7 = 10."

There is one additional item on the "Insertion Menu," named "Unicode character." This allows the insertion of extended characters from the Unicode character tables. See also 7.20.1 Inserting Extended Characters.

7.10 Binding Spaces.

A binding space is simply a space that binds the words on either side of it to each other in a way that a normal space cannot.

You can use a binding space to keep two words together on the same line, so that they cannot be split apart by the text breaking at the end of the line at a normal space. For example, it would be undesirable for a first initial and a last name, such as T. Brown, to appear on separate lines.

The other place where binding spaces are useful is in the search function when searching for an e-mail - you need to use binding spaces instead of normal spaces in a string of words to be searched for. In other contexts of search and/or replace, this is not necessary.

Pressing ***ENTER with B*** produces a "binding space." It is shown as $bsp on the Braille display.

7.11 Pasting an Address.

A person's name and address, or other details, can be copied from an address list and inserted into your current document. Refer to 10.10.1 Copying to a Text or Braille Document.

7.12 Working with Documents on other Drives.

While you will usually work with documents on the Flash Disk, KeyWord allows documents to be created or opened directly from any drive available on the BrailleNote BT. If you want to open or create a document on a different drive, follow these steps:

From the KeyWord Menu, select Open a Document or Create a Document. At the "Folder name?" prompt, press ***BACKSPACE***. KeySoft prompts: "Drive? (Flash Disk)."

Either type the name of the required drive, press ***SPACE*** repeatedly to review the list of available drives and press ***ENTER*** to select one, or press the hotkey for the drive you want. KeySoft returns to the "Folder name?" prompt. You can now follow the prompts to select the required folder and document name in the usual manner. When editing a document on a removable disk or storage card, do not remove the disk or card containing the document until after you return to the KeyWord Menu or the Main Menu.

If you change to a drive other than the Flash Disk, KeySoft reminds you that you are not using the default drive each time you create or open a file. It does this by prompting for the drive, in addition to the folder and document name prompts.

It is not recommended that you create or save important files on the KeySoft System disk, because the contents of this drive will be lost if the BrailleNote BT is reset with ***dots 4-5-6*** held down, or if the battery goes completely flat. This drive should only be used for temporary storage.

7.13 Saving a Document.

Changes to a document are saved automatically when you finish editing it and return to the KeyWord menu or Main Menu, or when switching to another document with the command ***SPACE with dots 1-2-5-6***. However, it is good practice to save a document regularly while you are editing it, especially if you are editing the document for a long period of time. For example, you might delete a significant passage by accident. You can recover by quitting without saving, as described in the next section, and then opening the document again. This puts you back to the last version that you saved.

To save the current document, press ***SPACE with S.*** If the document has not been changed since the last time it was saved, KeySoft displays: "Document has not been modified"

If this message is displayed and you do not wish to continue saving the document, you can return to the Word Processor by pressing ***SPACE with E.*** If the document has been changed, no such message is given.

KeySoft then prompts: "Document name? (name)"

where (name) is the name of the current document. You can either overwrite the original document by pressing ***ENTER*** then ***Y*** for Yes, or write the changed document to a new name by typing a new document name and pressing ***ENTER***. If you choose the first option, the new one replaces the old document. If you choose the second option, a new copy of the document is created under the new name, and the old document remains unchanged.

If you wish to save the document to a different folder, press ***BACKSPACE*** at the "Document name" prompt and you will be asked for the Folder name, which can be selected as usual.

You can also change the type of document at this point. For example, if you are editing a Braille document you can save a copy as a text document or as a Microsoft Word document and so on. To save a document as another file type, press ***BACKSPACE with X*** at the "Document name?" prompt. Repeat the ***BACKSPACE with X*** command until you hear the file format you wish to save in.

If you save the document using a different name or file type, KeySoft gives you the option of opening the saved document or continuing to edit the original document. This is convenient if you want to make copies of the document with different formats without having to re-open the original document.

If you have a large number of documents and the Flash Disk is almost full, there may be insufficient space available to save the current document. In this case you will be given the option of saving to the KeySoft System Disk or a storage Card, or deleting documents in the Flash Disk to make room.

7.14 Quitting a Document.

Changes to a document are saved when you press ***SPACE with S,*** or automatically as you return to the KeyWord menu or Main Menu, or when switching to another document. Sometimes you may need to quit the Word Processor without saving the changes made since the document was last saved. For example, you may have made some incorrect alterations and want to abandon your changes.

To do this, press ***BACKSPACE with Q,*** for Quit. If changes have been made, KeySoft prompts: "Lose changes. Sure?"

If you really wish to quit without saving the document, press ***Y***. To cancel the command and return to the Word Processor, press ***N.***

7.15 Creating Other Document Types.

To create a different type of document, select "Create a Document" from the KeyWord Menu in the normal manner. Press repeatedly at the file name prompt until the document type you wish to create is displayed.

Successive presses of ***SPACE with X*** at the file name prompt cycle through the document types you can create. These are:

Braille (Keyword format);

Text (Keyword format);

ASCII Text;

Microsoft Word;

Rich text format;

WordPerfect 5.1 for DOS;

KeySoft version 2 Braille;

KeySoft version 2 text;

KeyList Definition file;

Computer Braille Table.

For further information on document and file types, refer to 14.17 File Translation

You can also change the default document type; this is discussed in 7.2 Document Types.

7.16 Text Documents.

So far, we have assumed that our base document is a Braille document, written in grade 1 or grade 2 Braille, and having about 40 characters per line and 25 lines on a page. The alternative is a text document written in computer Braille and formatted for print, having around 66 print characters per line and 55 lines on a page, suitable for printing on letter or A4 size paper.

Braille and print documents can be stored in the same folder, so you review all document names when you review the contents of a folder. Remember that you can check the type of document by pressing ***SPACE with I*** when its name is displayed.

7.16.1 Creating a Text Document.

To create a text document, press ***BACKSPACE with X*** repeatedly at the "Document to create?" prompt, until the prompt "Create a text document" is displayed. Type the document name, and press ***ENTER***. KeySoft prompts: "This is a text document. Computer Braille is required. Top of document. Blank."

You may then enter your text into the file using computer Braille. Choose the appropriate US or British computer table from the Braille display options in the Options Menu. If you are unfamiliar with computer Braille, a brief overview is provided in 7.17 Computer Braille.

7.16.2 Opening Text Documents.

When you receive a document, such as an e-mail or a Microsoft Word document (as an e-mail attachment perhaps) you may find it easier to read and even edit the document as a text document. The advantages of leaving the document as a text document rather than translating the document into Braille are:

It saves initial translation time and effort;

It avoids translation errors;

It eliminates any loss of formatting during translation.

This is especially true if the document is to be exported from the system as a text document, for instance by e-mailing it to sighted people.

When a text document is opened, the Braille display displays it in your preferred Braille grade. KeySoft translates from the underlying document as required without altering the document, so you have the advantage of being able to read the document in grade 2 Braille. However, if you need to edit the document, you must use computer Braille.

On the BrailleNote BT, whether in editing or automatic mode, if you move to a word it is displayed in computer Braille, regardless of where the cursor is. If you route the cursor to a word, no matter where in the word, it appears under the first character, and the word appears in computer Braille. You can then route it to any other character as desired. In this way you are able to view the exact keystrokes that make up the word.

7.17 Computer Braille.

If you choose to open or create a text document, KeySoft advises: "This is a text document. Computer Braille is required."

If you don't know computer Braille, don't be put off, because it's not as bad as it sounds. Computer Braille signs for the lower case letters are exactly the same as grade 1. We'll come back to capitals shortly.

Numbers in computer Braille are similar to grade 1 and 2, except that the dots are lowered by one row and no number sign is used. For example, number 1 becomes ***dot 2***, and number 2 is ***dots 2-3***. Punctuation marks are certainly different from grade 1 or grade 2. For example, to obtain a ***period*** in US computer Braille, press ***dots 4-6***. In UK computer Braille a ***period*** is ***dots 2-5-6.*** A full list of Computer Braille characters for both the US and United Kingdom conventions is contained in Appendix D.

7.17.1 6-dot or 8-dot Computer Braille.

There are two sorts of computer Braille: 6-dot and 8-dot. In 6-dot, a capital letter is obtained by pressing ***SPACE*** with ***U*** before the letter. If you press ***SPACE*** with ***U*** twice, capitals continue until you turn them off by pressing ***SPACE*** with ***U*** again.

Alternatively, you can employ 8-dot Braille. The two keys that we have been calling ***BACKSPACE*** and ***ENTER*** are used in 8-dot Braille for dot 7 and dot 8 respectively. These two dots are the bottom two of the 4 by 2 dot cell used for 8-dot Braille. There is no separate capital sign. Instead, you get upper case by adding ***dot 7*** to each letter sign. For instance, capital A is ***dots 1-7.*** Since ***dots 7 and 8*** are used for characters in 8-dot Braille, the ***ENTER*** and ***BACKSPACE*** functions have to be obtained in a different way:

For ***ENTER***, press ***SPACE*** with ***ENTER,*** and for ***BACKSPACE,*** press ***SPACE*** with ***BACKSPACE***.

In all KeySoft commands that use ***BACKSPACE*** or ***ENTER***, you must add ***SPACE*** if you are using 8-dot Braille. For example, the command to delete the current word is usually ***BACKSPACE*** with ***dots 2-5.*** When you are using 8-dot Braille, however, you must press ***SPACE*** with ***BACKSPACE*** with ***dots 2-5*** to delete the current word.

You can choose 6 or 8-dot computer Braille through the Options menu. Press ***SPACE with O,*** then ***K*** for Keyboard Settings. Press ***SPACE*** repeatedly until KeySoft asks: "Use 6 or 8 dot computer Braille?."

Enter ***6*** or ***8*** without a number sign.

The last prompt in this list asks you for the computer Braille language you wish to use. The choices are "USA computer Braille," or "UK computer Braille" and this setting applies to both 6 and 8 dots computer Braille. While the dot combinations for the letters of the alphabet are the same in both languages, the dot combinations for numbers and most punctuation characters is different. For example, an asterisk is obtained in USA computer Braille by pressing ***dots 1-6.*** In UK computer Braille an asterisk is ***dots 3-5.*** Appendix D lists the computer Braille codes for both languages.

7.17.2 Computer Braille Cursor.

In chapter 4 we discussed the review cursor in relation to reading a book with KeyBook. We explained that for grade 1 or grade 2 Braille, the standard cursor is both ***dots 7 and 8.*** For computer Braille the cursor is ***dot 8*** only.

KeyWord requires text documents to be edited in computer Braille, regardless of what reading grade you have set for the Braille display. If you place the cursor on any character in a word, the display of the word reverts to computer Braille. This gives you a one-to-one correspondence between the underlying text and the Braille display. It expands contractions as you review a word character by character and the cursor changes to reflect that.

When the cursor is under a format indicator, the cursor spans all of the cells of the indicator.

7.17.3 Instant Translation.

KeyWord, like KeyBook, can translate text into your preferred reading grade instantly, as you read. For example, if your preferred reading grade is grade 2 Braille, KeyWord automatically translates the book into grade 2 as you read. The underlying text is still in its original form, however, and you can examine it in computer Braille, at any time, should you wish.

You can choose the Braille grade for viewing text files from the Braille Display options off the Options Menu while in a text file. The factory default is set to "Preferred Reading Grade," which in turn is set to grade 2. For more information, refer to 5.4.8 Text Document Reading Grade.

7.18 Formatting a Text Document.

The format of a text document, that is an ink-print style document, is determined by the settings in the Layout List, the Page Settings List, and by individual commands for centering, justifying, underlining, and changing font types.

The settings associated with taking a text document, and performing the "on-the-fly" translation of this document to create a Braille document that will emboss properly, are determined by the items in the Style of Presentation List, and the Braille Settings Menu.

The preparation of "Template documents" for use with the address list and text files is controlled from the Template Menu.

The Format Menu that is presented while you are working on a text document is similar to that for a Braille document but there are some differences because text documents are formatted for printing on an ink-printer.

In the same way as you can include ink-print formatting information in a Braille document that is used when the document is translated, Braille formatting information can be included in a text document.

The Format menu for a text document contains the following items:

Layout; refer to 7.18.1 Layout of a Text Document.

Underlining; refer to 7.18.2 Underlining.

Font; refer to 7.18.3 Font.

Center a line; This item centers a line or paragraph. It operates in the same way as the format item for centering a line of Braille described in 7.3.4 Center a Braille Line.

Right justify a line; This item aligns a line or paragraph so that each line ends at the right margin. It operates in the same way as the format item for right justifying a line of Braille described in 7.3.5 Right Justify a Braille Line.

Style of presentation; Styles of presentation are used when a text document is translated and reformatted into a Braille document, for example, before being embossed. They allow you to control the way paragraphs, headings, etc. are formatted in the Braille document independently of the text document's formatting. They are described in 7.18.4 Style of Presentation linked to a Text Document.

Braille settings; This item allows you to review and change options that affect the way a text document is translated or reformatted as a Braille document. It is described in 7.18.5 Braille Settings linked with a Text Document.

Page settings; This item allows you to review or change the page layout of the text document. It contains the same options as the Page settings for Braille documents described in 7.3.3 Page Settings for a Braille Document.

Template menu; This item contains options that are used when preparing a Template Document for use with the Address List. This is described in 10.9 Templates.

7.18.1 Layout of a Text Document.

Layout allows you to review and change options that control the layout or formatting of the text document, such as tabs, indents, page numbering, etc.

The items in the Layout List for a text document have initial values that are appropriate for ink-printing. The Left and Right Margins are both set to 10, and the Tab Stops are set to Indent 5. A justification option is included. Justification is explained in 7.4.2.1 Ink-print Layout.

The Layout List for a text document, together with the factory default settings, is as follows:

Indent first line of paragraph. Default setting 0;

Indent rest of paragraph. Default setting 0;

Tab stops. Default setting Indent 5;

Line Spacing. Default setting single;

Print page numbers. Default setting No;

Page number position. Default setting Bottom Center;

Justification. Default setting Off;

Left margin. Default setting 10;

Right margin. Default setting 10;

Word wrap. Default setting On.

7.18.2 Underlining.

Underlining can be switched on or off at any point in the text. When switched on, it continues until an "Underline Off" command is encountered.

To check or change the underline status at any point, either press ***SPACE with dots 2-3-4-6,*** for the Format menu, and ***U*** for Underlining, or press ***ENTER with U***. KeySoft prompts: "Underline is off."

Press ***ENTER*** to leave it off, ***N*** to turn it on, or ***F*** to turn it off. You can underline as you type, by turning it on, typing the word or passage, and then turning it off. Alternatively, you can place the cursor at appropriate points in existing text and turn underlining on or off.

The Underline Start indicator is placed in the text at the point where you turn underlining on, and similarly an Underline End indicator is placed at the point where the underlining is turned off. The Underline start indicator appears as $fsu (font, start, underline)on the Braille display and the Underline End indicator appears as $feu (font, end, underline).

To remove underlining, use the Search command with the search string ***ENTER with U, N*** to position the cursor at the Underline On indicator. Press ***BACKSPACE with dots 3-6,*** to delete the indicator. Repeat the action using the search string ***ENTER with U, F*** to remove the Underline Off indicator.

If underlining is on, KeySoft displays: "Underline on"

each time you press ***ENTER*** to start a new line, to avoid large sections of text being underlined unintentionally.

7.18.3 Font.

Most printers can produce special fonts, such as italics, bold, elongated, compressed, and subscripts, to enhance the appearance of a printed document. KeySoft allows fonts to be changed within a text document. A single letter is used to select each font. For instance, ***I*** signifies italics, ***B*** for bold, ***E*** for elongated. The full listing of fonts for any printer is contained in a document for the selected printer, which can be found in the "Printers" folder on the KeySoft System disk.

Before using the Font commands you should select the driver appropriate to your printer from the Printer Setup in the KeyWord menu. If the driver is not installed, you will not hear the font type. For example "Font B" would be spoken, rather than "Bold."

To check or change the font at any point, either press ***SPACE with dots 2-3-4-6*** for the Format menu, and ***F*** for Font, or press ***ENTER with F***. KeySoft prompts: "Font."

Type a letter to select the required font. KeySoft prompts: "Font (p) is off."

where (p) is the letter designating the chosen font. KeySoft describes the font, if it is implemented by the current printer type, as selected in the Printer Set-up list 6.8 The Embosser Set-up List.

To turn the font on, press ***N***. To turn it off, press ***F.*** To leave the font unchanged, press ***ENTER***.

More than one font can apply to a passage of text. Font commands are announced in the text when the cursor passes over them, and can be deleted like any other character.

The Font Start indicator is shown on the Braille display as dollar sign fsn where n is the type style letter. The Font End indicator is shown on the Braille display as dollar sign fen where n is the type style letter.

7.18.4 Style of Presentation linked to a Text Document.

You can attach a style to a section of a text document, and this has an effect only when you emboss the document, or translate it to a Braille document. This is the converse of the Styles of Presentation described in 7.4.1 Style of Presentation linked with a Braille Document. The same 6 style names are available, but their actions are suited to formatting a Braille document.

To check or change a style, locate the cursor anywhere in the paragraph and press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***S*** for Style of presentation. KeySoft displays the style of the current section of text. If you wish to leave the Style unchanged, press ***ENTER***. Alternatively, you can review the available Styles by pressing ***SPACE*** repeatedly and choose a new Style by pressing ***ENTER***, or press the initial letter of your choice. Settings apply from the start of the current paragraph following a New Line indicator, and a "Style" indicator indicates a change.

These styles are as follows:

7.18.4.1 Paragraph.

This is the initial style for new documents. A section with the "Paragraph" style starts in Braille with a new line and an indent of 2 spaces. Blank lines in print are ignored in Braille. The Paragraph Style indicator is shown on the Braille display as $sp.

7.18.4.2 Heading.

A blank line is placed above and below a heading. Each new print line starts a new Braille line. A blank line in a heading causes a blank line in Braille. Two or more blank lines in a heading cause the style to revert to "Paragraph."

A heading is centered in Braille. A print line can produce more than one Braille line, so a centered heading could fill the page width. This would destroy the centering effect, so lines longer than 90% of the page width overflow onto the next line. The Heading indicator is shown on the Braille display as $h.

7.18.4.3 Sub-heading.

This style starts in Braille with a new line and an indent of 4 spaces. A sub-heading may contain more than one line, but a single blank line terminates the style and revert to "Paragraph" style.

The Sub-heading indicator is shown on the Braille display as $h#n where n is the level of the sub-heading. For example, the first level sub-heading would be indicated by $h#1, the second level by $h#2 etc.

7.18.4.4 Outline.

This style is used for simple numbered lists or more complex outlines and produces a first line that starts at the left margin, with the rest of the text indented. Blank lines in the text are suppressed in Braille and two or more blank lines cause the style to revert to "Paragraph." The Outline indicator is shown on the Braille display as $ou.

7.18.4.5 Lines.

This style is for a series of separate lines all starting at the left margin. Any overflow onto the following line is indented by 2 spaces. The "Lines" style might be used to format the address at the top of a letter, for example. Two or more blank lines causes the style to revert to "Paragraph." The lines style indicator is shown on Braille display as $sl.

7.18.4.6 Identical to Source.

Use this style to preserve the layout of a section in a text document when its corresponding Braille document. This style continues in effect until another style is set. The Identical to Source indicator is shown on the Braille display as dollar sign si.

7.18.5 Braille Settings linked with a Text Document.

When you are working with a text document, you may want to put in formatting that only has effect when the document is embossed, or translated to a Braille document. This is the purpose of the Braille Settings option in the Format Menu.

To access the Braille settings menu when you are editing a text document, press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***B*** for Braille settings. You can review the list and select an item in the same way as all KeySoft menus.

The Braille settings menu contains the following 8 items:

Layout;

Inclusion;

Start Braille exclusion;

End Braille exclusion;

Braille Grade;

Page Settings;

Translation options;

Control Translation.

These items are the counterparts of the Ink-print settings available for a Braille document. Most of them are similar to the Ink-print settings discussed in 7.4.2 Ink-Print Settings linked with a Braille Document. Please refer to that section for a description of the Layout, Inclusion, and Exclusion options. Bear in mind, that because the settings now relate to a Braille page, the values presented are those for embossing. The initial values for new documents are; Left and Right Margins 0 cells, and Tab Stops of 3.

Remember, values that you set in the Braille Layout are used when your text document is embossed on a Braille printer, or translated to a Braille document. They do not affect the layout of the text document. A change to the Braille layout is shown in a print document by an indicator $nlb.

7.18.5.1 Braille Grade.

When a text document is embossed or translated into a Braille document, your preferred reading grade setting is used. This setting is in the Braille display options of the Options Menu. However, you may need to over-ride this grade for a particular passage, for example, if your document contains an e-mail address, you will want computer Braille used for the e-mail address when the document is translated into Braille.

To have a word or passage appear in a different grade, select the Braille grade option, select the required grade, type the relevant passage, and then repeat the procedure to restore the grade. This option can also be used to change the grade into which a passage of existing text is translated. The Braille grade setting appears on the Braille display as $g#n where n is the grade: 0, 1, or 2.

7.18.5.2 Braille Page Settings.

This group of settings applies to the entire current text document if it is embossed, and consists of the same 5 items as the Page Settings for a Braille document, namely:

First page number;

Paper length;

Paper width;

Top margin;

Bottom margin;

The suggested values for Paper Length and Width follow the values in the Embosser Set-up List, and a prompt indicates if a setting is changed. A Braille Page Settings indicator $psb is positioned at the top of the document.

7.18.5.3 Braille Translation Options.

This group of 11 settings affects the way in which a particular presentation style in a text document appears in the corresponding Braille version. Settings apply from the start of the current paragraph, and can be changed at chosen points throughout the document. The initial values are covered in Chapter 14, as well as other translation settings that are not available while editing.

To access the Braille translation options in a text document, press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***B*** then ***T***, or just press ***BACKSPACE with ENTER with O***. KeySoft displays: "Braille translation options list."

The settings are as follows:

What type of paragraph boundary is used in the source document?

Interpret larger boundaries as paragraphs also?

New line translation option?

Convert italics font to Braille italics?

Suppress multiple spaces?

Suppress New Page markers?

Ignore Tabs?

Include capital signs?

Suppress blank lines in Outline style?

Revert to paragraph style after how many blank lines?

Translation find and replace.

The last item allows you to replace a particular formatting sequence with another, as part of the translation process. For example, the text document might use two New Line markers to separate paragraphs, and these could be replaced by 3 spaces in Braille. The Braille Translation Options indicator is dollar sign txb. To set up this sequence, at the "Find?" prompt type:

SPACE with dots 2-6, two times, followed by ***ENTER***.

this sets up the "Find?" string of 2 new line markers, then at the "Replacement for 2 new lines?" prompt type:

ENTER with B, 3 times followed by ***ENTER***.

this sets up the "Replacement?" string of 3 Spaces.

7.18.5.4 Control Translation.

This option provides control over how fractions, Roman numerals, dates, and math appearing in the text document are treated in the corresponding Braille version.

To access the Control translation options in a text document, press ***SPACE with dots 2-3-4-6*** for the Format menu, then ***B*** for Braille settings, and ***C*** for Control Translator options. KeySoft displays: "Translator Control option."

To step through the available options press ***SPACE with dots 3-4*** and press ***ENTER*** to select an option. The available options are:

Fractions On/Off;

Roman Numerals On/Off;

Date On/Off;

Math On/Off.

7.19 Initial Format Settings in a Document.

If you have changed one or more settings in a Layout list, you can reach a point in the document where you want the settings to revert to their initial values. That is, the value they were at the start of the document. To do this, ensure that the cursor is at the appropriate place, and from anywhere in the Layout list, press ***BACKSPACE with R***, for Revert. This causes all the settings in the Layout list to revert to the values that they had at the start of the document.

The initial settings that KeySoft uses when you create a new document have been chosen to suit most situations, but you can set up different initial settings if you wish. For example, you may decide that you want a right margin of 8 columns in all the text documents you create from now on. To do this, open or create a text document, and change the right margin setting in the Layout list. Then, from anywhere in the Layout list, press ***BACKSPACE with S***. This saves all the current values including the new right margin, as the initial settings that are used when you create a Braille document.

To change the initial Page Settings, alter the required setting and then from anywhere in the Page Settings list, press ***BACKSPACE with S.*** Remember that there are separate initial settings for Braille and text documents, which you can change by opening the appropriate document and carrying out this procedure.

7.20 Extended Characters.

The text characters represented, in the standard 63 dot combination Braille set, or for that matter on the typical QWERTY keyboard, only represent a tiny proportion of the total characters available. These include currency indicators like pounds and euros, accented letters like e acute and c cedilla, character sets for other languages such as Arabic and Japanese and a whole range of specialist characters for use in sciences, math, phonetics etc. totaling around 35,000. Those characters not represented in your standard character set are referred to as the extended character set.

As a way of managing this enormous character set, a standard called Unicode exists. Unicode assigns a unique numeric code to every character. This allows for use in coding and programming, formatting, and an easy way to enter characters once you know the character code. For more information on Unicode Tables, have a look at www.unicode.org.

Extended characters are useful in a wide range of situations.

For studying languages, economics, math, just about any subject with its own symbols or characters.

For commercial use, inserting copyright or trademark symbols etc.

For everyday use of words borrowed from other languages, people and place names, correspondence with friends.

You may use certain characters frequently, or just occasionally, and there are various ways you can set up your use of characters depending on the level of usage.

Use of extended characters is not confined to documents. You may also use them in e-mail addresses, file names, and within the address list etc.

7.20.1 Inserting Extended Characters.

Unicode characters only work in text documents. If you wish to use an extended character in a Grade 2 document, you will need to change to computer Braille.

There are three different ways of inserting an extended character, that are suitable for different levels of use:

a. Searching and selecting the character from the Unicode tables – For the first or only time you look up a character and if you don't know its code, you will need to do this to search for it. There are two methods of doing this detailed later in this section.

b. Typing in the character code – This is quick and easy for characters you use occasionally and can remember the code for.

c. Setting up a key combination – assigning a dot combination to the character. This is a good way to manage frequently used characters.

7.20.2 Insertion By Name.

This search is based on the name of the character, for example "e acute" or "Euro-currency sign."

Follow these steps to insert an extended character using the name search:

1. When the cursor is at the place where you wish to enter the character, press ***BACKSPACE with dots 3-5***. KeySoft will prompt for the Unicode character. If you have used this function before, it will offer the previously selected character. If you want to select it, press ***ENTER***. If not, continue to Step 2.
2. Type in the name, or part of the name, of the character, then press ***ENTER***.
3. KeySoft will respond with a selection, either the character you want or the first one to fit your search criteria. If it is the one you want, press ***ENTER***. If not, view the next search match by pressing ***SPACE with N*** repeatedly until you do find it and then press ***ENTER***. This will insert the character.

7.20.2.1 An Example:

Let's assume you want to enter the word "resume" with the letter "e" showing as "e acute," but you don't know the character code for "e acute."

Type the letter "r," then press ***BACKSPACE with dots 3-5***. KeySoft will prompt for the Unicode character. We know that we want to enter an "e acute," so type in "e acute," then press ***ENTER***. KeySoft will respond with "Cap e acute," and using this as your starting point you can search for all members of the "e acute" character family by pressing ***SPACE with N***. In this instance "e acute" will be the next character prompted. Press ***ENTER***, and the extended character for "e acute" will be entered into your document.

Continue typing "sum," then press ***BACKSPACE with dots 3-5*** again to enter the last "e acute." KeySoft will prompt the previously chosen extended character, which in this instance happens to be "e acute," so you just have to press ***ENTER,*** followed by ***SPACE*** to complete the word.

7.20.3 Browsing Unicode Tables.

Unicode characters are grouped into tables according to type. For example, there is a Unicode table for Greek characters, for General Punctuation, for Superscripts etc. You have the choice of searching for a table then for a character within it. This is useful if you are not sure which character you want but you are aware of its general type.

Follow the steps below to browse for a character using the Unicode tables.

1. When the cursor is at the place where you wish to enter the character, press ***BACKSPACE with dots 3-5***. KeySoft will prompt for a Unicode character.
2. To browse the list of Unicode tables, press ***SPACE*** repeatedly, or ***BACKSPACE*** to go back, or type the initial letter of a table name to narrow down the selection and browse from there.
3. When you locate the table you wish to browse, select it by pressing ***ENTER***.
4. At this point you can either browse the whole table by pressing ***SPACE*** or ***BACKSPACE*** repeatedly, or type the initial letter of a character name to narrow down the selection and browse from there.

Note: While reviewing a table, you can display the numeric code of the character you are currently viewing by pressing ***SPACE with I.***

If you are already within the Unicode tables and wish to search for a Unicode character by name, press ***SPACE with F*** and you will then return to the "Unicode character?" prompt. To search again for the next matching Unicode character description for within the Unicode tables, press ***SPACE with N***. If there are no more matches you will remain on the current Unicode character. Once you have completed your search, press ***ENTER*** to select the Unicode character.

7.20.4 Inserting Characters Using Unicode Codes.

This method is easy if you already know the character code i.e. the numeric code assigned to it.

Follow the steps below to search for a character using the Unicode tables.

1. When the cursor is at the place where you wish to enter the character, press ***BACKSPACE with dots 3-5***. KeySoft will prompt for a Unicode character.
2. Type the numeric code, and press ***ENTER***. The character will be inserted into the document. (You can, if you prefer, use the hexadecimal value of the code in the form "0x….").

7.20.5 Assigning Key Combinations to a Unicode Character.

KeySoft allows you to assign a key combination to a Unicode character. This is an excellent idea for characters you use frequently.

While you may assign any key combination including any of the 63 combinations currently available, it stands to reason that those already representing characters are not such a great choice. For example, if you assign ***dots 1-4*** to e acute, you will no longer have a lower case c! To avoid this happening, we suggest you press ***SPACE with U*** at the beginning of each key combination. This shift function accesses a greater range of key combinations using all 8 dots. The examples given below assume you have chosen to do this.

The assignation function is called a macro, and the following steps outline how to define or change a macro for a Unicode character:

You are either working in a text/computer Braille document or you need to swap to computer Braille using ***SPACE with O*** then ***G*** then ***C***.

1. Enter the Unicode Tables with ***BACKSPACE with dots 3-5***, and locate the Unicode character you wish to assign a key combination to using one of the browse and search methods above, only don't press ***ENTER***.
2. When the character is displayed, press ***SPACE with K***. If there is no key combination assigned, it will display, " (Character) is unassigned. Option" where character in brackets is the actual name of the character.
3. If a key combination is already assigned, it will display, "(Character) is assigned to (key combination). Option" For example, "E acute is assigned to SPACE with U then dots 1,5,7. Option."
4. Press ***A***. The prompt, "Assign, key combination to assign to (Character)?" will display. Press the key combination you wish to assign to the character, and press ***ENTER***.

KeyWord prompts, "Assign (key combination) to (character)?" For example, "Assign Space with U and Dots 1,5,7 to e acute?" Press ***Y*** for Yes or ***N*** for No. If you press ***N***, you will be returned to the beginning of this step. If you press ***Y***, you will be returned to the same place in the Unicode tables. From there you can select another character or exit by pressing ***SPACE with E***.

Note: A Unicode character can have more than one key combination assigned to it. To toggle through all the currently assigned key combinations, press ***SPACE***.

7.20.5.1 Changing a Macro.

If the Unicode character has already been assigned, at the "Option?" prompt you may press ***U*** to unassign or remove it altogether, or ***R*** to reassign or change the key combination.

To use either of these functions, follow steps 1 and 2 above. Then:

To Remove or unassign the key combination, press ***U*** at this point. KeyWord prompts, "Unassign (Character) from (keystrokes), sure?". Press ***Y*** for Yes or ***N*** for No. If you press ***N***, you will be returned to the beginning of this step. If you press ***Y***, you will be returned to the same place in the Unicode tables. From there you can select another character or exit by pressing ***SPACE with E***.

To change the key combination, press ***R*** at this point. KeyWord prompts, "Reassign, Macro to reassign to Character?" where character is the name of the character. Type the new key combination and press ***ENTER***. KeyWord prompts, "Reassign (keystroke) to (character)?". For example, "Reassign SPACE with U with dots 1,5,7 to e acute?" Press ***Y*** for Yes or ***N*** for No. If you press ***N***, you will be returned to the beginning of this step. If you press ***Y***, you will be returned to the same place in the Unicode tables. From there you can select another character or exit by pressing ***SPACE with E***.

7.20.6 How to use Unicode Key Combinations.

Once you have created a key combination as above, you will then no doubt wish to use it in a document, a file name, address listing etc.

To use it, at the point where you wish to insert the Unicode character, press the key combination you assigned to it. Continue Brailling as normal.

7.20.7 Appearance of Unicode Characters in Computer Braille.

You may assign a computer Braille dot combination to any extended character so that when the document is translated to computer Braille, that dot combination will be used.

Assigning a dot combination follows a similar pattern to assigning a key combination:

Search the Unicode tables for the character to which you wish to assign a dot pattern and when you locate it, press ***SPACE with D.*** Press ***A*** to assign a computer Braille dot combination. If the Unicode character has already been assigned you may press ***R*** to reassign a dot combination, leaving the original dot combination free. Assigned dot combinations can be removed by selecting ***U***. Upon selecting ***A*** (assign) or ***R*** (reassign) you will be asked to enter the dot combination to assign to the selected Unicode character. Finally, you will be asked to confirm your dot combination selection. To confirm the selection, press ***Y***.

Note that multiple Unicode characters can be assigned to one dot combination. This may be useful if, for example, you use e acute, e grave, and e macron, you could assign a dot combination that for you means "e with an accent," or you might assign the same combination to all vowels that have diereses. You can use this feature any way you see fit.

As soon as a "dot pattern" is assigned to a Unicode character, a "Custom" Computer Braille table is automatically added in the "Dictionary" folder. This file is used in place of the previously selected Computer Braille file.

7.20.8 Interpreting Braille Versions of Unicode Characters.

If you are reading a text document that has been translated to Grade 2 in Braille, whether you have or haven't assigned a computer Braille dot output combination, you will see the same thing.

Using the word cafe as an example: You will observe the letters "caf" on the embossed printout, followed by "dot 4", then the letter "e". The "dot 4" is the Grade 2 indication for an extended character.

If you are reading a text document that has been translated to computer Braille, you will see either a blank cell if the character is unassigned, or the dot combination you assigned to the character in computer Braille.

On any computer Braille character you can find out the name of the character by pressing the "Read current Character" command ***SPACE with dots 3-6***, twice.

End of Advanced Word Processing Chapter.

8 Scientific Calculator (US Nemeth).

The Scientific Calculator, KeyPlus, can be used for straightforward sums such as addition or division, but is also capable of many more complex operations.

Both the UK Braille Mathematics Notation and the Nemeth Braille Code for Mathematics are supported for the entry and display of calculations. The correct code for your country is automatically selected when you set up your Braille Language as described in 5.4.10 Calculator Braille Language.

This chapter describes the operation of the calculator when set to Nemeth Code. For UK Braille, see the separate chapter called "8 The Scientific Calculator (UK Version)".

As well as being displayed in Braille you can have your calculations and results spoken. The result of a calculation, or a whole calculation, can also be inserted into a document.

Remember that you can press ***SPACE with H*** for Help at any point.

8.1 Entering KeyPlus.

You can enter KeyPlus from the Main Menu by pressing S for Scientific Calculator, or from anywhere in KeySoft by pressing ***BACKSPACE with ENTER*** then ***S***. Your BrailleNote BT restores the display to what it was when you last left the calculator. This might be the result of a calculation or part of one you were entering. Continue entering the calculation or, if a result is displayed, starting a new calculation clears the calculator. To clear the calculator to zero, press ***SPACE with dots 3-5-6***. Note that this is ***SPACE with the Nemeth code for zero***.

8.2 Entering a Calculation.

A calculation is entered in the same order as it would be typed or spoken, without any spaces. The four basic operators are represented as follows:

For ***PLUS***, press ***dots 3-4-6***;

For ***MINUS,*** press ***HYPHEN, which is dots 3-6***;

For ***MULTIPLY,*** press ***dots 1-6.*** The ***MULTIPLY*** sign is displayed as ***dot 4***, followed by ***dots 1-6***;

For ***DIVIDE***, press ***SLASH***, which is ***dots 3-4***. The ***DIVIDE*** sign is displayed as ***dots 4-6*** followed by ***dots 3-4***.

For example, to add the numbers ***3*** and ***5***, and then subtract ***2***, you press: ***3 + 5 - 2***

Press ***ENTER***, for ***"Equals,"*** and KeyPlus displays the answer, which in this case is: 6.

Note that this is displayed in standard Braille. You can review the calculation by pressing the ***PREVIOUS*** and ***NEXT*** thumb keys together. The Braille display will show 3 + 5 - 2 = 6, in Nemeth. Pressing the ***PREVIOUS*** and ***NEXT*** thumb keys again will return to just displaying the answer. If the speech is on, the speech will mirror the content on the Braille display.

Try some simple calculations to get the feel of the calculator. If you type in a long sequence such as: ***3 * 2 + 5 * 6 + 9***.

remember that the answer will not be determined until you have typed in the complete calculation and pressed ***ENTER***.

To enter a decimal point, press dots ***4-6***.

The Calculator Help gives a complete list of key combinations. To get help, press ***SPACE with H***. You can also check key combinations with the "Key Announce mode", by pressing ***SPACE with W***. In this mode, pressing a particular key combination causes the resulting function to be displayed.

To return to the normal calculator function, press ***SPACE with E***.

Remember that the order for entering numbers and operators is just as you would write them.

8.2.1 Reviewing the Calculation.

If you are not sure that you have entered a calculation correctly, you can review the calculation before pressing ***ENTER***.

Pressing the ***PREVIOUS*** thumb key moves the Braille display back, that is to the left, one cell at a time. Pressing the ***NEXT*** thumb key moves the Braille display forward, that is to the right, one cell at a time.

After pressing ***ENTER*** to complete the calculation, pressing the ***PREVIOUS*** and ***NEXT*** buttons together toggles between displaying the result and the details of the calculation.

When using speech , there are two review commands available before pressing ***ENTER***. They are:

To hear the whole calculation, press ***SPACE with dots 1-4***.

To hear the last number or operator entered, press ***SPACE with dots 2-5***.

8.2.2 Editing the Calculation.

While entering a calculation you can backspace to delete entries one by one by pressing ***BACKSPACE*** one or more times. If the current calculation started with the result of the previous one, ***BACKSPACE*** does not delete that number, because it was calculated rather than typed. Entering a new calculation clears the last result.

8.2.3 Calculation Entry Errors.

When you type a calculation, KeyPlus beeps if you make a mistake, such as:

3 **+ ***

Press ***SPACE with H*** to find the reason. In this case, KeyPlus displays: "Value expected."

Other messages indicate different errors. You may want to review the calculation after an incorrect entry, by pressing ***SPACE with dots 1-4***, to find out where you are.

8.2.4 Setting the Calculation Precision.

The maximum number of decimal places that are displayed can be set from 0 to 9. This is done by pressing ***SPACE with dots 4-6,*** followed by the desired number of digits. This does not affect the internal precision of calculations, but only the number of digits that are displayed.

For example, to set the number of decimal places to 4, first press ***SPACE with dots 4-6.*** KeyPlus prompts: "Decimal places currently (current setting)."

Press ***4*** then ***ENTER***. If you are checking the precision, just press ***ENTER*** to leave the current setting unchanged.

8.3 Basic Operations.

The basic operations provided are:

Addition, Subtraction, Multiplication, Division,

Negation, Percent, Parenthesis, and Fractions.

8.3.1 Addition, Subtraction, Multiplication and Division.

These operations have the normal order of precedence. This means that expressions inside brackets are evaluated first, and then division and multiplication are performed, followed by addition and subtraction.

8.3.2 Parentheses.

Parentheses, or brackets, are used to change the order in which an equation is evaluated. For example, the equation: ***3 + 4 * 5***.

is evaluated by adding ***3*** to the product of ***4 and 5***. The answer is 23.

If you want the addition of ***3 and 4*** to occur first and the result to be multiplied by ***5***, insert parentheses around the ***3 + 4***, as follows: ***(3 + 4) * 5 = 35***.

To enter a left parenthesis, press ***dots 1-2-3-5-6***.

To enter a right parenthesis, press ***dots 2-3-4-5-6***.

Parentheses can be placed wherever a number can occur. You can use up to 6 levels. If you try to open more than 6 levels, or close more than are open, KeyPlus beeps.

8.3.3 Negation.

Use the negation operator if you want to enter negative numbers into an equation or to change the sign of a number from positive to negative. The negation operator is represented by ***SPACE with HYPHEN***, which is ***SPACE with dots 3-6***. It is displayed as dots 3-6. For example, to calculate ***5 divided by negative 2***, type: ***5 / SPACE with HYPHEN 2*** followed by ***ENTER***. Note that the negation operator is not the same as the subtraction operator, which is just ***HYPHEN***.

8.3.4 Percent.

The percent operator is used to calculate percentage mark-up or mark-down. It is a special operator that automatically evaluates the calculation without the need to press ***ENTER.*** To enter the percent operator, press ***dots 1-4-6***. For example,

To calculate a 20% mark-up on 56, type:

5 6 + 2 0 % which gives the result 67.2.

To calculate a 10% mark-down on 45, press:

4 5 - 1 0 % which gives the result 40.5.

To calculate what percentage 17 is of 20, press:

17 / 20 % which gives the result 85.

That is, 17 is 85% of 20.

To calculate 30% of 180, press:

180´ 30%, which gives the result 54.

8.3.5 Fractions.

This section describes how to enter fractions in KeySoft 7.2. It covers the entry of simple fractions, improper fractions and mixed numbers. It also describes how to convert fractions. If you want to use addition, subtraction, multiplication and division in an equation that includes fractions, refer to 8.2 Entering a Calculation.

Note that the calculator memory can hold either a fraction or a decimal at any one time.

8.3.5.1 Entering Simple and Improper Fractions.

This section explains how to enter simple and improper fractions into the Scientific Calculator.

A simple fraction is a fraction in which both the numerator and denominator are integers or whole numbers. For example, 1/2 which is spoken in KeyPlus as "1 over 2".

An improper or 'top heavy' fraction is one in which the numerator is larger than the denominator. For example, 24/9.

To enter a simple or improper fraction, follow the steps below:

1. Enter the numerator (the top number in the fraction).
2. Enter the fraction command that adds a horizontal line between the numerator and denominator. The fraction command is as follows:

   Press ***BACKSPACE with dots 3-4***. You will hear "over" as ***BACKSPACE with dots 3-4*** are pressed.
3. If applicable, continue entering the remaining part of the equation.

8.3.5.2 Entering Mixed Numbers.

A mixed number is the combination of an integer or whole number, and a fraction. For example, 6 1/2.

To enter a mixed number, follow the steps below:

1. Enter the integer or whole number and press ***SPACE***. You will hear "and" as ***SPACE*** is pressed.
2. Enter the numerator (the top number in the fraction).
3. Enter the fraction command that adds a horizontal line between the numerator and denominator. The fraction command is as follows:

   Press ***BACKSPACE with dots 3-4***.
4. Enter the denominator (the bottom number in the fraction).

8.3.5.3 Converting Fractions.

This section covers how to convert a fraction into several different forms and vice versa

The conversion hot key is used for all conversions except converting a fraction to its lowest term and to a percentage. To use the conversion hot key, enter it after the result of an equation is displayed. The conversion hot key will therefore operate on the result. You can also enter the conversion hot key immediately after the fraction or decimal has been entered. In this case, the conversion hot key will operate on the fraction or decimal entered.

The conversion hot key is ***SPACE with dots 3-4***.

8.3.5.4 Converting a decimal to a fraction.

Converting a decimal to a fraction is the opposite of converting a fraction to a decimal which you achieve by dividing the numerator by the denominator. For example, the fraction 1/2 is the decimal 0.5 which you calculate by dividing 1 by 2.

To convert a decimal to a fraction, press ***SPACE with dots 3-4***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.5 Converting a fraction to a decimal.

Every decimal can be written as a fraction. For example 1 divided by 3 is 1/3.

To convert a fraction to a decimal, press ***SPACE with dots 3-4 D***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***D*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.6 Converting a fraction to its lowest terms.

A fraction is in lowest terms or lowest prime denominator, when the greatest common factor of its numerator and denominator is 1. For example, 1/4 + 1/4 = 1/2. If you are not converting the fraction to its lowest terms, the answer to the equation would be 2/4.

The result of an equation involving a fraction is always displayed in its lowest terms form. To directly convert a fraction to its lowest terms, Type the fraction and press ***ENTER***.

8.3.5.7 Converting a mixed number to an improper fraction.

To convert a mixed number to an improper fraction, press ***SPACE with dots 3-4 I***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***I*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.8 Converting an improper fraction to a mixed number.

To convert an improper fraction to a mixed number, press ***SPACE with dots 3-4 M***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***M*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.9 Converting an equivalent fraction to the displayed fraction.

Equivalent fractions are fractions that have the same value. You can determine if fractions are equivalent by multiplying the numerator and denominator by the same number. The number that you multiply should be such that the numerators will be equal after the multiplication. For example, if you compare 1/2 and 2/4, you would multiply by 2/2 which would result in 2/4 so they are equivalent.

To convert an equivalent fraction to the displayed fraction, press ***SPACE with dots 3-4 E***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***E*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***. KeyPlus will then prompt: "Factor to use?". Enter the number. The equivalent fraction is then displayed, and replaces the original fraction.

8.3.5.10 Converting a fraction to a percentage.

Percentages refer to fractions of a whole.

To convert a fraction to a percentage, enter the existing percent operator, which is ***P*** or ***dots 1-4-6***. For example, to convert 1/2 to a percentage, type 1/2 followed by the percent operator. 50 will be displayed.

8.3.5.11 Taking the reciprocal of a fraction.

The reciprocal of a fraction is taken by switching its numerator and denominator. For example the reciprocal of 3/4 is 4/3.

Notice that when you multiply a fraction and its reciprocal, the product is always 1.

To take the reciprocal of a fraction, press ***SPACE with dots 3-4 R***.

8.4 Statistical Operations.

Statistical operations in KeyPlus, allow you to enter a set of numbers, and KeyPlus then calculates their mean (average), median, mode, standard deviation, minimum, maximum, etc. You can review the statistical results, insert them into documents, or use them in calculations, etc. You can also review the data in the order you entered it, in numeric order or as a frequency table. The data set can be edited to correct mistakes and can be saved in a file for later use, to share, or export for use in a database or spreadsheet. You can paste in a set of numbers copied from a document, as well as being able to import data from databases and spreadsheets.

There are two menus for Calculator Statistics - the Data Set Menu and the Statistical Functions Menu/Statistical Functions Review List. The Data Set Menu is where data sets are reviewed, saved, loaded and cleared. It also provides you with the option to turn Data Entry on or off and to paste data from the clipboard into the data set. The Statistical Functions Menu/Statistical Functions Review List is for performing numerous statistical operations, such as finding the mean and the sum of values.

The Data Set Menu is accessible from anywhere in KeyPlus. To go to the Data Set Menu, press ***BACKSPACE with S***. The Statistical Functions Menu/Statistical Functions Review List is also accessible from anywhere in KeyPlus. To go to the Statistical Functions Menu/Statistical Functions Review List, press ***S***.

8.4.1 Entering Data.

To perform statistical operations, KeyPlus needs a set of numbers to operate upon. To avoid confusing these numbers with other numbers in KeyPlus, these numbers will be referred to as "values", and the set of values KeyPlus operates on is called "the data set." The number of times a value occurs is called the "frequency" of the value. When you put a value and a frequency together, you get a data item. Note that the maximum number of data items allowed in a data set is 5000.

Once you have entered a set of values, they remain in KeyPlus until you either purposefully clear the data set, or load another data set in its place.

In order to add each individual value one at a time, you will need to turn Data Entry on. Data Entry is turned on using the first item in the Data Set Menu. To enter the Data Set Menu, press ***BACKSPACE with S***. Move to the first menu item by pressing ***SPACE*** and KeyPlus will display: "Data entry is off. Turn it on." To turn it on, press ***ENTER***. KeyPlus will display: "Data entry on, N is 0." "N is 0" means there are currently no values in the data set. You are now back in KeyPlus with the Data Entry on. When you press ***ENTER*** after typing a number or performing a calculation, the number or result of the calculation will be added to the data set. Alternatively, you can toggle data entry on/off using the hotkey, ***SPACE with D***.

While Data Entry is on, "N is …" is always displayed after the calculator result. This tells you the total number of values in the data set and reminds you that Data Entry is on. If at anytime you want to check that the Data Entry Mode is on or off, press ***SPACE with I***. KeyPlus will display: "data entry is on, N is (xx)" or "data entry is off."

Once you have finished entering values or if you need to use the calculator for another purpose, turn Data Entry off again. To do this, enter the Data Set Menu and move onto the first item. You will notice that it is now "Data entry is on. Turn it off." To turn it off, press ***ENTER*** and you will be returned to the Scientific Calculator.

There are 4 ways to type individual values into the data set:

1. Entering a single number:

   You can type numbers, for example, type 73 and press ***ENTER***. KeyPlus displays: "seven three equals seventy three", and then pauses before "N is 1", followed by "73 N is 1" is displayed. This shows that the number 73 has been added to the data set and it now contains one value.

2. Entering the result of a calculation:

   You can enter the result of a calculation directly into the data set. For example, type 3 * 6 and press ***ENTER***. KeyPlus displays: "three times six equals eighteen", and then pauses before "N is 2", followed by "18 N is 2" is displayed. This shows that the number 18 has been added to the data set, which now contains 2 values.

3. Entering a number and how often it occurs:

   If you know a particular number occurs more than once, you do not have to enter it multiple times because you can tell KeyPlus in one entry what the number is and how often it occurs. The number of times a number occurs is called the frequency of the number. To enter a number and its frequency, type the number, the frequency command, and then the number of times it occurs. For example, to input "5", ten times, type "5", the frequency command, "10" and press ***ENTER***. KeyPlus displays: "five frequency ten" and then pauses before "N is 12", followed by "5; 10 N is 12" is displayed. This shows that the number 5 has been added ten times to the data set, which now contains 12 values.

   A value followed by its frequency is called a data item.

   The frequency command is ***dots 4-5-6*** for Nemeth, ***dot 6*** for UK/German, and ***dots 2-3*** for French. It is displayed in Braille as a semicolon.

4. Pasting numbers from the clipboard:

   You can paste either a single number from the clipboard or a set of numbers.

   A single number can be pasted into the calculator using the standard paste command, ***BACKSPACE with V***. If any invalid characters are included, KeyPlus will display: "Value is out of range." Invalid data items include alphanumerical words, such as ninety-one; spaces; and mathematical operations.

   To paste in a set of numbers use the "Paste clipboard into data set" option in the Data Set Menu. The numbers must be separated by commas. For example, if you are reading a worksheet or text book that instructs you to "Calculate the mean of the following numbers: 1, 2, 3, 4, 5", copy just the numbers, commas, and spaces, to the clipboard, switch to the calculator, enter the Data Set Menu, and select the "paste clipboard into data set" option. If any invalid characters are included, KeyPlus will display: "Discarded invalid data items. N is xx."

8.4.2 Importing Data.

You can import data from a file that has been saved in Comma Separated Values (CSV) format. Most spreadsheets and databases have this as an option when saving or exporting data. Note that in this file, the data items must be listed so that the value comes before the frequency. For example:
73,2
58,2
38,1

The data is presented in a list with one value and in its associated frequency per line. Also, the numbers are written in digits rather than words. Note that you do not need to include the frequency on each or any line. For example, your list could include:

73,2
58
38,1

or

73
58
38

When importing data, any lines containing invalid data are ignored and importing continues.

If any invalid data items are included, KeyPlus will display: "Discarded invalid data items, N is xx." Otherwise, KeyPlus will display: "N is xx."

To start the process of importing data, you will need to access the Data Set Menu. To do this, press ***BACKSPACE with S*** and select the "Load another Data Set" option.

If the data set has been modified prior to being loaded, KeyPlus will display: "Existing data set has been modified. Save?." If you would like to save the modifications, press ***Y***. You will be prompted to select the file in which to save the data set and the data set will be saved.

KeyPlus will then prompt: "Name of data set to load?". Type a file name or select the file containing the data set and press ***ENTER***. KeyPlus will prompt: "Replace existing data set or append new data to existing data set?". If you select "replace", the existing data set will be cleared before the selected data set is loaded. If you select "append", the loaded data will be added to the existing data set.

All the existing data items in the current data set will now be added or replaced and KeyPlus will prompt: "N is xx" and at the same time, a series of progress beeps may be heard if there is a reasonable amount of data items to add or replace. Note that the "xx" in "N is xx", represents the new sample size, which will either be the size of the imported data set, or the total of the previous sample size combined with the sample size of the imported data, depending on whether you choose the "Replace" or "Append" option.

8.4.3 Leaving the result of a calculation out of the data set.

As described above, when Data Entry is on the result of a calculation is added to the data set when you press ***ENTER***. There is a way to perform calculations while Data Entry is on, without entering the result into the data set. To find the result of a calculation without entering it into the data set, press ***dots 1-2-3-4-5-6*** instead of ***ENTER***. If you then want to add the result to the data set, press ***ENTER***.

8.4.4 Clearing the Data Set.

The purpose of clearing the data set is to allow you to begin with a new set of data items. To clear the data set, go to the Data Set Menu by pressing ***BACKSPACE with S*** and select the "Clear Data Set" option. If the data set has been modified prior to being cleared, KeyPlus will display: "Existing data set has been modified. Save?." If you would like to save the modifications, press Y. You will then be prompted with: "Name of data set to save?." Type an appropriate name for the data set and press ***ENTER***. KeyPlus will display: "Clear Data Set. Sure?." To clear all the existing data items in the data set, press ***Y***. If you have performed any statistical calculations, these will also be cleared at this point.

8.4.5 Statistical Functions.

KeyPlus uses the data you enter to calculate the values for the following statistical functions. Also listed is the hot key that you use for each function in the Statistical Functions Review List and the Statistical Functions Menu.

1. Sample size (N); hotkey ***N***.
2. Arithmetic mean; hotkey ***M***.

3. Median; hotkey ***D***.
4. Mode; hotkey ***O***.
5. Minimum; hotkey ***I***.
6. Maximum; hotkey ***X***.
7. Sample Standard deviation; hotkey ***S***.
8. Population Standard deviation; hotkey ***P***.
9. Sum of values; hotkey ***V***.
10. Sum of the square of the values; hotkey ***Q***.

For definitions of the above statistical functions, refer to 8.4.10 Definitions of Statistical Terms.

8.4.5.1 Reviewing the Statistical Functions.

At any time while you are entering data or once you have finished, you can review the results of the statistical functions by pressing ***S***. What happens next depends on whether or not Data Entry is on.

When Data Entry is on, the Statistical Functions Review List is displayed and you can review the statistical results an item at a time by pressing ***SPACE*** repeatedly, or jump directly to a particular result by pressing its hot key.

When Data Entry is off, the Statistical Functions Menu is displayed. This allows you to review the statistical results by pressing ***SPACE*** repeatedly, as well as to select any result for use in a calculation. To select any result for use in a calculation, either press ***ENTER*** when the result is displayed or enter the menu and press the hot key. For example, to calculate the mean plus 2 times the standard deviation follow these steps:

1. In the calculator ensure Data Entry is off and the calculator is cleared.
2. To enter the mean, select the Statistical Functions Menu by pressing ***S***. You can then either move along to “Mean” and press ***ENTER*** or just press the hot key for mean, which is ***M***. You will be returned to the calculator with the mean inserted into your calculation.
3. Enter “plus 2 times” and insert the standard deviation by selecting the “Sample standard deviation” from the Statistical Functions Menu again. You will once again be returned to the calculator and the sample standard deviation will now be inserted into your calculation.
4. Finally press ***ENTER*** to obtain the result.

To use a statistical result in another KeySoft application, use the clipboard. Simply review the result in the Statistical Functions Review List or the Statistical Functions Menu and copy the value to the clipboard by pressing ***BACKSPACE with K***. Insert the result and paste the clipboard into the Word Processor, via the Block Commands Menu. Otherwise, move to the application in which you want to insert the result and paste the clipboard by pressing ***BACKSPACE with V***.

8.4.6 Reviewing the Data Set.

It is often easy to accidentally enter the wrong items or add data that is already in the data set. Also, you will often want to review your data using a method that differs from how the data was entered. KeyPlus offers three different ways to review your data:

1. The order you entered the data.
2. The frequency order.
3. The numeric order.

KeyPlus has a Data Set Review Mode in which you can review the data, and if Data Entry is on, make changes. To enter the Data Set Review Mode, go to the Data Set Menu by pressing ***BACKSPACE with S*** and select Review Data Set. KeyPlus displays: "Data Set Review Mode. Entry Order" followed by the last data entry. To exit Data Set Review Mode and return to your calculation, press ***SPACE with E***.

You can review your data using the following commands:

To go to the previous data item, press ***BACKSPACE***.

To go to the next data item, press ***SPACE***.

To go to the first data item in the data set, press ***SPACE with dots 1-2-3***.

To go to the last data item in the data set, press ***SPACE with dots 4-5-6***.

To find to a specific number in the data set, press ***SPACE with F***, followed by the number and press ***ENTER***.

To find the next occurrence of the same number in the data set, press ***SPACE with N***.

To change the order in which the data items are presented, press ***SPACE with V***. KeyPlus will prompt: "View data in which order? Currently Entry Order." Select the order you require. There are 3 options:

1. Entry Order (hotkey ***E***) - lists the data items in the order that data was entered.
2. Frequency Order (hotkey ***F***) - lists the data items by frequency, in descending order. This lets you review your data set in a frequency table format. For details on how to generate a frequency table, refer to 8.4.9 Generating a Frequency Table.
3. Numerical Order (hotkey ***N***) - lists the data items by numerical values, in ascending order.

If you change the order in which your data items are presented, KeyPlus will prompt: "Sorting data set items, please wait…Data set sorted."

8.4.7 Editing the Data Set.

While reviewing your data, you may discover an incorrect entry that you want to edit or delete. To edit or delete data, Data Entry must be on and you must be in entry view.

To edit the current data item, use KeySoft's editing commands to make the cursor appear. Move the cursor, insert or delete, as required. When you have completed the edit, press ***ENTER***. The item in the data set is now changed.

To delete the current data item, press ***BACKSPACE with dots 1-4***. KeyPlus will provide a confirmation prompt and if you confirm the deletion, will delete the current number and the frequency it occurs from the data set. It will then display the next data item. For example, if the current item is "5 frequency 4", "Delete 5 frequency 4. Sure?", will be displayed. If you press ***Y***, the data item will be removed, and the unit will display the next data item in the list.

8.4.8 Saving the Data Set.

Saving data sets to files means that you can have multiple data sets and whichever one you require when you need it. You can also share data sets with other BrailleNote users and transfer them to PC or other systems to use from within spreadsheets or databases. You can insert them into documents as frequency tables, and so on.

To save the data set, go to the Data Set Menu by pressing ***BACKSPACE with S*** and select "Save Data Set". If you have not previously saved a data set, KeyPlus will prompt: "Destination folder name? Press ***ENTER*** for Calculator Data Sets." Calculator Data Sets is offered as a handy place to keep your data. It is first created when you save a data set for the first time. Select this folder or another in the usual way. To change the drive on which this data set will be saved, press ***BACKSPACE***. KeyPlus then prompts: "Name of data set to save?." If the data set was previously saved, KeyPlus will provide you with the most recently used data set name. Select the name offered by pressing ***ENTER*** or type an appropriate name for the data set and press ***ENTER***. Note that a series of progress beeps may be heard if there is a large number of data items to save. The data set will be saved and you will be returned to the calculator.

Data sets are saved in Comma Separated Values (CSV) format files. The first line of the file contains the words "Value" and "Frequency" separated by a comma and each subsequent line contains a value and a frequency separated by a comma. When you save a data set, the order of the data in the CSV file is the same as the order you currently have set for Review Mode.

8.4.9 Generating a Frequency Table.

A frequency table can be automatically made up from the data set.

To review your data set in a frequency table format, enter the Review Mode by selecting "Review Data Set" from the Data Set Menu. KeyPlus displays: "Data Set Review Mode. Entry Order" followed by the last data entry. You now need to change the view to Frequency Order. To change the order in which the data items are presented, press ***SPACE with V***. KeyPlus will prompt: "View data in which order? Currently Entry Order." Type ***F*** or "frequency" to select the Frequency Order. The data items are now ordered by frequency, in descending order.

You can then save the data items using the save option (as described in 8.4.8 Saving the Data Set). Once saved, go to the document and use Block Insert (that, is the "Insert a File" option in the Block Commands Menu) to insert the CSV file into your document or to the clipboard. You can now reformat the data, as required.

8.4.10 Definitions of Statistical Terms.

As you probably know, Statistics is a mathematical science pertaining to collection, analysis, interpretation and presentation of data.

Below are the terms that you will need to be familiar with in order to effectively use the statistics function of KeySoft.

VALUE: A value is a number that is a measurable amount or quantity. In statistics, a set of values is what makes up a data set.

FREQUENCY: The frequency is the number of times a value occurs and is represented by the letter N.

DATA ITEM: A data item is made up of a "value" and a "frequency".

DATA SET as represented by the symbols left set or opening curly brace, a group of numbers with commas in between them and right set or closing curly brace to close the set, that is {,,,}: The section of a population which is observed.

For example, the number of goals scored in a hockey tournament is represented by the following data set:

{0, 0, 0, 0, 1, 1, 1, 2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 4, 5, 5, 5}

We can represent the above data set as follows:

Number of goals = 0; Frequency = 4

Number of goals = 1; Frequency = 3

Number of goals = 2; Frequency = 4

Number of goals = 3; Frequency = 5

Number of goals = 4; Frequency = 3

Number of goals =5; Frequency = 3

It is often faster to enter a data set into the calculator by entering the value and frequency together. For example, rather than typing the value of 0 four times, we can type the value of 0 followed by a frequency separator, followed by the frequency.

Once the above data is entered into the calculator, we can access the statistical functions menu to find out the average score, the most common score, how many games were played, etc.

MAXIMUM: The maximum is the highest value in the data set.

MEAN as represented by the Greek letter symbol, mu, italicized x with a bar above it, m or mean values: For a data set, the mean is the same as the average. It is the sum of all the values divided by the number of values. For example, the mean or average of 2, 3, 3, 5, 7 and 10, is 30 divided by 6, which is equal to 5.

MEDIAN: A median in statistics, is the middle number in a group of numbers. At most, half the numbers in the group have values that are greater than the median, and half have values less than the median. For example, the median of 2, 3, 3, 5, 7 and 10, is equal to 4.

MODE: The mode is the value that has the largest frequency. For example, the mode of 2, 3, 3, 5, 7, and 10, is 3. Note that there may be more than one mode in the data set or no mode at all if every number occurs to the same frequency. Where there is more than one mode, use the Frequency Order in review mode to view them.

SAMPLE SIZE as represented by the letter N:
The sample size is the total number of values in the data set.

POPULATION STANDARD DEVIATION as represented by sigma, sigma with subscript n, or italicized x with sigma and subscript n:
The population standard deviation is a measurement of the variability of data in a population. Population in statistics, refers to a set of potential measurements or values, including not only cases actually observed but those that are potentially observable.

SAMPLE STANDARD DEVIATION as represented by italicized s, sigma with subscript n minus 1, or italicized x with sigma and subscript n minus 1: The sample standard deviation is a measurement of the variability of data in a sample. A sample differs from a population in that it is the part of a statistical population which is actually observed. Note that this type of standard deviation is the most commonly requested when the standard deviation is required in an equation.

SUM OF VALUES as represented by capital sigma italicized, italicized x followed by subscript n: The sum of values is the total you get when all the individual values in the data set are added together.

SUM OF THE SQUARE OF VALUES as represented by capital sigma italicized with italicized x followed by superscript two and subscript n: The sum of the square of values is the result you get when each individual value is squared (that is, multiplied by itself) and all the squares are added together.

8.5 Memory Operations.

There are 10 separate memories for storing conversion factors, partial results, etc. They are numbered 0 to 9. The commands for memory number 1, for example, are as follows:

Clear memory 1: press ***SPACE with K, then 1***;

Store number in memory 1: press ***SPACE with S, then 1***;

Add to memory 1: press ***SPACE with A, then 1***;

Recall contents of memory 1: press ***SPACE with M then 1;***

Display contents of memory,

but do not use in calculation: press ***M, then 1.***

These commands are now discussed in more detail.

8.5.1 Clear Memory.

This operation clears the particular memory immediately. For example, to clear memory 5, press ***SPACE with K***, then ***5***. KeyPlus displays 5 on the Braille display and it announces: "Clear memory." "Clear which memory?" "5."

8.5.2 Store Memory.

This completes the current calculation and stores the result in a memory. For example, to calculate the result of 3 + 5 and store it in Memory 4, type: ***3 + 5 SPACE with S 4.***

When you press ***SPACE with S,*** the letter S is displayed on the Braille display and "Store memory" is spoken.

The resulting value of 8 is stored in memory number 4.

8.5.3 Add to Memory.

This completes the current calculation and adds the result to the existing contents of a memory. For instance, after the previous example, Memory 4 contains 8. Now to calculate 9 divided by 5, and to add the result to Memory 4, press : ***9 / 5 SPACE with A 4.***

When you press ***SPACE with A,*** the letter A is displayed on the Braille display and "Accumulate memory" is spoken.

The calculation is evaluated, resulting in 1.8. This is then added to Memory 4, to give a value in Memory 4 of 9.8.

8.5.4 Recall Memory.

This is used to recall the value in a memory and insert it into the calculation. For example, to divide the contents of Memory 4 by 4, and store the result in Memory 1, press: ***SPACE with M 4 / 4 SPACE with S 1***.

When you press ***SPACE with M***, the letter M is displayed on the Braille display and "Recall memory" is spoken.

This calculates ***9.8 / 4 = 2.45,*** which is stored in Memory 1.

8.5.5 Display Memory.

This is used to display the value in a memory at any time without affecting the current calculation. For example, if you press: ***M 4***

KeyPlus displays "Memory 4: 9.8" on the Braille display and it announces: "Display Memory," "Display which memory?" "4, memory 4, nine point eight."

but this does not affect any calculation in progress, which can continue. To return the display to the calculation, press ***ADVANCE*** or continue entering it.

8.6 Scientific Operations.

Trigonometric, logarithmic and exponential functions are available, as well as squares, square roots, powers and roots.

8.6.1 Trigonometric Functions.

The trigonometric functions can be calculated in either degrees or radians. To select degrees press ***T, then D,*** to select radians press ***T, then R***. A setting stays in effect until it is superseded by another.

A two-character sequence is used to select a trig function. Sine, cos and tan are preceded by ***T***, and the inverse functions are preceded by ***SPACE with T***. The following list gives for each function, the name of the function, the key sequence required to invoke the function and its form on the Braille display. The speech announces "Trig," then the name of the function. So:

For sine: press ***T, then S.*** This is displayed as sin(.

For cosine: press ***T, then C.*** This is displayed as cos(.

For tangent: press ***T, then T,*** This is displayed as tan(.

For arc sine: press ***SPACE with T, then S.*** This is displayed as arcsin(.

For arc cosine: press ***SPACE with T, then C.*** This is displayed as arccos(.

For arc tangent: press ***SPACE with T, then T.*** This is displayed as arctan(.

For PI: press ***Y.*** This is displayed as dots 4-6 followed by P.

For example, to calculate the sine of 30 degrees, press: ***T, then D T S 3 0***

followed by ***ENTER.*** The result "0.5" is displayed.

If the calculator is already set to degrees, it is not necessary to precede the calculation with ***T, then D***.

Notice that you don't have to close the brackets; KeyPlus does that for you. The meaning is clear because there was only a single number entered. In general, if you don't type an opening bracket the calculator closes the brackets after the following number otherwise it is up to you. If you wanted to find the sine of the sum of two 15 degree angles, for example, you must put brackets around the addition as follows:

T, then D T S (1 5 + 1 5) ENTER.

The result "0.5" is displayed.

To calculate the Arc Tangent of 2, press:

SPACE with T T 2

followed by ***ENTER***. The result "63.43495" is displayed.

To calculate the cosine of PI radians divided by 3, press:

T, then R T C (Y / 3)

followed by ***ENTER***. The result "0.5" is displayed. Pressing ***T, then R*** selects radians mode. The parentheses causes KeyPlus to calculate PI / 3 before taking the cosine.

8.6.2 Square Roots and Squares.

The "square root" symbol is ***dots 3-4-5.***

The "squared" symbol is ***SPACE with dots 3-4-5.*** It is displayed on the Braille display as ***dots 4-5, dots 2-3,*** followed by a ***SPACE.***

To calculate the square root of the sum of 3 squared plus 4 squared, press:

dots 3-4-5 (3 SPACE with dots 3-4-5 + 4 SPACE with dots 3-4-5)

followed by ***ENTER***. The result 5 is displayed. The square root operator precedes its number, while the squared operator occurs after its number, following the written convention.

8.6.3 Decimal Exponent.

Very large or very small numbers are often expressed in scientific notation as a power of 10. For example, the number 4000 is equal to 4 * 1000, which may be written as 4 * 10 to the power of 3. This number could be entered into a calculation by pressing: ***4 X 3***.

This appears as 4 e 3 on the Braille display. Similarly, the number 0.05 could be entered by pressing:

5 X SPACE with HYPHEN 2.

This appears as 5 e - 2 on the Braille display.

8.6.4 Powers and Roots.

These functions are assigned as follows:

x to the power of y: press ***dots 4-5***.

This is displayed as dots 4,5 on the Braille display. KeyPlus automatically adds in dot 5 to show when the calculation returns to the base level.

x to the power of 1/y: press ***SPACE with dots 4-5***.

This is displayed on the Braille display as dots 3-5-6, dots 4-5 dot 2, dots 3-4 or "to the power of," "1," "divided by."

Parentheses can be used where y is a compound expression. For example, to calculate 2 to the power of 6 + 8, press:

2 dots 4-5 (6 + 8) followed by ***ENTER***. The result "16,384" is displayed.

For example, to calculate 3 to the power of 4, press:

3, dots 4-5, 4 followed by ***ENTER***. The result "81" is displayed.

To calculate the cube root of 27, press:

2 7, SPACE with dots 4-5, 3 followed by ***ENTER***. The result 3 is displayed.

8.6.5 Logarithmic Functions.

The following log functions are provided:

For log to base e, or natural log:press ***N***. This is displayed as ln(.

For e to the power of: press ***SPACE with N.***

This is displayed as e dots 4-5.

For log to base 10: press ***L***. This is displayed log(.

For 10 to the power of: press ***SPACE with L***.

This is displayed as 1 0 dots 4-5.

For x to the power of reciprocal y:

press ***dots 4-5, dot 2, dots 3-4.*** or to the power of, 1, over or divide.

This is displayed as dots 4-5, dot 2, dot 3-4.

Once again dot 5 is inserted automatically to show a return to the base level.

To calculate the log to base e of 10, and save the result in Memory 2, press:

N 1 0 SPACE with S 2 followed by ***ENTER***.

The result "2.302585" is displayed.

Now to calculate e to the power of 2.302585, press:

SPACE with N SPACE with M 2 followed by ***ENTER***. The result 10 is displayed.

8.7 Inserting a Result or a Calculation.

Suppose that you are writing a letter, and you want to do a calculation and include the result in the letter. How would you do that?

You could do the calculation before starting the letter. Alternatively, you could begin the letter and then use the Task menu to switch from the Word Processor to the calculator, do the sum and then switch back to the letter.

When you get to the point in the letter where you want to include the result of your calculation, press ***SPACE with O*** for the options menu, then ***I*** for Insert field, and ***R*** to insert the Result or ***C*** to insert the whole Calculator. KeyPlus prompts: "Insert result or whole calculation?"

The most recent result from the calculator is inserted into the document, which saves you having to remember and re-type it.

End of Scientific Calculator Chapter.

8 The Scientific Calculator (UK Version).

The Scientific Calculator, KeyPlus, can be used for straightforward sums such as addition or division, but is also capable of many more complex operations.

Both the UK Braille Mathematics Notation and the Nemeth Braille Code for Mathematics are supported for the entry and display of calculations. The correct code for your country is automatically selected when you set up your Braille Language as described in Section 5.4. This chapter describes the operation of the calculator when set to UK Braille. For Nemeth code, as used in the USA, see the separate chapter called "8 The Scientific Calculator (USA Version)".

As well as being displayed in braille you can have your calculations and results spoken. The result of a calculation, or a whole calculation, can also be inserted into a document.

Remember that you can press ***SPACE with H*** for Help at any point.

8.1 Entering KeyPlus.

You can enter KeyPlus from the Main Menu by pressing ***S,*** or from anywhere in KeySoft by pressing ***BACKSPACE with ENTER with S***. Your BrailleNote BT restores the display to what it was when you last left the calculator. This might be the result of a calculation or part of one you were entering. Continue entering the calculation or, if a result is displayed, starting a new calculation clears the calculator. To clear the calculator to zero, press ***BACKSPACE with dots 1-4***.

8.2 Entering a Calculation.

A calculation is entered in the same order as it would be typed or spoken, without any spaces. Numbers are entered using the letters A to J. You do not need to type a number sign, one is automatically entered for you as soon as you start entering a number. The four basic operators are represented as follows:

For ***PLUS***, press ***dots 2-3-5***.

For ***MINUS***, press ***dots 3-6***.

For ***MULTIPLY***, press ***dots 2-3-6***.

For ***DIVIDE***, press ***dots 2-5-6***.

These are displayed spaced from the last entry and with their dots 5-6 prefix.

For example, to add the numbers 3 and 5, and then subtract 2, you type:

3 + 5 - 2

Press ***ENTER***, for "Equals", and KeyPlus displays the answer, which in this case is: 6.

Try some simple calculations to get the feel of the calculator. Remember that the answer is not displayed until you have entered the whole calculation and pressed ***ENTER***.

To enter a decimal point, press dot ***2***.

The Calculator Help gives a complete list of key combinations. To get help, press ***SPACE with H***. You can also check key combinations with the "Key Announce" mode, by pressing ***SPACE with W***. In this mode, pressing a particular key combination causes the resulting function to be displayed.

To return to the normal calculator function, press ***SPACE with E***.

Remember that the order for entering numbers and operators is just as you would write them.

8.2.1 Reviewing the Calculation.

If you are not sure that you have entered a calculation correctly, you can review the calculation before pressing ***ENTER***.

Pressing the ***PREVIOUS*** thumb key moves the Braille display back, that is to the left, one cell at a time. Pressing the ***NEXT*** thumb key moves the Braille display forward, that is to the right, one cell at a time.

After pressing ***ENTER*** to complete the calculation, pressing the ***PREVIOUS*** and ***NEXT*** buttons together toggles between displaying the result and the details of the calculation.

When using speech , there are two review commands available before pressing ***ENTER***. They are:

To hear the whole calculation, press ***SPACE with dots 1-4***.

To hear the last number or operator entered, press ***SPACE with dots 2-5.***

8.2.2 Editing the Calculation.

While entering a calculation you can backspace to delete entries one by one by pressing ***BACKSPACE*** one or more times. If the current calculation started with the result of the previous one, ***BACKSPACE*** does not delete that number, because it was calculated rather than typed. Entering a new calculation clears the last result.

8.2.3 Calculation Entry Errors.

When you type a calculation, KeyPlus beeps if you make a mistake, such as: ***3 + ****

Press ***SPACE with H*** to find the reason. In this case, KeyPlus displays: "That operator may not occur here".

Other messages indicate different errors. You may want to review the calculation after an incorrect entry, by pressing ***SPACE with dots 1-4***, to find out where you are.

8.2.4 Setting the Calculation Precision.

The maximum number of decimal places that are displayed can be set from 0 to 9. This is done by pressing ***SPACE with dot 2***, followed by the desired number of digits. This does not affect the internal precision of calculations, but only the number of digits that are displayed.

For example, to set the number of decimal places to 4, first press ***SPACE with dots 4-6***. KeyPlus prompts: "Decimal places currently (current setting)."

Type ***4*** and press ***ENTER***. If you are checking the precision, just press ***ENTER*** to leave the current setting unchanged.

8.3 Basic Operations.

The basic operations provided are: Addition, Subtraction, Multiplication, Division, Negation, Percent, Parenthesis and Fractions.

8.3.1 Addition Subtraction Multiplication and Division.

These operations have the normal order of precedence. This means that expressions inside brackets are evaluated first, and then division and multiplication are performed, followed by addition and subtraction.

8.3.2 Parentheses.

Parentheses, or brackets, are used to change the order in which an equation is evaluated. For example, the equation: 3 + 4 × 5 is evaluated by adding 3 to the product of 4 and 5. The answer is 23.

If you want the addition of 3 and 4 to occur first and the result to be multiplied by 5, insert parentheses around the 3 + 4, as follows: (3 + 4) × 5 = 35.

To enter a left parenthesis, press ***dots 1-2-6***.

To enter a right parenthesis, press ***dots 3-4-5***.

Parentheses can be placed wherever a number can occur. You can use up to 6 levels. If you try to open more than 6 levels, or close more than are open, KeyPlus beeps.

8.3.3 Negation.

Use the negation operator if you want to enter negative numbers into a equation or to change the sign of a number from positive to negative. The negation operator is represented by ***SPACE with HYPHEN***, which is ***SPACE with dots 3-6***. For example, to calculate ***5*** divided by negative ***2***, type: ***5 * SPACE with HYPHEN 2***

followed by ***ENTER***. Note that the negation operator is not the same as the subtraction operator, which is just ***HYPHEN***.

8.3.4 Percent.

The percent operator is used to calculate percentage mark-up or mark-down. It is a special operator that automatically evaluates the calculation without the need to press ***ENTER***. To enter the percent operator, press ***P***, that is ***dots 1-2-3-4***. For example,

To calculate a 20% mark-up on 56, type:

5 6 + 2 0 % which gives the result 67.2.

To calculate a 10% mark-down on 45, type:

4 5 - 1 0 % which gives the result 40.5.

To calculate what percentage 17 is of 20, type:

17 ÷ 20 % which gives the result 85.

That is, 17 is 85% of 20.

To calculate 30% of 180, type:

180 × 30%, which gives the result 54.

8.3.5 Fractions.

This section describes how to calculate fractions in KeySoft 7.0. It covers the entry of simple fractions, improper fractions and mixed numbers. It also describes how to convert fractions. If you want to use addition, subtraction, multiplication and division in an equation that includes fractions, refer to 1.2 Entering a Calculation.

Note that the calculator memory can hold either a fraction or a decimal at any one time.

8.3.5.1 Entering Simple and Improper Fractions.

This section explains how to enter simple and improper fractions into the Scientific Calculator.

A simple fraction is a fraction in which both the numerator and denominator are integers or whole numbers. For example, 1/2 which is spoken in KeyPlus as "1 over 2".

An improper or 'top heavy' fraction is one in which the numerator is larger than the denominator. For example, 24/9.

Note that to display a fraction in UK Braille, you use a number sign (dots 3-4-5-6) followed by A-J for the numerator and dropped digits for the denominator. For example, to enter 1/3, add ***dots 3-4*** , followed by ***dot 1*** and ***dots 2-5***. However, to enter a fraction using UK braille, you must use upper digits.

8.3.5.2 Entering Mixed Numbers.

A mixed number is the combination of an integer or whole number, and a fraction. For example, 6 1/2.

Note that the number sign is entered between the integer or whole number and the fraction.

To enter a mixed number, follow the steps below:

1. Enter the integer or whole number followed by the number sign (***dots 3-4-5-6***). You will hear "and" as ***dots 3-4-5-6*** are pressed.
2. Enter the numerator (the top number in the fraction).
3. Enter the fraction command that adds a horizontal line between the numerator and denominator. The fraction command is as follows:

   Press ***BACKSPACE with dots 3-4***. You will hear "over" as ***BACKSPACE with dots 3-4*** are pressed.
4. Enter the denominator (the bottom number in the fraction), using upper digits.

8.3.5.3 Converting Fractions.

This section covers how to convert a fraction into several different forms and vice versa.

The conversion hot key is used for all conversions except converting a fraction to its lowest term and to a percentage. To use the conversion hot key, enter it after the result of an equation is displayed. The conversion hot key will therefore operate on the result. You can also enter the conversion hot key immediately after the fraction or decimal has been entered. In this case, the conversion hot key will operate on the fraction or decimal entered.

The conversion hot key is ***SPACE with dots 3-4***.

8.3.5.4 Converting a decimal to a fraction.

Converting a decimal to a fraction is the opposite of converting a fraction to a decimal which you achieve by dividing the numerator by the denominator. For example, the fraction 1/2 is the decimal 0.5 which you calculate by dividing 1 by 2.

To convert a fraction to a decimal, press ***SPACE with dots 3-4***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.5 Converting a fraction to a decimal.

Every decimal can be written as a fraction. For example, 1 divided by 3 is 1/3.

To convert a fraction to a decimal, press ***SPACE with dots 3-4 D***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***D*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.6 Converting a fraction to its lowest terms.

A fraction is in lowest terms or lowest prime denominator, when the greatest common factor of its numerator and denominator is 1. The result of an equation involving a fraction is always displayed in its lowest terms form. For example, 1/4 + 1/4 = 1/2. If you are not converting the fraction to its lowest terms, the answer to the equation would be 2/4.

To directly convert a fraction to its lowest terms, type the fraction and press ***ENTER***.

8.3.5.7 Converting a mixed number to an improper fraction.

To convert a mixed number to an improper fraction, press ***SPACE with dots 3-4 I***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***I*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.8 Converting an improper fraction to a mixed number.

To convert an improper fraction to a mixed number, press ***SPACE with dots 3-4 M***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***M*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***.

8.3.5.9 Converting an equivalent fraction to the displayed factor.

Equivalent fractions are fractions that have the same value. You can determine if fractions are equivalent by multiplying the numerator and denominator by the same number. The number that you multiply should be such that the numerators will be equal after the multiplication. For example, if you compare 1/2 and 2/4, you would multiply by 2/2 which would result in 2/4 so they are equivalent.

To convert an equivalent fraction to the displayed fraction, press ***SPACE with dots 3-4 E***. KeyPlus prompts: "Fraction option?". To cycle through the list of options, either press ***E*** (the hot key) or press ***SPACE***. Complete your entry by pressing ***ENTER***. KeyPlus will then prompt: "Factor to use?". Enter the number. The equivalent fraction is then displayed, and replaces the original fraction.

8.3.5.10 Converting a fraction to a percentage.

Percentages refer to fractions of a whole.

To convert a fraction to a percentage, enter the existing percent operator, which is ***P*** or ***dots 1-4-6***. For example, to convert 1/2 to a percentage, type 1/2 followed by the percent operator. 50 will be displayed.

8.3.5.11 Taking the reciprocal of a fraction.

The reciprocal of a fraction is taken by switching its numerator and denominator. For example the reciprocal of 3/4 is 4/3.

Notice that when you multiply a fraction and its reciprocal, the product is always 1.

To take the reciprocal of a fraction, press ***SPACE with dots 3-4 R***.

8.4 Statistical Operations.

Statistical operations in KeyPlus, allow you to enter a set of numbers, and KeyPlus then calculates their mean (average), median, mode, standard deviation, minimum, maximum, etc. You can review the statistical results, insert them into documents, or use them in calculations, etc. You can also review the data in the order you entered it, in numeric order or as a frequency table. The data set can be edited to correct mistakes and can be saved in a file for later use, to share, or export for use in a database or spreadsheet. You can paste in a set of numbers copied from a document, as well as being able to import data from databases and spreadsheets.

There are two menus for Calculator Statistics - the Data Set Menu and the Statistical Functions Menu/Statistical Functions Review List. The Data Set Menu is where data sets are reviewed, saved, loaded and cleared. It also provides you with the option to turn Data Entry on or off and to paste data from the clipboard into the data set. The Statistical Functions Menu/Statistical Functions Review List is for performing numerous statistical operations, such as finding the mean and the sum of values.

The Data Set Menu is accessible from anywhere in KeyPlus. To go to the Data Set Menu, press ***BACKSPACE with S***. The Statistical Functions Menu/Statistical Functions Review List is also accessible from anywhere in KeyPlus. To go to the Statistical Functions Menu/Statistical Functions Review List, press ***S***.

8.4.1 Entering Data.

To perform statistical operations, KeyPlus needs a set of numbers to operate upon. To avoid confusing these numbers with other numbers in KeyPlus, these numbers will be referred to as "values", and the set of values KeyPlus operates on is called "the data set." The number of times a value occurs is called the "frequency" of the value. When you put a value and a frequency together, you get a data item. Note that the maximum number of data items allowed in a data set is 5000.

Once you have entered a set of values, they remain in KeyPlus until you either purposefully clear the data set, or load another data set in its place.

In order to add each individual value one at a time, you will need to turn Data Entry on. Data Entry is turned on using the first item in the Data Set Menu. To enter the Data Set Menu, press ***BACKSPACE with S***. Move to the first menu item by pressing ***SPACE*** and KeyPlus will announce: "Data entry is off. Turn it on." To turn it on, press ***ENTER***. KeyPlus will announce: "Data entry on, N is 0." "N is 0" means there are currently no values in the data set. You are now back in KeyPlus with the Data Entry on. When you press ***ENTER*** after typing a number or performing a calculation, the number or result of the calculation will be added to the data set. Alternatively, you can toggle data entry on/off using the hotkey, ***SPACE with D***.

While Data Entry is on, “N is …” is always displayed after the calculator result. This tells you the total number of values in the data set and reminds you that Data Entry is on. If at anytime you want to check that the Data Entry Mode is on or off, press ***SPACE with I***. KeyPlus will announce: "data entry is on, N is (xx)" or "data entry is off."

Once you have finished entering values or if you need to use the calculator for another purpose, turn Data Entry off again. To do this, enter the Data Set Menu and move onto the first item. You will notice that it is now "Data entry is on. Turn it off." To turn it off, press ***ENTER*** and you will be returned to the Scientific Calculator.

There are 4 ways to type individual values into the data set:

1. Entering a single number:

   You can type numbers, for example, type 73 and press ***ENTER***. KeyPlus displays: "seven three equals seventy three", and then pauses before "N is 1", followed by "73 N is 1" is displayed. This shows that the number 73 has been added to the data set and it now contains one value.

2. Entering the result of a calculation:

   You can enter the result of a calculation directly into the data set. For example, type 3 * 6 and press ***ENTER***. KeyPlus displays: "three times six equals eighteen", and then pauses before "N is 2", followed by "18 N is 2" is displayed. This shows that the number 18 has been added to the data set, which now contains 2 values.

3. Entering a number and how often it occurs:

   If you know a particular number occurs more than once, you do not have to enter it multiple times because you can tell KeyPlus in one entry what the number is and how often it occurs. The number of times a number occurs is called the frequency of the number. To enter a number and its frequency, type the number, the frequency command, and then the number of times it occurs. For example, to input "5", ten times, type "5", the frequency command, "10" and press ***ENTER***. KeyPlus displays: "five frequency ten" and then pauses before "N is 12", followed by "5; 10 N is 12" is displayed. This shows that the number 5 has been added ten times to the data set, which now contains 12 values.

   A value followed by its frequency is called a data item.

   The frequency command is ***dots 4-5-6*** for Nemeth, ***dot 6*** for UK/German, and ***dots 2-3*** for French. It is displayed in Braille as a semicolon.

4. Pasting numbers from the clipboard:

   You can paste either a single number from the clipboard or a set of numbers.

   A single number can be pasted into the calculator using the standard paste command, ***BACKSPACE with V***. If any invalid characters are included, KeyPlus will announce: "Value is out of range." Invalid data items include alphanumerical words, such as ninety-one; spaces; and mathematical operations.

   To paste in a set of numbers use the "Paste clipboard into data set" option in the Data Set Menu. The numbers must be separated by commas. For example, if you are reading a worksheet or text book that instructs you to "Calculate the mean of the following numbers: 1, 2, 3, 4, 5", copy just the numbers, commas, and spaces, to the clipboard, switch to the calculator, enter the Data Set Menu, and select the "paste clipboard into data set" option. If any invalid characters are included, KeyPlus will announce: "Discarded invalid data items. N is xx."

8.4.2 Importing Data.

You can import data from a file that has been saved in Comma Separated Values (CSV) format. Most spreadsheets and databases have this as an option when saving or exporting data. Note that in this file, the data items must be listed so that the value comes before the frequency. For example:
73,2
58,2
38,1

The data is presented in a list with one value and in its associated frequency per line. Also, the numbers are written in digits rather than words. Note that you do not need to include the frequency on each or any line. For example, your list could include:

73,2
58
38,1

or

73
58
38

When importing data, any lines containing invalid data are ignored and importing continues.

If any invalid data items are included, KeyPlus will announce: "Discarded invalid data items, N is xx." Otherwise, KeyPlus will announce: "N is xx."

To start the process of importing data, you will need to access the Data Set Menu. To do this, press ***BACKSPACE with S*** and select the "Load another Data Set" option.

If the data set has been modified prior to being loaded, KeyPlus will announce: "Existing data set has been modified. Save?." If you would like to save the modifications, press ***Y***. You will be prompted to select the file in which to save the data set and the data set will be saved.

KeyPlus will then prompt: "Name of data set to load?". Type a file name or select the file containing the data set and press ***ENTER***. KeyPlus will prompt: "Replace existing data set or append new data to existing data set?". If you select "replace", the existing data set will be cleared before the selected data set is loaded. If you select "append", the loaded data will be added to the existing data set.

All the existing data items in the current data set will now be added or replaced and KeyPlus will prompt: "N is xx" and at the same time, a series of progress beeps may be heard if there is a reasonable amount of data items to add or replace. Note that the "xx" in "N is xx", represents the new sample size, which will either be the size of the imported data set, or the total of the previous sample size combined with the sample size of the imported data, depending on whether you choose the "Replace" or "Append" option.

8.4.3 Leaving the result of a calculation out of the data set.

As described above, when Data Entry is on the result of a calculation is added to the data set when you press ***ENTER***. There is a way to perform calculations while Data Entry is on, without entering the result into the data set. To find the result of a calculation without entering it into the data set, press ***dots 1-2-3-4-5-6*** instead of ***ENTER***. If you then want to add the result to the data set, press ***ENTER***.

8.4.4 Clearing the Data Set.

The purpose of clearing the data set is to allow you to begin with a new set of data items. To clear the data set, go to the Data Set Menu by pressing ***BACKSPACE with S*** and select the "Clear Data Set" option. If the data set has been modified prior to being cleared, KeyPlus will announce: "Existing data set has been modified. Save?." If you would like to save the modifications, press Y. You will then be prompted with: "Name of data set to save?." Type an appropriate name for the data set and press ***ENTER***. KeyPlus will announce: "Clear Data Set. Sure?." To clear all the existing data items in the data set, press ***Y***. If you have performed any statistical calculations, these will also be cleared at this point.

8.4.5 Statistical Functions.

KeyPlus uses the data you enter to calculate the values for the following statistical functions. Also listed is the hot key that you use for each function in the Statistical Functions Review List and the Statistical Functions Menu.

1. Sample size (N); hotkey ***N***.
2. Arithmetic mean; hotkey ***M***.

3. Median; hotkey ***D***.
4. Mode; hotkey ***O***.
5. Minimum; hotkey ***I***.
6. Maximum; hotkey ***X***.
7. Sample Standard deviation; hotkey ***S***.
8. Population Standard deviation; hotkey ***P***.
9. Sum of values; hotkey ***V***.
10. Sum of the square of the values; hotkey ***Q***.

For definitions of the above statistical functions, refer to 1.4.10 Definitions of Statistical Terms.

8.4.5.1 Reviewing the Statistical Functions.

At any time while you are entering data or once you have finished, you can review the results of the statistical functions by pressing ***S***. What happens next depends on whether or not Data Entry is on.

When Data Entry is on, the Statistical Functions Review List is displayed and you can review the statistical results an item at a time by pressing ***SPACE*** repeatedly, or jump directly to a particular result by pressing its hot key.

When Data Entry is off, the Statistical Functions Menu is displayed. This allows you to review the statistical results by pressing ***SPACE*** repeatedly, as well as to select any result for use in a calculation. To select any result for use in a calculation, either press ***ENTER*** when the result is displayed or enter the menu and press the hot key. For example, to calculate the mean plus 2 times the standard deviation follow these steps:

1. In the calculator ensure Data Entry is off and the calculator is cleared.
2. To enter the mean, select the Statistical Functions Menu by pressing ***S***. You can then either move along to “Mean” and press ***ENTER*** or just press the hot key for mean, which is ***M***. You will be returned to the calculator with the mean inserted into your calculation.
3. Enter “plus 2 times” and insert the standard deviation by selecting the “Sample standard deviation” from the Statistical Functions Menu again. You will once again be returned to the calculator and the sample standard deviation will now be inserted into your calculation.
4. Finally press ***ENTER*** to obtain the result.

To use a statistical result in another KeySoft application, use the clipboard. Simply review the result in the Statistical Functions Review List or the Statistical Functions Menu and copy the value to the clipboard by pressing ***BACKSPACE with K***. Insert the result and paste the clipboard into the Word Processor, via the Block Commands Menu. Otherwise, move to the application in which you want to insert the result and paste the clipboard by pressing ***BACKSPACE with V***.

8.4.6 Reviewing the Data Set.

It is often easy to accidentally enter the wrong items or add data that is already in the data set. Also, you will often want to review your data using a method that differs from how the data was entered. KeyPlus offers three different ways to review your data:

1. The order you entered the data.
2. The frequency order.
3. The numeric order.

KeyPlus has a Data Set Review Mode in which you can review the data, and if Data Entry is on, make changes. To enter the Data Set Review Mode, go to the Data Set Menu by pressing ***BACKSPACE with S*** and select Review Data Set. KeyPlus displays: "Data Set Review Mode. Entry Order" followed by the last data entry. To exit Data Set Review Mode and return to your calculation, press ***SPACE with E***.

You can review your data using the following commands:

To go to the previous data item, press ***BACKSPACE***.

To go to the next data item, press ***READ with O***.

To go to the first data item in the data set, press ***SPACE with dots 1-2-3***.

To go to the last data item in the data set, press ***SPACE with dots 4-5-6***.

To find to a specific number in the data set, press ***SPACE with F***, followed by the number and press ***ENTER***.

To find the next occurrence of the same number in the data set, press ***SPACE with N***.

To change the order in which the data items are presented, press ***SPACE with V***. KeyPlus will prompt: "View data in which order? Currently Entry Order." Select the order you require. There are 3 options:

1. Entry Order (hotkey ***E***) - lists the data items in the order that data was entered.
2. Frequency Order (hotkey ***F***) - lists the data items by frequency, in descending order. This lets you review your data set in a frequency table format. For details on how to generate a frequency table, refer to 1.4.9 Generating a Frequency Table.
3. Numerical Order (hotkey ***N***) - lists the data items by numerical values, in ascending order.

If you change the order in which your data items are presented, KeyPlus will prompt: "Sorting data set items, please wait…Data set sorted."

8.4.7 Editing the Data Set.

While reviewing your data, you may discover an incorrect entry that you want to edit or delete. To edit or delete data, Data Entry must be on and you must be in entry view.

To edit the current data item, use KeySoft's editing commands to make the cursor appear. Move the cursor, insert or delete, as required. When you have completed the edit, press ***ENTER***. The item in the data set is now changed.

To delete the current data item, press ***BACKSPACE with dots 1-4***. KeyPlus will provide a confirmation prompt and if you confirm the deletion, will delete the current number and the frequency it occurs from the data set. It will then announce the next data item. For example, if the current item is "5 frequency 4", "Delete 5 frequency 4. Sure?", will be displayed. If you press ***Y***, the data item will be removed, and the unit will announce the next data item in the list.

8.4.8 Saving the Data Set.

Saving data sets to files means that you can have multiple data sets and whichever one you require when you need it. You can also share data sets with other BrailleNote users and transfer them to PC or other systems to use from within spreadsheets or databases. You can insert them into documents as frequency tables, and so on.

To save the data set, go to the Data Set Menu by pressing ***BACKSPACE with S*** and select "Save Data Set". If you have not previously saved a data set, KeyPlus will prompt: "Destination folder name? Press ***ENTER*** for Calculator Data Sets." Calculator Data Sets is offered as a handy place to keep your data. It is first created when you save a data set for the first time. Select this folder or another in the usual way. To change the drive on which this data set will be saved, press ***BACKSPACE***. KeyPlus then prompts: "Name of data set to save?." If the data set was previously saved, KeyPlus will provide you with the most recently used data set name. Select the name offered by pressing ***ENTER*** or type an appropriate name for the data set and press ***ENTER***. Note that a series of progress beeps may be heard if there is a large number of data items to save. The data set will be saved and you will be returned to the calculator.

Data sets are saved in Comma Separated Values (CSV) format files. The first line of the file contains the words "Value" and "Frequency" separated by a comma and each subsequent line contains a value and a frequency separated by a comma. When you save a data set, the order of the data in the CSV file is the same as the order you currently have set for Review Mode.

8.4.9 Generating a Frequency Table.

A frequency table can be automatically made up from the data set.

To review your data set in a frequency table format, enter the Review Mode by selecting "Review Data Set" from the Data Set Menu. KeyPlus displays: "Data Set Review Mode. Entry Order" followed by the last data entry. You now need to change the view to Frequency Order. To change the order in which the data items are presented, press ***SPACE with V***. KeyPlus will prompt: "View data in which order? Currently Entry Order." Type ***F*** or "frequency" to select the Frequency Order. The data items are now ordered by frequency, in descending order.

You can then save the data items using the save option (as described in 1.4.8 Saving the Data Set). Once saved, go to the document and use Block Insert (that, is the "Insert a File" option in the Block Commands Menu) to insert the CSV file into your document or to the clipboard. You can now reformat the data, as required.

8.4.10 Definitions of Statistical Terms.

As you probably know, Statistics is a mathematical science pertaining to collection, analysis, interpretation and presentation of data.

Below are the terms that you will need to be familiar with in order to effectively use the statistics function of KeySoft.

VALUE: A value is a number that is a measurable amount or quantity. In statistics, a set of values is what makes up a data set.

FREQUENCY: The frequency is the number of times a value occurs and is represented by the letter N.

DATA ITEM: A data item is made up of a "value" and a "frequency".

DATA SET as represented by the symbols left set or opening curly brace, a group of numbers with commas in between them and right set or closing curly brace to close the set, that is {,,,}: The section of a population which is observed.

For example, the number of goals scored in a hockey tournament is represented by the following data set:

{0, 0, 0, 0, 1, 1, 1, 2, 2, 2, 2, 3, 3, 3, 3, 3, 4, 4, 4, 5, 5, 5}

We can represent the above data set as follows:

Number of goals = 0; Frequency = 4

Number of goals = 1; Frequency = 3

Number of goals = 2; Frequency = 4

Number of goals = 3; Frequency = 5

Number of goals = 4; Frequency = 3

Number of goals =5; Frequency = 3

It is often faster to enter a data set into the calculator by entering the value and frequency together. For example, rather than typing the value of 0 four times, we can type the value of 0 followed by a frequency separator, followed by the frequency.

Once the above data is entered into the calculator, we can access the statistical functions menu to find out the average score, the most common score, how many games were played, etc.

MAXIMUM: The maximum is the highest value in the data set.

MEAN as represented by the Greek letter symbol, mu, italicized x with a bar above it, m or mean values: For a data set, the mean is the same as the average. It is the sum of all the values divided by the number of values. For example, the mean or average of 2, 3, 3, 5, 7 and 10, is 30 divided by 6, which is equal to 5.

MEDIAN: A median in statistics, is the middle number in a group of numbers. At most, half the numbers in the group have values that are greater than the median, and half have values less than the median. For example, the median of 2, 3, 3, 5, 7 and 10, is equal to 4.

MODE: The mode is the value that has the largest frequency. For example, the mode of 2, 3, 3, 5, 7, and 10, is 3. Note that there may be more than one mode in the data set or no mode at all if every number occurs to the same frequency. Where there is more than one mode, use the Frequency Order in review mode to view them.

SAMPLE SIZE as represented by the letter N:
The sample size is the total number of values in the data set.

POPULATION STANDARD DEVIATION as represented by sigma, sigma with subscript n, or italicized x with sigma and subscript n:
The population standard deviation is a measurement of the variability of data in a population. Population in statistics, refers to a set of potential measurements or values, including not only cases actually observed but those that are potentially observable.

SAMPLE STANDARD DEVIATION as represented by italicized s, sigma with subscript n minus 1, or italicized x with sigma and subscript n minus 1: The sample standard deviation is a measurement of the variability of data in a sample. A sample differs from a population in that it is the part of a statistical population which is actually observed. Note that this type of standard deviation is the most commonly requested when the standard deviation is required in an equation.

SUM OF VALUES as represented by capital sigma italicized, italicized x followed by subscript n: The sum of values is the total you get when all the individual values in the data set are added together.

SUM OF THE SQUARE OF VALUES as represented by capital sigma italicized with italicized x followed by superscript two and subscript n: The sum of the square of values is the result you get when each individual value is squared (that is, multiplied by itself) and all the squares are added together.

8.5 Memory Operations.

There are 10 separate memories for storing conversion factors, partial results, etc. They are numbered 0 to 9. The commands for memory number 1, for example, are as follows:

Clear memory 1: press ***SPACE with K, then 1***.

Store number in memory 1: press ***SPACE with S, then 1***.

Add to memory 1: press ***SPACE with A, then 1***.

Recall contents of memory 1: press ***SPACE with M then 1***.

Display contents of memory,

but do not use in calculation: press ***M, then 1***.

These commands are now discussed in more detail.

8.5.1 Clear Memory.

This operation clears the particular memory immediately. For example, to clear memory 5, press ***SPACE with K***, then ***5***. KeyPlus displays 5 on the Braille display and it announces:

"Clear memory." "Clear which memory?" "5."

8.5.2 Store Memory.

This completes the current calculation and stores the result in a memory. For example, to calculate the result of 3 + 5 and store it in Memory 4, type : ***3 + 5 SPACE with S 4.***

When you press ***SPACE with S,*** the letter S is displayed on the Braille display and "Store memory" is spoken.

The resulting value of 8 is stored in memory number 4.

8.5.3 Add to Memory.

This completes the current calculation and adds the result to the existing contents of a memory. For instance, after the previous example, Memory 4 contains 8. Now to calculate 9 divided by 5, and to add the result to Memory 4, press : ***9 ¸ 5 SPACE with A 4.***

When you press ***SPACE with A,*** the letter A is displayed on the Braille display and "Accumulate memory" is spoken.

The calculation is evaluated, resulting in 1.8. This is then added to Memory 4, to give a value in Memory 4 of 9.8.

8.5.4 Recall Memory.

This is used to recall the value in a memory and insert it into the calculation. For example, to divide the contents of Memory 4 by 4, and store the result in Memory 1, press: ***SPACE with M 4 ¸ 4 SPACE with S 1***.

When you press ***SPACE with M***, the letter M is displayed on the Braille display and "Recall memory" is spoken.

This calculates ***9.8 ¸ 4 = 2.45,*** which is stored in Memory 1.

8.5.5 Display Memory.

This is used to display the value in a memory at any time without affecting the current calculation. For example, if you press: ***M 4***

KeyPlus displays "Memory 4: 9.8" on the Braille display and it announces

"Display Memory," "Display which memory?" "4, memory 4, nine point eight."

but this does not affect any calculation in progress, which can continue. To return the display to the calculation, press ***ADVANCE*** or continue entering it.

8.6 Scientific Operations.

Trigonometric, logarithmic and exponential functions are available, as well as squares, square roots, powers and roots.

8.6.1 Trigonometric Functions.

The trigonometric functions can be calculated in either degrees or radians. To select degrees press ***T, then D,*** to select radians press ***T, then R***. A setting stays in effect until it is superseded by the another.

A two-character sequence is used to select a trig function. Sine, cos and tan are preceded by ***T***, and the inverse functions are preceded by ***SPACE with T***. The following list gives for each function, the name

For sine: ***press T, then S***. This is displayed as dots 1-2-4-6, S.

For cosine: ***press T, then C***. This is displayed as dots 1-2-4-6, C.

For tangent: ***press T, then T***. This is displayed as dots 1-2-4-6, T.

For arc sine: press ***SPACE with T, then S***. This is displayed as

dots 1-2-4-6, dot 4, S.

For arc cosine: press ***SPACE with T, then C***. This is displayed as dots 1-2-4-6, dot 4, C.

For arc tangent: press ***SPACE with T, then T***. This is displayed as dots 1-2-4-6, dot 4, T.

For PI: press ***Y***. This is displayed as dots 4- 6 followed by P.

For example, to calculate the sine of 30 degrees, type:

T, then D S 3 0

followed by ***ENTER***. The result "0.5" is displayed.

Note that the function applies only to the number immediately following. If you wanted to find the sine of the sum of two 15 degree angles, for example, you must put brackets around the addition as follows:

T, then D T S (1 5 + 1 5) ENTER.

The result "0.5" is displayed.

To calculate the Arc Tangent of 2, type:

SPACE with T T 2

followed by ***ENTER***. The result "63.43495" is displayed.

To calculate the cosine of PI radians divided by 3, type:

T, then R T C (Y ÷ 3)

followed by ***ENTER***. The result "0.5" is displayed.

8.6.2 Square Roots and Squares.

For "square root", press ***dots 1,4,6***.

For "squared", press ***dots 2-3***. It is displayed on the braille display as

dots 3-4-6, ***dots 2-3***, followed by a ***SPACE***.

To calculate the square root of the sum of 3 squared plus 4 squared, type:

dots 1,4,6 (3 dots 2,3 + 4 dots 2,3) followed by ***ENTER***. The result "5" is displayed. The square root operator precedes its number, while the squared operator occurs after its number, following the written form.

8.6.3 Decimal Exponent.

Very large or very small numbers are often expressed in scientific notation as a power of 10. For example, the number 4000 is equal to 4 × 1000, which may be written as 4 × 10 to the power of 3. This number could be entered into a calculation by pressing: ***4 X 3***

This appears as 4 e 3 on the braille display. Similarly, the number 0.05 could be entered by pressing ***5 X SPACE with HYPHEN 2.***

This appears as 5 e - 2 on the braille display.

8.6.4 Powers and Roots.

These functions are assigned as follows:

x to the power of y: ***dots 3-4-6***.

This is displayed as dots 3-4-6 on the braille display. KeyPlus automatically adds in the index termination sign, which is dots 1-2-4-5-6, to show when the calculation returns to the base level.

x to the power of 1/y: press ***SPACE with dots 3-4-6***.

This is displayed on the braille display as dots 3-5-6, number sign, dot 1, dots 2-5-6 or "to the power of", "1", "divided by". Once again KeyPlus automatically adds in the index termination sign, which is dots 1-2-4-5-6, to show when the calculation returns to the base level.

Parentheses can be used where y is a compound expression. For example, to calculate 2 to the power of 6 + 8, type: ***2 dots 3-4-6 (6 + 8)***

followed by ***ENTER***. The result "16,384" is displayed.

For example, to calculate 3 to the power of 4, type: ***3 dots 3-4-6 4***

followed by ***ENTER***. The result "81" is displayed.

To calculate the cube root of 27, type: ***2 7 SPACE with dots 3-4-6, 3***

followed by ***ENTER***. The result "3" is displayed.

8.6.5 Logarithmic Functions.

The following log functions are provided:

For log to base e, or natural log:press ***N***. This is displayed as dots 1-2-4-6 LN.

For e to the power of: press ***SPACE with N.***

This is displayed as e dots 1-4-6.

For log to base 10: press ***L. dots 1-2-4-6 L***.

For 10 to the power of: press ***SPACE with L***.

This is displayed as ***dots 1-2-4-6, dot 4, L***.

To calculate the log to base e of 10, and save the result in Memory 2, type:

N 1 0 SPACE with S 2

followed by ***ENTER***. The result "2.302585" is displayed.

Now to calculate e to the power of 2.302585, type:

SPACE with N SPACE with M 2

followed by ***ENTER***. The result "10" is displayed.

8.7 Inserting a Result or a Calculation.

Suppose that you are writing a letter, and you want to do a calculation and include the result in the letter. How would you do that?

You could do the calculation before starting the letter. Alternatively, you could begin the letter and then use the Task menu to switch from the Word Processor to the calculator, do the sum and then switch back to the letter.

When you get to the point in the letter where you want to include the result of your calculation, press ***SPACE with O*** for the options menu, then ***I*** for Insert field, and ***R*** to insert the Result or ***C*** to insert the whole Calculator. KeyPlus prompts: "Insert result or whole calculation?"

The most recent result or calculation from the calculator is inserted into the document, which saves you having to remember and re-type it.

End of Scientific Calculator Chapter.

9 Planner.

KeyPlan is a page-per-day planner, which allows you to make notes and reminders for each day of the year. You can also enter appointments for particular times, reschedule them, and include an audible alarm with any appointment. Appointments can be single events or recurring right out until the year 9999. And all of this information can be shared with Microsoft Outlook's calendar via a synchronization function we call KeySync, which is discussed in detail in 13.15 KeySync.

The commands you use with the planner are similar to those used in KeyWord. Planner pages are formatted as Braille documents, and you can use grade 1, grade 2, or Computer Braille as you wish.

9.1 Entering the Planner.

To enter the Planner, select it from the Main Menu by pressing ***P***. This will take you to the KeyPlan Menu. Or you can open the Planner directly from anywhere in KeySoft by pressing ***BACKSPACE with ENTER with P***.

9.2 The KeyPlan Menu.

When you select the Planner from the Main Menu, your BrailleNote BT displays "KeyPlan Menu."

Open planner;

Setup options.

If you want to make entries in the planner or review its contents, choose "Open planner." This option is described first. If you enter the Planner by pressing ***BACKSPACE with ENTER with P,*** you will go directly to the "Open Planner" option.

9.3 Selecting a Date.

When you select the "Open" option, KeyPlan displays: "Day? Press ***ENTER*** for (today's date)."

where today's date is the actual date. Before pressing ***ENTER***, you can choose a different date by either typing it in as described in the next section, or by moving around the calendar, as follows:

By day back or forward, use ***SPACE with dot 3 or dot 6***;

By week, use ***SPACE with dots 2 or 5***;

By month, use ***SPACE with dots 1 or 4***;

By year, use ***SPACE with dots 2-3 or 5-6***.

When the required date is displayed, press ***ENTER*** to select it.

9.3.1 Entering the Date.

Instead of moving around the calendar to find the required date, you can Braille a date as:

25 dec 06, or

dec 25 06.

To avoid ambiguity, precede each group of numbers with the number sign as shown, which is ***dots 3-4-5-6***.

You can use a 3-letter abbreviation for the month, such as:

25 dec 06.

Or you can type the month name in full:

25 december 06

december 25 06

You can also use numbers separated by a number sign in the form:

25 12 06. or

12 25 06, depending on the KeySoft date format you have set.

If you omit the year, then the current year is assumed.

When you have selected or Brailled the date, press ***ENTER*** and you are placed in the required planner page. If you have selected today's date, the cursor is placed at the beginning of the next appointment for today, if one exists. This allows you to check your next appointment very quickly. For other dates, the cursor will be at the top of the page, ahead of any existing entries.

9.3.1.1 Going to Today's date.

There is a quick way of going directly to today's date from anywhere in the planner. Whatever day you are currently on, if in the Planner itself, return to the calendar by pressing ***SPACE with E***. At the prompt "KeyPlan Calendar. Date? Press ***ENTER*** for (date)", type "today" and press ***ENTER***. This will take you directly to today's planner page.

9.3.2 Page Layout.

The planner is laid out as a page-per-day desk planner. Each day starts on a new page. The date appears on the first line. On the next line are any general notes or reminders that can use as many lines as required. These are called "all-day events" and are not associated with any particular time.

The scheduled appointments then follow. Each of these starts on a new line, and begins with a time. The appointment details follow on the same line.

Here is an example:

"Friday January 27 2006

All day: Mike's Birthday.

All day: Sarah in interviews all day

Don't forget to clear her voice-mail.

10:00-11:00 am Team meeting

12:30-1:15 pm Lunch with Bob

7:30-11:00 pm Movies Return of the King

Reading 2, meeting in foyer."

When an appointment is scheduled or rescheduled, it is placed on the correct page, and is sorted into time order with other entries.

9.3.3 Making Notes on a Particular Day.

Notes are recorded as all-day events and KeyPlan precedes them with the words "all-day:". They are not associated with any particular time during that day.

To make notes on any page of the planner, first select the date. The cursor is placed ahead of any text that may already be on the page. If the page is blank, then just start typing. If there is already text on the page, check that the cursor is in the right place before typing. As soon as you start typing, KeyPlan will automatically schedule an all-day event for you. You can move the cursor to a different point in the text by using the cursor movement commands. These are similar to KeyWord commands.

When you have finished typing an entry, you do not need to press ***ENTER*** unless you require a new line.

If you have selected today's date, the cursor is placed on a scheduled appointment, if one exists. You can use the cursor movement commands to move the cursor, or you can go to the top of the page by pressing ***SPACE with dots 1-2-3***.

9.3.4 Scheduling an All-Day Event.

You can set up an all-day event with the properties of an appointment, such as recurrence, or being marked as busy or out of office. Please note that the default setting for All-Day appointments is set to "free" as it is in MS Outlook. This is because typically people use this function for events such as traveling, birthdays or other anniversaries, and reminders rather than actual appointments where they will be busy. Remember that All-Day means midnight to midnight, not just 8am to 5pm. This means that the All-Day event or appointment alarm will go off at midnight! To prevent this from happening, either set a warning time so that the alarm goes off the day before, or schedule a reminder appointment instead.

If you have already set up the all-day event, put the cursor into the text. Select Review or Modify this appointment by pressing ***BACKSPACE with R***. This will give you all of the scheduling options.

If you are setting the appointment up from scratch, when scheduling the appointment, specify an appointment time of ***L*** for all-day. From there continue as normal. Full directions on scheduling an appointment are in the next section of this User Guide.

9.4 Scheduling Appointments.

An appointment is made up of a group of settings that the user defines. These include date, start time, end time, title, location etc. The process of scheduling an appointment is basically going through the list of these settings and defining each setting.

You don't have to go through all the settings to make an appointment, in fact they are ordered so that you cover the mandatory settings first and can exit and save by pressing ***SPACE with E*** at any point after you have set the date, time, and title. Like all lists in KeySoft, you can move back and forward by pressing ***BACK or BACKSPACE*** and ***SPACE or ADVANCE***. However, if you follow the procedure below, you will see that KeyPlan steps you through the settings logically and easily. If you wish to change any setting you have made before exiting and saving, use the back and forward commands to return to the setting and make the change.

KeyPlan assumes you wish to schedule the appointment on the date of the planner page you are currently in, and so jumps directly to the time setting.

To schedule an appointment in KeyPlan, follow this procedure:

1. From any planner page, select Schedule an appointment by pressing ***SPACE with dots 2-6.***
2. KeyPlan prompts: "Appointment time?"

   The way you enter appointment times should agree with the setting of 12 or 24 hour format, which is displayed when you press ***SPACE with H***. You can enter a time without using number signs, in the form:

   hh:mm where "hh" is hours and "mm" is minutes, separated by a colon. You can abbreviate an entry with fewer digits or no colon if it is unambiguous. In 12 hour format, follow the minutes by a space and then ***a*** or ***p***, to denote a.m. and p.m. Note that if you use an abbreviated form for an a.m. time, for example 7a for 7:00 am, type a letter sign before the a or it will be read as a 1. And if you forget to type ***a*** or ***p***, KeySoft will prompt you to do so. For an all-day event, type ***L*** instead of a time.

   Before you enter a time, you can change the day or date of your appointment by pressing ***BACKSPACE***.

   KeySoft prompts: "Appointment Day? Press ENTER for (current day and date)."

   A calendar is being presented. If the offered date is correct, just press ***ENTER***. Otherwise, move around the calendar to the required date, or type it, and then press ***ENTER***.

3. KeySoft prompts: "End time or length? Press ***ENTER*** for (time) 30 minutes." where (time) is the time 30 minutes after the appointment time. The default length is 30 minutes, but you can change this. You can type a number by itself for minutes, or follow the number with ***h*** for a number of hours, ***d*** for days or ***w*** for weeks. For ***h*** and ***d***, put a letter sign or space between the number – this is not necessary for ***m*** and ***w***. To enter a finishing time, type the time in the same format as the appointment time.

   Press ***ENTER*** to go to the next field. Note: If you want to set a different end date, you can either press ***BACKSPACE*** as soon as you hear the End Time or length prompt, or set the end time and then press ***BACKSPACE*** twice.

4. KeySoft prompts: "Appointment title?."

   Type the reason for this appointment and press ***ENTER***. If necessary, you can add more notes about this appointment after you have finished scheduling it.

5. KeySoft then prompts: "Location?"

   This is not a mandatory field. Either type the location and press ***ENTER***, or simply press ***ENTER***.

6. KeySoft prompts: "Recurrence? Press ENTER for once."

   For a one off appointment, press ***ENTER***. For more information on recurring appointments, refer to 9.5 Recurring Appointments.

7. KeySoft prompts: "Set an alarm on this appointment? Press ***ENTER*** for N."

   If you do not, press ***N.*** If you want to set an alarm, press ***Y,*** and KeySoft prompts: "Warning time? Press ENTER for n (time),"

   where "n" is the suggested interval of time (for example 30 minutes) and (time) is the actual time at which it would ring (for example 7:30pm). To change the setting, type either a time in the usual format, or a number of minutes, or a number followed by ***h*** for hours, ***d*** for days or ***w*** for weeks. For ***h*** and ***d***, put a letter sign or space before the letter – this is not necessary for ***m*** and ***w***. Press ***ENTER***.

8. KeySoft then prompts: "Show time as? Press ***ENTER*** for busy."

   The options are free = ***f***, tentative = ***t***, busy = ***b*** and out of office = ***o***. These settings let you know the level of availability you will have with this appointment. If you select "free", you will be able to schedule an overlapping appointment without any reminders from KeySoft. For the other options, KeySoft will remind you at the time setting and at the point of saving the appointment, but it won't prevent you from scheduling it.

9. KeySoft then prompts: "Mark as Private? Press ***ENTER*** for No." To mark as Private, press ***Y***.

10. KeySoft prompts: "End of List". At this point, to schedule the appointment, press ***SPACE with E***. KeySoft prompts: "Schedule this appointment?" Press ***Y*** or ***N***. KeySoft displays: "Appointment scheduled."

    The time is inserted in the planner page, on a new line, followed by the title and location. The appointment is sorted into the correct time order for the current date, and the cursor is placed just after the new entry.

9.4.1 Making Notes on an Appointment.

You can make notes on any appointment at any time by placing the cursor in the time and title line and pressing ***ENTER***. From there, simply type your notes. If you have only just scheduled the appointment, the cursor will already be in the time and title line.

When the notes are complete, you will exit when you press ***SPACE with E***, which will take you to the top of the day, or perform any other command such as Scheduling another appointment, using any "go to" or "move" commands etc.

9.4.2 Making another entry.

To make another entry, press ***SPACE with dots 2-6*** again. The new entry is sorted into order with existing entries. You can set as many appointments as you wish.

9.5 Recurring Appointments.

A recurring appointment is one that is repeated in a regular pattern of times determined by the user. You can schedule your appointment according to dates, or patterns of days, weeks, months or years – for example an event may be on the 25th of every month, or on the third Thursday of every month, or every 25th of March, or every day at 9am, etc. There is a pattern of recurrence to cover just about every type of recurring event you could think of.

For the sake of clarity, we will refer to any use of calendar days as dates – for example the 6th or the 23rd, and we will use the word "pattern" to describe other intervals such as the third Friday in the month, or the last Thursday in November.

9.5.1 Recurring patterns.

Apart from "once" which of course is not recurring at all, the options for a recurring event are: Daily, Weekly, Monthly or Yearly. Each of these is described and relevant instructions given below.

9.5.1.1 Daily.

Daily means any pattern based on a number of days. This could be every day, or every second day, every 5 days etc.

At the prompt "Days between occurrences? Press ***ENTER*** for 1 day(s)", The default setting is 1 day. To change this, type the number of days of your choice. For example, for every second day, type 2.

9.5.1.2 Weekly.

Weekly means any recurring event that happens weekly, or in a weekly pattern. For example, every Monday, every week day, or every second week on a Thursday.

At the prompt "Recur on which days? Press ***ENTER*** for x y z" where x y z are any days you require, type any of the following, with a space between if more than one (and in any order):

Sunday = Su; Monday = Mo; Tuesday = Tu; Wednesday = We; Thursday = Th; Friday = Fr; Saturday = Sa; every day = v; weekdays = d (Monday through Friday) and weekend days = e (Saturday and Sunday).

For example, if your appointment is every Monday, Tuesday and Thursday, you would type "Mo Tu Th". If it were every Saturday and Sunday, type "e" for weekend days.

Note: you can type initial letters only for Monday, Wednesday or Friday as they are the only day names starting with M, W or F. You can also type more or all of the name of a day, for example, Thurs or Thursday.

At the prompt "Weeks between occurrences? Press ***ENTER*** for n" type the number of weeks if different from the default n. For example if it occurs weekly, type 1, if fortnightly, type 2 etc.

9.5.1.3 Monthly.

Monthly recurrence includes dates, or patterns of days or weeks scheduled on a monthly basis.

For example, every 20th of the month, or every third Thursday, or the second week, or even the last weekend day, are all monthly events.

1. When you select Monthly, KeyPlan prompts: "Recur on day x of the month?" where x is the date you originally selected. To choose this option press ***Y*** for Yes then go to step 4, otherwise press ***N*** and go to step 2.
2. KeyPlan prompts: "Week of recurrence? Press ***ENTER*** for x."

   where x is the correct week for the original date selected. The options are: first, second, third, fourth, last. Either press ***ENTER***, or cycle through the options using ***SPACE with dots 3-4***, or press the hotkey for your choice. These are: first = ***1***; second = ***2***; third = ***3***; fourth = ***4***; last = ***l***. No number sign required. Press ***ENTER***.

3. KeyPlan prompts: "Day of recurrence? Press ***ENTER*** for x" where x is the day of the week of the original date selected. Options are the days of the week, weekday, weekend day, or day (refer to note above). To make a selection, cycle through by pressing ***SPACE with dots 3-4*** then ***ENTER***.
4. KeySoft then prompts "Months between occurrences? Press ***ENTER*** for n" where n is 1 by default. Either press ***ENTER*** or type the new number and then press ***ENTER***.

9.5.1.4 Yearly.

When setting a yearly recurring event, you have a choice of a date, or a month based pattern.

You already selected a date when setting up the appointment initially, for example every 8 February. KeyPlan prompts: "Recur on February 8 each year? Press ***ENTER*** for Yes."

For Yes, press ***ENTER*** as stated.

If you want to schedule a pattern, press ***N*** for No. KeyPlan assumes you have scheduled the correct month in the beginning. KeyPlan prompts: "Week of recurrence? Press ***ENTER*** for x."

The options are: first, second, third, fourth, last. Either press ***ENTER***, or cycle through the options using ***SPACE with dots 3-4***, or press the hotkey for your choice. These are: first = ***1***; second = ***2***; third = ***3***; fourth = ***4***; last = ***l***. No number sign required. Press ***ENTER***.

KeySoft prompts: "Day of recurrence? Press ***ENTER*** for x."

where x is the day of the selected appointment date. Options are the days of the week, weekday, weekend day, or day. To make a selection, cycle through by pressing ***SPACE with dots 3-4*** then ***ENTER***.

9.5.2 Number of Recurrences.

Having set up the pattern, KeyPlan now wishes to know how many times the event will recur. You have four choices: "End of recurrence? Press ***ENTER*** for none",

"None" – With this option, the event will recur right out until the end of 9999.

"***#*** occurrences" – with this option, type the number of times the event recurs in digits, the maximum being 999.

"date" –With this option, type in the date when you wish the last recurring event to occur, or to occur before, in usual date format. If the date you select does not fall in the recurring pattern, the last appointment will be the one immediately before it. For example, if your appointment is always on the second Tuesday of the month, but you specify 31 December 2006 as the end date, the last recurrence will be the second Tuesday of December 2005, which is the 12th.

"length" – You can specify the length of time by a number of days or weeks. To do this, type the number and then ***D*** or ***M***, for example 6 weeks is 6w and 15 days is 15d. Or, you can press the relevant hotkey as many times as the number. The hotkeys are: Days = ***SPACE with dot 6***; Weeks = ***SPACE with dot 5***; Months = ***SPACE with dot 4***; Years = ***SPACE with dot 5-6***. For example, for six months, press ***SPACE with dot 4*** six times. Press ***ENTER***.

At this point you will be back into the normal Scheduling appointment procedure.

9.5.3 Recurring Appointments scheduled in Outlook.

If you are using KeySync to synchronize your calendar with MS Outlook's, you will find that recurring appointments that "come across" from Outlook will take exactly the same form as above, and you can modify and change them as you wish in KeyPlan.

9.5.4 Moving between Recurring Appointments.

It is very likely that you will want to move through the occurrences of a recurring appointment, and there are commands to do this that work when the cursor is in the time and title line of an instance of the appointment.

To move to the next occurrence of the appointment, press ***SPACE with N***. To move to the previous occurrence, press ***SPACE with dots 2-3-6***.

9.5.5 Notes on Recurring Appointments.

These notes explain how recurring appointments behave differently to ordinary appointments in the following circumstances:

9.5.5.1 Alarm Warning Time.

In a recurring appointment, the alarm warning time must be shorter than the interval between occurrence. For example – recurring appointment is 5pm daily, a warning time of 25 hours would have the alarm sound before the previous occurrence of the recurring appointment.

9.5.5.2 Modifications and Exceptions.

If you modify just one instance of a recurring appointment in any way at all, it creates an exception. If later you then modify the date, start or end time, and/or recurrence interval of all recurrences of that same appointment, the exception will be overwritten by a normal instance.

9.5.5.3 Privacy Setting.

When reviewing or modifying just one instance of a recurring appointment, the privacy setting is not offered for modification. This is because Outlook doesn't allow exceptions to this setting. However when reviewing or modifying all occurrences, then you can change it.

9.6 Reviewing the Appointments.

9.6.1 The Review Commands.

Most KeySoft review commands are available in the planner, but two groups of commands are unique:

To read all planner entries for the:

Previous day: ***SPACE with dots 2-3;***

Current day: ***SPACE with dots 2-3-5-6;***

Next day: ***SPACE with dots 5-6.***

To read the planner entries within a particular day:

Previous entry: ***SPACE with dot 1;***

Current entry: ***SPACE with dots 1-4;***

Next entry: ***READ with O.***

These actions will read one complete appointment, or all-day event. The previous and next commands will move the cursor to the beginning of the new appointment or line.

Repeated use of the previous or next commands will move the cursor through the planner. A beep will indicate that there are no more entries to read in the calendar. Note: The calendar goes out to the year 9999, so it might pay to put an end time on recurring appointments if you ever want to hear that beep! Note however that if the cursor is in the notes of an appointment, these commands will take you to the next, previous or current sentence or line, as they do in KeyWord.

To move the cursor to the top or the bottom of the current day, press ***SPACE with dots 1-2-3,*** or ***SPACE with dots 4-5-6.***

Likewise, when in the notes of an appointment, these commands will take you to the top or bottom of the notes.

To speak continuously, press ***SPACE with G***.

To stop the BrailleNote BT speaking at any time, press ***BACKSPACE with ENTER***.

To confirm the date of the current planner page, and how many days away from today's date, press ***SPACE with wh sign (dots 1-5-6)***.

Press this command again to get the interval of time stated in weeks and days. **Note:** These two commands can be used to check how much time there is to go in the year or how much time has passed, simply by using the 1st January or the 31st December of the current year as the reference dates.

9.6.2 Checking Your Next Appointment.

You can check the details of your next appointment from any point in KeySoft, without losing your place in your current activity. To do this, press ***ENTER with N***. This command recognizes appointments showing their time as busy, out of office or tentative, but not those marked as free. KeyPlan will tell you whether you have any, any more, no, or no more appointments for the day, if you are in a current appointment time, when the next appointment is and on what date and time, and when the next alarm is scheduled for if it is not associated with the next appointment.

When you are finished you are returned to the same place in your original activity.

The other way of checking just your current or next appointment for the current day is to enter the planner and select today's date in the calendar. This places you at the current or next appointment of the day, if there is one.

9.6.3 Overlapping Appointments.

Overlapping appointments occur when two appointments are scheduled with an overlapping start or end time. KeyPlan only recognizes appointments as overlapping if neither are set to show their time as free. As mentioned before, KeyPlan will warn you that you are about to schedule an overlapping appointment but won't stop you from doing so. And of course the synchronization process may also cause overlapping appointments. This is discussed fully in 13.15.7.1 Overlapping Appointments.

While in the planner, you can find the next or previous occurrence of an overlapping appointment. The commands are:

Go to next overlapping appointment: ***SPACE with dots 3-4-5-6.***

Go to previous overlapping appointment: ***SPACE with dots 1-2-3-6***.

When you go to the overlapping appointment, KeyPlan will display its date, time, title and location. To hear the appointment with which it is overlapping, press ***SPACE with dots 3-4-5-6*** again. The same command will take you to the earlier of the next pair of overlapping appointments.

To resolve an overlapping appointment situation, simply modify one or both appointments in the usual way, as described in 9.7.3 Modifying an Appointment.

9.6.4 Calendar or Appointment Information.

There are two quick ways to get information about either a day in the calendar or a specific appointment. These are by using the information command ***SPACE with I***, and ***SPACE with wh sign (dots 1-5-6)***.

When the cursor is in the date line of a calendar page, you can access the following information:

Press ***SPACE with I*** for the number of appointments and number of all-day events, when the first appointment starts and the last appointment finishes.

Press ***SPACE with wh sign (dots 1-5-6)*** for the date and how many days away from the current date. Press the command again for the interval of time stated in weeks and days.

When the cursor is in an appointment, you can access the following information:

Press ***SPACE with I*** for a summary of recurrences and alarm status.

Press ***SPACE with wh sign (dots 1-5-6)*** for the date and time of the appointment and how many days away from the current date. Press the command again for the interval of time stated in weeks and days.

9.6.5 Finding an Appointment.

You may need to find an appointment whose date you have forgotten. If you remember a word, name or phrase in the text, then you can use the Find command, ***SPACE with F***, to find it. If the text is found, you can read the details by pressing ***SPACE with dots 1-4***, and you can query the date by pressing ***SPACE with wh sign (dots 1-5-6)***.

The text can appear more than once in the planner, so you may not find the required appointment on the first try. To continue the search, press ***SPACE with N.***

9.7 Changing an Existing Appointment.

After you have created an appointment or all-day event, you can edit the text of its notes, review or modify its time, date or other properties, or cancel it altogether. These functions are all outlined in this section.

9.7.1 Editing an Appointment.

After you have made an entry in the planner, you can edit, delete, move or change the layout of its text. Most of the KeySoft editing commands are available in KeyPlan. These can be used to make changes to the text of an appointment, but not to change the time and date of an appointment itself. In the case of recurring appointments, changes made this way will only affect the appointment you are in; to change all recurrences you need to use the "Review or Modify Appointment" option.

As with the review commands, there are some minor differences to the edit commands. For example, ***BACKSPACE with dots 1-4***, which in the Word Processor is "delete to end of sentence," or "delete to end of line," depending on the Reading Mode, cancels the appointment if the cursor is in the subject line, or deletes to the end of the line or sentence if the cursor is in a note.

9.7.2 Cutting, Pasting and Deleting using block commands.

The marking, cutting and pasting operations that are available elsewhere in KeySoft also work in KeyPlan. Because the Planner is not just a document, however, these operations behave a little differently.

You can copy, cut and paste the title or notes from one appointment to another, but you can't use this method to move an appointment in total. However you can copy a whole appointment and paste it into an e-mail or word document.

You can also mark an entire appointment or block of appointments and delete it using the ***SPACE with B*** then ***D*** Delete block command. It is wise to note, however, that if you use this function to delete a recurring appointment, it will only delete that one instance of the appointment. Doing this will use more storage space than leaving the recurring appointment in the planner.

You can mark a block and change its language (for multi-lingual users) and/or Braille grade as elsewhere in KeySoft, but only one appointment at a time.

The Block Commands are detailed in 7.5.1 Block Commands Menu and 19.2.7 Block Commands.

9.7.3 Modifying an Appointment.

This option allows you to reschedule the date or time, change the recurring pattern, alarm status, location etc of any appointment. Position the cursor anywhere in the appointment you wish to modify, and press ***BACKSPACE with R***.

If the appointment is a recurring one, you will now be asked if you wish to modify just this one, or all instances. For just this one, press ***J***, for all instances, press ***A***. You will be presented with the same prompts and steps as for creating an appointment, the difference being that you will be offered the current appointment's options as defaults at each prompt. Simply change the ones you wish to change and pass over the others by pressing ***ENTER***.

9.7.4 Canceling an Appointment.

To cancel an appointment, position the cursor in the appointment you wish to cancel and press ***BACKSPACE with dots 1-4***, or enter the Appointment menu by pressing ***SPACE with dots 3-4,*** and select "Cancel this appointment."

KeySoft prompts: "Cancel this appointment (title). Sure?" To cancel, press ***Y***, to abort, press ***N***. If the appointment is part of a recurring pattern, KeySoft will then prompt: "Cancel all occurrences or just this one?" For all, press ***A***, for just the currently selected instance, press ***J***.

9.8 Selecting Another Date.

There are two ways to select another date. Assuming you are already in the planner, you can return to the Calendar Day selection prompt by pressing ***SPACE with E,*** and then select or Braille the required date, or you can move forwards or backwards to a different date by using the "Go to" command, ***SPACE with dots 1-2-6.*** When you press ***SPACE with dots 1-2-6*** KeySoft prompts: "Go where?."

Press ***F*** for forwards, or ***B*** for back. Follow this with ***D, W, M or Y,*** to move a day, week, month or year, and then press ***ENTER***. You can also put a number and space before the ***D, W, M or Y*** (that is, Day, Week, Month or Year). For example, to move forward 3 days, use the following:

SPACE with dots 1-2-6, f, 3, SPACE, D, ENTER.

To find where the cursor is currently located, press ***SPACE with wh sign (dots 1-5-6)***.

Today's date and day of the week can be checked from any point in KeySoft by pressing ***ENTER with D***.

You also have the option of typing a number after the ***D, W, M or Y***. If you do not specify forward or back, information will be taken as an absolute value, for example W 10 will take you to week 10 of the current year. If you want to go to week 10 of another year in the future you would type the year before the week. For instance, Y2008 W10.

9.9 Alarms.

9.9.1 Setting an Alarm.

When you schedule an appointment, setting an alarm is one of the steps you go through. You can set an alarm on an appointment that is already set up through modifying an appointment.

9.9.2 When Alarms Sound.

An alarm rings at its programmed time, even if the BrailleNote BT is switched off. The speaker and the headphones sound the alarm. Unlike speech, the speaker sounds the alarm even if the headphones are plugged in.

If not acknowledged, the alarm continues ringing for a length of time called the "Alarm ringing time." It is then silent until:

the "Alarm repeat time" has elapsed, OR;

a key is pressed, OR;

the machine is switched on;

In which case it sounds again. See 9.9.4 Alarm Set Up

The maximum number of times an alarm can cycle is set to 10. This is to prevent an alarm causing unnecessary battery drain.

9.9.3 Acknowledging an Alarm.

If the BrailleNote BT was on standby when the alarm sounds, it turns itself on and brings up the alarm options menu:

To cancel the alarm: press ***C;***

To read and hear appointment details without canceling: press ***R;***

To postpone the alarm for 10 minutes: press ***SPACE.***

If the BrailleNote BT is on when the alarm sounds, first acknowledge it by pressing ***BACKSPACE with ENTER*** together. You are then automatically placed in the Alarm options menu.

There are four items that you can select by pressing their initial letter. They are:

Cancel the alarm;

Read and hear the appointment details without canceling;

Postpone the alarm. A number of minutes will be offered; to change it, type a new number of minutes (number sign not required).

Go to the corresponding appointment in the planner. The alarm is cancelled, and the cursor is placed at the start of the appointment so that you can read its details.

9.9.4 Alarm Set Up.

The ringing and repeat times have the same values for all alarms. To review or change the values, first move to the KeyPlan menu. In the KeyPlan Menu select "Setup options" and KeySoft enters the "KeyPlan setup list."

The first item on the list is alarm volume. KeyPlan displays: "Alarm volume? 24."

To change the alarm volume, type a new value between 5 and 32 where 5 is quietest and 32 is loudest, and press ***ENTER***. To test the volume, go back to the alarm volume item and press ***SPACE with T***.

The next item on the list is the alarm ringing time. KeyPlan displays: "Alarm ringing time? 30 seconds."

This is the length of time an alarm sounds before it turns itself off. To change the value, type the required duration in seconds and press ***ENTER***. The value can be between 5 and 600. A number sign is optional.

The second item in the list is: "Alarm repeat period? 5 minutes."

This is the period of time for which an unacknowledged alarm will be silent before it sounds again. To change the value, type the required duration in minutes and press ***ENTER***. The value can be between 1 and 60.

9.10 Embossing and Printing.

Any part of the planner can be embossed or printed. This section refers to embossing, but the procedure for printing is the same.

To emboss part of the planner, first move to the KeyPlan menu, and then select: "Emboss planner." KeyPlan prompts: "Emboss or Setup Embosser?"

The Emboss option leads to a series of prompts to select the dates to emboss. The Set Up option allows the BrailleNote BT to be set-up to match your embosser. This is the same as the Set Up option presented when embossing a document and is described in 6.8 The Embosser Set-up List. If you have already set-up your BrailleNote BT for embossing documents, you do not need to set it up again.

Assuming that the embosser has already been set up, you may proceed to emboss part of the planner. Press ***E*** for Emboss, and KeySoft prompts: "Emboss from which date? Press ***ENTER*** for (date),"

You can accept the date suggested, or type a different date, or choose the starting date from the calendar that is being presented.

The next prompt is: "Emboss up to and including which date?."

Select a finishing date, or if you prefer, a length of time from the start date. When "Embosser ready?" is displayed, press ***Y*** and embossing begins. The default number of print or emboss copies is one.

If you want more than one copy, press ***N,*** and you are prompted for the number of copies. Enter a number, press ***ENTER,*** and you are placed at the "Embosser ready?" prompt again. Press ***Y*** and the embosser should start immediately.

Only dates with planner entries and the final date in the specified range will be embossed or printed, and each embossed or print page will show as many days as will fit.

End of Planner Chapter.

10 Address List.

KeyList is an address list manager. It allows you to enter addresses, phone numbers and other data against a person's name. You can review and edit the information, sort it, and copy it to KeyWord or KeyPlan. It is also possible to synchronize your Address List with an MS Outlook Contacts list – see 13.15 KeySync.

To enter the Address List from the Main Menu, use the ***SPACE*** and ***BACKSPACE*** keys to review the items in the menu, until "Address List" is displayed, and then press ***ENTER***. Alternatively, you can select the Address List from the Main Menu by pressing ***A***.

You can switch directly to the Address List from anywhere in KeySoft by pressing ***BACKSPACE with ENTER with A***. If you leave the Address List by switching directly to another application, such as the Word Processor, then pressing ***BACKSPACE with ENTER with A*** will return you to the same point in the Address List.

BrailleNote BT displays "KeyList Menu". This menu comprises 6 options as follows:

Add address.

Look up address.

Copy addresses.

Emboss addresses.

Print addresses.

Select KeyList file.

The following chapter describes these options. If you are using KeyList for the first time, the address list is empty until you have added some addresses.

10.1 Adding an Address.

This option allows you to enter contact details; last name, first name, and a list of other information. Each item of information, such as a phone number, is called a "field". Up to 25 fields can be associated with a last name to form a contact "record".

At the KeyList menu, select "Add address". KeyList displays: "Entry list for Address List".

Move to the first item in the list by pressing ***SPACE or ADVANCE***, and KeyList prompts you for a Last name. Type a last name and press ***ENTER***.

You are then prompted for text to enter into the following fields. For any field other than the last name field, you can enter text or skip the field by pressing ***SPACE***. The complete list of fields for an address record is as follows:

Last Name

First name

Middle Name

Title

Home Phone

Business Phone

Cell Phone

Home E-mail

Business E-mail

Home Fax

Business Fax

Street Address

Street Address Line 2

Street Address Line 3

City

State or County

Zip or Postcode

Home Country

Business Title

Company Name

Department

Business Street Address

Business Street Address Line 2

Business Street Address Line 3

Business City

Business State or County

Business Zip or Postcode

Business Country

Web Page

Notes

For each field, type the information and press ***ENTER***. You are then asked for the next field. When you come to the Notes field, press ***ENTER*** to select it. You can then write, edit or read the notes, and return to the list by pressing ***SPACE with E***.

In general, you can use your Preferred Braille Grade, as set up through the Options menu, for entering list items. However where your grade is not appropriate, KeyList assumes a lower grade. For example, for entering the "Zip or Post Code" field, grade 1 is assumed. E-mail addresses must be entered in Computer Braille. For details about entering e-mail addresses, refer to 10.1 Adding an Address.

Remember that names and addresses may be copied to a document at some stage, so it is good practice to use capital signs as appropriate. KeySoft will put one in if you don't.

If you enter a telephone number, a number sign isn't needed.

All fields except Last name are optional, so if you wish to skip a field, just press ***SPACE*** to move to the next one.

You can review the list by pressing ***BACKSPACE or BACK*** to move back, and ***SPACE or ADVANCE*** to move forward. When you are satisfied, add the new record by pressing ***SPACE with dots 2-6***.

KeyList displays, "Record added", and you are returned to the KeyList menu. If you wish to add another record, press ***A*** and repeat the previous procedure.

10.2 Looking Up an Address.

10.2.1 Searching by Surname.

At the KeyList menu, select "Lookup Address". KeyList displays: "Selection list for Address List".

Move to the first item in the list by pressing ***SPACE or ADVANCE***, and KeyList prompts: "Last name?"

You are being asked for data which is used to find matching records. We deal with a simple case, and return to more complex searches later.

For example, you may want to review the records of all people called "Smith". In this case, type "smith" at the last name prompt, and press ***ENTER***. The first name and last name of the first person in the address list called "Smith" is displayed. You can move through the list of "Smiths" by pressing ***SPACE with dots 5-6***. Each press displays his or her first name, followed by the last name, in this case "Smith". Only records which match the selection list are displayed. A beep indicates when there are no more matching last names.

To review the other fields in a particular record, press ***SPACE or ADVANCE*** repeatedly. Only fields containing an entry are displayed. The format of each item comprises the name of the field, such as "Company name", followed by the entry, such as "Yoyodyne Inc." The movement commands are as follows:

To move to the previous record: ***SPACE with dots 2-3 or PREVIOUS***.

To move to the next record: ***SPACE with dots 5-6***.

To move to the previous field: ***BACKSPACE or SPACE with dot 1 or BACK*** .

To move to the next field: ***SPACE or SPACE with dot 4 or ADVANCE*** .

To jump to any field: Press the first letter of the field name.

For example, ***H*** for Home phone number, Home e-mail address or Home fax number.

When reviewing using speech you can use the following commands:

To hear the current record: ***SPACE with dots 2-3-5-6***.

To read the next record: ***SPACE with dots 5-6***.

To read the previous record: ***SPACE with dots 2-3***.

To hear the next field: ***SPACE with dot 4***.

To hear the current field: ***SPACE with dots 1-4.***

To hear the previous field: ***SPACE with dot 1.***

To hear the next word: ***SPACE with dot 5***.

To hear the current word: ***SPACE with dots 2-5***

(Press twice to spell current word.)

To hear the previous word: ***SPACE with dot 2***.

When you have finished listening to a selection, you can return to the selection list by pressing ***SPACE with E***. You are asked for another Last name. If you have finished searching, you can return to the KeyList menu by pressing ***SPACE with E*** again.

10.2.2 Record Matching.

The information which you enter into the Lookup Selection List is used to find matching records. You may include as much or as little data in the List as you wish.

For example, when looking up a telephone number, you might specify just the person's last name. To start the search, press ***ENTER*** and the first person with that last name is displayed. If necessary, move through the other entries for that last name by pressing ***SPACE with dots 5-6***, until you locate the one with the required first name. Then press either ***H*** or ***B*** to move to the home phone number field or business phone number field.

You need only type the first few characters in a field rather than the whole field. For example, if you just type ***S*** in the Surname field, you are able to access the records of all people whose surnames begin with ***S***.

You can search for all people who work for a particular company. At the lookup selection list, don't specify a surname, but press ***SPACE*** repeatedly until the prompt: "Company name?" is displayed and then type the company name and press ***ENTER***. You can then use ***SPACE with dots 5-6*** to move through all the people who work for that company.

10.2.3 Wildcard search.

You can also search for a name fragment within a field, using the multi-character wild card for the unknown first part. For example, you may remember a company as: "Something and Fox, Incorporated". If you press ***SPACE with dots 3-5***, followed by "fox" in the company name field, you should have a very short list of records to review.

When setting up the Lookup Selection List, you can move forward and backward through the entries without changing their values. Press ***SPACE*** or ***BACKSPACE*** to do this. To change an entry, just type the required setting. When the Selection List is to your satisfaction, start the lookup by pressing ***ENTER*** and the first match is displayed.

For example, you may wish to display all entries in your address list with a last name of Smith that live in the city of Seattle. To do this type “Smith” in the last name field, then press ***SPACE*** until the City field is displayed. Type “Seattle”, and press ***ENTER***. All records matching your search criteria will be presented.

10.2.4 Clearing a Field.

Any fields used in a Lookup will be offered as a suggestion for the next search, unless you exit to the KeyList Menu between searches. You may want to blank out a previously-used field so it is not used in the next search. To do this, move to the required field using ***SPACE with O*** and press the Clear Field command, ***SPACE with dots 3-5-6***.

10.3 Changing a Field or Adding More Information.

First we will look at changing an existing field, as would be the case, for example, if you wished to change a person's phone number. From the "Lookup address" option, select the person's record you wish to modify, then move to the field to be changed. Press ***BACKSPACE with dots 2-5*** or ***BACKSPACE with dots 1-4***, and you are asked for a new entry for this field. There are three options here:

1. Type a new entry and press ***ENTER***.
2. Edit the old field which is offered as the suggestion, as described in 5.17 Editing at a Prompt.

3. Clear the field by pressing ***SPACE with dots 3-5-6***, followed by ***ENTER***.

This puts you in an entry list so you can modify or add to any other field as well. You have the same three options for all the fields and you can change any other field in the record.

The second scenario is where you wish to add an additional field to an existing record. From the "Lookup address" option, select the person's record you wish to add to, then press ***BACKSPACE with dots 2-5***. KeySoft will prompt: "Last name? Currently (name)."

Press ***ENTER*** to accept the name, then use ***SPACE*** to move through the list of fields until you hear the field you wish to add. Type in the required information and press ***ENTER***. When you are satisfied press ***SPACE with dots 2-6*** and the modified record will be stored.

10.4 Deleting a Record.

To delete a record, comprising a last name and all its associated fields, use the "Lookup" option. Move to any field in the record and press ***BACKSPACE with dots 2-3-5-6***.

You are prompted to make sure, so press ***Y***, and the record is deleted from the address list.

10.5 Duplicating a Record.

You may want to create a new record which is similar to an existing one. There is often less to type if you duplicate an existing record, and then make the required changes. You might do this, for example, if two people work for the same company and many of their details are the same. There is a useful function called "Retrieve last record", which can help here.

Assume that you have just added a new record for someone who works for a particular company, and you want to add another similar record for someone else. Select the Add Address option and when you get as far as the Last name prompt, select the Block Commands Menu by pressing ***SPACE with B***.

Note that this is a different menu to the Block Commands menu in KeyWord. Press ***SPACE*** and KeyList displays: "Retrieve last record".

KeyList is offering to retrieve the last record you added, so press ***ENTER***. KeyList prompts, "Last name? Currently Smith". You now have two identical records, so you should change the fields that are to be different, such as Last name, First Name, and Title. When you have made the changes, add the new record by pressing ***SPACE with dots 2-6***.

If you need to add other similar records, continue using the retrieve last record command as necessary. If you want to duplicate an old record, just look it up first, since the retrieve last record command retrieves the last record which was looked up, added or copied.

10.6 Inserting an Address into a Document.

You may wish to insert a name and address, from KeyList into a letter you are typing with KeyWord. This can be done in two steps as follows:

1. Copy the address to the clipboard.
2. Paste the clipboard into the document.

These steps are now described. Select KeyList and from the KeyList menu, press ***L*** for Lookup, and locate the person's address. At any field in this record, select the Block Commands Menu by pressing ***SPACE with B***. There is only one item in this menu, and if you press ***SPACE*** the following message is displayed, "Copy record to clip board". This is the action you require, so press ***ENTER***.

KeyList then prompts, "Template name?" for the name of the template that determines which fields in the record should be copied, and in which order. You can create your own templates as described later. For the moment, select an existing one by pressing ***SPACE*** repeatedly until "Letterhead template" is displayed and press ***ENTER***.

The record which you just looked up is copied to the clipboard. KeyList displays, "Record copied to clipboard", and you are returned to your place in the record. The fields which have been copied to the clipboard are formatted in a letterhead style.

Now use KeyWord to create the letter which requires an address. Place the cursor where you want the address to be inserted and paste the clipboard by pressing ***SPACE with B, then P***. If you review this document, you will find the selected person's name and address in a letterhead layout.

10.7 Embossing Addresses.

You may want to emboss a name and address or phone number, or a selection of them. From the KeyList menu select "Emboss addresses". KeySoft prompts: "Emboss or Set up embosser?"

If you haven't previously set up the embosser, press ***S***. The set up procedure is covered in 6.8 The Embosser Set-up List.

To proceed with embossing, press ***E***, and KeySoft prompts: "Template name"?

10.7.1 Templates for Embossing.

An address record is a series of fields, whereas an embossed page must have a specific format. So, to emboss address records, you must specify which fields you want to emboss, and how they should be arranged. This is defined by a template, which is a KeyWord document laid out with the required field names in the required arrangement. A template may also contain text and formatting information.

There are two main template categories, namely Braille templates and text templates. To emboss addresses from the address list, you would use a Braille template. Conversely to print addresses from the address list, you would use a Text template. The convention used for naming templates, places the word "Braille" in front of the Braille templates.

KeySoft is provided with several ready-made Braille and Text templates for copying, embossing or printing. There is a "Letterhead template", which produces a letter heading in the form:

Line 1: (first name)***space***(last name).

Line 2: (street address).

Line 3: (street address, line 2).

Line 4: (city)***comma***(state)(zip or postal code).

Another ready-made template is called, "Phone List template", and produces a single line for each record in the form:

(last name)***space***(first name)

Tab: (street address)space(street address, line 2)

Tab: (city)

Tab: (business phone number).

A new line is then created.

Select a template for your purpose. If there is no template which suits what you want to do, you can modify or create a template as described in 10.9 Templates.

10.7.2 Selecting Addresses to Emboss.

After you have selected the template, KeyList displays, "Selection list for Address List". If you want to emboss every record, press ***ENTER***. However, you can select just those addresses you want to emboss. For example, you might type "Yoyodyne Inc." in the "Company name" field. When you have set up the required search field, or fields, start the lookup by pressing ***ENTER***. KeyList displays the number of selected records, and prompts, "Emboss all selected records?" To do this, press ***Y***. All the selected addresses are embossed, and you are returned to the KeyList menu.

Alternatively, you have a further opportunity to choose from the selected addresses. To do this, press ***N***, and you are presented with the first matching record. If you wish to emboss this record, press ***ENTER*** and this record is embossed. If you do not want to emboss this record, scan the list, and press ***ENTER*** for each record that you do wish to include.

10.8 Printing Addresses.

The procedure for printing an address list, or a selection of it, is very similar to embossing. From the KeyList menu, select "Print addresses". KeySoft prompts: "Print or Set up printer?."

If you haven't already set up the printer, press ***S***. The set up procedure is covered in 6.11 The Printer Set-Up List. To proceed with printing, press ***P***, and follow the prompts to select a template and choose which address records to print.

10.9 Templates.

Templates are used for copying, embossing and printing. You can use the templates as they are supplied, or you can modify them, or create new ones. The procedure for creating a new template is described.

10.9.1 Braille and Text Templates.

It is important to note that a template can be either a Braille or a text document, and the right one must be used for the purpose. If you want to emboss a Braille document, or insert into a Braille document, then a Braille template is required. Conversely, if you want to print, or insert into a text document, then a text template is needed.

10.9.2 Creating a Template.

Suppose that you wish to copy records from an address list into some business letters. You might want a template which puts your own address at the head of the letter, followed by the date, and then the recipient's name and address. We will assume that the letters will be Braille documents, which could be printed later. In this case you will need a Braille template.

From the KeyWord menu, press ***C*** to create a new document. At the "Folder name?" prompt, select "KeyList", which is the folder where templates are kept. At the prompt: "Document to create?" type a suitable name such as: "Business template". Unless you specify otherwise a Braille template is created. If you had wanted a text template, press ***SPACE with X*** at the prompt for "Document to create?" until "Create a text document" is displayed.

Now compose this document in the way you want the record to be formatted. The layout is for a business letter, so first type your own address, followed by a blank line.

Next, insert the date by pressing ***SPACE with O***, followed by ***I***, then ***D***. KeySoft prompts, "Insert today's date or printing date?" Select the Printing Date option by pressing ***P***. This causes the date to be updated each time you use the template to emboss or print Address List records. The Today's Date option inserts today's actual date, that is the date you created the template document.

The text you have typed so far will be reproduced each time you use this template. Now we want to copy a recipient's first name from the address list. Place the cursor where you want the name to go, and select the list of available field names as follows:

Select the Template menu by pressing ***BACKSPACE with ENTER with dots 2-3-4-6***, and then select the Insert Field option.

KeySoft prompts, "Insert field from which database?" Select "KeyList's Address list" by pressing ***A***. You are then presented with the "Field selection list". This is a list of all the field names in an address list. Press ***SPACE*** or ***BACKSPACE*** repeatedly to review this list and find the field you want, which in this case is: "First name." Press ***ENTER*** to select it. You are returned to the document, a "First name field" marker is inserted, and the cursor is placed just after it. Now when a record is copied into a document using this template, a person's First Name appears in the marked position.

To put a space after the first name, press ***SPACE***. To include the last name next, follow the same procedure which you used to select the first name, but select the "Last name" field instead. This places a "Last name field" marker after the space.

Start a new line by pressing ***ENTER***, and continue to compose the recipient's address, using field names from the list. A template may include whatever punctuation, formatting commands or text that you wish, and these are included with the fields that are specified by the template. The field indicator is shown on the Braille display as $fld followed by the field name.

Other layout rules to remember are:

1. When using a template, KeyList filters out lines which only contain blank fields. For example, the original record may have a blank "Country" field. If your template contains a "Country" field name on a line by itself, a blank line will not be generated.
2. If you want a blank line to be generated when it contains only blank fields, start the line in the template with a marker to indicate "Force Inclusion of Line", by pressing ***BACKSPACE with ENTER with dots 2-3-4-6***, then ***F***.
3. Part of a line in a template can be marked with suppression markers. If the field or fields between the markers are blank, everything between the markers is suppressed when the template is used. To insert these markers, press ***BACKSPACE with ENTER with dots 2-3-4-6***, for the Template menu, and choose Start or End Conditional Suppression. For an example of the use of suppression markers, see the "Letterhead Template" in the KeyList folder.
4. To put a comment line in a template, start the line with a comment marker. To do this, press ***BACKSPACE with ENTER with dots 2-3-4-6*** for the Template menu, and choose: "Mark comment line". The contents of the comment line are not included when the template is used.
5. Records can be printed to fill the page, in a layout suitable for a phone list. Alternatively, they can be printed one per page, to suit envelopes and form letters. In the latter case, a "New Page" marker is required at the end of the template.

When you have finished the template, you can review it as you would review any other KeyWord document. Markers are spoken with character or word review commands.

In the template, fields appears to have a particular length, but the actual field lengths are substituted when you use the template. For example, the "First name" field appears to be 13 characters long in the template, but only 4 characters result if the address list field contains the name "John".

If you create a new template or modify an existing one, you should check the resulting layout to ensure that it is what you intended. You can do this by copying a record into the clipboard, using the new template, and pasting the clipboard into a blank document. You can then review the layout.

10.10 Copying Addresses.

KeyList allows you to copy a sub-set of the address list, such as all people who work for Fox Corporation, into a chosen file. At the KeyList menu select "Copy addresses". KeyList displays: "Copy addresses to a document or an address list?"

You have the option of copying the addresses to a KeyWord document, or to another address list file used by KeyList or KeyMail.

10.10.1 Copying to a Text or Braille Document.

To copy to a document, press ***D***, and you hear prompts for a destination folder name and document name. Select an existing Braille or text document, or create a new one.

When you have entered the destination document name, you are prompted, "Template name?" This determines the fields to be copied and their format on the page. The offered template is either a Braille or a text document, to match the type of destination document you have chosen. To accept the suggested template, press ***ENTER***, or press ***SPACE*** repeatedly to review the list of available templates, and choose one by pressing ***ENTER***.

You are then placed in the KeyList Lookup function, at the prompt: "Selection list for Address Notebook". If you want to copy every record, press ***ENTER***. However, you also have the opportunity to select just those addresses you want to copy, if they have something in common. For example, in the "Organization" field you might type "Fox Corporation." When you have set up the required search field or fields, start the lookup by pressing ***ENTER***. KeyList displays the number of selected records, and prompts, "Copy all selected records?" To do this, press ***Y***.

All the selected records are copied to the destination document, and you are returned to the KeyList menu. Alternatively, you have a further opportunity to choose from the selected addresses. To do this, press ***N***, and you are presented with the first matching record. If you press ***ENTER*** this record is added to the document. If you do not want to include this record, use ***SPACE with dots 5-6*** to scan the list, and press ***ENTER*** for each record you wish to include.

10.10.2 Copying to an Address List File.

You can also copy addresses to another address list file, rather than to a document as just described. At the KeyList menu select "Copy addresses". Your BrailleNote BT prompts: "Copy addresses to a document or an address list?"

To copy to an address list file, press ***A***, and your BrailleNote BT prompts for a destination folder name and file name**.** Select an existing address list. If you need to select a different drive or folder, press ***BACKSPACE***.

There are now two possibilities; either the source and the destination files have the same number of fields and the same field names, or there are differences.

The first case applies when you are copying records to a file with an identical structure to the source file. KeySoft advises, "All fields match. Review field mapping list?" You would normally press ***N*** here, and you are placed at the Selection List, from where you may select the required records, as described in the previous section about copying to a document.

Alternatively, if the source and destination structures are different, KeySoft tells you how many field names match, and queries, "Review field mapping list?" If you press ***N*** at this point, KeySoft copies only those fields which have matching field names in the destination file.

However, if you want to specify how each field in the source file is mapped to the destination file, press ***Y***. KeySoft presents a "Field Mapping List" containing pairs of field names. The first of each pair is a field name from the source file, and the second is a matching field name in the destination file, if a match exists. To change a mapping, review the field mapping list by pressing ***SPACE*** or ***BACKSPACE*** repeatedly and select a source field name by pressing ***ENTER***. You are presented with a field selection list containing all the field names in a destination record. Review this list and pick the corresponding field name by pressing ***ENTER***. You can then continue to review the field mapping list, making changes as required. To prevent a field being copied, use the Clear Field command, ***SPACE with dots 3-5-6***, when the field name is displayed. When the field mapping list is to your satisfaction, press ***SPACE with E*** and you can proceed to select the required records to copy, as described previously.

10.11 Selecting an Address List.

KeySoft is installed with a blank address file called: "Address List". Its name is displayed when you select, "Add address", or "Lookup address". However there is no reason why you can't have multiple address lists, instead of one, and use them for other purposes than storing addresses. You should read the following section on Creating an Address List before proceeding.

To select a different address list, or to verify which address list is currently selected, select the "Select KeyList file" option in the KeyList Menu. You are prompted for a folder and file name. Select the folder and file in any of the usual ways. The selected file remains current until deliberately changed. If the file selected is not of the Address List type then you are prompted to verify the selection when you enter KeyList.

10.12 Creating an Address List.

Each address list has an associated KeyList definition file that defines the fields that are contained in an address record. The definition file for the standard "Address List" may be found in the KeyList folder and is named "Address List.klt".

When you first enter details into the Address List, an associated database volume is created within the "Keylist.cdb" file that is stored in the KeyList folder on the Flash Disk. The entries you place in the Address List are stored within this database file.

We recommend caution in working with database definition files. If you think that you have the necessary skills and wish to experiment with creating your own variant of the "Address List", we suggest that you first make a copy of the existing Address List definitions file and that you modify this copied file. In this way you will always have the original Address List definition file intact.

From the File Manager, copy the file named "Address List" from the KeyList folder on the Flash Disk to the General folder on the Flash Disk.

Use Keyword to open the Address List file you have copied into the General Folder. We suggest you set KeyWord to line reading mode, by pressing ***SPACE with M*** until "line reading mode" is displayed.

We'll now consider the task of modifying this file so that the associated database is named "Phone List", and the definition file only contains fields for "Last Name", "First name", and "Phone". Now, let's take a closer look at the original address list definitions file that we have just opened.

You will find that the file contains some 33 lines of information. The syntax of each line determines its function.

The first line of the file contains the word "database", followed by the words "Address List". We want to create a definition file called "Phone List", so replace "Address List" with "Phone List", leaving the word "database" at the start of the line.

The second line contains the number "24". Leave this unchanged.

The next 27 lines define each field as it appears in the Address List. Each line starts with a unique number, but the order in which the fields appear in the database is determined by their relative line position, not the number used to identify the line.

Delete the lines starting with "16420" and "16419". These lines represent the fields "Middle Name" and "Title" in the original definition file.

Position the cursor at the start of the line numbered "14856" and place a "Top of Block" marker. Next position the cursor to the start of the line numbered "24594", enter the Block Menu and select "Delete Block".

You should now be left with a file that contains 9 lines. Modify the line starting with "14857" so that the text between the quotes is "Phone" rather than the original "Home phone number". It is important that the word "Phone" is placed inside quotation marks.

The final form of your modified file should be:

database Phone List

24

14865, name, autocap, "Last name"

14854, name autocap, "First name"

14857, phone, autonum, "Phone"

24594, concat, "14865, 14854"

24595, concat, "14854, 14865"

announcement order 14854, 14865

sort order 24594, 24595

Once you are happy with the contents of the modified file, exit the file, and from the File Command Menu, rename it to "Phone List". Ignore the message that there is no database associated with the file. Copy the "Phone List" definition file back into the KeyList folder.

All you have to do now is go to the Address List menu and select the "Phone List" file as your address file. You can then add entries to your new phone list. When you first try to add an entry to the phone list, you will be asked to confirm the creation of the associated database within the "Keylist.cdb" file.

10.13 Using KeyList to Manipulate Databases.

KeyList is not restricted to looking up or adding to an address list. It can also be used to manipulate any of the databases in the KeyList folder. To do this, select the folder and name of the required database using the "Select KeyList file" option in the KeyList menu as described in 10.11 Selecting an Address List.

You can now use KeyList to Lookup or Add to the selected database in the usual way, as if it were an address list.

When you have finished reviewing or updating a database, remember to re-select the Address List in the KeyList folder for future use.

Refer to the Database Manager chapter for information on setting up a database and how to free database space.

End of Address List Chapter.

11 E-mail.

This chapter introduces KeyMail, the BrailleNote mPower BT's user-friendly e-mail package that lets you send, receive and manage your e-mail.

If you are new to the world of electronic telecommunications you may wonder what e-mail is. That is, apart from being short for electronic mail. Essentially e-mail is just the electronic equivalent of paper mail, but it is faster and cheaper than ordinary mail. It takes minutes or hours rather than days to reach its destination even when the destination is on the other side of the world.

In order to send and receive e-mail, computers need to have a set of rules, or protocol, which determines how the information is sent. BrailleNote BT's e-mail program, KeyMail, uses the popular POP (Post Office Protocol) e-mail format. This protocol has become the "industry standard" which ensures easy connection to the majority of Internet Service Providers.

We commence this chapter by describing, in general terms, what KeyMail can do. We then take an overview of the KeyMail package, and follow this with getting started with KeyMail from a first time perspective. Following this is a fuller description of KeyMail and its component parts.

11.1 What Can KeyMail Do.

The KeyMail e-mail program enables you to access mainstream e-mail services and communicate with e-mail users worldwide.

KeyMail provides you with the following capabilities:

KeyMail enables you to communicate with people using many different popular e-mail programs like Microsoft Outlook or Outlook Express, Eudora, and Lotus cc:Mail.

KeyMail guides you through the steps of addressing and composing an e-mail message, connecting to an e-mail service provider, sending e-mail and receiving e-mail.

KeyMail helps you organize your e-mail messages so you can find them easily using electronic folders, and it enables you to set up your preferred e-mail options.

KeyMail handles attachments to e-mail. It understands Microsoft Word document formats so you can read Word documents attached to your e-mail. You can also attach files of any format to your out-going e-mail.

KeyMail eliminates the routine task of appending your name and e-mail address, and facilitates responding to an e-mail message. Replying to a message automatically creates a new message with the address and subject line filled in, and the message area contains the text of the original message.

With a range of connectivity configurations available and the KeyMail software, BrailleNote BT provides everything you need to join the connected world of e-mail.

11.2 KeyMail Menu.

You can access KeyMail by typing ***E*** from the Main Menu, or by pressing ***BACKSPACE with ENTER with E***. This takes you to the KeyMail Menu, which contains 4 items. These are:

Write an e-mail;

Read e-mail;

Connect to send and receive e-mail;

Set up options.

11.2.1 Write E-mail.

Choose "Write an e-mail" when you wish to send a new message to one or more people. You can enter their e-mail addresses manually, or more conveniently, choose them from your KeyList address list. KeyMail steps you painlessly through the various options that include the following items:

main recipient or recipients;

carbon copy recipient or recipients;

blind carbon copy recipient or recipients;

subject; and,

whether you wish to send any file attachments.

You can then create, review, spell check, and edit the text of your e-mail message using the same friendly commands used in KeyWord. At this point you may choose to send your e-mail, with or without saving a copy, or save it as a Draft, so that you can return to it at a later time.

You may also emboss or print a copy of your e-mail.

11.2.2 Reading E-mail.

To read e-mail stored on your system, choose "Read E-mail." You can check for new messages before you start, or read messages stored from previous sessions. KeyMail uses a series of folders to organize your mail, and you can add folders of your own to streamline the filing of your mail. KeyMail guides you through selecting the desired folder, and provides tools for replying to and forwarding e-mail, with and without the original text and/or attachments included.

E-mails can be marked for further action, such as moving or copying to another folder, or sending to the Trash folder.

11.2.3 Checking for E-mail.

To check for new e-mail, choose "Connect to send and receive e-mail." KeyMail prompts you through the necessary steps, and provides feedback about the status of the connection and mail download. If you have any unsent mail, it is also sent at this time.

11.2.4 Setup Options.

The purpose of the "Set up options" is to define the details of your e-mail accounts. You can set up as many accounts as you wish. Using the Receive options you can choose not to delete messages from your service provider after they have been downloaded, leaving them available to be downloaded to another computer. A size limit can also be set on e-mails to be downloaded, and if exceeded, an alert will be given. The Address list set up allows you to define which address list to use, if you have more than one, and to tell it your own name and e-mail address so these can be included in e-mail you send.

Each of the Set up Options is detailed in 11.10 Setup Options.

Setting up access to the internet itself is handled separately. For more information, refer to 13.3 The Connectivity Menu.

11.2.5 Disconnecting.

When KeyMail connects in order to send or receive e-mail, at the end of the process it will prompt: "Remain connected?" At this point you can press ***Y*** to stay connected to the internet, or ***N*** to disconnect. The reason you have this choice is because you may wish to do other e-mail activities, or switch to KeyWeb, during the same session. When you choose to remain connected, KeySoft returns to the Main Menu. When you disconnect, KeySoft returns to the KeyMail Menu.

11.3 Before You Start.

Before you can send and receive e-mail, you need to set up an e-mail account with an Internet Service Provider, or ISP for short. If you already have an e-mail account, you can configure KeyMail to work with it in most cases. For those unfamiliar with Internet Service Providers, your ISP can be thought of as providing a similar service to telephone banking, only instead of shuffling money, your ISP handles your e-mail.

First you have to choose a Service Provider (ISP) and establish with them what your e-mail address and log on password will be, and the address of their send and receive mail boxes. A typical example of these various items may be:

User Name: Murray_Thorn;

Password: Cheeky;

Pop Server address: pop.clear.net.nz;

SMTP Server address: smtp.clear.net.nz.

In some cases you may require other information such as a DNS address. Either ask your Service Provider for details on setting up a Windows CE machine, or contact your BrailleNote BT dealer.

If using a dial-up connection, you will also require a telephone number from them. Some Service Providers also require a User Name and Password for the initial connection, as well as those required to access your actual E-Mail account.

Some people have e-mail accounts with separate providers, but may only access them using one ISP connection to the Internet. Others may have several accounts and several different ways to get connected. Others will have just one e-mail account through one ISP. This chapter covers the setting up of an e-mail account and the handling of e-mail. For information on how to set up the connection to the internet, refer to the Connectivity Chapter.

11.4 Correcting Input Errors.

Unless you are extremely accurate, it is highly likely that you will input an incorrect keystroke or two while you are filling in the various details. KeySoft has a number of editing and review commands that make it easy to correct such problems. Get into the habit of frequently using KeySoft Help, ***SPACE with H.*** It often provides a valuable source of information relevant to what you are trying to do.

If you notice a mistake while typing in, use ***BACKSPACE*** to take out the last character. To review an e-mail address, you can display it by pressing ***SPACE with dots 2-5***. Pressing this combination again causes the address to be spelt. You can move forwards and back through an entry using ***SPACE with dot 3*** or ***SPACE with dot 6***.

Alternatively, you can locate the character you wish to position the cursor at on the Braille Display, and press the Touch Cursor associated with that cell to route the cursor to that character.

Some fields require you to use Computer Braille, so you need to be aware of the default Computer Braille settings. The **@** sign used in e-mail addresses is a case in point. For 6 dot US Computer Braille the **@** sign is generated by pressing ***SPACE with U***, followed by ***dot 4***. For 6 dot United Kingdom Computer Braille the **@** sign is generated by pressing ***SPACE with U***, followed by ***dots 2-3-4-6.***

11.5 Writing an E-mail Message.

KeyMail provides most of the important functions of the popular e-mail programs available today. If you have used any of these programs you have a head start because you already understand what you are doing. KeyMail guides you through the process of addressing, writing an e-mail message and attaching files to e-mail.

There is some essential detail that you must provide, like who you want to send the e-mail to, but there is also much detail that is optional. The following discussion guides you through all of the available options.

When addressing e-mail using KeyMail you may select addresses from an address list. KeyMail provides a way of setting up your own personal address details that are used specifically by KeyMail. This information is needed so that KeyMail can add your details to your out-going e-mail. Then your e-mail correspondents have a return address for their reply.

Remember that if you need help with your available options at any point, press ***SPACE with H***.

1. From anywhere in KeySoft, press ***BACKSPACE with ENTER with E***, or go to the Main Menu and press ***E***. From the KeyMail menu, select "Write an E-mail."

2. KeySoft prompts: "Send to?." Type in the address and press ***ENTER***. Or, if the address you want to use is in your address book, press the first few letters, or the whole name, of the person you want to send the e-mail to and press ***ENTER***. KeySoft looks for entries in the address list with matching first names. If it finds a match, it displays the first name and surname of the matching record. KeySoft continues at Step 3.

   If two or more records are found, it reports "X records selected." where X is the number of records, and queries "Send to all selected addresses?." If yes, press ***Y***. KeySoft continues at Step 4.

   If you don't want to send to all of them, press ***N***. KeySoft confirms "No" and displays the first name and surname of the first matching record. To send to this person, press ***ENTER***. To skip this person and go to the next, press ***SPACE with dots 5-6,*** and so on until KeySoft displays your choice, then press ***ENTER***. KeySoft will confirm your selection with the message: "Address added."

   If KeySoft fails to find a match, it reports "Cannot find name in the address list," where "name" is the name you typed. You can edit the name and try again.

   A person may have more than one e-mail address, in which case you get to choose which address to use.

   Other options available when entering an e-mail address are:

Type in the e-mail address, rather than the person's name.

Look up the person in the address list by pressing ***BACKSPACE with L***. This takes you to the selection list for the Address List.

3. KeySoft now prompts, "Also send to?" The same options as are discussed in step 2 are available. To skip adding another address here, press ***ENTER***.
4. A prompt: "Copy to?" is displayed. Type a name as discussed in step 2 or press ***ENTER*** to skip.
5. A prompt: "Blind copy to?" is displayed. Again you can type a name as discussed in step 2 or press ***ENTER*** to skip.

   You may be wondering what blind copy is?. It is a copy of an e-mail that is sent without being marked with all "send to" and "copy to" addresses. Consequently the recipient does not know that anyone else has been sent a copy.
6. KeySoft prompts: Subject?". Type a word or phrase that encapsulates the topic of your e-mail and press ***ENTER***. You can quickly move to the Subject field from any of the previous field by pressing ***SPACE with dots 5-6***. This saves you having to "pass through" all the intervening fields if you do not wish to enter any addresses.
7. KeySoft then queries "Attach a file to this e-mail?." If no press ***ENTER*** or press ***N*** and KeySoft continues at the next step. If yes please refer to section 11.7 Attaching a file to an e-mail.
8. The prompts "E-mail message," "Top of document" and "Blank" are presented. You are placed at the top of a new document in KeyWord where you can type, review and edit your e-mail message. When you are happy with it, press ***SPACE with E*** to exit KeyWord.
9. Now the prompt "Ready to send this e-mail?" is displayed. If not press ***N*** and you will be returned to the "send to" prompt. You may review the details you previously entered by pressing ***SPACE***. If you are ready to send the e-mail, press ***Y***. KeySoft now prompts "Save a copy?" Press ***N*** to send the e-mail without retaining a copy. Press ***Y*** to send the e-mail and to save a copy of the e-mail message. KeySoft queries which folder to use. Select the folder from existing ones or create a new folder in the usual way. KeySoft returns to the KeyMail menu.

   There are 4 other options available at the "Ready to send this e-mail?" prompt:

   To save the e-mail as a Draft, press ***D***. This saves the e-mail in the "Draft" folder, where it can be retrieved at a later time.

   To Print, press ***P***.

   To Emboss, press ***E***.

To abandon this e-mail without sending, press ***SPACE with E***.

KeySoft saves your outgoing e-mail in a special folder, called the "Outbox." When you exit the KeyMail menu, KeySoft will prompt if there are any un-sent messages in the Outbox, and ask if you want to send them. Pressing ***N*** leaves the e-mail in the Outbox to be sent at some other time. If you press ***Y*** KeySoft will prompt for an e-mail account and connection configuration, and send the e-mail. KeySoft does not check for newly received e-mail at this time.

If you know that you have e-mail to send and also wish to check for new received e-mail, choose the "Connect to send and receive e-mail" option on the KeyMail menu.

Note: If you receive a message that has multiple recipients and you only want to reply to one of them, follow these steps:

1. Select the e-mail you wish to reply to (but leave it closed).
2. Move to the address of the person you want to sent a reply to and press ***BACKSPACE with K***.
3. KeyMail will display: "copied to clipboard".
4. To add the address into the To: field of a new message, press ***BACKSPACE with V***.
5. Fill in the Subject field and write your message.

11.6 Email Signatures.

You have the option of automatically adding your own customized signature to an email. Your signature can include any information, such as your name, initials, contact details, or even a meaningful quotation!

The email signature that is added to the end of a new message comes from a document that you create and name, 'signature'. Likewise, an email signature that appears at the end of an email message that you reply to or forward, originates from a document that you create and name, 'reply signature'.

The contents of the 'signature' and 'reply signature' documents, can be exactly the same or be different in whatever way you like, depending on your requirements. For instance, in new emails, you may want to include your full contact details whereas in emails that you reply to or forward you might need to include just your name and work phone number.

Follow these steps to create email signatures:

1. Go into the Word Processor and select the KeyMail folder from the Flash Disk.
2. Create the 'signature' and 'reply signature' documents.
3. Type your signature and be sure to format it the way you want it to appear in your email message.

Once you begin to write, reply or forward an email, you will notice that your new signature has been automatically added to the end of the email. This signature can be personalized for the individual email by simply editing it at this point.

11.7 Attaching a file to an e-mail.

To attach a file to an e-mail, follow these steps.

1. When KeySoft queries "Attach a file to this e-mail?" press ***Y***. KeySoft displays "Folder name? General."

   Select a drive, folder, and file in the usual way.
2. You are now asked "File to attach?" Press ***SPACE*** to access the file list. KeySoft prompts "List of all files in (folder name) folder." Review the list and select the file you want.
3. KeySoft now queries whether you want to attach the file in its current format. For example, KeySoft might query "Attach this KeyWord document in a different file type?" If you press ***Y*** for Yes, KeySoft queries, "Attach as which file type? Microsoft Word file?" Press ***ENTER*** to accept this option. To choose a different file type, press ***SPACE with dots 3-4***. The available file types are: Microsoft Word, ASCII text, Plain Braille file, Rich Text Format (RTF), WordPerfect 5.1, and same file type as the source.
4. KeySoft now prompts, "Attach another file?" You can now attach another file by typing ***Y*** for yes. KeySoft continues at the beginning of this step.
5. When you have finished attaching files, press ***N***. Continue with the e-mail writing procedure.

Note: When sending a document as an attachment, it pays to consider the reading equipment available to the recipient. For example, a plain Braille file is no use to someone without a Braille reading device. Remember also that you can attach files off the Network, even those whose file type is incompatible with the BrailleNote BT.

11.8 Read E-mail.

The "Read E-Mail" option on the KeyMail menu is likely to be the most frequently used feature of the BrailleNote BT's e-mail system. Using this option you can download new e-mail, read e-mail stored in the KeyMail filing system, including those sent by yourself, organize your e-mail into folders, and send unwanted e-mail to the trash folder.

KeyMail guides you through processes such as reading or detaching e-mail file attachments and moving or copying e-mail to other folders. It provides options for replying to, and forwarding e-mail. KeyMail allows you to perform these options one at a time, or you can mark individual e-mail for later action.

Next we discuss the philosophy behind KeyMail's "Read E-mail" design, then we take a detailed look at each of the available features.

11.8.1 E-mail Folders.

KeyMail organizes your messages by sorting them into folders. These folders are located within the KeyMail system, and are not part of the normal folder structure of KeySoft. Initially, KeyMail provides 8 internal folders. These are My E-mail, Inbox, Outbox, Sent, Received, All, Draft and Trash. It is highly recommended that you create at least 2 folders of your own. Your folders could simply be called "Mail In" and "Mail out."

Incoming mail is automatically placed in the Inbox. When you have read an e-mail, KeyMail will prompt you to move the e-mail to another folder. This folder must be one that you have created, or the "Trash" or "My E-mail" folder, and could for example be your "Mail In" folder. Items moved from the Inbox also appear in the Received folder. A link to this e-mail also appears in the All folder. It is important to understand that if an e-mail stays in the Inbox, it does not appear in either the Received or All folders.

The Outbox stores your outgoing e-mail messages until they have been sent. At the point where you are about to send your e-mail message, KeyMail asks if you wish to save a copy. If you answer yes, you are prompted for the folder into which to save the e-mail. Again, this must be a folder you have created, and could be your "Mail out" or "My E-mail" folder. E-mail saved in a folder prior to sending will also appear in the Sent folder. A link to this e-mail is also placed in the All folder. It is important to realize that sent e-mails only appear in the Sent and All folders if you have saved them to one of your folders.

The Drafts folder is used to hold messages that have been started, but are not ready to be sent, and the Trash folder stores any e-mails deleted from the system.

New mail is automatically placed in the Inbox and is stored in the order it is received. If you choose to read the Inbox, KeyMail asks whether you wish to check for new mail before placing you in the Inbox at the last item received.

KeyMail encourages you to organize your e-mail as you read. Once a message has been read from the Inbox, you are prompted to move the message from the Inbox to another folder. In this way you keep the number of items in your Inbox to a manageable number, and you are able to organize your e-mail under useful categories. E-mail within a folder can be marked, either on an individual basis, or alternatively all items can be marked. This handy feature allows you to move, copy, delete, print or emboss marked e-mails as a group without having to repeat the procedure for each e-mail.

Reading or detaching file attachments received with e-mail is easy with KeyMail. Document attachments can be read without detaching, or they may be detached and saved in the normal KeySoft folders so that they can be accessed from KeyWord.

The "E-mail Action Menu" can be invoked from within any KeyMail folder, or while reading an e-mail, and provides tools for replying to e-mail, forwarding an e-mail to another person or group of people, moving, copying, deleting, printing and embossing.

11.8.2 Receiving incoming E-mail.

The following steps are required to read your incoming e-mail.

1. Select KeyMail by pressing ***BACKSPACE with ENTER with E***.
2. KeySoft displays "KeyMail Menu." Select "Read E-mail" from the KeyMail menu.
3. KeySoft prompts "Connect using which configuration? Press ***ENTER*** for (name)." where (name) is the name of a connection configuration you have set up in the Connectivity menu. To use the offered configuration, just press ***ENTER***. If the correct configuration was not prompted, press ***SPACE*** repeatedly to find the required configuration. When you have found it, press ***ENTER***.
4. KeySoft prompts: "Use which e-mail account? Press ***ENTER*** for (account)" To select the offered e-mail account, press ***ENTER***, otherwise press ***SPACE*** repeatedly to find the required account. When you have found it, press ***ENTER***.

   Note: If you typically use the same e-mail account and the same connection configuration every time, you can simply cut these two prompts short by pressing ***ENTER***, because the offered option is always the last option used.
5. If using a dial-up modem to access your e-mail, read this. If not, skip to the next step. KeySoft displays the message "dialing," and you should hear the dialing process followed by whistling noises as your modem connects with the modem at your Service Provider. Before the sequence of messages listed in the next step, you will first hear these:

   Dialing;

   Connected;

   Logging On;

   Logon Successful;

   Connected;

   ...and at the end of the sequence below, you will get this message:

Remain connected to the modem? (Press Y or N)

6. KeySoft reports the progress of the mail checking sequence by displaying the appropriate message as each significant stage of the operation is completed. The typical sequence of messages, assuming you have one new message to receive and no outgoing e-mail to send, is:

   There is 1 e-mail on Server;

   Checking for new messages;

   There is 1 new e-mail;

   Receiving 1;

   There is no e-mail to send.

11.8.3 Reading New E-Mail.

When new e-mail appears in the Inbox, you will be presented with the first new e-mail to read:

1. To review the fields associated with the E-mail press ***SPACE*** to advance through the fields, or ***BACKSPACE*** to move back through the fields.

   Each e-mail entry in a folder consists of a number of fields, depending on whether the e-mail has any attachments, and how many there are. The first field presented is the Subject, followed by the sender. Next the date and time the message was received is given, followed by a field for each attachment, if they are present. Finally, a list of whom the e-mail was to be copied to, followed by the date and time the message was sent in the time zone it was sent from.

   File attachments are discussed in 11.8.5 Received Attachments.

2. To read the e-mail, press ***ENTER*** at any field other than an attachment field.

3. KeySoft prompts "Top of Document," and you are placed at the top of the e-mail message. Use the normal KeyWord commands to read and review the message. When you have finished reading, press ***SPACE with E*** to exit the document.

4. KeySoft prompts "Move this e-mail to which folder?." To hear the existing options, press ***SPACE***. These are Trash and My E-mail. You can create a new folder by typing its name and pressing ***Y*** at the prompt. KeySoft will advise that one e-mail has been moved. If you want to leave the e-mail in the Inbox press ***SPACE with E***. You are then returned to the Inbox, where you can review and read your next e-mail.

The following section provides instructions on how to move around the e-mail within the "Inbox," or any folder. discusses Folder Management, folders you have created, and how you may either rename or delete them from the KeyMail folder system.

11.8.4 Reviewing E-mail.

When you enter any folder, the focus is on the last item entered in that folder. You can move up and down the items in a folder, and read the key fields associated with each item. If desired, you can also read the e-mail message, and if present, any attachment.

KeyMail provides the following commands to review e-mail within a folder:

To read the selected e-mail, press ***ENTER***.

To exit the e-mail message, press ***SPACE with E***.

To move to the next field, press ***SPACE***.

To move back to the previous field, press ***BACKSPACE***.

To move to the next e-mail, press ***SPACE with dots 5-6***.

To move back to the previous e-mail, press ***SPACE with dots 2-3***.

To move this e-mail to the trash folder, press ***BACKSPACE with dots 2-3-5-6***.

To mark an e-mail for further action, press ***SPACE with M***.

To search for a subject, name or contents, press ***SPACE with F***, then ***S***, or ***N*** or ***C***; remember that you can add spaces to a search string by using the binding space command. It is shown as $bsp on the Braille display.

To select the E-mail Action Menu, press ***SPACE with dots 2-6***.

To move forward or back a day, press ***BACKSPACE with dot 6 or dot 3***.

To move forward or back a week, press ***BACKSPACE with dot 5 or dot 2***.

To move forward or back a month, press ***BACKSPACE with dot 4 or dot 1***.

To move forward or back a year, press ***BACKSPACE with dots 5-6 or dots 2-3***.

To move to the first e-mail in a folder, press ***SPACE with dots 1-2-3***.

To move to the last e-mail in a folder, press ***SPACE with dots 4-5-6***.

To determine the number of e-mails in the folder press ***SPACE with I.***

11.8.5 Received Attachments.

If the e-mail being reviewed has one or more attachments, these appear as fields in the e-mail entry. Move forward or back through the fields with the ***SPACE*** and ***BACKSPACE*** keys. KeySoft displays "Attachment 1 name," "Attachment 2 name," and so on, depending on the number of attachments.

Press ***ENTER*** on the desired Attachment, and KeySoft asks you to confirm whether you wish to detach or read the file. To read the attachment, press ***R***. To detach, press ***D***.

Choosing Read, places you at the top of the attached document. KeySoft's normal review commands may then be used to read the file. Press ***SPACE with E*** to exit the attachment, and you are returned to the folder from which you opened the attachment.

Choosing the "Detach" option, causes KeySoft to prompt the attachment file type, and ask whether you wish to detach the file as a KeyWord document.

For example, if the attachment were a Microsoft Word document, KeySoft would prompt: "Attachment is a Microsoft Word file. Detach as a KeyWord document?."

To have the file converted to a KeyWord Text Document, press ***Y***. To leave the attachment as a Microsoft Word file, press ***N***. To have the file converted to a KeyWord Braille Document, press ***B***.

KeySoft will then prompt: "Delete this attachment from the e-mail?."

Now that you have saved a copy of the attachment, you can save storage space by deleting the attachment from the e-mail. To delete the attachment from the e-mail, press ***Y***, to leave the attachment unchanged, press ***N***.

11.8.6 Folder Management.

E-mail folders are different to the other kinds on the Flash Disk. They are held in a database, called E-mail folders.cdb, found in the KeyList folder of the Flash Disk. You cannot access this database any other way than KeyMail, but we hope that by understanding this, it will make the folder management process easier to understand. It also explains why, in order to make more room for e-mails, the option is called "Free Database Space". For more information on this option, please refer to 11.10.3 Free Database Space.

Organizing your e-mail requires that you give some thought to what folders you need to efficiently categorize your e-mail. New folders can easily be created at any prompt to name a folder, by simply typing in a new folder name. If the folder doesn't already exist you will be prompted to confirm the creation of a new folder.

The following options are available at the "Folder Name" prompt:

To select the suggested folder press ***ENTER***.

To move forward or back through the list of existing folders, press ***SPACE,*** or ***BACKSPACE***.

In the "list of folders," the following commands are available:

To delete a folder, press ***BACKSPACE with dots 2-3-5-6***;

To rename a folder, press ***BACKSPACE with R***;

To determine the number of e-mails in the folder, press ***SPACE with I***;

To jump to folders starting with a particular letter, press that letter.

11.8.7 Marking E-mail.

E-mail within a folder may be marked for future action. The marking can either be applied to all e-mail in the folder, or on an individual basis. E-mail marking is extremely useful when you are organizing your e-mail, as it allows you to perform common actions on a number of files. For example, if you decide, while reading your new e-mails, that a number of them can be deleted, these e-mails may be marked. Before exiting the folder you can move all the marked e-mails to the Trash folder by pressing ***BACKSPACE with dots 2-3-5-6***.

To mark individual e-mails, press ***SPACE with M***. To mark all files in the folder, press ***SPACE with dots 2-6*** to open the "E-mail Action Menu," and choose the mark all files option.

E-mail marking only applies while you are in the folder. When you exit the folder the marking is turned off.

11.8.8 E-mail Action Menu.

The E-mail Action Menu is available when you are reviewing e-mail within a folder, and is entered by pressing ***SPACE with dots 2-6***. The options available from the menu depend on the folder you are reviewing.

Invoking the E-mail Action Menu within the Inbox presents the following options:

Reply: Used to send an answer to the person who sent you the message. Choosing this option presents further choices, and after you have chosen the appropriate action, KeyMail creates a new message with the address and subject line filled in. The additional options available after choosing Reply are:

Reply to sender only:

If you receive a message that has been sent to a group of people you can send a reply to all members of the group as well as the sender, or just to the sender of the message. Answering ***Y*** to this option restricts your reply to the sender.

Move e-mail to another folder:

Choose this option to move the selected e-mail to the folder of your choice. Either select the folder by pressing ***SPACE,*** then ***ENTER,*** or type in the name of the folder. If the folder does not already exist you are asked to confirm the creation of a new folder.

Copy e-mail to another folder:

Choose this option to copy the selected e-mail to the folder of your choice. This leaves the original in the current folder. Either select the folder by pressing ***SPACE,*** then ***ENTER,*** or type in the name of the folder. If the folder does not already exist you are asked to confirm the creation of a new folder.

Delete e-mail from this folder:

Choose this option to delete the selected e-mail from the current folder. The deleted e-mail is moved to the Trash folder.

Mark all e-mail:

This is a useful feature if you want to perform an action on all e-mail within the current folder. For example you may wish to copy the contents of the folder to another folder. If you wanted to do this, first "Mark all e-mail," then choose the "Copy e-mail to another folder option" from the E-mail Action Menu.

Invoking the E-mail Action Menu within, for example, the Sent folder, causes the "Reply" and "Delete e-mail from this folder" options to be suppressed. A new item, "Move to Trash" will appear on the menu in addition to the other standard items.

Include copy of original e-mail:

Answering ***Y*** to this prompt causes KeySoft to include a copy of the original e-mail text in the message area.

Include original e-mail attachments:

Answering ***Y*** to this prompt causes KeySoft to include a copy of the original e-mail attachments with the reply.

Forward: Used to send an e-mail message you have received to another person or group. Choosing this option presents further choices and input fields to be entered. After you have done the appropriate action, KeyMail creates a new message with the subject line filled in, and the message area will contain the forwarded e-mail. You can then enter your message ahead of the forwarded e-mail. The additional option available after choosing Forward is:

Include the original emails attachments:

Answering ***Y*** to this prompt causes KeySoft to include a copy of the original e-mail attachments with the forwarded message.

You are then presented with the standard prompts for writing an e-mail, such as: Send to? Also Send to?, Copy to?, and so on. From this point, proceed on as if you were preparing and sending a standard e-mail message.

Move e-mail to another folder:

Choose this option to move the selected e-mail to the folder of your choice. Either select the folder by pressing ***SPACE,*** then ***ENTER,*** or type in the name of the folder. If the folder does not already exist you are asked to confirm the creation of a new folder.

Copy e-mail to another folder:

Choose this option to copy the selected e-mail to the folder of your choice. This leaves the original in the current folder. Either select the folder by pressing ***SPACE,*** then ***ENTER,*** or type in the name of the folder. If the folder does not already exist you are asked to confirm the creation of a new folder.

Delete e-mail from this folder:

Choose this option to delete the selected e-mail from the current folder. The deleted e-mail is moved to the Trash folder.

Mark all e-mail:

This is a useful feature if you want to perform an action on all e-mail within the current folder. For example you may wish to copy the contents of the folder to another folder. If you wanted to do this, first "Mark all e-mail," then choose the "Copy e-mail to another folder option" from the E-mail Action Menu.

Invoking the E-mail Action Menu within, for example, the Sent folder, causes the "Reply" and "Delete e-mail from this folder" options to be suppressed. A new item, "Move to Trash" will appear on the menu in addition to the other standard items.

Print e-mail:

Choose this option to print an ink copy of the selected e-mail.

Emboss e-mail:

Choose this option to emboss a copy of the selected e-mail on a Braille printer.

11.8.9 Include copy of original e-mail.

Include copy of original e-mail:

Answering ***Y*** to this prompt causes KeySoft to include a copy of the original e-mail text in the message area.

Include original e-mail attachments:

Answering ***Y*** to this prompt causes KeySoft to include a copy of the original e-mail attachments with the reply.

Forward: Used to send an e-mail message you have received to another person or group. Choosing this option presents further choices and input fields to be entered. After you have done the appropriate action, KeyMail creates a new message with the subject line filled in, and the message area will contain the forwarded e-mail. You can then enter your message ahead of the forwarded e-mail. The additional option available after choosing Forward is:

Include the original e-mails attachments:

Answering ***Y*** to this prompt causes KeySoft to include a copy of the original e-mail attachments with the forwarded message.

You are then presented with the standard prompts for writing an e-mail, such as: Send to? Also Send to?, Copy to?, and so on. From this point, proceed on as if you were preparing and sending a standard e-mail message.

Move e-mail to another folder:

Choose this option to move the selected e-mail to the folder of your choice. Either select the folder by pressing ***SPACE,*** then ***ENTER,*** or type in the name of the folder. If the folder does not already exist you are asked to confirm the creation of a new folder.

Copy e-mail to another folder:

Choose this option to copy the selected e-mail to the folder of your choice. This leaves the original in the current folder. Either select the folder by pressing ***SPACE,*** then ***ENTER,*** or type in the name of the folder. If the folder does not already exist you are asked to confirm the creation of a new folder.

Delete e-mail from this folder:

Choose this option to delete the selected e-mail from the current folder. The deleted e-mail is moved to the Trash folder.

Print e-mail:

Choose this option to print an ink copy of the selected e-mail.

Emboss e-mail:

Choose this option to emboss a copy of the selected e-mail on a Braille printer.

Mark all e-mail:

This is a useful feature if you want to perform an action on all e-mail within the current folder. For example you may wish to copy the contents of the folder to another folder. If you wanted to do this, first "Mark all e-mail," then choose the "Copy e-mail to another folder option" from the E-mail Action Menu.

Invoking the E-mail Action Menu within, for example, the Sent folder, causes the "Reply" and "Delete e-mail from this folder" options to be suppressed. A new item, "Move to Trash" will appear on the menu in addition to the other standard items.

11.8.10 Trash Folder.

The Trash folder is used as a temporary storage folder for e-mails deleted from any of the KeyMail folders. When you exit KeyMail and return to the Main Menu, KeySoft advises if there are any e-mail in the Trash folder and asks if you want to empty the trash.

Typing ***N*** at the prompt to "empty trash?" returns you to the Main Menu, and leaves the items in the "Trash" folder.

To empty the trash, press ***Y***. To Review the Trash Folder, press ***R***. Pressing ***Y*** permanently deletes all e-mail from the Trash folder. Typing ***R*** allows you to review the items. The following options are then available:

To review each e-mail by moving through the fields, press ***SPACE*** to move to the next field. To move back to the previous field, press ***BACKSPACE.***

To move to the next e-mail, press ***SPACE with dots 5-6.*** To move back to the previous e-mail, press ***SPACE with dots 2-3.***

To delete the e-mail being reviewed, press ***BACKSPACE with dots 2-3-5-6.***

To restore e-mails in the Trash folder to their original folders, press ***SPACE with dots 2-6*** to enter the 'Trash Folder Menu." From this menu you may choose the option to "Restore this e-mail to original folder." The other option in this menu is "Empty the Trash Folder."

11.9 Connect to Send and Receive E-mail.

Connect to Send and Receive E-mail checks for new e-mail, and sends any e-mails in the "Outbox." You are prompted through the steps required, and feedback is provided as to the status of the connection and mail download. If you have any unsent mail, this is also sent at this time.

1. From the KeyMail menu select "Connect to send and receive e-mail."
2. KeySoft prompts "Connect using which configuration? Press ***ENTER*** for (name)." where (name) is the name of a connection configuration you have set up in the Connectivity menu. To use the offered configuration, just press ***ENTER***. If the correct configuration was not prompted, press ***SPACE*** repeatedly to find the required configuration. When you have found it, press ***ENTER***.

3. KeySoft prompts: "Use which e-mail account? Press ***ENTER*** for (account)." To select the offered e-mail account, press ***ENTER***, otherwise press ***SPACE*** repeatedly to find the required account. When you have found it, press ***ENTER***.

   Note: If you typically use the same e-mail account and the same connection configuration every time, you can simply cut these two prompts short by pressing ***ENTER***, because the offered option is always the last option used.

4. If using a dial-up modem to access your e-mail, read this. If not, skip to the next step. KeySoft displays the message "dialing," and you should hear the dialing process followed by whistling noises as your modem connects with the modem at your Service Provider. Before the sequence of messages listed in the next step, you will first hear these:

   Dialing;

   Connected;

   Logging On;

   Logon Successful;

   Connected;

   ...and at the end of the sequence below, you will get this message:

   Remain connected to the modem? (Press Y or N)

5. KeySoft reports the progress of the mail checking sequence by displaying the appropriate message as each significant stage of the operation is completed. The typical sequence of messages, assuming you have one new message to receive and no outgoing e-mail to send, is:

   There is 1 e-mail on Server;

   Checking for new messages;

   There is 1 new e-mail;

   Receiving 1;

   There is no e-mail to send.

For details on the options available while downloading e-mail, during the download options, refer to the following section.

During the sending and receiving process BrailleNote BT beeps once every few seconds indicating it is busy.

When using a dialup connection, at completion of sending your messages, KeySoft displays "Remain connected to modem?" To disconnect and return to the KeyMail Menu, press ***N***. To remain connected and return to the Main Menu, press ***Y.***

If you wish to terminate the e-mail session at any time, press ***SPACE with E***. If using a dial-up connection, KeySoft will prompt, "Abandon e-mail session after current operation or hang-up immediately?". To allow KeySoft to compete its current operation before hanging up, press ***N*** for no. To hang up immediately, press ***I*** for immediately.

11.9.1 Download status.

You can press ***ENTER*** at any time during the download process to hear the status of the download. During this process the BrailleNote BT beeps once every few seconds indicating it is busy.

Download status displays the percentage complete, the size of the e-mail currently being downloaded and the percentage complete of the total e-mails waiting to be downloaded. It is useful to check the status during downloads of long messages, as it provides an indication that the download is progressing satisfactorily.

The maximum size for any e-mail to download, without prompting for User intervention, is initially set to 50K or approximately 50,000 characters. Any e-mail bigger than this setting causes KeySoft to prompt: "This e-mail is larger than the maximum size allowed. Option?."

The following options are available at this point:

Continue to download: press ***ENTER***;

Skip this e-mail: press ***S***;

Delete this e-mail from server: press ***D***;

Hear information about the e-mail: press ***I***;

This displays the sender and the subject.

Download only the first 10 lines,

but leave all on the server: press ***T***;

Download 10 lines and delete

from server: press ***A***.

Change the size limit: press ***L***.

11.10 Setup Options.

Selecting Setup Options from the KeyMail menu presents the KeyMail Setup Menu which provides 3 options; "Directory of E-mail Accounts," "Receive Options," and "Free Database Space"

"Directory of E-mail Accounts" allows you to define account details for e-mail using a particular Service Provider, and provides options for both adding a new account and looking up and modifying an existing account. For details refer to 11.10.1 Directory of E-mail Accounts.

"Receive Options" allows you to choose whether or not your e-mail is deleted from your mail box at the Service Provider after you have downloaded it to the BrailleNote BT. It also allows you to set the size limit for automatic download. Refer to 11.10.2 Receive Options.

"Free Database Space" allows you to reclaim space in the e-mail database that had been taken up by unwanted e-mails. Refer to 11.10.3 Free Database Space.

11.10.1 Directory of E-mail Accounts.

To select "Directory of E-Mail Accounts," first select KeyMail from the Main Menu, then select Setup Options. You are presented with the KeyMail Setup Menu and "Directory of E-mail Accounts" is the first item on this menu.

There are two options on this menu; "Add an E-mail Account," and "Look up an E-mail Account."

"Add an E-mail Account" is used to set up the details of a new e-mail account.

"Look up an E-mail Account" allows you to review the details for an existing e-mail account, and modify individual fields as appropriate.

Information relating to a particular e-mail account is stored in a record, and each record has a number of fields that contain the details for that record. KeySoft provides commands for moving between records and reviewing the fields within them. To move to the next record, press ***SPACE with dots 5-6.*** To move back to the previous record, press ***SPACE with dots 2-3.*** Within a record you can use the ***SPACE*** and ***BACKSPACE*** keys to move forward or back through the list of fields.

The next two sections provide detailed information on "Adding an E-mail Account" and "Looking up an E-mail Account."

11.10.1.1 Add an E-mail Account.

To send and receive e-mail you need access to an e-mail Service Provider. When you open an account with a Service Provider you need to obtain details of the service such as the POP server and SMTP addresses, and these details must be loaded into KeyMail before you can use that e-mail account.

Note: Details of the actual internet connection are listed separately. This is because it is not uncommon for users to access the internet in multiple ways, via a different set-up to the default one, and this arrangement saves double entering account details or connection configurations.

To add an e-mail account, follow these steps:

1. Select E-mail from the Main Menu, or press ***BACKSPACE with ENTER with E***, anywhere.

2. KeySoft displays "KeyMail Menu." Select Set Up Options from the KeyMail menu. KeySoft displays "KeyMail Set Up Menu." Select Directory of E-mail accounts.
3. KeySoft displays "Directory of E-mail Accounts." Select Add an account. KeySoft displays "Entry List for Directory of E-mail accounts."
4. KeySoft now steps you through a list of details of the service so that you can enter details for each item. KeySoft queries "Account Name?" Enter the name you wish this account to be called and press ***ENTER***. Typically you would use the name of your provider, for example, "Earthlink."
5. KeySoft prompts "User Name?" Enter the user name, for example Murray_Thorn. Typically this is the part of your e-mail address that precedes the **@** sign.
6. KeySoft prompts "Password?" For greater security, you can leave this blank and you will be prompted for the password each time you connect. Alternatively, type your password. The password is displayed as you enter it. You can review it before pressing ***ENTER***. After pressing ***ENTER*** it displays as 5 asterisks. Remember that passwords are often case sensitive, so it is important that you enter the password exactly as you have chosen or been given.
7. You are then prompted for "Your Name?" and reminded that computer Braille is required. This is the name that will appear in the From: field when the recipient reads e-mail from you.
8. KeySoft prompts "Your E-mail address?." Type your full e-mail address for this provider, for example: Murray_Thorn@earthlink.net.
9. KeySoft now queries "POP Server?." Enter the POP server address. For example a POP server address might be "pop.humanware.com." The POP server address defines the path via which you receive mail from your e-mail account provider.
10. Next KeySoft queries "SMTP Server?." Enter the SMTP server address. For example a SMTP server address might be "smtp.humanware.com." The SMTP server address defines the path via which you send mail to your e-mail account provider.
11. Finally, KeySoft displays, "SMTP authentication required?." Increasingly, e-mail providers expect users to verify their user name and address on the SMTP server before allowing them to proceed. The BrailleNote BT is set up to automatically provide your username and password if you have turned this feature on. The default is No. Press ***Y*** to turn on.

12. You can review your list of entries with the ***BACKSPACE*** and ***SPACE*** keys. When you are happy with the entries, press ***SPACE with E*** to exit the list and KeySoft prompts "Add this record?." Press ***Y*** to save this record in the list of e-mail accounts. KeySoft confirms your choice with the message "Yes," "Record added" and returns to the Directory of E-mail Accounts Menu.

If you have more than one e-mail account that you wish to access on the BrailleNote BT, simply add another record in the same way. Each account will have its own POP and SMTP server addresses, which you can get from the e-mail account provider.

11.10.1.2 Look up an E-mail Account.

To check or modify details of a particular account, select "Look up an E-mail Account". To do this, follow these steps:

1. Select E-mail from the Main Menu, or press ***BACKSPACE with ENTER with E***, anywhere.
2. KeySoft displays "KeyMail Menu." Select Set Up Options from the KeyMail menu. KeySoft displays "KeyMail Set Up Menu." Select Directory of E-mail accounts.
3. KeySoft displays "Directory of E-mail Accounts." Select Look Up an account. KeySoft queries "Account to Look Up?."
4. To lookup all account records, press ***ENTER***. To move to the next account record, press ***SPACE with dots 5-6***, and to move to the previous account record, press ***SPACE with dots 2-3***. Alternatively type part or the entire e-mail account name, then press ***ENTER***. If your entry matches more than one account name, KeySoft displays the number of matches and places you at the first matching account name. To move to the next match, press ***SPACE with dots 5-6***, or to move back, ***SPACE with dots 2-3***. Make a selection by pressing ***ENTER***.
5. KeySoft steps you through the fields of the nominated account so that you can check the details of each item. If you want to change a field, press ***BACKSPACE with dots 1-4*** anywhere in the list. This takes you into an entry mode where all fields are presented and you can enter or change any field. Press ***ENTER*** when you have finished modifying a field and the next field will be presented. ***SPACE with E*** takes you back to the review option.

   To make a duplicate copy of an e-mail account record, you can use the same technique as discussed in 10.5 Duplicating a Record, for duplicating address list records. This provides a quick and convenient way of duplicating a record, and then modifying a field.

The account record list comprises the following items:

Account Name;

User Name;

Password;

Your Name;

E-mail address;

POP Server;

SMTP Server;

SMTP Authentication Required?

6. When you are happy with the entries, press ***SPACE with E*** to exit the record, and if you changed any details KeySoft prompts "Add this record?" Press ***Y*** to save this record in the list of services or ***N*** if you do not want to save your changes.

If you want to delete an account record, select the account you wish to remove, and press ***BACKSPACE with dots 2-3-5-6.***

11.10.2 Receive Options.

Receive Options allows you to choose whether you want to delete e-mail from the e-mail service after uploading it to your BrailleNote BT, and to put a size limit on incoming e-mails.

To select Receive Options, first select KeyMail from the Main Menu, and then select Setup Options. You are presented with the KeyMail Setup Menu and Receive Options is the second item on this menu.

Selecting Receive Options places you in the E-mail Receive Options Setup List, which contains two items.

1. "Delete e-mail from service after receiving? currently Yes or No"

   For the usual option of having each e-mail deleted from your service account after it has been successfully received, press ***Y.*** To leave it on the service so that, for example, you can also download it to your PC, press ***N***. This feature can be useful if you wish to keep a complete record of your received e-mail on your PC, and are using your BrailleNote BT to download your messages while you are traveling.

2. "Size limit for automatic download of e-mail? Currently 50K"

If an e-mail is larger than this setting, KeySoft will prompt you with a number of options before downloading it. These options were discussed in 11.9.1 Download status. To change the value, enter the maximum size in kilobytes and press ***ENTER***. For example, to set the limit at 60 kilobytes, enter 60, followed by ***ENTER***. The default setting is 50K, or approximately 50,000 characters.

To exit the Receive Options list, press ***SPACE with E*** and you are returned to the KeyMail Setup Menu.

11.10.3 Free Database Space.

E-mail folders are held in a database. One of the peculiarities of databases is that when you delete items from them, they don't automatically shrink back down again. Because of this, simply deleting your unwanted e-mails does not free up more space. The "Free database space" software shrinks the database back to the smallest size capable of storing the e-mails remaining in the database.

To use this utility, simply go to the e-mail set-up menu, and select the item "Free database space". After running, the utility will report how much space has been freed.

End of E-mail Chapter.

12 Web Browser.

KeyWeb has all the same basic features as Internet Explorer. You can browse the web, use a search engine, download files or read a page online and work through forms. KeyWeb can also be used to open and read locally stored html files, such as a saved web page.

This chapter is designed to demonstrate the features and commands of KeyWeb, and the ways it makes the Internet accessible for users of the BrailleNote family of products. To learn more about how the Internet works, we suggest that you investigate the various tutorials available that are designed to aid persons who are blind or visually impaired in learning to use the Internet and all its accompanying features.

12.1 Connecting to the World Wide Web.

As with KeyMail, in order to use KeyWeb, you will need to set up at least one connection configuration. The connection configuration makes it possible to connect to an Internet service provider and therefore to the world wide web. There are many different setups you can use to do this, and the ones that you choose will depend on what technology you have available and where you want to be when you browse the web.

Here are some examples of available connection configurations:

Using the internal modem in your BrailleNote mPower BT, plug into a dial-up connection.

Connect to a LAN network using an ethernet card

Using a WiFi (wireless) card in your BrailleNote BT, access any available WiFi network, at home, school, work, or even out shopping.

12.2 Changing to another Part of KeySoft.

As is standard in KeySoft, you can jump in and out of KeyWeb to go to other applications such as KeyMail, KeyWord etc. The hot key combination for changing to KeyWeb is ***BACKSPACE with ENTER with I***. For more information on the Task list, see 1.16 Switching Between Tasks.

If you are using a phone line connection and jump to another task, KeyWeb will ask if you wish to stay connected. If you jump into KeyMail while still connected, you can then use the same connection to check your e-mail. Likewise if you wish to return to KeyWeb from KeyMail, you can continue to use the same connection.

If you jump to another task, perhaps to paste new contact information into the Address list, you will also stay connected, and you can return to KeyWeb when you have finished, using ***BACKSPACE with ENTER with I***. You will be returned to the same page you left.

When using a wireless or LAN network connection, you will automatically stay connected until you choose to disconnect.

12.2.1 Disconnecting from outside KeyWeb.

While using a dialup connection, if you have left KeyWeb while still connected to the Internet, and you decide that you don't wish to return to either KeyWeb or KeyMail, you can disconnect from right where you are. Simply press ***SPACE with O*** to access the Options Menu, select Connectivity Menu, and from this menu, select Disconnect. This option only displays in the Connectivity Menu when you are connected to the Internet, and using a dialup connection.

12.3 Logging on.

A URL (Uniform Resource Locator) is the location address of a web page; for example, www.humanware.com, or Flash Disk\My Favorites\hw.

The first prompt displayed when you select KeyWeb from the Main Menu is a request for a URL. At this point you have several options. You can either:

Select the home page, which is the URL offered;

Type a URL;

Copy and paste a URL from another location, such as from KeyWord or KeyMail (For more information refer to 1.17 Pasting Text into a Field);

Select a URL from your favorites (For more information refer to 12.8.3 Selecting a Favorite);

Select a URL from the history list (For more information refer to 12.10.1 History Records);

Select an HTML file from a folder (For more information refer to 12.7 Application Management);

Having made a selection, press ***ENTER***. KeySoft prompts for a connection configuration. If you only have one set up, this one will be offered. If you have several configurations, it will offer the last one used. To change service provider, press ***SPACE*** at the prompt and select another one in the usual way.

During the page loading process, you may hear a series of beeps unless you have turned them off; these are progress tones, designed to let you know something is happening while the page is loading. You can also find out what percentage of the page has loaded by pressing ***SPACE with H***. When the page has completed loading, KeyWeb will display the words in the top line of the page.

Note that you can hear the contents of a URL by pressing ***SPACE with dots 3-4*** then repeat the command.

12.3.1 Progress tones.

Progress tones are there to let you know a page is loading or a download is progressing normally. You can control their volume or turn them off altogether. To do this, go to the Options Menu, Review Voice by pressing ***SPACE with O*** then ***R***. Press ***SPACE*** repeatedly to reach the Progress Tone Volume option. Type a number between ***0*** and ***6***. Zero disables the tone, 6 is loudest. To leave the setting unchanged, just press ***ENTER***. The factory setting is ***4***.

12.4 Navigation.

12.4.1 Moving around a Page.

Apart from the "move by" commands outlined below, KeyWeb uses the same commands as the Book Reader for moving through a page. These commands are in the Command Summary and are also covered in 4.5 Additional Reading Commands.

There are different ways you can review or move across a web page:

You can read it, using the standard KeySoft Read commands.

You can skip across it from hyperlink to hyperlink, referred to in KeyWeb as simply "links;"

You can move through it reviewing another page element such as input controls, headings or frames.

Or you can combine these in any way that works for you. In this chapter, we refer to links, frames, headings and input controls collectively as "page elements."

12.4.1.1 Moving with keys.

You can use the ***NEXT*** and ***PREVIOUS*** thumb keys to move around all the input controls and links on the page in whatever order they appear. So with each press you may move from, for example, link to button to text field to link, to link etc. This is different to the other page navigations as they only move by one specified element type, whereas this one includes all types of input controls and links. If you have surfed the Web on a PC before, this is the equivalent of using Tab and Shift Tab.

12.4.1.2 Moving by text.

This function allows you to move from section to section of non-linked text. You can set a minimum number of characters for KeyWeb to search for.

For example, if the minimum size is 50, KeyWeb will find the next section of text that is 50 or more characters long, and skip to the beginning of it ready for you to read. The larger the minimum number, the larger the section KeyWeb will skip to.

This is useful when reviewing news or magazine sites, research sites, or anywhere where you just want to get to the information.

The key commands are:

Move to next section of text: ***ENTER with dots 5-6***,

Move to previous section of text: ***ENTER with dots 2-3***.

Note: These commands are similar to move by paragraph but use ***ENTER*** instead of ***SPACE***.

To set the minimum size of the section of text, there is an option in the display settings. To get to this setting, press ***BACKSPACE with O*** then D for Display Settings, then select "Text section size?." Enter the number and press ***ENTER***. The factory setting is 50.

12.4.2 Links.

Links will take you to another place, either in the same page or website, or somewhere else entirely. They also can lead to downloads, documents, etc. Moving from link to link is a very useful way to review or use many types of sites. Great for reviewing search results on a search engine, a menu page or frame, the home page of a large site, etc.

Links appear on the Braille display like this: dots 2-4-6 name of link dots 1-3-5.

If you have speech on or have set speech on request, you will notice that links are identified by a small beep just before the name of the link.

12.4.2.1 Moving by Link.

Moving by Link is always available to you in KeyWeb; so you can use it in conjunction with moving by another type of page element.

To move from link to link, use ***BACKSPACE*** to move backwards and ***SPACE*** to move forwards. Alternatively, press the initial letter of the link. Note that each time you press a particular letter, you are moved to the next link on the page that starts with that letter. For example, if you repeatedly press the letter "n" you will be moved sequentially through all the links starting with "n" in the order that they occur on the page.

When punctuation level 1 is set, no beep will be heard. However, when punctuation level 2 is set, you will hear several beeps.

For punctuation levels 3 to 5, KeySoft will display "link start" and "link end".

12.4.2.2 Selecting a Link.

You can follow the link you are on by pressing ***ENTER***, or the touch cursor anywhere above the link on the Braille display.

It is also possible to place the cursor on a character within a link as opposed to following it, perhaps to copy and paste the link into a document or e-mail. When you are on the link, press and hold down the ***PREVIOUS*** thumb key, then press and release the touch cursor.

12.4.3 Other Page Elements.

The other three types of page elements you can use to move around the page are Input control, Heading or Frame. You can toggle through these types of page elements using the commands listed below. The default setting is input control. Because these page elements share a separate set of movement commands to links, you can use whichever one you have selected in conjunction with links. You can select links in the same manner as well; the command is included in the list below.

What follows is a brief description of each page element and how it is used.

Input control: Input controls are fields where you can type in text, or some other form of entry is required. They include text form fields, check boxes, radio buttons, buttons, and selection lists. Almost all forms are made up of a combination of these types of fields. Handling forms is discussed in 12.6.1 Handling Forms.

Heading: Headings usually cover the topics on a page and are a good way of finding out what the page is about.

Frame: Many web pages are divided into frames. They are basically windows within the page, usually dividing the page into subjects or groups of links etc. This is a high level search and a good way of skipping around a page quickly to get a sense of what it is about.

12.4.4 Commands for Moving by Element.

These are the commands used to move around the page by element:

Move to next element: ***SPACE with dots 4-6;***

Move to previous element: ***SPACE with dots 1-3;***

Current element: ***SPACE with dots 1-3-4-6;***

Change move type: ***SPACE with T;***

Link: ***L;***

Input Control: ***I;***

Heading: ***H;***

Frame: ***F.***

Once you are on an element, you can read from that point. For example, having moved by frame to Frame 2, you can then press ***SPACE with G*** for a speech read-out, or ***SPACE with dots 1-2-4-5-6*** to scroll your Braille display to read the contents of that frame. If ever in doubt, press ***SPACE with H***.

12.5 Moving from Page to Page or Site to Site.

For pages and sites previously visited in the same session, you can use the forward and back commands ***ENTER with F*** and ***ENTER with B*** to move between them.

If you wish to move on to a new site at any point, simply press ***ENTER with O***. KeyWeb will prompt: "Address? Press ***ENTER*** for (current URL)."

At this point you have five options (these are the same as when first logging on):

1. To select the current URL, press ***ENTER***.
2. Type in a new URL or favorite name and press ***ENTER***.
3. Go to list of favorites by pressing ***SPACE***.
4. Go to a saved web page by either typing the \pathname with a back slash in front of it, or pressing ***SPACE*** and then ***SPACE with T*** to go into directory mode, and locate it that way. Even if you make a selection that is not online, your Internet connection will stay connected.

5. Go to your history by pressing ***ENTER with dots 2-3-6***. For more information on History, refer to 12.10 History.

12.6 Page Management.

12.6.1 Handling Forms.

To fill out forms you need to be in "move by input control" mode, as forms are made up of input controls such as form fields, combo or list boxes, check boxes, buttons, and radio buttons.

When on an input control, it is not always clear what needs to be input. There are two ways to deal with this:

1. Set the "Automatically read input control prompts" to on. This mode will display most of the prompts, or labels, that explain the purpose of the input control.
   NOTE: Some prompts may be coded in such a way that they cannot be read at all.
2. The alternative way is for when you are working with the "Automatically read input control prompts" mode set to "off." Simply press ***SPACE with R*** to read the prompt.

12.6.1.1 Filling in text fields.

To fill in a text field, type the information in computer Braille, e.g. user name, search criteria etc. Any existing text can be deleted by pressing ***BACKSPACE with dots 1-4***. You can edit or delete what you have written in the usual way. Once you are happy with your input, press ***ENTER***, and your text will be submitted. Note that you have to press ***ENTER*** before your input will be accepted. If you change your mind and don't wish to submit the contents of the field after all, you can either delete it all by pressing ***BACKSPACE with dots 1-4***, or if there is a reset button, move to it using ***SPACE with dots 4-6*** and press ***ENTER*** there. If the form has more than one text field, you may need to move between them using ***SPACE with dots 4-6*** instead.

12.6.1.2 Selecting from selection lists.

In KeyWeb, selection list is the term used for combo boxes and list boxes. These are the input fields that allow you to make a selection from a list, and sometimes to type in your own entry if none of the list items is appropriate.

Once you are in the selection list field, you can select an item by pressing ***SPACE*** and ***BACKSPACE*** to go down and up the list. Alternatively, in some selection lists you can type the initial letter and press it repeatedly until you find your preferred selection. This is useful in lists of countries or states, for example, where you know the item you are looking for.

Having selected an item, simply use ***SPACE with dots 1-3*** or ***SPACE with dots 4-6*** to move on, and your selection will be entered.

12.6.1.3 Selecting Check boxes and buttons.

To Tab to a button, check a box or select a radio button, press ***ENTER***. KeyWeb will display "click" or "check" or "pressed" respectively.

12.6.1.4 Input controls on Braille Display.

The symbols that appear on the Braille display for each input control element are:

Text Start:	(&) dots 1-2-3-4-6;
Text End:	(y) dots 1-3-4-5-6;
Radio button, checked:	dots 2-4-5-6, dots 1-2-3-4-5-6, dots 1-2-3-5;
Radio button unchecked:	dots 2-4-5-6, dots 3-6, dots 1-2-3-5;
Check box, checked:	dots 1-2-3, dots 1-2-3-4-5-6, dots 1-2-3;
Check box, unchecked:	dots 1-2-3, dots 3-6, dots 1-2-3;
Button:	dollar-sign b-t dots 1-2-4-6, dots 1-2, dots 2-3-4-5;
Selection list:	dollar sign-l-s dots 1-2-4-6, dots 1-2-3, dots 2-3-4;

Multiselection field (where you can select more than one item):

dollar sign-l-s 1-2-4-6, 1-2-3, 2-3-4 + Checkbox.

12.7 Application Management.

Most application management happens from the Internet Options menu. This is accessible when you are in KeyWeb, either on a web page or a locally stored document, by pressing ***BACKSPACE with O***. These are the available options:

Open HTML file;

Set current page as home page;

Go to home page.

Internet file management:

Clear cookies;

Delete temporary files;

Erase browser history;

File download options.

Display settings:

Hide images without descriptions;

Automatically read input control prompts;

Text section size;

Default language for web pages.

Print current web page;

Error status.

Here is each of these options in more detail:

12.7.1 Open HTML files.

For opening a locally stored document, such as a saved web page.

12.7.2 Set Current Page to Home Page.

Your home page is the one that is always presented at the URL prompt. When you first enter KeyWeb, the home page is set to www.humanware.com\keyweb. To change this to a home page of your choice, go to that page in the usual manner, and then select this option off the menu.

12.7.3 Go to home page.

No matter where you are on the internet, when you select this option you will go straight to your home page.

12.7.4 Internet File Management.

The three items on this sub-menu all involve managing cached files i.e. files that save themselves to your BrailleNote BT:

12.7.4.1 Clear Cookies.

Cookies are small files that are uploaded to your computer or BrailleNote BT by web pages. They serve a wide range of functions, but they can build up and from time to time, it pays to delete them all. Select this option to do so.

12.7.4.2 Delete temporary files.

Same as with cookies, web pages upload various files to your BrailleNote BT and they build up over time. Select this option to delete them all.

12.7.4.3 Erase browser history.

This clears all of the URL's and files that are listed in KeyWeb's history. Very useful for teachers and students or other people who share equipment, or simply if you end up with a lot of URL's you will never look at again.

12.7.4.4 File download options.

From the File Download Options List you have the choice of turning "Stream Audio Links" on (the default) or off.

To allow for the streaming of audio links, ensure that "Stream Audio Links" is on. If you want to download an mP3 file, you need to turn "Stream Audio Links" off.

12.7.5 Display Settings.

These settings determine the extra information that will display as you read a web page.

12.7.5.1 Hide images without descriptions Y/N.

Visual images may have a label called an alt tag, which describes in words what the image portrays e.g. Child playing with Dog, back view of BrailleNote BT, etc. Images without these alt tags are not a lot of use and in this option you can choose ***Y*** to ignore them altogether. The default setting is ***N***. The exception is when an image is used as a link, in which case it will be treated as a link and not an image, regardless of how this setting is set.

12.7.5.2 Automatically read input control prompts Y/N.

When this is set to ***Y*** for yes, KeyWeb displays the label associated with each of the input controls as it reads them, such as text boxes, radio buttons, check boxes, tables, etc. To turn this feature off, press ***N***.

12.7.5.3 Default language for web pages.

If a page is written in a foreign language such as French or German, it may have a hidden HTML code that indicates this. If this is the case, and you have that language on your BrailleNote BT, KeyWeb will automatically read the page in that language. If the page does not have a code marker, you can listen to it and read it using the English setting, or change it to another language in the usual way, again assuming you have that language on your BrailleNote BT.

12.7.5.4 Text Section Size.

This was described in 12.4.1.2 Moving by text. Type a minimum number of characters for the "Move by Text Size" function. Factory setting is 50.

12.7.6 Print current web page.

To print the current web page, you use the same process that you would for printing a document. If your printer is ready, print the current web page straight away. Otherwise, you will be required to set-up the current printer before printing.

Refer to Chapter 6 on Embossing and Printing Documents, for further information.

12.7.7 Error status.

Occasionally you will find that a web page is not working correctly. If this is the case, KeyWeb will inform you of any Java script errors in the current web page.

12.8 Favorites.

You can type in the name of a favorite and, assuming that the favorite exists, that page will be loaded.

Pressing ***SPACE*** when at the address prompt takes you to a folder / file prompt layer where you can choose an existing favorite to load.

12.8.1 Adding a Favorite page.

To add a favorite webpage to your favorites folder, you have to be on the page, online. Go to the Favorites Menu by pressing ***ENTER with dots 2-3-5***, and press ***SPACE*** until you get to "Add current page to Favorites" Press ***ENTER***.

KeyWeb will ask you to confirm the name and offers the title of the page. At this point you can rename your favorite by typing in the name of your choice before pressing ***ENTER***. When you next review your Favorites list, the page will display as the name you chose.

12.8.2 Create favorite from current link.

It is possible to create a favorite from a link on a website, such as an audio streaming link. This option will only show up in the Favorites Menu when the cursor is on a link.

Go to the Favorites Menu by pressing ***ENTER with dots 2-3-5***, and press ***SPACE*** until you get to "Create Favorite from current link" Press ***ENTER***.

KeyWeb will ask you to confirm the name. At this point you can name your favorite by typing in the name of your choice before pressing ***ENTER***. When you next review your Favorites list, the link will display as the name you chose.

12.8.3 Selecting a Favorite.

The simple way to do this is to press the ***SPACE*** bar at the URL prompt. This will take you to the List of Favorites in your Favorites folder. Note that there are three home pages that have already been set up as favorites in your Favorites folder. These are:

bookshare.org - an online service that provides electronic format books.

ifarchive.org - an Interactive Fiction Archive that provides helpful links to download and learn how to play games.

list.humanware.com - the location from which you can subscribe or unsubscribe to and modify the settings of various HumanWare lists.

You can either review the favorites by pressing ***SPACE*** repeatedly and pressing ***ENTER*** to select one, or simply type the initial letter of the name and press ***ENTER*** when it is displayed.

To select a favorite from another folder other than your Favorites folder, press the ***BACKSPACE*** bar at the URL prompt. KeyWeb will prompt: "Folder name? Press ***ENTER*** for My Favorites." Press ***SPACE*** and KeyWord will display: "List of folders on Flash Disk". To review the list of folders on the Flash Disk, press ***SPACE*** repeatedly and press ***ENTER*** to select one, or simply type the initial letter of the name and press ***ENTER*** when it is displayed.

12.8.4 Organizing Favorites.

You can organize your Favorites in exactly the same way as you would normally organize files and sub-directories in KeySoft, as discussed in Chapter 14. Move, change, rename or delete favorites just as you would any other files. The difference is that instead of KeyWord file format files being the default file type, it is HTML. This means that while in My Favorites, KeyWeb will only display URL's unless you use the ***SPACE with X*** command, in which case you can then also choose between txt and html file types.

12.9 Tables.

Tables are a common occurrence on web pages, and are used for everything from setting out items for sale to laying out records in online banking.

KeyWeb has a Table Mode just for navigating tables.

To get into Table mode, you need to be in a table. On the display, a table is marked as:

"dollar sign t-b" or dots 1-2-4-6, dots 2-3-4-5, dots 1-2.

Press ***SPACE with M*** to get into table mode. While in table mode, you can find out what cell you are in. Press ***SPACE with wh sign (dots 1-5-6)*** and KeyWeb will display your row and column co-ordinates.

The cursor moves through a table by row or by column. On the display there will be one space between each column, and two spaces between each row.

While in Table mode the following navigation commands apply.

Move forward one cell along a row: ***SPACE with dot 4***.

To hear the current cell in a row: ***SPACE with dots 2-3-5-6***.

Move back one cell along a row: ***SPACE with dot 1***.

Move down one cell in a column: ***SPACE with dots 5-6***.

To hear the current cell in a column: ***SPACE with dots 1-4***.

Move down one cell in a column: ***SPACE with dots 2-3***.

12.10 History.

History is a record of all the web addresses or local file paths (referred to as URLs) you have accessed using the browser, with an upper limit of 300.

To access the history, press ***ENTER with dots 2-3-6***.

To go to the history list, press ***SPACE with dots 5-6***.

To navigate to a page listed in the history, select it from the history list using ***SPACE*** and ***BACKSPACE***, then press ***ENTER***. Alternatively, use the ***SPACE with F*** find command to locate the history item in the list then press ***ENTER***.

12.10.1 History Records.

Each history record consists of the following information:

Date when last visited – self explanatory;

URL – the whole address path for the page e.g. http://www.humanware.com/index.cfm/8,html;

Title – the title given to a particular page;

Domain – the base web address for a page, e.g. www.humanware.com.

12.10.2 Sorting history records.

You can change the way in which a history is presented by sorting by day or by domain.

A search by day will sort all the fields in a record by date and time order, then by domain. A search by domain will sort all fields by domain, then date and time.

To toggle the sort mode press ***SPACE with S***. The factory setting is by day, and if you change it, the system will always default to the setting you last made, whichever it is.

12.10.3 Reviewing history.

Having established a sorting order for the history records, you may then want to review them. You can do this in two ways – by record or by field. Reviewing by record will take you from record to record in the order defined by the sort. Use ***SPACE with dots 5-6*** to review forwards and ***SPACE with dots 2-3*** to review back.

Review fields within a record by using ***SPACE*** for forwards and ***BACKSPACE*** for back.

Other commands for reviewing history records are:

Next History record:	***SPACE with dots 5-6.***
Previous History record:	***SPACE with dots 2-3.***
Forward one Day:	***BACKSPACE with dot 6.***
Back one Day:	***BACKSPACE with dot 3.***
Forward one week:	***BACKSPACE with dot 5.***
Back one week:	***BACKSPACE with dot 2.***
Previous Domain name:	***BACKSPACE with dot 4.***
Next Domain name:	***BACKSPACE with dot 1.***
Newest History record:	***SPACE with dots 1-2-3.***
Oldest History record:	***SPACE with dots 4-5-6.***
Sort by domain/day:	***SPACE with S.***

Note: history is presented alphabetically for day or domain.

12.10.4 Pop Up Dialog Boxes.

KeyWeb is 'sitting' on Internet Explorer, and from time to time, Internet Explorer will open a dialog box. You will know this because KeyWeb will display its title and the fact that it is a dialog box. Wherever possible, the same navigation keystrokes are used as for the rest of KeyWeb. The difference is that at every text input field, you need to press ***ENTER*** to submit your input. You then move to the next one using ***SPACE***.

The final entry will almost always be a button control with a label such as ***YES, NO***, ***OK,*** or ***CANCEL***. Move to the appropriate button and press ***ENTER*** to activate it. Where you end up from there will depend on what the dialog box was for.

12.11 Saving and Refreshing Web Pages.

Downloading files to the BrailleNote BT is easy.

You can use this feature to download:

Software upgrades directly onto your BrailleNote BT;

Books;

Bank Statements;

MP3 files;

…and other files that you may wish to use on your BrailleNote BT, assuming they are compatible. You can also download files for moving to a PC later. However, please heed the following warning before making any downloads.

WARNING: Only HumanWare's proprietary software can run on the BrailleNote BT. KeyWeb does not limit the type of file you can download, but we strongly advise you not to try and run executables on your BrailleNote BT, including those designed to run on Windows CE. Doing this could cause irreparable damage to your BrailleNote BT and to KeySoft, and you do so at your own risk.

12.12 How to Download a file.

Follow these steps to download a file off an internet site.

1. When you are on the download link or button, press ***ENTER.*** KeySoft will prompt: "Download file into which folder?."
2. Select a folder in the usual way, either on the BrailleNote BT itself or on an external drive or storage card.
3. KeySoft will prompt: "Download file name? Press ***ENTER*** for (file name)" where the file name is the current name of the file to download. Press ***ENTER***, or to change the name of the file at this point, type a new name (without a file extension, which is automatically added) and press ***ENTER***.
4. During downloading, the BrailleNote BT can give you a percentage complete update. To hear it announced, press ***SPACE with R***.

When the download is complete, you will be returned to a blank page. You can then use the go back or forward commands to return to the web page you were previously in, or press ***ENTER with O*** to choose another page.

Note: If you attempt to download a file that is too big for the memory available on the destination drive, you can abort the download by pressing ***SPACE with E*** during the download process. To find out the status of a download at any time, press ***SPACE with H***.

General Caution: While copying or moving any files onto your Flash Disk from any location, never perform a reset. This can cause your Flash Disk to disappear and can cause corruption.

End of Web Browser Chapter.

13 Connectivity.

This chapter looks at all the different ways the BrailleNote mPower BT can connect to other forms of technology. From cables to cableless, there is bound to be a connection configuration that will suit your requirements.

These connection configurations allow you to access:

The World Wide Web;

E-mail;

Local Area Network;

Your PC via ActiveSync.

Bluetooth makes it possible to access the web and your e-mail anywhere, any time, by pairing with a bluetooth cell phone. You can also pair with a bluetooth qwerty keyboard.

With wireless networking you can also access the web and your e-mail anywhere where there is an available wireless network. Use it to view the network on your BrailleNote BT and even manage network files

LAN networking makes the same things possible, using a cable to connect to the network.

USB client allows you to connect to your PC with ActiveSync and access your e-mail or the web via your PC's internet connection, be it dial up or networked.

Serial connection allows you to dialup the internet via a modem, or view your BrailleNote BT on your PC using ActiveSync.

This chapter assumes that you have a basic understanding of networking and already have a network available. Not all the options discussed require a network however, so don't be put off if this is not something you wish to get into!

The heart of setting up connectivity on your BrailleNote BT is the Connectivity Menu. This is available from the Options Menu.

13.1 Understanding Connectivity Concepts.

The world of connectivity is a world of communication between, or among, devices of all kinds. Just as in the world of human beings, where there are those who speak our language and those who don't, not all devices can talk to all other devices, they have to share a method of communication. And again, just as sometimes people don't like what each other are saying, or don't agree, or misunderstand; in the world of connectivity, even when devices share the same methods of connecting, they don't always manage to connect the first time.

Why is this? Firstly, because electronic and computerized devices are "dumb". They only know what they know, and if a device offers another device a setting even slightly different to what it is expecting, it will ignore it. And while there are industry standards, with so many different companies manufacturing devices that are trying to talk to each other, there is bound to be the odd miscommunication, where theory collides with practice. Then there is the business of which device initiates the connection.

With cableless connectivity options such as wireless networking, this gets even more interesting again. When you use cables, you actually plug the cable in between two devices, so there is no ambiguity as to which devices are supposed to be communicating. However, cableless devices have to broadcast their availability to all other devices within range, and then there is a stage of identifying which device goes with which, not to mention security levels etc., before anything else can happen.

In the face of all these possibilities, initiating a connection can take some patience, some tweaking, but most of all, following the instructions.

The BrailleNote BT has been designed to make this as straightforward as possible. There is just one important rule to remember - that the BrailleNote BT initiates all connections. A special case among tens of millions of PC's, laptops and PDA's, it knows best what it needs from other devices, and is set up to initiate connections.

13.2 Connection Configurations.

A connection configuration is a record of the settings required in order to be able to use a particular type of connectivity, such as wireless networking or a phoneline, with a particular device. Because each type of connectivity is different, their configuration needs to be different.

You may also find that you will need to set up different configurations for the same kind of connectivity, such as a network configuration for work, and one for home.

The same connection configuration can be available for a range of uses, such as e-mail, browsing the web, and local network access.

In this section we discuss the devices available to connect your BrailleNote BT with other devices.

13.3 The Connectivity Menu.

The connectivity menu is the heart of the connectivity options available on the BrailleNote BT.

The Connectivity Menu is off the Options Menu. It has the following items:

Create a New Dialup or LAN connection: Select this option to set up a new dial up, or LAN connection i.e. using an ethernet card. Refer to 13.6.1 Creating a New Dialup or LAN connection.

Disconnect Dial-up connection: Only displays when the BrailleNote BT is online using a dial-up connection. Refer to 13.6.4 Disconnect Dial-up connection.

Active Connection Details (Name): This option gives you information on any connection that is currently active. Refer to 13.7 Active Connection Details.

Bluetooth: Select this option to turn Bluetooth on or off. Refer to 13.12 Bluetooth.

Wireless Ethernet: Select this option to turn WiFi on or off. Refer to 13.4 Using a Wireless Connection.

Review an existing connection configuration: This option allows you to make changes to a configuration. Refer to 13.8 Review an existing connection configuration.

Setup Options: When you select this option, KeySoft prompts: Computer name? Currently BrailleNote. You can change the name of the BrailleNote to something unique. This is the name that a network will use to identify your BrailleNote BT as a networked device. This is particularly important if any other network users are using a BrailleNote BT.

13.4 Using a Wireless Connection.

Wireless networking is just a different form of computer networking that doesn't require cables. It is also sometimes referred to as WiFi or 802.11, but they are all the same thing.

To use the BrailleNote BT with a wireless network, you will need a wireless network card. This is a card that fits into either the PCMCIA or CompactFlash card slots on the BrailleNote BT. HumanWare supports a range of WiFi cards - for a list of these please refer to the readme, to the FAQ page of our website, or contact us.

You will also need access to a wireless network. This may be in your home, workplace or school, or in an airport, café or library. There are two ways in which to access a wireless network - through setting up a connection configuration, and through scanning for and picking up a wireless network. Which method you use will depend on the circumstances.

Although there has been much talk over the past few years about wireless security, or lack of it, most workplaces or institutions will have proper security measures in place on their wireless networks. These comprise a range of settings, passwords and codes that are only made available to legitimate users. In the case of public wireless networks such as in libraries and airports, the network itself will provide most of the settings automatically because they are set up to let you log in, not to prevent you. However, before trying to connect your BrailleNote BT to any non-public wireless network, be aware that you will need to have some advance information about the wireless network, usually via the network administrator.

To find out how to:

Create a new wireless networking configuration, refer to 13.4.1 Creating a new Wireless Configuration.

Scan for a new wireless network and logging on, refer to 13.4.2 Scanning for a Wireless Network.

Connect to wireless network after it is set up, refer to 13.4.3 Reconnecting to a Wireless Network.

Organize the wireless network configurations already set up, refer to 13.5 Wireless Configuration Options.

13.4.1 Creating a new Wireless Configuration.

When you have a wireless connection available to you on a regular basis, you should set up a dedicated configuration for it. It may be, for example, on your college campus or in your workplace. All wireless networks have an SSID (Service Set Identifier). The SSID is just the name given to the network. For added security, networks not intended for access by the general public may hide their SSID, so it can not be displayed when you scan for visible networks. In this case, the network administrator needs to tell you what the SSID for the network is, and any other applicable settings such as WEP.

To create a connection configuration for a wireless connection, go to the Wireless Network option of the connectivity Menu. Ensure the wireless network card is inserted into the BrailleNote BT's card slot, as without it this procedure is not possible:

1. Insert your wireless card into the appropriate card slot of the BrailleNote BT.
2. From the Options menu, select Connectivity by pressing ***C***, then Wireless Ethernet, by pressing ***W***.
3. KeySoft prompts, "Wireless on? Currently No." Press ***Y*** for Yes.
4. You are at the Wireless Ethernet Menu. Select "Configure a New Wireless Connection" and press ***ENTER***. KeySoft presents you with the Entry List for Connection configuration. You can move down the list by pressing ***SPACE***.
5. The first item is Name. Enter any name you like, something that is meaningful to you, and press ***ENTER***.
6. KeySoft prompts, "SSID?" This is the name of the network as determined by the network administrator. Type in the SSID and press ***ENTER***.
7. Next are "Use Infrastructure Mode?" and "Use Shared Authentication?", which both require a ***Y*** or ***N*** value. The values you need to assign will be given to you by the network administrator.
8. Next is "Use WEP?" If you answer ***Y,*** the next item you see on the list is a WEP-Key entry field. Type in the WEP-key and press ***ENTER***. Note that the WEP-key will be in hexadecimal format and either 10 characters long for a 64 encryption or 26 characters long for a 128 encryption.
9. Next is 802.1x Authentication. This will be either 0 for no authentication, 1 for TLS, or 2 for MD5 - Challenge. Type in the appropriate value and press ***ENTER***.

10. The rest of the fields are standard network settings and again, the values will come from the network administrator. The fields are: "Obtain an IP Address Automatically?", "IP Address", "Subnet Mask", "Default Gateway", "Primary DNS", "Secondary DNS", "Primary WINS", and "Secondary WINS." Any fields that don't need changing, just pass over them by pressing ***SPACE***.
11. KeySoft prompts, "Use a proxy server for this connection?" If ***N*** for No, you will go to the end of the list. If ***Y*** for Yes, you will need to fill in two more fields - "proxy server name" and "proxy server port."
12. To save and close the record, press ***SPACE with E***. KeySoft prompts, "Add this Record?" Press ***Y*** for Yes or ***N*** for No.

This configuration is now available for use as described in 13.4.3 Reconnecting to a Wireless Network.

To make changes to, or to delete a wireless configuration, use the "Review an existing connection configuration" function as described in 13.8 Review an existing connection configuration.

13.4.2 Scanning for a Wireless Network.

An alternative way to log into a wireless network is to scan for it. Wireless networks that have the public display of their SSID disabled will be invisible to a scan, so scanning is not an appropriate way to try to log into those networks. However wireless networks with low, or no security, such as are found in libraries, airports and cafés etc., are set up through scanning. This is because when selected the first time, they then typically transfer most of the settings required in a connection configuration automatically to your BrailleNote BT. This connection configuration is then available to use to log on automatically in the future.

1. To scan for a new wireless network, from the Wireless Ethernet menu, select Scan for Wireless Networks and press ***ENTER***.
2. KeySoft prompts, "List of available connections." The connections listed will depend on how many wireless networks are displaying themselves in your vicinity. To review the list, press ***SPACE***. Each network will announce its name, for example:

   1. SSID: Vodaphone; 2. SSID: Tsunami; 3. SSID: Air America
3. Make a selection by pressing ***ENTER***.

4. KeySoft prompts, "Entry List for Connection Configurations." Press ***SPACE***. The first field is the connection configuration name. Give it a name and press ***ENTER***. In most cases, the rest of the fields will be correctly configured by the connection itself, however this will vary depending on how the wireless network is set up. In some cases, the venue will provide you with a code to enter, in others the whole configuration is provided. Once completed, exit the configuration using ***SPACE with E*** and press ***Y*** when asked if you wish to save it.
5. KeySoft displays the name of the network, e.g. "1. SSID: Vodaphone, Active" You are now on the Wireless network.

The next time you scan for this network, it will show up with its configuration listed just before its name. For example, if the connection configuration is called VP, you would hear or read, "VP SSID: Vodaphone. Active." Just press ***ENTER*** on this option and you will be connected.

13.4.3 Reconnecting to a Wireless Network.

This option makes it really easy to connect to a wireless network that you use repeatedly. If you only use one wireless network, this option automatically reconnects to it. If you use more than one, a list of configurations is formed. As the BrailleNote BT can only pick up a wireless network that is in the vicinity, this option will always pick up the one that you want. In the unusual situation that you have two wireless networks with configurations in the same vicinity or two configurations for the same wireless network, so that there is a chance it may pick up the wrong one, you can change the order of the list so that the preferred configuration will get picked up first.

To reconnect to a wireless network; from the Connectivity Menu, select "Reconnect using existing Configurations" and press ***ENTER***. KeySoft will announce, "Please Wait, connecting to (config)" there will be progress beeps as it locates the network, then "Please Wait, connected to (config)." You are now connected to the wireless network.

Of course in order to reconnect, you will need to have your wireless card inserted.

13.4.3.1 Changing preferred order.

Wireless network connection configurations will order themselves with the first created at the top. As discussed in the previous section, if this doesn't work for you, you can change the order of the list.

To change the order of the list, follow these steps:

1. From the Wireless Ethernet Menu, select Order Connection Preferences.
2. KeySoft prompts: "List of configurations in preferred order." To review the list, press ***SPACE or ADVANCE***. The list will be something like:

   1. work; 2. home; 3. home2
3. When you are on the item you wish to move, press ***SPACE with dots 2-6***. This will take you to the Preference Order Action Menu. The options are:

   Top: Move to the top of the list,

   Up: Move up one position in the list,

   Down: Move down one position in the list, and

   Bottom: Move to the bottom of the list.
4. Select a move from the list and the order will change accordingly.

   For example: I want to move "home2" above "home", as it is the one I use most often. I go to "3. home2" and press ***SPACE with dots 2-6***. I press ***SPACE*** twice to get to "Up: Move up one position in the list," and press ***ENTER***. KeySoft displays, "2. home2," confirming that "home2" has moved to position 2. I press ***SPACE with E***.

13.5 Wireless Configuration Options.

The Wireless configuration options allow you to set some parameters on how wireless operates on the BrailleNote BT. To review the list items, press ***SPACE or ADVANCE*** to go down the list, or BACK or BACKSPACE to go up.

To get to the “Wireless Ethernet Options List,” select it from the Wireless Ethernet Menu.

The three options and their purposes are:

1. “Notify when new networks are available (currently yes/no)” When this option is set to yes, a message displays when the device is not yet connected to a wireless network and a network is sensed by the wireless card.

2. "Automatically Connect to Non preferred Networks (currently yes/no)". This option allows the wireless card to try to establish a connection to a network that is not part of the existing configurations database.
3. "Types of Networks to Access (Currently Access Points only)". When trying to connect, this option filters out the wireless devices using a different Infrastructure. The default is Access points only with P as its hotkey. This setting detects only network access points. For Ad-Hoc only, press H. This filters out access points and detects only peer to peer devices. For all types of network, press A, this allows any type of network to be accessed.

13.6 Dial up and LAN Connections.

These two kinds of connection are quite different in the way they operate, but have some things in common in how you set them up. This is because both are used to access the internet, and both require cables. Even if you are using a LAN network connection to access a network, instead of just using the internet, the setting up of the network connection configuration is the same.

This section explains how to set up a dial up or LAN connection, and how to use it once you have done so.

13.6.1 Creating a New Dialup or LAN connection.

Use this option to set up a Dial up or LAN connection, as the name suggests. You can also enter a wireless configuration this way but it is preferable to do so via the "Wireless" Menu item.

Before following this procedure, please refer to either 13.6.3 Using a Dialup Connection or 13.6.2 Using a LAN connection, whichever applies to what you want to do. They provide essential information about devices and settings that are needed to complete the procedure.

1. Configurations are kept in a database, and the first time you go to enter a configuration, you will be prompted to create a database in which to do it. KeySoft prompts:

   "The database for connection configurations does not exist. Create a database called connection configurations?."

   Press ***Y*** for yes and this happens automatically. After the first time you won't hear this prompt again.

2. KeySoft prompts: "Entry list for connection configurations." To go to the first field, press ***SPACE***.
3. "Connection configuration name?" Enter a name for the record that is meaningful to you, then press ***ENTER***.
4. "Device to use? (name)." Dialup only - if using networking, select the device to use (such as, ethernet if you are accessing a network via the ethernet card) and then go to step 9. If you are not using Dialup, this is where you specify the device through which you are making the connection, such as a type of modem. Select the device you want by pressing ***ENTER***. To cycle through the list, press ***SPACE with dots 3-4*** and make a selection by pressing ***ENTER***.
5. "Phone Number?." For dialup connections only. If using in a work environment, remember to add any dialout prefix to the number.
6. "Service User name?." This is the user name you use to get onto the internet via your ISP. Type it here. Likewise the "Service Password?."
7. For the rest of the prompts, leave them set to their default unless otherwise stated in 13.6.3 Using a Dialup Connection or 13.6.2 Using a LAN connection.
8. For dialup connections only: When you are happy with all the settings, add this configuration by either pressing ***SPACE with dots 2-6***, or ***SPACE with E*** then ***Y*** at the "Save this record?" prompt. The rest of this procedure applies to networking configurations only.
9. The rest of the fields relate to networking using a LAN. As discussed in 13.6.2 Using a LAN connection, you may not need to fill in all, or even any of them, depending on the way in which the network is set up.

"IP Address" - This identifies the BrailleNote BT as a part of the network.

"Subnet Mask" - The part of the IP address that is common to all of the IP addresses in the domain.

"Default Gateway" - Default connection to the Internet through another piece of hardware or software that provides address translation and/or security.

"Primary DNS" - Domain Name Server - translates network names into IP addresses.

"Secondary DNS" - The system will look to this setting if the primary DNS setting cannot be located.

"Primary WINS" - A WINS setting has a similar purpose to DNS, and it is highly unlikely a network will have both WINS and DNS. The system administrator will advise you which to use.

"Secondary WINS" - The system will look to this setting if the primary WINS setting cannot be located.

Proxy Settings:

"Use a proxy server for this connection?" Y/N

'proxy server name"

"proxy server port"

End Of List

13.6.2 Using a LAN connection.

LAN is an acronym for Local Area Network. We use the term in this user guide to refer to networking via an ethernet card and cable as opposed to wireless networking, which uses a wireless network card that doesn't need cables. Wireless networking is discussed separately in 13.4 Using a Wireless Connection.

To establish a LAN connection for your BrailleNote BT, you will need an Ethernet Card (type Socket Low Power Ethernet (LPE) EA2902-139, CF+ R/LP - E) - which has a ruggedized, i.e. connected, cable.

You will also need access to a working ethernet computer network, via a network capable PC, server, hub/switch/router or DSL modem.

When configuring the connection, use these specific settings:

At the "Device to Use?" prompt, select Ethernet Network.

At the "Obtain an IP address automatically?" setting, ensure it is set to yes, unless the network uses static IP addresses as in scenarios a and b below, where it is necessary to enter the IP address manually. When set to Yes, this setting allows the network to fill in the rest of the fields automatically except the proxy server fields.

The scenarios below cover most of the common network configurations found at work, school or at home. In a work or school scenario, you may need to involve the network administrator in this task.

a. Home Network: If you have one PC and only intend to connect to the BrailleNote BT, such as in a home user situation (i.e. No DHCP server, no WINS, maybe gateway), set an IP address in the same range as the PC's IP address. For example, if the PC's is 10.0.0.1, make the BrailleNote BT's 10.0.0.2. If the PC acts as a gateway, add a gateway address. If you use a router, the address is likely to start with 192.168.0.n where n is a number that uniquely identifies your BrailleNote BT.

   Note: If another computer is subsequently attached to the network, it MAY take the IP address that the BrailleNote BT has. If this happens, one of the addresses will need to be changed, and setup run again.

b. Local Network with static IP addresses: If the network uses static IP addresses i.e. not automatically assigned, set an IP address on the BrailleNote BT in the range of acceptable addresses. Add a gateway address if available.

c. Local Network with DHCP: This kind of network automatically assigns IP addresses. When creating the new dialup or LAN connection, set the "Obtain an IP address automatically?" setting to Yes. It will pick up the DNS or WINS from the DHCP.

13.6.3 Using a Dialup Connection.

To use a dial-up connection, you will need a modem. The BrailleNote BT has its own internal 56k modem. If for some reason you wish to use an external modem, this is also possible. Both are discussed in this section.

13.6.3.1 Using the Internal Modem.

The BrailleNote BT has an internal 56k modem. The modem port used for connecting this modem to a dial-up connection is located on the right of the rear panel. Your BrailleNote BT is supplied with a modem cable for use with this port.

If you live in UK, Australia or New Zealand, an adapter that plugs into a standard "BT" type phone jack is also supplied with your BrailleNote BT. The modem cable plugs into the adapter and the adapter plugs into a phone jack.

The modem cable has a phone type plug at either end of the cable. Insert one plug into the BrailleNote BT's modem port and the other end into a phone jackpoint. To do this, locate the locking clip on one side of the plug. Orient this side to the bottom of the modem port, engage the plug in the socket and push the plug home. The plug should hold when the cable is lightly pulled. To unplug, squeeze the clip in towards the plug and pull the cable. The case bottom is scalloped under the modem port so that you can easily get your fingertip under the clip. When the plug is unclipped it releases freely.

13.6.3.2 Using an external modem.

While it is possible to use an external modem with the BrailleNote BT, there is little advantage in terms of speed of connection. However the following two scenarios are possible:

1. Using an external modem connected via serial port: If you are using this combination, connect the modem to the BrailleNote BT using the serial to serial cable. Ensure the modem is on and plugged into a phone line. The device name to choose when configuring the connection is Hayes Compatible Modem on COM1.
2. Using a card modem in the CF card slot: Insert the modem card before setting up a configuration for it, and it will appear on the device list as the name given to it by the manufacturer.

13.6.4 Disconnect Dial-up connection.

This option only displays when you are online with a dial-up connection. It allows you to hang up without having to be in either KeyMail or KeyWeb at the time.

To disconnect from the dial-up connection, select this option off the Connectivity Menu and press ***Y*** for Yes. To exit without disconnecting, press ***N*** for No.

13.7 Active Connection Details.

This option off the Connectivity menu lists out information on a currently active wireless or LAN connection.

The items listed are:

Name:

Status: connected to (name of network)

Signal strength: (if connected via wireless)

IP Address:

DNS address:

Test current connection. This last option is a "ping" function. This allows you to check if there is a connection path between the BrailleNote BT and a particular site. Although KeySoft prompts you for the IP address, you can also enter a URL such as www.humanware.com.

13.8 Review an existing connection configuration.

This option allows you to access connection configurations that you have already created, and view and/or edit the information in them. This applies to all configurations including wireless ones.

From the Connectivity Menu, select "Review an existing connection configuration". Using ***SPACE,*** then ***SPACE with dots 5-6*** to move from one to the next, find the configuration record that you wish to review. At this point you can review the different fields in the record by pressing ***SPACE or ADVANCE*** and ***BACK*** or ***BACKSPACE***.

If you wish to make a change to any field, follow these steps:

1. Move to the field to be changed. Press ***BACKSPACE with dots 2-5***, and you are asked for a new entry for this field. There are three options here:
   a) Type a new entry and press ***ENTER***.
   b) Edit the old field which is offered as the suggestion, as described in 5.17 Editing at a Prompt.

c) Clear the field by pressing ***SPACE with dots 3-5-6***, followed by ***ENTER***.

2. This puts you in an entry list so you can modify or add to any other field as well. You have the same three options for all the fields, and you can change any other field in the record.

If you want to fill in a field that is blank, simply navigate to it and type in the new entry.

13.8.1 Duplicating a Connection Configuration.

Being able to duplicate a connection configuration is highly useful when you wish to make slight variations to the configuration, such as adding a dial out prefix to a phone number for use at work. It is better, and far simpler, to create two configurations than to keep changing the setting in the one configuration. By duplicating the entire configuration and renaming it, all you then have to do is adjust the settings that need it, and you have a second configuration.

To create a duplicate configuration, follow these steps:

1. From the Connectivity Menu, select "Review an existing connection configuration." Using ***SPACE,*** then ***SPACE with dots 5-6*** to move from one to the next, find the configuration you wish to duplicate, go to name field by pressing ***SPACE***, then exit with ***SPACE with E***.
2. Select the "Create a new Dialup or LAN Connection" option and when you get as far as the "Connection configuration name?" prompt, select the Block Commands Menu by pressing ***SPACE with B***. Note that this is a different menu to the Block Commands menu in KeyWord.
3. Press ***SPACE*** and KeyList displays: "Retrieve last record?." This is the configuration you accessed in step 1, so press ***ENTER***.
4. KeyList prompts, "Connection configuration name? Currently (name)". You now have two identical configurations. Change the name, and any other fields necessary, then press ***SPACE with E***.
5. When prompted to save the record, press ***Y*** for Yes.

13.9 Glossary of terms:

These are terms that are used with LAN and wireless networking.

DHCP: Dynamic Host Configuration Protocol.

WINS: Windows Internet Naming Service - Microsoft specific Name.

Number protocol: similar to DNS, but for NetBIOS.

Gateway: Connection to the Internet through another piece of hardware or software that provides address translation and/or security.

IP Address: Identifier on a Network.

DNS: Domain Name Server, translates network names into IP addresses.

WEP: Wired Equivalent Privacy, encryption protocol on wireless networks providing a security level similar to a wired connection. Both 64-bit (the standard WEP) and 128-bit encryption strength are available. It is however recommended that you use 128-bit encryption as it offers the highest level of security. Note that WPA encryption is not currently supported.

802.1x: Authentication protocol in use on wireless networks.

Subnet mask: A mask used to determine what subnet an IP address belongs to.

LAN: Local Area Network.

Access Point: Device connected to a network that allows other wireless devices to enter this network.

Infrastructure: Type of wireless connection (using an access point or in Ad Hoc mode).

Ad Hoc: Wireless direct (Peer to peer) connection between devices.

13.10 Troubleshooting.

1. "Card not recognized" message on inserting Ethernet card into the BrailleNote BT:

   Have you inserted the card up the right way? Is the card one that is supported? Check out the readme, or our website FAQ,.

2. BrailleNote BT doesn't acknowledge your wireless card:

Have you inserted the card up the right way? Is the card one that is supported? Check out the readme, or our website FAQ.

Did you reset after inserting the card? This is important as it enables the BrailleNote BT to recognize the presence of the wireless card.

3. Connection to ActiveSync over Ethernet fails, however, Internet connection (mail, browser etc) via DSL or Cable Modem works:

   Is there a firewall program (such as Zone Labs ZoneAlarm, or Norton Personal Firewall) on the PC? If so, have the appropriate ports been opened?

   Has "Allow network (Ethernet) and Remote Access Service (RAS) server connection with this desktop computer." been checked in the ActiveSync Connection Settings dialog?

   If you have any troubles with ActiveSync once you have set it up, try deleting the partnership and creating a new one. This allows you to reset all the settings in ActiveSync. Alternatively, try a reset on the BrailleNote BT with no keys held down.

13.11 Firewalls.

If there is a firewall in use on your network, disable any firewall blocking for the IP address of the BrailleNote BT. This may require setting a static IP address for the BrailleNote BT, depending on the firewall in use on the network.

13.12 Bluetooth.

Bluetooth is not a dental condition as the name implies, it is a cable replacement technology. Simply put, it allows devices to connect to one another without the need for cables. Sound familiar? An infrared connection does the same thing. However, the advantages of Bluetooth are that there is no need for sight lines, the capture area is far greater (about 10 meters), and Bluetooth is available in a wider range of products and services.

Here are some examples:

Establish a Bluetooth connection with your cell phone for Internet access anywhere your mobile network has coverage. The cell phone can be in your pocket or briefcase while this is happening as there is no need for a clear space between the items.

ActiveSync with Bluetooth and you can keep in sync without your BrailleNote BT and PC ever having to be physically connected. You can also use ActiveSync to access the Internet.

Use a Bluetooth keyboard with your BrailleNote BT, and you have the choice of either Braille input on the BrailleNote BT itself, or QWERTY input on the Bluetooth keyboard.

The BrailleNote BT does not currently offer any services itself, but can use other devices and their services.

13.12.1 How Bluetooth works; Pairing.

A Bluetooth device contains a radio transceiver that takes the information normally carried by a cable, and transmits it at a special frequency to a Bluetooth transceiver in the receiving device, which will then pass the information to that device. When two Bluetooth enabled devices link up like this, it is called "pairing."

Every Bluetooth device has one or more services that it offers. These are functions that it has available to share with another Bluetooth device. In Bluetooth-speak, offering a service is called exposing a service. For example, a keyboard can only expose keyboard as a service, as it can only do one thing. A PC however, may expose a range of services, such as "modem", "network", or "headset". This is complicated slightly by the fact that devices expose all of the services they can potentially support, whether or not the device transmitting a request to pair can actually use those services.

Bluetooth is a relatively new technology and has some interesting idiosyncrasies such as the one just mentioned. However with patience it usually all works in the end!

Most Bluetooth device pairings involve an authentication code. This code is sometimes known by other names, but it's the same thing. When initially setting up the pairing, you enter the same code into each device, and in subsequent pairings, this is used by the devices to recognize one another. Not all pairings require a code, even if they ask for one, so a certain amount of experimentation might be worthwhile.

If you want to learn more about Bluetooth and what it is for, can do, and will be able to do in the future, and why, the World Wide Web has plenty of sites dedicated to these subjects.

13.12.2 BrailleNote BT Supported Services.

The BrailleNote BT can pair with a Bluetooth keyboard, the modem functionality of a Bluetooth cell phone, and the ActiveSync and modem services exposed by a Bluetooth enabled PC. We do advise that you get recommendations of makes and models of these devices that work with the BrailleNote BT successfully, or test this yourself before purchasing any Bluetooth device.

To use any of these services, you first need to establish a pairing between the BrailleNote BT and the other device. This is akin to plugging the two devices into one another before being able to actually do anything. This is discussed in the following section 13.12.3 Pairing with another Bluetooth device.

13.12.3 Pairing with another Bluetooth device.

The procedure for pairing the BrailleNote BT with another device is fairly consistent regardless of what the device is. Using ActiveSync involves a few more steps so it is documented separately in context in 13.14.6 ActiveSync using Bluetooth.

1. Go to the Options Menu by pressing ***SPACE with O***, then ***C*** for the Connectivity Menu.
2. Select Bluetooth and press ***ENTER***. KeySoft prompts: "Bluetooth on? Currently Yes/No." Press ***Y***.
3. KeySoft prompts: "Search for Bluetooth devices?" Press ***Y***. KeySoft displays, "Searching for Bluetooth devices, please wait..." This may take a few seconds during which you will hear progress beeps.
4. When the search is complete, KeySoft will display: "List of Bluetooth devices."
5. Review the list with ***SPACE*** and select the device with which you want to pair by pressing ***ENTER*** when it is displayed. Single service devices such as a keyboard, will offer pairing when selected and you can start using them straight away, although in many cases you will be asked to type in an authentication code. This code is the same on both sides, and you will need to enter it on each side. The BrailleNote BT will cue you through this process. Pairing with a PC to use ActiveSync is slightly different so refer to 13.14.6 ActiveSync using Bluetooth.

Once you have established a pairing, the BrailleNote BT keeps a record of it and the authentication code, so it is easy to reconnect next time.

Specific details on how to pair with a Bluetooth keyboard follow.

Specific details on pairing with a Bluetooth Printer are covered in 6.4 Printing with Bluetooth.

13.12.3.1 Connecting to a Bluetooth keyboard.

Follow these steps to connect to a Bluetooth keyboard.

1. Press the "connect" button on the Bluetooth keyboard. This is usually found on the underside of the keyboard.
2. Start a search for Bluetooth devices using the BrailleNote BT as described in steps 1 to 4 of the previous section.
3. Once searching is complete and the keyboard is on the device list, pair & activate the keyboard.
4. At the "Authentication code?" prompt, type any code and press ***ENTER***.
5. Then type the same code on the Bluetooth keyboard and press ***ENTER***.

You should now be connected.

13.12.4 Setting up Bluetooth on your PC.

If your PC is not already Bluetooth enabled, you can turn your PC into a Bluetooth device by purchasing a Bluetooth USB dongle or a Bluetooth CF card from an electronics retailer. These plug into the USB port or card reader on your PC and come with the necessary software on CD. As with any new soft- or hardware, first ensure that your PC meets the system requirements.

The PC may offer services including ActiveSync (if ActiveSync is installed) and a modem, if it has one.

13.13 Accessing the Network through your BrailleNote BT.

As well as accessing the internet, you can also use a connection between the BrailleNote BT and a network to access the rest of the network on your BrailleNote BT. This means that you can browse to folders and files on the network, allowing you to open compatible files and/or attach any kind of file to your e-mails.

Open an MS Word file from a network folder, make changes and close it again. E-mail an Excel spreadsheet using your BrailleNote BT or, if you receive one, move it onto the network where you can open it from a PC. Transfer files quickly and easily onto the network.

This is possible when a LAN or wireless connection is set up without ActiveSync (which has the opposite effect of allowing you to browse the BrailleNote BT file structure on your PC). If you don't already have a connection configuration set up for using with LAN or wireless networking, follow the connection set up instructions in 13.6.1 Creating a New Dialup or LAN connection or 13.4.1 Creating a new Wireless Configuration.

The network appears as **Network** on the Drive list when there is a Network available.

13.13.1 Network terminology.

There are several key terms and concepts that are important to understand in order to access a network confidently.

Network Client: A network client is a device that requests and receives data over the network. When connected to a network, the BrailleNote BT is a client device.

Domain: A domain is a group of computers and devices on a network that are administered as a unit. A network may have only one domain, or multiple domains, depending on the way it has been designed. The domain is the highest point available when searching and you need to know the name of the domain in order to do so. Please note that if a network is a workgroup and doesn't have a domain, you won't be able to search by domain.

Server: A server is basically a computer on which the network, or part of the network, resides. There may be one or several servers in a domain. If you wish to access a specific server on the network, you will need to know its name. Otherwise you can search the domain and locate it that way.

Network Folders: We are using this term to cover all of the shared folders and directories or resources on a network. Resources that are not available for use with the BrailleNote BT, such as printers, will not show up at all.

Network Place: The BrailleNote BT allows you to map any frequently used network folders to a list of network places, making it quick and easy to access them. The list of Network Places is the first thing to appear once you select Network Drive. For more information, refer to 13.13.4 Network Places.

13.13.2 How to access Network the first time.

This topic explains how to set up access to a network's servers and folders via your BrailleNote BT.

The first time you access the network, there are no defaults set up as it is previously unchartered territory. However on subsequent uses, you will find that most of the prompts will offer your previous choice as a default, for example, "Network server? Press enter for server1." There are other short cuts for future use that are discussed as they come up.

Before starting this procedure, you will need to know the exact name and spelling of either the domain, if there is one, or the server or servers that you wish to access. You will also need to have a wireless or LAN card plugged in and in the case of a wireless card, be connected. In both cases, you will need of course to have a connection configuration set up to access this particular network using either method. Lastly you will need to know your username and password for logging onto the network, if the network requires this.

From anywhere in KeySoft where you are prompted to select a Drive from the Drive list (for example, File Manager, Directory):

1. Select Network from the Drive list by pressing ***N***.
2. KeySoft prompts, "Network Place?." Ignore this prompt for now and press ***SPACE*** twice.
3. KeySoft prompts, "Browse entire Network." Press ***ENTER***.
4. At this point you have two choices; Network Server, or press ***SPACE*** to choose Domain to Search? The one you choose will depend on what information you have available. If you know the name and exact spelling of the server you wish to access on the network, type it at the Network Server prompt and press ***ENTER***. If you know the name and exact spelling of the domain and wish to search for a network folder that way, type it in at the Domain to Search? prompt and press ***ENTER***.
5. Regardless of which option you chose, if you have to log into this network, at this point you will be prompted for your network server user name. Type it in Computer Braille and press ***ENTER***.
6. At the password prompt, type your password and press ***ENTER***.
7. Press ***SPACE with E***. This extracts you from the log-in fields. the BrailleNote BT will ask you to verify your choice to save username and password with a ***Y*** or ***N***.

8. KeySoft prompts: "Update the default login information?" This prompt relates to whether you wish to save your login details on the BrailleNote BT. If you type ***Y*** for yes, you will hear a warning about the risks of saving it. However if you do save it, you won't need to log in manually again. If you type ***N*** for no, you won't run the risk of someone using your BrailleNote BT to gain access to the network with your login, but you will have to re-enter your username and password every time.
9. If you chose the Network Server name, skip this step. If you chose the domain search, at this point you will be presented with all of the servers on the network. You can review them all by pressing ***SPACE***, or press the initial letter of the server you are looking for, repeatedly if necessary, until you find it. Press ***ENTER***.
10. KeySoft prompts: "Network Folder?." Either type the exact name, review all the folders by pressing ***SPACE***, or press the initial letter of the folder you are looking for until you find it. Press ***ENTER***.
11. KeySoft prompts: "Network Place name for this folder? Press ***ENTER*** for (folder name)." Type another name or press ***ENTER***. Network Places are explained in 13.13.4 Network Places.
12. From here on, it is the same as reviewing the folder structure in the BrailleNote BT.

Note: If you turn off the BrailleNote BT, the BrailleNote BT will ask you to enter your network server user name and password as soon as you select Network from the Drive List.

13.13.3 How to access the Network after the first time.

Once you have been onto the network at least once and set up a network place or places, accessing the network becomes a lot more straightforward. The procedure is almost the same as the first time, but now you have some shortcuts in the Network Places list, possibly a saved login, and default options at each prompt to make the process quicker.

1. Select Network from the Drive list by pressing ***N***.
2. KeySoft prompts, "Network Place? Press ***ENTER*** for (name)" where (name) is the last network place visited. Either press ***ENTER,*** or go to the list of network places by pressing ***SPACE***, select one, and press ***ENTER***.

3. If you saved your username and password, or do not have one, from here on, it is the same as reviewing the folder structure in the BrailleNote BT. If you didn't save your username and password, you will be prompted here to enter them.
4. Press ***SPACE with E***. This extracts you from the login fields.
5. From here on, it is the same as reviewing the folder structure in the BrailleNote BT.

Note: After a reset of the BrailleNote BT, there will be no defaults set up as they are all wiped. If you do a reset while holding down ***dots 4-5-6***, all your settings will be lost and you will need to start again as described in 13.13.2 How to access Network the first time.

13.13.4 Network Places.

The BrailleNote BT maps network folders to a list of network places, making it quick and easy to access them. The list of Network Places is the first thing to appear once you select Network Drive, so you can go directly to them instead of having to search down through the domain or review all the servers to find the shared folder that you want.

Every time you open a new network folder, KeySoft will ask you to map it to a network place. You can give the network place any name you like, but as it is the convention, KeySoft offers the folder's name as the default. You can accept it by pressing ***ENTER***, or type an alternative name then press ***ENTER***.

Because you may not want to keep a network place for the future, you can delete it. To do this, select the network place from the list of network places, but do not press ***ENTER***. Instead, to delete, press ***BACKSPACE with dots 1-4***. KeySoft will ask you to confirm this by typing ***Y*** for yes, or ***N*** for No.

You can also rename a network place by pressing ***BACKSPACE with R***.

It is not possible to map the same network folder to two different network places, nor is it possible to have two network places with the same name.

13.14 ActiveSync.

The ActiveSync option in the Utilities Menu allows the BrailleNote BT file structure to be viewed on a PC with Windows Explorer.

This feature allows you to manage your BrailleNote BT files from the PC. You can copy, move, or delete Files and Folders, just as you would on the normal PC drives. You can quickly transfer files to and from the BrailleNote BT using this option. To get to the file structure of the BrailleNote BT, Select Explorer from the File menu in the ActiveSync window on your PC. From the Windows Explorer window, select My Handheld PC.

Using ActiveSync, it is also possible to synchronize files and time settings between your PC and your BrailleNote BT.

ActiveSync can also redirect internet access via your PC's internet connection when the PC and BrailleNote BT are connected via a LAN or wireless network connection.

Before any ActiveSync connection can be made, you will need to install the ActiveSync program on the PC as discussed in 13.14.2 Installing ActiveSync on your PC.

13.14.1 USB, Bluetooth, Ethernet, Infrared and Serial Connection Types.

The BrailleNote BT may be connected to the PC via either the serial port, infrared port, Bluetooth, USB, or via Ethernet connection, wireless or LAN. Assuming you have access to a suitable PC, you have everything you need to set up the cable connections required for Serial or USB. PC's that are not Bluetooth, infrared and/or network enabled require extra PC hardware and associated software drivers before these can be used.

Here are some things you should know about each connection type:

Serial Port: This is the slowest connection type but it has the advantage of not requiring any extra equipment, and is simple to set up and use. Only works with ActiveSync. Refer to 13.14.3 ActiveSync using an Infrared or Serial Connection.

Infrared Port: Faster than a serial connection, but requires a PC that is infrared capable. For how to set up an Infrared connection, refer to 2.3.1 Using the Infrared Port. For how to set up an ActiveSync connection, refer to 13.14.3 ActiveSync using an Infrared or Serial Connection.

LAN connection: Fastest of all the connections, you have the option of accessing the internet as well as the usual ActiveSync activities. Requires an ethernet card and some configuring at the PC end. For information on setting up LAN, refer to 13.6 Dial up and LAN Connections. For ActiveSync connection set up, refer to 13.14.4 ActiveSync using LAN .

Wireless Ethernet connection: As fast as LAN, with the same capabilities, this type requires that there is a wireless network available to you. BrailleNote BT requires a wireless network card. For more information on setting up a wireless connection, refer to 13.4 Using a Wireless Connection. ActiveSync connection set up is very much the same as the LAN connection explained in 13.14.4 ActiveSync using LAN.

Please note that while you can access the internet using LAN and Wireless with ActiveSync, you can also do so without ActiveSync.

Bluetooth: This wireless connection type is faster than serial. To use Bluetooth, you need to set up your PC with a Bluetooth accessory such as a dongle or card. Only works with ActiveSync. For more information on Bluetooth, refer to 13.12 Bluetooth. For how to set up an ActiveSync connection, refer to 13.14.6 ActiveSync using Bluetooth.

USB: This connection is faster than serial and as long as your PC has a USB port, it will work fine. You can use this connection type to use ActiveSync in the usual ways, but also to gain internet access on your BrailleNote BT via the PC, whether this be network access or dialup. This is discussed further in 13.14.5 ActiveSync using USB.

USB can be used anytime by simply connecting the USB cable once your PC is running ActiveSync. You can also select the "Connect to ActiveSync" option from the Utilities Menu. Note that this method is more commonly used for connecting to Serial, Infrared and Bluetooth. If you activate ActiveSync via "Connect to ActiveSync", the BrailleNote BT will attempt to connect using the connection method that has been stored in the "Connect to ActiveSync" option. Also, the setting for this connection is only accessible when selecting "Connect to ActiveSync" from the Utilities Menu, not from a USB Port connection.

13.14.2 Installing ActiveSync on your PC.

Before you can use ActiveSync with the BrailleNote BT, it must be installed on the PC. This program is provided on the CD-ROM supplied with the BrailleNote BT. The current version of ActiveSync is 3.8.

To install ActiveSync 3.8, follow these steps:

1. Insert the CD-ROM into your PC CD-ROM drive. Wait a few seconds, and a window will display with 6 buttons. The top button says "Install ActiveSync". Tab to this button.
2. Give the installation file a few seconds to automatically extract and copy files. When this is complete, the first window of a SetUp wizard will display. Although the wizard gives instructions on what to do, the procedure is slightly different than it states, so please follow these instructions carefully. You can now close down the CD installation window by clicking on its Exit button if you wish. In the SetUp wizard window, Tab to the Next button.
3. The Select Installation Folder window displays. ActiveSync offers a default file path that you can use. Tab to the Next button.
4. At completion of this process, you could Tab to the Exit button and ActiveSync is now installed. However, until a connection is established, the Get Connected wizard will keep appearing on your PC when you try to set connection types in the Connection Settings window of ActiveSync. To get around this, we suggest you make your first connection Infrared, or Serial as they are the easiest to set up. All you have to do is to follow the instructions in 13.14.3 ActiveSync using an Infrared or Serial Connection, with the only difference being that instead when you go to the Connection Settings, the Wizard will come up. At this point, press ***ENTER*** on the BrailleNote BT straight away.

If for any reason you cannot use the CD-Rom, you can also download ActiveSync from the Internet. It is free and readily available. A search engine search for "ActiveSync 3.8 download" will bring up several download sites.

13.14.3 ActiveSync using an Infrared or Serial Connection.

Follow these steps to make an ActiveSync connection using the serial or infrared ports. For an infrared connection, you will need a PC with an IrDA compatible port that is in enabled, and in operation.

Once ActiveSync is installed on your PC, as per directions in 13.14.2 Installing ActiveSync on your PC, follow these steps:

1. Connect the BrailleNote BT to the PC with the serial cable provided, or position the BrailleNote BT so that the infrared port lines up with that of the PC's.
2. Go to the Utilities Menu from the Main Menu, and select Miscellaneous Options. Press ***SPACE*** once to get to ActiveSync Connection. Type ***S*** for Serial, or ***I*** for infrared, and press ***ENTER***.
3. Return to the Utilities Menu by pressing ***SPACE with E***. Press ***C*** or ***SPACE*** once to get to "Connect to ActiveSync." Do not press ***ENTER*** yet.
4. On the PC, make sure the connection type is correct. To do this, in the ActiveSync window on your PC, from the File Menu, select Connection Settings. Check the option "Allow Serial cable or Infrared connection to this port" then Tab to ***OK*** and press ***ENTER***. If it is your first ever connection on the PC, the Get Connected Wizard may pop up instead, in which case just carry on to step 5.
5. Now on your BrailleNote BT, press ***ENTER.*** **Note:** If the connection does not happen within 10 seconds, press ***C*** and ***ENTER*** again on your BrailleNote BT straight away.
6. If the connection was successful, after about 10 seconds you will hear a chime followed by a slight shriek from the BrailleNote BT. This can happen even if the BrailleNote BT gives an error message about the port not being available. If you don't hear the chime at all, try again. All you need to do is Tab to the Next button of the wizard screen that comes up then press ***ENTER***, and the Get Connected window will display again. If not using the wizard, try a reset by pressing the reset button.

7. When connected, a "New Partnership" dialogue box appears. There are two choices, "Yes" or "No". If you are simply going to use ActiveSync to manage files, you could Tab to "No" and press ***ENTER***. If you are going to set up a network connection after this or wish to synchronize files or the time settings, select "Yes". Tab to ***OK*** and press ***ENTER***.

13.14.4 ActiveSync using LAN.

Using ActiveSync with a LAN allows you to access the internet. Of course if you have network capability on your PC, you can also do this using the Network Client approach, as discussed in 13.13 Accessing the Network through your BrailleNote BT, but there are different benefits for each. Using ActiveSync means that you can use Windows Explorer on your PC to view and manage the directory system of the BrailleNote BT, whereas with Network client, you can view and manage the files on your network on the BrailleNote BT. Also, if your primary goal is to access the internet, this approach means you don't have to go through quite so much rigmarole to set up the connection configuration.

1. This first step is necessary so that the BrailleNote BT recognizes your PC. Using a serial or infrared connection, connect to ActiveSync, and in the PC popup, say "yes" to establish a partnership.
2. In the ActiveSync window, go to the File Menu and select Connection Settings. Ensure that "Allow network (Ethernet) and Remote Access Service (RAS) server connection with this desktop computer." Checkbox is checked.

   Technical note for systems administrators: ActiveSync uses ports 990, 999, 5678, and 5679 to communicate with the BrailleNote BT. It also uses the NetBIOS TCP and UDP ports 137 (naming service), 138 (netBIOS datagram service) and 139 (netBIOS session service) to communicate with your BrailleNote BT. If a DNS is used, it will use port 53 for name resolution.
3. Perform a simple reset.
4. From the Main menu, go to Utilities, then the Miscellaneous Options Setup List, and at the ActiveSync Connection option, select ***E*** for Ethernet. You are now ready to connect your BrailleNote BT using Ethernet.
5. Having gone through this set up process once, you don't have to go through it again. While ActiveSync connection is set to "Ethernet", and as long as you are connected via the Ethernet cable, everything will behave as normal.

To use this connection to access the Internet, there are a few more simple steps:

1. Enter the Options Menu by pressing ***SPACE with O***. Press ***C*** for Connectivity then ***SPACE*** to get to "Create a New Dialup or LAN Connection." Press ***ENTER***.
2. KeySoft prompts: "Connection configuration name?." Type a name that is meaningful to you and press ***ENTER***.
3. KeySoft prompts: "Device to use?." Cycle through the options to Ethernet Network Connection and press ***ENTER***.
4. Press ***SPACE with E*** and at the prompt, "Save this configuration?" press ***Y*** for Yes. This configuration is the one you will need to access the internet.

Now return to the main menu and select Internet. When asked which configuration to use, select the one you have just set up. You can now access the world wide web. Likewise with e-mail - when asked in KeyMail for a configuration, select the one you have just set up. As long as you have an e-mail account set up, this will work fine.

13.14.5 ActiveSync using USB.

ActiveSync using a USB connection allows you to do all the usual activities of managing the files and folders on your BrailleNote BT in Windows Explorer. It also allows you to access the internet by redirecting internet access from your PC to the BrailleNote BT. This section covers the basic setup of ActiveSync on your PC, and what else you need to do to use the internet. USB is a good connection type to start off with, as it is simple and allows you to set up a partnership for future LAN or wireless connections.

To make a connection between your BrailleNote BT and a PC, follow these steps:

1. Plug the smaller end of the USB cable into your BrailleNote BT, and the larger end into a USB port on your PC.
2. On the BrailleNote BT, ensure the ActiveSync connection type is set to USB. To do this, go to the Main menu, then Utilities Menu, then Miscellaneous Options, press ***SPACE***, and then ***U*** for USB. Exit by pressing ***SPACE with E***.
3. Return to the Utilities Menu by pressing ***SPACE with E***. Press ***C*** or ***SPACE*** once to get to "Connect to ActiveSync". Do not press ***ENTER*** yet.

4. On the PC, make sure the connection type is also set to USB. To do this, in the ActiveSync window on your PC, from the File Menu, select Connection Settings. Check the option Allow USB connection... and Tab to ***OK*** and press ***ENTER***. If it is your first ever connection on the PC, the Get Connected Wizard may pop up instead, in which case just carry on to step 5.
5. Now on your BrailleNote BT, press ***ENTER***. Note: If the connection does not happen within 10 seconds, reset the BrailleNote BT until you hear a beep, and the connection should come up straight away.

To use this connection to access the Internet, there are a few more simple steps:

1. Enter the Options Menu by pressing ***SPACE with O***. Press ***C*** for Connectivity then ***SPACE*** to get to "Create a New Dialup or LAN Connection". Press ***ENTER***.
2. KeySoft prompts: "Connection configuration name?" Type a name that is meaningful to you and press ***ENTER***.
3. KeySoft prompts: "Device to use?" Cycle through the options to Ethernet Network Connection and press ***ENTER***.
4. Press ***SPACE with E*** and at the prompt, "Save this configuration?" press ***Y*** for Yes. This configuration is the one you will need to access the internet.

Now return to the main menu and select Internet. When asked which configuration to use, select the one you have just set up. You can now access the world wide web. Likewise with e-mail - when asked in KeyMail for a configuration, select the one you have just set up. As long as you have an e-mail account set up, this will work fine.

13.14.6 ActiveSync using Bluetooth.

Before setting up a pairing between the BrailleNote BT and your PC's Bluetooth function, ensure that both ActiveSync and Bluetooth are set up on your PC. For more information on these, refer to 13.14.2 Installing ActiveSync on your PC and 13.12.4 Setting up Bluetooth on your PC. You will also need to know which COM Port Bluetooth has assigned to itself on the PC. You can view this by going to My Bluetooth Places then the Bluetooth menu, choose the Advanced Configuration option, then the Local Services Tab. Look for the Bluetooth Serial Port in the list of services, and which COM Port it is assigned to is in the right hand column. Why is it called a Serial Port when it isn't? Don't worry, "serial port" is simply the default name used by the PC for any connection using one of its COM Ports.

The user interface for the PC Bluetooth service may vary from the one described above. Nevertheless, the COM port information will still be available somewhere.

Now we know the number, it is a fairly straightforward procedure to set up and connect to ActiveSync:

1. On your PC, open ActiveSync. From the File menu, select Connection Settings.
2. Tick the checkbox called "Allow serial cable or infrared connection to this COM Port" and in the drop down list directly after it, select the COM port assigned to Bluetooth that you looked up in the beginning. Tab to ***OK*** and press ***ENTER***.
3. On your BrailleNote BT, in the Utilities Menu, press ***M*** for Miscellaneous Options, and go to ActiveSync Connection by pressing ***SPACE***.
4. Select Bluetooth by pressing ***B*** then ***ENTER***. Bluetooth is now the connection type of choice. Now you need to set up Bluetooth on the BrailleNote BT.
5. Go to the Options Menu by pressing ***SPACE with O***, then ***C*** for the Connectivity Menu.
6. Select Bluetooth and press ***ENTER***. KeySoft prompts: "Bluetooth on? Currently Yes/No." Press ***Y***.
7. KeySoft prompts: "Search for Bluetooth devices?." Press ***Y***. KeySoft displays, "Searching for Bluetooth devices, please wait..." This may take a few seconds during which you will hear progress beeps.
8. When the search is complete, KeySoft will display: "List of Bluetooth devices."
9. Your PC will appear on the list by the name you gave it during Bluetooth set up. Select it by pressing ***ENTER***. KeySoft prompts: "List of services for (device name)?" Review the list, and select "ActiveSync".
10. KeySoft prompts: "Pair with (device name) and activate ActiveSync?." Press ***Y***.

11. On your BrailleNote BT, KeySoft will prompt: "Authentication code?." Type a password that you can remember, in letters or numbers.
12. On your PC, there will be a dialog box requesting an authentication code. Type the same password here and click ***OK***.

You are now connected to ActiveSync via Bluetooth.

13.14.7 Connecting via ActiveSync.

Assuming you have carried out the steps in 13.14.2 Installing ActiveSync on your PC, and set up a connection via Serial, Infrared, or LAN successfully, follow these steps to reconnect in the future. **Note:** Your PC will need to be switched on for this to work.

1. Connect the BrailleNote BT to the PC with your chosen connection type.
2. On the BrailleNote BT, go to the "Utilities Menu," and press ***C*** to select "Connect to ActiveSync" option.
3. The ActiveSync window on the PC should indicate that the PC is "Connecting" to the BrailleNote BT. This process normally takes about 5 to 10 seconds. When connected, the "New Partnership" dialogue box may appear. If you followed the steps in the last section, a partnership was established, so this dialog shouldn't appear. Select Yes or No and Tab to ***OK*** and press ***ENTER***.

And that's it!

13.14.7.1 Synchronizing Time in ActiveSync.

Synchronizing the time on your BrailleNote BT each time you use ActiveSync is a simple matter of ticking a checkbox.

Firstly, ensure that your BrailleNote BT is set to the correct international timezone. This is described in 1.21 Setting Time and Date. Your BrailleNote BT will synchronize to the time zone specified so if it is incorrect, the time will always be out.

Whether you are connected via ActiveSync or not, open the ActiveSync window on your desktop. From the Tools Menu, Tab to Options and press ***ENTER***. On the Sync Options tab that shows, you will find a check box labeled "Synchronize mobile device clock upon connecting." Check this box, and to save the change, Tab to ***OK*** and press ***ENTER***.

13.14.7.2 File Conversion and ActiveSync.

One of the options available in ActiveSync is the automatic conversion of MS Word files to MS Pocket Word format when transferring them to the BrailleNote BT from your PC, and convert them back when transferring in the other direction. As this is automatic i.e. you do not get the option of choosing when you would like to do this and when not, we recommend that you ensure it is turned off. However at times, converting to MS Pocket Word format may be useful, and if so it is useful to know how to switch this function on.

From the Tools menu in the ActiveSync window of your desktop, select Options. There are three tabs, select the Rules tab. There is a button marked Conversion Settings. Tab to this and press ***ENTER***. On this tab is a check box labeled "Convert files when synchronized, copied, or deleted." When checked, ActiveSync will always convert transferred MS Word or MS Pocket Word files; when unchecked it never will.

13.14.8 Trouble Shooting ActiveSync.

To establish a successful connection with ActiveSync, a number of independent factors must be satisfied. Be prepared to spend time to understand the connection procedure. With patience you will soon be connecting quickly and reliably.

Difficulties usually center around making a successful connection. Make sure you follow the recommended connection procedures outlined in the previous sections.

Factors to check if you cannot make a connection are:

If you have been using the BrailleNote BT serial port for ActiveSyncing as well as to drive a remote display, you need to release the port for ActiveSync. Do this by selecting the Visual Display from the Options Menu, then pressing ***F*** and ***ENTER*** to turn off the connection.

Similarly, at the PC end, if another program has been using the serial port, it is necessary to close the program, or if the program provides facilities to do so, release the port.

Connection setting in ActiveSync is set to incorrect port type (applies only after successful connection has been previously established) – To check this, in the ActiveSync window, go to the File Menu and select Connection Settings. Check the box that refers to your connection type. Tab to OK and press ***ENTER*** and try connecting again.

Check that the cables are plugged in correctly and firmly at both ends.

With USB connections, try another USB port. We have noticed that when establishing an initial connection, not all the USB ports on the PC unit will work first time. If your PC has more than one USB port, try them all.

Check that the correct port type is set on the BrailleNote BT in Miscellaneous Options off the Utilities Menu.

If still unsuccessful, reset the BrailleNote BT until you hear a beep. If that doesn't work, uncheck all connections in the ActiveSync Connection Settings, Tab to ***OK*** and press ***ENTER***, then go back in and recheck. Reset the BrailleNote BT again.

With a Bluetooth connection, make sure the authentication code is correct.

13.14.9 Disconnecting.

To disconnect from ActiveSync, unplug the relevant cable from either the PC or BrailleNote BT, or for Infrared, simply move the BrailleNote BT so that its infrared port is no longer in line with the PC's.

If you need to use the PC's serial or infrared port for another function, on the PC, go to the File Menu of the ActiveSync menu bar, select "Connection Settings" and un-check the "Allow serial cable or infrared connection to this Comm Port" option. Remember that next time you connect, you have to "re-check" this option.

13.15 KeySync.

13.15.1 What is Synchronization.

Synchronization is the act of making two things work in unison. In the world of planners and address lists and files, it specifically means being able to keep the records on two different systems in unison with each other, in this case a PC and a BrailleNote BT. When you synchronize, the information goes back and forth between the two systems in such a way that both sides end up the same, with a little help from you occasionally. So, if you enter a friend's name or an appointment on the BrailleNote BT, you can ensure that by synchronizing, they will end up recorded in MS Outlook as well.

ActiveSync is a Microsoft tool designed to allow PC's and hand held Pocket devices to talk to one another and to synchronize with each other, which is why it has "Sync" in its name. KeySync does not replace ActiveSync. KeySync still uses ActiveSync as an electronic connection, but it does the job of synchronizing KeySoft records such as addresses, appointments and alarms, with MS Outlook's contacts and planner, and vice versa. So, instead of having to enter or update all your contacts and appointments into two systems separately, you can do them at one end and let the synchronization process copy them, update changes or make deletions, for you.

There is one kind of BrailleNote BT to PC synchronization that uses ActiveSync without KeySync, and that is file synchronization. This is discussed in detail in 13.16 File Synchronization.

One way to imagine how synchronization works is to think of a pair of scales. Put some sand in one scale, and to balance, or synchronize, the other side, we would add to it the same amount of sand. If we take some or all out of one side, we can synchronize it by either putting the sand back, or taking the same amount off the other side. If we add sand to one side, we can either take it off again, or add the same amount to the other side. If we change the amount of sand on both sides, we can choose which side we like best and change the other one to match it. And all of this is balanced through the center point of the scale. KeySync is like a pair of scales, with one side being MS Outlook and the other being KeySoft. The center point is a database that sits in your PC and keeps a record of all of the pairs of synchronized files, so it can tell if any changes have been made to either side. With KeySync, you get to make the calls about which side to adjust if there is a change, so you are always in control.

This section begins with general information and instructions on KeySync and how to set it up, followed by a section on synchronizing KeyList, and another on KeyPlan.

13.15.2 Getting the best out of Synchronization.

Like so many tools, the efficiency of synchronization is as much in the way you use it as in the design. Synchronization is designed to keep both copies of a record the same. While it is possible to temporarily override the process on a record by record basis, the ultimate objective of synchronizing is to allow you to keep accurate, matched records, and if that is not what you want to do, perhaps synchronizing is not the way to go.

Synchronizing works best when you do it often, rather than leave the records to build up. If you do it often, there won't be so many opportunities for conflicts and duplicates, and so it will work quickly without you having to make lots of judgment calls.

The first time you synchronize records, any records that are unique to either KeySoft or Outlook will copy themselves to the other system. Duplicate records will need user intervention, and the length of time this takes will be determined by how many you have. However, it will never be such a large job again, especially if, as we mentioned before, you synchronize regularly.

13.15.2.1 KeySyncing for the first time.

If you have a sizeable number of records on either or both your PC and BrailleNote BT, the first synchronization could be quite a mission! KeySync will automatically update records unique to one system, but if you have a lot of duplicate or overlapping records already, it may take some time. Duplicate records are discussed in 13.15.5 Duplicates.

13.15.3 Setting up KeySync on your PC.

The software required to set up KeySync on your PC is available on the CD Rom that came with your BrailleNote BT, or by downloading it from the internet, or by installing it off the PC Software CD available from your SMA distributor. Instructions on how to download it from the internet, and from where, are in the readme file which is in the General folder of the Flash Disk. Please note that you can only synchronize the Planner and Address List of your BrailleNote BT with one PC.

1. Put the CD into the CD drive of your PC.
2. A window will appear with 6 buttons. Tab to the second button, labeled "Install KeySync PC Software" and press ***ENTER***.

3. The KeySync Setup window appears. Read the information on it then Tab to Next and press ***ENTER***.
4. The Destination Folder window appears. In this window there is a file path field, in which the file path C:\Program Files\Pulse Data\KeySync is specified. Tab to Next and press ***ENTER***. Note: if re-installing KeySync, at this point you will get a dialog box saying "You've specified a folder that already exists…" Tab to Yes and press ***ENTER***.
5. Your PC is now ready to install KeySync. In the window that appears, Tab to Next and press ***ENTER***.
6. After a short period of installing activity, a dialog box displays asking if you want to run KeySync at every start up. Tab to Yes and press ***ENTER***.
7. The Installation Complete window displays. Tab to the Finish button and press ***ENTER***.
8. If you are downloading from a CD, the original 6 button window will appear again. You can either try another option, or tab to Exit and press ***ENTER***.

KeySync has put an icon in your system tray, but otherwise as KeySync is driven from your BrailleNote BT, there is very little you need to do with it on the PC.

Important Note: If for some reason you wish to reinstall the KeySync PC Software, do not remove the original version of the software, just install over it. This is because the removal process also deletes all the files in the same folder, including the database that keeps a record of the synchronized pairs.

13.15.3.1 Installation of ActiveSync.

Because you are transferring data to and from your BrailleNote BT and PC, you will need to use ActiveSync to set up a connection with a partnership. This can be a serial, Infrared or Ethernet connection. The ActiveSync software is on the BrailleNote Family CD-ROM supplied with your BrailleNote BT, and there is more information on how to install and use it in.

If you have a partnership set up already, you don't need to do it again. If you don't, follow these steps to set one up.

1. Connect to ActiveSync, and select "Yes" to a partnership.

If you are presented with the "Select number of Partnerships" screen, check the box for "Yes, I want to synchronize with only this computer" unless you use the file synchronization facility (see 13.16 File Synchronization) on more than one PC, in which case choose the other option.

1. The Select Synchronization Settings window will display. If you are using file synchronization, check the files synchronization option. Otherwise, ensure that none of the options are checked.
2. A dialog box will appear. Tab to Finish and press ***ENTER***.

13.15.3.2 How to Synchronize for the first time.

Having set up the synchronization at both ends, you can now synchronize your contacts and appointments.

Follow the steps below to set up and perform a KeySync synchronization.

1. Connect to ActiveSync using your preferred connection type.
2. If you are not already connected with a partnership via ActiveSync, do so now.
3. From the Main Menu, choose Utilities Menu, then ***S*** for Synchronization.
4. KeySoft prompts: "KeySync Menu". There are two menu items. Select the second option, "Options for synchronization".
5. KeySoft prompts: "KeySync Options List". ***SPACE*** down to the option "Synchronize contacts? Currently (y/n)". Type ***Y*** for Yes or ***N*** for No and then press ***ENTER***.
6. KeySoft prompts: "Synchronize Planner? Currently (y/n)" Type ***Y*** for Yes or ***N*** for No and then press ***ENTER***.

   If you answered yes, KeySoft prompts: "Synchronize All appointments? Currently (y/n)" This option allows you to specify a period of weeks, past or future, that you wish to synchronize. If you want all past and future appointments synchronized, type ***Y*** for Yes and go to step 9. If you wish to specify a period of time, type ***N*** for No and then press ***ENTER***.
7. KeySoft prompts: "Past weeks of appointments to sync? Currently All." The values you can enter are, ***L*** for All, or a number between 0-999, which specifies the number of weeks. If you don't want to synchronize any past weeks, type ***0***. No number signs required. Type a value and press ***ENTER***.

8. KeySoft prompts: "Future weeks of appointments to sync? Currently All." The same values are valid as for the past. Type a value and press ***ENTER***. **Note:** In the case of both past and future time frames, all the instances of any new recurring appointments starting in the time frame will synchronize through, even if they extend beyond the time frame specified.
9. You are now set up to synchronize as much or as little as you wish to. The values that you have selected become the defaults until you change them again. To get back to the KeySync menu, press ***SPACE with E***.
10. From the KeySync menu, select "Synchronize now". This will activate the synchronization process.

13.15.3.3 Synchronizing after the first time.

Once you have set up all the options as described in the previous section, from then on initializing synchronization is a three-step procedure.

1. Connect to ActiveSync using your preferred connection types.
2. From the Main Menu, choose Utilities Menu, then ***S*** for Synchronization.
3. From the KeySync menu, select "Synchronize now".

13.15.3.4 What happens next.

You may have gathered from the previous sections that synchronization is not a completely automatic process; it requires you to provide your judgment and intervention at times to produce the results you want.

This section covers what to do with any conflicts, duplicates, etc. While conflicts and duplicates may be defined differently for the Address List and the Planner, the process is pretty much the same. The main difference is in the prompts. For address records, the First and Last names of the contact are used as an identifier. For appointments, the date, time and title are used as an identifier. In the procedure below, these identifiers will be represented by the word (identifier) in brackets.

This procedure starts at the point where you have pressed Synchronize now, step 11 of the procedure in 13.15.3.2 How to Synchronize for the first time.

Follow these steps:

1. KeySync displays: "Connecting…Syncing contacts/planner, please wait…". Some beeps may follow. Then there are three prompts, either one, some, all or none of which may come up, in the following order:
   a) "A conflict exists for (identifier). Option?". To choose the KeySoft version, press ***K***. To choose the PC version, press ***P***. To leave both copies unchanged and ask again next time, press ***L***. For more information on conflict resolution, go to 13.15.4 Resolving conflicts.
   b) "(Identifier) has been deleted from the (PC/BrailleNote). Option?" where PC/BrailleNote is either one or the other. Select one of the options outlined in 13.15.5.2 Restoring and deleting records, then go to Step 2.
   c) "There appears to be a duplicate for (identifier). Option?" Select one of the options outlined in 13.15.5 Duplicates, then go to Step 2.
2. KeySync has now presented all the relevant prompts and you have chosen options for them. The first time you synchronize, a dialog box will pop up on the PC, asking if you wish to synchronize with this particular BrailleNote BT, with an accompanying announcement from the BrailleNote BT saying "Please confirm on the PC that it is OK to sync data." To answer yes, press Enter on your PC. If you are not using Office XP or 2000 with the security pack installed, go to step 4.
3. If you are using MS Office XP or 2000 with the security pack installed, a second dialog box may display on your PC. It is a feature that is meant to stop viruses from polling your Outlook records, and warns that a program is trying to get into your contacts list. If you are not using a screen reader, it may seem like the process has hung, but it is a simple routine on the PC to get around the dialog box:

a) Tab to the check box labeled "Allow access".

b) Press the space bar to check the box, then Tab to go to a combo box that has a range of times up to ten minutes.

c) Use the arrow keys to select a time from the drop-down list.

d) Tab to the Yes button and press Enter. You can then proceed. Unless you have hundreds of contacts to synchronize, ten minutes should be enough time. If it is not, the dialog box will reappear allowing you to specify another ten minutes in the same way.

4. KeySync will now display: "Syncing (contacts/planner), please wait" then proceed to synchronize. During this process, KeySync will let you know what is going on with a series of "Percentage complete" prompts. When it is complete, KeySync will display some or all of this prompt: "Finished syncing (contacts/planner). x PC items updated. x KeySoft items updated. x KeySoft items deleted"
5. If you are synchronizing both contacts and planner applications, at this point KeySync will return to step 1 and go through the process again for the other application. **Note:** Once the synchronization begins, do not interrupt it.
6. When all the syncing is complete, KeySync will display: "Syncing complete. KeySync menu."

13.15.4 Resolving conflicts.

Conflicts arise when changes have been made to both the KeySoft and Outlook copies of a record since the last synchronization, even if the changes are identical on both systems. KeySync gives a variety of ways with which you can manage conflicts, either automatically, or on a case by case basis. The conflict resolution procedure is the same for both Contacts and Planner records.

Follow these steps to set up what happens when there is a conflict.

1. From the Main Menu, choose Utilities Menu, then ***S*** for Synchronization.
2. KeySoft prompts: "KeySync Menu". There are two menu items, "Synchronize now", and "Options for synchronization". Select "Options for synchronization" and the KeySync Options List is presented.

   From the list, select "Action if something has changed on both the PC and in KeySoft? currently (option)" where (option) is one of the options listed and explained below. These options define what will always happen at a conflict.

To change the setting, press the hotkey for the option of your choice.

These are the options followed by their hotkeys:

"Ask the user to choose" -***A***. Choose this option if you wish to make a judgment call on every conflict individually.

"Choose KeySoft's copy" -***K***. Choose this option if you trust the KeySoft records completely over Outlook.

"Choose the PC's copy" -***P***. Choose this option if you trust the Outlook records completely over KeySoft.

"Leave both unchanged" -***L***. Choose this option if you don't wish to synchronize either side at this stage.

KeySync identifies conflicts before processing them, and if you have selected "Ask the user to choose", KeySync will query all the conflicts first and then do the processing. At this point, KeySync offers the other three options to you - "Choose KeySoft's copy", "Choose the PC's copy", and "Leave both unchanged"; to select one, press its hotkey. The affected record is identified but not the actual cause of the conflict. If you are sure which copy is the version you wish to keep, select one of the Choose Copy options. If you are unsure of the cause of the conflict, select "Leave both unchanged", so you can review the two copies later and with that information, rerun KeySync and choose the appropriate copy when prompted again.

13.15.5 Duplicates.

Duplicates are records that KeySync recognizes as possibly being the same as each other, but that have not previously been synchronized. In the Address list, duplicates occur when there is an address record on Outlook and one on KeyList with exactly the same first and last name. In the Planner, duplicates occur where Outlook and KeyPlan have either exactly the same title and start time, or start time and duration. While they may be defined differently, KeySoft handles Planner and Address List duplicates the same way.

When you first synchronize, if you have been double entering contacts or appointments, you may have many duplicates, but once these are resolved, a duplicate will only occur when you enter duplicate records separately onto the BrailleNote BT and your PC.

For example, you know two people called Joseph Brown, and so the address records are not duplicates at all, bearing in mind that the only data that is compared are the first and last names. However if they are the same person, you can choose one record or the other from which to make both copies. Or in KeyPlan, you set up a recurring appointment for a meeting at 10am on Mondays, and the meeting chairperson sets a recurring appointment up for all attendees in Outlook for the same time. As they have the same start time and duration, KeySync will recognize them as duplicates.

Resolving duplicates is handled quite differently to conflicts, because they occur so differently – predictably you may have a lot of duplicates the very first time you synchronize, but hardly any after that, as opposed to conflicts, which only show up once you get into the synchronizing habit. For example, there are no global settings for what happens to a duplicate; instead you have a selection of actions available when one shows up.

13.15.5.1 How to resolve a duplicate.

You have started the synchronization process as described more fully in 13.15.3.2 How to Synchronize for the first time. In the prompts quoted in the procedure below, the word (identifier) in brackets is a placeholder for the First and Last name of an address record or the date, time and title of an appointment.

KeySync displays: "There appears to be a duplicate for (identifier). Option?"

These are the available options followed by their hotkeys:

"Choose KeySoft's copy" -***K***. Choose this option if you trust the KeySoft record completely over Outlook.

"Choose the PC's copy" -***P***. Choose this option if you trust the Outlook record completely over KeySoft.

"Keep both copies" -***B***. Choose this option to keep both copies as they are if a) you know the two records are not meant to be the same, or b) they are supposed to be the same but you are not sure which one you wish to choose as the master record.

"Update all duplicates from KeySoft copies" -***S***. Choose this option if, during this synchronization session, you will want this and any subsequent duplicates to be updated on both sides from KeyList or KeyPlan.

"Update all duplicates from PC copies" -***C***. Choose this option if, during this synchronization session, you will want this and any subsequent duplicates to be updated on both sides from Outlook.

"Keep both copies for all duplicates" -***A***. Choose this option if, during this synchronization session, you will want both copies of this and any subsequent duplicates to stay as they are.

Options ***B*** and ***A***, both of which are for keeping copies as they are, behave differently to the conflict option ***L*** for "leave both copies unchanged". Once you select either ***B*** or ***A***, KeySync assumes that they are not duplicates but unrelated records, and therefore won't ask you next time. So, if you chose these options in order to review the copies and decide which one to keep as the synchronized copy, you will have to delete the other copy manually. The next time you run synchronization, the remaining copy will be synchronized across to the other system.

13.15.5.2 Restoring and deleting records.

If you delete one copy of a pair of synchronized records, during the synchronization process, you will have the opportunity to restore or delete it. However if both copies are deleted, they are both gone for good.

In the prompts quoted in the procedure below, the word (identifier) in brackets is a placeholder for the First and Last name of an address record or the date, time and title of an appointment.

At the delete prompt: "(identifier) has been deleted from the (PC/BrailleNote BT). Option?" you can choose from the following options:

Restore this item. - ***R***

Delete this item - ***D***.

Always restore deleted items - ***A***.

Always delete deleted items - ***E***.

Options ***R*** and ***D*** apply only to the currently mentioned item. Options ***A*** and ***E*** apply to all of the items deleted since the last synchronization. Only select ***A*** or ***E*** if you are sure that all the changes to that device, be it the BrailleNote BT or the PC, are the accurate ones.

Because by choosing to delete items, they are then unrecoverable, there are safety messages that appear after you choose options ***D*** or ***E***:

For ***D*** – deleting one item, the message reads, "You are about to delete (identifier). Are you sure?"

For ***E*** – deleting several items, the message reads, "You are about to delete (x) items. Are you sure?" where x is the number of items.

Press ***Y*** for Yes, or ***N*** for No. If you select ***Y***, the synchronization process continues. Select ***N*** and you will return to the deletion options prompt.

13.15.5.3 Editing Considerations.

This information applies to the Notes field in an Address List record, and to the Location, Title and Notes fields of an Appointment in the Planner.

In order for KeySoft and MS Outlook to speak to each other, they need a common language, and that is text. This means that if you use contracted Braille entry on your BrailleNote BT in one of the fields mentioned above, you may notice a slight change to an entry after synchronizing if that entry has been changed at the Outlook end. This is because the contracted Braille you originally typed for this entry has been replaced with the text from Outlook, but if you are using contracted Braille as your preferred reading grade, it should appear the same because of the BrailleNote BT's on-the-fly translation.

There are two implications of this process – firstly there may be changes to the way the contracted Braille appears, caused by back and forward translating from Braille to text to Braille, and secondly when editing any fields. Instead of editing in contracted Braille, you will need to use computer Braille.

13.15.6 Synchronizing the Address List.

KeySync works by pairing Outlook and KeyList records with each other. It initially identifies pairs of records by looking for identical first and last name fields on each side, and creates copies of single records to make them into a pair. After that, any changes to the pairs are updated when you synchronize. KeySync works with the whole KeyList address database on the BrailleNote BT, and on Outlook the main Contacts folder, not including any subfolders or renamed contacts folders or any group or distribution lists set up on Outlook.

KeySync carries out the following functions:

When you add a new address record to either KeyList or Outlook, KeySync will add the record to the other system.

When you delete an address record in either KeyList or Outlook, KeySync will ask whether you want to delete it from the other system, or restore it.

Note: When you delete both copies of a record, they are gone for good.

When you make a change to an existing address record in either KeyList or Outlook, KeySync will update the other system with the changes.

When you make changes to the same record on both sides, KeySync will detect the conflict and ask you what you want it to do.

Here are some examples:

1. Initially, your friend Andie is in your BrailleNote BT as Andie Brown, but in Outlook as Andrea Brown. Both records are synchronized across as the names are not identical, and you can delete whichever one you don't wish to keep at both ends.
2. You update Kyle Jones' e-mail address on the BrailleNote BT but not on your PC. When you run KeySync, it automatically updates Outlook with the new e-mail address.
3. You update a customer's mobile phone number on Outlook, but when you try to ring her while out of the office, you find it is incorrect. You get the correct number and enter it into KeyList as you have your BrailleNote BT with you. When you run KeySync, the conflict will be detected and as you have set KeySync to always ask you about a conflict, you tell it to use the KeySoft copy.
4. On Outlook, you delete the contact record for a supplier that you no longer use. When you synchronize, KeySync asks if you wish to delete it off KeyList, or restore it to Outlook. You select the delete option and wipe it completely.

13.15.6.1 Fields.

Because there are a lot more fields in an Outlook Contacts record than in a KeyList address record, and they have different names, only the fields that are in both systems are synchronized. The pairs in order of KeyList then Outlook are:

Last Name	Name, Last
First name	Name, First
Middle Name	Name, Middle
Title	Name, Title
Home Phone	Home, Phone
Business Phone	Business, Phone
Cell Phone	Home, Mobile
Home E-mail	E-mail Address
Business E-mail	E-mail Address 2
Home Fax	Home Fax
Business Fax	Business Fax
Street Address	Home Address
Street Address Line 2	Home Address
Street Address Line 3	Home Address
City	Home Address City
State or County	Home Address State
Zip or Postcode	Home Address Zip
Home Country	Home Country
Business Title	Job Title
Company Name	Company
Department	Department

Business Street Address	Business Address
Business Street Address Line 2	Business Address
Business Street Address Line 3	Business Address
Business City	Business Address City
Business State or County	Business Address State
Business Zip or Postcode	Business Address Zip
Business Country	Business Country
Web Page	Web Page
Notes	Notes

13.15.6.2 Unused Fields in Outlook.

The fields in an Outlook record that are not synchronized by KeySync are not generally affected by the synchronizing process. However, if you delete a previously synchronized record off KeySoft, and during synchronization choose to delete the Outlook record as well, the entire Outlook record will be deleted, including the unused fields.

13.15.6.3 Note on Area Codes.

It is a characteristic of Outlook that if you do not put an area code onto a phone number, it fills in the default country and area code for you, regardless of whether it is correct or not, and while you can change them, you cannot delete these codes entirely, so you have to have these codes even if the number is local. The phone number fields in KeyList do not do this, however; they simply take whatever numeric combination you type into them. This means that if a number in a KeyList record without a country and area code synchronizes to Outlook, Outlook will add the default one at the Outlook end. And the next time you synchronize, those codes will synchronize back to KeyList. However if you type a country and area code in KeyList, using a space between each code, Outlook will recognize these and sort them into the appropriate fields. For example, the number +1 415 8206820 in KeyList will synchronize accurately into Outlook.

13.15.6.4 Notes on Refreshing Outlook.

If you happen to be displaying an individual contact record when you synchronize, the display does not automatically refresh itself with the new information. It will however refresh once you close it.

13.15.7 Synchronizing the Planner.

13.15.7.1 Overlapping Appointments.

Overlapping appointments happen when two appointments are scheduled in all or partly the same timeframe, for example one for 10am – 11am and one for 10.30am – 12noon on the same day. Both MS Outlook and KeyPlan will allow you to schedule these appointments, although you will get a notification message from either system. However in this section we are just going to look at the BrailleNote BT end of the process and overlapping appointments that occur when synchronizing with Outlook.

When synchronizing, there is a greater chance of getting unwanted overlapping appointments caused by scheduling on both systems. If you are synchronizing regularly, however, your current schedule will be fairly up to date in both systems, so overlapping appointments will be fairly uncommon. But just in case, KeySync will notify you of any overlaps caused as a result of the synchronization process, when the syncing is finished. This is different to conflicts and duplicates, which come up before the actual synchronization has taken place. The overlapping appointment announcement will only come up for instances occurring in the next 365 days.

The following procedure starts where the Synchronization procedure ends at step 10, 13.15.3.2 How to Synchronize for the first time.

1. After any conflicts or duplicates have been resolved, and the syncing is 100% complete, KeySync displays: "Finished Syncing Planner, x KeySoft items updated, x PC items updated" where x is a number.
2. If there are any new overlapping appointments, KeySync will display: "There are overlapping appointments, review them now?" To ignore them, press ***N***. Unlike unreviewed conflicts and duplicates, these will not be displayed again. If you wish to review them straight away, press ***Y***.
3. KeySoft returns you to the planner at this point, to the first overlapping appointment resulting from the synchronization. Once in the Planner, you can review any or all overlapping appointments using the two commands:

Go to next overlapping appointment: ***SPACE with dots 3-4-5-6***, and

Go to previous overlapping appointment: ***SPACE with dots 1-2-3-6***.

13.16 File Synchronization.

It is also possible to synchronize files between the BrailleNote BT and a PC. This means you can, effectively, keep copies of files on both your BrailleNote BT and PC at the same time, with a choice of having them updated automatically in either direction, or only when you choose to update them. For example, if you have a report that you may wish to work on while traveling to work, then on your PC, then on your way home, simply put it into the Synchronized Files folder on either your BrailleNote BT or PC, and when you ActiveSync, both versions will synchronize to the latest version.

File synchronization is not a KeySync function, but works with ActiveSync alone. So, even if you don't want to synchronize your planner or address list, you can still take advantage of this tool, and you don't need to install the KeySync PC software. Also unlike KeySync synchronization, you can synchronize files with more than one PC.

13.16.1 How to Set Up File Synchronization.

Follow these steps to set up file synchronization between your BrailleNote BT and your PC.

1. Connect to ActiveSync and say "Yes" to a partnership. **Note:** If you already have a partnership set up, in the ActiveSync window on your desktop, go to Tools then Options, and skip to step 3.
2. If you are presented with the "Select number of Partnerships" screen and only want to sync with this computer, check the box for "Yes, I want to synchronize with only this computer". If you synchronize with more than one PC, however, it is fine to check the other box.
3. The Select Synchronization Settings window will display. Ensure that the Files option is checked, no others. **Note:** KeySync will still function if Files is checked.
4. A dialog box will appear telling you that a synchronized files folder will be set up on your desktop. Tab to the OK button and press ***ENTER***.
5. You are back in the Select Synchronization Settings window. Tab to ***OK*** and press ***ENTER*** and a window called Set Up Complete appears. Tab to the Finish button and press ***ENTER***.

6. ActiveSync will set up a folder in My Documents called "BrailleNote BT Synchronized Files", for storing synchronized files. Likewise, it creates a folder called "Synchronized Files" on the KeySoft System Disk of your BrailleNote BT. It is only the files you put into either of these folders that will be synchronized.
7. At this stage you can select how you want the synchronization to operate. From the Tools menu, select Options, then the Sync Mode tab. You have three choices; they are: Continuous, only at connection, and manually. Select the one that you prefer. Stay in this window for the next step.
8. Lastly, as described in 13.14.7.2 File Conversion and ActiveSync, you may want to turn off the Convert File Format function. This converts MS Word files to MS Pocket Word and back during the synchronization process.

Your File Synchronization is now set up.

13.16.2 Tips on File Synchronization.

1. The Synchronization folder on your BrailleNote BT will set itself up on the KeySoft System disk. Because of this, during a ***dots 4-5-6*** reset, any files in this folder will get erased. While the copies on the PC will still be available, if you synchronize again, these too will be deleted. So, if you wish to restore the PC copies to your BrailleNote BT, before connecting to the PC with ActiveSync, move the files out of the Synchronization folder on your PC and into another folder, connect, and then move them back. They will then be restored to the BrailleNote BT synchronization folder. However none of this can restore any changes made to the BrailleNote BT copy of the files since the past synchronization.
2. While the instructions for file synchronization say to turn off the converter function, if the file on your PC is a Microsoft 2000 or later document, you may wish to leave the converter function turned on, and convert the file to Pocket Word. Alternatively, save the Word document as a rich text format file before transferring to the synchronize folder.

End of Connectivity Chapter.

14 File Manager.

A file is the name given to any organized information stored in an electronic form. File types stored by the BrailleNote BT are word processor documents, e-mail attachments, address lists, dictionaries, and so on. The File Manager provides tools for manipulating and organizing files using folders and a directory structure.

To select the File Manager, go to the Main Menu and press ***F***. KeySoft displays: "File Manager menu."

As always you can review the options in the menu by pressing the ***ADVANCE*** and ***BACK*** thumb keys or ***SPACE*** and ***BACKSPACE***, followed by ***NEXT*** or ***ENTER*** to select an item, or just press an initial letter. The File Manager comprises the following items:

1. Directory: To check all the files in a folder;
2. Copy File: To copy a file or group of files;
3. Erase File: To erase any file;
4. Rename File: To change the name of a file;
5. Move File: To move a file from one location to another;
6. Protection: To protect or unprotect any file. Once a file is protected, it cannot be accidentally erased or altered without first unprotecting it;
7. Translate File: Firstly, to translate a Braille file to a text file, or vice versa. The discussion about file translation starts at 14.17 File Translation.

   Secondly, to import a file that is in some other format - ASCII or Microsoft Word for example, into the BrailleNote BT and convert it to a Keyword format. The file may be on a disk or storage card or brought in through the serial port.

   Thirdly, to export a document from BrailleNote BT's KeySoft format into some other format; for example, ASCII or Microsoft Word format. The file may be written to a disk or storage card or sent out through the serial port;
8. Folder Manager: To create, rename or erase a folder or sub-directory.

General Caution: While in the process of copying or moving any files onto your Flash Disk from any location, never perform a reset. This can cause your Flash Disk to disappear and can cause corruption.

14.1 Selecting Files Folders and Drives.

Documents, folders and drives were discussed in 3.4 Documents Folders and Drives. Remember documents are just particular types of files and they are handled in the same way as far as the File Manager is concerned.

When you choose an option from the File Manager menu, such as Copy File, you are first asked to select the drive. The selection of a drive was discussed in 4.8.1 Selecting a Drive. The selection of a folder and file follows the same procedure as discussed in 3.5 Opening a Document.

There is another way of selecting a drive in KeySoft generally, which is not restricted to the File Manager. If you are at a prompt for a file name or folder name, and you have not had the opportunity to select a drive, then press ***BACKSPACE***. KeySoft prompts: "Drive? (Last drive used)."

You can choose a drive, and then follow the prompts to select a folder and file.

14.2 Checking the Spelling of Folder or File Names.

Folder or file names are easy to check. When KeySoft displays the name of a file or folder, you can repeat the name by pressing ***SPACE with R***. Any punctuation and spaces within the name are not usually spoken. If you wish to hear the file or folder name spoken with punctuation and spaces included, press ***SPACE with O***, then ***H***. To check the exact spelling of a file or folder name, press ***SPACE with O***, then ***S***.

14.3 The Directory Option.

To obtain information about a file, folder or drive, use the Directory option. From the File Manager menu, press ***D*** for Directory and KeySoft displays: "Drive? (Last drive used),"

You can select the drive and then the folder as usual. KeySoft then displays a list of files in the selected folder. Review the list in the usual way. Let us say that you are reviewing the files in a folder, and the file name "Frank" is displayed. If you press ***SPACE with I***, KeySoft provides information about the file. That might typically be as follows: "Braille document. Size: 945. Last modified: Saturday 24 May 2004, at 8:21 PM. Unprotected."

At the point where KeySoft displays "List of folders" on a particular drive**,** you can request information about the selected drive by pressing ***SPACE with I***.

This might typically be as follows: "Disk name: (name). (number) characters free. Disk size: (number) characters."

Similarly, you can obtain details as to when a folder was created by stepping through the list of folders presented after the "List of folders" prompt is displayed until your desired folder is presented, and then pressing ***SPACE with I***.

For details on how to view sub-directories, see 14.16 Creating Renaming and Erasing Sub-Directories.

14.4 Folder Manager.

The Folder Manager allows you to create, copy, rename or delete folders and sub-directories. From the File Manager menu press ***F***, for Folder Manager. You can review the options in the usual way. You can also select an option in the usual way by pressing ***NEXT*** or just press the initial letter of the option name.

14.4.1 Creating a New Folder.

From the Folder Manager menu, press ***N,*** for New Folder. KeySoft prompts: "Create folder on which drive? Press ***ENTER*** for Flash Disk."

Select the required drive, and KeySoft prompts: "New folder name?."

Type the new name, of up to 250 characters and press ***ENTER***. A new, empty folder is created, and you are returned to the Folder Manager menu.

Note that this is not the only place you can create a folder. You can create a folder at most "folder name" prompts just by typing a new name.

For instructions on how to create a sub-directory, see 14.16.2 Creating a Sub-Directory.

14.4.2 Copying Folders.

The option of copying folders has been added to the Folder Manager. To access Copy Folder, go to the File Manager Menu and open the Folder Manager by pressing ***F***.

Copy Folder is listed in the Folder Manager Menu, after New Folder (previously known as Create Folder). Once you hear "Copy Folder", press ***ENTER*** and KeySoft will prompt: "Copy folder on which drive? Press ***ENTER*** for Flash Disk." If you want to copy the folder onto your Flash Disk press ***ENTER*** and KeySoft will prompt: "Folder to copy?."

In addition to copying folders, it is also possible to rename and erase them. You cannot however protect and unprotect folders, nor can you move them.

14.4.3 Renaming a Folder.

1. From the Folder Manager menu, press ***R,*** for Rename. KeySoft prompts: "Rename folder on which drive? (Suggested drive)."
2. Select the drive, and then the folder you wish to rename. KeySoft prompts: "New name for (original name)?."
3. Type in the new name and press ***ENTER***, or use the prompt editing commands as discussed in 5.17 Editing at a Prompt to modify the original name, and press ***ENTER***. The name is changed and you are returned to the Folder Manager menu.

Alternatively, while in a folder list at any folder prompt, press ***BACKSPACE with R***. Follow steps 2 and 3 above, and you will be returned to where you were in KeySoft.

For instructions on how to rename a sub-directory, see 14.16.3 Renaming a Sub-Directory.

14.4.4 Erasing a Folder.

You can erase a folder and its contents, including unprotected, protected or hidden files and sub-directories, in one operation. Therefore it is important to check before erasure that there is nothing in the folder that you wish to keep before proceeding.

1. From the Main Menu, press ***F*** for File Manager and then ***F*** for Folder Manager.
2. Press ***E*** for Erase a folder, then select a drive.
3. At the "Folder to Erase?" prompt, press ***SPACE*** and locate the folder you wish to erase.
4. When you have found it, press ***SPACE with dots 5-6***. KeySoft will prompt: "Folder to erase? Press ***ENTER*** for folder name" where folder name is the selected folder. Press ***ENTER***.
5. KeySoft prompts: "Erase folder and all contained files and folders. Sure?" Press ***Y*** and the erasure begins.
6. If any files are protected, KeySoft prompts: "file name is protected. Erase anyway?". Press ***Y***, or ***A*** for All, if you suspect there may be others that you also wish to erase. If you wish to save the protected file, press ***N*** and the erasure of the other files will continue, however the actual folder will not be erased.
7. KeySoft displays the number of files and sub-folders erased, then returns to the Folder Manager menu.

Note that you can also erase a folder by pressing ***BACKSPACE with dots 1-4***.

14.5 Document and File Types.

When giving information about a file, KeySoft displays the file type in addition to the size and date, etc. The file type indicates what type of information the file contains and whether it is a Braille document, a Microsoft Word document, an address list and so on. It determines how the information contained in a file is to be interpreted by KeySoft. KeyWord, for example, recognizes certain file types and interprets these file types to extract meaningful information. In the BrailleNote BT file system, files can contain information that be interpreted in all manner of different ways. In KeySoft, files which contain text or Braille are called documents.

The following document or file types are supported by KeySoft:

Braille Document: A document type where the contents are interpreted as Braille characters and symbols;

Microsoft Word: The Microsoft Word, word processor document format;

Rich text format: A standard word processor format that converts formatting to instructions that other programs, including compatible Microsoft programs, can read and interpret;

Word Perfect 5.1: A file type used by the Word Perfect 5.1 DOS word processor;

KeySoft version 2 Braille: This is the Braille document format of version two of KeySoft, the version used by the Braille Companion;

KeySoft version 2 text: This is the text document format of version two of KeySoft, the version used by the DOS versions of KeySoft Companion, the KeyNote Companion and the Braille Companion;

ASCII text. An ASCII text document contains only ASCII characters. It allows only very simple formatting using, for example tab characters;

UNICODE text. A standard character encoding format that supports international languages;

Plain Braille. A standard form of Braille.

When reviewing a folder in the File Manager, KeySoft's default setting only displays files that are likely to contain text. This prevents system files from "cluttering" the list of files and limits the accidental deletion of system files.

KeySoft also provides the option to view all files in the folder. To select this option press ***SPACE with X*** when the prompt "List of files in (folder name)" is displayed. There are two additional file views available. These are: "List of all, including hidden, files" and "List of KeySoft files."

Each time you repeat the ***SPACE with X*** key sequence a different type of file view is presented.

14.6 Opening Files using File Manager.

The Directory option in the File Manager allows you to open files using the Media Player, KeyWord, KeyWeb and KeyBook.

A file name will be displayed after ***ENTER*** is pressed, and File Manager will open the file in the correct application if the file type is recognized. File Manager recognizes the file type from the extension, for example, if it is Greensleeves.mp3, File Manager knows to open the file in the Media Player. The file types, .wav, .wma, and .m3u (a play list file that can only be played on the mPower), will also be opened in the Media Player.

The file types that can be opened in KeyWord include .brf, .txt, .rtf, .doc, KeyWord text and Braille files. For KeyWeb, the files .html/.htm and url (shortcut) are recognized by the File Manager.

14.7 Changing the Order of File Lists.

In a list of files, you can change the order in which files are listed. Files can be ordered by name, date, type or size. For example, let us consider the file, Board of Trustees Report.doc which was last modified on Friday 5 May 2006 and is 27 KB. The order can be changed so that this file is listed before Salary Review.doc which was last modified on Friday 28 April 2006 and is 12 KB. Note that you cannot change the order of folders or directories.

As you can see, file lists are arranged in alphabetical order when ordered by name, so that the names of files appear from "A" at the top of the list to "Z" at the bottom of the list. Likewise, by changing the date order, the dates that the files were last modified are listed from the most recently modified to the least recently modified. You can order by type, for example, you can order all the .doc files before all the .txt files in your list. The file size can also be organized from largest to smallest. Ordering files by size is particularly useful when you realize that you are running out of storage space and need to find and delete the largest file in your list of files.

To toggle between ordering the file lists by name, date, type or size of a file, press ***SPACE with V***.

14.8 Selecting Multiple Files.

You can mark any number of individual files to select multiple files. When you mark a file, you are selecting it to either copy, move, erase and protect/unprotect. You could also select multiple files, for example, when printing, importing, etc.

You can either mark an individual file or all the files in a list of files. To toggle between marking and unmarking an individual file, press ***SPACE with M***. If you later discover that you have marked the wrong file or group of files or decide against making a change to a file or group of files, repeat the command, press ***SPACE with M*** to remove each mark. To mark all files in a list of files, press ***ENTER with lower g***. This is also a toggle command; in other words it will alternate between marking all files and unmarking all files.

Note that marks are kept after you open a file in the Directory option. However, marks will be lost if you exit a list of files or if you change the view in a list of file, by pressing ***SPACE with X***.

As well as marking files, you can also mark folders. Once marked, folders can be copied or deleted.

Once you have marked the appropriate file or group of files you can then perform the copy, move, erase and protect/unprotect operations. You can also rename individual files. To do this, press ***BACKSPACE with R***. Note that you cannot mark and then rename multiple files.

To copy a marked file or a group of files, press ***BACKSPACE with Y***. For instance, you may wish to make a copy of a file so that you can move it to another location.

To move a marked file or a group of files, press ***BACKSPACE with M***. You can easily move a file to a different location, for instance from the General folder to the KeyBase folder. Note that a marked file or group of files will no longer be marked once moved to another folder.

If you move a protected file, you will be asked to confirm the move. Also, when you copy or move a protected file, it will remain protected.

To erase a marked file or a group of files, press ***BACKSPACE with C***. When you decide that you no longer need a file or want to get rid of one in order to free up more storage space, you can erase it.

To protect a marked file or a group of files, press ***BACKSPACE with P***, then ***P***. You can add security by choosing to protect a file. This is good if you need to prevent others from making changes to a file. This effectively makes the file Read-Only, which means that others can open the file and read it, but cannot make any changes to it.

To unprotect a marked file or a group of files, press ***BACKSPACE with P***, then ***U***. If the protected file is to be reviewed and you want the reviewer to make changes to the file, you can unprotect it.

14.9 Copying a File.

This option allows any file to be copied to another folder or drive. You can also copy within a folder.

A file is often copied so it can be used as the basis for a similar document or as a template. You might also copy an important file to another disk for security.

Copying is a process of duplication, it does not remove the original file. If you wish to do this, refer to 14.10 Erasing a File. During the process, prompts use the terms "Source" and "Destination", which refer to the original file and its copy, respectively.

To copy a file, start from the File Manager menu and press ***C***. KeySoft prompts: "Source drive? (suggested drive)."

Follow the procedure as previously described; select the required drive, and answer the subsequent prompts for folder and file name. The file is initially assumed to be a KeySoft type meaning that it may only be in Braille. To type the name of any file, remembering you must type the name in computer Braille, press ***SPACE with X***. The first time you press ***SPACE with X***, KeySoft displays the current entry type. The second and subsequent times, KeySoft changes the entry type. In the list of files, ***SPACE with X*** can be used to narrow or widen the list of options as described in 14.5 Document and File Types.

After a source file name has been selected, KeySoft prompts: "Destination drive? (suggested drive)."

The choices of destination drive and folder are made in exactly the same way as in choosing the Source File name.

The destination file name is the same as the source file name except if a file is copied within the same folder. Then the words "Copy of" are put in front of the file name to differentiate it from the original file. You can, of course, rename file as described in 14.11 Renaming a File.

When a selection has been made, copying commences and after a few seconds you are returned to the File Manager menu.

If the chosen Destination File name already exists in the destination folder, KeySoft prompts: "(File name) already exists. Replace?."

KeySoft is asking if you want to replace the existing file. Remember that it cannot be recovered later if you change your mind. If you do want to replace it, press ***Y***. Pressing ***N*** returns you to the File Manager menu without the file being copied.

14.10 Erasing a File.

To conserve disk space, or to make file management easier, you may wish to erase files you no longer need. The Erase File option accomplishes this.

From the File Manager menu, press ***E*** to select the Erase File option. KeySoft prompts: "Erase file from Drive? (suggested drive)."

Choose a disk, folder name, and file name in the same way you would choose a file to copy, as described in the previous section. When a file has been chosen for erasing, KeySoft prompts: "Erase (file name). Sure?."

This is your last chance to abandon this destructive process. Press ***Y*** to erase the file, or ***N*** to abandon the operation.

NOTE: Protected files cannot be erased until they are first "unprotected," as described in 14.13 Protecting a File.

14.11 Renaming a File.

The names of files often have to be changed as their contents alter with editing, or to avoid confusion with other files. This can be done using the Rename File option.

1. From the File Manager menu, press ***R***, for Rename. KeySoft prompts: "Rename File on which Drive? (suggested drive)."
2. Select the drive, and follow the prompts for folder and file. Once a file has been selected, KeySoft prompts: "New name for (file name)?."
3. Type the new file name or edit the existing file name and press ***ENTER***. Editing the existing file name is the same as editing at a prompt as discussed in 5.17 Editing at a Prompt. Providing the file is not protected, the name is changed, and you are returned to the File Manager menu.

Alternatively, while in a file list at any file prompt, press ***BACKSPACE with R***. Follow steps 2 and 3 above, and you will be returned to where you were in KeySoft.

14.12 Moving a File.

With this option you can move a file (protected or unprotected) from one folder/directory/drive to another in one action. This is different to the Copy file option in that it does not leave a copy of the file in the source folder. Otherwise it is almost the same procedure.

To select the Move File option, start from the File Manager menu and press ***M***. KeySoft will display: "Source Drive? Press ***ENTER*** for (suggested drive)."

Locate and select the file you wish to move in the usual way. When you select the file, KeySoft will display: "Destination Drive? Press ***ENTER*** for (suggested drive)."

Locate the destination folder or directory. When you select it, KeySoft will display: "One file moved. File Manager menu."

As the prompt says, you are back in the File Manager menu.

You can also move a file by selecting it in the usual way and pressing ***BACKSPACE with M***.

14.13 Protecting a File.

Files can be protected against accidental erasure. Once a file is protected, it cannot generally be changed, erased, or copied over with a new file without first removing the protection. You do not need to remove the protection first if you specifically erase a protected file either individually or as part of a group of files or a folder. Although KeySoft does not require you to remove the protection, it will provide the following prompt regardless: "xyz is protected. Erase anyway?." For more information on erasing folders, refer to 14.4.4 Erasing a Folder.

To select the Protect File option, start from the File Manager menu and press ***P***. KeySoft prompts: "Protect File on which Drive? (suggested drive)"

Select the file to protect in the same way as choosing a file to copy, erase or rename. Once a file has been selected, KeySoft prompts: "(File name) is unprotected," or protected, as appropriate. Press ***P*** to protect, or ***U*** to unprotect, and you are returned to the File Manager menu.

14.14 Groups of Files and Wild Cards.

Often you may want to copy a group of related files, such as all letters to a particular company. You could do this one file at a time, but it is slow if there are more than 2 or 3 files.

To speed things up, KeySoft allows the use of two "wild card" characters to specify a group of files with related names.

Any single character can specified by ***SPACE with dots 2-3-6***. For example, the file name:

NOTES, followed by ***SPACE with dots 2-3-6***,

would select all the following files:

NOTES1;

NOTES2;

NOTES3.

You can use the single character wild card more than once. For example, the file name:

NOTES, followed by ***SPACE with dots 2-3-6***, twice,

would select NOTES13 and NOTES24, but would ignore NOTES7.

The second wild card is ***SPACE with dots 3-5***. This is the multi-character wild card, used to represent any group of characters. For example, the file name:

SCIENCE, followed by ***SPACE with dots 3-5*** would select all the following files:

SCIENCE NOTES – JAN;

SCIENCE;

SCIENCE3.

To Copy, Erase, or Protect a group of related files, include the appropriate wild card characters in the file name that you enter at a "File name?" or "Document name" prompt. Use Help, ***SPACE with H*** to remind you of the commands.

To select every file in a folder, use just the multi-character wild card, ***SPACE with dots 3-5***, as the file name. You might do this to copy the entire contents of one folder to another folder. If you save the copies in the same directory, KeySoft prefixes "Copy of" to the file name of each copy.

When using wildcards KeySoft gives the opportunity to confirm each file individually or to let KeySoft operate on all files without interruption. KeySoft prompts: "Confirm each file?."

You can select ***Y*** to confirm each file individually, or ***N*** to for KeySoft to perform the operation without interruption. If you select "confirm each file", KeySoft requests confirmation for each file before completing the operation and moving onto the next file.

For example, when using wildcards to erase files, KeySoft prompts: "(Number)files were selected. Confirm each file?" where number is the number of files. If you press ***Y***, KeySoft prompts for each file: "OK to erase (file name)" where file name is a matching file name. ***Y*** confirms the action for this file, ***N*** cancels the action for this file and ***A*** confirms the action for this and all the other matching files.

14.15 What is a Directory.

The idea of folders was introduced very early on in this user guide because this provides a convenient way to organize documents. When used in one layer only, we call them folders. However when folders are organized in a tree structure with any number of levels, we refer to them as directories. The distinction is not in what they are but in how they are used. It might help to think in terms of being in "folder mode" i.e. one layer, or "directory mode" i.e. several layers. Folder mode is the standard folder management mode in which the BrailleNote BT operates. The reason for having two modes is to make management simpler. If you never intend to use the directory structure, folder mode saves having to type slashes at prompts. If you do have a directory tree of several layers, folder mode will give you the topmost layer of directories only. You can then swap to directory structure to work in the sub-directories of the selected directory.

The directory structure is particularly relevant when importing or exporting files. For instance, you might want to import a file from a storage card. The card might be organized as a directory tree with several sub-directories.

If you find yourself comparing this with how MS Windows Explorer works, it pays to be aware that you cannot view the sub-directories and files in a directory in the same list. For example, if you are listing the sub-directories in a directory, no files will be listed. If you list the files in the directory, no sub-directories will be listed.

When in directory mode, a folder becomes a directory and this is indicated by a slash character "/", appearing before the folder name. This initial slash represents the "root" directory, which contains all the other directories on this drive. The root is called the "parent" of the directories “beneath” it.

A typical directory name starts with the slash, followed by a directory name followed by one or more sub-directory names separated by "/." For example, a directory name on a PC card might be: "/storage card/my documents/correspondence." Or a directory on the Flash Disk might be /Flash Disk/general/letters.

What does this mean? The name can be broken down into the following parts:

The first slash which is the root.

"Flash Disk" is a sub-directory of the root directory. In this case it is the Flash Disk drive.

The next "slash" is just a separator.

"General" is the name of a sub-directory of the "Flash Disk" directory. Its parent is "Flash Disk."

The next "slash" is another separator.

"letters" is the name of a sub-directory of the "general" directory. Its parent is "general."

This naming convention allows us to find a document or file in any directory structure.

14.15.1 Switching to a Directory Structure.

You can choose to use directories at any prompt for a folder name, not just in the File Manager. For example, from the File Manager Menu select Copy File and then select a drive such as the Flash Disk. KeySoft prompts: "Source folder name? (Last used folder)."

If you now press ***SPACE with T***, KeySoft replies, for example: "Source directory name? /(Last used folder)" where "/(Last used folder)", is the last used directory.

You can select directories in exactly the same way when using the File Manager, Directory option.

14.15.2 Accessing Files in Another Directory.

Following on from the previous section, there are two basic ways to choose a different directory at this point. You could type the full name, including slashes, etc., but this can be rather prone to errors, especially if you are not sure of the arrangement of the directories.

Alternatively, you can browse the directory structure to find what you want. This is rather like using KeySoft's menus. You can move "down" by selecting a sub-directory from a list, or move "up" by selecting the parent.

You can review any list of available directories in several ways: To navigate down a list, press ***SPACE with dot 4, SPACE or ADVANCE***. To navigate up the list again, press ***SPACE with dot 1,*** or ***BACK or BACKSPACE***. To go back up a level in the directory structure, press ***SPACE with dots 2-3***. To make a selection, press ***NEXT or ENTER***. If you know that you are not in a low enough level directory to find the folder you want, you can bypass the "Directory name? Press ***ENTER*** for /name" prompts at each level by pressing ***SPACE with dots 5-6*** instead of ***ENTER***.

Let's see how this works. For the purposes of this example, we will assume that we are currently in the "/General" directory on the Flash Disk and we wish to go to the "/KeyMail/Attachments" directory. You could be at any "Folder name?" prompt on KeySoft, although the exact prompts will vary. The example is taken from the Open a Document function in KeyWord. At the prompt, press ***SPACE with T***.

1. At the "Directory name? Press ***ENTER*** for /General" prompt, navigate up to the parent directory by pressing ***SPACE with dots 2-3***. KeySoft displays: "Directory name? Press ***ENTER*** for /". This is a list of sub-directories of the Flash Disk.
2. Navigate down through the list until "KeyMail" is displayed. Either press ***SPACE with dots 5-6***, or do the following:
    1. Press ***ENTER*** to select KeyMail, and KeySoft displays: "Directory name? Press ***ENTER*** for /KeyMail."
    2. Press ***SPACE*** repeatedly to see the sub-directories within the KeyMail directory.

    Regardless of which method you chose, KeySoft now displays "Sub-directories of Flash Disk/KeyMail."
3. Using one of the methods descried in Step 2, navigate to the "Attachments" directory.

4. Press ***ENTER***. You have reached your goal. See what happens when you review this directory. There are no more sub-directories. Navigate back up to the "attachments" sub-directory. You can press ***ENTER***, putting you at the familiar "Document/File to Open?" prompt. You might now review this directory for files.

Directories are one of the most demanding concepts to master. Finding files in a complex directory structure can be difficult. Remember to change to directories when prompted for a folder name. Remember also that you can move back and forward through directories and up and down lists of available directories using the commands covered in this section. And of course, if in doubt, you can press ***SPACE with H*** at any time.

14.15.3 Relationship Between Folders and Directories.

All folders are directories in the root directory of a drive, with the exception of the folder called "None," which is the root directory itself. Sub-directories below this level are not accessible in folder mode.

14.16 Creating Renaming and Erasing Sub-Directories.

It is possible to browse, create, rename and erase any sub-directories using a variation on the same processes for browsing, creating, renaming and erasing folders. This is because, as discussed before, they are basically one and the same, only used in a different way. It is important to know how to do this if you find that you cannot erase a seemingly empty folder, as it almost definitely contains sub-directories that are not visible in that folder.

Three procedures are listed below in a step by step format. You may notice that the prompts refer to both folders and directories, but it still works! Please note also that if you wish to create a sub-directory that is deeper than root level, for example /general/recipes/brownies, this whole “branch” will be displayed at prompts that include "/folder name."

14.16.1 Browsing a Sub-Directory.

When opening a document in the File Manager, you may need to browse through a list of folders and filenames to find the one you want. To browse a sub-directory, follow these steps:

1. From the Main Menu, press ***F*** for File Manager and then ***D*** for Directory.
2. Change from folder to directory by pressing ***SPACE with T***.
3. KeySoft prompts: "Directory name?." Either press ***SPACE*** and search through the list of folders until you find the one you want, or if you have many folders to search through, type the path instead. You will now be able to view the first level of folders.
4. Move down the list of folders an press ***ENTER*** once you find the sub-folder you want. KeySoft will now prompt: "Directory name? Press ***ENTER*** for /downloads." Now either press ***ENTER*** to select the downloads or return to the list of downloads and select My Subdirectory at the next level down.
5. KeySoft will display the subdirectory in /downloads, for example, "test". Press ***ENTER*** to select "test" and KeySoft will prompt: "Directory name? Press ***ENTER*** for /downloads/test." If you press ***ENTER*** at this point and "test" is the last subdirectory in the list, KeySoft will prompt: "List of files in (directory name)?."

The only problem with browsing a sub-directory using the method described above, is that once you access a sub-directory, you're stuck there until you back out. To browse the directory tree without getting stuck in a sub-directory, press ***SPACE with dots 5-6*** or ***SPACE with dots 2-3***.

If you are in a sub-directory and want to move up a level, press ***SPACE with dots 5-6*** and KeySoft will move up a level. For example, from /downloads/test to /downloads. To move up yet another level, press ***SPACE with dots 5-6*** again. To browse sub-directories from within a directory, press ***SPACE with dots 5-6***.

14.16.2 Creating a Sub-Directory.

1. From the Main Menu, press ***F*** for File Manager and then ***F*** for Folder Manager.
2. Press ***C*** for Create a folder, then select a drive.
3. At the "New Folder name?" prompt, press ***SPACE with T***. The New Folder prompt will repeat.

4. Press ***SPACE*** and either search through the sub-directories (folders) until you find the one in which you want to set up the sub-directory. KeySoft will prompt "New Folder name? Press ***ENTER*** for /folder name" where folder name is the name of the currently selected directory.
5. Type the name you wish to give the sub-directory without a / before it, and press ***ENTER***. KeySoft will prompt "Directory does not exist. Create new directory?."
6. Press ***Y*** for Yes. KeySoft displays: "Folder created. Folder Manager menu." You are back in the folder manager menu.

14.16.3 Renaming a Sub-Directory.

1. From the Main Menu, press ***F*** for File Manager and then ***F*** for Folder Manager.
2. Press ***R*** for Rename a folder, then select a drive.
3. At the "Folder to Rename?" prompt, press ***SPACE with T***. The Rename Folder prompt will repeat.
4. Press ***SPACE*** and search through the sub-directories (folders) until you find the one that contains the sub-directory you wish to rename; and select it by pressing ***ENTER***. KeySoft will prompt "Folder to Rename? Press ***ENTER*** for /folder name" where folder name is the name of the currently selected directory. Press ***SPACE*** to move through the list of sub-directories until you find the one you want then press ***ENTER***. If there are any more layers of sub-directories, repeat this procedure until you reach the one you wish to rename.
5. KeySoft will prompt, "New name for /directory name?" where the name is the directory you wish to rename. Press ***ENTER***.
6. KeySoft will prompt "New Name for /directory name?" where directory name is actually the **parent directory** of the one you have selected. Type the new sub-directory name and it will update that, not the parent directory.
7. Press ***ENTER*** to complete the renaming. KeySoft will return you to the Folder Manager menu.

14.16.4 Erasing a Sub-Directory.

Just as with erasing folders, you can erase a sub-directory and its contents, including unprotected, protected or hidden files and sub-directories, in one operation. Therefore it is important to check before erasure that there is nothing in the folder that you wish to keep before proceeding.

1. From the Main Menu, press ***F*** for File Manager and then ***F*** for Folder Manager.
2. Press ***E*** for Erase a folder, then select a drive.
3. At the "Folder to Erase?" prompt, press ***SPACE with T***. KeySoft will prompt "Directory to Erase?"
4. Press ***SPACE*** and locate the directory containing the sub-directory you wish to erase.
5. When you have found it, press ***SPACE with dots 5-6***. KeySoft will prompt: "Directory to erase? Press ***ENTER*** for /directory name" where directory name is the selected directory. Repeat this if necessary
6. Press ***SPACE*** until you reach the sub-directory you wish to delete and press ***ENTER***. KeySoft will prompt, "Directory to erase? Press ***ENTER*** for /directory name" where directory name is the selected sub-directory. Press ***ENTER***.
7. If any files are protected, KeySoft prompts: "file name is protected. Erase anyway?". Press ***Y***, or ***A*** for All, if you suspect there may be others that you also wish to erase. If you wish to save the protected file, press ***N*** and the erasure of the other files will continue, however the actual sub-directory will not be erased.

Note that you can also erase a sub-directory by pressing ***BACKSPACE with dots 1-4***.

14.17 File Translation.

As well as creating and reading your own documents and books, you may want to exchange information with other people, especially via e-mail. KeyWord can directly open a file of any of the supported types listed in 14.5 Document and File Types. KeyWord can also save a file as any of the supported types. The supported types include Microsoft Word format; the de facto standard for Word Processor document exchange. The following sections of this chapter are needed only when you specifically want to convert a file without going into KeyWord.

The Translate File option of the File Manager Menu allows you to take a file in ASCII, or Microsoft Word, or WordPerfect 5.1 and others and translate it so that it can be read or edited on your BrailleNote BT. This process of converting a file into KeyWord format is called "importing." Braille files created by another Braille system can also be imported into KeySoft.

The Translate File option also works in the other direction as well. You can take a KeySoft document and translate it to the format used by Microsoft Word, or WordPerfect 5.1, or to ASCII format and other formats. This is called "exporting." KeySoft documents can also be exported as Braille files for use by other Braille systems.

The Translate File option also translates KeySoft Braille documents into text documents, and vice versa.

Apart from an ASCII set-up list, which specifies how documents are translated between KeySoft format and ASCII format, there are also set-up lists for Braille to text, and text to Braille translation. These provide a lot of layout flexibility in the translated document if required, but you may not need to change any settings because the default settings have been chosen for typical usage.

14.18 Translation Menu.

To use the Translation Menu, start from the Main Menu, select the File Manager, and then the "Translate file" option. The Translation Menu consists of the following items:

Import file;

Export document;

Translate between Braille and text;

ASCII translation options;

Back translation options, Braille to text;

Forward translation options, text to Braille.

Note that the ASCII translation options apply in the case of ASCII imports and exports including those to or from the serial port. The serial port options are included in the ASCII translation options.

The Translation Menu items are now discussed.

14.19 Importing Files.

To import a file, follow these steps.

1. From the Translation Menu, press ***I***, for import a file. KeySoft prompts: "Import from which device? Press ***ENTER*** for file."
2. The options are:
    1. If the file is stored on a CompactFlash, SD or PC card, press ***F*** to import from a File.
    2. If you want to import from a host using the serial cable provided with your BrailleNote BT press ***S*** for Serial port.

14.19.1 Importing from a File.

After selecting "File" as the device to import from, KeySoft prompts: "Import file from which drive? (Suggested drive)."

Select the drive. KeySoft then prompts: "Directory name? (Suggested directory)."

The slash character is used to separate the different parts of the directory path name. For a description of directory path name, refer to 14.15.2 Accessing Files in Another Directory.

You can accept the suggested directory, or type a new directory path name, remembering you must type the name in computer Braille, or edit the old name. Alternatively you can press ***SPACE*** to review a list of sub-directories of the suggested directory. Next select the desired file to import when KeySoft prompts: "File to import?."

Remember that you can press ***SPACE or ADVANCE*** to list all files in the selected directory. If the file is of a type unknown to KeySoft, possibly a plain text file, you are asked, "Is this a Braille or text file?." If you know that the file is a Braille file, press ***B***. If it is an ASCII text, press ***T*** and KeySoft then asks if you want to translate the file into Braille. Press ***Y*** if yes or ***N*** if you want to leave the file in its existing format. When you have selected the file KeySoft prompts: "Destination folder name? (Suggested folder)." Select a folder.

KeySoft displays: "Text (or Braille) document name?."

Next type the name of the destination file and press ***ENTER***. If the file already exists you are asked if you want to append to it or replace it? Press ***A*** to append or ***R*** to replace. KeySoft imports the file or document and saves it as the destination file in the selected folder. KeySoft then returns to the Translation Menu.

14.19.2 Importing from the Serial Port.

After selecting "Serial" as the device to import from, KeySoft prompts: "Serial. Is this a Braille or text file?."

If you are importing a text file KeySoft queries: "Translate into Braille?."

If you press ***Y*** to translate a text file into Braille, the file is converted into Braille when it is received. If you press ***N*** the file is left as a text document. Specify the destination folder name and file name in the usual way. When you have done that, KeySoft queries: "Host ready to transmit?."

Check that the host is ready to transmit, and press ***ENTER*** or ***Y*** on the BrailleNote BT keyboard. On the host's keyboard, type any commands required to start transmitting the file. You should hear a periodic beep as the file is transferred. When the beeps stop, wait a few seconds and then press ***SPACE with E***. If the host stops transmitting or does not start KeySoft displays: "Host has not sent any characters for some time. To exit press ***SPACE with E***."

If you do exit KeySoft displays: "File import complete."

You are returned to the Translation Menu.

14.19.3 Importing a Foreign Braille File.

Note that while you can import files that are in either North American Braille Computer Code format or in United Kingdom Braille Computer Code format, the importation process does not convert the Braille language of the file. If your BrailleNote BT is set to USA Braille and you import a file in UK Braille format, for example, the contents of the file appear strange when you read it with KeyWord. To read an imported file that is in another Braille language, you can temporarily change the language that your BrailleNote BT uses, then change it back again when you have finished. The Braille language your BrailleNote BT uses can be changed using the Braille display Options in the Options Menu as described in 5.4 Braille Display Options.

14.19.4 Exporting a Document.

To export a document press ***E***, in the Translation Menu. You can export the document as one of the following document formats:

Plain Braille file;

Microsoft Word file;

Rich text format file;

Word Perfect file;

KeySoft version two Braille document;

KeySoft version two text document;

ASCII text file;

The original document remains unchanged.

1. Select the drive in the usual way when prompted. KeySoft then prompts:

   "Export document from which folder? (Suggested folder)"
2. When you have selected the folder KeySoft prompts:

   "Document name? (Suggested file name)."
3. Select the document to export. KeySoft prompts:

   "Export to which device? Press ***ENTER*** for file."

   The options are:

   To export from a File press ***F***.

   To export from the Serial port press ***S***.

14.19.5 Exporting to a File.

After selecting "File" as the device to export to, KeySoft prompts: "Export as an ASCII text file?."

1. To export as an ASCII text file press ***ENTER***. To select another file type, press ***SPACE with dots 3-4*** repeatedly to step through the list of file types that you can export. The available file types were listed in 14.5 Document and File Types.
2. When you have selected the file type, select the destination drive. KeySoft then prompts:

"Directory name? (suggested directory). Computer Braille is required."

3. Select the suggested directory, find the one you want in the usual way, or type the path name of the desired directory. Remember that the slash character, dots 3-4, is used to separate the different parts of the directory.
4. After the file is exported you are returned to the Translation Menu.

To find out how to access files in another directory, see 14.15.2 Accessing Files in Another Directory.

14.19.6 Exporting to the Serial Port.

If you select "Serial" as the device to export to, KeySoft will display: "Serial cable on COM1."

"COM1" is the 9 pin male connector at the left of the rear panel. A serial cable is provided with your BrailleNote BT. Of course you must connect one end of the cable to COM1 and the other end to a mating connector of a host; most likely a PC. Both ends of the cable are the same. The connectors are discussed in 2.3.4 Using the Serial Port. The Serial Port settings are listed in the ASCII translation options list, which is discussed in 14.19.8 Reviewing and Setting ASCII Translation Options. Remember that the BrailleNote BT and host serial port must be set exactly the same to transfer a document.

When you have selected a device KeySoft prompts: "Export as a Braille or text file?."

Press ***B*** for Braille or ***T*** for a text file. When you have selected the file type KeySoft queries: "Host ready to receive?."

Prepare the host to receive the file and when it is ready press ***ENTER*** or press ***Y***. You hear a periodic beep as the document is transferred. When the transfer is finished, you are returned to the Translation Menu.

14.19.7 Translating between Braille and Text.

To translate a document from KeyWord Braille to KeyWord text or vice versa, select Translate between Braille and Text from the Translation Menu. This is useful if, for example, you have written a Braille document which you now intend to print, but before printing, you want to check out the ink-print formatting. You can translate it into a text document and review it.

KeySoft guides you through the translation procedure. Select the source folder name when prompted by KeySoft. Either type a folder name and press ***ENTER***, or press ***SPACE*** to review the List of Folders. Alternatively, to select a sub-directory path name, press ***SPACE with T***.

To change the current drive, press ***BACKSPACE***. For the Flash Disk, press ***F***. For the KeySoft System Disk, press ***K.*** If you have a storage card installed you can press ***P*** for PC Card, ***C*** for CompactFlash card, or ***S*** for SD card. To review the list of drives, press ***SPACE***.

After you have selected the drive and folder, select the source file. Either type a file name or select it in the usual way.

Follow the same procedure to select the destination folder name and enter the destination file name.

If you type a document name that does not exist, KeySoft asks if you want to create a new document. Conversely, if the document already exists, you are asked if you want to append the translated document to the end of the existing one, or replace it entirely.

When you have entered the destination file name, the source document is translated to its complementary format. That is, a Braille document is translated to text, or vice versa. The source document remains in its original format, and you are returned to the Translation Menu.

14.19.8 Reviewing and Setting ASCII Translation Options.

The ASCII translation options are used by KeySoft when translating between KeyWord and ASCII formats including when exporting documents to the Serial Port.

To review and set ASCII translation options, select ASCII Translation Options from the Translation Menu. Press ***SPACE*** to display the ASCII Translation Options list. Each item in the list is discussed below. When you have reviewed the list, you can use ***BACKSPACE*** to move back through the list to check the settings. The current setting is displayed for each item. Remember that you must press ***ENTER*** after you have changed the setting. Press ***SPACE with E*** to exit when you are satisfied with your settings.

14.19.8.1 Use line or paragraph format.

Press ***P*** for Paragraph, or ***L*** for Line. Press ***ENTER*** to complete the entry. This option determines the way that lines are terminated during document exporting or file importing. During document exporting, if the Line option has been selected, a carriage return is added at the end of each line. If the Paragraph option is selected, a carriage return is added only at the end of each paragraph, giving a line that is as long as the paragraph. The Line option is usually best when exporting to a communications program. The Paragraph option is most suitable when exporting a document to a word processor because it allows the text to be reformatted after it is received.

The Line or Paragraph format option also determines how KeySoft treats each incoming line of text during file importing. If the Line format option is selected, KeySoft leaves the text unaltered. In the Paragraph option, KeySoft removes single carriage returns. Where there are two or more carriage returns, or a carriage return followed by an indent to indicate a new paragraph, no change is made.

If you go into KeyWord and insert any hard carriage returns to format the file contents, these will be retained next time the file is opened in the BrailleNote BT.

When importing an ASCII file, for example a Braille book, that has a single space in front of each line, the left margin is automatically stripped out so that KeySoft doesn't interpret it as if every line is the start of a new paragraph.

14.19.8.2 Extended ASCII character.

The options are:

To convert extended ASCII characters to standard ASCII characters, press ***C***. This option removes the high order bit. It is useful in situations where this bit may be inadvertently set.

To ignore ASCII characters, press ***I***. This option removes characters with the high order bit set. It is useful where graphical symbols have been used extensively. For example, when boxes have been drawn around text.

To retain ASCII characters as extended ASCII characters, press ***R***. Extended ASCII characters are 8 bit characters such as characters in foreign languages or graphical symbols. In most cases KeySoft can name or use the character. In other cases the character will be referred to as "character n" where n is the ASCII value of the character.

14.19.8.3 Extended Character Set.

The options are MS-DOS; International MS-DOS; or ANSI.

14.19.8.4 Use of end of file character.

The options are ***N*** to turn on the use of an end of file character, or ***F*** to turn off and ignore the use of an end of file character. This option determines whether an ASCII end of file character (1AH or ^Z) is appended to a document being exported after the end of the text. In most cases this will cause a communications program to stop receiving text and save it on disk.

14.19.8.5 Use of line feed character.

Press ***N*** to turn on the appending of a line feed character after a carriage return character is exported. Press ***F*** to turn off appending a line feed character. Appending a line feed character may be required when exporting to a communication program depending on the program.

14.19.8.6 Baud Rate.

The baud rate is the speed at which data is transferred between serial devices. Type a new baud rate value if you know the standard values or press ***SPACE with dots 3-4*** to cycle through the list of available values.

14.19.8.7 Parity.

Press ***N, E*** or ***O***, for None, Even or Odd parity respectively. If you are unsure which setting is correct select none; this is usually preferred for short cables.

14.19.8.8 Number of data bits.

Press ***7*** or ***8*** for the number of data bits and press ***ENTER***. Standard ASCII characters use only 7 data bits while extended ASCII characters have 8 bits.

14.19.8.9 Handshaking.

The options are ***S*** for Software or ***H*** for Hardware. Handshaking determines how the BrailleNote BT and a host computer control the flow of data from each other. Handshaking is needed if the BrailleNote BT or host computer cannot keep up with the flow of data when a high baud rate is selected. BrailleNote BT supports both types of handshaking. You know when it is needed because large blocks of data are lost when exporting documents or importing files. Try the software option first if information about the host computer is limited.

14.19.8.10 Transmit delay.

This is the delay between each character when exporting a document. It should be zero when using a communications program on the host. Where a document is being exported directly into a word processor or other program, a value from ***1*** to ***5*** may be used to allow the word processor to keep up. Use the smallest value which does not cause characters to be lost.

This is the end of the ASCII Translation Options list.

14.19.9 Reviewing and Setting Back Translation Options.

These are the general settings which are used during the translation of a KeySoft Braille document to a KeySoft text document. These settings are used throughout KeySoft whenever a document is back translated. For example, when exporting a Braille document. The first 6 items and the last item may be over-ridden in a document by changing the Ink-print Translation Options, as described in 7.4.2 Ink-Print Settings linked with a Braille Document.

To review and change Back Translation Options from Braille to Text, select Back Translation Options from the Translation Menu. Press ***SPACE*** to display the Braille to Text Translation Set Up List. Each item in the list is discussed below. When you have reviewed the list, you can use ***BACKSPACE*** to move back through the list to check the settings. The current setting is displayed for each item. Note that you must press ***ENTER*** after you selected a new setting. Press ***SPACE with E*** to exit when you are satisfied with your settings.

14.19.9.1 Type of paragraph boundary used in the source document.

The way paragraphs are formatted in Braille is usually different from the way they are formatted in ink-print. For example, paragraphs in Braille are commonly indented two spaces whereas paragraphs in ink-print are commonly separated by one or more blank lines. This option tells KeySoft how to recognize a paragraph in a Braille document so that it can be formatted correctly in the text document.

KeySoft needs to know what type of paragraph boundary is used in the source document. It needs to know this in order to correctly interpret where one paragraph ends and the next starts in the Braille document. There are 3 options, as follows:

1. For an Indented line, or one or more blank lines, press ***I***. This is the suggested setting. For a new paragraph to be started in the destination document, the source document must have either a New Line followed by an indented line, or a blank line. Single New Line markers which are not followed by an indented line are not taken as the start of a new paragraph and therefore are not passed over into the text document.
2. For one or more New line markers, press ***N***. This setting causes every New Line marker to indicate the end of a paragraph.
3. For one or more Blank lines, press ***B***. Use this option if every line in the source document ends with a New Line marker and paragraphs are indicated by blank lines.

The way paragraphs are formatted in the resulting text document is not affected by this setting but is determined by the "Paragraph format?" setting below.

This setting is also used by KeyWord to determine the paragraph boundary when the paragraph reading commands are used.

14.19.9.2 New line translation option.

This applies to Heading, Subheading and Lines styles of presentation and determines how New Line markers in a Braille document are translated.

To leave the line formatting Unchanged, press ***U***.

To remove New Line markers and thereby Join lines together, press ***J***.

To expand single New Lines into Blank lines, press ***B***. This is the suggested setting.

14.19.9.3 Convert Braille Italics to Italics Font.

To have Braille italics converted to italics font press ***Y***. To have italics ignored press ***N***.

14.19.9.4 Include two spaces between sentences.

In Braille, sentences are usually ended by a period followed by a single space whereas in ink-print sentences are usually ended with a period followed by two spaces. To have a space after a period in a Braille document converted to two spaces after the period, press ***Y***. To leave as a single space press ***N***.

14.19.9.5 Suppress new page markers.

The places where you have forced a new page in a Braille document by pressing ***SPACE with P*** are often not the correct places to force a new page in ink-print. This option excludes New Page markers in the Braille document from the text document. You can force new pages in the text document by using the Ink-print Inclusion option in the Braille document as described in 7.4.2.3 Ink-print Exclusion.

14.19.9.6 Include a blank line between items in outline style.

To save space in Braille, items in an outline may start on the next line, rather than after a blank line. If this is the case and you want a blank line left in the text document, press ***Y*** to turn this option on. Press ***N*** to turn it off.

14.19.9.7 Blank lines before and after a heading.

This sets the number of blank lines which are left in the text document before and after a section of text which has the Heading presentation style. The factory setting is 2 and 1. To change the setting, type the new number of blank lines before a heading, a ***comma*** and then the new number of blank lines after a heading. Number signs are not needed. For example *"**1,2**."*

14.19.9.8 Heading format.

This sets the format indicators to be inserted at the beginning of each line in a heading in a text document. These format indicators are: center the line, right justify the line, insert tab, fonts, underline, space, or force new line or new page. Entering format indicators here is the same as when searching for them. Refer to 3.12.2 Searching for Format Indicators for details. The factory setting for the heading format is: "Center line," "Bold on."

14.19.9.9 Blank lines before and after a sub-heading.

This sets the number of blank lines which will be left in the document before and after a section of text which has the Subheading presentation style. The factory setting is 1 and 1. The same procedure as discussed in Item 7 above is used to change the setting.

14.19.9.10 Sub-heading format.

You can enter the commands to be inserted in the text document at the beginning of each line in the Sub-heading presentation style. You can use the same format indicators as listed in the Heading Format item above. There is no factory setting for this item.

14.19.9.11 Paragraph Format.

This item determines the format indicators that are inserted between paragraphs in the text document. You can enter a combination of New Lines, spaces and tabs. To enter a New Line press ***SPACE with dots 2-6***. The default is 2 New Line format indicators.

14.19.9.12 Revert to paragraph style after how many blank lines.

When either the heading, subheading, outline or line styles of presentation are used, the style will continue in effect until another style is selected or the number of blank lines set here are encountered.

This is the end of the Braille to text translation setup list.

14.19.10 Reviewing and Setting Forward Translation Options.

These are the general settings which are used during translation from a KeySoft text document to a KeySoft Braille document. These options are used throughout KeySoft wherever a document must be translated into Braille. The items are generally similar to those for back translation, but there are differences to cater for the direction of translation. The first 8 items may be over-ridden from within a text document by using the Braille Translation Options, as described in 7.18.5.3 Braille Translation Options.

To review or change the settings in the Forward Translation Options list, select Forward translation options, from the Translation Menu. The 15 items in the list are as follows:

14.19.10.1 Types of paragraph boundary used in the source document.

KeySoft needs to know this in order to correctly interpret where one paragraph ends and the next starts in the text document. The options here are the same as for Item 1 in the Back Translation Options. Refer to 14.19.9 Reviewing and Setting Back Translation Options above for details.

14.19.10.2 New line translation.

This applies to Heading, Sub-heading and Lines styles of presentation and determines how New Line markers in a text document are translated into Braille. There are four options:

To leave the line formatting unchanged, press ***U***.

To remove New Line markers and thereby Join lines together, press ***J***.

To replace New Line markers with two Spaces, press ***S***.

To have new lines in the text document start new lines in the Braille document but remove any blank lines, press ***B***. This is the factory setting.

14.19.10.3 Convert italics font to Braille italics.

To have italics font converted to Braille italics press ***Y***. To have italics ignored press ***N***.

14.19.10.4 Suppress multiple spaces.

Multiple spaces may be used in a text document between sentences or for visual formatting. This option can be used to remove these from the Braille document during translation, leaving only one space.

14.19.10.5 Suppress new page markers.

The places where a new page has been forced in text are often not the correct places to force a new page in the Braille document. This option excludes New Page markers in the Braille document from the text document.

14.19.10.6 Ignore tabs.

If the text document uses tabs extensively for visual formatting, you can have these replaced by a space in the Braille document using this option.

14.19.10.7 Include capital signs.

Usually you would want capital signs included in Braille document, but if you are translating a text document where every word is in capitals, for example, then this option will become very useful.

14.19.10.8 Suppress blank lines in outline style.

This option enables you to save space in Braille by eliminating blank lines left between items in an outline.

14.19.10.9 Blank lines before and after a heading.

This sets the number of blank lines which are left in the Braille document before and after a section of text which has the Heading presentation style. The factory setting is one before and one line after.

14.19.10.10 Heading format.

You can enter the format indicators to be inserted in the Braille document at the beginning of each line in the Heading presentation style. You can include format indicators to center the line, right justify the line, insert tabs, and spaces, or force new lines or new pages. For details, refer to 3.12.2 Searching for Format Indicators. The factory setting is: "Center line."

This sets the number of blank lines which are left in the Braille document before and after a section which has the Sub-heading presentation style. The factory setting is one and zero.

14.19.10.11 Sub-heading format.

You can enter the format indicators to be inserted in the Braille document at the beginning of each line in the Sub-heading presentation style. You can use the same indicators as listed in the Heading Format item above. The factory setting is 4 spaces. To enter a space as the first character in the Sub-heading, press ***ENTER with B***.

14.19.10.12 Paragraph format new line (two spaces).

This item determines the format indicators which are inserted between paragraphs in the Braille document. You can enter a combination of New Lines, spaces and tabs. To enter a New Line press ***SPACE with dots 2-6***. The factory setting is a New Line followed by 2 spaces.

14.19.10.13 Revert to paragraph style after how many blank lines.

When either the heading, subheading, outline or line styles of presentation are used, the style continues in effect until another style is selected or the number of blank lines set here are encountered. The factory setting is two.

14.19.10.14 Size of indent for wrapped lines in the lines and outline styles.

Often a line of text in ink-print takes up more than one line in Braille. Sometimes this makes it difficult to find an item in a list or an outline when reading an embossed copy. This option does not affect the first line of each item in Braille, but if more than one line has to be used for an item, the second and subsequent lines will be indented by this number of cells. The factory setting is two.

This is the end of the Text to Braille options list.

End of File Manager Chapter.

15 Utilities Menu.

The Utilities Menu provides a number of general-purpose functions. This chapter covers most of the functions available from the Utilities menu.

To enter it, select the "Utilities" option in the Main Menu. The available operations are as follows:

Connect to ActiveSync. ActiveSync is discussed fully in 13.14 ActiveSync.

Synchronization. This is discussed fully in 13.15 KeySync.

Backup or Restore Files, which allows all working files to be backed up or restored to a backup drive.

Pronunciation Dictionary, which corrects the pronunciation of unusual words.

Date and Time Set, used to reset the internal clock.

Application Program, which runs optional KeySoft software.

Miscellaneous Options, which allows you to select a connection type for ActiveSync.

Key Management – for keeping track of separately purchased KeySoft products.

You can select an item by reviewing the list and pressing ***ENTER***, or by pressing the initial letter of the required item.

15.1 Backup or Restore Files.

You can use the Backup Options in the Utilities Menu to save and restore all KeySoft working files, including word processor and e-mail documents, planner files and address lists. By default, KeySoft stores these files on the Flash Disk.

It is good housekeeping to backup your files to an external drive. This could be a storage card, an external memory drive, or a PC or network. This safeguards your information against loss caused by accidental overwriting or deletion of files and other mishaps. Incremental Backup can be used to reduce the time taken to copy the files to the backup drive. Only those files changed since the last backup are copied. You should back up your files into the same folder used for the previous backup. You may use the Restore option to restore your working documents or files in the event of a problem, or to return to an older version.

15.1.1 Backing Up.

From the Utilities menu, select the "Backup or Restore files" option. KeySoft prompts: "Do you wish to Backup or Restore files?."

If you want to backup your working files, press ***B***, for Backup. KeySoft prompts: "Backup which drive? Press ***ENTER*** for Flash Disk."

Press ***ENTER*** to backup the Flash Disk. KeySoft prompts: "Backup which folder? All."

KeySoft assumes you want to backup "All" folders. You would normally do a complete backup of all folders on the Flash Disk together with their contents. Alternatively you can backup a folder at a time if you wish. To backup all folders, press ***ENTER***, or to backup one folder at a time, press ***SPACE*** to review the list of folders and press ***ENTER*** to select the desired folder. KeySoft prompts: "Make backup on which drive? Press ***ENTER*** for (suggested drive)."

Backups are normally done to a storage card, an external memory drive, or to a Network.

Select the appropriate drive from the drive list, then press ***ENTER***. KeySoft prompts: "Make Backup in which Folder? Press ***ENTER*** for (suggested folder)."

The suggested folder name is based on the current date, and is in the form "June 10, 2006 backup." Press ***ENTER*** to accept the suggested folder, or press ***SPACE*** to review the list of folders on the backup drive. Alternatively you can type in the name of a folder. If the folder does not already exist you will be asked to confirm creation of the new folder; press ***Y*** to do this.

The time taken for the backup process depends on the number of files being backed up, and BrailleNote BT continues to beep about once per second during the process. At the completion of the backup KeySoft confirms the number of files copied to the backup disk, and you are returned to the Utilities menu.

To speed up the backup process you can perform an incremental backup, which only copies files modified since the last backup. This procedure is described in the next section.

15.1.2 Incremental Backup.

Incremental Backup can be used to reduce the time taken to copy the files to the backup drive. Only those files changed since the last backup are copied. You should back up your files into the same folder used for the previous backup.

From the Utilities menu, select the "Backup or Restore files" option. KeySoft prompts: "Do you wish to Backup or Restore files?."

Press ***I*** for Incremental Backup. KeySoft prompts: "Backup which drive? Press ***ENTER*** for Flash Disk."

Press ***ENTER*** to backup the Flash Disk.

From this point on, the procedure is as outlined in 15.1.1 Backing Up.

Given that you are performing an incremental back up to an existing folder, KeySoft requests confirmation before backing up files modified since the previous backup. Even if you have only created one new file, you will be asked to confirm the replacement of the KeySoft.ksd file that resides in the Dictionaries folder. Press ***Y*** to confirm that you want this system file to be updated.

15.1.3 Restoring Files.

From the Utilities menu, press ***B*** to select Backup Options. KeySoft prompts: "Do you wish to Backup or Restore files?"

To restore files that have been backed up, press ***R***. KeySoft prompts: "Restore from which drive? Press ***ENTER*** for (drive)."

Press ***ENTER*** to select the offered backup drive, or select the drive which has the backup you wish to restore. KeySoft prompts: "Folder name? (suggested folder)"

Select the folder that you want to restore. KeySoft prompts: "Restore to which drive? Press ***ENTER*** for Flash Disk."

Your backup files are copied from the backup disk, and you are returned to the Utilities menu. BrailleNote BT continues to beep once per second during the process, and on completion displays the number of files copied.

If a file already exists, you are asked to confirm that you wish to replace the existing file with one on the backup drive. To replace the existing file press ***Y***, to skip this file press ***N***, to accept all files press ***A***. You can press ***SPACE with H*** to get detailed information on the date and time of creation of a file, and the file size of both the source and destination files, before the back up process starts

Backup and Restore work on the entire contents of a folder. If you want to restore an individual file, you should use the Copy File option in the File Manager described in 14.9 Copying a File.

15.2 Pronunciation Dictionary.

The Pronunciation Dictionary allows KeySoft to correctly pronounce unusual words, and to expand abbreviations. KeySoft's accuracy is superior to most speech products, but proper names or technical words can be corrected by adding a suitably misspelled version to the pronunciation dictionary.

This is done by entering the correct spelling of the word, together with a suitable misspelling. Before speaking a word, KeySoft searches the pronunciation dictionary and if it finds the word, the misspelled version is spoken instead. Commands are provided to add, delete and change words in the pronunciation dictionary.

To access the Pronunciation Dictionary, start from the Utilities Menu and press ***P.*** The Pronunciation Dictionary Menu includes the following 3 options:

Add a word;

Change a word;

Delete a word.

15.2.1 Adding Words to the Pronunciation Dictionary.

If KeySoft mis-pronounces a word, you may add it to the Pronunciation Dictionary.

1. From the Pronunciation Dictionary menu, press ***A***.
2. KeySoft prompts, "Type word to add." Type the normal spelling of the word, without spaces or numbers, and press ***ENTER***.
3. KeySoft then prompts, "Type misspelling." Type in a misspelling of the word, using only letters and spaces, which gives a correct pronunciation for the word. Spaces are useful for changing the stress. Do not press ***ENTER*** yet.
4. To check the new pronunciation, press ***SPACE with dots 1-4***. If it does not sound correct, change it with the prompt editing commands, or delete it by pressing ***SPACE with R***, and try again. If it sounds OK, press ***ENTER***.

You are then returned to the Pronunciation Dictionary Menu.

15.2.2 Changing Words in the Pronunciation Dictionary.

If you are concerned about the pronunciation of a word, you can review the Pronunciation Dictionary to check whether it is included. If it is, you can change the misspelling to improve the rendition.

From the Pronunciation Dictionary menu, press ***C***. KeySoft prompts, "Type word to change." Either type the normal spelling of the word and press ***ENTER***, or review the pronunciation dictionary by pressing ***SPACE*** repeatedly and select the word from there. KeySoft then prompts: "Type misspelling, press ***ENTER*** for (default)."

You can now amend the offered default by using the prompt editing commands, or you can type in a new misspelling. Before pressing ***ENTER***, listen to the new pronunciation by pressing ***SPACE with dots 1-4***. If you are not happy with the sound, continue to edit the misspelling until you are satisfied with the pronunciation, and then press ***ENTER***. The latest misspelling is saved, and you are returned to the Pronunciation Dictionary menu.

15.2.2.1 Foreign words.

It is unusual to find a word which is seriously mispronounced, but people's names and foreign words may be exceptions. Typical problems are a shift in vowel sound, and misplaced stress.

To correct the way a word is spoken, misspell it phonetically, and use a space to shift the stress. For example:

Change "Mikhail Gorbachov" to "Mikhile Gorba choff".

Change "Socrates" to "Socra tees".

Change "Taj Mahal" to "Taaj Mah harl".

15.2.2.2 Substituting a Text String.

There are various reasons why you may wish to put a substitute text string in the Pronunciation Dictionary. For example, KeySoft correctly speaks many acronyms that contain vowels, such as "IBM". However, a less common acronym may be spoken as a word, so you may wish to use the Pronunciation dictionary to change the rendering. For example:

Change "ATM" to "A T M", or "automatic teller machine".

Change "NaCl" to "N A Cl", or "sodium chloride".

You can change the way symbols are spoken. For example, KeySoft says "star" when it encounters the symbol often called "asterisk". If you prefer to hear "asterisk", you may do this with the Pronunciation Dictionary. To do this Braille an asterisk symbol at the "Type word to add" prompt and then Braille the word "asterisk" at the "Type misspelling" prompt. The pronunciation of the plural of the punctuation name also needs entering. To do this Braille an asterisk symbol followed by an "s" at the "Type misspelling" prompt and then Braille the word "asterisks" at the "Type misspelling" prompt.

15.2.2.3 Braille Signs.

You can change the way KeySoft announces the grade 1 and grade 2 signs. For example, KeySoft speaks the dot 3 sign as "apostrophe", but you may prefer to hear "dot 3". From the Pronunciation Dictionary menu, press ***A***. KeySoft prompts: "Type word to add."

Press the Computer Braille sign for "apostrophe", which happens to be ***dot 3***. For the misspelling, type ***d-o-t 3***, remembering that ***3*** is a lowered ***C*** in computer Braille.

15.2.2.4 Military Renditions.

Finally, you can change the word which KeySoft says when you press ***SPACE with dots 3-6***, twice to identify an indistinct letter. For instance, if you prefer to hear "toffee" instead of "tango" when you check the letter ***T***, go to the "Add word" option and press ***T***, followed by an exclamation mark. For the misspelling, type "toffee". This now does as you wish, but it does not alter the pronunciation of the word "tango" in normal text.

You can have fun changing the way things are spoken, but take care! It can be a source of mystery later on, when you have forgotten that you made the change.

15.2.3 Deleting Words from the Pronunciation Dictionary.

From the Pronunciation Dictionary menu, press ***D***. KeySoft prompts, "Type word to delete." Either type the normal spelling of the word and press ***ENTER***, or review the pronunciation dictionary by pressing ***SPACE*** repeatedly and select the word from there. The word is deleted and you are returned to the Pronunciation Dictionary Menu.

15.3 Date and Time Set.

Follow these steps to set or change the settings of, KeySoft's internal clock and calendar. Remember that at each point in the process you can obtain relevant help by pressing ***SPACE with H***.

1. From the Utilities menu, press ***D*** for Date and time set.
2. KeySoft prompts: "Date format? (default). Press ***ENTER*** for USA." Press ***S*** for USA format, which is: month/day/year, or ***K*** for UK format which is: day/month/year. Press ***ENTER*** to confirm your selection. To leave the date format unchanged, just press ***ENTER***.
3. KeySoft prompts: "Time format? Press ***ENTER*** for 12 hour." Press ***A*** for 12 hour or ***B*** for 24 hour clock format, followed by ***ENTER***. To leave the time format unchanged, just press ***ENTER***.
4. KeySoft prompts: "Timezone? Press ***ENTER*** for (current timezone)." Either press ***ENTER*** to choose the current selection, type the first letter of your timezone and press ***ENTER***, or cycle through the list of time zones by pressing ***SPACE with dots 3-4***.

5. KeySoft prompts: "In Daylight saving time? Currently (yes/no)." Type ***Y*** for Yes or N for No then press ***ENTER***. Or if the current selection is correct, just press ***ENTER***.
6. KeySoft prompts: "Time? Press ***ENTER*** for (current time)." Enter the time, without number signs, in the form: ***hh:mm***, where "hh" is hours and "mm" is minutes, separated by a colon. You may abbreviate an entry with fewer digits and no separator if it is unambiguous. In 12 hour format, follow the minutes by a ***space*** and then ***A*** or ***P*** to denote before noon and after noon. Press ***ENTER***.
7. KeySoft prompts: "Date? Press ***ENTER*** for (current date)." If the date is correct, press ***ENTER*** to retain it, or enter a new date. If USA date format has been selected, enter the date in the form: ***#mm#dd# yy***, such as ***#04#22#06*** for April 22, 2006. If UK date format has been selected, enter the date in the form: ***#dd#mm#yy***, such as ***#25#08# 06*** for 25 August 2006. When you have typed the date, press ***ENTER***.

As an alternative to entering the date, you may move around the calendar until the date you want is displayed. To move back or forward a day at a time press ***SPACE with dot 3 or dot 6***. To move a week at a time press ***SPACE with dots 2 or 5***. To move a month at a time press ***SPACE with dots 1 or 4***. To move a year at a time press ***SPACE with dots 2-3 or 5-6***. After the date entry is made, you are returned to the Utilities menu.

15.4 Application Programs.

This option allows you to run optional software applications written specially for the BrailleNote BT, including manual and software upgrades.

To run an application program, start from the Utilities Menu and press ***A*** to select Applications Program. KeySoft prompts: "Run program from which drive? Press ***ENTER*** for (default drive)."

Press ***ENTER***, or use ***SPACE*** to select another drive from the drive list. KeySoft prompts: "Directory name? Press ***ENTER*** for (default directory)."

Type in the directory name, or use ***SPACE*** to select the required directory. KeySoft prompts: "Program Name?."

Either type the program name, or review the list of programs by pressing ***SPACE***, and press ***ENTER*** to complete your entry. The program is now loaded and you will be prompted for a "Command Line." Refer to the instructions associated with the Application Program you are running to determine if a Command Line parameter is required. If you don't have information on this, try pressing ***ENTER*** which will run the program without a command line parameter. The Application Program immediately starts running.

15.5 Miscellaneous Options.

The Miscellaneous Options setup list contains two items. The first allows you to choose which connectivity method to use for ActiveSync communication. The second option provides a keyboard compatibility mode for users making the transition from Blazie notetakers.

To access the Miscellaneous Options, start from the Utilities Menu and press ***M***.

15.5.1 ActiveSync Connection.

From the Miscellaneous Options setup list, press ***SPACE*** until KeySoft displays: "ActiveSync Connection? (default)."

where the word "default" shown in brackets is the current setting. The options are:

To connect to ActiveSync using the serial port, press ***S*** followed by ***ENTER***.

To connect to ActiveSync using a "low speed" 19,200 baud serial connection, press ***L*** followed by ***ENTER***. This mode is provided to support older PC's that can not run the serial port at the 115K baud expected when the ***S*** option is chosen.

To connect using the infrared port, press ***I*** followed by ***ENTER***. Depending on the infrared port on your PC, it may be necessary to limit the maximum data rate at the PC to 1 Megabit/second.

To connect using Ethernet, press ***E*** followed by ***ENTER***.

15.5.2 Compatibility Mode.

The keyboard compatibility mode is included to ease the transition to the BrailleNote BT for people used to the command structure of Blazie notetakers.

From the Miscellaneous Options setup list, press ***SPACE*** until KeySoft prompts: "Compatibility Mode? Currently (default)."

where the word "default" shown in brackets is the current setting. The options are:

To select KeySoft "native" commands press ***F*** followed by ***ENTER***.

To turn the keyboard compatibility mode On press ***N*** followed by ***ENTER***.

With keyboard compatibility mode On, the ***BACKSPACE*** key function of deleting the previous character is duplicated by the command ***SPACE with B***. The Block Commands menu is then transferred to ***ENTER with dots 2-3***.

15.6 Key Management.

The purpose of this menu item is to give you access to information about what kind of add-on software products you have installed on your BrailleNote BT. There are two options on the Key Management Menu as follows:

Enter a new product key – If you purchase an add on software product, sometimes part of the installation process may require typing in a security code. This is the place where one would do that. If it is necessary, instructions for correct usage will be included in the add on software's documentation.

System Options – If you press ***ENTER*** at this option, the BrailleNote BT will display a list of add-on software products. This includes extra languages, software maintenance agreements etc.

End of Utilities Chapter.

16 Media Center.

This Chapter covers the Media features offered in KeySoft 7.2. These include the Media Player and audio recording functions.

16.1 Media Player.

The KeySoft Media Player allows you to play music, readings and any other audio in a range of media formats, on your BrailleNote mPower BT.

The Media Player is accessed from the Media Center menu found on the Main Menu. Alternatively, you can go directly to it from anywhere in KeySoft by pressing ***BACKSPACE with ENTER with M***.

You can play just about any size of media file from either the BrailleNote BT itself or a storage card or memory drive. When the track is playing, you can skip back and forward through it, stop, pause or resume the track as you wish.

As well as playing single tracks, you can play M3U playlists, allowing you to listen to continuous audio. And streaming audio off the internet is also possible.

Other features include volume control that operates independently of speech, changing tasks with one keystroke, track information and the ability to listen to the audio track in the background while performing other tasks in KeySoft.

This section describes the features and their uses in detail.

16.1.1 Supported File Types.

The Media Player can play media files with the following extensions: wma, wav, mp3, mpa, snd, aif, aiff, aifc, wmv, au, wax, wmx, wvx and asx.

It can also play M3U playlist files. This is discussed more fully in 16.1.9 Playlist files.

16.1.2 Storing MP3 files on the BrailleNote BT.

You can store MP3 files anywhere you would store any other file. However as they can be large files, you may find it most convenient to save them on a storage card.

You can transfer MP3 files from a PC onto a storage card plugged into your BrailleNote BT via ActiveSync or network client, load them directly onto a storage card using a card reader/writer, or download them directly off the Internet using the web browser on your BrailleNote BT.

While it is possible to play an MP3 file on the BrailleNote BT while it is still located on a network, please be aware that the sound quality will be impacted by any variations in the network, just as it is when using a PC based media player. A much better quality sound can be achieved by copying the file to a storage card in one of the ways listed above.

16.1.3 How to play an MP3 file.

Opening a media file to play is the same as opening a file anywhere else in KeySoft. The steps are laid out below. In this procedure, it is assumed that you know how to select a drive, folder or file from a list.

1. To open the Media Player, press ***BACKSPACE with ENTER with M*** anywhere.
2. The BrailleNote BT will display one of the following two prompts:
   a) KeySoft prompts "Play media file in which folder? Press ***ENTER*** for (folder name)" where the folder name is "General" the first time you use the media player, and after that, it's the last folder accessed. Go to step 3.
   b) KeySoft prompts "Continue playing (file)?" where file is the last file you paused while it was playing. To start the track playing from the same point it was paused, press ***Y***. To select a different file, press ***N*** and refer to a) above.
   c) If the Media Player was already playing in the background, it will continue to play. Stop the track by pressing ***SPACE with E*** and go to option a) above.
3. There are three possible actions at this point:
   a) If the folder you want was offered at the prompt, simply press ***ENTER*** and go to step 4.
   b) If you want a different folder on the same drive as the folder offered, press ***SPACE*** and select another folder, then go to step 4.

c) If the folder you want is on a different drive or on a card, press ***BACKSPACE*** and select the drive or card from the drive list. Select a folder from the list of folders, and go to step 4.

4. KeySoft will prompt for a file name. Select a file from the list. The track will then start playing.
5. When the track has finished, KeySoft will prompt, "Media file to play? Press ***ENTER*** for (file name)" where file name is the name of the last file played. At this point you can select another file, or exit the media player by pressing ***SPACE with E***.

16.1.4 How to stop or pause a track.

There are two sets of commands that you can use to stop or pause a media track.

While in the Media Player application itself, you can use the pause command ***BACKSPACE with ENTER*** and restart using either ***BACKSPACE with ENTER*** again, or ***SPACE with G***. You can also stop it all together by pressing ***SPACE with E***.

However, while a track is playing in the background and you are working in another part of KeySoft, these commands will only affect the application you are working in. It is however, possible to stop and restart the track using ***ENTER with dots 1-3-4-6***. This command also works while you are in the Media Player application.

16.1.5 Skipping Through a Track.

Sometimes you may want to skip through a track rather than listen to it straight through. There are two ways to do this.

1. The Braille Display acts as a progress indicator for the track – once the track begins to play it will go blank except for a lower g (dots 2-3-5-6) indicator that moves evenly along the Braille display as the track progresses. So, for example, half way through the track, the indicator will be on cell 16 of a 32 cell display and cell 9 of an 18 cell display.

   As the Braille display represents the total length of the track, this will affect the rate and increments at which the indicator will move. For example, with a 5 minute track, it will move more slowly along the display than with a 3 minute track.

You can use the Braille display to skip along the track in either direction, simply by pressing the touch cursor buttons. The indicator will skip to the position of the button, and the track will skip to that spot as well.

There are also skip commands that use the keyboard. These skip commands skip forwards or backwards by either 1, 5 or ten percent of the total file.

They are:

Skip forward 1% ***SPACE with dot 6***,

Skip back 1% ***LEFT ARROW***,

Skip forward 5% ***CONTROL with RIGHT ARROW***,

Skip back 5% ***SPACE with dot 2***,

Skip forward 10% ***SPACE with dot 4***,

Skip back 10% ***SPACE with dot 1***,

You can use these singly or repeatedly to skip through a track.

16.1.6 Restarting a Track.

If you are part way into a track and want it to start from the beginning, press ***SPACE with dots 1-2-3***. This is the same command as used elsewhere in KeySoft for returning to the beginning.

16.1.7 Streaming Audio.

As well as playing files, the media player can also stream audio from compatible links on the internet. Compatible links include ACB Radio's winamp link, along with other winamp links that use a pls file format, and MS Media player links, except in the case of ACB Radio. If it is not clear from the link whether it is going to be compatible, try it to see.

If you select a compatible streaming audio link while in KeyWeb, it will automatically open either the Media Player, or open an online media player, depending on how the link is designed.

After selecting the link there will be a period of time when the file buffers and the web page reloads itself. The length of time this takes will depend on the internet connection speed. KeyWeb lets you know what is going on by a series of prompts and progress beeps something like this: "Please wait ...beep ...beep... beep... loading media... beep... beep...Name of webpage." There may be a short period of silence before or at the end of this sequence depending on how long it takes for the Media Player to buffer the file. When the file is loaded, the stream will start to play. Hitting ***ENTER*** again during this process could cause it to hang, so make sure you give it time before retrying.

If the link opens a player on the site itself, you will have to use KeyWeb to activate the controls on the site itself. If the link opens in the Media Player, you can use the stop, pause and play functions but not the others. This is standard behavior for media players playing links that stream audio.

16.1.7.1 Pausing and stopping audio streaming.

There is a command that pauses and restarts audio streaming. It is ***ENTER with dots 1-3-4-6***. If audio is playing, it will cause it to pause. If it is paused, it will cause it to restart. This command also works to stop and start any media file while it is playing.

16.1.7.2 Saving a streaming link as a Favorite.

By saving a streaming link as a favorite, you can go directly to it from the favorites menu instead of having to go to the page then select the link. Instructions on how to save a link are covered in 12.8.2 Create favorite from current link.

16.1.8 Volume Control.

The media player volume controls are:

Louder: ***ENTER with dots 4-6***.

Softer: ***ENTER with dots 1-3***.

They operate independently from the speech volume, in that you can change the volume without changing the volume of the speech. The speech volume is still the "master volume", so if you adjust the speech volume, the media player volume will change relative to it.

This relativity is a useful feature as it means that if you wish to turn down the volume of both speech and track at the same time, you can do so with one action. For example, if you are listening to a piece of music while writing an essay and someone addresses you, you can turn down the speech volume, keep working, and still conduct a conversation.

The Media Player volume commands are also mentioned in the last two items of the Options Menu.

If you wish to increase the relative volume of the voice to the Media Player, that is, you want to make the speech louder or softer without making the Media Player louder or softer at the same time, you can adjust it independently by pressing ***BACKSPACE with ENTER with R***, then select "Speech Volume Level?." Select a number between 1 and 5, 5 being the loudest. The default setting is ***3***.

16.1.8.1 Stereo and Mono Outputs.

When listening to the media player over stereo headphones or through a set of stereo speakers, the audio track will play in stereo.

The built-in speaker is mono. Recordings made will also be in mono.

16.1.9 Playlist files

The Media Player supports the use of M3U playlist files. These files define a playlist of MP3 files that must also be either on your BrailleNote BT or an inserted storage card for the playlist to work. To use an M3U file, open it in the same way as you would any other media file.

Any file paths defined in the M3U file will need to point to the location of the MP3 files. If an existing M3U file has file paths relative to a PC, you would need to open the M3U file either on your BrailleNote BT or on your PC in Notepad and edit the file paths to reflect the location on the BrailleNote BT. If the M3U file is in the same folder as the MP3 files to which it refers, you don't need to include any file path at all, just the file names.

Alternatively, it is easy to create an M3U file in Keyword. If this interests you, follow the steps below:

Before you start, you need to know the location of the media files you wish to include in the playlist.

1. Create a new ASCII text document in KeyWord. When prompted for a file name, add the .m3u suffix to the name you give it. As stated above, it is easiest if you save the M3U file into the same folder as the MP3 files listed in it.
2. In the document, you have two options:
   a) Type or paste in the file name of the MP3 including the file extension e.g. Purple Rain.mp3. Or,
   b) If required, type or paste in the file path to the first file, ending with its file name including the file extension, for example: \Flash Disk\My Music
3. Go to the next line by pressing ***ENTER*** and repeat, so that each track is listed on its own line.
4. When you've added all the tracks you want to include in the playlist, press ***SPACE with S***.

Your playlist is now ready to use.

16.1.9.1 Playlist Commands.

While running an m3u playlist, you might want to skip a track or go back to a previous track. The commands are:

Return to previous track: ***SPACE with dots 2-3***

Go to next track: ***SPACE with dots 5-6***

All of the other media player commands also work when playing m3u files.

16.1.10 Information on your media file.

There are two types of information available about your media file as it is playing – track information and elapsed time.

16.1.10.1 Track Information.

You can check out file information while playing a media file. The list of information will vary depending on what type of file you are playing; for example, when streaming audio, there is no track length to report, and likewise with an M3U file, which may not have the track lengths specified in it. The available items of information in order is Title, Track Length, Sample rate and bit rate. Time is given as hh:mm:ss.

For example:

Title: Sample.mp3

Track length: 0:1:1

Sample rate: 44100 Hertz

Bit rate: 128 kbps.

To access this information, press ***SPACE with I***. To pass from one item to the next, press ***SPACE***. To go back to the previous item, press ***BACKSPACE***. To exit from the information at any point, press ***SPACE with E***.

16.1.10.2 Elapsed time.

You can also find out the elapsed time, that is, how long the track has been playing and the total length of the track. To access this information, press ***SPACE with wh sign (dots 1-5-6)***. Time is given as hh:mm:ss.

For example: “Elapsed time: 0:0:27 of 0:1:1”

16.1.11 Changing Tasks.

Having set a track to play, if you then wish to work on a different task while playing it in the background, either press the hotkey combination for the new task, for example ***BACKSPACE with ENTER with P*** for Planner, or return to the main menu by pressing ***SPACE with dots 1 through to 6*** and take it from there. The hotkey combination for returning to the Media player is ***BACKSPACE with ENTER with M***.

16.2 Audio Recorder.

The audio recorder allows you to make short audio recordings using your BrailleNote BT. It is ideal for short recordings such as reminders and "to-do" items, recording a phone number, shopping lists etc.

There is a choice of input via an in-built microphone or external microphone (not provided) and you can set the quality of the recording in the set up list. Play back recordings via the Playback function, or the Media player.

In this user guide, and in the prompts on your BrailleNote BT, recordings are referred to as memos. Recorded memos are wave format files (they have a *.wav file extension) and can be played either via the playback function, or through the Media Player.

Memos are saved by default to the My Memos folder on the Flash Disk unless otherwise specified.

16.2.1 Microphones.

You can use the audio recorder with either the internal microphone, or an external microphone plugged into the port on the left side of the unit. The internal microphone is positioned inside the top left hand corner of the BrailleNote BT. It has an effective range of about 30cm (1 foot).

To let the Recorder know which microphone you are going to be using, you can specify it in the Recording options set up list, as discussed in 16.2.2 Setting up the Audio Recorder. Bear in mind that the internal microphone is the factory default and therefore if you have never used nor do not intend to use, an external microphone, there is no need to do this.

It may be necessary before recording to adjust the recording levels, depending on factors such as the usual volume of your voice, the default settings may be too high or low. These are discussed in 16.2.3 Adjusting Recording levels.

16.2.1.1 External Microphone.

The BrailleNote BT can record using an external microphone. The kind of external microphone that will work with it is a low-voltage "electret" type. Electret microphones are distinct from "dynamic" microphones, and are readily available. It would pay however, before purchasing any new microphone, to test it with your BrailleNote BT, or to ensure that you can return it if it is not compatible.

Just a quick note on external microphones - any damage to the microphone's lead, no matter how slight, can result in a noticeable loss of sound quality. Likewise the use of extension leads between the microphone and the socket.

16.2.2 Setting up the Audio Recorder.

Before recording, there are some settings to configure. From Media Center in the Main Menu, select Set-Up options. This takes you to the Media Set-Up Menu. The options are; "Select folder for Memos" and "Recording Options."

The first option in the menu is "Select folder for Memos," where you can nominate in which drive and folder you wish memos to be saved. The factory default folder is the My Memos folder on your Flash Disk. If you wish however, you can save the file to a storage card or device. To change the default offered, change the drive then folder in the usual way.

You can either configure the settings directly in the Recording Options set-up List, or as part of setting up to make your first recording.

1. To access the recording options set up list, from the "Media Set-Up menu" menu either:
   a) Select "Recording options set up list," or
   b) Select "Record a Memo" and at the prompt, "Start recording from the internal/external microphone?" press ***O*** for Options.
2. The first setting is "Default input source?" This is where you specify either an external or the internal microphone. For internal press ***I***, for external, press ***E***. Press ***ENTER***
3. The next option is Sampling frequency. For low quality (11.025 kHz), press ***L***. For middle quality (22.05 kHz), press ***M***. For high quality (44.1 kHz), press ***H***. Press ***ENTER***.
4. The next option is Bit Depth. For low quality (8 bits), press ***L***. For high quality (16 bits), press ***H***. (Read more about bit depth in 16.2.7 Bit depth.) Press ***ENTER***.
5. The next item is, "Record button input source? currently Internal microphone" In this item, you are nominating what, if any, type of microphone is selected. Options are:

   Internal microphone: Whenever you use the record button to instigate recording, it will use the internal microphone

   External microphone: Whenever you use the record button to instigate recording, it will use an external microphone. Note: if you select this and try to record without the external microphone plugged in, nothing will happen to tell you this and all you will end up with is some white noise, so it pays to check!

Off (hotkey is F): If you are not using the record button, you can turn it off altogether so as to minimize the risk of bumping it and making an unwanted recording.

Default input source setting: The record button will use whatever input source you set as the default in the first setting of the "Recording options set up list".

6. The next option is "Respond to the Record Button when the power switch is off? Currently no." This allows you to nominate whether you can use the record button while the BrailleNote BT is switched off. The options are ***Y*** for Yes and ***N*** for No. If you disabled the Record button in the previous option, this option will not be displayed.
7. The last options are Internal and External microphone recording levels. These are covered in the next section.

You are now ready to make a recording. Go to 16.2.4 Recording a Memo.

16.2.3 Adjusting Recording levels.

The recording levels for both microphones are set to an average level but you may well wish to adjust them to suit the volume or pitch of your voice.

There are two places where you can adjust the level (also known as "gain") - using the menu items and entering a different value, or at the prompts. In the menu, you can set a specific value whereas at the prompts, you can adjust the level on a sliding scale and test it.

The next two sections cover each of these in turn.

16.2.3.1 Setting levels at the menu.

From the Recording Options Set up List, select either Internal or External microphone recording level. When the item is displayed, the current setting will also be displayed. To change the value, type a new value and press ***ENTER***.

The recording level values available represent the viable decibel range for each kind of microphone. For the internal microphone, the available values are 1-15 (covering a range of 31.5 to 52.5 decibels), default setting is 12. For the external microphone the available values are 1-35 (covering 1.5 to 52.5 decibels), the default being 25.

16.2.3.2 Setting levels at a prompt.

Setting the recording levels this way impacts the chosen default microphone, which if you have not changed it at all, is the internal microphone.

To adjust the levels on a sliding scale at a prompt and test the results, follow these steps:

1. From the Media Menu, select Record a memo. KeySoft prompts "Start recording using...". Do NOT press ***ENTER*** yet!
2. At this point you can adjust the recording levels - increase by pressing ***SPACE with dot 6*** repeatedly, or decrease by pressing ***SPACE with dot 3*** repeatedly. Still do NOT press ***ENTER*** yet.
3. You can now test the new level. Start a test recording by pressing T and speaking normally as you would if recording a memo, then to stop the recording, press T again. Still do NOT press ***ENTER*** yet.
4. To play back the test recording, press ***P.***
5. If the level is not right, repeat steps 1 to 4 until you are happy. At that point, continue on with making your recording by pressing ***ENTER***!

The test recording is called "Test.wav" and each new test overwrites the old file so that you don't end up with lots of test files.

16.2.4 Recording a Memo.

There are two methods available for making a recording. The first method is useful if you wish to change microphones or are not sure which microphone is set as the default. The second method is useful if you are confident all the settings are as you wish them to be.

Method 1:

1. From the Main Menu, select Media Center.
2. From this menu, select "Record a memo."
3. The Recorder prompts, "Start recording using internal microphone?" unless you have already changed the default microphone to external in the set up options. To start recording with the offered microphone, press ***ENTER,*** or ***Y***, or the Record button. If you are using the external microphone you will need to plug it in first. Note: The Record button works with the selected input source in this instance.
4. You will hear a beep, which indicates that it is time to start recording. KeySoft will otherwise remain silent during recording.
5. To stop the recording, press ***ENTER*** or ***Y***, or the Record button. Two beeps confirm that recording has ceased, and KeySoft will repeat the prompt: "Start recording using internal microphone?". Note: The Record button works with the selected input source in this instance.

Method 2:

1. From anywhere in KeySoft, press the record button. This is located on the left side of the unit, and is the first thing you will find if you feel from the front edge. It is a small button. Press it in and you will hear a beep. Release the button and start recording.
2. To stop recording, press the button again.

There are some other commands available while recording:

To change tasks and continue working with KeySoft while still recording, either press ***SPACE with E*** or the relevant changing task hot key combination.

At the "Start Recording from...?" prompt, you can also:

Playback the last recorded memo by pressing ***P***;

Erase the last recorded memo by pressing ***E***; or

Name the last recorded memo by pressing ***N***.

16.2.5 Playing back a Memo.

Memos are recorded, unless you have specified otherwise, in the My Memos folder on the Flash Disk.

The hotkey for playing back a memo is ***ENTER with M***. When you select Playback Memos from the Media menu, KeySoft will prompt:

"Playback memos in which folder? Press ***ENTER*** for My Memos."

KeySoft will display "List of memos, most recent first, in My Memos folder" for example:

"10:59:32 AM on Thursday June 7, 2006 memo"

"4:22:10 PM on Wednesday June 6, 2006 memo"

"Class singing happy birthday to me"

Just as in any file list in KeySoft, you can review it by pressing ***SPACE*** and ***BACKSPACE***. To play a memo, press ***ENTER***. When that memo has finished playing, the memo name is repeated.

While playing a memo, all of the usual Media Player commands are available.

In the My Memos folder, all the usual file commands are available, e.g.:

Information about item: ***SPACE with I***

To erase a file: ***BACKSPACE with dots 1-4***

To rename it: ***BACKSPACE with R***

Etc.

16.2.6 Sampling Frequency.

The sounds we use and hear in the real world, such as our voices, are "analog" signals. This means that they are continuous and constant. To process these signals as a recording, we need to convert the signals to "digital" form. Digital signals are not continuous, and so to create the effect of continuous sound, a process called sampling is used. The value of the signal is measured at certain intervals in time, and each measurement is referred to as a sample.

The frequency with which samples are measured is called the sample frequency. The more samples that occur in a second, the better the quality of the sound. As the measurement used to describe this is Kilohertz or kHz, the larger the number of kHz, the better quality the sound.

Of course, the higher the sample frequency, the larger the resulting file will be. Because there will be times when the sound quality is not as important to you as the amount of storage space you have available, the Recorder has three sample frequencies to choose from: 11.025 kHz (low quality), 22.05 kHz (medium quality), and 44.1 kHz (high quality). The factory defaults is 22.05kHz.

16.2.7 Bit depth.

A bit (short for binary digit) is the smallest unit of data in a computer. The range of a digital signal is measured in bits. So, each time a sample is taken, the size of that sample is measured in bits. This is called a bit depth, because the size of the sample is determined by the vertical range of the sound wave

The Recorder has two available bit depths - 8 bits and 16 bits. Using 16 bits per sample gives a higher quality recording with a larger dynamic range and less noise. However, it uses twice as much storage space as 8 bits. The factory default is 8 bits.

16.2.8 File size.

As discussed before, the higher the sample frequency and bit depth of a recording, the larger the resulting sound file will be. However, the larger the file, the better the sound quality. Therefore you may want to make a value judgment about what to record at a high quality and what to record at lower quality, to manage your storage capacity. Below is a breakdown of the relative sizes for 10 second and 60 second sound recordings according to the sound quality.

For a 10 second recording, the file sizes are:

1. Low Frequency sample, Low quality bit depth =107KB
2. Medium Frequency sample, Low quality bit depth =215 KB
3. High Frequency sample, Low quality bit depth =431 KB
4. Low Frequency sample, High quality bit depth =215 KB
5. Medium Frequency sample, High quality bit depth =431 KB
6. High Frequency sample, High quality bit depth =861 KB

For a 60 second recording, the file sizes are:

1. Low Frequency sample, Low quality bit depth =646KB
2. Medium Frequency sample, Low quality bit depth =1.26MB
3. High Frequency sample, Low quality bit depth =2.5MB
4. Low Frequency sample, High quality bit depth =1.26MB
5. Medium Frequency sample, High quality bit depth =2.5MB
6. High Frequency sample, High quality bit depth =5.04MB

16.3 FM Radio.

The FM Radio includes several features that are standard for a digitally tuned FM Radio such as a typical car radio. For example, it has automatic tuning and the ability to preset stations.

The default frequency range of between 87.5MHz and 108MHz is used for the FM Radio.

The FM Radio is accessed from the Media Center menu found on the Main Menu. Alternatively, you can go directly to it from anywhere in KeySoft by pressing ***BACKSPACE with ENTER with F***. When you access the FM Radio for the first time you will tuned into the frequency 87.5 FM. Unless this is a station, you will just hear static!

Since the headphones act as an aerial they must be plugged in whenever you want to listen to the radio. You can listen to the radio either via headphones or the speaker. To listen to the radio via the speaker instead of through your headphones, press ***ENTER with S***. This is a toggle command; in other words it will alternate between the headphones and the speaker each time you press ***ENTER with S***.

This section describes the features and their uses in detail.

16.3.1 Tuning the FM Radio.

You will need to tune your radio into your local FM stations using one of the three options described below.

1. If you already know the frequency of a station, you can tune into it directly by pressing ***SPACE with F***. KeySoft prompts: "Station frequency?". Type the frequency you want to tune into and press ***ENTER***. The radio will then be tuned into the frequency you have selected and KeySoft will then display the frequency. For example "92.1 FM Stereo".
2. The FM Radio can automatically tune into stations using the following hot keys:

   To scan forward to find a station press ***SPACE with dot 4***;

   To scan back to find a station press ***SPACE with dot 1***.

   Once you have tuned into a station you can make further adjustments to the frequency by manually tuning the radio. See option 3 below for an explanation of manual tuning.

3. Manual tuning is handy for fine tuning when the reception of stations is unclear. To improve the reception you can increase or decrease the frequency by 100 KiloHertz at a time. It is also useful for coarse tuning if you want to move the frequency up or down by 1 Megahertz. Fine or coarse tuning can be performed by using the following hot keys:

   To increase the frequency by 100kHz press ***SPACE with dot 6***;

   To decrease the frequency by 100kHz press ***SPACE with dot 3***;

   To increase the frequency by 1MHz press ***SPACE with dot 5***;

   To decrease the frequency by 1MHz press ***SPACE with dot 2***.

Remember that you can press ***SPACE with H*** at any time to read a summary of the options available.

16.3.2 Pre-setting stations.

Presetting stations is possible with the Presets feature. Presets save you from having to remember the frequency of all your favorite stations.

You may have as few or as many presets as you wish. Each preset is given a personalized name so that they can be easily identified. For example, Concert FM or Cool Party Tunes. All you need to do is tune to a station of your choice and press ***BACKSPACE with R***. You can then type in a name and press ***ENTER***. Repeat this process for each station you want to preset.

The following hot keys are available for navigating preset stations:

To move forward through the list of preset stations press ***SPACE***;

To move back through the list of preset stations press ***BACKSPACE***.

Once you have preset your favorite stations you can move from one to another by entering the first character of the name, for instance, ***C*** for Concert FM. If there are more than one preset starting with the same character, enter the first unique part of the name instead. For example, "Co" for Concert FM or "Cl" for Classic.

When KeySoft finds a preset station it will display both the name you have given it and the frequency. For example "Concert FM 89.7 Stereo". Note that once you have scrolled through all the preset stations KeySoft will display "End of list" and remain tuned to the the last preset station. The name and frequency of the last preset station will then be displayed.

It is possible to change the name of a preset and if you decide that you no longer want a pre-set on the list you can delete it. The following hot keys are available for entering, editing or renaming and deleting preset stations:

To enter a new preset station press ***BACKSPACE with R***. Keysoft will prompt: "Name for this station? Currently (blank space)." The blank space represents no preset name entered. Type in a name for the preset station and press ***ENTER***. KeySoft will then display the name of the new preset station.

To edit or rename an existing preset station, select the one you wish to change and press ***BACKSPACE with R***. Keysoft will prompt: "Name for this station? Currently (existing preset station name)." Type in the new name for the preset station and press ***ENTER***. KeySoft will then display the new name of the preset station.

To delete a preset station, select the one you wish to delete and press ***BACKSPACE with dots 2-3-5-6***. KeySoft will prompt: "Delete (preset station name). Sure?." Type ***Y*** for Yes and KeySoft will display the frequency of the station.

Note that the FM Radio will tune into the last frequency that it was tuned into when the radio was previously switched on.

16.3.3 Listening to the radio while using KeySoft.

The BrailleNote mPower BT allows you to listen to your favorite station at the same time as performing other tasks in KeySoft. For example, while you are writing a document or reading a book. If you want to leave the radio on in the background while you work in another part of KeySoft press ***SPACE with E***. Keysoft prompts: "Leave the radio on?." Type ***Y*** for Yes. If you need to change the station or adjust any of the other FM Radio features, return to FM Radio via the Main Menu or by pressing ***BACKSPACE with ENTER with F***.

To switch off the FM Radio press ***SPACE with E***. KeySoft prompts: "Leave the radio on?". Press ***N*** for No.

16.3.4 Volume Control.

The FM Radio volume controls are:

Louder: ***ENTER with dots 4-6***.

Softer: ***ENTER with dots 1-3***.

They operate independently from the speech volume, in that you can change the volume without changing the volume of the speech. The speech volume is still the "master volume", so if you adjust the speech volume, the FM Radio volume will change relative to it.

This relativity is a useful feature as it means that if you wish to turn down the volume of both speech and radio at the same time, you can do so with one action. For example, if you are listening to the radio while writing an essay and someone addresses you, you can turn down the speech volume, keep working, and still conduct a conversation.

If you wish to increase the relative volume of the voice to the FM Radio, that is, you want to make the speech louder or softer without making the FM Radio louder or softer at the same time, you can adjust it independently by pressing ***BACKSPACE with ENTER with R***, then select "Speech Volume Level?" Select a number between 1 and 5, 5 being the loudest. The default setting is ***3***.

16.3.5 Mute.

You can quickly silence the FM Radio using the mute function. For example, this is useful when phone rings or you need to access Help without being distracted by the sound of the radio blaring. To mute or un-mute the radio press ***ENTER with dots 1-3-4-6***.

16.3.6 Recording the radio.

You can record the radio using the Audio Recorder function. The Audio Recorder provides you with the option of recording the radio whether or not you are listening to it. Refer to 16.2 Audio Recorder for further details.

End of Media Chapter.

17 Database Manager.

This chapter introduces the basics of KeyBase, the database part of KeySoft.

A database is an organized collection of information (otherwise known as data) that has been arranged so that it is easy and fast to find. Databases are useful for storing a wide range of information. The information within a database is organized into fields and records. Each piece of information, such as a phone number, is called a "field". You can enter multiple fields against a person's surname, for example, to form a "record".

Databases are useful for storing a wide range of information, such as a catalog of CDs in your CD collection, your recipes, bank records and so on. For your convenience, KeyBase comes with 9 different databases that are ready for use. If you cannot find exactly what you need from the list of supplied databases, you can develop your own database or modify one to suit your needs. The supplied databases are:

CD Catalog: Keep information on the CDs that you own, such as the track titles on each album.

Home Inventory: Useful for entering information about household purchases such as appliances that are under warranty and insurance details.

My Books: Provides an opportunity to search for data on the genre and format of books you have read.

My Recipes: Retrieve lists of ingredients for your favorite dish.

Transaction Record: Allows you to keep track of debit and credit movements within your bank accounts. Copy and rename this database as appropriate, for instance, create one copy for each of your bank accounts.

Receipt Book: Make a record of goods and services bought or sold. Copy and rename this database as appropriate.

Membership List: Club/Organization contact details, for example, membership numbers and subscription information. Copy and rename this database to suit your requirements. For example, if you are the secretary of a Blind Cricket Club, rename it "Blind Cricket Club Membership".

Wine Tasting: Create records of your wine tasting experiences, including notes on the taste and bouquet.

Ham Radio Log: Used to keep a log of amateur radio contact and call details, such as location, call sign and frequency.

To enter the Database Manager from the Main Menu, use the ***SPACE*** and ***BACKSPACE*** keys to review the items in the menu, until "Database Manager" is displayed, and then press ***ENTER***. Alternatively, you can select the Database Manager from the Main Menu by pressing ***D***.

You can switch directly to the Database from anywhere in KeySoft by pressing ***BACKSPACE with ENTER with D***.

KeyBase prompts: "Database to use. Press ***ENTER*** for (default)?", where the word "default" is really the database you used last. This is a standard KeySoft filename prompt and all the usual commands are available, as described below:

To select the displayed database, press ***ENTER***.

To cycle through the list of available KeyBase files, press ***SPACE***. KeySoft will then display "List of KeyBase files in KeyBase folder". To look through the list of available KeyBase files, press ***SPACE or ADVANCE*** repeatedly and when the name of the file you require is displayed, select it by pressing ***NEXT or ENTER***.

Note: As the remainder of this chapter uses the example of the Membership List database to illustrate the features of the Database Manager, now is a good time to select it from the list of supplied databases.

17.1 KeyBase Menu.

Once you have selected the database you want to work with, the KeyBase Menu is displayed.

If you are familiar with KeyList, the address list manager, you will notice that KeyList and KeyBase have many features in common.

The KeyBase menu comprises of 8 options as follows:

Add record.

Lookup records.

Copy records.

Emboss records.

Print records.

Import data.

Review database definition.

Free database space.

The following sections describe these options. Note: If you are using a database for the first time, it will be empty until you have added records.

17.1.1 Adding a Record.

The supplied database, Membership List (for instance, one named Blind Cricket Club) is used here to help you add a record.

This option allows you to enter any information into the database. Each item of information, such as the first name of a member (in the Blind Cricket Club database), is called a "field". All the fields associated with a particular first name are used to form a "record".

At the KeyBase menu, select "Add Record". KeyBase displays: "Entry list for Blind Cricket Club".

Move to the first item in the list by pressing ***SPACE or ADVANCE***, and KeyBase prompts you for a first name. Type the first name of a particular member and press ***ENTER***.

You are then prompted for the next field. Either enter text and press ***ENTER*** or skip the field by pressing ***SPACE***.

Continue adding rentries until you come to the end of the list. You can review the list at any time by pressing ***BACKSPACE or BACK*** to move back, or ***SPACE or ADVANCE*** to move forward. When you are satisfied, add the new record by pressing ***SPACE with dots 2-6***.

KeyBase displays, "Record added", and you are returned to the KeyBase menu. If you wish to add another record, press ***A*** and repeat the previous procedure.

17.1.2 Finding Information.

This option allows you to quickly find information in the database. It is useful when you have a particular query that you need answered.

To explain how to find information in a database, the example of a Membership List for a Blind Cricket Club has again been used

At the KeyBase menu, select "Lookup Record". KeyBase displays: "Selection List for Blind Cricket Club".

Move to the first item in the list by pressing ***SPACE or ADVANCE***, and KeyBase prompts: "First Name?".

The Selection List allows you to specify the search for a particular record or several related records. For example, you may want to review the records of all people called "Smith" who are members of the Blind Cricket Club. In this case, type "smith" at the last name prompt, and press ***ENTER***. The first name and last name of the first person in the Blind Cricket Club database called "Smith" is displayed. You can move through the list of "Smiths" by pressing ***SPACE with dots 5-6***. Each press displays his or her first name, followed by the last name, in this case "Smith". Only records which match the selection list are displayed. A beep indicates when there are no more matching last names.

To review the other fields in a particular record, press ***SPACE or ADVANCE*** repeatedly. Only fields containing an entry are displayed. The format of each item comprises the name of the field, such as "Membership Category", followed by the entry, such as "Senior".The movement commands for the KeyBase menu are as follows:

To move to the next record: ***SPACE with dots 5-6***.

To move to the previous record: ***SPACE with dots 2-3***.

To move to the next field: ***SPACE***.

To move to the previous field: ***BACKSPACE***.

To read all fields: ***SPACE with dots 2-3-5-6***.

To delete this record: ***BACKSPACE with dots 2-3-5-6***.

To change this field or any other field or to enter information into additional fields press ***BACKSPACE with dots 1-4***.

To copy a record to the clipboard: ***SPACE with B then C***.

When you have finished reviewing to a selection, you can return to the "Selection List" by pressing ***SPACE with E***. You are then asked for another Last name. If you have finished searching, you can return to the KeyBase menu by pressing ***SPACE with E*** again.

The information which you enter into the Lookup Record option is used to find matching records. You may include as much or as little data as you wish.

For example, when looking up a membership number, you might want to find Jane Smith. Move to the first item in the list by pressing ***SPACE or ADVANCE***, and KeyBase prompts: "First Name?". Type "jane" and move to the next field by pressing ***SPACE with dot 4***. KeyBase will prompt: "Last name?". Type "smith" and start the search by pressing ***ENTER***. The first "Jane Smith" will be displayed. If necessary, cycle through the other "Jane Smith's" by pressing ***SPACE with dots 5-6***, until you locate the one you require. To find the correct "Jane Smith", review the fields by pressing the initial letter for the field name. For example, ***D*** for "Date Joined".

For string fields, you need only type the first few characters in a field rather than the whole field. For example, if you just type ***S*** in the "Last Name" field, you are able to access the records of all people whose last names begin with ***S***.

You can search for all members who fall into the senior membership category. At the selection list, don't specify a last name, but press ***SPACE*** repeatedly until the prompt: "Membership category?" is displayed and then type "senior" and press ***ENTER***. You can then use ***SPACE with dots 5-6*** to move through all the members who are senior members of the Blind Cricket Club.

You can also search for a name fragment within a field, using the multi-character wild card for the unknown first part. For example, you may remember a members' postal address as: "Something View Road". If you press ***SPACE with dots 3-5***, followed by "View" in the address line 1 field, you should have a very short list of records to review.

Any fields used in a Lookup will be offered as a suggestion for the next search, unless you exit to the KeyBase Menu between searches. You may want to clear a previously-used field so it is not used in the next search. To do this, move to the required field using ***SPACE or BACKSPACE*** and press the Clear Field command, ***SPACE with dots 3-5-6***.

Note: numbers are matched identically, so that 42 will match with 42, but not with 39.9. Conversely, dates and times will be matched regardless of how they are entered. For example, 11.00p.m. will match with 23.00.

17.1.3 Embossing Records.

You may want to emboss a name and membership number, or a selection of records, to create membership cards for your Blind Cricket Club members. From the KeyBase menu select "Emboss Records". KeySoft prompts: "Emboss or Set up embosser?"

If you haven't previously set up the embosser, press ***S***. The set up procedure is covered in 6.8 The Embosser Set-up List.

To proceed with embossing, press ***E***, and KeySoft prompts: "Template name"?

A template is a standard KeyWord text or Braille document that specifies the field layout that is to be used when database records are printed, embossed, copied, or merged into documents.

Each database can have one or more templates, but each template only works with one database. For this reason, in selecting a template, you can only select templates associated with the current database.

To avoid confusion caused by viewing templates that are associated with other databases, follow the suggestions below:

1. Create a separate folder for each database that holds the database and templates associated with that particular database.
2. Name each template clearly to easily identify with its associated database. For instance, for the database named Book Club Membership, the template to be used when composing subscription reminder letters, could be named Book Club Subscriptions.

Note you will be provided with an error message if you accidently select a template that is not associated with the current database. The error message is "This template is associated with a different database, (name of database). Use anyway?". To select another template, type N.

Refer to 10.9.2 Creating a Template for further details on how to create a template.

To select a template for embossing, you need to understand the difference between a database record and an embossed page. A database record is a series of fields, whereas an embossed page must have a specific format. So, to emboss database records, you must specify which fields you want to emboss, and how they should be arranged. This is defined by a template, which is a KeyWord document laid out with the required field names in the required arrangement. A template may also contain text and formatting information.

There are two main template categories, namely Braille templates and text templates. To emboss records from your Blind Cricket Club database, you would use a Braille template. Conversely to print records from the same database, you would use a Text template. The convention used for naming templates, places the word "Braille" in front of the Braille templates.

After you have selected the template, KeyBase displays, "Selection list for Blind Cricket Club". This is the Selection List that you use in the Lookup Record option. It is used in the same way to select the records that you want embossed. If you want to emboss every record, press ***ENTER***. However, you can select just those records you want to emboss. When you have set up the required search field, or fields, start the lookup by pressing ***ENTER***. KeyBase displays the number of selected records, and prompts, "Emboss all selected records?" To do this, press ***Y***. All the selected records are embossed, and you are returned to the KeyBase menu.

Alternatively, you have a further opportunity to choose from the selected records. To do this, press ***N***, and you are presented with the first matching record. If you wish to emboss this record, press ***ENTER*** and this record is embossed. If you do not want to emboss this record, scan the list by pressing ***SPACE with dots 5-6***, and press ***ENTER*** for each record that you wish to include.

17.1.4 Printing Records.

The procedure for printing a record, or a selection of them, is very similar to embossing. From the KeyBase menu, select "Print records". KeySoft prompts: "Print or Set up printer?"

If you haven't already set up the printer, press ***S***. The set up procedure is covered in 6.11 The Printer Set-Up List. To proceed with printing, press ***P***, and follow the prompts to select a template and choose which records to print.

17.1.5 Importing Data into a Database.

Importing information into a database is a valuable feature of KeyBase that allows you to input records from files rather than entering them by hand.

Comma Separated Values (CSV) is the file type used for importing into a database. It is a file type that is widely supported by many database and spreadsheet applications, including but not limited to, Access, Excel, and Lotus Notes. To ensure that .csv files are successfully imported, check that the first line of the .csv file contains the field names and that these are named the same as the field names in KeyBase. This is often given as an option when you export data from another application in order to import the data into KeyBase.

To begin the process of importing data, either press ***I*** or access the KeyBase menu or cycle through the items using ***SPACE*** until you find "Import Data" and then press ***ENTER*** to select it. KeySoft will prompt "Source folder name? Press ***ENTER*** for (default)", where "default" is the last folder used. Select the drive and folder containing the .csv file you wish to import. The prompt "Import data from which CSV file?" will be displayed. Type the name of the .csv file you wish to import and press ***ENTER***. Alternatively, you can select it from the list of files by pressing ***SPACE*** repeatedly, followed by ***ENTER*** when the file is displayed. KeySoft will prompt: "Does line 1 (field 1, field 2, field 3) contain field names?." If you type ***Y***, KeyBase will exclude line 1 of the .csv file when importing, because it contains field names rather than data. If you type ***N***, line 1 will be included.

Note: To help you determine whether or not the first line contains field names, KeySoft will display up to 30 characters of line 1.

The field mapping of .csv files to the field names in the KeyBase database now begins. Field names in the .csv file (if field names are present) are compared with those in the database. Once the matching is complete, the results are displayed as one of the possible outcomes that follow:

"All fields match. Review field mapping list?"

"One field doesn't match. Review field mapping list?"

"(A specified number) fields do not match. Review field mapping list?"

"No fields match. Review field mapping list?"

Your response to the result will be either Yes or No. If you type ***Y***, the Field Mapping List will be displayed. The Field Mapping List contains one item for each field in the .csv file. This will show you what .csv field maps to which database field. For example, in the case of a membership list, "(Last name) maps to (last name)". If the .csv file does not contain field titles, an example of a prompt could be "(Jones) maps to nothing".

To change the mapping of a particular field, press ***ENTER***. You will then be presented with a list of the fields in the database. Once you have selected a field, KeySoft will once again prompt "(item) maps to (KeyBase field)" and the new mapping displayed. For example, "Jones maps to last name".

Once you are happy with the field mapping, press ***SPACE with E***. KeyBase will then display your changes (for example, "All fields match"), and follow with the prompt: "Review field mapping list?". To start the import process, press ***N***.

If your .csv file is large, the import process may take some time. If this is the case, "Please wait" will be displayed and you will hear a beep every few seconds. If you want to check on progress, find the status information by pressing ***ENTER***. Once the process is complete, the KeyBase Menu will be display.

Note that KeyBase can be used to view data that is maintained on another system and frequently imported into a database. To manually delete existing data before performing an import, follow these steps:

1. At the "Database to use?" prompt, press ***SPACE*** and locate the database from which data is to be deleted.
2. To delete the existing data, press ***BACKSPACE with dots 1-4***. KeyBase will prompt: "This KeyBase Definition File has an associated database called xyz. Erase the Definition File only, the database, or both?."
3. Select "database only" by pressing ***D***. You will then be given a further warning.
4. Confirm that you only want to erase the database by pressing ***Y***.
5. You will then be returned to the list of files. To select the database, press ***ENTER***.
6. KeyBase will inform you that the database does not exist and give you the option to create it.
7. Press ***Y*** and select the Import Option to import your .csv file.

17.1.6 Copying Records to a Document.

KeyBase allows you to use the information in a database as the basis for a document. For example, when embossing or printing records, a template is used to designate how the information is formatted and to add command text, etc. This option is useful for preparing lists or forms for emailing, allowing you to review form letters before printing, and so on.

At the KeyBase menu, select "Copy Records". KeyBase display: "Copy Records to a document, another database or a CSV file".

To copy to a document, press ***D***. KeyBase willl prompt: ""Destination folder name? Press ***ENTER*** for (default)" where "default" is the last folder used. Select the drive, folder and document you want to copy the records to and KeyBase will prompt you for the template file to use. The type of document you are copying records to will determine whether you choose a Braille or Text template. If you are copying to a Braille document, you can only choose a Braille template. If you are copying to Text document, you can only choose a Text template. Select the template you wish to use and continue as described in 17.1.3 Embossing Records.

17.1.7 Copying Records to another Database.

This option allows you to take a selection of records from one database and add them to another database. Because you can select which fields are copied and which are not, the two databases do not need to be exactly the same. The field names also do not have to match, because you can control how the fields are mapped. This is useful when you have records you want to copy from old KeyList based databases, into new KeyBase databases, for example.

At the KeyBase menu, select "Copy Records". KeyBase display: "Copy Records to a document, another database or a CSV file".

To copy to another database, press ***A***. KeyBase will prompt: "Destination file name?". Select the database you wish to copy. KeyBase will then attempt to match the field names in the current database with those in the destination database you have selected and will display the results in the same way as in the Import Data option. Use the Field Mapping List to adjust this mapping as required. This is described in 17.1.5 Importing Data into a Database. From the Selection List, select the records you wish to copy in the same way as described in 17.1.3 Embossing Records.

17.2 Exporting data.

Exporting information out of a database is a valuable feature of KeyBase that allows you to upload a database to a PC, as well as share data with other people and applications. Also, by using the export option for backup allows the backup to be restored on any machine.

Comma Separated Values (CSV) is the file type used for exporting out of a database. It is a file type that is widely supported by many database and spreadsheet applications, including but not limited to, Access, Excel, and Lotus Notes.

To begin the process of exporting data, access the KeyBase menu and cycle through the items using ***SPACE*** until you find "Copy Records". Press ***ENTER*** to select it. KeySoft will prompt "Copy records to a document, another database, or a CSV file". Type ***C*** to select a .csv file and KeySoft will prompt "Destination folder name? Press ***ENTER*** for (default)". Once you have selected the drive and folder, KeyBase will prompt: "Destination CSV filename?". Type the name of the file and press ***ENTER*** or select an existing file to overwrite it. You do not need to type the .csv extension because it is automatically added for you. If the .csv file already exists, the prompt "File exists. Replace?" will be displayed.

KeySoft will then prompt: "Include field titles?". Whether you answer yes or no, depends on the requirements of the application you will use to open the .csv file. Commonly, you will decide to include the field names by pressing ***Y***. The first line of the .csv file will then contain a list of the field names. To omit field names, press ***N***.

Select the records that you want to include in the .csv file from the Selection List. To select all records in the database, press ***ENTER***. Otherwise, use the Selection List to only select the records you require, as described in 17.1.3 Embossing Records.

17.3 Creating a new Database.

If you are feeling adventurous, you may want to create your own database. There are many possibilities for the types of databases that can be created. For the purpose of explaining how to create a new database, the example of developing a Medical History is used to illustrate how a new database is created.

Note: Creating your own database is a difficult task. To be successful, you will need a solid technical understanding of how databases work and be an advanced user of KeySoft.

To create a new database, select Database Manager from the Main Menu. KeyBase prompts: "Database to use?". Instead of selecting an existing database, you will now type the name of the database you wish to create (such as Medical History) and press ***ENTER***. KeyBase will prompt: "File does not exist. Create a new file?". Confirm that you wish to create a new file, by typing ***Y***.

You will then be led through the process of creating a new database. This includes the following:

The Field Definition List, where you define the fields and field types for your new database.

The Sort Order, which defines the order that the records are presented during the lookup records process.

The Record Title, that is displayed when you first enter a record during lookup and helps you to identify the record you wish to find.

The Associated Database which is in the form of a .cdb file. You will notice that a KeyBase database consists of two different files. First, there is the KeyBase Definition File (this has the extension .kbs) that defines the field names, various field options, the sort order, record title, etc. And second, there is the .cdb file that contains the actual data. The KeyBase Definition File is created when you develop a new database. The first time you add a record, the .cdb file is created and KeySoft will prompt "The database for (.kbs filename) does not exist. Create a database called (.cdb filename)". Normally these files have the same base name, for example the Medical History database will have Medical History.kbs and Medical History.cdb. However, sometimes you may wish to have more than one KeyBase Definition file using the same data. This will allow you to have different views of the data.

17.3.1 Field Definition List.

Once you have created a new database by typing and confirming the new database name, KeyBase will display "Field definition list for Medical History".

You will now need to think of all the information that you want to keep from each visit the Medical Center. Each piece of information becomes a field and you can have up to 150 different fields in your database. Also consider which order you want the fields presented when you add a record. Last, but not least, you will need to decide on the type of data to store in each field. Is the data a date, time, number or text only? The type of data you store in each field is known as a field type and there are 8 choices:

String

Number

Yes or No

Document

Date

Time

Field types are explained in detail in 17.3.2 Field Types.

For the Medical History database, the following fields and field types will be entered in the order below:

Reason for appointment - String

Appointment Date - Date

Appointment Time - Time

Medical Practitioner - String

Prescription Issued – Yes or No

Notes - Document

Medical Center Name - String

Medical Center Cost - Number

Prescription Cost - Number

You don't need to get everything right the first time. You can come back later and add additional fields, remove fields you find you don't need, or change the name of fields. However, think carefully about the field type, because if you change a field type after you have added data to your database, any data already stored in the previous type will no longer be displayed.

When you are ready to start defining the fields, press ***SPACE*** at the prompt: "Field Definition List". KeyBase will prompt "Field 1 name?". Type a name for the first field that you want to be presented with when you add records and press ***ENTER***. In the example of a Medical History database, the first field is "Reason for appointment".

The prompt "Field type for Reason for Appointment? Currently string" will be displayed. To confirm that this is the correct field type for this field, press ***ENTER***. KeySoft will then prompt "Field 2 name?". Type "Appointment Date" and press ***ENTER***. KeySoft will then prompt: Field type for "Appointment Date? Currently string". This field is a date field not a string field and you must therefore change the field type. To cycle through the list of types, press ***SPACE with dots 3-4*** repeatedly until "Date" is displayed and then press ***ENTER***. KeySoft will then prompt "Field 3 name?". Continue on adding all the fields in the order you want them presented.

You can review the field names and types you have already added by pressing ***SPACE*** or ***BACKSPACE***. While reviewing the fields you can change the field names, as well as inserting, deleting, or changing the order of the fields:

To change the name of a field, either type the new name and press ***ENTER*** or edit the existing name using the standard KeySoft editing commands. Note that if you are using a Braille keyboard you can type field names in your preferred keyboard grade. When you review the field names, you will notice that they are displayed in your preferred reading grade. However, KeyBase stores field names internally as text, so if you edit a field name you must make sure to edit using computer Braille.

To insert a field before the current field, for example to add "Medical Center Address" before "Prescription Cost", press ***SPACE with dots 2-6***. The current field and all subsequent fields are moved down one place to open up a gap for the new field to occupy.

To delete a field, for example, the Appointment Time field in your Medical History database, press ***BACKSPACE with dots 1-4***. KeyWord will prompt: "Delete Appointment Time field. Sure?". If you type ***Y***, the field will be deleted from the Database Definition. The subsequent fields will move up a place. In other words, "Medical Practitioner" will take the place of "Appointment Time" and "Prescription Issued" will take the place of "Medical Practitioner" and so on.

To move the current field up one place in the Field Definition List, that is, closer to the beginning of the list, press ***BACKSPACE with dots 2-3***. If the field can be moved up by one place, the field name prompt will be repeated and the new position number is displayed. For example, "Field 2 name? Currently Appointment Date", becomes "Field 1 name? Currently Appointment Date". This move will then force the first field in the list, "Reason for Appointment", to become Field 2.

To move the current field down one place in the Field Definition List, that is, closer to the end of the list, press ***BACKSPACE with dots 5-6***. If the field can be moved down by one place, the field name prompt will be repeated and the new position number is displayed. For example, "Field 4 name? Currently Medical Practitioner", becomes "Field 5 name? Currently Medical Practitioner". This move will then force the next field in the list, "Prescription Issued", to become Field 4.

There are numerous options available for each field, depending on the field type. To review these options for the current field, press ***BACKSPACE with O*** after the Field Type prompt. The Field Options list will be displayed as described in detail in 17.3.3 Field Options.

Once you have added all the fields you require and are fairly satisfied with them, you are then ready to move onto the next stage. You can return to the Field Definition List later to make further changes if needed. To exit the Field Definition List, press ***SPACE with E***. KeyBase will prompt: "Sort Order is Reason for Appointment. Change?".

17.3.2 Field Types.

Note: If you decide to change a field type after records have been added, any fields that had been assigned with the original field type will not be displayed. This situation does not apply for string and document field types as they are interchangeable. If you have entered a significant number of records and you want to keep the database, make a copy of the KeyBase Definition File in a different folder. Make the required changes in the copy and then use the Copy Records option (from the KeyBase Menu) to copy the data from your old database into your new database. Delete the original database and move the new database to a location where you wish to store it.

The 6 Field Type options are described in the following sections:

17.3.2.1 String.

A string is a sequence of characters. For example, you can enter a string to retain important phone numbers; months of the year or the symbol representing a currency. A string can be presented in text or any grade of Braille and is sorted alphabetically.

The maximum length of a string is 255 characters. For longer entries or multiple line entries, use a document field type.

Note: When you include characters and numbers in a sequence, they are treated as words. To store the sequence with the numbers in numerical order, put a 0 in front of numbers 1-9. For example, the My Books database includes a field to store series numbers, and this procedure would ensure that the titles appeared in order of their series number.

17.3.2.2 Number.

This Field Type applies to any sort of number, but can only contain digits, the negative sign and a decimal point. The number field type is therefore unsuitable for storing phone numbers as they may contain spaces, brackets, and so on.

Suitable numbers to have in your database, include quantities, ages, and event years. Numbers can also represent measurements, such as temperature, and quantities (dollars and cents, for instance).

Numbers are sorted numerically.

17.3.2.3 Yes or No.

The Yes or No Field Type provides two options to choose from; yes or no. This is useful when you want to include a question requiring a yes or no answer in your database, for instance, "Was there a prescription issued?".

17.3.2.4 Document.

The maximum length of data allowed in a string field type is equivalent to 255 characters. If you think the data you want to add to a field will be beyond this limit, use a document field type. For example, in the case of a Medical History database, you could add a document that outlines details of your treatment schedule or lists the ingredients in your medication.

An advantage of using the document field type over a string field type is that a document is two dimensional. That is, you are able to read and edit it as you would with a document in KeyWord.

17.3.2.5 Date.

The Date Field Type is useful for keeping a record of events such as your last dental check-up or when you purchased an appliance that is under a fixed warranty. If you want to enter the date for today, type "today".

A date is sorted chronologically. In other words, you can sort your check-ups or warranty expiry dates from the earliest to the latest.

17.3.2.6 Time.

The Time Field Type is useful for keeping a record of events such as what time you spoke to someone on your Ham Radio or the time of a medical appointment.

17.3.3 Field Options.

There are numerous options available for each field, depending on the field type. These can be reviewed or changed by pressing ***BACKSPACE with O*** when a field type prompt is displayed.

The Field Options are displayed as a list. Move forward or back through the list by pressing ***SPACE*** or ***BACKSPACE***. To change an option, either select or type the new value and press ***ENTER***. When you are happy with the options, return to the Field Definition List by pressing ***SPACE with E***.

For String Fields, you have 4 options to choose from that are exclusive to this Field Type:

"Braille Option?"

This is used to determine how the field will be entered and if Braille code or Unicode is stored in the database for this field. On units that have a Qwerty keyboard, Unicode is used universally.

If you have a unit with a Braille keyboard, the options are:

Preferred Keyboard Grade, which is used for general strings such as names, descriptions, etc. Your entry will be stored and displayed again, exactly as you entered it.

Computer Braille, which is used when combinations of letters, punctuation and/or numbers are entered. For example, email addresses, post codes, etc.

Back-translate from preferred grade. You will be able to use grade 2, or whatever your preferred keyboard grade is when adding this field, but the field will be stored in the database as Unicode. When the field is displayed, it will be displayed in your Preferred Reading Grade. Use this for fields you will be sorting on to ensure that they are sorted correctly. If you select a string field type as one of the fields in the Sort Order, KeyBase will automatically change the Braille Option to "Back-translate from preferred grade".

"Braille Prefix?"

If you are using literary Braille, you can choose between Capital Sign, Double Capital Sign, Auto Number Sign and None.

"Field Context?"

This option is used for many different purposes, including controlling how the contents of the field will be displayed.

Fields usually contain fragments of text that by themselves, do not denote context. For instance, in some cases the pronunciation that is used is dependent on the context. For example, "Dr" in a "Title" field is "Doctor", but in an "Address" field, is most commonly the abbreviation for "Drive".

The options for Field Context are as follows:

General (the default)

Spell

Name

Address

Town or City

State

Country

Organization

Password

Email address

Phone number

"Maximum Length?"

The default maximum length is 255. Numbers between 1 and 255 can be entered. If you need longer fields, use a Document field-type. Usually you would leave this set to 255. However, if you will be using the database in a situation where you are printing on pre-printed forms, for example, where there is a specific limit on the length of a field, then set this appropriately to ensure that your entry will fit in the pre-printed space.

For Number fields, you have 1 option that is exclusive to this Field Type:

"Number format?"

The options are preferred setting (this is the default and uses the Number Format setting in the Review Options List); digits and words.

The settings below, apply to all field types and follow on from the settings above:

"Help message?"

Any entry in this option will be displayed when you request "help" on this field in the "Add Record" option. It is displayed in addition to the standard KeySoft help and the default for this setting is blank.

"Default value?"

The default for this setting is blank. When a new record is initialized, the field is set to the default value. For example, a "City" field with a default of "Auckland", will appear as "City? Currently Auckland", in the "Add Record" option.

There is no difference in the amount of work involved in changing the city than there is to assign a field without a default value. However, if the majority of new database entries have "Auckland" as the city, having "Auckland" as the default improves the efficiency.

Note: If a default value is specified, this value is actually added to all records and uses storage space that would not be used if the field was left blank.

For date and time fields, "auto" can be entered as the default value. This sets the field to the time or date when the record was created.

"Display option?"

The display options are normal; read only and hidden.

An example of when this setting can be used is with auto time and date fields. You want the date and time logged as well as used to print, emboss or merge the data, but you don't need to review or change it.

Another example of when the display option is useful, is for filling in forms using KeyBase. There may be some fixed fields on the form, such as a tax number. These are set with a default value and they would otherwise clutter the list when adding or reviewing fields.

17.4 Sort Orders.

After you have defined the fields you require for a database, the next priority is to define how you want the records sorted. This determines the order in which the records are presented during the lookup records process. For example, sort the records in chronological order by the "Appointment Date", when looking for all records with "sore throat" in the “Reason for appointment” field.

In a membership list, where there are separate fields for a member’s first name and last name, it is most practical to initially sort the records by last name. Where there are several members with the same last name, you would sort by first name. For example, those members with Jones as their last name would be sorted in the following order: Alice Jones, Ben Jones, and Sally Jones.

Depending on the type of field you are sorting, records can be sorted into one of the three categories below:

1. Chronological order - listing by date field type, from earliest to latest.
2. Alphabetical order - listing by string field type.
3. Numerical order - listing by number field type in ascending order.

You must sort by at least one field and can sort on up to 3 fields in a specified order. The records are initially sorted by the first field you specify. This means that records will be grouped together when the first field is identical. These records are then sorted by the second field you specify. In cases where this field is identical, the third sort field is used. When you first create a database, the first field in the Field Definition List is automatically chosen as the sort order.

When you enter the Sort Order List, the initial prompt provides a list of the sort order fields in the order that they are presented. For example, "Sort order is First Name, Last Name, Membership Number. Change?". To leave the sort order unchanged, press ***N***. The Record Title prompt will then be displayed. To change the Sort Order, press ***Y*** and the Sort Order List will be displayed.

The Sort Order List presents each field in the sort order one by one, therefore allowing you to add, remove or change the fields. There will always be a 1st sort field, displayed as "1. Sort by (fieldname)". If there is a 2nd sort field, KeyBase will display, "2. Then sort by (another fieldname)". The 3rd sort order will be displayed as "3. Then sort by (yet another fieldname)". However, if there is no 2nd sort field, the prompt for the 3rd field will not be presented. In this is the case, the 2nd sort field will display"2. None".

To change a sort order field or add another field, move through the list by pressing ***SPACE*** or ***BACKSPACE*** until the position you want to change is displayed, and press ***ENTER***. You will be presented with the Field Selection List. Move through this list to find the field you want and press ***ENTER***.

A sort order can be removed by pressing ***BACKSPACE with dots 1-4***. If you remove any field (except the last field), the subsequent fields move down to replace the field that has been removed. Remember that there must always be at least one field in the Sort Order. If only one field remains, it cannot be deleted so must be changed instead.

Note: If you change the sort order of existing records, the database will be sorted again once you return to the KeyBase menu. There may be a short delay during the sorting process.

Once you have finished the order sorting process, press ***SPACE with E***. KeyBase will prompt: "Record title (field 1; field 2; field 3). Change?".

17.5 Record Title.

The Record Title helps you quickly identify records during lookup and is displayed when you first enter a record in the lookup option. The Record Title consists of up to 3 fields in any order. For example, if you may want the Record Title to be the "Appointment Date", followed by the "Reason for Appointment" in your Medical History database. In a Membership List database, you may want the Record Title to be the First Name, followed by the Last Name.

Note: The Record Title must contain at least one field. When you first create a database, the Record Title defaults to Field 1.

The way that you interact with record titles is similar to how you deal with sort orders. The first prompt is: "Record title (field 1; field 2; field 3). Change?". To leave the record title unchanged, press ***N*** and the Associated Database prompt will be displayed. To change the Record Title, press ***Y*** and the Record Title List will be displayed.

The Record Title List presents each field in the Record Title one by one, therefore allowing you to add, remove or change the fields in the same way as Sort Orders, which are described in 17.4 Sort Orders. For example, the Record Title for our Medical History database will automatically be set to “1. Reason for Appointment”, “2. None”. We want to change this to “1. Appointment Date”, “2. Reason for Appoinment”.

Once you have finished with the record title, press ***SPACE with E***. KeyBase will prompt: "Associated Database? Currently (name)".

17.6 Associated Database Name.

As described earlier, a KeyBase database consists of two different files, the KeyBase Definition File that defines the field names, etc. and the .cdb file that contains the actual data. Normally these files both have the same base name, for example Medical History.kbs and Medical History.cdb. However, you may occasionally use the same data for more than one KeyBase Definition File. The Associated Database Name will enable you to have multiple "views" of the same data for different purposes.

The Associated Database Name prompt is: "Associated database name? Currently (name)". Select the default name, which is the same name as your KeyBase Definition File. If you are creating another view of an existing database, select the .cdb file of that database.

Note: An associated database must be in the same folder as the KeyBase Definition file with which it is associated.

The Associated Database prompt is the last prompt required to define a database. Once you have confirmed or selected it, you are prompted: "Confirm Changes?". Press ***Y*** to go to the "KeyBase Menu" where you can start adding records to your new database. However, if you have made a complete mess of your database and want to start again, press ***N*** and the "Database to use?" prompt will be displayed.

Try adding some data to your database once it is defined. You will often find that you need to make some changes to the definition. For example, you may need additional fields, have added fields you realize you don't need, or find the order the fields are presented is inappropriate, and so on. The "Review Database Definition" option in the KeyBase Menu has been created for the purpose of reviewing and making changes to your Database Definition.

17.6.1 Review Database Definition.

It is clear that developing even a basic database is not a simple task and that it will take several attempts to get it right. It is likely that fields will be named incorrectly, important fields will get missed out, or that you accidently duplicate fields and so on. Because of the need to make changes to your databases during the development process, the DataBase menu includes a "Review Database Definition" option. At the KeyBase menu, select "Review Database Definition". The Database Definition Menu will be displayed. This contains the following options:

Field Definition

Sort Order

Record Title

Associated Database Name

The above options correspond to the tasks you perform when you initially create a database as described in 17.3 Creating a new Database. However, when you review a database definition you can access each option individually.

Once you have reviewed and made the changes you require, exit from the Database Definition Menu by pressing ***SPACE with E***. If you have made changes, KeyBase will prompt: "Confirm changes?". If you made changes you didn't intend to and want to abandon them, press ***N***. To bring your changes into effect, press ***Y***.

17.7 Database File Management.

A KeyBase database consists of two files. The KeyBase Definition File, which contains the field names and other information that defines the database, and the database itself that contains the data. Normally both these files have the same base name, but different endings or extensions. The KeyBase Definition File has a .kbs extension and the database file a .cdb extension. When you use the File Manager, you will not be able to read the .kbs extension when a KeyBase Definition File name is displayed. If you need to find out if a file has a .cdb or .kbs extension, press ***SPACE with I***.

Because the KeyBase Definition File and the .cdb file form a pair, KeySoft's File Manager takes both files into account when you operate on a KeyBase Definition File.

When you copy a KeyBase Definition File, both the definition file and the database are copied. This is very useful for back-up purposes.

When you erase a KeyBase Definition File, KeySoft prompts: "This KeyBase definition file has an associated database called (associated database name). Erase the definition file only, the database only, or both?".

To erase only the KeyBase Definition File, press ***F***. To erase the database (.cdb) file only, press ***D***.

To erase both the KeyBase Definition File and the database (.cdb) file, press ***B***.

Before erasing a database (.cdb) file, you will receive another warning. It is possible for a .cdb file to be associated with more than one KeyBase Definition File and you are warned of this before a .cdb file is erased.

Similarly, when you rename a KeyBase Definition File, KeySoft also prompts to see if you want to erase only the definition file, only the database, or both files.

17.7.1 Free Database Space.

One of the peculiarities of databases is that when you delete items from them, they may not automatically shrink back down again. Because of this, simply deleting your unwanted records does not always free up more disk space. The "Free database space" software shrinks the database back to the smallest size capable of storing the records remaining in the database.

To use this utility, simply go to the KeyBase menu, and select the item: "Free database space". After running, the utility will report how much space, if any, has been freed.

End of Database Manager chapter.

18 Games.

Text adventure games, also known as Interactive Fiction, involve fun games that are played using text-based input and output.

There are nine games in The are in z-game file format supplied with your BrailleNote BT:

A Tutorial Game. The Dreamhold.

Adventure

Bear's Night Out

Curses

Dragon

Gourmet

Hunter In Darkness

The Underoos That Ate New York

Winter

The first game in the list of games supplied with your BrailleNote BT is A Tutorial Game. The Dreamhold. Because this is a tutorial game, it allows you to learn as you play. If you have never played adventure or interactive fiction games before, we recommend that you play The Dreamhold first.

Before you try playing any game on your BrailleNote BT, it is important that you read and understand the following:

1. There are many differences and similarities between games. As you will notice, most moves you can perform in one game can also be done in another. For example the keyword "look" will work in most games. When you type "look" and then press ***ENTER*** you will be given a description of your current location.

2. Humanware did not write the games that have been supplied with your BrailleNote BT. We are simply distributing them and if you have a problem with a specific game then Humanware will not be able to provide support. To resolve a problem with a specific game, you will need to contact the author of the game. To find out details about the author, try typing the keyword "about" and press ***ENTER***. You will usually then be given some details about the game and information on how to contact the author.
3. The start of some of the games may be a bit strange. This is because the games have been designed with a visual screen in mind and the author of the game assumes that you are using a screen. The best action to take is to wait for the spoken text to finish and then try pressing the ***ENTER*** key once or twice. Alternatively, press ***BACKSPACE with S*** to hear the status line.
4. Although the supplied games suit both a speech and braille environment, you need to realize that they were primarily designed to run on a screen. This means that you may encounter a situation that is confusing because the author has included graphics or a timer. The games supplied with your BrailleNote BT should not encounter such situations. However, if you try out games that have not been supplied with your BrailleNote BT, you should be aware that this may occasionally happen.
5. Press ***SPACE with H*** to learn about the KeySoft commands to use for loading, saving and reviewing the game output.

   Note: This is not the help for the specific game you are playing. Each game includes its own detailed help. To access this help, type "help" and press ***ENTER***.
6. During the process of playing a game, you will type in commands and press ***ENTER*** before receiving feedback from the game. There is an exception that applies to the one key mode that is discussed in 18.7 Single Key Mode. If you are playing a game with the text to speech on, then the response will be spoken to you from beginning to end.

   If you are using Braille only, then you read the first part of the response from the game on your braille display. To continue reading, press the ADVANCE key to read to the end of the game response.

   You can also read by using the standard reading keys for reading the previous, current, and next sentence. Specifically, ***SPACE with dot 1***, ***SPACE with dots 1-4***, and ***SPACE with dot 4***. Words and characters can also be read in the same way as they are in the Word Processor and Book Reader, using ***SPACE with dot 2***, ***SPACE with dots 2-5***, and ***SPACE with dot 5*** for words and the commands ***SPACE with dots 3-6*** and ***SPACE with 6*** for characters. You can also read from the cursor position to the end of the current game response, by pressing ***SPACE with G***. To hear the entire text again, press ***SPACE with R*** to repeat it.

Note. The standard reading keys of ***SPACE with dots 2-3***, ***SPACE with dots 2-3-5-6***, and ***SPACE with dots 5-6*** do not behave in the same manner as they do for reading in the Word Processor and Book Reader. These commands should not be used until you have read 18.5 Reading Previous Moves.

18.1 Starting a Game.

As with other applications within Keysoft, a game can be left running whilst you move across to another application (see 1.16 Switching Between Tasks for details on task switching). Whilst playing a game you can task switch to another application. For example pressing ***BACKSPACE with ENTER with S*** will switch you to the calculator. To return to the game in progress press ***BACKSPACE with ENTER with G***.

To enter Games from the Main Menu, use the ***SPACE*** and ***BACKSPACE*** keys to navigate the items in the menu, until "Games" is displayed, and then press ***ENTER***. Alternatively, you can select Games from the Main Menu by pressing ***G***.

You can switch directly to the Database from anywhere in KeySoft by pressing ***BACKSPACE with ENTER with G***.

KeySoft prompts: "Play which game?." Press ***SPACE*** and KeySoft will then prompt: "List of game files in My Games folder." Press ***SPACE*** again, and you will be given a list of the games that have been supplied with your BrailleNote BT. If you have loaded a game in the past then the last loaded game name will be displayed. The standard Keysoft operations for choosing a file are available.

If you have never played a game before, we recommend that you first play the tutorial game, named "Dreamhold". Cycle through the games and when "A tutorial game. The Dreamhold" is displayed, press ***ENTER***. An introduction to the game is then spoken that begins with "Time shifts and flattens, days and decades folding aside like pages in a book."". The text continues further and ends with "Press space to continue". The reason that you must press ***SPACE*** to continue, is that each game only presents a certain amount of information at a time and this prompt is a way to tell you that there is still more to learn about the game, before any commands can be entered.

To hear the final part of the introduction to the Dreamhold, press ***SPACE*** and you will hear: "Only the floor is smooth...a fine white surface beneath you feet. There is a narrow gap in the east wall". Congratulations, you have now entered the fantasy realm of text adventure games! You now have the option of reviewing the details of the last part of the message, using any of the review commands for reading sentences and paragraphs (except for the commands for reading the current, previous and next paragraph, as these will be explained later).

18.2 Entering Commands.

Now that the introduction to The Dreamhold has finished and you know where you are in the game, it is now up to you to perform an action. This is done by typing in a command and pressing ***ENTER***. A simple one is the shorthand command, "look". Type "look" and press ***ENTER***. The game will then respond with exactly the same message about the room you have entered.

If you want to repeat your last command, press ***BACKSPACE with R***. You can also review and edit the command text before pressing ***ENTER*** to send the command to the game.

Well done, you have made your first move! If you are still using The Dreamhold, then typing help and pressing enter would now be a good thing to do, to learn about more commands.

The Dreamhold has extensive help built into it. The following commands can be typed in to learn more standard game commands. Type the following commands and then press ***ENTER*** :

"Help basics".

"Help commands".

"Help talking".

"Help system".

"Help special".

"Help strategy".

As you can observe, the commands are quite detailed and in some cases rather long. You move around by typing directional words, such as East, West, North, South, as well as pick objects up by typing the word "get" ("get sword", for example), and put objects down by typing the word "drop" (such as, "drop sword"). These commands are not part of KeySoft, but part of the game supplied. Each game may use these commands in different ways and may extend the range of words. The commands explained in the Help section of the "A tutorial game. Dreamhold" are standard and typical of many games.

18.2.1 Block Marker Commands.

When playing a game, it is useful to be able to mark a block of text and move it to another location, such as the clipboard. For example, when there is a complicated and long-winded description that you want to re-read and think over before making your next move.

The following block marker commands can be used when playing games:

To insert a block marker, press ***BACKSPACE with M***

To copy a block to the clipboard, press ***BACKSPACE with K***

To paste the contents of the clipboard into the input prompt, press ***BACKSPACE with V***.

18.2.2 Entering a Command While Reading.

If you are part way through reading a response in a game, you do not have to move to the end in order to start typing your response. All you need to do is start typing and press ***ENTER***.

18.2.3 System Words.

There are numerous special words, called system words and these are used to perform actions outside the game, but are very important. They include :

"Restart" - to restart a game.

"Restore" - to load a saved game.

"Save" - to save a game.

"Undo" - to undo the last move (not available in all games).

"Quit" - to leave a game.

18.2.4 Shorthand.

Many game commands have the option of entering short hand. This is useful when you have commands that you need to frequently type, often a long and tedious process. The important examples of shorthand include :

"l" - for look.

"x" - for examine.

"n", "s", "e", "w" - for North, South, East and West.

"g" - for Again (to repeat the last move).

18.2.5 Grade 2 Braille Input.

If you are typing in Braille and using grade 2 as your preferred keyboard entry, then single character commands will need to be preceded by a letter sign. This prevents KeySoft from treating these single characters as a contraction and expanding them (something which can confuse the game).

Note: The game will attempt to default to grade 1, even if the default keyboard grade is set to grade 2. To avoid this situation, press ***SPACE with O*** and KeySoft will prompt: "Options menu". Press ***G*** to select Grade of Braille for Keyboard Entry and select your preferred braille grade. This selection is applied until you choose to change it by repeating this procedure.

18.2.6 Invalid Input.

All the games supplied, as well as the many others that can be played on your BrailleNote BT handle many types of commands. However, if you mis-spell or type something that the game does not understand, it will then let you know that you have entered an invalid input. A common response is "That is not a verb I understand". Each game may respond slightly differently but will be consistent in the response that it provides.

You will learn that the invalid input response means the game did not understand what you typed, either because of a spelling mistake or because you used words the game does not recognize. Another possibility is when you have used words in a combination that the game does not understand. Try similar words and simpler expressions. For example "put the Piano on top of the stage" may fail, but "put piano on stage" may succeed.

18.3 Leaving a game.

If you want to exit a game and return to the Main Menu press ***SPACE with E***, or type "quit" and press ***ENTER***. You will then usually be prompted to confirm that you want to quit. You will then need to type ***Y*** or ***Yes*** and press ***ENTER*** to be returned to the Main Menu.

If you are typing in Braille and using grade 2 as your preferred keyboard entry, then single character commands will need to be preceded by a letter sign.

18.3.1 Abandoning a Game.

Some games may have bugs in them and do not run properly or suddenly stop working. They may expect timed responses or contain graphics that also make the game unreadable. A mechanism has been provided to exit back to the main menu without going through the standard way of quitting. To abandon a game at any time, press ***BACKSPACE with Q***. This is a last resort way of leaving a game and it is not recommended for use under normal circumstances.

18.4 Saving Games.

A game can be saved by either pressing ***SPACE with S*** or by typing "save" and pressing ***ENTER***. You will then be presented with a standard KeySoft save prompt and will be able to type in a name to save the current game that you have started but not as yet completed. Because this saved game is applicable only to the current game, it is a good idea to include the title of the name of the game or something similar. This will allow you to easily distinguish between the partially completed saved games and the unsaved games. For example naming a saved game "A Bears Night Out" game as "Bear Lounge1" will make it easier to restore the partially completed game.

At the save prompt you can use ***BACKSPACE*** in the usual way to save the game in a different folder or drive.

18.4.1 Restoring a Saved Game.

Note: Restoring and loading a game is the same procedure.

In order to restore a game, follow the two step process described below. First you need to start the game and once it is running, restore the saved game. For example, save a "A Bears Night Out" game as "Bear Lounge1". To run "A Bears Night Out", select "Games" and choose this game from the list, before loading "Bear Lounge1".

To load a saved game press ***ENTER with O***, or type the word "restore" and press ***ENTER***. You will then be presented with a standard KeySoft prompt and by repeatedly pressing ***SPACE***, cycle through to the game you wish to restore. Use ***BACKSPACE*** to move to a different folder or drive, as you do elsewhere in KeySoft.

Once the appropriate game is found, press ***ENTER*** to restore the saved game. The previous moves will not be available as these are not kept. However, you will be able to review the game details, where you are, your score, how many moves you have made, what you are carrying and so on. At this stage, it is advised to check the status line by pressing ***BACKSPACE with S*** - see 18.6 Status Line) and to look around by typing "look" and then press ***ENTER***.

18.5 Reading Previous Moves.

During the time you play a game, you will type in many moves and the computer will remember these responses. It can sometimes be quite useful to review previous moves, for example, to check the spelling of a word.

KeySoft stores the last 20 moves you performed through typed commands, and the response from the game itself. Each one of these historical moves can be read in the same manner as the current move, by using the reading keys below:

To read from the start of the previous sentence, press ***SPACE with dot 1***

To read from the start of the current sentence, press ***SPACE with dots 1-4***

To read from the start of the next sentence, press ***SPACE with dot 4***

To move back a word, press ***SPACE with dot 2***

To read the current word and read it, press ***SPACE with dots 2-5***

To move forward a word and read it, press ***SPACE with dot 5***

To read continuously, press ***SPACE with G***

18.5.1 Moving Between Historical Moves.

To move between historical moves, use the command for moving by section, as listed below:

To move to the previous move, press ***SPACE with dots 2-3***

To move back to the top of the currently selected move, press ***SPACE with dots 2-3-5-6***

To move to the next move results, press ***SPACE with dots 5-6***

The game will also store up to 20 moves. When you have made 20 moves, the oldest moves will be removed from the list as new moves are added. The commands for jumping to stored moves are listed below:

To jump to the oldest stored move, press ***SPACE with dots 1-2-3***

To jump to the most recently stored move, press ***SPACE with dots 4-5-6***

If you are entering a move and need to hear the previous move again, press ***SPACE with dots 4-5-6***

Note: The moves you type are stored in the move history. If you want to review what you did to cause the game to react in a certain way, go back one or more moves in the history.

18.6 Status Line.

As mentioned earlier, Interactive Fiction games are written with a screen in mind. One of the downsides to this approach, is that there are a few situations where the author of a game, considers things from a visual perspective. Part of this issue is the status line, an area on the screen (usually at the top) which holds information about the game, such as the title, the number of moves a player has had and the score. Keysoft a way to access the status line via a keystroke. The contents of the status line will be captured and it will be read to you, when you press ***BACKSPACE with S***. You can also read the information once it has been captured in the same manner as any other turn, by using the standard reading keys.

The status line is another place where the author of a game, can write information. In fact the status line can grow to be several lines in size and can be used to display a lot of text. Some games have what is called a "splash screen" at the start of a game, which is an enlarged status line. If you hear limited words when you first start up a game, then you may wish to try reading the status line, as it could hold some valuable information. It is a good idea to do this before you press any other key if you have not run the game before. By pressing ***BACKSPACE with S***, you know if there is important information at the start of the game.

18.7 Single Key Mode.

Games also use a mode of interacting with you that is slightly different from the standard way in which you type commands and then allow the game to provide feedback. This is usually only used in a small section of the game, or to provide you with a menu based help and information system. However, some games may use this mode continuously.

Single key mode can occur at any time and some games use it as their primary input device. In general, this mode is mainly used to provide a menu based help system. In this mode you press a key, and instead of going to the command input area, the key will be acted on immediately, that is, without you needing to press ***ENTER***. This can be quite confusing when it first happens to you. If you type a letter and hear a response straight away, press ***BACKSPACE with S***. This provides you with status information from one or more lines on the screen. You can use the standard reading keys to read everything the game presents to you.

A good example of this situation can be found in the supplied game "Bears Night Out". If you load this game and then ***SPACE with H***, you will hear: "How to play, a few helpful hints". To repeat the help message, either press ***SPACE*** or ***dot 1***. If you now press ***BACKSPACE with S*** you will hear a lot more information. For example, for "A Bear's Night Out", you will hear: "A Bear's night out help menu. ***N*** = Next subject, ***P*** = previous, ***RETURN*** = read subject, ***Q*** = resume game. Greater than How to Play. The scoring system ... etc"

What you are reading is all the information on the status screen. Firstly the title of the game - "A Bear's Night Out". Secondly, a series of relevant single keys and what action they will perform, N = next subject, P = previous, return = read subject and Q = resume game. Finally you will hear a series of menu items, the first of which has a > (greater than) symbol next to it. This indicates that the currently selected menu item is active. If we press N then the second item, "the scoring system", will become the active menu item and will be spoken. Press ***BACKSPACE with S*** again to repeat all the information that was previously presented. The difference is that this time the greater than symbol will be next to the second menu option. To access the information for that menu item, press ***ENTER***. You can then press ***Q*** to return to the menu and press ***Q*** again to get back to the game.

In some games (those not supplied), this mode of operation is used as part of the game itself, not just for help and hints. They can also contain menus within menus and may take some time to explore. The ***N***, ***P***, ***ENTER*** and ***Q*** keys will work. Alternatively, you can usually rely on capturing and reading the status line to find out specific single keys to press that are relevant to the game.

Note: The moves you type are not stored in the move history and you are therefore unable to review what you did to cause the game to react in a certain way.

18.8 Downloading and Playing More Games.

If you have enjoyed the games supplied with your BrailleNote BT, you may wish to play additional games. There is an extensive range of z-games available, many are free and some are commercial and must therefore be purchased. The best starting place is the Internet, though you may have a friend or relative who still has some of the older commercial games, in particular, from a company called Infocom.

18.9 Selecting Games for Children.

Many of the games available on the Internet have been written for an older audience. That is, usually aged15 years and up, and several of the games are for adults only. Those supplied with your BrailleNote BT have been carefully scrutinized, and are deemed to be appropriate for a general audience. For younger game players, Dragon, Winter Wonderland and The Underoos that Ate New York are the most appropriate.

If a parent, teacher or guardian does supply games to younger BrailleNote BT users, Humanware recommends that these games are first reviewed by an adult. This can be done by playing the game, or visiting www.sparkynet.com/spag/noframe.html (a web site that contains detailed reviews about many z-games).

18.10 Freely Available Games.

The place to find freely available games and as a useful resource for finding out about interactive fiction is www.ifarchive.org. This web site contains many freely available games which can be download from http://ifarchive.org/indexes/if-archiveXgamesXzcode.html

Baf's site - http://wurb.com/if/ is an easier web site to find specific games, although we recommend that children are supervised whilst visiting this site.

18.11 Commercial Games.

Z-games were invented back in the early 1980's by a company called Infocom and the games that they wrote are still available to be purchased. Many of these games are all able to be played on your BrailleNote BT. A CD of all the games was produced in 1996 and can still be purchased. The CD was called "Infocom Classic Text Adventure Masterpieces" and can be found and purchased on-line from sites such as amazon.com. Friends or family may also have old copies that they bought years ago.

Note: Games that expect timed responses or contain graphics, will not run correctly on your BrailleNote BT.

18.12 Hints and Walkthroughs.

Many interactive fiction games contain puzzles and tasks that you must complete before you can move further on in the game.

These puzzles can occasionally be too difficult to solve and our advice is to firstly persevere, try different things, talk to others about the problem, and do not give up. When you finally solve the puzzle, you will feel a lot more satisfaction than having to "cheat". However, sometimes you may need a little help. The games supplied with your BrailleNote BT have the following resources to help you:

If you are unsure of what to do next, try typing the word "hint" and pressing ***ENTER***. Some of the games also have hints in the help menu.

To get help, press ***SPACE with H***. If you need help when you are in single key mode, try pressing ***N***. Listen to the menu option and when you hear the word "hint", then press ***ENTER***.

If all else fails, use the Book Reader or Word Processor to look at the supplied text files in the My Games folder.

18.13 Internet Resources.

Learning about interactive fiction, or text adventures as they are also called, can take a little time and it may appear confusing at the very beginning. There are many resources on the Internet that can help you learn how to play, or even how to create your own games. A good starting point is the web site www.ifarchive.org and this site has been added to your web browser favorites when you upgraded to the current version of Keysoft.

Two other good sites to learn about playing are :

A Beginners Guide to playing interactive fiction which can be found at www.microheaven.com/IFGuide/ and The Brass Lantern at http://brasslantern.org/beginners/

If you are interested in writing your own text adventures (in fact any sort of game) you need to learn about the INFORM compiler, the language used to create the games. Two good web sites for this are :

The Inform compiler home page - www.inform-fiction.org/

and

A tutorial in creating a game at www.inform-fiction.org/examples/alice.html

The inform compiler is complex and will take many hours to learn to use. This is probably only of interest to those BrailleNote BT users who have had some experience in programming.

18.14 History of Text Adventure Games.

When computers were first evolving, the terminals that were used to display information did not allow graphics to be displayed. People still wanted to play games that created scenes and allowed players to move around in an environment where they could interact with it; wander through caves and tunnels; find hidden treasure and attack monsters.

The only way that this could be done was by describing to the player what was happening and then allowing them to type in some actions. The first game that was like this, was called "Adventure". As you played the game, you walked around houses, caves and tunnels. You also picked objects up, looked around, fought monsters and solved puzzles. The text adventure had been born.

Note: A copy of "Adventure" is included in the games supplied with your BrailleNote BT. Because it is quite a difficult game to play, it is not recommended as the first game you try.

Over the next 10 years many text adventures were made and sold to early users of personal computers. But as graphics improved this type of game became unpopular and nearly disappeared. However in the late 1990's a group of nostalgic programmers and authors got together and reinvented the games, calling them Interactive Fiction (abbreviated to IF), a more appropriate description of what you are doing when you play a game. All the games included with your BrailleNote BT are classified as interactive fiction where you as the player must unravel puzzles, or perform certain tasks, all of which causes the story to slowly unfold.

End of Games chapter.

19 Command Summary.

19.1 General Commands.

19.1.1 Operating Modes.

Speech On Request/Off/On	***SPACE with PREVIOUS thumb key***
Braille On/Off	***SPACE with NEXT thumb key***

Braille Display:

Auto Display	***SPACE with dots 1-2-4-5-6***
Slow Down	***PREVIOUS***
Speed Up	***NEXT***
Stop	***Previous with Next thumb key***
Back a Word	***Previous with Back thumb key***
Forward a Word	***Previous with Advance thumb key***
Route Cursor Beginning	***Back with Advance thumb key***
Mode	***Previous with Next*** (Cycle x ***4***)
Start in one handed mode:	Hold down ***BACKSPACE*** while turning On BrailleNote. BrailleNote remains in one-handed mode until restarted in two-handed mode.
Start in two-handed mode:	Hold down ***ENTER*** while turning On BrailleNote BT.

19.1.2 In a Menu or List.

Move forward in a menu or list:	***SPACE***, or
	SPACE with dot 4, or
	ADVANCE thumb key.
Move backward in an menu or list:	***BACKSPACE***, or
	SPACE with dot 1 or
	BACK thumb key.
Select spoken item:	***ENTER*** or
	NEXT thumb key.
Jump to item:	Press ***first letter.***

19.1.3 Options Available at Any Point.

Return to Main Menu: ***SPACE with dots 1 through to 6.***

Exit current option: ***SPACE with E***.

Obtain help for current operation: ***SPACE with H.***

Increase volume of speech: ***ENTER with dot 4.***

Decrease volume of speech: ***ENTER with dot 1***.

Speak faster: ***ENTER with dot 6***.

Speak slower: ***ENTER with dot 3***.

Raise pitch of speech: ***ENTER with dot 5***.

Lower pitch of speech: ***ENTER with dot 2***.

Stop reading, or acknowledge alarm: ***BACKSPACE with ENTER***

Date announcement: ***SPACE with O, D*** or

ENTER with D.

Time announcement: ***SPACE with O, T, C*** or

ENTER with T.

Stopwatch: ***SPACE with O, T, S*** or ***ENTER with W***.

Keyboard Settings: ***SPACE with O, K*** or

BACKSPACE with ENTER with K.

Review Voice: ***SPACE with O, R*** or

BACKSPACE with ENTER with R.

Power and Battery status: ***SPACE with O, P***.

User Guide: ***SPACE with O, U*** or

BACKSPACE with ENTER with H.

Next appointment: ***SPACE with O, N*** or ***ENTER with N***.

Repeat the last message or prompt: ***SPACE with R***.

Repeat the last prompt with spelling: ***SPACE with O, S*** or ***ENTER with S***.

Repeat the last prompt with all punctuation: ***SPACE with O, H*** or ***ENTER with H***.

Options Menu: ***SPACE with O***.

19.1.4 Switch Programs.

Cycle through programs: ***SPACE with dots 2-3-5***, or

SPACE with O, M, or

Go to Wordprocessor: ***BACKSPACE with ENTER with W***.

Go to Planner: ***BACKSPACE with ENTER with P***.

Go to Address List: ***BACKSPACE with ENTER with A***.

Go to E-mail: ***BACKSPACE with ENTER with E***.

Go to Book Reader: ***BACKSPACE with ENTER with B***.

Go to Calculator: ***BACKSPACE with ENTER with S***.

Go to Internet: ***BACKSPACE with ENTER with I***.

Go to Braille Terminal: ***BACKSPACE with ENTER with T***.

Go to Media Player: ***BACKSPACE with ENTER with M***.

Go to Database Manager: ***BACKSPACE with ENTER with D***.

Go to Games: ***BACKSPACE with ENTER with G***.

19.1.5 At "Folder Name" prompt.

Type folder name and press ***ENTER***, or

Cycle forward through folder list: ***SPACE***.

Cycle back through folder list: ***BACKSPACE***.

Select a directory path: ***SPACE with T***.

To move up one directory level: ***SPACE with dots 2-3***.

Change Drive: ***BACKSPACE***.

Rename folder: ***BACKSPACE with R***.

19.1.6 At "List of Folders" prompt.

Cycle forward through folder list: ***SPACE***.

Cycle back through folder list: ***BACKSPACE***.

Jump to folder name starting with: Press ***first letter***.

Hear disk name and space available: ***SPACE with I***.

Return to "Folder Name?" prompt: ***SPACE with E***.

19.1.7 Within a Folder list.

Return to "Folder Name?"

prompt: ***SPACE with E***.

Select prompted "Folder Name:" ***ENTER***.

Hear Folder information: ***SPACE with I***.

19.1.8 At "Folder Name" prompt.

Type file name and press ***ENTER***, or

Cycle forward through list of files: ***SPACE***.

Cycle back through list of files: ***BACKSPACE***.

Change folder: ***BACKSPACE***.

Rename file: ***BACKSPACE with R***.

Delete file: ***BACKSPACE with dots 1-4***.

Toggle file type to view: ***BACKSPACE with X***.

Hear file information: ***SPACE with I***.

Cycle forward through most recently opened files: ***SPACE with dots 2-3***.

Cycle back through most recently opened files: ***SPACE with dot 1***.

19.1.9 At "List of Folders" prompt.

Cycle forward through list of files: ***SPACE***.

Cycle back through list of files: ***BACKSPACE***.

Jump to file name starting with: Press ***first letter***.

Return to "File Name?" prompt: ***SPACE with E***.

19.1.10 At "Document to Create" prompt.

Type name of new document and press ***ENTER***, or

Toggle document type to create: ***SPACE with X***.

Return to "Folder Name?" prompt: ***BACKSPACE***.

19.1.11 At "Document to Open" prompt.

Type document name and press ***ENTER***, or

Cycle forward through list of Docs: ***SPACE***.

Move back through list of Docs: ***BACKSPACE***.

Toggle Document type to view: ***BACKSPACE with X***.

Hear document information: ***SPACE with I***.

Cycle forward through most

recently opened documents: ***SPACE with dots 2-3***.

Cycle back through most

recently opened documents: ***SPACE with dot 1***.

19.1.12 Other Useful Commands at prompts.

Single-character wild-card: ***SPACE with dots 2-3-6***.

Multi-character wild-card: ***SPACE with dots 3-5***.

Clear field: ***SPACE with dots 3-5-6***.

Upper case for computer Braille: ***SPACE with U***.

19.1.13 Thumb Keys.

Thumb keys On/Off toggle: ***SPACE with O, F***.

19.1.14 Options Menu.

The following items are accessed via the Options Menu, and have not previously been covered under 19.1.3 Options Available at Any Point**.**

Access Options menu: ***SPACE with O***.

Grade of Braille: ***SPACE with O, G,*** or

BACKSPACE with G, or

Set Grade 1: ***BACKSPACE with A***.

Set Grade 2: ***BACKSPACE with B***.

Set Grade ***0***: ***BACKSPACE with J***.

Braille Options: ***SPACE with O, B***.

Visual Display: ***SPACE with O, V***.

Insertion: ***SPACE with O, I,*** or

ENTER with I.

19.2 Word Processor.

19.2.1 KeyWord text review.

Read continuously:	***SPACE with G***.
Stop reading:	***BACKSPACE with ENTER, or SPACE with dots 1-4-6***.
Top of file:	***SPACE with dots 1-2-3***.
Bottom of file:	***SPACE with dots 4-5-6***.
Previous character:	***SPACE with dot 3***.
Current character:	***SPACE with dots 3-6***.
Next character:	***SPACE with dot 6***.
Previous word:	***SPACE with dot 2***.
Current word:	***SPACE with dots 2-5***.
Next word:	***SPACE with dot 5***.
Start of line:	***SPACE with dots 1-3***.
End of line:	***SPACE with dots 4-6***.
Start of next line:	***SPACE with dots 4-5***.
Review-only mode:	***SPACE with X***.
Check or change Reading Mode:	***SPACE with M***.
Check file name:	***SPACE with I***.
Open Previous Document:	***SPACE with dots 1-2-5-6***.

In Sentence and Paragraph reading Mode, the following commands review sentences and paragraphs.

Previous sentence:	***SPACE with dot 1***.
Current sentence:	***SPACE with dots 1-4***.
Next sentence:	***SPACE with dot 4***.

Previous paragraph: ***SPACE with dots 2-3***.

Current paragraph: ***SPACE with dots 2-3-5-6***.

Next paragraph: ***SPACE with dots 5-6***.

In Line Mode, the same commands review lines and sections.

In Column mode, the same commands review the current word on the line above or below and section above or below.

19.2.2 Other Review Commands.

Find where cursor is: ***SPACE with wh sign (dots 1-5-6)***.

Go to: ***SPACE with dots 1-2-6***.

Previous page: ***SPACE with 1-2-6 then SPACE with dot 1***.

Next page: ***SPACE with dots 1-2-6 then SPACE with dot 4***.

Go to next Tab position: ***BACKSPACE with T***.

Define Place Marker: ***BACKSPACE with D***.

Jump to Place Marker: ***SPACE with J***.

Find: ***SPACE with F***.

Find Next Occurrence: ***SPACE with N***.

19.2.3 Editing Commands.

Delete menu:	***SPACE with D***.
Backspace:	***BACKSPACE***.
Delete current character:	***BACKSPACE with dots 3-6***.
Delete current word:	***BACKSPACE with dots 2-5***.
Delete previous word:	***BACKSPACE with dot 2***.
Delete to end of sentence:	***BACKSPACE with dots 1-4*** in Sentence and paragraph reading mode.
Delete to end of paragraph:	***BACKSPACE with dots 2-3-5-6*** in Sentence and paragraph reading mode.
Delete to end of line:	***BACKSPACE with dots 1-4*** in Line and Column reading modes.
Delete to end of section:	***BACKSPACE with dots 2-3-5-6*** in Line and Column reading modes.
Delete to end of document:	***BACKSPACE with dots 4-5-6***.
Find and replace:	***BACKSPACE with F***.

19.2.4 Formatting Commands.

New line:	***ENTER***.
New Page:	***SPACE with P***.
TAB:	***SPACE with T***.
Binding space:	***ENTER with B***.
Format menu:	***SPACE with dots 2-3-4-6***.
Document Layout:	***SPACE with dots 2-3-4-6, L,*** or ***BACKSPACE with L***.
Style of presentation:	***SPACE with dots 2-3-4-6, S,*** or ***BACKSPACE with S***.
Center line:	***SPACE with dots 2-3-4-6, C,*** or ***ENTER with C***.
Right justify line:	***SPACE with dots 2-3-4-6, R,*** or ***ENTER with R***.
Page settings:	***SPACE with dots 2-3-4-6, P,*** or ***BACKSPACE with P***.
Template Menu:	***BACKSPACE with ENTER with dots 2-3-4-6***.
Insertion menu:	***SPACE with O, I,*** or ***ENTER with I***.
Insert the Time:	***SPACE with O, I, T***.
Insert the Date:	***SPACE with O, I, D***.
Insert calculator result:	***SPACE with O, I, C***.

19.2.5 Commands used within Braille Documents.

Ink-print Settings Menu:	Format menu, ***I***.
Ink-print layout:	Ink-print Settings Menu, ***L,*** or ***BACKSPACE with ENTER with L***.
Ink-print only inclusion:	Ink-print Settings Menu, ***I,*** or ***BACKSPACE with ENTER with C***.
Start ink-print exclusion:	Ink-print Settings Menu, ***S,*** or ***BACKSPACE with ENTER with dots 3-4***.
End ink-print exclusion:	Ink-print Settings Menu, ***E,*** or ***BACKSPACE with ENTER with dots 2-6***.
Ink-print translation options:	Ink-print Settings Menu, ***T,*** or ***BACKSPACE with ENTER with O***.
Ink-print page settings:	Ink-print Settings Menu, ***P***.
Font control for translated or print document:	***ENTER with F***.

19.2.6 Commands used within Text Documents.

Underline:	***SPACE with dots 2-3-4-6, U,*** or ***ENTER with U***.
Font:	***SPACE with dots 2-3-4-6, F,*** or ***ENTER with F***.
Braille Settings Menu:	Format menu, ***B***.
Braille layout:	Braille Settings Menu, ***L,*** or ***BACKSPACE with ENTER with L***.
Braille only inclusion:	Braille Settings Menu, ***I,*** or ***BACKSPACE with ENTER with C***.
Start Braille exclusion:	Braille Settings Menu, ***S,*** or ***BACKSPACE with ENTER with dots 3-4***.
End Braille exclusion:	Braille Settings Menu, ***E,*** or ***BACKSPACE with ENTER with dots 2-6***.
Braille page settings:	Braille Settings Menu, ***P***.
Braille translation options:	Braille Settings Menu, ***T,*** or ***BACKSPACE with ENTER with O***.
Braille grade:	Braille Settings Menu, ***B,*** or ***ENTER with G***.

19.2.7 Block Commands.

Block menu:	***SPACE with B***.
Append block to clipboard:	Block menu, ***A***.
Bottom marker insertion:	Block menu, ***B***.
Copy block to clipboard:	Block menu, ***C***.
Delete block:	Block menu, ***D***.
Erase file and exit Keyword:	Block menu, ***E***.
Insert file:	Block menu, ***I***.
Move block to clipboard:	Block menu, ***M***.
Paste clipboard:	Block menu, ***P***.
Read block:	Block menu, ***R***.
Store block:	Block menu, ***S***.
Top marker insertion:	Block menu, ***T***.
Zap block markers:	Block menu, ***Z***.

19.2.7.1 Quick Mark commands.

Mark character:	Block menu, ***SPACE with dots 3-6***.
Mark word:	Block menu, ***SPACE with dots 2-5***.
Mark sentence or line:	Block menu, ***SPACE with dots 1-4***.
Mark paragraph or section:	Block menu, ***SPACE with dots 2-3-5-6***.

19.2.8 Miscellaneous KeyWord Commands.

Find where the cursor is: ***SPACE with wh sign (dots 1-5-6)***.

Query value of Tab stop: ***SPACE with wh sign (dots 1-5-6)***.

Switch document: ***SPACE with dots 1-2-5-6***.

Save document: ***SPACE with S***.

Quit document: ***BACKSPACE with Q***.

19.2.9 Spelling Checker Commands.

Spelling Checker menu: ***SPACE with dots 1-6, the ch sign***.

Check from cursor to end of document: Spell Check menu, ***C***.

Document check: Spell Check menu, ***D***.

Lookup Word in dictionary: Spell Check menu, ***L***.

Word check: Spell Check menu, ***W***.

Paragraph or section check: Spell Check menu, ***P***.

Select Language: Spell Check menu, ***S***.

At the Spelling Checker "Option?" prompt, the following are valid:

Review the word: ***SPACE with dots 2-5***.

Ignore the word: ***I***.

Skip this occurrence of the word: ***SPACE with dot 5***.

Add the word to the dictionary: ***A***.

Correct the word: ***C,*** new word.

Review suggested spellings: ***S***.

Look up a word in the dictionary: ***L***.

Read sentence containing word: ***SPACE with dots 1-4***.

Read paragraph containing word: ***SPACE with dots 2-3-5-6***.

During Suggested Spelling Review:

Display original word: ***I.*** Second press spells word.

Spell current suggestion: ***SPACE with O,*** then ***S***.

Use suggestion: ***ENTER***.

Return to option prompt: ***SPACE with E***.

19.2.10 When Looking up Word in Dictionary.

Spell current word in dictionary: ***SPACE with O,*** then ***S***.

Display original word: ***I***.

Replace original word: ***ENTER***.

19.2.11 Template Commands.

Template Menu: ***BACKSPACE with ENTER with dots 2-3-4-6***.

Insert Field: Template Menu, ***I,*** or

BACKSPACE with I.

Force inclusion of line: Template Menu, ***F***.

Start conditional suppression: Template Menu, ***S***.

End conditional suppression: Template Menu, ***E***.

Mark comment line: Template Menu, ***M***.

19.3 Calculator.

19.3.1 Nemeth Math.

1	***A*** or ***lowered A,*** etc.
Plus:	***dots 3-4-6***.
Minus:	***HYPHEN,*** which is ***dots 3-6***.
Multiplied by:	***dots 1-6***.
Divided by:	***SLASH,*** which is ***dots 3-4***.
Equals:	***ENTER***.
Decimal point:	***dots 4-6***.
Negative number:	***SPACE with dots 3-6***.
Percent operator:	***dots 1-4-6***.
Left parenthesis:	***dots 1-2-3-5-6***.
Right parenthesis:	***dots 2-3-4-5-6***.
Set decimal places:	***SPACE with dots 4-6***.
Clear calculation:	***SPACE with dots 3-5-6***.
Delete last key:	***BACKSPACE***.
Display calculation or result:	***SPACE with C***.
Read last number or sign entered:	***SPACE with dots 2-5***.
Square root:	***dots 3-4-5***.
Squared:	***SPACE with dots 3-4-5***.
Decimal exponent:	***X***.
Log to base e of:	***N***.
e to the power of:	***SPACE with N***.
Log to base 10 of:	***L***.

10 to the power of:	***SPACE with L***.
To the power of:	***dots 4-5***.
To the power of 1 divided by:	***SPACE with dots 4- 5***.
Degrees:	***T, then D***.
Radians:	***T, then R***.
PI:	***Y***.
Sine:	***T, S***.
Arc sine:	***SPACE with T, S***.
Cosine:	***T, C***.
Arc cosine:	***SPACE with T, C***.
Tan:	***T, T***.
Arc tan:	***SPACE with T, T***.
Clear memory:	***SPACE with K,*** then ***0 through 9***.
Store memory:	***SPACE with S,*** then ***0 through 9***.
Add to memory:	***SPACE with A,*** then ***0 through 9***.
Recall memory:	***SPACE with M,*** then ***0 through 9***.
display memory:	***M,*** then ***0 through 9***.
Announce Key Mode:	***SPACE with W***.
Enter a fraction:	Type the numerator, ***BACKSPACE with dots 3-4*** and then the denominator.
Enter a mixed number:	Type the whole number, ***SPACE*** and then the fraction.
Convert a decimal to a fraction:	***SPACE with dots 3-4***.
Convert a fraction to a decimal:	***SPACE with dots 3-4 D***.

Convert a fraction to its lowest terms: Type the fraction and press ***ENTER***.

Convert a mixed number to an improper fraction: ***SPACE with dots 3-4 I***.

Convert an improper fraction to a mixed number: ***SPACE with dots 3-4 M***.

Convert a fraction to a percentage: ***dots 1-4-6***.

Take the reciprocal of a fraction: ***SPACE with dots 3-4 R***.

Find an equivalent fraction to the displayed fraction: ***SPACE with dots 3-4 E***.

Data Set Menu: ***BACKSPACE with S***.

Check whether the data entry is on or off:: ***SPACE with I***.

Statistical Functions Menu/Statistical Functions Review List: ***S***.

Find the result of a calculation without entering it into the data set: ***dots 1-2-3-4-5-6***.

Sample size: ***N***.

Mean: ***M***.

Median: ***D***.

Minimum: ***I***.

Maximum: ***X***.

Sample standard deviation: ***S***.

Population standard deviation: ***P***.

Sum of values: ***V***.

Sum of the square of values: ***Q***.

Copy a value to the clipboard: ***BACKSPACE with K***.

Enter the Review Mode: ***SPACE with X***.

Go to the previous data item: ***BACKSPACE***.

Go to the next data item: ***SPACE***.

Go to the first data item in the data set: ***SPACE with dots 1-2-3***.

Go to the last data item in the data set: ***SPACE with dots 4-5-6***.

Find a specific number in a data set: ***SPACE with F***.

Find the next occurrence of the same number in the data set: ***SPACE with N***.

Change the View Option: ***SPACE with V***.

Entry order: ***E***.

Frequency order: ***F***.

Numerical order: ***N***.

Delete the current data item: ***BACKSPACE with dots 1-4***.

Save a Data Set: ***BACKSPACE with S***.

19.3.2 UK Math.

1:	***A,*** etc.
Plus:	***dots 2-3-5***.
Minus:	***HYPHEN,*** which is ***dots 3-6***.
Multiplied by:	***dots 2-3-6***.
Divided by:	***dots 2-5-6***.
Equals:	***ENTER***.
Decimal point:	***dot 2***.
Negative number:	***SPACE with dots 3-6***.
Percent operator:	***P***.
Left parenthesis:	***dots 1-2-6***.
Right parenthesis:	***dots 3-4-5***.
Set decimal places:	***SPACE with dot 2***.
Clear calculation:	***BACKSPACE with dots 1-4***.
Delete last key:	***BACKSPACE***.
Display calculation or result:	***SPACE with C***.
Read last number or sign entered:	***SPACE with dots 2-5***.
Square root:	***dots 1-4-6***.
Squared:	***dots 2-3***.
Decimal exponent:	***X***.
Log to base e of:	***N***.
e to the power of:	***SPACE with N***.
Log to base 1***0*** of:	***L***.
1***0*** to the power of:	***SPACE with L***.
To the power of:	***dots 3-4-6***.

To the power of 1 divided by: ***SPACE with dots 3-4-6***.

Degrees: ***T, then D***.

Radians: ***T, then R***.

Pi: ***Y***.

Sine: ***T, S***.

Arc sine: ***SPACE with T, S***.

Cosine: ***T, C***.

Arc cosine: ***SPACE with T, C***.

Tan: ***T, T***.

Arc tan: ***SPACE with T, T***.

Clear memory: ***SPACE with K,*** then ***0 through 9***.

Store memory: ***SPACE with S,*** then ***0 through 9***.

Add to memory: ***SPACE with A,*** then ***0 through 9***.

Recall memory: ***SPACE with M,*** then ***0 through 9***.

display memory: ***M,*** then ***0 through 9***.

Display Calculation Formula: ***PREVIOUS with NEXT***.

Announce Key Mode: ***SPACE with W***.

Enter a fraction: Type the numerator, ***BACKSPACE with dots 3-4*** and then the denominator.

Enter a mixed number: Type the whole number, ***dots 3-4-5-6*** (the number sign) and then the fraction.

Convert a decimal to a fraction: ***SPACE with dots 3-4***.

Convert a fraction to a decimal: ***SPACE with dots 3-4 D***.

Convert a fraction to its lowest terms: Type the fraction and press ***ENTER***.

Convert a mixed number to an improper fraction: ***SPACE with dots 3-4 I***.

Convert an improper fraction to a mixed number: ***SPACE with dots 3-4 M***.

Convert a fraction to a percentage: ***P***.

Take the reciprocal of a fraction: ***SPACE with dots 3-4 R***.

Find an equivalent fraction to the displayed fraction: ***SPACE with dots 3-4 E***.

Data Set Menu: ***BACKSPACE with S***.

Check whether the data entry is on or off:: ***SPACE with I***.

Statistical Functions Menu/Statistical Functions Review List: ***S***.

Find the result of a calculation without entering it into the data set: ***dots 1-2-3-4-5-6***.

Sample size: ***N***.

Mean: ***M***.

Median: ***D***.

Minimum: ***I***.

Maximum: ***X***.

Sample standard deviation: ***S***.

Population standard deviation: ***P***.

Sum of values: ***V***.

Sum of the square of values: ***Q***.

Copy a value to the clipboard: ***BACKSPACE with K***.

Enter the Review Mode: ***SPACE with X***.

Go to the previous data item: ***BACKSPACE***.

Go to the next data item: ***SPACE***.

Go to the first data item in the data set: ***SPACE with dots 1-2-3***.

Go to the last data item in the data set: ***SPACE with dots 4-5-6***.

Find a specific number in a data set: ***SPACE with F***.

Find the next occurrence of the same number in the data set: ***SPACE with N***.

Change the View Option: ***SPACE with V***.

Entry order: ***E***.

Frequency order: ***F***.

Numerical order: ***N***.

Delete the current data item: ***BACKSPACE with dots 1-4***.

Save a Data Set: ***BACKSPACE with S***.

19.4 Planner.

19.4.1 Selecting a New Date.

At the calendar:

Move by day:	***SPACE with dot 3 or dot 6***.
Move by week:	***SPACE with dot 2 or dot 5***.
Move by month:	***SPACE with dot 1 or dot 4***.
Move by year:	***SPACE with dots 2-3 or dots 5-6***.

In a planner page:

Go to a new date:	***SPACE with dots 1-2-6,*** then,
Select Forward or Back:	***F or B,*** then,

(where ***n*** equals a number)

Move by ***n*** day/s:	***nD***.
Move by ***n*** week/s:	***nW***.
Move by ***n*** month/s:	***nM***.
Move by ***n*** year/s:	***nY***.

19.4.2 Reading the Entries.

Previous entry: ***SPACE with dot 1***.

Current entry: ***SPACE with dots 1-4***.

Next entry: ***SPACE with dot 4***.

Note: In Notes, the above commands move by sentence or line as in KeyWord.

All entries for previous day: ***SPACE with dots 2-3***.

All entries for current day: ***SPACE with dots 2-3-5-6***.

All entries for next day: ***SPACE with dots 5-6***.

Top of current day: ***SPACE with dots 1-2-3***.

Bottom of current day: ***SPACE with dots 4-5-6***.

Note: In Notes, the top and bottom commands take you to top or bottom of the notes.

Read continuously: ***SPACE with G,*** or

SPACE with dots 1-2-4-5.

Find text string: ***SPACE with F***.

Find next occurrence: ***SPACE with N***.

Appointment menu: ***SPACE with dots 3-4***.

Schedule appointment: Appointment menu, ***S,*** or

SPACE with dots 2-6.

Review or Modify appointment: Appointment menu, ***R,*** or

BACKSPACE with R.

Cancel appointment: Appointment menu, ***C,*** or

BACKSPACE with dots 1-4.

Hear next appointment anywhere

in KeySoft: ***SPACE with O, N,*** or ***ENTER with N***.

Go to next overlapping appt: ***SPACE with 3-4-5-6***.

Go to previous overlapping appt: ***SPACE with dots 1-2-3-6***.

When the cursor is in the date line of a calendar page:

Number of appointments and all-day events: ***SPACE with I***.

Date and days away from current date: ***SPACE with dots 1-5-6***.

When the cursor is in an appointment:

Summary of recurrences and alarm status: ***SPACE with I***.

Date and time and days away from current date: ***SPACE with dots 1-5-6***.

19.4.2.1 Recurring Appointments.

Move to next occurrence: ***SPACE with dots 3-5-6***.

Move to previous occurrence: ***SPACE with dots 2-3-6***.

Patterns:

Daily: Type number of days

Weekly, Yearly: Sunday: ***Su***.

Monday: ***Mo***.

Tuesday: ***Tu***.

Wednesday: ***We***.

Thursday: ***Th***.

Friday: ***Fr***.

Saturday: ***Sa***.

every day: ***v***.

weekdays: ***d***.

weekend days: ***e***.

Note: you can type less letters for Monday, Wednesday or Friday as their initial letters are unique. You can also type more of the name of a day, for example, Thurs for Thursday.

Weeks between occurrences: Type number of weeks

Monthly, Yearly: first week: ***1***.

second week: ***2***.

third week: ***3***.

fourth week: ***4***.

last week: ***l***.

Months between occurrences: Type number of months.

Number of Recurrences: (not all options documented)

Days: ***SPACE with dot 6***.

Weeks: ***SPACE with dot 5***.

Months: ***SPACE with dot 4***.

Years: ***SPACE with dots 5-6***.

19.4.3 Alarms.

Acknowledge alarm: ***BACKSPACE with ENTER***

then:

Read alarm details: ***R***.

Cancel alarm: ***C***.

Postpone alarm: ***P***.

Go to diary entry: ***G***.

19.4.4 Miscellaneous Functions.

Move from planner page

to calendar: ***SPACE with E***.

Hear the current time: ***ENTER with T***.

Hear today's date: ***ENTER with D***.

Query day, date and duration: ***SPACE with wh sign (dots 1-5-6)***.

Announce Key Names: ***SPACE with W***.

19.5 Address List.

Previous record:	***SPACE with dots 2-3***.
Current record:	***SPACE with dots 2-3-5-6***.
Next record:	***SPACE with dots 5-6***.
Previous field:	***BACKSPACE***.
Current field:	***SPACE with dots 1-4***.
Next field:	***SPACE***.
Previous word:	***SPACE with dot 2***.
Current word:	***SPACE with dots 2-5***.
Next word:	***SPACE with dot 5***.
Add a completed record:	***SPACE with dots 2-6***.
Change current or other field:	***BACKSPACE with dots 1-4***.
Clear current field:	***SPACE with dots 3-5-6***.
Delete record:	***BACKSPACE with dots 2-3-5-6***.
Copy record to Clipboard:	***SPACE with B***.

19.6 E-mail.

19.6.1 In an E-mail Folder.

Read E-mail:	***ENTER***.
Next field:	***SPACE***.
Previous field:	***BACKSPACE***.
Next E-mail:	***SPACE with dots 5-6***.
Previous E-mail:	***SPACE with dots 2-3***.
Move E-mail to Trash:	***BACKSPACE with dots 2-3-5-6***.
Mark E-mail:	***SPACE with M***.
Mark All:	***SPACE with dots 2-6***, then ***A***.
Search:	***SPACE with F***.
E-mail Action Menu:	***SPACE with dots 2-6***.
Move forward by day:	***BACKSPACE with dot 6***.
Move back a day:	***BACKSPACE with dot 3***.
Move forward by week:	***BACKSPACE with dot 5***.
Move back a week:	***BACKSPACE with dot 2***.
Move forward by month:	***BACKSPACE with dot 4***.
Move back a month:	***BACKSPACE with dot 1***.
Move forward by year:	***BACKSPACE with dots 5-6***.
Move back a year:	***BACKSPACE with dots 2-3***.
Move to first e-mail:	***SPACE with dots 1-2-3***.
Move to last e-mail:	***SPACE with dots 4-5-6***.

19.6.2 In a List of E-mail Folders.

Select prompted folder: ***ENTER***.

Delete folder: ***BACKSPACE with dots 2-3-5-6***.

Rename folder: ***ENTER with R***.

display Number of e-mails: ***SPACE with I***.

19.6.3 At “Ready to send” prompt.

Send e-mail: ***Y***.

Return to “Send to?” prompt: ***N***.

Save e-mail as a Draft: ***D***.

Print e-mail: ***P***.

Emboss e-mail: ***E***.

Abandon e-mail without sending: ***SPACE with E***.

19.6.4 E-mail in Trash Folder.

At “Empty Trash?” prompt,

Leave items in Trash: ***N***.

Delete items in Trash: ***Y***.

Review items in Trash: ***R***.

Options after selecting Review,

Move to next e-mail: ***SPACE with dots 5-6***.

Move to previous e-mail: ***SPACE with dots 2-3***.

Delete e-mail being reviewed: ***BACKSPACE with dots 2-3-5-6***.

Trash Folder Menu: ***SPACE with dots 2-6***.

then,

Restore e-mail to original folder: ***R***.

Empty Trash folder: ***E***.

19.7 Database Manager.

19.7.1 Adding a Record.

Add a record: ***SPACE with dots 2-6***.

Retrieve last record: ***SPACE with B then R***.

Paste the clipboard into a field: ***SPACE with B then P***.

Remove a field entry from the current record: ***SPACE with dots 3-5-6 then ENTER***.

19.7.2 Finding Information.

Delete a record: ***BACKSPACE with dots 2-3-5-6***.

Edit current record: ***BACKSPACE with dots 1-4***.

Copy a field to the clipboard: ***BACKSPACE with K***.

Copy a record to clipboard: ***SPACE with B then C***.

To hear the current record: ***SPACE with dots 2-3-5-6***.

Go to the next record: ***SPACE with dots 5-6***.

Go to the previous record: ***SPACE with dots 2-3***.

Next field: ***SPACE***.

Previous field: ***BACKSPACE***.

Next word: ***SPACE with dot 5***.

Previous word: ***SPACE with dot 2***.

Exit from the list of records: ***SPACE with E***.

19.7.3 Field Definition List Commands.

To delete a field: ***BACKSPACE with dots 1-4***.

To review or change field settings: ***BACKSPACE with O***.

To insert a field before the current field: ***SPACE with dots 2-6***.

To cycle through the field data types: ***SPACE with dots 3-4***.

To move current field one up in the list: ***BACKSPACE with dots 2-3***.

To move current field one down in the list: ***BACKSPACE with dots 5-6***.

Exit the field definition list: ***SPACE with E***.

19.7.4 Sort Order and Record Title List Commands.

To change a sort order or a record title field: ***ENTER***.

To remove a sort order or a record title field: ***BACKSPACE with dots 1-4***.

19.8 Games.

19.8.1 Basic Commands.

Go to game: ***BACKSPACE with ENTER with G***.

Save the game: ***SPACE with S***.

Load the game: ***ENTER with O***.

Abandon the game: ***BACKSPACE with Q***.

Enter the next move: Type a single/multiple character.

Insert the last move entered: ***BACKSPACE with R***.

Insert block marker: ***BACKSPACE with M***.

Copy block to the clipboard: ***BACKSPACE with K***.

Paste the contents of the clipboard to the input prompt: ***BACKSPACE with V***.

19.8.2 Game History Commands.

View the current status: ***BACKSPACE with S***.

Move forward from the history item: ***SPACE with dots 2-3***.

Move backward from the history item: ***SPACE with dots 5-6***.

In Sentence and Paragraph reading Mode, the following commands review sentences and paragraphs.

Move back a sentence : ***SPACE with dot 1***.

Hear the current sentence: ***SPACE with dots 1-4***.

Move forward a sentence: ***SPACE with dot 4***.

Move back a word: ***SPACE with dot 2***.

Hear the current word: ***SPACE with dots 2-5***.

Move forward a word: ***SPACE with dot 5***.

Move back a character: ***SPACE with dot 3***.

Hear the current character: ***SPACE with dots 3-6***.

Move forward a character: ***SPACE with 6***.

19.9 Unicode Characters.

These commands only function in Text or Computer Braille documents.

Unicode character entry:	***BACKSPACE with dots 3-5***.
Select Unicode Table:	***SPACE***, then ***ENTER***.
Select Unicode Character:	***SPACE*** or letter, then ***ENTER***.
Review or change a way a character is displayed in Braille:	Unicode Table, ***SPACE with D***.
Review or change a macro for a character:	Unicode Table, ***SPACE with K***.

19.10 Web Browser.

Open a new URL:	***ENTER with O***.
Go forward one page:	***ENTER with F***.
Go back one page:	***ENTER with B***.
Save web page:	***SPACE with S***.
Refresh Page:	***ENTER with R***.
Hear URL contents:	***SPACE with I*** then repeat the command.
Modem disconnect:	***SPACE with O*** then Select from Menu.
Progress Tone:	***SPACE with O then R,*** select from list.
Internet Options Menu:	***BACKSPACE with O***.
Favorites Menu:	***SPACE with dots 2-3-5***.

19.10.1 Move by Element.

"Click" on an item:	***ENTER***.
Read Input Control Prompt:	***SPACE with R***.
Move to next element:	***SPACE with dots 4-6***.
Move to previous element:	***SPACE with dots 1-3***.
Current element:	***SPACE with dots 1-3-4-6***.
Change move type:	***SPACE with T***.
Link:	***L***.
Input Control:	***I***.
Heading:	***H***.
Frame:	***F***.

19.10.2 Move from link to link.

Move backwards:	***BACKSPACE***.
Move forwards:	***SPACE***.

19.10.3 Tables.

Table Mode: ***SPACE with M***.

Query Cursor Position: ***SPACE with wh sign (dots 1-5-6)***.

While in Table Mode:

Move forward one cell along a row: ***SPACE with dot 4***.

To hear the current cell in a row: ***SPACE with dots 2-3-5-6***.

Move back one cell along a row: ***SPACE with dot 1***.

Move down one cell in a column: ***SPACE with dots 5-6***.

To hear the current cell in a column: ***SPACE with dots 1-4***.

Move down one cell in a column: ***SPACE with dots 2-3***.

19.10.4 History.

History command list:	***ENTER with dots 2-3-6***,
Navigate to current record:	***ENTER***.
Next Field:	***SPACE***.
Previous field:	***BACKSPACE***.
Next History record:	***SPACE with dots 5-6***.
Previous History record:	***SPACE with dots 2-3***.
Forward one Day:	***BACKSPACE with dot 6***.
Back one Day:	***BACKSPACE with dot 3***.
Forward one week:	***BACKSPACE with dot 5***.
Back one week:	***BACKSPACE with dot 2***.
Previous Domain name:	***BACKSPACE with dot 4***.
Next Domain name:	***BACKSPACE with dot 1***.
Newest History record:	***SPACE with dots 1-2-3***.
Oldest History record:	***SPACE with dots 4-5-6***.
Sort by domain/day:	***SPACE with S***.

Note: history is presented alphabetically for day or domain.

19.11 Stopwatch.

Go to StopWatch:	***ENTER with W,*** or
	SPACE with O, then ***T, S***.
Stop or Start Stopwatch:	***SPACE***.
Set time back to Zero:	***BACKSPACE with dots 1-4***.
Stop stopwatch altogether:	***SPACE*** then ***BACKSPACE with dots 1-4***.
Hear elapsed time:	***SPACE with R***.
Hear elapsed time again:	***L***.

19.12 Media Player.

Go to Media Player:	***BACKSPACE with ENTER with M***.
Volume increase:	***ENTER with dots 4-6***.
Volume decrease:	***ENTER with dots 1-3***.
Pause track:	***BACKSPACE with ENTER*** or ***ENTER with dots 1-3-4-6***.
Restart track:	***BACKSPACE with ENTER***, ***SPACE with G***, or ***ENTER with dots 1-3-4-6***.
Pause audio streaming:	***ENTER with dots 1-3-4-6***.
Restart audio streaming:	***ENTER with dots 1-3-4-6***.
Skip forward 1%:	***SPACE with dot 6***.
Skip back 1%:	***LEFT ARROW***.
Skip forward 5%:	***CONTROL with RIGHT ARROW***.
Skip back 5%:	***SPACE with dot 2***.
Skip forward 10%:	***SPACE with dot 4***.
Skip back 10%:	***SPACE with dot 1***.
Elapsed time of total time:	***SPACE with wh sign (dots 1-5-6)***.
Track Information:	***SPACE with F***.
Stop track and exit:	***SPACE with E***.

19.12.1 Audio Recorder.

Record a memo:	Either press Record button or go through the Media Center menu.
Stop Recording:	Either press Record button or go through the Media Center menu.
Playback a memo:	***ENTER with M***.

19.12.2 FM Radio.

Go to FM Radio: ***BACKSPACE with ENTER with F***.

Turn off FM Radio: ***SPACE with E***.

Toggle speaker on/off: ***ENTER with S***.

Go to next preset station: ***SPACE***.

Go to previous preset station: ***BACKSPACE***.

Go to preset station starting with a particular character: ***ALPHA*** or ***DIGIT***.

Enter a new preset station: ***BACKSPACE with R***.

Rename preset station: Select the preset then press ***BACKSPACE with R***.

Delete radio preset: Select the preset then press ***BACKSPACE with dots 2-3-5-6***.

Jump directly to a frequency: ***SPACE with F***.

Scan frequency forward: ***SPACE with dot 4***.

Scan frequency backward: ***SPACE with dot 1***.

Jump frequency forward by 1MHz: ***SPACE with dot 5***.

Jump frequency back by 1MHz: ***SPACE with dot 2***.

Jump frequency forward by 100kHz: ***SPACE with dot 6***.

Jump frequency back by 100kHz: ***SPACE with dot 3***.

Turn the FM Radio volume up: ***ENTER with dots 4-6***.

Turn the FM Radio volume down: ***ENTER with dots 1-3***.

Mute or unmute the FM Radio: ***ENTER with dots 1-3-4-6***.

End of Command Summary.

Appendix A User Settings for BrailleNote BT.

The following User settings should be set-up and/or checked on the BrailleNote BT.

A.1 Speech; volume, rate, and pitch.

Refer to: 1.15.6 Setting Speech Volume Speed and Pitch

A.2 Time and date set, and in preferred format.

Refer to 1.21 Setting Time and Date: or 15.3 Date and Time Set.

A.3 Keyboard input voice setting; words, characters, or off.

Refer to 1.12.1 Help Messages.

A.4 Braille language; US, UK, or Australian.

Refer to: 5.4 Braille Display Options, then Section 5.4.9 Braille Language.

A.5 Braille grade for keyboard input; grade 1, 2, or computer Braille.

Refer to: 5.5.1 Preferred Keyboard Braille Grade

A.6 Calculator Braille code; Nemeth math, or UK math.

Refer to 5.4 Braille Display Options, then 5.4.10 Calculator Braille Language.

A.7 Computer Braille language; US or UK.

Refer 5.4 Braille Display Options, then 5.4.11 Computer Braille Language.

A.8 Computer Braille; 6 or 8 dot.

Refer to 5.4.13 Display Computer Braille using 6 or 8 dots.

A.9 Spelling checker dictionary language installed.

Open the "Demonstration Document" in the "General" folder, and access the spelling checker by pressing ***SPACE with dots 1-6, the ch sign***. If the spelling dictionary has not been installed you will advised that there is no language currently installed, followed by a prompt to choose the language. Press ***SPACE*** repeatedly until the dictionary name is displayed, for example "USA Spelling Dictionary," then press ***ENTER***.

A.10 Address list data base installed.

From the Main Menu select the Address List, then press ***A*** to add an address. You will be advised if the address list data base does not exist, followed by the prompt to create a data base called "Address List." Press ***Y*** to create the data base named "Address List."

A.11 E-mail data base installed.

From the Main Menu select the E-mail option, then press ***S*** for Setup, and select the "Directory of E-mail Account" item from the Setup menu. Press ***A*** to add a service. You will be advised if the data base for "Directory of E-mail Accounts" does not exist, followed by the prompt to create a data base called "Directory of E-mail Accounts." Press ***Y*** to create the data base.

You will then be placed in the entry list for the "Directory of E-mail Accounts." Unless you wish to continue on and setup a "Directory of E-mail Accounts" record, press ***SPACE with E*** to exit, and answer ***N*** to the prompt "Add this record?"

End of Appendix A - User Settings.

Appendix B Information on BookShare.

At the time of publishing, the Bookshare service is only available to residents of the United States. Up to date information on Bookshare.org and eligibility to join etc is available from their website: http://www.bookshare.org.

For information on the special offer for BrailleNote BT users as well as how to join, go to:

http://www.bookshare.org/Braillenote

For membership information, go to:

http://www.bookshare.org/web/AboutMembership.html

To join Bookshare.org, go to:

https://www.bookshare.org/web/MembersJoinForm.html

For Frequently Asked Questions about Bookshare.org, go to:

http://www.bookshare.org/web/SupportFAQ.html

There is also a book available called "***Finding ebooks on the Internet"***, by BrailleNote user Anna Dresner, available through National Braille Press, which tells you how to find, download, and access electronic books from a variety of sources, including Bookshare.org. Sources for free public domain eBooks, as well as for commercially available accessible eBooks, are also included. For more information, including a link to the table of contents, visit:

http://www.nbp.org/ebook.html

End of Appendix B - Info on Bookshare

Appendix C Troubleshooting the BrailleNote BT.

If the BrailleNote BT does not respond as you expect, there are a number of things you should check:

Make sure that the BrailleNote BT has power.

Connect the AC adapter. The BrailleNote BT should detect the AC adapter when the adapter is powered on even if the BrailleNote BT is switched off. The message "AC adapter on," is normally spoken.

Switch off then on again.

If the BrailleNote BT does not respond, leave the AC adapter connected. Wait 10 minutes, then try switching the BrailleNote BT off, then on again.

Resets – The three types and their uses.

C.1 Reset Button.

Press just the reset button when:

- asked to by an upgrade/new feature installation program to install new drivers and restart KeySoft

- the BrailleNote BT stops responding for any reason (assuming the problem is not that the power is off, or the battery is flat!)

- the BrailleNote BT generally seems to not be its normal self.

Switch the BrailleNote BT on and gently press the reset switch with a pointed instrument until it clicks, then release it. The BrailleNote BT should beep immediately. After about ten seconds silence, a chime should sound and the BrailleNote BT will display "KeySoft CE, version 7.2x. Build (number)."

After a pause KeySoft displays: "Main Menu."

You will lose data if you have to press reset while a file is open in the word processor or the planner is open or an e-mail is being written and changes have been made and not saved before reset is pressed. Same in the address list if changes are made to a record and not saved before reset is pressed.

C.2 Reset with dots 1-2-3 held down.

This reset runs the original factory-installed software, and clears any later ROM upgrade of KeySoft you were running. Necessary before an upgrade. Useful if an upgrade or add-on has become corrupted and the BN will not start after a reset due to this. The data lost will be the same as above. It won't change your user defined defaults back to the factory settings.

Hold down ***dots 1-2-3***. Gently press the reset button until it clicks then release it, while still holding down ***dots 1-2-3***. After about ten seconds silence, a chime should sound and the BrailleNote BT should speak. Release the keys. KeySoft displays.

"KeySoft CE, version 3.0x. Build (number)."

After a pause KeySoft displays: "Main Menu."

C.3 Reinitialize with dots 4-5-6 held down.

If KeySoft still does not start, BrailleNote BT's memory may have been corrupted. If this has happened, then it is necessary to re-initialize the memory. (This reset is sometimes called a Hard Reset although technically it isn't)

Make sure the BrailleNote BT is switched on. Hold down ***dots 4-5-6*** and gently press the reset switch with a pointed instrument until it clicks. The BrailleNote BT should beep immediately. Continue to hold down ***dots 4-5-6.*** After about ten seconds silence, a chime should sound and the BrailleNote BT should speak. Release the keys. KeySoft displays.

"KeySoft CE, version 3.0x. Build (number)."

After a pause KeySoft displays: "Main Menu."

C.4 Service Reset.

The service reset should only be performed under the supervision of a service staff member. If performed at the wrong time, it can cause loss of data and possibly a malfunction that could require you to return your unit for servicing. It is akin to, but potentially more harmful than, pulling the plug on your PC while it is working.

It is only mentioned at all in this manual so that users will be aware of the consequences of doing it should they hear of it from other users.

The service reset involves holding down both the record button and the reset button at the same time and then releasing them both.

C.5 Still doesn't start.

Telephone your BrailleNote BT Distributor for further advice.

End of Appendix C - TroubleShooting.

Appendix D Computer Braille Reference List.

The BrailleNote BT supports USA and UK Computer Braille in both 6 dot and 8 dot forms.

This Appendix contains 6 tables which give you the dot combination used for each ASCII character available in each of the supported configurations. The 6 tables are listed in the following order:

United States 6 dot Computer Braille - Lower Case

United States 6 dot Computer Braille - Upper Case

United States 8 dot Computer Braille

United Kingdom 6 dot Computer Braille - Lower Case

United Kingdom 6 dot Computer Braille - Upper Case

United Kingdom 8 dot Computer Braille

Each table has two columns. The first column contains the actual ASCII character enclosed in single quote marks so that it is read at all punctuation levels. The second column lists the dots required to obtain this character. Each table is divided into sections according to the type of character. For example, the lower case letters are in one section, the digits are in another, and so on. The sections are divided by a blank line.

Reading of this Appendix may be best accomplished by using KeyWord to select Appendix D from the Manual folder on the "KeySoft System Disk"

To find a particular character, first find the start of the relevant table. Next set your Reading Mode to the "Line Reading" option, by pressing ***SPACE with M*** as many times as necessary. Now, using the "Read next line" command, which is ***SPACE with dot 4***, start reading the first line of the table. As soon as you have heard the character name, if it is not the character you are looking for, press ***SPACE with dot 4*** again to cut off the speech and instantly start reading the next line. If you determine that the character you are looking for is in another section, press ***SPACE with dots 5-6*** to start reading the next section. Continue skimming through by line or section until you find the character you are looking for. Now let KeySoft read the whole line, and you will hear the dot combination for this character.

D.1 United States Computer Braille.

D.1.1 United States 6 dot Computer Braille - Lower Case

exclamation mark	'!'	2,3,4,6
quotation mark	'"'	5
hash sign	'#'	3,4,5,6
dollar sign	'$'	1,2,4,6
percent	'%'	1,4,6
ampersand	'&'	1,2,3,4,6
apostrophe	'''	3
left bracket	'('	1,2,3,5,6
right bracket	')'	2,3,4,5,6
asterisk	'*'	1,6
plus sign	'+'	3,4,6
comma	','	6
hyphen	'-'	3,6
period	'.'	4,6
forward slash	'/'	3,4
colon	':'	1,5,6
semi colon	';'	5,6
less than	'<'	1,2,6
equals	'='	1,2,3,4,5,6
greater than	'>'	3,4,5
question mark	'?'	1,4,5,6
underscore	'_'	4,5,6

grave accent	'`'	4
left curly brace	'{'	2,4,6
right curly brace	'}'	1,2,4,5,6
upright slash	'|'	1,2,5,6
tilde	'~'	4,5
zero	'0'	3,5,6
one	'1'	2
two	'2'	2,3
three	'3'	2,5
four	'4'	2,5,6
five	'5'	2,6
six	'6'	2,3,5
seven	'7'	2,3,5,6
eight	'8'	2,3,6
nine	'9'	3,5
'a'	1	
'b'	1,2	
'c'	1,4	
'd'	1,4,5	
'e'	1,5	
'f'	1,2,4	
'g'	1,2,4,5	

'h'	1,2,5
'i'	2,4
'j'	2,4,5
'k'	1,3
'l'	1,2,3
'm'	1,3,4
'n'	1,3,4,5
'o'	1,3,5
'p'	1,2,3,4
'q'	1,2,3,4,5
'r'	1,2,3,5
's'	2,3,4
't'	2,3,4,5
'u'	1,3,6
'v'	1,2,3,6
'w'	2,4,5,6
'x'	1,3,4,6
'y'	1,3,4,5,6
'z'	1,3,5,6

D.1.2 United States 6 dot Computer Braille Upper Case

The following table shows the combinations which change when a keystroke is immediately preceded by ***SPACE with U*** or when Caps Lock has been turned on by pressing ***SPACE with U*** twice in succession.

'A'	1
'B'	1,2
'C'	1,4

'D'	1,4,5
'E'	1,5
'F'	1,2,4
'G'	1,2,4,5
'H'	1,2,5
'I'	2,4
'J'	2,4,5
'K'	1,3
'L'	1,2,3
'M'	1,3,4
'N'	1,3,4,5
'O'	1,3,5
'P'	1,2,3,4
'Q'	1,2,3,4,5
'R'	1,2,3,5
'S'	2,3,4
'T'	2,3,4,5
'U'	1,3,6
'V'	1,2,3,6
'W'	2,4,5,6
'X'	1,3,4,6
'Y'	1,3,4,5,6
'Z'	1,3,5,6

at symbol	'@' 4

left square bracket	'['	2,4,6
right square bracket	']'	1,2,4,5,6
back slash	'\'	1,2,5,6
carat symbol	'^'	4,5
underscore	'_'	4,5,6

D.1.3 United States 8 dot Computer Braille

exclamation mark	'!'	2,3,4,6
quotation mark	'"'	5
hash sign	'#'	3,4,5,6
dollar sign	'$'	1,2,4,6
percent	'%'	1,4,6
ampersand	'&'	1,2,3,4,6
apostrophe	'''	3
left bracket	'('	1,2,3,5,6
right bracket	')'	2,3,4,5,6
asterisk	'*'	1,6
plus sign	'+'	3,4,6
comma	','	6
hyphen	'-'	3,6
period	'.'	4,6
forward slash	'/'	3,4
colon	':'	1,5,6

semi colon	';' 5,6
less than	'<' 1,2,6
equals	'=' 1,2,3,4,5,6
greater than	'>' 3,4,5
question mark	'?' 1,4,5,6
at symbol	'@' 4,7
left square bracket	'[' 2,4,6,7
back slash	'\' 1,2,5,6
right square bracket	']' 1,2,4,5,6
carat sign	'^' 4,5,7
underscore	'_' 4,5,6,7
'_'	4,5,6
grave accent	'`' 4
left curly brace	'{' 2,4,6
upright slash	'|' 1,2,5,6
right curly brace	'}' 1,2,4,5,6
tilde	'~' 4,5
Delete	8
Delete	1,2,3,4,5,6
'0'	3,5,6
'1'	2
'2'	2,3
'3'	2,5

'4'	2,5,6
'5'	2,6
'6'	2,3,5
'7'	2,3,5,6
'8'	2,3,6
'9'	3,5
'A'	1,7
'B'	1,2,7
'C'	1,4,7
'D'	1,4,5,7
'E'	1,5,7
'F'	1,2,4,7
'G'	1,2,4,5,7
'H'	1,2,5,7
'I'	2,4,7
'J'	2,4,5,7
'K'	1,3,7
'L'	1,2,3,7
'M'	1,3,4,7
'N'	1,3,4,5,7
'O'	1,3,5,7
'P'	1,2,3,4,7
'Q'	1,2,3,4,5,7
'R'	1,2,3,5,7

'S'	2,3,4,7
'T'	2,3,4,5,7
'U'	1,3,6,7
'V'	1,2,3,6,7
'W'	2,4,5,6,7
'X'	1,3,4,6,7
'Y'	1,3,4,5,6,7
'Z'	1,3,5,6,7

'a'	1
'b'	1,2
'c'	1,4
'd'	1,4,5
'e'	1,5
'f'	1,2,4
'g'	1,2,4,5
'h'	1,2,5
'i'	2,4
'j'	2,4,5
'k'	1,3
'l'	1,2,3
'm'	1,3,4
'n'	1,3,4,5
'o'	1,3,5
'p'	1,2,3,4

'q'	1,2,3,4,5
'r'	1,2,3,5
's'	2,3,4
't'	2,3,4,5
'u'	1,3,6
'v'	1,2,3,6
'w'	2,4,5,6
'x'	1,3,4,6
'y'	1,3,4,5,6
'z'	1,3,5,6

D.2 United Kingdom Computer Braille.

D.2.1 United Kingdom 6 dot Computer Braille Lower Case.

exclamation mark	'!'	3,4,5,6
quotation mark	'"'	4
hash sign	'#'	5,6
dollar sign	'$'	4,5,6
percent	'%'	4,6
ampersand	'&'	1,2,3,4,6
apostrophe	'''	3
left bracket	'('	4,5
right bracket	')'	3,4,5
asterisk	'*'	3,5
plus sign	'+'	2,3,5
comma	','	2
hyphen	'-'	3,6
period	'.'	2,5,6
forward slash	'/'	3,4
colon	':'	2,5
semi colon	';'	2,3
less than	'<'	2,3,6
equals	'='	2,3,5,6
greater than	'>'	3,5,6
question mark	'?'	2,6
grave accent	'`'	2,3,4,6

left curly brace	'{'	1,2,3,5,6
upright slash	'|'	5
right curly brace	'}'	2,3,4,5,6
tilde	'~'	6
Delete		
Delete		
Delete		3,4,6
'0'		1,2,3,4,5,6
'1'		1,6
'2'		1,2,6
'3'		1,4,6
'4'		1,4,5,6
'5'		1,5,6
'6'		1,2,4,6
'7'		1,2,4,5,6
'8'		1,2,5,6
'9'		2,4,6
'a'		1
'b'		1,2
'c'		1,4
'd'		1,4,5
'e'		1,5
'f'		1,2,4

'g'	1,2,4,5
'h'	1,2,5
'i'	2,4
'j'	2,4,5
'k'	1,3
'l'	1,2,3
'm'	1,3,4
'n'	1,3,4,5
'o'	1,3,5
'p'	1,2,3,4
'q'	1,2,3,4,5
'r'	1,2,3,5
's'	2,3,4
't'	2,3,4,5
'u'	1,3,6
'v'	1,2,3,6
'w'	2,4,5,6
'x'	1,3,4,6
'y'	1,3,4,5,6
'z'	1,3,5,6

D.2.2 United Kingdom 6 dot Computer Braille Upper Case

The following table shows the combinations which change when a keystroke is immediately preceded by ***SPACE with U*** or when Caps Lock has been turned on by pressing ***SPACE with U*** twice in succession.

'A',	1
'B',	1,2

```
'C',                    1,4
'E',                    1,5
'D',                    1,4,5
'F',                    1,2,4
'G',                    1,2,4,5
'H',                    1,2,5
'I',                    2,4
'J',                    2,4,5
'K',                    1,3
'L',                    1,2,3
'M',                    1,3,4
'N',                    1,3,4,5
'O',                    1,3,5
'P',                    1,2,3,4
'Q',                    1,2,3,4,5
'R',                    1,2,3,5
'S',                    2,3,4
'T',                    2,3,4,5
'U',                    1,3,6
'V',                    1,2,3,6
'W',                    2,4,5,6
'X',                    1,3,4,6
'Y',                    1,3,4,5,6
'Z',                    1,3,5,6
```

at symbol	'@',	2,3,4,6
left square bracket	'[',	1,2,3,5,6
back slash	'\',	5
right square bracket	']',	2,3,4,5,6
carat sign	'^',	6
underscore	'_',	3,4,6

D.2.3 United Kingdom 8 dot Computer Braille

exclamation mark	'!'	3,4,5,6
quotation mark	'"'	4
hash sign	'#'	5,6
dollar sign	'$'	4,5,6
percent	'%'	4,6
ampersand	'&'	1,2,3,4,6
apostrophe	'''	3
left bracket	'('	4,5
right bracket	')'	3,4,5
asterisk	'*'	3,5
plus sign	'+'	2,3,5
comma	','	2
hyphen	'-'	3,6
period	'.'	2,5,6
forward slash	'/'	3,4

colon	':'	2,5
semi colon	';'	2,3
less than	'<'	2,3,6
equals	'='	2,3,5,6
greater than	'>'	3,5,6
question mark	'?'	2,6
at symbol	'@'	2,3,4,6,7
left square bracket	'['	1,2,3,5,6,7
back slash	'\'	5,7
right square bracket	']'	2,3,4,5,6,7
carat sign	'^'	6,7
underscore	'_'	3,4,6,7
grave accent	'`'	2,3,4,6
left curly brace	'{'	1,2,3,5,6
upright slash	'|'	5
right curly brace	'}'	2,3,4,5,6
tilde	'~'	6
Delete	3,4,6	

'0'	1,2,3,4,5,6
'1'	1,6
'2'	1,2,6
'3'	1,4,6
'4'	1,4,5,6

'5'	1,5,6
'6'	1,2,4,6
'7'	1,2,4,5,6
'8'	1,2,5,6
'9'	2,4,6
'A'	1,7
'B'	1,2,7
'C'	1,4,7
'D'	1,4,5,7
'E'	1,5,7
'F'	1,2,4,7
'G'	1,2,4,5,7
'H'	1,2,5,7
'I'	2,4,7
'J'	2,4,5,7
'K'	1,3,7
'L'	1,2,3,7
'M'	1,3,4,7
'N'	1,3,4,5,7
'O'	1,3,5,7
'P'	1,2,3,4,7
'Q'	1,2,3,4,5,7
'R'	1,2,3,5,7
'S'	2,3,4,7

'T'	2,3,4,5,7
'U'	1,3,6,7
'V'	1,2,3,6,7
'W'	2,4,5,6,7
'X'	1,3,4,6,7
'Y'	1,3,4,5,6,7
'Z'	1,3,5,6,7

'a'	1
'b'	1,2
'c'	1,4
'd'	1,4,5
'e'	1,5
'f'	1,2,4
'g'	1,2,4,5
'h'	1,2,5
'i'	2,4
'j'	2,4,5
'k'	1,3
'l'	1,2,3
'm'	1,3,4
'n'	1,3,4,5
'o'	1,3,5
'p'	1,2,3,4
'q'	1,2,3,4,5

'r'	1,2,3,5
's'	2,3,4
't'	2,3,4,5
'u'	1,3,6
'v'	1,2,3,6
'w'	2,4,5,6
'x'	1,3,4,6
'y'	1,3,4,5,6
'z'	1,3,5,6

a acute	'á'	8
a grave	'à'	4,6,7,8
a circumflex	'â'	5,6,7,8
Cap A diaeresis	'Ä'	2,5,6,7,8
a diaeresis	'ä'	4,5,6,7,8
Cap a ring	'Å'	3,4,7,8
a ring	'å'	1,2,3,4,6,7,8

cap a diphthong	'Æ'	1,2,6,7,8
a diphthong	'æ'	1,6,7,8
feminine ordinal	'ª'	1,2,3,4,6,8
masculine ordinal	'º'	3,8

c cedilla	'Ç'	7,8

cap C cedilla	'Ç'	3,7,8
cap E acute	'É'	1,2,3,4,5,6,7,8
e acute	'é'	4,7,8
e grave	'è'	3,5,7,8
e circumflex	'ê'	4,5,7,8
e diaeresis	'ë'	3,4,5,7,8
i acute	'í'	3,4,5,6,8
i grave	'ì'	3,6,7,8
i circumflex	'î'	2,7,8
i diaeresis	'ï'	2,3,5,7,8
cap N tilde	'Ñ'	4,6,8
n tilde	'ñ'	4,5,6,8
o acute	'ó'	4,8
o grave	'ò'	1,5,6,7,8
o circumflex	'ô'	1,4,6,7,8
cap O diaeresis	'Ö'	2,4,6,7,8
o diaeresis	'ö'	1,4,5,6,7,8
u acute	'ú'	5,6,8
u grave	'ù'	1,2,4,5,6,7,8

u circumflex	'û'	1,2,4,6,7,8
Cap U diaeresis	'Ü'	2,5,7,8
u diaeresis	'ü'	3,4,5,6,7,8
y diaeresis	'ÿ'	1,2,5,6,7,8
Exclamation inverted	'¡'	3,6,8
question mark inverted	'¿'	4,5,8
Start of	'¬'	3,5,8
Logical NOT	'⌐'	3,4,5,8
Right double angle quotation	'»'	3,4,8
Left double angle quotation	'«'	2,5,6,8
Pounds sign	'£'	2,3,6,7,8
cent sign	'¢'	2,3,7,8
Florin sign	'₣'	2,6,7,8
Yen sign	'₨'	3,5,6,7,8
Peseta sign	'¥'	2,3,5,6,7,8
half	'½'	2,3,5,8
quarter	'¼'	2,8
Plus or minus	'±'	1,2,3,4,5,8
Greater than or equal to	'÷'	1,2,3,6,8
Less than or equal to	'≤'	2,3,4,8

Greater than or equal to	'≥'	1,2,3,5,8
Nearly equals	'≈'	2,4,5,6,8
Identity symbol	'≡'	1,2,3,4,8
Superscript 2	'² '	2,3,4,5,6,8
Superscript n	'ⁿ'	5,8
Radical symbol	'√'	1,2,3,5,6,8
Integral sign	'⌠'	2,3,4,5,8
Integral sign	'⌡'	1,3,6,8
degree sign	'°'	1,3,4,6,8
Intersection symbol	'∩'	1,3,5,8
Greek epsilon	'ε'	1,3,4,5,8
'.'		1,3,5,6,8
'.'		1,3,4,5,6,8
Solid square	'■'	6,8
Greek alpha	'α'	2,3,4,6,8
Greek beta,	'ß'	1,8
Greek Gamma	'Γ'	1,2,8
Greek pi	'π'	1,4,8
Greek Sigma	'Σ'	1,4,5,8
Greek sigma	'σ'	1,5,8
Greek mu	'µ'	1,2,4,8
Greek tau	'τ'	1,2,4,5,8

Greek Fi	'Φ' 1,2,5,8
Greek Theta	'Θ' 2,4,8
Greek Omega	'Ω' 2,4,5,8
Greek delta	'δ' 1,3,8
Infinity	'∞' 1,2,3,8
Greek fi	'φ' 1,3,4,8

Upper left	'┌' 1,3,5,6,7,8
Center box	'│' 1,4,6,8
Lower Left	'└' 2,3,4,6,7,8
Upper right	'┐' 2,6,8
Lower right	'┘' 1,3,4,5,6,7,8
Middle box	'┬' 1,2,7,8
Left middle	'├' 1,4,7,8
Box intersection	'┼' 1,5,7,8
Right middle	'┤' 1,4,5,6,8
Middle box	'┴' 1,7,8
Center box	'─' 1,4,5,7,8

Double upper left	'╔' 2,4,7,8
Double center box	'║' 2,5,8
Double lower left	'╚' 1,2,5,7,8
Double upper right	'╗' 2,3,8
Double lower right	'╝' 2,3,6,8

Double middle box	'╦'	1,3,7,8
Double left middle	'╠'	1,2,3,7,8
Double box intersection	'╬'	1,3,4,5,7,8
Double right middle	'╣'	2,4,6,8
Double middle box	'╩'	2,4,5,7,8
Double center box	'═'	1,3,4,7,8
Double horizontal upper right	'╕'	1,2,5,6,8
Double horizontal right middle	'╡'	1,5,6,8
Double horizontal left middle	'╞'	1,2,4,8
Double horizontal lower right	'╛'	3,5,6,8
Double horizontal upper right	'╒'	1,3,6,8
Double horizontal lower left	'╘'	2,3,4,5,7,8
Double horizontal top middle	'╤'	1,2,3,4,5,7,8
Double horizontal intersection	'╪'	1,3,4,6,7,8
Double horizontal bottom middle	'╧'	1,3,5,7,8
Double vertical upper right	'╖'	1,2,4,5,6,8
Double vertical left middle	'╟'	1,2,4,5,7,8
Double vertical right middle	'╢'	1,2,4,6,8
Double vertical lower right	'╜'	2,3,5,6,8
Double vertical upper left	'╓'	1,2,3,6,7,8
Double vertical intersection	'╫'	2,4,5,6,7,8
Double vertical lower left	'╙'	2,3,4,7,8

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Double vertical bottom middle	'╨'	1,2,3,4,7,8
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Fill character	'▒'	1,6,8
Fill character	'▓'	1,2,6,8
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Solid fill	'▌'	6,7,8
Solid fill	'■'	3,4,6,7,8
Solid fill	'█'	1,2,3,5,6,7,8
Solid fill	'▐'	2,3,4,5,6,7,8

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