BRAILLE SENSE PLUS B32 USER MANUAL (H332B)

ENGLISH MANUAL For Software Version 5.0

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When there are any manual updates, the readme files or appendices will be added to the manual CD and website.

HIMS Co., Ltd.

139-9, Gajung-dong, Yuseong-gu, Daejeon, Korea 305-350 Phone: +82-42-864-4460

Fax: +82-42-864-4462 Email: hims@himsintl.com Website: www.himsintl.com Congratulations on the purchase of your Braille Sense Plus B32! The Braille Sense Plus B32 is capable of doing everything that an ordinary PDA can do, and more – all without the need for a screen!

I. You will find the following items when you open the Braille Sense Plus B32 package:

- 1) Braille Sense Plus B32
- 2) Battery
- 3) AC adapter
- 4) USB Cable
- 5) Earphone
- 6) User Manual (CD)
- 7) Braille User Manual (Hot Keys List)
 - 1. The input voltage of the AC adapter is 100V 240V, and the output is DC 5V / 2A.
 - 2. When the Braille Sense Plus B32 is shipped, the battery may be separate from the unit to avoid damage. The battery may not be fully charged when it is shipped. Before you use the Braille Sense Plus B32, you should make sure the battery is fully charged. When you use the Braille Sense Plus B32 for the first time, you may need to open the package, take the battery, and insert it into the battery slot at the rear panel of the unit. It is possible that the dealer or distributor from whom you purchased the Braille Sense Plus B32 from has already done this for you.
 - 3. When you use the Braille Sense Plus B32 with the battery for the first time, the battery status may not be displayed accurately. In order to avoid this, connect the Braille Sense Plus B32 to the AC adapter for about six hours with turn on. If you want to use the Braille Sense Plus B32 immediately after opening the box, you will need to connect the AC adapter to the unit for more than six hours to fully charge the battery.

- 4. If you want or need to take the battery out of the unit, turn the power off, and then take the battery out of the unit. Before putting the battery back in to the unit, make certain that the power switch is turned off.
- 5. When you are using the Braille Sense Plus B32 on battery power only (without the AC adapter), the status of the remaining battery power will be announced when the battery power is low. When the battery's charge falls below 15 percent, connect the AC adapter to the unit for recharging. If the remaining battery power drops to five percent, and the unit is not connected to the AC adapter, the Braille Sense Plus B32 will shut down one minute after the announcement of the battery's status. The amount of battery life per charge will vary depending on the options you have set.
- 6. Your Braille Sense Plus B32 needs to be handled with care. The Braille Sense Plus B32 is a very delicate machine. You should make sure to handle the unit in a proper manner. Also, the Braille Sense Plus B32 is very sensitive to dust. Make sure to keep the Braille Sense Plus B32 away from dusty environments.
- 7. The Braille cells are very sensitive parts. If any of the Braille cells are not working properly due to dust or any other reason, please contact our repair center, or the dealer whom you purchased the Braille Sense Plus B32 from for support.
- 8. You will need to register your Braille Sense Plus B32 in order to ensure further maintenance, service, and upgrade information. Please visit www.himsintl.com, to register your information. If you have any trouble when registering your information, please contact the dealer whom you purchased your Braille Sense Plus B32 product from for help.
- 9. Do not take apart the Braille Sense Plus B32 by yourself. Do not have anyone else who is not authorized by HIMS take apart the Braille Sense Plus B32. If an unqualified person disassembles the unit, serious damage may occur to the Braille Sense Plus B32. If an unauthorized person

disassembles the Braille Sense Plus B32, the unit will be excluded from any free maintenance, and the warranty will become void. If any liquid or external force damages the unit, it may also be excluded from free maintenance, even if the damage occurred during the warranty period.

- 10. If you have any complaints or suggestions, please provide us with your comments on our website. We will improve our product based on your comments and suggestions. Thank you for using the Braille Sense Plus B32, and we value any comments or suggestions you have for our product.
 - 11. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions.
 - 1) This device may not cause harmful interference, and
 - This device must accept any interference received, including interference that may cause undesired operation.

II. How to use this manual

Before using the Braille Sense Plus B32, you should read the entire manual to familiarize yourself with the functions of the Braille Sense Plus B32. Reading the entire manual will allow you to operate the Braille Sense Plus B32 to its fullest potential. The Braille Sense Plus B32 has many functions. Many of these functions operate in a similar manner, so it is important to become familiar with all of the functions of the Braille Sense Plus B32.

You will see references to hot keys and shortcut keys. These keys refer to ways to access menus and functions quickly by using a combination of keystrokes. Please note that not all hot keys and shortcut keys will work while you are in the Braille Sense Plus B32. Some hot keys and shortcut keys require that you be within a program in order for specific hot keys and shortcut keys to work.

This user manual uses a specific notation of how to press keys. When you see, "space-b (dots 1-2)" this means that you would press the "space bar" and dots 1 and 2 simultaneously. This is a very important concept to understand when using this manual.

In order to use the Braille Sense Plus B32, you will need to understand what a menu is, and how it works. You will also need to understand what a text box is, and how to type in information in a text box. You will want to read section 2.2 to help you understand basic concepts of menus. It is very important that you completely understand concepts such as this, so that you are able to use the Braille Sense Plus B32 to its fullest potential.

If you find that you are unable to find a solution to a problem within the manual, or if you need assistance with the Braille Sense Plus B32, please email us at hims@himsintl.com. Visit us on the web at www.himsintl.com; or, you can call us at +82-42-864-4460.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is con-nected.
- Consult the dealer or an experienced radio/TV technician for help. FCC Caution: To assure continued compliance, (example use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

IMPORTANT NOTE:

FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

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1. Introduction

1.1 What is the Braille Sense Plus B32?

The Braille Sense Plus B32 is a Braille note taker developed and manufactured by HIMS, for people who are blind and visually impaired. You can do the following with the Braille Sense Plus B32.

- 1. You can use the Word Processor, and the Perkins style keyboard, to create Braille documents.
- 2. You can print your text documents using any compatible ink printer.
- 3. You can emboss your Braille documents when you connect the unit to a Braille printer.
- 4. You can open Microsoft (MS) Word documents, and read them in Braille. The Braille Sense Plus B32 will import any document that was created in MS Word, and translate it into Braille.
- 5. Using the E-Mail Program, you can send email messages to sighted individuals, as well as read your email messages in Braille.
- 6. Using the Schedule Manager, you can enter your appointments on the Braille Sense Plus B32. The Braille Sense Plus B32 will then alert you at the time of your appointments.
- 7. With the Address Manager, you can input information about your contacts and the Braille Sense Plus B32 can retrieve the information for those contacts.
- 8. Using the Braille Sense Plus B32 Web Browser, you can surf the Internet with the Braille display that is located on the Braille Sense Plus B32.
- 9. Using the Braille Sense Plus B32 Media Player, you can listen to music, or any other sounds that are recorded in mp3, wma, or a wave file format.
- 10. Using the Braille Sense Plus B32 Radio, you can listen to radio sound.
- 11. You can record the voice and radio sound in mp3 or wav file format.
- 12. On the Calculator, you can calculate algebraic equations, including scientific calculations.
- 13. You can copy any files from your personal computer to the Braille Sense Plus B32, and vice versa.

- 14. You can use the Braille Sense Plus B32 as a Braille display with a compatible screen reader, such as Window-Eyes.
- 15. You can copy, move, and delete files on the Braille Sense Plus B32.
- 16. You can adjust the volume, the speed, and the tone of the speech. You can change as many of these features as you want on the Braille Sense Plus B32.
- 17. You can use the Database Manager to create your own Database for keeping and storing important information
- 18. You can use MSN Messenger to communicate in real time, with others who are running the MSN Messenger program.
- 19. The sighted person who is learning Braille for the first time can use the LCD screen on the Braille Sense Plus B32, to easily learn Braille. Likewise, using the LCD screen, sighted people, who do not know Braille, can teach Braille to those who are blind when using the Braille Sense Plus B32.

1.2 Hardware

In order to get the most out of your Braille Sense Plus B32, you will want to become familiar with the Braille Sense Plus B32 by learning where the buttons and ports are located, as well as the function of each of these buttons and ports.

This section explains the hardware configuration of the Braille Sense Plus B32. The dimensions of the Braille Sense Plus B32 are 10 inches long by 6.1 inches wide by 1.9 inches high. On the bottom of the unit, there are rubber feet in order to prevent slipping while you are using the Braille Sense Plus B32. The input keys are Perkinsstyle, which consist of seven keys that represent dot one through dot six, and the space bar. In addition to these seven keys, there are two function keys that correspond to the backspace and enter keys. Also there are 32 cells that make up the Braille display.

The first thing you should do is place the Braille Sense Plus B32 on a level surface that you can use to examine the Braille Sense Plus B32, such as a table or desk. When the Braille Sense Plus B32 is placed on a level surface, the shape of the entire unit will resemble a small, thin rectangular box. The Braille Sense Plus B32 has six sides. You should feel for the Braille keys and Braille display. The side that the

Braille keys and Braille display are on should be facing up. The side that is now facing up is referred to as the top of the Braille Sense Plus B32. The side that is facing to your right is called the right side panel. The side facing to your left is called the left side panel. The side that is facing away from you is called the rear panel. The side that is facing toward you is called the front panel, and the side that the Braille Sense Plus B32 is sitting on is called the bottom panel.

This section of the manual describes each side of the Braille Sense Plus B32 and the basic function(s) of each button and port. We will discuss each of the panels in the following order: top panel, right side panel, left side panel, rear panel, and front panel.

1.2.1 Top Panel

Starting with the top of the Braille Sense Plus B32, you will find a Braille display that is located close to the front panel on the Braille Sense Plus B32. Above the Braille display, there are 32 small buttons that correspond to 32 Braille cells. These 32 small buttons are called cursor routing keys. You can use these buttons as cursor placement keys on the corresponding Braille cells when you are editing documents. The cursor routing keys will also work as shortcut keys in certain situations.

On both the extreme right and left sides of the Braille display, are two capsule shaped buttons. These buttons divided into two parts up and down. These buttons are called scroll buttons. The upper button called up scroll button and the lower button called down scroll button. The scroll buttons can be used to scroll through the menus or other information that is displayed on the Braille display. If you are on text that has more than 32 Braille cells, the scroll buttons will scroll the Braille display. By pressing F1-up scroll button, this will act as the up arrow, just like pressing space-1. Pressing F4-down scroll button will act as the down arrow, just like pressing space-4.

Above the cursor routing keys, are four rectangular shaped buttons. The spacebar is located between these four rectangular shaped buttons. Two of the rectangular shaped buttons are located on the left side of the spacebar and the other two are located on the right of the spacebar. These four rectangular shaped buttons are function

keys. Moving from left to right, the key that is the farthest to the left is called the F1 key, and the key to the right of the F1 key is called the F2 key. Then, you will feel the spacebar. The key that is to the right of the spacebar is called the F3 key, and the key that is to the right of the F3 key is the F4 key.

Above the function keys, you will find the Braille keys that are Perkins-style, including the spacebar. If you have ever used a regular computer keyboard, this setup is very similar to the keys on the home row on a regular computer keyboard. When you are typing, you should place your fingers on these 9 Perkins-style keys in the following manner:

Place your index finger, middle finger, ring finger, and pinky finger of your left hand on the left four buttons. Then, place your index finger, middle finger, ring finger, and pinky finger of your right hand on the right four buttons. Finally, place both of your thumbs on the spacebar, also called the space key.

The button where you placed your left index finger corresponds with dot one in Braille. The button that your left middle finger is on corresponds to dot two, and the button that your left ring finger is on corresponds to dot three. The button on which your left pinky finger is placed on is the backspace key.

The button that your right index finger is on corresponds with dot four in Braille. The button that your right middle finger is on is dot five, and the button your ring finger is placed on corresponds with dot six in Braille. The button on which your right pinky is placed is the enter key. And, the long bar shaped button where your thumbs are placed is called the spacebar.

Toward the top of the Braille Sense Plus B32 on the top panel, is a liquid crystal display (LCD) in the center. The LCD displays the printed text, so that someone who has sight can see what you are typing. On both sides of the LCD, there are two speakers, which enable the Braille Sense Plus B32 to emit sound.

1.2.2 Right Side Panel

Next, let's discuss the right side panel of the Braille Sense Plus B32. We will start from the front of the unit on the right side panel, and move our way toward the back. Toward the front of the Braille Sense

Plus B32 on the right side panel, you will find the USB OTG port. If you connect the unit to a personal computer by using this USB port, you can transfer files that are stored in the Braille Sense Plus B32 to your personal computer, and vice versa.

Continuing toward the back of the unit on the right side panel, you will find the USB port. You can connect a USB stick memory in this USB port, for auxiliary storage.

The last thing you will find on the right side panel of the unit is the AC adapter jack. The AC adapter will plug in to this hole, and then plug in to a standard AC electrical outlet, so that you can use the Braille Sense Plus B32 with electricity, instead of using power from the battery.

1.2.3 Left Side Panel

Now, let's take a look at the left side panel of the unit. If you move your finger to the left side of the Braille Sense Plus B32, you will find CF slot. You can insert CF card (compact flash card) in CF slot. Continuing toward the back of the unit on the left side panel, you will find the SD port. You can insert SD card (secure digital card) in SD slot.

1.2.4 Rear Panel

Next, let's take a look at the rear panel of the Braille Sense Plus B32. On the far left of the rear panel, you will find a small button in round groove. This is the reset button. If your unit is not responding properly, you can press this button with your finger, which will reboot the unit via a hard reset. Pressing the reset button is a hardware reset. Do NOT press the reset button for more than 5 seconds. You can also do a soft reset by pressing F2-F3-1-2-3-4-5-6. This is a software reset, instead of a hardware reset.

If you press down dots 1-2 and the reset button at the same time while the power is on, the Braille Sense Plus B32 will turn on without speech.

When the reset button is pressed, the Braille Sense Plus B32 will reboot. It will take about fifteen seconds for your unit to complete the reboot process.

At the right side of this reset button, you will find the local area network (LAN) port. If you connect the Braille Sense Plus B32 to an Ethernet interface through this port, you will be able to connect to the Internet, allowing you to browse websites as well as send and receive email.

To the right of the LAN port is a serial port. You can connect the Braille Sense Plus B32 to devices that have serial ports, such as printers and a personal computer. The details of this feature will be explained in more detail later in this manual.

Next, to the right of the serial port, you will find a video output port. The video output port can be used to display the text that is shown on the Braille display on a regular computer monitor for sighted people. If you want to use this port, it will have to be turned on from within the options menu. This port is very beneficial when using the Braille Sense Plus B32 in educational settings.

The last thing you will find on the rear side panel of the unit is a rectangular hole that is for the detachable battery. The battery is separated from the unit when the Braille Sense Plus B32 is shipped. Insert the battery into this rectangular slot until you hear a click sound. When you hear this sound, you will know that the battery is inserted correctly. To remove the battery from the unit, you will need to locate the latch that is found on the bottom of the unit. Using your left hand, pull the latch to the right panel, and then use your right hand to pull the battery out of the slot.

1.2.5 Front Panel

Finally, let's take a look at the front panel of the Braille Sense Plus B32.

On the far left of the front panel, you will find a slide switch. This slide switch is the key lock switch. This switch will be explained in more detail in the next section.

To the right of the key lock switch is microphone jack. You can plug in microphone.

To the right of the microphone jack is headphone jack. You can plug in stereo headphone jack.

Next, to the right of the headphone jack is five buttons in different

shapes. The five buttons are for playback audio and recording sounds. These five buttons will be explained in the Radio, Daisy and Media program sections in this user manual.

To the right of the five buttons is on/off switch. This switch will turn the unit on and turn the unit off. To turn on the unit, push the switch to the right. To turn off the unit, push the switch to the left.

Congratulations! You are now familiar with the very basic functions of the buttons and ports that are located on the Braille Sense Plus B32. The rest of the manual will discuss each function in greater detail to allow you to maximize the potential of your Braille Sense Plus B32.

1.3 Hardware Specifications of the Braille Sense Plus B32

- 1. Operating system: Windows CE 5.0
- 2. Flash memory: 8GB
- 3. RAM: 128MB
- 4. Memory extension: Compact flash, SD memory or USB stick memory
- 5. CPU: Intel PXA270
- 6. Battery: Lithium Ion (detachable), backup battery installed
- 7. Keyboard: Braille keyboard with Perkins-style, 4 function keys, 32 cursor routing keys, 4 scroll buttons, 5 audio buttons
- 8. Additional button and switch: key lock switch, audio mode switch, reset button
- 9. Braille display: 32 refreshable Braille cells
- 10. Video output: VGA output, LCD
- 11. Network: 10/100 based Ethernet
- 12. Wireless: WLAN b/g, Bluetooth
- 13. Interface: USB OTG, USB, serial (RS-232C) port, CF slot, SD slot
- 14. Sound: Internal stereo speakers, stereo headphone jack
- 15. Voice recording: Internal microphone, external microphone jack

1.4 Memory on the Braille Sense Plus B32

The Braille Sense Plus B32 has 128MB of RAM (random access memory) and 8GB of flash memory. The RAM is memory space that is reserved for running programs. This memory space is a temporary storage of any program files that are running or any current data located in documents that you are editing. The data in the RAM area

will disappear if your battery goes dead, and the AC adapter is not connected. Also, when the Braille Sense Plus B32 reboots for any reason, the data in the RAM will disappear. However, the data in flash memory will not disappear, even if your battery goes dead, or if your unit reboots.

Now that you know what the Braille Sense Plus B32 is, move on to the next section to learn more about the basic functions of the Braille Sense Plus B32.

2. Basic Functions of the Braille Sense Plus B32

2.1 How to Use the Commands

All of the commands that you will use on the Braille Sense Plus B32 are comprised of different combinations of the Braille keys. In this user manual, the "-" sign is used to indicate key combinations. For example, "space-z (dots 1-3-5-6)" indicates that the user should press the "space bar" and "letter z (dots 1-3-5-6)" simultaneously and then release them at the same time. You will also find expressions like "space-1-3-5-6" in this manual. This means that the spacebar with dots 1, 3, 5, and 6 should be pressed and released simultaneously. You can execute most commands by pressing the "enter" button. If you want to cancel the execution of any command, and return to the previous status, press "space-z (dots 1-3-5-6)." "Space-z (dots 1-3-5-6)" is a very important command to remember, as it will allow you to back out of programs and menus, when you may have pressed keys that you did not mean to press.

2.1.1 Messages

If you have setup an appointment in the Braille Sense Plus B32, schedule Manager, you will be notified of your appointments by the Braille Sense Plus B32 on the day of your appointment. When you are notified of an appointment, you can interact with the Schedule Manager as you normally would. In order to exit from the Schedule Manager, you should press "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)," and launch another program.

If you do not want to be alerted of "today's schedule" when you turn on the Braille Sense Plus B32, you should turn off the "check today's schedule" option which will be explained in section 2.4.2.28. Please refer to section 2.4.2.28 in this user manual for more information on this option.

If you turn off the Braille Sense Plus B32 while another program is opened, and then you turn it on again, the Braille Sense Plus B32 will tell you the name of the program that was running on the Braille Sense Plus B32 when you turned it off. If you turn off the Braille

Sense Plus B32 while you are using the word processor, it will tell you the file name/input mode and file protection status as well as the program name.

When you connect the AC adapter to the Braille Sense Plus B32, the Braille Sense Plus B32 will speak the message "AC adapter connected." When you disconnect it from the Braille Sense Plus B32, the Braille Sense Plus B32 will say, "AC adaptor disconnected."

2.2 Concept of the Menu

The menu on the Braille Sense Plus B32 is similar to the concept of a restaurant menu. For instance, a menu that is used at a restaurant will help you select your choice of food that will be served, while the menu on the Braille Sense Plus B32 provides you with choices that you can select. If you have selected a menu item from the menu items list, and there are sub menus, the Braille Sense Plus B32 will display those choices for that particular item.

Moving among the menu items is very simple.

Press "space-m (dots 1-3-4)" or F2 to call up the menu, and press up arrow key("space-1") to move to the previous item, and press down arrow key("space-4") to move to the next item. Or just press an alphabet that follows the menu names. This is a "shortcut key." Or you can execute the menu item without calling up the menu by pressing "hotkey."

Shortcut keys are the alphabets in the parentheses that follow the menu names. And hotkeys are the combination of a couple of keys like "enter," "space," or "backspace." These are displayed after the shortcut keys.

For example, if you are in the word processor, and press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "file," you will hear "new (n) pull down enter-n". The word "new" represents the function. The letter "n (dots 1-3-4-5)" is the letter that you would press while you are in the "file" menu in order to move directly to "new." "Enter-n (dots 1-3-4-5)" is what you would press to access the function "new" from anywhere in the word processor. The "n" is the shortcut key and "enter-n" is the hotkey. It is important to note that not all shortcut keys work from anywhere in the Braille Sense Plus B32; some commands

will only work while you are in a specific program. For example, if you want to activate the "new document" option in the word processor. You cannot press "enter-n (dots 1-3-4-5)" in the "program" menu to activate this option. You must be in the word processor program in order for "enter-n (dots 1-3-4-5)" to activate the "new document" option.

You can also move to the next menu item by pressing "space-4." You can move to the previous menu item by pressing "space-1." When you want to move to the first item of the menu, you can press "space-1-2-3." If you would like to move to the last item of the menu, you can press "space-4-5-6." The corresponding menu name will be displayed on the Braille display, and the menu name will be spoken through the TTS (text to speech) engine. If you want to listen to the name of the menu again, press "space-r (dots 1-2-3-5)." Once you move to a menu item that you want to execute, press "enter" in order to execute the menu. By pressing "enter," you will move to the sub menu. If there is no submenu, the Braille Sense Plus B32 will execute the command from the menu. This process is called "menu selection." You may also move to any menu or execute any menu by pressing an initial spelling of the menu.

Sometimes, if a menu is executed by pressing "enter," the lower-level menu is displayed. In this case, the right direction arrow sign (->) is displayed after the name of the corresponding menu on the Braille display. When this happens, the Braille Sense Plus B32 will say, "pull down." Or, if a menu is executed by pressing "enter," the dialog box is displayed. In this case, the ellipsis sign (...) will be displayed after the name of the corresponding menu on the Braille display. The Braille Sense Plus B32 will also speak the message, "common dialog."

Let's begin going through the various menus. First, turn the unit on by pushing the power switch toward you. Now, bring up the "program" menu. You can bring up the "program" menu by pressing "F1." The "program" menu is the top menu in the Braille Sense Plus B32. That is, the "program" menu is the parent directory for everything, as there are no directories or menus above the "program" menu. The items in the "program" menu are file manager, word processor, address manager, schedule manager, e-mail, media player,

web browser, daisy player, bluetooth manager, msn messenger, database manager, utility, option settings, and help. The first item of the "program" menu is "file manager." If "space-4" is pressed, the next menu item is displayed on the Braille display, and it is also spoken. If "space-4" is pressed repeatedly, the "help" menu will be displayed. The "help" menu is the last item on the "program" menu.

Press "space-4-5-6" when "file manager" is displayed. The Braille Sense Plus B32 will say "help," as the help menu is displayed. Then, press "space-1-2-3," and the Braille Sense Plus B32 speaks "file manager." It means that "space-4-5-6" moves to the last item of the "program" menu, and "space-1-2-3" moves to the first item of the "program" menu. If you want to move from the current menu to the upper level menu, press "space-e (dots 1-5)."

At any point in the "program" menu or navigating sub-menus, you can press the "F1" key to go to the "program" menu immediately. The file manager, which is the first item of the "program" menu, will be displayed.

2.2.1 Control Symbols on the Braille Sense Plus B32

The Braille Sense Plus B32 has many control symbols. Those symbols appear when you set "before" and "after" the "control information" in the "option" menu. The default value is set to "before." However, if you are in the web browser, the control symbols will be displayed even if you turn off the "control information" option. The control symbol will appear in front and back of the menu name or item name. For example, you might see something like, "MN file (f) pull down."

The following table shows the names and the symbols of the control symbols that are displayed in front and back of menu names.

Name	Symbol	Comments
Menu	MN	It means the menu that has
		submenus.
Menu item	MI	It means the menu that does not
		have a submenu.
List item	LI	The item name after this symbol

		represents the name of the item in any list. (Ex: "LI database" or "LI sample.txt" in the "file list" of the file manager)
Edit box	EB	The item name after this symbol represents the edit box name. You can find the edit box after the edit box name. In the web browser, the symbol "EB" may be followed by an edit box without an edit box name. Edit boxes that begin with the symbol "EB" are one line. (Ex: "EB name: (cursor)" in the address manager program or "EB (cursor)"
Multi edit box	MEB	This also represents the edit box. But you can type in more than one line in the edit box. (Ex: "MEB subject: (cursor)" in the e-mail program)
Computer edit box	CE	It means there is an edit box to input ASCII Braille. The edit box after this symbol should allow ASCII Braille to be typed in. (Ex: "CE to: (cursor)" in the email program)
Combo box	СВ	It represents the combo box in which you can choose an item by pressing the up arrow key or the down arrow key. (Ex: "CB type: *.*" in the "open dialog box" of the word processor program)
Edit combo box	ECB	You can choose the desired item by pressing the up or down arrow key, or by directly typing in the item name.

Prompt button	PB	(Ex: "ECB file name: (cursor) " in the "open dialog box" of the word processor program) PR follows any question in which
Prompt button	PB	PB follows any question in which you have to choose "yes" or "no." You can toggle between "yes" and "no" by pressing the "space" or the "backspace" button. (Ex: When you exit from the word processor, "PB save: yes")
Static box	ST	ST is followed by the current status. (Ex: "ST noname.hbl/insert
		mode/write" in the word processor program)
Link	LN	It means there is a link in the web page.
Anchor	ANC	It means there is an anchor in the web page.
Radio button	RB	It represents a radio button, which allows you to choose an item by pressing the up arrow key, down arrow key, space, or backspace. Also it cycles between items when pressing this key. (Ex: "RB attribute: write" in the "information dialog box" of the file manager)
Radio button select	SRB	It means that the radio button is selected in the web browser
Radio button unselect	URB	It means that the radio button is not selected in the web browser.
Check box check	SCHB	It means that the check box is selected in the web browser.
Check box uncheck	UCHB	It means that the check box is not selected in the web browser.

Links, anchors, and check boxes are controls that are only used in

the web browser. The symbols enable you to understand what type of box or menu you are working with. For example, if "MN," "MI," or "LI" are displayed in front of a list, you can move from one item to the next item or previous item by pressing the up or down arrow keys. If "ECB," "EB," "CB," or "MEB" are displayed on the display, you will have to find the cursor and input the desired letters at the cursor position. If "BT" is displayed, you can press "enter" to "push the button."

2.3 Using the Function Keys

There are four function keys on the Braille Sense Plus B32. When using the Braille Sense Plus B32, you can open the menus, cancel tasks, and move to other items by using these function keys. No matter where you are in the Braille Sense Plus B32, the "F1" key will open the Braille Sense Plus B32 "program" menu. You can also use "F1" and the shortcut key for each program in the "program" menu to open each program anywhere in the Braille Sense Plus B32. For example, if you are in the word processor, and want to open the web browser, you could press "F1-b (dots 1-2)" to open the web browser. In each program, "space-m (dots 1-3-4)" and the "F2" key will open the specific menu for each program. The "F3" key has the same function as "tab ("space-4-5"). If you press "space-F3," this will have the same function as pressing "shift-tab ("space-1-2")." The "F4" key will function just like the "escape" key does on a personal computer. This key performs the same function as pressing "space-e (dots 1-5)." Please note that the "escape" key does not exit a program, as does "space-z (dots 1-3-5-6)."

You can use combinations of the function keys to allow you to do many tasks. Pressing "F1" and "F2" at the same time will work the same as "page up" on a personal computer. If you press the "F3" and "F4" keys at the same time, this is the same as pressing "page down" on a personal computer. The combination of the "F1" and "F4" keys will move you to the task ID (like the task bar in a computer running Microsoft Windows). If you press the "F2" and "F3" keys simultaneously, you can switch between the different programs that are running just like pressing "alt-tab" in your PC. The task ID and program switching will be explained in greater detail in the section 2.10, entitled, "Multi-Tasking."

2.4 Option Menu (Called Option Settings in the "Program" Menu)

The "option" menu in the Braille Sense Plus B32 has information on all of your settings. You can change your preferences regarding each option. You can access the "option" menu by pressing "F1." Then, use "space-4" or "space-1" until you find "option settings." Then, press "enter" on "option settings." By pressing the "space-o (dots 1-3-5)," you can open the "option" menu while you are anywhere in the Braille Sense Plus B32. You can navigate all of the items in the "option" menu with "space-1 (up arrow)" or "space-4 (down arrow)." You can also use the scroll buttons for navigating through each of the items. You can change the setting values with the "spacebar" or "backspace" buttons. There are many shortcut keys which you can use to quickly move you to wherever you want to go in the "option" menu. By pressing "space" on an item in the "option" menu, you can turn the setting on or off, or toggle between the various options that are available for the item you are on.

The "option" menu is like a dialog box. To change and save the settings in the "option" menu, you must press "enter" once you have selected the setting that you want to save. If you do not press "enter" (or select "confirm") on the setting that you want, the setting will not be saved. Once you press "enter" to save the setting, the Braille Sense Plus B32 will say, "saved options," and you will be returned to where you were before you entered the "option" menu. To cancel the change to the setting, press the "F4" key, "space-e (dots 1-5)," or "space-z (dots 1-3-4-5)." The Braille Sense Plus B32 will then speak the message, "canceled saving options." When you are on an option, you can also use "tab ("space-4-5")" or "shift-tab ("space-1-2")" to go to the "confirm" and "cancel" buttons. If you want to save your settings, press "enter" on the "confirm" button. If you do not want to save the changes you made to the settings, press "enter" on the "cancel" button.

Before we go in to detail about each option, let's first go through a brief overview of what you will find in the "option" menu.

2.4.1 Option Menu Overview

The "option" menu contains different settings that can be changed in the Braille Sense Plus B32. By pressing "space-o (dots 1-3-5)," you can open the "option" menu while you are anywhere in the Braille Sense Plus B32. The "option" menu has five groups.

- 1. Braille setting (which includes Braille display, Braille cursor, eight dot mode, view/input grade, and message display time)
- 2. Voice setting (which includes voice, punctuation level, keyboard echo, capitalization alert, numbers, voice volume, voice rate, voice tone, and scroll voice)
- 3. Display setting (which includes LCD, LCD font size, and video display)
- 4. Print setting (which includes printer port and print paper size)
- 5. General setting (which includes warning message, play power on/off sound, reverse scroll, skip empty lines, control information, hot key information, announce shortcut keys, power saving mode, power saving kick in, check today's schedule, one-handed mode, check spelling automatically, default document type, progress indicator, Bluetooth, wireless LAN, and mobile disk.)

You can move between the five groups by pressing "page down ("space-3-4-5" or "F3-F4")" or "page up ("space-1-2-6" or "F1-F2")." When a group is opened, a list of options will appear that can be changed for the particular setting that you are on. A list of options under a group, are referred to as a "list." You can move between items in the "list" by pressing "space-1" or "space-4." You can then change the setting for each option by pressing "space" or "backspace" on each option.

2.4.2 Option Menu in Detail

Now, let's take a look at each function in the "option" menu in more detail, and look at the specific steps on how to change the various settings. It is very important to note that there are duplicate shortcut keys; therefore, pressing a shortcut key will move the focus to the next setting that has a matching shortcut key, and pressing the same shortcut key will move the focus to the next setting that has the same shortcut key. If there are no more settings that have the same

shortcut key, the Braille Sense Plus B32 will wrap around and move to the first match. Pressing "space-1" or "space-4" moves the focus to the previous setting or the next setting. Pressing "page up ("space-1-2-6")" or "page down ("space-3-4-5")" will move the focus to the beginning of the previous group of settings or to the beginning of the next group of settings.

2.4.2.1 Braille display

The first item that you will find in the "option" menu is "Braille display." You can switch the Braille display on and off with the "space" key. The default is set to "on" and the shortcut key is "b (dots 1-2)." You can toggle the Braille display on or off, by pressing "backspace-F3" while you are using another program in the Braille Sense Plus B32, without having to pull up the "option" menu. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.2 Braille Cursor

You can choose how you want the Braille cursor to show up on the Braille display. The shortcut key is "c (dots 1-4)." By default the cursor is set to "always up." If you do not want the cursor set to "always up," you can press the "space" key to turn the cursor "blinking," and one more press the "space" key to turn the cursor "off." If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

Note that there are three types of cursors:

- 1. "dots 7-8"
- 2. blinking "dots 7-8"
- 3. blinking "dots 1-2-3-4-5-6-7-8"

The blinking "dots 7-8" will be displayed when you are in the "overwirte mode" in the word processor. The blinking "dots 1-2-3-4-5-6-7-8" will appear when you are using the "start selection" setting in the word processor and when you are in an edit box. In all other situations, the cursor will be displayed as "dots 7-8."

2.4.2.3 Eight Dot Mode

You can choose to use a 6-dot-Braille or 8-dot-Braille display when using ASCII text mode. The shortcut key is "e (dots 1-5)." By default the 8-dot-Braille display is set to off. You can switch this option to 8-dot-Braille mode by pressing the "space" key. You can toggle this option on or off by pressing "F1-down scroll button" while you are using another program in the Braille Sense Plus B32, without having to pull up the "option" menu. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.4 View/input the Grade of Braille

You can choose what grade of Braille you want the Braille display to use when reading. The shortcut key is "g (dots 1-2-4-5)." The setting choices are grade 1, grade 2, and ASCII. You can switch between the settings by pressing the "space" key. You can press "space-g (dots 1-2-4-5)" to cycle through the three settings while you are using other programs without calling up the "option" menu. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.5 Message Display Time

You can choose when a Braille message will disappear from the Braille display. This setting will only work when the voice setting is set to "off." The shortcut key is "m (dots 1-3-4)." The setting options that you can choose from are "standby," "ignore", and 1 to 10 seconds. The default is "3 seconds." The "space" key increases the option by one second and the "backspace" key decreases the option by one second. You can set the unit to standby mode by pressing the "space" key until you reach "stand by." In this mode, the message will remain until you press a key. The higher value you select, the longer the message remains. If you read the message before setting the number of seconds, you can clear the message by pressing any key. If you choose "ignore," then messages will be ignored and won't show on the display. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.6 Voice

This menu will allow you to turn the Braille Sense Plus B32 voice on or off. The shortcut key is "v (dots 1-2-3-6)." By default the voice is set to on, so you will hear the Braille Sense Plus B32 speak. You can turn off the voice with the "space" key. You can toggle it on and off by pressing "backspace-F2" while you are using another program in the Braille Sense Plus B32 without having to call up the "option" menu. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

You can also press "dots 1-2" while turning on the Braille Sense Plus B32, which will turn the Braille Sense Plus B32 on without speech. When resetting the Braille Sense Plus B32, you can also press "dots

1-2" when you press the reset button to reset the Braille Sense Plus B32, and turn on the Braille Sense Plus B32 without speech.

2.4.2.7 Punctuation Level

You can choose how you want the Braille Sense Plus B32 to read punctuation marks. The shortcut key is "p (dots 1-2-3-4)." The setting options are "all," "off," "punctuation," and "symbol." The default setting is set to "all" in which the Braille Sense Plus B32 will say all punctuation marks and symbols. The "space" key allows you to cycle through all four of the setting values. If you select "off," the Braille Sense Plus B32 will not say any punctuation marks. The option, "punctuation" will make the Braille Sense Plus B32 say only punctuation marks, but the "symbol" option will say all symbols without saying punctuation marks. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.8 Keyboard Echo

With this option, you can decide how the Braille Sense Plus B32 will speak when you are typing. The shortcut key is "k (dots 1-3)." The setting values are "on with characters and words," "on with characters," "on with words," and "off." If you select the default "on with characters and words," you can hear each keystroke and a word right after it is completed. If you select "on with characters," you can hear each keystroke letter by letter. If you select the "on with words" option, you can hear each word right after it is completed, but not each letter. You can cycle through each of the options by pressing the "space" key. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.9 Capitalization alert

You can decide how the Braille Sense Plus B32 will speak the "capital character" when you type the character or read the document by using "space-3" or "space-6" in computer edit box or ASCII mode. The shortcut key is "u (dots 1-3-6)." The setting values are "off," "say cap," and "pitch." The default value is "off." If you select the default, read the same regardless of capital letter and lower case letter. And if you select the "say cap," you will hear "cap" sound before the capital letter. For example, when you meet the capital letter "V," Braille Sense Plus B32 will talk "cap v." And if you select the "pitch," you will hear higher tone when meet the capital letter. You can cycle through each of the options by pressing the "space" key. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-

2.4.2.10 Numbers

5)."

You can choose how you want the Braille Sense Plus B32 to read number. The shortcut key is "n (dots 1-3-4-5)" with the default set to "on."

For example, if you set "on," the "2007" will read "two thousand seven." And you set "off," "the "2007" will read "two zero zero seven." You can change the value by using "space."

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.11 Voice Volume

You can set the volume level of the voice on the Braille Sense Plus B32. The shortcut key is "I (dots 1-2-3)." The setting value is 1

through 10 with the default set on 6. When you have set this option to 1, the volume will be set at the lowest level. If you set this option to 10, the volume is the loudest. If you set the volume level to 1, you will almost not be able to hear. The "space" key increases the volume and the "backspace" key decreases the volume by one number at a time. Please note that if you are at volume level 10, and increase the volume by one, the volume loops back to level 1. The same is true if you are at level 1, and decrease the volume by one unit. You will then be at level 10. Without opening the "option" menu, you can increase the volume with the key combination of the "backspace" and "F4" keys or you can decrease it with the "backspace" and the "F1" key.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.12 Voice Rate

You can control the speed of the Braille Sense Plus B32 speech. The shortcut key is "r (dots 1-2-3-5)." The setting options are 1 through 12 with the default set to 8. The "space" key increases the speed level and the "backspace" key decreases the speed level by one unit at a time. Without opening the "option" menu, you can increase the speed with the key combination of the "space" and "F4" keys, or you can decrease it with the "space" and the "F1" key. If you are at level 12, and increase the speed by one unit, you will go to level 1. Also, if you are at level 1, and decrease the speed by one unit, you will go to level 12.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.13 Voice Pitch

You can control the voice pitch of the Braille Sense Plus B32. The shortcut key is "t (dots 1-2-3-4-5)." The available options are 1 through 10 with the default set to 6. At level 10, the voice tone will be the highest; and, at level 1, the voice tone will be the lowest. The "space" key will increase the voice tone and the "backspace" key will decrease the voice tone by one level. Just as with the voice volume and voice speed, if you are at level 10, and you increase the voice tone by one level, you will go to level 1. And, if you are at level 1 and decrease the voice tone by one level, you will go to level 10. When you are not in the "option," menu, you can increase the tone by pressing, "enter" and "F4," or you can decrease it by pressing "enter" and "F1."

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.14 Scroll Voice

You can decide if you want the Braille Sense Plus B32 to speak while using the scroll buttons in the document. The shortcut key is "s (dots 2-3-4)" with the default set to "off." The default setting (off) does not allow the Braille Sense Plus B32 to speak while scrolling. The "space" key toggles off/on. If you set the option to "on," you can hear the Braille Sense Plus B32 while scrolling.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.15 LCD

You can decide whether the Braille Sense Plus B32 will show text on the LCD screen. If you decide to turn the LCD screen on, sighted people will be able to see what you are working on when they look at the LCD screen. The shortcut key is "I (dots 1-2-3)" with the default set to "off." The options that you can choose from for this setting are, "on," "off," and "all (lighting)." The "all (lighting)" setting will light the background of the LCD screen. You can toggle between all three of these options by pressing the "space" key.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.16 LCD Font Size

Here, you can change the font size on your LCD panel. The shortcut key is "f (dots 1-2-4)." The default is set to 19, but you can set the font size anywhere from 12 to 20. You can increase the font by one size with the "space" key, and you can decrease the font size with the "backspace" key. If you have the font size set to 20, and you increase the font by one size, the font will go to 12. If your font size is 12, and you decrease the font by one size, the font will go to 20. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.17 Video Display

You can choose to have the Braille Sense Plus B32 show your tasks on a VGA monitor. That is, a monitor that would normally hook up to a personal computer. The shortcut key is "d (dots 1-4-5)" with the default set to "off." To use a VGA monitor, you need to connect a cable from the Braille Sense Plus B32 VGA port to a computer monitor. You can toggle this option on and off with the "space" key. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the

setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.18 Printer Port

You can choose which port will be used for your printer port when sending your documents to a printer. The shortcut key is "p (dots 1-2-3-4)." The default is set to "USB." If you want to use a USB port printer, you keep the default setting. If you want to use a parallel port printer, you change the setting. You can toggle the options by hitting the "space" key.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)." For your reference, if you want to use parallel port printer, you must connect the USB port to cable that convert USB into parallel.

2.4.2.19 Print Paper Size

This option allows you to select the size of the paper that an ink printer will use, if you will be printing to an ink printer. The shortcut key for this function is "s (dots 2-3-4)." You can change the size for this option by pressing "space." You can choose between the settings of, "letter" (8.5 inches by 11 inches) or, "legal" (8.5 inches by 14 inches.)

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.20 Warning Message

You can choose whether you will hear a warning sound or not. The shortcut key is "w (dots 2-4-5-6)." This option is useful if the speech

setting on the Braille Sense Plus B32 is turned off. The default for this option is set to "on." If you turn off the speech, you will hear a beeping sound when you type in keys that the Braille Sense Plus B32 does not accept. If you don't want to hear the warning sound, you can press the "space" key once to turn "off" the warning message. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.21 Play Power On/Off Sound

You can choose whether you will hear a power on/off sound or not when you turn on the Braille Sense Plus B32. The shortcut key is "s (dots 2-3-4)." The default for this option is set to "on." If you keep default setting, you will hear a starting sound signal when you turn on or off the Braille Sense Plus B32.

If you don't want to hear the on/off sound signal, you can press the "space" key once to turn "off" the sound signal.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.22 Reverse Scroll

You can switch the direction of scrolling on the Braille Sense Plus B32. The shortcut key is "r (dots 1-2-3-5)" with the default set to "off." The "space" key toggles off/on. In the default setting (which has the reverse scroll set to off), the up scroll button moves up a 32-cell display in your document, or one previous item in a list. The down scroll button moves down a 32-cell display in the document, or the next item in the list. If you turn the reverse scroll on, the up and down scroll buttons will function in the reverse direction.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to

the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.23 Skip Empty Lines

You can choose to have the Braille Sense Plus B32 read a blank line, or to skip empty lines. The shortcut key is "e (dots 1-5)," and the default is set to "off." If you keep the default setting, you will hear the words "empty line" if there is a blank line. The "space" key toggles off/on. If you choose to turn this option on, the Braille Sense Plus B32 will skip all blank lines, and you will not hear the words "empty line" when there is a blank line. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.24 Control Information

You can choose the display location of information regarding the files and menus in the Braille Sense Plus B32. The short cut key is "I (dots 2-4)," and the default is set to "before." To toggle "control information" between before, after and off, press "space.

If you select "before," you will hear control information before a menu or list item. If you select "after," you will hear control information such as "list item" or "menu item" after a menu or list item. If you have control information shut off, you will not hear "list item" or "menu item."

Note that if the web browser is activated, the control symbols will appear even if you turn off the "control information" option. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.25 Hot Key Information

As described before, hot keys are keystrokes that can take you directly to an item, such as a menu, or a particular item in a list. You can choose the speech output method of hot key. The short cut key is "h (dots 1-2-5)," and the default is set to "ASCII character." The setting values are "ASCII character," "dot patterns," and "off." You can cycle through each of the options by pressing the "space" key. For example, when you select "ASCII character," the "open (o) entero" will output with "open (o) enter-o." And if you select "dot patterns," the "open (o) enter-o" will out put with "open (o) enter dots 1 3 5." And if you select "off," you can't hear the hot key information. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.26 Announce shortcut keys

The "announce shortcut keys" option allows you to decide if the Braille Sense Plus B32 will say the shortcut key for a function. The shortcut key is "s (dots 2-3-4)" and the default is set to "on." For example, if you hear, "file f pull down," the shortcut key is the letter "f." If you prefer the Braille Sense Plus B32 only says, "file pull down," you will want to turn the "announce shortcut keys" setting off. To toggle "announce shortcut keys" between on and off, press "space."

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.27 Power Saving Mode

You can choose to have the Braille Sense Plus B32 use the power saving mode. The shortcut key is "p (dots 1-2-3-4)." The default

setting is set to "on," which will use the power saving mode. The "space" key switches between "on," off, and "message." If you don't want to use the power saving mode, you can set the option to "off." If you set the option to "message," you will hear a warning message that says "power on" in 10, 20, or 30 minute increments (depending on the setting that you will choose for power saving kick in) if you have not pressed any keys on the Braille Sense Plus B32. The next section explains how to change the power saving kick in to 10, 20, or 30 minutes. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

For your reference, this option is available only when the AC adaptor is connected to the unit. In other word, although you set the option to "on" if AC adaptor is connected to the unit, the unit will not go to the sleep mode automatically when you meet the "power saving kick in" time.

2.4.2.28 Power Saving Kick In

When you want to use the power saving mode, you can set the time when the power saving mode will begin. The shortcut key is "k (dots 1-3)" with the default set at "after 10 minutes." If you set this option to the default, the Braille Sense Plus B32 will enter into power saving mode when you have not used the Braille Sense Plus B32 for 10 minutes. The "space" key changes the option setting to 10 minutes, 20 minutes, or 30 minutes.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.29 Check Today's Schedule

In the "schedule manager" (which you will learn about later), you are able to keep track of your appointments, using the Braille Sense Plus B32. The Braille Sense Plus B32 is able to check today's schedule when you turn it on. You can decide if you want the Braille Sense Plus B32 to show today's schedule when it powers on. The short cut key for this option is "s (dots 2-3-4)." To toggle this option between off and on, press "space."

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.30 One-Handed Mode

You can choose one-handed mode on or off when you use the Braille Sense Plus B32. The shortcut key is "h (dots 1-2-5)." The default for this option is set to "off." The setting options are "on" and "off." The detail information about one-handed mode refers to "2.14 One-Handed Mode."

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)." For your reference, this option is set to "off" even if you are set to "on" when connected the Braille Sense Plus B32 to USB keyboard. And if you remove the USB keyboard, this option will be returned to value that before you connected to the USB keyboard.

2.4.2.31 Spell check Automatically

You can choose whether the Braille Sense Plus B32 will check spelling or not. This option is available in "multi edit boxes" in programs such as the schedule manager, address manager, e-mail

messages, the word processor, etc. The short cut key for this option is "c (dots1-4)."

By default this setting is set to "off" which will not check your spelling. If you want to check spelling, press "space" to toggle the option to "on" and press "enter." Or, press "tab (space-4-5)" to move to the "confirm" button, and press "enter."

If you set the option to "on" and enter a misspelled word, you will hear a beep sound. You will hear a beep sound, even though you shut "off" the warning message discussed in section "2.4.2.20."

If you do not want to save the changed setting, press "tab (space-4-5)" to move to the "cancel" button, and press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.32 Default Document

This function is used to set the default document type applied when you create a new document using the word processor on the Braille Sense Plus B32. The shortcut key for this option is "q (dot 1-2-3-4-5)". When you create a new document in the "word processor", "Braille document" (.brl file) is selected as the file type by default. You can change the default setting using this option.

You can choose between "sense document", "Braille document," and "text document". By default, it is set to "Braille document." Press "space" to toggle through the three settings, and press "enter," or press "tab (space-4-5)" to move to the "confirm" button, and press "enter," to save the changed setting.

If you do not want to save the changed setting, press "tab (space-4-5)" to move to the "cancel" button, and press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

For your reference, this option is set to "text document" even if you are set to "sense document" or "Braille document" when connected the Braille Sense Plus B32 to USB keyboard. And if you remove the USB keyboard, this option will be returned to value that before you connected to the USB keyboard.

2.4.2.33 Progress indicator

Progress indicator shows the progress of opening a document, copying files or opening any webpage. This option is used to set the progress sign. The shortcut key is "p (dots 1-2-3-4)," and you can choose one among "silent," "beep," and "message." By default, it is set to "message."

Press "space" to toggle through three settings, and press "enter" to save to the changed option.

If it is set to "message," the Braille Sense Plus B32 will say progress in percentage, like 10% or 20%. If it is set to "beep," the Braille Sense Plus B32 outputs beep sound during copying or opening any documents or webpage. If it is set to "silent", the Braille Sense Plus B32 will not hear the any sound in progress of copying or opening. If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.4.2.34 Bluetooth

You can decide whether the Braille Sense Plus B32 will turn Bluetooth on.

The shortcut key for this option is "b (dots 1-2)." You can choose between "on" and "off" by pressing "space." By default, it is set to "off."

You can toggle it on and off by pressing "backspace-3-4-5-6" while you are using another program in the Braille Sense Plus B32 without having to call up the "option" menu.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

For your reference, in order to use Bluetooth function of the Braille Sense Plus B32, please turn it on. And please turn it off while you are not using the Bluetooth function to save battery power.

2.4.2.35 Wireless LAN

You can decide whether the Braille Sense Plus B32 will turn Wireless LAN on.

The shortcut key for this option is "w (dots 2-4-5-6)." You can choose between "on" and "off" by pressing "space." By default, it is set to "off."

You can toggle it on and off by pressing "backspace-1-4-5-6" while you are using another program in the Braille Sense Plus B32 without having to call up the "option" menu.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

For your reference, in order to use wireless LAN function of the Braille Sense Plus B32, please turn it on. And please turn it off when you are not using the wireless LAN to save battery power.

2.4.2.36 Wired LAN

You can decide whether the Braille Sense Plus B32 will turn Ethernet card (Wired LAN) on.

The shortcut key for this option is "I (dots 1-2-3)." You can choose between "on" and "off" by pressing "space." By default, it is set to "on."

You can toggle it on and off by pressing "backspace-1-5-6" while you are using another program in the Braille Sense Plus B32 without having to call up the "option" menu.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel"

button, and then press "enter." You can also cancel saving the setting by pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)."

For your reference, if you want to save battery power, turn this option off when you are not using the Ethernet (Wire LAN).

2.4.2.37 Mobile Disk

You can choose whether the Braille Sense Plus B32 will be used as a mobile disk or not when the Braille Sense Plus B32 is connected to the personal computer (PC) via USB. The shortcut key for this option is "d (dots 1-4-5)" with the default set to "on." The "space" key toggles off/on.

If you keep default setting, PC recognizes the Braille Sense Plus B32 as the mobile disk automatically when connecting the Braille Sense Plus B32 to PC.

If you select "off," PC doesn't recognizes the Braille Sense Plus B32. In this case, if you want to connect the PC to the Braille Sense Plus B32, you need to install and execute the Active Sync program in the PC. You can download the Active Sync program from the Microsoft website for free.

If you have changed the setting, press the "enter" key to save the setting. You can also "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "confirm" button, and press "enter." If you do not want to save the setting, "tab ("space-4-5")" or "shift-tab ("space-1-2")" to the "cancel" button, and then press "enter." You can also cancel saving the setting by pressing "space—z (dots 1-3-5-6)" or "space-e (dots 1-5)."

2.5 The AC Power Supply and the Battery Pack for the Braille Sense Plus B32

It is very useful to know what the remaining battery power when the Braille Sense Plus B32 is being operated only on battery power. If the remaining battery power is not sufficient, the Braille Sense Plus B32 will indicate that the battery power is low. In this case, you need to check the remaining battery power, especially when you are using the Braille Sense Plus B32 without plugging it into an AC power supply.

To check the battery power status, press "space-1-6." You will find

the following 2 items:

- 1. Battery power level
- 2. Power source (battery or AC supply)

The battery power level represents the percentage of the remaining battery power. The power source indicates whether power is coming from the battery or the AC power supply. If the battery power level drops under 15 percent, the Braille Sense Plus B32 will display the battery status on the Braille display, and it will announce (through the speakers) that the battery has less than 15 percent of its power left. If the battery power level falls below five percent, the Braille Sense Plus B32 will give you a warning indicating that your battery power level is under five percent, and the Braille Sense Plus B32 will be automatically turned off in one minute, unless you connect the Braille Sense Plus B32 to an AC power supply.

Let's explore the detachable battery pack. When the Braille Sense Plus B32 is shipped, you will find the battery pack is not installed in the Braille Sense Plus B32. This is done to prevent damage during shipping. When you insert this battery pack in to the Braille Sense Plus B32 for the first time, the unit may display an inaccurate battery power level. Before using the Braille Sense Plus B32 for the first time, please charge the battery for six hours. If you need to use the unit during the initial recharge, the unit should be connected to the AC power supply for at least seven hours in order to fully charge the battery. When you remove the battery from the Braille Sense Plus B32, make sure your unit is turned off; especially when the AC power supply is not connected to your unit. Otherwise, you will lose all of your data that is stored in RAM. If you remove the battery, and do not have the Braille Sense Plus B32 hooked up to the AC power supply, your data that is stored in RAM will remain for only about an hour. In order to keep your data that is stored in RAM, the Braille Sense Plus B32 must be connected to an AC power supply or battery pack within an hour; otherwise the data that is stored in RAM will be lost.

2.6 Basic Explanation of Disks, folders, and files

The flash memory in the Braille Sense Plus B32 is similar to a big bookshelf in a library. The piece of hardware in the Braille Sense Plus B32 that is called the "disk" is similar to the idea of a bookshelf in a library. You can make partitions on a bookshelf in order to organize books into categories. Each category can be compared to what are called "folders" on the Braille Sense Plus B32. The books in each section can be compared to what are called "files" on the Braille Sense Plus B32. You can save files into any folders at your convenience. If you make the proper folder names for files you are saving, it will make it easier to find saved files when you need to access them later.

When the Braille Sense Plus B32 is shipped from the factory, the name of the flash memory in the Braille Sense Plus B32 is called "flashdisk." You can create folders on this "flashdisk" in any way that you prefer.

You can also expand your memory space by adding additional memory devices, such as a floppy disk drive through a USB port, USB stick memory (also known as a USB flash drive), or a compact flash memory card in the CF slot. The default name of the floppy disk drive is "FDD" and the name of the CF card is "CFD." The USB stick memory is called "SMD." If you decide to add any of these memory devices, you will be able to create folders, and save files on the additional memory devices.

2.7 Controlling the Volume, Speed, and the Tone of Speech

You can change the volume, speed, and tone of speech used on the Braille Sense Plus B32. To change the volume, you can press "backspace-F4" to raise the volume. Press "backspace-F1" to lower the volume. To make changes in the reading speed, you can press "space-F4" to make the reading faster. Press "space-F1" to make the reading speed slower. In order to make changes in tone, press "enter-F4" for a higher tone and "enter-F1" for a lower tone. When any of the above combination keys are pressed, the Braille Sense Plus B32 will announce the status of its volume, speed, or tone. The changes you made with these combination keys will remain in effect even when you turn off the machine and turn it back on again. These changes can also be made in the "option" menu settings. Please

refer to sections 2.4.2.11, 2.4.2.12, and 2.4.2.13 in this user manual.

2.8 How to use the Voice and the Braille display

When using the Braille Sense Plus B32, you can choose to use Braille only or speech only for reading. You can also use both Braille and speech at the same time for reading. However, you cannot turn off both Braille and the speech simultaneously. You can utilize "backspace-F2" to turn the speech on and off. You can use "backspace-F3" to turn the Braille on and off. Please refer to section 2.4.2.1 in this user manual for more information.

2.9 How to type the character

In the document, "edit box" and "multi edit box" on Braille Sense Plus B32, you can enter the grade 1 or grade 2 Braille. But in the "computer edit box" such as "to" in email program, you have to enter the computer Braille.

If you want to enter the capital letter, you can use the "capital sign (space-u (dots 1-3-6))" when you enter the computer Braille. For example, if you want to enter the "H" in computer edit box, you press the "space-u (dots 1-3-6)" and press the "dots 1-2-5."

If you press "space-u (dots 1-3-6)" twice, capitals continue until you turn off by pressing "space-u (dots 1-3-6)."

You can use the "space-backspace" instead of "capital sign (space-u)." Only, you have press "space-backspace" and "dots 1-2-5" simultaneously.

Also you can use the "capital sign" when you enter the "at sign." To input the "at sign," you press the "space-u (dots 1-3-6)" and press the "dot 4." Also you can input the "at sign" by pressing "space-backspace-dot 4."

And if you want to enter the number, you can use the "number sign (dots 3-4-5-6)." But in the computer edit box, you have to input the number in computer Braille that lowered by one row and no number sign.

2.9.1 The ASCII table for a computer Braille input

exclamation mark: dots 2-3-4-6

quotation mark: dot 5

number sign: dots 3-4-5-6 dollar sign: dots 1-2-4-6

percent: dots 1-4-6

ampersand: dots 1-2-3-4-6

apostrophe: dot 3

left parenthesis: dots 1-2-3-5-6 right parenthesis: dots 2-3-4-5-6

asterisk: dots 1-6 plus: dots 3-4-6 comma: dot 6 dash: dots 3-6 period: dots 4-6 slash: dots 3-4 0: dots 3-5-6

1: dot 2

2: dots 2-3

3: dots 2-5

4: dots 2-5-6

5: dots 2-6

6: dots 2-3-5

7: dots 2-3-5-6

8: dots 2-3-6

9: dots 3-5

colon: dots 1-5-6 semi colon: dots 5-6 less than: dots 1-2-6 equal: dots 1-2-3-4-5-6 great than: dots 3-4-5

question mark: dots 1-4-5-6

at sign: space-u (dots 1-3-6), dot 4

A: space-u (dots 1-3-6), dot 1

B: space-u (dots 1-3-6), dots 1-2

C: space-u (dots 1-3-6), dots 1-4

D: space-u (dots 1-3-6), dots 1-4-5

E: space-u (dots 1-3-6), dots 1-5

F: space-u (dots 1-3-6), dots 1-2-4

G: space-u (dots 1-3-6), dots 1-2-4-5

H: space-u (dots 1-3-6), dots 1-2-5

I: space-u (dots 1-3-6), dots 2-4

J: space-u (dots 1-3-6), dots 2-4-5

K: space-u (dots 1-3-6), dots 1-3

L: space-u (dots 1-3-6), dots 1-2-3

M: space-u (dots 1-3-6), dots 1-3-4

N: space-u (dots 1-3-6), dots 1-3-4-5

O: space-u (dots 1-3-6), dots 1-3-5

P: space-u (dots 1-3-6), dots 1-2-3-4

Q: space-u (dots 1-3-6), dots 1-2-3-4-5

R: space-u (dots 1-3-6), dots 1-2-3-5

S: space-u (dots 1-3-6), dots 2-3-4

T: space-u (dots 1-3-6), dots 2-3-4-5

U: space-u (dots 1-3-6), dots 1-3-6

V: space-u (dots 1-3-6), dots 1-2-3-6

W: space-u (dots 1-3-6), dots 2-4-5-6

X: space-u (dots 1-3-6), dots 1-3-4-6

Y: space-u (dots 1-3-6), dots 1-3-4-5-6

Z: space-u (dots 1-3-6), dots 1-3-5-6

left bracket: space-u (dots 1-3-6), dots 2-4-6

back slash: space-u (dots 1-3-6), dots 1-2-5-6

right bracket: space-u (dots 1-3-6), dots 1-2-4-5-6

carat: space-u (dots 1-3-6), dots 4-5

underline: space-u (dots 1-3-6), dots 4-5-6

grave accent: dots 4

a: dot 1

b: dots 1-2

c: dots 1-4

d: dots 1-4-5

e: dots 1-5

f: dots 1-2-4

g: dots 1-2-4-5

h: dots 1-2-5

i: dots 2-4

i: dots 2-4-5

k: dots 1-3

I: dots 1-2-3

m: dots 1-3-4

n: dots 1-3-4-5

o: dots 1-3-5

p: dots 1-2-3-4

q: dots 1-2-3-4-5

r: dots 1-2-3-5

s: dots 2-3-4

t: dots 2-3-4-5

u: dots 1-3-6

v: dots 1-2-3-6

w: dots 2-4-5-6

x: dots 1-3-4-6

v: dots 1-3-4-5-6

z: dots 1-3-5-6

left brace: dots 2-4-6 vertical bar: dots 1-2-5-6 right brace: dots 1-2-4-5-6

tilde: dots 4-5

2.10 Multi Tasking

The Braille Sense Plus B32 can do more than one task at the same time, which is called multi-tasking. For example, you can work with the word processor while you are listening to music, and you can put calculations into a document at the same time. This is called a Braille Sense Plus B32 multi-task. If you want to work with the word processor while listening to music, you can first run the media player and play a music file. While playing music, you can press the "F1" key to open the Braille Sense Plus B32 menu and run the word processor.

The Braille Sense Plus B32 can run up to seven programs simultaneously. You cannot have more than seven multi-tasks. That is, you cannot run more than seven programs at the same time. If you try to run a program that you are already running, the new instance of the program will not start, and you will be taken to the instance of the program that is already running.

For example, while you are working with a document called "A," you decide to execute the "file manager." Next, you move to a document called "B" by pressing the move keys in the "file list" of "file manager," and you press "enter." Then, the word processor will not load again for opening the document "B," but the document "B" will be opened in the word processor, which document "A" is also running on. If you want to switch documents, you need to open them in the word processor without running other programs. In this case, you can switch them with "tab(space-4-5 or F3)" or "shift-tab(space-1-2 or

space-F3)." Switching documents will be explained later in detail in section 4, which covers the word processor.

After you press F1 to call up the "program" menu, or after you press F1-F4 to open the Task ID, you can press "escape" ("space-e" or "F4") to return to the previously-running program.

If you want to switch between programs while running more than one program, press the "F1" and "F4" keys at the same time to open the Task ID. The Task ID shows the names and numbers of the running programs, just like the file manager. You can cycle through the running programs on the Braille Sense Plus B32 with the "space-1" or the "space-4" and scroll buttons. Press the "enter" key to run the program that you want after focusing on your selection.

The combination of the "F2" and "F3" keys can switch between all of the running programs immediately without opening the Task ID. It functions the same way as the "alt-tab" keys on your PC. If you are running three programs and you are in the second program, pressing the "F2" and "F3" keys at the same time will move you to the third program. If you press "F2-F3" again, you will be on the first program. In the above case, pressing "space-z (dots 1-3-5-6)" will close the current running program and move you to the previous program. However, if there is only one program running, pressing "space-z (dots 1-3-5-6)" will close the program and move you to the Braille Sense Plus B32 "program" menu. Note that "space-z (dots 1-3-5-6)" is different from the "escape" key, which does not close programs.

2.11 Switching Audio mode

The audio buttons on the front panel will work for different function according to the location of Audio mode switch.

If you push the audio mode switch to the left side, the Braille Sense Plus B32 will say "radio mode" and the audio buttons will work for the Radio program.

If you set the audio mode switch to the center, the Braille Sense Plus B32 will say "daisy mode" and the audio buttons will work for the Daisy program.

If you push the audio mode switch to the right side, the Braille Sense Plus B32 will say "media mode" and the audio buttons will work for the Media program.

So in order to use the audio buttons as you desire, you have to set the audio mode switch to the proper position. For example, when you are using Media program and the audio mode switch is located in the left side, the audio buttons on the front panel will work for radio program. The detailed function of the audio buttons will be explained in the Radio, Daisy and Media program sections in this user manual.

2.12 Switching Key lock

You can disable or enable any specified keys on the Braille Sense Plus B32 by using Key Lock switch on the front panel.

If the key lock switch put on left, Braille Sense Plus B32 will say "all keys locked." In this case, you can't use the all keys including the on/off switch.

If the key lock switch put on center, Braille Sense Plus B32 will say "top panel locked." In this case, only you can use the buttons and switches in the front panel (audio mode switch, audio buttons and on/off switch).

If the key lock switch put on right, Braille Sense Plus B32 will say "unlock." In this case, you can use the all keys (Braille keyboard, audio buttons, arrow keys, function keys, audio mode switch and on/off switch).

But, you can use the reset button, regardless of location of key lock switch.

2.13 Print Spool

The Braille Sense Plus B32 has a print spool function. This function enables the Braille Sense Plus B32 to do other tasks while printing to an ink-printer or Braille embosser. For example, if you send data to your printer or embosser, you will be immediately returned to where you were before the print command was executed. If you want to check the print spool dialog box after you have given the print command, press "space-2-3-4-6." Then, you will see the dialog box which has three controls. The first control is a list that gives you information about files that are being printed. There is also a "cancel" button and a "close" button. You can cycle through the three controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." In the information list, you can move item by item by pressing "space-4" or

"space-1." However, if you open up the dialog box without printing anything, you will see "no list" and the "close" button.

While printing, the information list will contain the following: "running program name," "printing file name," "printer type," "the number of copies," and either "printing" or "ready." For example, let's assume that we are printing one copy of "sample.hbl" in the word processor. In the info list, you will see "program: word processor, file: sample.hbl, printer, copy: 1, printing." If you are using a Braille embosser, you will see "embosser" instead of "printer." If there is not anything printing and, (the printer is waiting), you will see "ready" instead of "printing." If you print something out in the e-mail program, you will see "emailtemp.txt," instead of the file name. When you are printing something from the address manager, or the schedule manager, you will see the message, "prn_(time).txt."

If you focus on any of the files in the info list, and press "enter" on "cancel" after pressing "tab (space-4-5)," you will cancel the printing of that file. If you press "space-4-5" repeatedly, locate "close," and press "enter" on "close," you will close the print spool dialog box. Pressing "space-z (dots 1-3-5-6)" will also close the print spool.

2.14 One-Handed Mode

Braille Sense Plus B32 provides a one-handed mode for users restricted to the use of one hand for Braille input. To turn on one-handed mode, hold down F3, while turn on the power switch. And to turn off this mode (i.e. to return on two-handed mode), hold down F4, while turn on the power switch. Also, by using the Option menu, you can turn on or off this mode.

When one-handed mode turned on, the input methods are as follows:

- 1) To type a character, you press the dots in any combination or order. And when you have pressed all dots, press "space." For example, if you want to type the "h," you press "dot 1" and "dot 2" separately or together and then press "dot 5." And finally you press "space."
- 2) To press a command that includes "space," you press "space" both before and after the other keys. For example, if you want to press "space-o (dots 1-3-5)," you press "space" and then press

- "dot 1", "dot 3" and "dot 5" separately or together in any order. Then press "space" again.
- 3) To press a command that includes "backspace" or "enter," you press "backspace" or "enter" before the other keys. And then press other keys. Finally you press "space." For example, if you want to press "enter-I (dots 1-2-3)", you press "enter" and then press "dots 1-2-3." And press "space."
- 4) To press "space," "backspace" and "enter", you press this keys twice. For example, if you want to press "space" to make a space between words, you press "space" twice.

The operation of the arrow keys, function keys, audio buttons remains the same as in two-handed mode.

If one-handed mode is on, the Braille Sense Plus B32 will advise this each time it is turned on, and will also advise what to do to return to the two-handed mode.

2.15 Common Combination Keys

- 1. Call up the program menu: F1
- 2. Run the individual program in the program menu F1-"shortcut key" (varies for each program)
- 3. Call up the task ID list: F1-F4
- 4. Switch to previous program: Space-F2-F3
- 5. Switch to next program: F2-F3
- 6. Call up the menu in the individual program: Space-m (dots 1-3-4) or F2
- 7. Exit: Space-z (dots 1-3-5-6)
- 8. Escape: Space-e (space-1-5) or F4
- 9. Move to the next control in a dialog box: Tab (space-4-5 or F3)
- Move to the previous control in the dialog box: Shift-tab (space-1-2 or space-F3)
- 11. Move to the previous character: Left arrow key (space-3)
- 12. Move to the next character: Right arrow key (space-6)
- 13. Move to the previous line/item: Up arrow key (space-1)
- 14. Move to the next line/item: Down arrow key (space-4)
- 15. Move to the beginning of line/item: Home key (space-1-3)
- 16. Move to the end of line/item: End key (space-4-6)
- 17. Move to the top of a document or to the first item: Ctrl-home (space-1-2-3 or F1-F2-up scroll button)

- 18. Move to the bottom of a document or to the last item: Ctrl-end (space-4-5-6 or F3-F4-down scroll button)
- 19. Move to the previous page or to the first item of the previous 32item group: Page up (space 1-2-6 or F1-F2)
- 20. Move to the next page or to the first item of the next 32-item group: Page down (space 3-4-5 or F3-F4)
- 21. Scroll left: Up scroll button
- 22. Scroll right: Down scroll button
- 23. Move the cursor to each cell or move to an item: The corresponding cursor routing key
- 24. Read the current item again: Space-r (dots 1-2-3-5)
- 25. Say current time: Space-t (dots 2-3-4-5)
- 26. Check power status: Space-1-6
- 27. Call up the "option" menu: Space-o (dots 1-3-5)
- 28. Online help: Space-h (dots 1-2-5)
- 29. Checking your version: Space-v (dots 1-2-3-6) only in the Braille Sense Plus B32 "program" menu."
- 30. Check network status: Space-n (dots 1-3-4-5) in the Braille Sense Plus B32 "program" menu
- 31. Increase the voice volume: Backspace-F4
- 32. Decrease the voice volume: Backspace-F1
- 33. Increase the voice rate: Space-F4
- 34. Decrease the voice rate: Space-F1
- 35. Increase the voice tone: Enter-F4
- Decrease the voice tone: Enter-F1
- 37. One-handed mode on: hold down F3 while turning on
- 38. One-handed mode off: hold down F4 while turning on
- 39. Bluetooth on/off: Backspace-3-4-5-6
- 40. Wireless on/off: Backspace-1-4-5-6
- 41. Scroll voice on/off: F3-up scroll button
- 42. Selecting Braille cursor: F4-up scroll button
- 43. Selection control information: F2-down scroll button
- 44. Eight dot mode on/off: F1-down scroll button

3. File Manager

3.1 Overview

The functions and structures of the "file manager" on the Braille Sense Plus B32 are very similar to the "file manager" on a personal computer. In order to run the "file manager," press "f (dots 1-2-4)" or press "enter" when you are on "file manager" in the "program" menu.

The "file manager" includes an "address window" and a "file list." When you open the "file manager," the disk name will appear. The default disk name is "flashdisk." You can use the up and down arrows ("space-1" or "space-4") or the scroll buttons to explore additional disks. Press "enter" on the disk you want to open. The Braille Sense Plus B32 will show you the list of the files or folders on the disk you have opened.

When you press "tab (space-4-5 or F3)" or "shift-tab ("space-1-2" or "space-F3")" on the "file list," you will enter into an "address window." The "file list" and "address window" will be explained in more detail in section 3.2 and section 3.3 in this user manual.

For your convenience, the "file manager" provides you with menus and "hot keys." The menus will appear when you press "space-m (dots 1-3-4)" or "F2." Section 3.4 will provide a more detailed explanation of the hot keys that you can use.

It is possible to format the flashdisk, which will erase everything on the flashdisk. Be extremely cautious when executing this command. If you execute this command, you will loose all of your data. You will **NOT** be able to get this data back once the command has been executed. To format the flashdisk, press "space-1-2-3." While holding down "space-1-2-3," quickly press and release the reset button. Continue pressing "space-1-2-3" until you hear the flashdisk formatting.

3.1.1 Navigating the File List

There are two kinds of lists that you will see when using the Braille Sense Plus B32. The lists are: "file list" and the "menu list." When you reach the end of the "menu list," the Braille Sense Plus B32 will automatically bring you back to the top of the list when you press "space-4." However, when you reach the end of a "file list," the Braille Sense Plus B32 will remain at the end of the "file list," even if you press "space-4." The following is a list of the navigation keys;

- (1) Move to previous item: Up arrow key (space-1) or up scroll button
- (2) Move to next item: Down arrow key (space-4) or down scroll button
- (3) Move to the beginning of a list: Ctrl-home (space-1-2-3)
- (4) Move to the end of a list: Ctrl-end (space-4-5-6)

The following keystrokes are valid only when you are on a "file list."

- (1) Fast move to folder list or move to file list: Space-5-6
- (2) Move between file list and address window: Tab (space-4-5 or F3) / shift-tab (space-1-2 or space-F3)
- (3) Enter into a selected folder or open the selected file: Enter
- (4) Move to the upper level folder: Backspace
- (5) Fast move to the top level disk: Space-1-2-5-6
- (6) Move to the previous 32-item group: Page up (space 1-2-6 or F1-F2)
- (7) Move to the next 32-item group: Page down (space 3-4-5 or F3-F4)
- (8) Find and move to the file or folder in the file list by pressing the first character of the folder or file names. You must use ASCII characters.

3.1.2 Item (Folder or File) Selection Key

- 1) Select item by item ("space"): Select one or more item(s) while moving in a list. "*" is displayed in front of the selected item. Pressing "space" again on the selected file that has "*" displayed by it will cancel the selection.
- 2) Continuous selection ("enter-b (dots 1-2)"): This will select all of the items from the point where this command is executed to the

- item where the cursor is moved to. "*" will appear in front of the selected items.
- 3) Select all ("enter-a (dot 1)"): This selects all the items including files and folders in the current path. You can use navigation keys to move around the selected items to make sure they are selected. You can cancel selections or reselect canceled items by pressing the "space" on the item. When the "select all" command is given, the Braille Sense Plus B32 will say the number of selected files, and will display "*" in front of the selected files on the Braille display.

3.1.3 Cancel / Exit Key

Cancel ("space-e (dots 1-5)" or "F4"): This command will cancel a function, just like the "esc" key cancels functions on a personal computer.

Exit ("space-z (dots 1-3-5-6)"): This will cancel or stop a selected function or program. This is similar to the way "alt-F4" closes a program on a personal computer.

3.2 Using File Manager Features in the File List

When you open the "file manager," you will see the list of disks that you can access. You can choose a disk from the list, and then press "enter" to get into the selected disk. The Braille Sense Plus B32 will show you the list of folders and files on that disk. The items within the quotation marks are the folders, and the items without quotation marks are the files. The items on the list will be followed by numbers, such as 1/5 or 2/5. The numbers after the names of the items indicate where an item is on the list, and how many items are on the list. For example, "database 1/5," means that this is the first folder on a list that has five items.

3.2.1 Selecting Disks

When you open the "file manager," the first item on the list is "flashdisk." If you inserted the CF memory or SD card in CF card slot or SD card slot, CF memory card and SD card will be listed on this list. Any of the disks can be selected by using the up and down arrows

("space-1 or space-4"). You can also use the scroll buttons to choose one of the disks. After selecting the disk you want, press "enter" to open the disk you have selected. For more information on the name of the disks, refer to section 2.6.

3.2.2 Getting in and Out of a Folder (Opening/Closing a Folder)

- There are several ways to open a folder.
 You can utilize a menu to get into a specific folder.
- a. You can call up a menu by pressing "space-m (dots 1-3-4)" or "F2." You will have to choose the menu item called "open" from the list and press "enter" to get into a selected folder.
- b. You can also press "enter-o (dots 1-3-5)" to call up the menu to open a desired folder.
- c. Another way to open a selected folder is by just pressing "enter" on the folder that is selected.
- 2. To close the current folder, you can use the "backspace" key. Then, you will be at the next upper level folder list.

3.2.3 Opening a File

You can open a file by pressing "enter" on the item that is displayed. You can also use "enter-o (dots 1-3-5)" to open a file or folder. The Braille Sense Plus B32 will load the appropriate application or program to open the file you have chosen.

Another way of opening a file is using the menu. You can press "space-m (dots 1-3-4)" or "F2" to call up the menu. Then, press the letter "o (dots 1-3-5)," or you can press "enter" on the item named "open."

The file formats that are supported by the Braille Sense Plus B32 are as follows:

- 1. Hbl, brl, txt, pwd, brf, rtf, and doc files are supported by the word processor on the Braille Sense Plus B32.
- 2. Url, and html files are supported by the web browser on the Braille Sense Plus B32.

- ac3, asf, asx, m3u, mp2, mp3, ogg, pls, wav, wax, wma, and wmv files are supported by the media player on the Braille Sense Plus B32.
- 4. Daisy files are supported by the Daisy player on Braille Sense Plus B32.

If you press "enter" on a file type other than those mentioned above, the "open with" dialog box appears, because the file type is not associated with a program. Also, you can bring up the "open with" dialog box through the menu. By using the "open with" menu item, you can open the currently selected file with a program other than the program originally associated with it. First, press "space-m (dots 1-3-4)" to bring up the menu, press "space-4" repeatedly until you reach "open with," and then press "enter." You can also open the dialog box by pressing "enter-e (dots 1-5)" in the file list, or by pressing "e (dots 1-5)" in the menu.

This dialog box consists of the "open with" list, the "adopt" list, a "confirm" button, and a "cancel" button. You can move between these elements by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." Within the list, you can select the next item by pressing "space-4," and the previous item by pressing "space-1."

As soon as the dialog box opens, "open with: word processor" will be displayed. In this list, you can select a program, which would be the word processor, media player, or web browser. Pressing "space-4" will select the next program, and "space-1" will select the previous program. Once you have selected the program to open the file type with, press "tab (space-4-5)" to move to the "adopt" list. If you have selected the word processor, pressing "tab (space-4-5)" will take you to an additional list called "open mode." Using this list, you can specify whether the file will be opened as a Braille file or a text file. Press "space-4" or "space-1" to select one of the two file types, and then press "tab (space-4-5)" to move to the "apply to" radio button. In this radio button, you can specify whether only the currently selected file or all of the files with the same file extension as the currently selected file will be opened with the specified program. If you have set one of the two, press "enter" or "tab (space-4-5)" to move to the "confirm" button, and then press "enter" to apply what you have just set. If you have specified a program that does not support the file type, nothing will be displayed or played after the program has started. In the "file manager," if you activate the "open with" menu after focusing on folders that have Daisy or media files, you will see the associated program, Daisy or media player. If you activate the "open with" menu, and encounter a folder that does not have the Daisy info file (discinfo.html or ncc.html), you will not be able to see the Daisy player as an associated program. You can play all of the files after selecting either the Daisy or media player.

3.2.4 Send To

You can use this option to copy files and folders to different disks such as a flash disk, USB flash drive (also known as USB stick memory), SD card, or a CF memory card. You can select files and folders by using the item selection option, which was described in section 3.1.2. After selecting files and folders, you can call up the menu with "space-m (dots 1-3-4)" to choose the "send to" option. Then, when you press "enter" on "send to," the Braille Sense Plus B32 will display the list of disks that you can use to send your files or folders to. You can choose a destination disk by using the up and down arrow keys ("space-1" or "space-4"). Pressing "enter" on the desired disk will start copying the selected files and folders into the selected disk. Also, you can send files and folders by pressing "enter-s (dots 2-3-4)" without calling up a menu.

3.2.5 Copy / Move

There are some differences between "copy" and "move." "Copy" leaves the original files and folders in their original places, while "move" removes original files and folders from their original places.

In the "file manager," you can use the copy function as follows: First, you have to select the files and folders you would like to copy. Files and folders can be selected as explained in section 3.1.2 in this user manual.

Second, you need to call up the menu, and choose "copy" from the list to copy selected files and folders. If you want to move files and folders, you can choose "cut" from the menu. When the "copy" or "cut" command is executed, the Braille Sense Plus B32 will return to the file list.

Third, you need to go into the destination folder and call up the menu, and choose "paste." Press "enter" on "paste," and your selected files and folders will be copied or moved. If the destination folder is the same folder where the selected files are, the Braille Sense Plus B32 will attach "copy1-" to your original file names for copied files. If the same files are copied into the same folder once again, the Braille Sense Plus B32 will attach "copy2-" to the original file names for the second copied files.

If your destination folder has the same name as the file you are copying, the Braille Sense Plus B32 will say "file xxx already exists. Overwrite? Yes." Press "enter" if you want to replace the file. However, if you do not want to overwrite the file, select "no," and press "enter." When "no" is selected, the "paste" function will be canceled.

Example: Copying "sample.txt" from the root folder to the download folder.

- 1. Select "sample.txt" from the root folder by using the navigation keys "up arrow (space-1)" or "down arrow (space-4)."
- 2. Call up the menu by pressing "space-m (dots 1-3-4)," and choose "copy." Then, press "enter." The Braille Sense Plus B32 will return to the file list in the root folder.
- 3. Move to the download folder, and press "enter." Call up the menu again to choose "paste." Press "enter" on "paste," or press "v (dots 1-2-3-6)" after calling up the menu to complete the file copy function. You can also use "enter-v (dots 1-2-3-6)" to do the same thing.

3.2.6 Delete Files or Folders

To delete files or folders, go to the folders or files you want to delete, and then select them, as explained in section 3.1.2. Call up the menu by pressing "space-m (dots 1-3-4)" to choose the "delete" function. Press "enter" on "delete" to complete the deletion of the selected files and folders. You can also press the letter "d (dots 1-4-5)" after calling up the menu to have the same result as above. You can delete selected files or folders even without calling the menu by using hot keys. "Space-d (dots 1-4-5)" and "enter-d (dots 1-4-5)" are the

hotkeys assigned to perform the delete function. However, "space-d (dots 1-4-5)" can be used with in the programs on the Braille Sense Plus B32. "Enter-d (dots 1-4-5)" can only be used in the "file manager." When you delete only one file or one folder, it is not necessary to use the select function. Instead, just use the navigation keys to go to the file or folder you want to delete, and then you can use the delete function from the "file manager."

3.2.7 Rename

You can change the name of a file or folder by using this function. To change the name of a file or folder, move to the file or folder you desire to rename. Section 3.1.1 describes the navigation method for using the file list. Call up the menu by using "space-m (dots 1-3-4)" to choose "rename" from the menu list. Press "r (dots 1-2-3-5)" after calling up the menu to activate the rename function quickly. Otherwise, you can use the down arrow key ("space-4") until you reach "rename" on the list. Press "enter" on this menu. Then, the Braille Sense Plus B32 will ask for a new name. On the Braille display, "new name? (current file name or folder name)" will appear. You must type in a new file name and folder name in ASCII characters. And if you type the file extension, you can change the file extension. Pressing "enter" after entering a new file name will complete the process of changing a file or folder name. You cannot use the following characters in a file name or folder: "|, \, <, >, ?, :, *"

3.2.8 New Document

You can create a new document with this option. There are several ways to access this function. You can utilize the menu by pressing "space-m (dots 1-3-4)," and you can use the down arrow ("space-4") until you reach "new document." Another way to use this function is by pressing "n (dots 1-3-4-5)" after calling up the menu. The hot key for this option in the "file manager" is "enter-n (dots 1-3-4-5)." When the new document function is activated, the Braille Sense Plus B32 will display "file format: text (txt)." You can create two types of documents, which are "text file" and "Braille file." When the Braille Sense Plus B32 displays "file format: text (txt)," you can use the down arrow ("space-4") to select the "Braille (brl)" file format. When you press "enter" on either "text (txt)" or "Braille (brl)," the Braille Sense

Plus B32 will display "new document name? New document0.txt" or "new document0.brl." "New document0.xxx" is the default file name based upon the file type you have chosen. The number after the new document will increase by one whenever you create a new document. You can also type in the document name you prefer. Then, the new document you named will be created. "|, \setminus , <, >, ?, :, *" characters cannot be used when creating a file name.

3.2.9 New Folder

You can create a new sub-folder under the current folder by using this option. You need to call up the menu in the "file manager" by pressing "space-m (dots 1-3-4)," and select "new folder" from the menu list by using the down arrow ("space-4"). Press "enter" on "new folder" to activate this function. The Braille Sense Plus B32 will ask, "new folder name?," and wait for your response. Enter your preferable new folder name in ASCII, and press "enter." Finally, your new folder has been created. You can still use the letter "f (dots 1-2-4)" after calling up the menu to invoke the new folder option. "Enter-f (dots 1-2-4)" is the hotkey that you use to access this feature quickly without going through the menu. When creating a new folder name, you cannot use the following characters: "|, \, <, >, ?, :, *"

3.2.10 File Conversion

The "file conversion" on the Braille Sense Plus B32 is similar to the "save as" item in the word processor. This feature converts files to different file formats. The Braille Sense Plus B32 file conversion feature will support the following file formats: "Sense word (hbl)," "text (txt)," and "Braille (brl)."

The Braille Sense Plus B32 can convert one or more files at the same time to the file format you prefer. Select files using the file selection method (method described in section 3.1.2). After selecting the files you want to convert, call up the menu by pressing "space-m (dots 1-3-4)." Move down to the file conversion, and press "enter." The Braille Sense Plus B32 will prompt you to choose the preferred file format. Use the up and down arrows ("space-1" or "space-4") to select the desired file format. When you press "enter" on the file format you want, the Braille Sense Plus B32 will start converting files

to the file format you have chosen. The Braille Sense Plus B32 will keep the original file names for the files you have converted, except for the file name extension. The Braille Sense Plus B32 will change your file extension to the extension that you have selected. If there is a file with the same file name and format already, "date" and "time" will be added to the file name. You can always use the letter "t (dots 2-3-4-5)" after calling up the menu to invoke the file conversion feature. Also, "enter-t (dots 2-3-4-5)" is the hot key that activates this feature without calling up the menu.

3.2.11 Select All

This feature selects all the files and folders in the current path. You can use this feature through the menu, or by using a shortcut key. Press "space-m (dots 1-3-4)" to call up the menu. Press the down arrow ("space-4") to go to "select all." Press "enter" to execute the "select all" function. You can use the letter "a (dot 1)" after calling up the menu to use this feature. "Enter-a (dot 1)" is the hot key to select all of the files and folders in the current path. When "select all" is activated, the Braille Sense Plus B32 will say, "x objects selected." The Braille Sense Plus B32 will return to the file list in the current path after this brief announcement. You will see "*" in front of each file name you have selected. You can always cancel your selections by pressing "space" after moving to the file you want to cancel. This feature is a convenient way of copying, cutting, and deleting multiple files.

3.2.12 Search for File

"Search for file" is to find out files of the current or other disk. You can press "space-m (dots 1-3-4) to call the menu and move to "search for file," and press "enter" or "b." Or, you can press "space-f (dot 1-2-4)" without calling the menu. Then, you can see dialog box for file search.

The dialog box for file search consists of "edit window for file name to search", "combo box to select a disk", "check box to searching subfolder", "search button", "cancel button" and "list to be searched file" and you can use "tab (space-4-5)" or "shift-tab (space-1-2)" to move to each control.

When you perform file search, you will hear "file to find:" This edit window is "edit window for file name to search." You need to input whole or part of the file name and press "enter." Then, it will search all files which contains the word which you inputted in the current disk. After the file search, it is located in "list to be searched file" automatically.

You can press up and down arrow key ("space-1" and "space-4") to move to each file in "list to be searched file." If you press "enter" on a file, it moves to the path where a file is stored and dialog box for file search will be closed. You can open the file by pressing "enter" on the file name once again.

If you want to search a file in another disk, not in current disk, you need to input file name and press "tab (space-4-5)" to move to "combo box to select disk." Then, you can press up and down arrow key ("space-1" and "space-4") to move to a disk. If you press "enter" on a disk or "search button," it will start to search a file in a disk. In "combo box to select disk," you can see the disk list which is linked with Braille Sense Plus B32 now. If there are many files in a disk, it can take some time to search a file and you can see a message of "searching."

If you want to search in a root of a disk excluding sub-folders, then press "tab (space-4-5)" to move to the "check box to searching sub-folder," press "space" to cancel the selection in the check box and press "enter." The default set-up is to include sub-folders when you search in a disk.

3.2.13 Sort Files By

This option is used to specify the order of how files and folders will be displayed within the file list. Press "space-m (dots 1-3-4)" to bring up the menu. Then, press "space-4" repeatedly until you reach "sort files by," and then press "enter." Also, you can access this feature by pressing "enter-g (dots 1-2-4-5)" in the file list, or by pressing "g (dots 1-2-4-5)" in the menu. Then, you can specify in what order the files and folders in the file list will be sorted. Files and folders can be sorted according to the following: "name," "size," "extension," and "date and time." You can move between these items by pressing "space-4" or "space-1." If you press "enter" after selecting the sorting criterion, files and folders will be displayed in the specified order. If you select "name" or "extension," the list will be sorted in ascending

order, and if you select "size" or "date and time," the list will be sorted in descending order. By default, files and folders in the file list will be sorted by "name." Once you have chosen how you want your file and folder lists sorted, the option will be kept even after the "file manager" is closed, so that files and folders can be sorted in the same order when the "file manager" is opened again later.

3.2.14 Set File Info

This item is used to set what kind of information will be displayed in the file list. Press "space-m (dots 1-3-4)." Then, press "space-4" repeatedly until you reach "set file info," and then press "enter." You can also access this feature by pressing "enter-I (dots 1-2-3)" in the file list or press "I (dots 1-2-3)" when you are in the menu. Then, you can select the information to be displayed in a list containing "name," "name, size," and "name, size, date and time." You can move between these items by pressing "space-4 or "space-1." If you press "enter" after selecting the information to be displayed, the file list will be updated, and show all the information you specified. By default, only names are displayed in the "file list." If you have selected "name, size," the name and size of files will be displayed. But, for folders, size will not be displayed. If you have set the "set file info" option, it will be kept even after closing the "file manager," and the same information will be displayed when the "file manager" is started again.

3.2.15 Display Only Files of Type

This is used to specify what type of files will be displayed in the file list. Press "space-m (dots 1-3-4)" to bring up the menu. Then, press "space-4" repeatedly until you reach "display only files of type," and press "enter." You can also access this feature by pressing "enter-w (dots 2-4-5-6)" in the file list, or press "w" in the menu. Then, you can select one of the following items: "all files," "Sense word files," "MS word files," "text files," "Braille files," "html files," "url files," "media files," and "wave files." You can move between these items by pressing "space-4" or "space-1." If you press "enter" after selecting the file type you want, only the files of the specified type will be displayed in the file list. Folders will be displayed for whatever type you have specified. By default, all files are displayed in the file list.

This option setting is not kept after closing the "file manager," so all the files will be displayed after starting the "file manager" again.

3.2.16 Zip

With this item you can compress files (but not folders) into a zip file. Compressing a file makes the total file size smaller, which can make it easier to email, or allow you to save space on a storage device or disk. To activate the "zip" function, use the following steps:

- 1) Select the files you want to compress in the "file list" by using "space" or "enter-b (dots 1-2)".
- 2) Open the menu by pressing "space-m (dots 1-3-4)" or "F2," and press "enter" on "zip." Or, while you are in the menu, press "z (dots 1-3-5-6)." You can also activate this function without calling up the menu by pressing "enter-z (dots 1-3-5-6)."
- 3) Then, "zip filename: (default filename.zip)" will appear. "Default filename" is the file name that will be used for the compressed file if you try to compress only one file. If you try to compress several files, the default name is the folder name that contains the files.
- 4) If you press "enter" (or press "enter" on "confirm" by pressing "tab ("space-4-5")"), the zip file will be created in the current path. If you want to change the name of the zip file, you can modify the default by using the cursor keys or type in a new name. If you want to cancel, press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)." Or, move to "cancel" by pressing "tab ("space-4-5")," and then press "enter" on "cancel."

3.2.17 Unzip

The "unzip" function will allow you to unzip (or decompress) a zip file, regardless of whether it was made in Braille Sense Plus B32 or a PC. To activate the "unzip" function, use the following steps:

- 1) After selecting a zip file, open the menu with "space-m (dots 1-3-4)" or "F2," and press "enter" on "unzip." Or, press "u (dots 1-3-6)" in the menu. You can also activate this function without opening up the menu by pressing "enter-u (dots 1-3-6)" after selecting a zip file.
- 2) Then, "unzip foldername" (default foldername)" will appear. The default foldername is the compressed file name. For example, if

- you unzip a file called "test.zip," you will see "unzip foldername: test."
- 3) Then, press "enter," or move to "confirm" by pressing "tab ("space-4-5")," and then press "enter" on "confirm." Then, the Braille Sense Plus B32 will unzip the files to the default folder. If you want to change the default folder name, you can modify the default folder name by using the cursor keys and editing the folder name. Or, you can type in a new name. If you want to cancel, press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)." You can also move to the "cancel" button by pressing "tab ("space-4-5")." Then, press "enter" on "cancel."

3.2.18 Information

The Braille Sense Plus B32 can provide information about files and folders. The information feature in the "file manager" provides you with information about the file type, file size, the date and time of the file or folder's creation, and file attribute. Press "space-m (dots 1-3-4)" or "F2" to call up the menu. Press the down arrow ("space-4") until you reach "information." Press "enter" to activate the "file information" feature. Use the letter "I (dots 2-4)" to call up the "file information" feature after opening up the "menu." "Enter-i (dots 2-4)" is the hot key for this option. You can use this hot key without going through the menu. The Braille Sense Plus B32 will display the information about a file or folder in the following order: file type, file size, creation date and time, and attribute. You can review this information by pressing the "tab ("space-4-5")." You can also press "space-I (dots 2-4)," while you are in the file manager or "program" menu in the Braille Sense Plus B32, to hear how much space is available on the flashdisk.

- 1) File type: This will give you the file type information, such as "brl file," "doc file," and "txt file." When a folder is selected, it will give you the information indicating that this is a folder containing x number of files and folders.
- 2) File size: This will show you the size of the selected file or folder. When multiple files or folders are selected, this will give you the total size of the selected files and folders.
- 3) Date and time: This will show you the time and date when the folder and file was created or modified.

- 4) Attribute: This will show you whether the file is write protected or not. You can change this attribute by using the up and down arrows ("space-1" or "space-4") or "space. When multiple files or folder are selected, you won't be able to see this attribute.
- 5) Confirm: In order to change the attribute, press "enter" when "confirm" is displayed.
- 6) Cancel: In order to cancel the change, press "enter" while "cancel" is displayed.

3.3 Using the Address Window

This window provides you with the ability to type in the file name you want to open. Also, this window provides you with the opportunity for you to type in the path name you want to go to. This window contains the history list you can use for opening a file or for moving to a directory. The history list contains file names and directory paths you have used recently.

3.3.1 Editing

When you are in a file or folder list, you can press "tab (space-4-5)" to get into the address window. The Braille Sense Plus B32 will show you the current path including the current disk name, such as "flashdisk/download/." When you edit the path, you need to use the cursor routing keys to move the cursor to the place where you can type in the text. The cursor stays at the end of the path name when you first go into the address window.

The address window is only valid when you are in a file or folder list. When you are in the disk list, the address window is not available.

3.3.2 Type in Path / File Name

When you relocate the cursor by pressing the cursor routing key to the place that you want to edit, the Braille Sense Plus B32 will insert the text from the location where the cursor is. If you know the exact path and file name, you can type in the path and file name to open the file with the appropriate application. For example, if you type in "flashdisk/download" in the address window and press "enter," the Braille Sense Plus B32 will show you the list of the files in the

download folder. If you type "flashdisk/work/sample.txt" in the address window, and press "enter," the Braille Sense Plus B32 will first load the word processor, and then open the file "sample.txt." After the file opens, you can read or edit the file, "sample.txt."

3.3.3 Opening the History List

The history list contains paths, folders, and files that you have opened previously. You can access this history list within the address window by pressing the down arrow ("space-4"). Use the up and down arrows ("space-1" or "space-4") to review the history list. You can also use the scroll buttons to move around on this list. Simply open or visit the file and path by pressing "enter" on the item, which is displayed in Braille. The files that are supported by the Braille Sense Plus B32 will open with the appropriate applications (see section 3.2.3). During the navigation of the history list, you can still type in new path names or file names that you want to access.

3.4 Hot Keys in the "File Manager"

Hot Keys for the File Manager

- (1) Open: Enter-o (dots 1-3-5)
- (2) Open with: Enter-e (dots 1-5)
- (3) Zip: Enter-z (dots 1-3-5-6)
- (4) Unzip: Enter-u (dots 1-3-6)
- (5) Send: Enter-s (dots 2-3-4)
- (6) Copy: Enter-c (dots 1-4)
- (7) Cut: Enter-x (dots 1-3-4-6)
- (8) Paste: Enter-v (dots 1-2-3-6)
- (9) Delete: Enter-d (dots 1-4-5)
- (10) Rename: Enter-r (dots 1-2-3-5)
- (11) New document: Enter-n (dots 1-3-4-5)
- (12) New folder: Enter-f (dots 1-2-4)
- (13) File conversion: Enter-t (dots 2-3-4-5)
- (14) Select all: Enter-a (dot 1)
- (15) Sort files by: Enter-g (dots 1-2-4-5)
- (16) Set file info: Enter-I (dots 1-2-3)
- (17) Display only files of type: Enter-w (dots 2-4-5-6)
- (18) Search for file: Space-f (dots 1-2-4)
- (19) Information: Enter-i (dots 2-4)

4. Word Processor

When you launch the word processor on the Braille Sense Plus B32. the Braille Sense Plus B32 will place you in a new document that is ready for you to write in. The menu can be opened by pressing "space-m (dots 1-3-4)" or "F2." Don't worry if you can't remember the exact shortcut keys for each of the menu items, since you can activate various functions of the word processor by activating the word processor menu. The menu in the word processor consists of file, edit, go to, read, and layout. In order to use these menus, press "space-m (dots 1-3-4)" or "F2" in the word processor, select a menu item, and press "enter" or press "backspace" and the corresponding character that represents the menu item name. For example, in order to open the edit menu, press "space-m (dots 1-3-4)" or "F2" to open the menu, and move to the next menu by pressing arrow keys ("space-1" and "space-4") to find the "edit" menu, and then press "enter." Or, press "space-m (dots 1-3-4)" and press "e (dots 1-5)," which represents the "edit" menu. The "edit" menu contains a lower level menu. The "right arrow" is displayed at the end of the menu name, and it is spoken as "pull down" after the menu name. If a menu contains a dialog box, "..." will be displayed after the name of the menu, and it will be spoken as "common dialog."

Before going in to more detail about the word processor, it is also important to note that while you are anywhere in a document, you can find out your location by pressing "space-1-5-6." Also, if you are editing a document, and turn the Braille Sense Plus B32 off while you are editing a document, the Braille Sense Plus B32 will say the status when you turn the Braille Sense Plus B32 back on. In the next few sections the features of the word processor will be explained in more detail. We will also explain the functions of each of the menu items available in the word processor.

4.1 File Menu

The "file" menu contains the menus that will allow you to create new documents, open documents that were saved to a disk, save any documents that were edited, and print in Braille. It also contains various environment setting menus. In order to select the file menu,

press the "space-m (dots 1-3-4)," and press "f (dots 1-2-4)." Or, press "enter" on "file."

4.1.1 New

The new command creates a new document that can be edited. By default, the name of the new document is "noname.brl." The extension, ".brl" is the extension given to documents that are created in Braille on the Braille Sense Plus B32. It is the same file name that is named automatically when the word processor opens. In order to create a new document, select "new" on the "file" menu. Or, press "enter-n (dots 1-3-4-5)." If "new" is executed while editing another document, "Sense document (s)" is displayed first. If you press "space-4" repeatedly, "Braille document (b)" and "text document (t)" will appear. Select the document type that you want, and then press "enter".

"New" means that users can create a new document after closing the document that is currently being edited. Closing the document that is currently being edited means that the document is erased from the temporary memory. If a new document is executed without saving the document that is currently being edited, the Braille Sense Plus B32 asks whether it should save the current document, so that changes to the document will not be lost. When "save: Yes" is displayed, users can select "yes" in order to save the current document or select "no" in order not to save the changes. If you select "cancel" by pressing "space" once more, the word processor will cancel the new document, and return to the current document.

Note that you can change the "default document type", in the "options menu." By changing the "default document type", you can choose to have your default document type as text, sense, or Braille.

4.1.2 Open

The open command opens a document that has already been saved on to a disk. Select "open" on the "file" menu, or press "enter-o (dots 1-3-5)." You can access the "file" menu by pressing "space-m (dots 1-3-4"), or by pressing "F2." Then, a dialog box pops up, so that you can open a file. The "open dialog box" is a tool that helps you find

documents that you want to edit and read. It consists of the "file list" (which shows the list of files or folders), "file name" (to type in a file name directly), "type" (which changes the file format when opening a document), a "confirm" button (for confirming the selection), and a "cancel" button (for canceling the selection). In order to move between these controls, press "tab ("space-4-5")" or "shift-tab ("space-1-2")." If the "open dialog box" is executed, "file name:" is displayed first. If "file name:" is displayed, then type in a file name that you want to open, and press "enter." The file name should be typed in ASCII Braille. The Braille Sense Plus B32 will look for that file in the "/flashdisk/work" folder. If there are files that you used recently, you can scroll through them by pressing "space-4." The file names that were opened recently are displayed one by one by pressing "space-4." If the file that you want to open is selected press "enter" to open it. In order to move to the previous file name in the list, press "space-1." In order to open a file with a different file format, press "tab ("space-4-5")" to move to the file format selection, and then press the up arrow key ("space-1") or down arrow key ("space-4") to select a desired file format. You can find and open a desired file from the file list without typing in the file name directly in the "file name:" box. Press "tab ("space-4-5")" several times to move to the "file list," and then select a desired file. You can also move to the "file list" by pressing "shift-tab ("space-1-2")" when you are at the "file name:" dialog box. The files in the "file list" have the file format that was selected in "file format."

You can select a file that you want by using the up and down arrow keys, and you can open the file by pressing "enter." If you select a folder and press "enter," you will see the list of files in that folder. If you want to move to the upper folder or to other folders, you can go to wherever you want by using scrolling keys, just like in the "file manager" in chapter 3.

If you want to access a file that is on a compact flash card, or USB memory stick, you can access the file in the "open" dialog box by first moving to the "file list" by pressing "shift-tab ("space-1-2")" or "space-F3." Then, press "backspace" until you hear the USB stick memory or the compact flash card. Then, press "enter" to open the memory. The Braille Sense Plus B32 will choose the Braille mode depending upon the file type. For example, if you press "enter" to select a file

that has the extensions hbl or brl, or if you type in a file name with those extensions and press "enter," the Braille Sense Plus B32 will open the selected file in Grade 2 Braille. You will not be able to change the Braille mode in these documents. If you press "enter" to select a file that has the extensions of txt or doc, it will open the file in what is currently set in "view/input grade" of "option menu." After the file opens, you can switch the Braille mode, as was explained in section 2.4.2.4. If you press "enter" at the other file format, you can select the file format; Braille format, or text format. You can toggle between "Braille format" and "text format" by pressing the "space" key. Press "enter" when the desired format is displayed. If the Braille format is selected, the document will be opened in Braille grade 2. And, if the text format is selected, the document will be opened in Braille mode that is currently set in "view/input grade" of "option menu."

In the word processor of the Braille Sense Plus B32, it is possible to open and work simultaneously with up to 10 files at one time. If you already have one document open, and you try to open another document, the Braille Sense Plus B32 will ask you if you want to save changes to the document that is already open. Then, you can save the file (see section 4.1.3 for a detailed explanation). Once you have completed saving the document, an open dialog box will appear. However, you will still have the two files open. It only seems that you closed one without saving it. With the new document open, if you want to go to the previous document, you can press "shift-tab (space-1-2)." If you want to go back to the other document again, press "tab (space-4-5)."

4.1.3 Save

The save command will save a document to a disk drive. If you want to use this option, you can press "space-m (dots 1-3-4)" to open the "file" menu and execute the "save" command by pressing "enter" on it, or you can press "s (dots 2-3-4)." Otherwise, you can press "enter-s (dots 2-3-4)" while editing a document.

If you created a new document by activating the word processor or by pressing enter on "new" in the menu; if you execute "save," the "save

as dialog box" will open. You can refer to section 4.1.4 that explains how to use the "save as" dialog box.

If you execute "save" after you edit a document that was opened using the "open" function, the Braille Sense Plus B32 will save the document with the same file name without using a dialog box. After saving a document, it will return to document edit status. When you have several documents open, you can save the current open document, by pressing "space-q (dots 1-2-3-4-5)." This will close the document, save it, and return to the previous document.

4.1.4 Save As

The "save as" option is used to save a document as a different file name, on another disk drive, or as a different file type. If you want to execute this command, press "space-m (dots 1-3-4)," and then press "enter" when the "file" menu is displayed. Move to "save as" by pressing "space-4." Then, press "enter." Another way is to press "space-s (dots 2-3-4)," which executes the "save as" command in the word processor.

If you execute "save as," the "save as" dialog box is displayed. This dialog box is almost the same as the "open" dialog box. It consists of "file list," "file name," "type" (representing the file format), a "confirm" button, and a "cancel" button. If the dialog box is opened, "file name:" is displayed. You can move from one tab to the other tab by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")".

If you execute "save as" when you are editing a document that you opened, the displayed file name, file format, and the folder are the same as those of the file that you opened.

However, if you created a new document by executing the word processor or by executing "new," and you execute "save" or "save as," the displayed default file name is "noname.brl" and the file path is "flashdisk/work/."

If you want to edit the file name that is displayed on the Braille display, press the cursor routing key where you want to edit the file name, and then modify it. Or, if you want to make a new file name, type in the

new file name without pressing any of the cursor routing keys. You cannot use the following characters in a file or folder name. "|, \setminus , <, >, ?, :, *"

If you want to change the file format, move to "type." In "type," move to the file format that you want by pressing "space-1" or "space-4."

If you want to save a file with a file name that is in the file list, move to the "file list" by pressing "shift-tab." When "file name" is displayed, select your desired file by navigating the file list with the same method that you used to navigate the "file manager" that was explained in chapter 3.

4.1.5 Close Current Document

The "close current document" command allows you to close the current document that you are working on without closing the word processor. You can access the "close current document" command by pressing "space-m (dots 1-3-4)" or "F2." Then, press "enter" on the "file" menu. Use the arrow keys ("space-1" and "space-4") until you find "close current document," and then press "enter." Or, you can press "q (dots 1-2-3-4-5)" in the "file" menu. You can also access this function by pressing "space-q (dots 1-2-3-4-5)" while you are editing a document. Please note that this function will not work if you only have one document open. You must have at least two or more documents open in order to execute the "close current document" command.

4.1.6 Print

The "print" command is used to print the current document in ink or emboss it in Braille. If you want to execute this command, press "space-m (dots 1-3-4)" or "F2," and press "enter" on the "file" menu. Then, move to "print" by pressing "space-4," and then press "enter," or just press "p (dots 1-2-3-4)." While editing a document, the hot key for printing is "space-p (dots 1-2-3-4)." There are two lower level menus for the "print" menu. One is for printing with an ink printer, and the other is for embossing in Braille. Remember that you can move between the menu items by using "space-1" or "space-4."

1) Embossing in Braille

Open the document that you want to be embossed. Press "space-m (dots 1-3-4)" to activate the menu. Locate "print" in the "file" menu and select "embosser," or press "b (dots 1-2)." If you select "embosser (b)" above, the "embosser" dialog box is opened. Here you can type in the page number where you want the embossing to start, and type in the end page number, where you want the embossing to stop. The following items are in the dialog box.

(1) Start page number

This is the beginning page number to be embossed. The default page number is set to 1. You can change the value of the page number, by typing in the value that is desired. You can move to the next selection item, which is the "end page number" by pressing "space-4."

(2) End page number

This is the ending page number that is to be embossed. The default value is set to 100000. It means that the document will be embossed to the end of the document, unless the document exceeds 100000 pages. In order to change the value, input the number of the ending page. You can move to the next selection item (which is the "number of copies") by pressing "space-4."

(3) Number of copies

This option designates the number of copies to be embossed. The default value is set to 1. You can change this number by typing in the number that is desired. If you press "space-4" or "space-1," you will be moved to "start page number" or "end page number," respectively. If you want to move to "confirm," press "tab ("space-4-5")."

(4) Set Braille format

In this option, you can set whether or not the Braille document layout settings specified in Braille Sense Plus B32 will be used when embossing. If you set this to "yes," the document will be embossed using the Braille document layout setting in Braille Sense Plus B32. If you set it to "no," the document will be embossed in the format specified in the original document.

(5) Confirm / Cancel

In order to emboss as designated above, move to "confirm" by pressing "tab ("space-4-5")," and then press "enter." Or, if you are canceling embossing, move to "cancel" by pressing "tab ("space-4-5")", and then press "enter."

If "enter" is pressed on "confirm," "Print: Yes" is displayed on the Braille display and it is also spoken. If "enter" is pressed on "yes," embossing will start. If you do not want to emboss, press "space" to select "no," and then press "enter." If "save as file" is selected by pressing "space," then the current document is saved as a "brl" file.

If there are any problems with the Braille printer, the Braille Sense Plus B32 shows an error message and returns to the open document.

2) Print Text

This option is used when you want to print a document on an ink printer. To do so, open the document to be printed and press "space-m (dots 1-3-4)" or "F2," and then press "enter" on the "file" menu. Move to "printer" by pressing "space-4" repeatedly. Then, press "enter" when you are on "printer," or just press "p (dots 1-2-3-4)." The dialog box for "printer" is almost the same as "embosser." After you input the value as in embosser dialog box, press "tab ("space-4-5")," and then "Print: Yes" is displayed. If "enter" is pressed, printing will start. But, if you press "space" to move to "no," and press "enter," printing will be canceled, and the Braille Sense Plus B32 will return you to the open document.

Note that the Braille Sense Plus B32 will work with all HP printers (level 3 PCL or higher), and with HP-compatible printers.

4.1.7 Settings

If you want to change the environment, press "space-m (dots 1-3-4)" or "F2," and press "enter" on the "file" menu in order to enter into the "file" menu. Move to "settings (e)" by pressing "space-4" repeatedly, and then press "enter" on "settings," or just press "e (dots 1-5)."

While editing a document, pressing "enter-e (dots 1-5)" will open the "settings" menu.

When this menu is opened, a dialog box is displayed. You can move between the menu items by pressing "space-1" or "space-4." To make a change for one of the settings, press "tab" ("F3 or space-4-5") and press "enter" on "confirm" or "cancel." The following are the menu items that can be changed:

- 1) View format character (yes/no): If this option is set to "yes," all of the format characters are displayed. If you want to change this option, use "space" to toggle. Formatted characters will be marked with the "carriage return (\$p)", "auto return (\$I)" and the "mark sign (\$pI)."
- 2) Reading unit (line/paragraph): It sets the moving unit when "space-1" or "space-4" is pressed while you are reading a document. If this option is set to "line," "space-1" moves line by line. If this option is set to "paragraph," "space-1" moves paragraph by paragraph. In order to toggle between "line" and "paragraph," press "space."
- 3) Read only (yes/no): If this option is set to "yes," the document cannot be modified. This setting is used in order to protect the document from any unintentional modifications. If you want to change it to "no," press "space."

 Note that when you choose to select "compressed" on the option for reading with the Braille display, you set "read only" to "yes."

 When you are reading a document pressing a "cursor routing key", will show a word or character corresponding to the operation of the "cursor routing key." This will be displayed at a very left of the 32-cell Braille display.
- 4) Reading mode (original or compressed): This option sets the reading mode. Reading mode "original", will show the document in its original format. If the Reading mode is set to "compressed", The Braille Sense Plus B32 will continue displaying contents even if there exists a carriage return (\$p). In order to toggle between "original" and "compressed," press "space."
- 5) Auto scroll speed (1~20): This option sets the duration of displaying one line while you are scrolling in a document. Twenty is the fastest scrolling speed. Pressing "space" makes the number

- increase, and "backspace" makes the number decrease. Refer to section 4.4.5 for more information about the auto scroll option.
- 6) Automatic save interval (don't save automatically, 10~60): This option sets the automatic save time interval of the file that is currently being edited. The setting time can be increased or decreased by 10 minutes if you press "space" or "backspace," respectively.
- 7) Apply settings to all documents (yes/no): This option selects the settings only if they are valid for all documents. If "yes" is selected, the settings will be kept for all future documents, and if "no" is selected, the settings will only affect the document that is currently being edited. In order to toggle between "yes" and "no," press "space."
- 8) Confirm: If you press "enter" on "confirm," you can change the settings and return to the current editing document.
- 9) Cancel: If you press "enter" on "cancel," it will cancel the setting and return to the current editing document.

4.1.8 Exit

This command will close the word processor. In order to execute this command, select "exit" in the file menu, or press "space-z (dots 1-3-5-6)." If the document has been changed (or edited) and "exit" is selected without saving the document, a dialog box will ask you if you want to save the current document. You can select "(yes)" with the spacebar and press "enter" to exit the word processor.

4.2 Edit Menu

In the Braille Sense Plus B32, you can edit all files regardless of what the view mode is set to. In the "edit" menu, you will find the following items: "start selection," "copy," "cut," "paste," "delete," "delete blank lines," "add to clipboard," "clear clipboard," "select all," "insert from file," "insert date," "change insert/overwrite mode," and "check spelling." If you want to open the menu, press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit." Or, you can press "e (dots 1-5)" in the "edit" menu. Now, let's explore the edit menu.

4.2.1 Start Selection

The "start selection" command allows you to select a certain portion of text that you would like to edit. When you use the "start selection" command, the cursor will appear as blinking "dots 1-2-3-4-5-6-7-8." The "start selection" command allows you to make changes to only the text that is selected, and the changes will not affect text that has not been selected. The "start selection" command is especially useful for copying, cutting, and pasting. You can select text in a document by placing your cursor on the location where you want to start selecting text. If you want to use this function, press "space-m (dots 1-3-4)" or "F2" to open the "edit" menu, and then press "enter" on "start selection," or you can press "b ("dots1-2")" in the "edit" menu to get to this option. While editing a document, pressing "enter-b (dots 1-2)" will activate this command. The end point of the selected text is where you want to place the cursor after setting the starting point. For example, if you have typed the word, "mother" in a document, and you want to select the word "mother," you should place the cursor on the letter "m," and then place the cursor directly after the letter "r." Then, you will have selected the entire word.

4.2.2 Copy

After selecting text in a document, press "space-m (dots 1-3-4)" or "F2" to open the menu, and move to "edit" by pressing "space-4." Press "enter" to open the "edit" menu. Press "space-4" to move to "copy" and then press "enter," or press "c (dots 1-4)" in the "edit" menu. While editing a document, pressing "enter-c (dots 1-4)" will activate this command.

When you copy the selected text, it will be copied to the clipboard. The clipboard is the virtual space that is used for storing copied data temporarily. However, if you decide to copy new text that you have selected, the data in the clipboard that you copied before will be erased, and the selected text that you have just copied will replace the previously selected text that was on the clipboard.

4.2.3 Cut

To cut a selection of text, press "space-m (dots 1-3-4)" or "F2," and press "enter" on "edit" to enter into the "edit" menu. Move to "cut" by pressing "space-4" repeatedly, and then press "enter" on "cut," or press "x (dots 1-3-4-6)" in the "edit" menu (which is the short cut) to cut your selected text. While editing a document, pressing "enter-x (dots 1-3-4-6)" will activate the "cut" command.

The difference between "cut" and "copy" is that if you execute the "cut" command, the text that has been selected will not be moved to the clipboard and the selection in the document will be erased. However, the "copy" command will copy the selection to the clipboard, and the text that has been selected will not be erased from the document.

4.2.4 Paste

To paste selected text to the clipboard, press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit" to enter into the "edit" menu. Move to "paste" by pressing "space-4" repeatedly and then press "enter" on "paste," or press "v (dots 1-2-3-6)" in the "edit" menu (which is the short cut) to paste the selected text from the clipboard. While editing a document, press "enter-v (dots 1-2-3-6)" to paste the text from the clipboard.

4.2.5 Delete

To delete text that has been selected, press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit" to enter into the "edit" menu. Move to "delete" by pressing "space-4" repeatedly, and then press "enter" on "delete," or press "d (dots 1-4-5)" (as a short cut) in the "edit" menu to delete the selected text. When you are editing a document, you can press "space-d (dots 1-4-5)" to delete text that you have selected

4.2.6 Delete Blank Lines

In order to delete blank lines, you must select the area of the document where you want the blank lines to be deleted from. Once

this has been done, press "space-m (dots 1-3-4)" or "F2," and press "enter" on "edit" to enter into the "edit" menu. Then, use the arrow keys ("space-1" or "space-4"), and press "enter" on "delete blank lines," or press "I (dots 1-2-3)" as a short cut, while in the "edit" menu. If you want to delete an empty line while you are editing a document, press "backspace-e (dots 1-5)," which is the hot key for "delete blank lines."

4.2.7 Add to Clipboard

When you have selected the text you want to select in your document, you should press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit" to enter into the "edit" menu. Move to "add to clipboard" by pressing "space-4," and then press "enter," or press "p (dots 1-2-3-4)." While editing a document, pressing "enter-p (dots 1-2-3-4)" will activate this command.

"Add to clipboard" is almost the same as the "copy command." However, with the "copy" command, the newly selected text will replace the text that was copied before. The "add to clipboard" command however, will not erase the previously data from the clipboard when you use this command to copy the selected text. It will keep the previously selected text, and the new text that you have selected will also be added to the clipboard.

4.2.8 Clear Clipboard

To clear the clipboard, press "space-m (dots 1-3-4)" or "F2," and press "enter" on "edit" to select the "edit" menu. Move to "clear clipboard" by pressing "space-4" repeatedly, and then press "enter." Or, you can press "e (dots 1-5)" in the "edit" menu as a short cut. Once you have executed the "clear clipboard" command, everything on the clipboard will be erased. When you are editing a document, you can press "enter-d (dots 1-4-5)" to activate this command.

4.2.9 Select All

The "select all" command will select all text within a document. To activate this command, press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit" to enter into the "edit" menu. You can move to "select all" by pressing "space-4" repeatedly, and then press

"enter" on "select all," or press "a (dot 1)" in the "edit" menu (which is the short cut). While editing a document, press "enter-a (dot 1)" to activate this function.

4.2.10 Insert from File

This command will insert another file in the current document that is being edited. If you want to run this command, press "space-m (dots 1-3-4)" or "F2," and press "enter" on the "edit" menu. Move to "insert from file" by pressing "space-4" repeatedly. Then, press "enter" on "insert from file," or just press "I (dots 2-4)" in the "edit" menu. While editing a document, pressing "enter-I (dots 2-4)" will activate this function.

When you use this option, an insert dialog box will appear just like the open dialogue box. Select a file that you want to insert in to the current document, and press "enter" on the file. Then, the selected file will be inserted at the beginning of the paragraph with your cursor.

When you execute "insert from file," the text inserted from the file will be converted to the file format of the current document. Although the saved file that you pasted was in a different formatted document, the same file format will be kept as the current document. For example, if you insert "sample.txt" in "sample.hbl" and save it, the saved file will be "sample.hbl."

Note that if you are going to insert a Braille file in a text file, the Braille document will be translated back into a text document. You can read it in Braille, but on rare occasions you might see differences in the translated text.

4.2.11 Insert Date

To insert the date into your document, press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit" to enter into the "edit" menu. Move to "insert date" by pressing "space-4" repeatedly. Then, press "enter" on "insert date," or press "w (dots 2-4-5-6)" (which is the short cut) in the "edit" menu. Then, you can insert the current date and time where the cursor is located in your document. If you want to insert part of the current date and time, you can modify what you

want to change after completing the "insert date" command. When you are editing a document, you should press "enter-w (dots 2-4-5-6)" to activate this command.

4.2.12 Changing Between Insert and Overwrite Mode

There are two ways of editing documents in the Braille Sense Plus B32. The first is to insert your text, which will push back the words behind the cursor. This is called the "Insert mode" because you are simply inserting text. When you are in "Insert mode," the cursor will show up "dots 7-8." The second is to overwrite text at the cursor location. This is called the "Overwrite mode." In "Overwrite mode", the cursor will display as blinking "dots 7-8."

If you start the word processor (or open a document), the "insert mode" is the default. This will write text, while pushing back other words that are already in the document. However, you can overwrite text while erasing the old text by switching to "overwrite mode." You can switch to the "overwrite mode" by pressing "space-I (dots 2-4)." In the "overwrite mode," you can change the old text into new text at the cursor location. If you want to go back to "insert mode," you should press "space-I (dots 2-4)" again. You can also access this function via the menu. Press "space-m (dots 1-3-4)" or "F2," and go to "edit" using the arrow keys ("space-1" and "space-4"). Next, press "enter" on "edit" to enter in to the "edit" menu. Then, use the arrow keys to scroll to find "toggle insert/overwrite mode," or you can just press "m (dots 1-3-4)" while you are in the "edit" menu.

4.2.13 Check Spelling

This option is used to check spelling while you are editing a document

In order to bring up check spelling option, do the following;

- 1. Call up the menu by pressing "space-m (dots 1-3-4)" or "F2."
- 2. Move to the "edit" menu by pressing "space-4."
- 3. Press "enter" on the "edit" menu.
- 4. Press "space-4" until "check spelling" is displayed. Or, press "k (dots 1-3)" in order to move to "check spelling" directly.

5. Press "enter" on the "check spelling." Or, you can call up the "check spelling" menu by pressing "enter-k (dots 1-3)" while you are editing a document.

If "check spelling" is executed, a dialog box with the following items will be displayed:

```
"Range" combo box
```

You can move from one item to the next by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

The following is a detailed explanation for each item:

The "range" combo box is used to designate the range that is to be spell checked.

- 1) Whole document: check throughout the entire current document.
- 2) Chapter: check the current chapter where the cursor is located.
- 3) Sentence: check the current sentence where the cursor is located.
- 4) From cursor to bottom: check from the cursor position to the end of the document.
- 5) Current word: check just the word where the cursor is located. You can move from one item to the next by pressing "space-1" or "space-4."

When you press "enter" on the "custom dictionary" dialog, the following items will be displayed:

- 1) List: it shows the words that are registered in the custom dictionary. (Example: Braille 1/20). If there are no words registered, "no list" will be displayed.
- 2) Add word (a): if "enter" is pressed on this button, "add word?" will be displayed. If you want to add a word, press "enter" after you enter the new word. Then, the new word is added and the Braille Sense Plus B32 exits to the "add word" button.
- 3) Modify word (m): select the word to be modified on the "list" and then press "enter." The "modify word?" message is displayed.

[&]quot;Custom dictionary" dialog (c)

[&]quot;Options" dialog (o)

[&]quot;Begin" button (b)

[&]quot;Cancel" button

Input the correct word that will replace the selected word and then press "enter" in order to modify the selected word. The "modify word" button will be displayed again after the Braille Sense Plus B32 modifies the selected word.

- 4) Delete word (d): select the word to be deleted on your "list" and press "enter" in order to delete the selected word.
- 5) Cancel: this command closes the dialog box. You can move from one item to the next item by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

When you press "enter" on the "option" dialog, the following items will be displayed:

- 1) Check automatically: if you select "check automatically," the Braille Sense Plus B32 will check the spelling of the document automatically. The default is set to "off." If it is set to "on," the Braille Sense Plus B32 will beep if the word is not registered in the dictionary. Press "space" in order to toggle between "on" and "off."
- 2) Always suggest recommended word: if this option is set to "on," the Braille Sense Plus B32 will suggest a word if the word that is encountered is not in the dictionary. The default is set to "on." If the option is set to "off," the Braille Sense Plus B32 will not recommend a word. In order to toggle between "on" and "off," press "space."
- 3) Use main dictionary only: if this option is set "on," the spell checker will not look up any words in the "custom dictionary." It will only use the main dictionary. The default value is set to "off," and you can toggle between "on" and "off" by pressing "space."
- 4) Skip whole upper-case word: if this option is set to "on," words with only upper-case letters will not be checked. The default is set to "on," and you can change it by pressing "space."
- 5) Skip a word including address: if this option is set to "on," the words that contain an address will not be checked. The default is set to "on," and you can change it by pressing "space."
- 6) Skip a word including number: if this option is set to "on," the words that include the numbers will not be checked. The default value is set to "off," and you can change it by pressing "space."
- 7) Confirm: if you press "enter" on "confirm," the changes that you made above will be saved, and the Braille Sense Plus B32 will exit from the "option" dialog.

8) Cancel: if you press "enter" on "cancel," the changes that you have made above will be canceled and the Braille Sense Plus B32 exit from "option" dialog.

In order to move between the items 1) through 6), press "space-1" or "space-4." But, in order to move to "confirm" or "cancel," press "tab ("space-4-5")" or "shift-tab ("space-1-2")."

If you press "enter" on the "begin" button after you set all of the settings, the Braille Sense Plus B32 will start to check spelling. If you press "enter" on the "cancel" button, the "spell check" will be canceled. Once "spell check" is executed, the following dialog box will be displayed:

- 1) Window to show the text: it shows the sentence with the word to be checked currently. The cursor will be located at the word that is to be checked currently.
- 2) Change word edit box: it shows the word to be checked currently. You can input the correct word in edit box directly.
- 3) Recommendation word list: if the word to be checked is not in the dictionary, the Braille Sense will recommend words. You can move from one recommended word to the next by pressing "space-1" or "space-4."
- 4) Skip once (s): if you press "enter" on this button when a word is encountered that is not in the dictionary, the word will not be modified. You can also press the "down scroll button" in order to skip the word.
- 5) Skip all (i): if you press "enter" on this button, the word that is the same word as the currently focused word will not be modified and skipped throughout the spell check range.
- 6) Add to custom dictionary (a): if you press "enter" on this button, the word that is currently focused is added to your "custom dictionary."
- 7) Modify once (c): focus on the modified word and select the desired word on the "recommendation word list," and then press "enter." Then, the currently focused word that is on your document will be replaced by the recommended word.
- 8) Modify all (m): focus on the modified word and select the desired word on the "recommendation word list," and then press "enter."

- The same words with the same spelling will be replaced by the new word throughout the document.
- 9) Cancel: if you press "enter" on the "cancel" button, the "spell check" will be ended.

You can move from one item to the next by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

When the spell check has completed, the Braille Sense Plus B32 will say "search: 00 mismatch: 00 replace: 00."

Also simply, you can check spelling of the current word by press backspace-k (dots 1-3) when you enter or meet the misspelled word. If you press backspace-k (dots 1-3), you will hear list of recommended word. You move to word that you want by using the "space-1" or "space-4." And press "enter." So misspelled word will change to the correct word.

4.3 Go to Menu

If you want to open the "go to" menu in the word processor, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Or, you can press "g (dots 1-2-4-5)" in the menu. In the "go to" menu, you will find the following submenus: "find," "find again," "replace," "go to location," "go to previous page," "go to next page," "set mark," "go to mark," "go to previous document," and "go to next document."

4.3.1 Find

The find function allows you to search for text in a document. Once the text is found you will be taken to that position in your document. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4" and press "enter" on "go to." Then, select "find." You will be able to navigate the "go to" menu with "space-1" or "space-4." Otherwise, you can press "f (dots 1-2-4)" in the "go to" menu, which is the shortcut. While editing a document, pressing "space-f (dots 1-2-4)" will activate the "find" command. If "find" is executed, the dialog box is displayed. This dialog box consists of "text to find," "search direction," "match case," a "confirm" button, and a "cancel" button. You can move from one field to the next field by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")".

1) Text to find

The first field in "find" is "text to find." In this window, you can type in the text that you want to find. If you want to find the text immediately, press "enter." However, if you want to set other fields in the dialog box, press "tab ("space-4-5")" to move to the next field.

2) Search direction

The next field is "search direction." The default direction is "forward." If you would like to change the search direction, you should press "space." Pressing "space" will toggle between "forward" and "backward". After you type in the text to be found, and set the searching direction, press "enter" if you want to find the text immediately.

3) Match case

The next field is "match case." This field display only when you execute the "find" command in text file. This field does not display in Braille file. The default value is "no." If you want to change the value, press "space." Pressing "space" will toggle between "no" and "yes."

4) Confirm

After you set all of the fields and want to execute "find," press "enter" on "confirm." You can also start finding text by pressing "enter" on "text to find" or "search direction."

5) Cancel

In order to cancel the "find" function, press "enter" on "cancel." Or, you can cancel the "find" command by pressing "space-z (dots 1-3-5-6)."

If you have executed the "find" command as explained above and it finds the text that you typed in, the sentence with the text is displayed on the Braille display, and "completed" is announced by the voice. If there was no text that matched what you typed in, the cursor does not move and the Braille Sense Plus B32 announce the "not found." by the voice. This function saves the text that was typed in last, as well as the direction, so you can use it again to search for the next occurrence of text.

When using the find command, the current cursor position is very important. If the cursor is located at the beginning of the document, it is better for you to select "forward" direction. If the cursor is located

at the end of the document, it is better to select "backward" as the direction used for searching.

4.3.2 Find Again

When you want to run the "find again" command; you can press "space-m (dots 1-3-4)" or "F2." Then move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "find again" by pressing "space-4" to move to "find again" and press "enter," or press "h (dots 1-2-5)" in the "go to" menu. When you are editing a document, you should press "enter-f (dots 1-2-4)" to activate this command. When "find again" is executed, "find again" will look for the text that was used in the previous "find." "Find again" will search in the same direction that was used with the last "find." If you have not yet used the "find" command in the current document, and you execute "find again," it will not work. "Find again" is used to find the text that you have previously found in the current document.

4.3.3 Replace

To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "replace" by pressing "space-4" to move to "replace (r)," and press "enter," or press "r (dots 1-2-3-5)" in the "go to" menu (which is the short cut). While editing a document, pressing "enter-r (dots 1-2-3-5)" will activate this function.

"Replace" also has a dialog box that consists of the following fields: "text to find," "replace with," "search direction," "match case," "replace," "confirm" and "cancel." You can move between the fields by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". The following is a description of each function.

- 1) Text to find You can type in the text that you want to be replaced in this field.
- 2) Replace with You can type in new text that will replace the text that is found. After you type in "text to find" and "replace with," the Braille Sense Plus B32 will find the text and replace it in the direction that you

have specified. If you want to change the direction, press "tab ("space-4-5")" to move to the next field.

3) Search direction

The "search direction" has the same function as the "search direction" explained in section 4.3.1. After you set the searching direction, press "enter" to start the replacement of text, or press "tab ("space-4-5")" to set the "match case" or "replace."

4) Match case

This field display only when you execute the "replace" command in text file. This field does not display in Braille file. The default value is "no." If you want to change the value, press "space." Pressing "space" will toggle between "no" and "yes."

5) Replace

You may want to replace only one piece of text. Or, you may want to replace all the texts that coincides with the text that you typed in the "text to find" field. You can set it in the "replace" field. There are two choices: "once" and "all." You can toggle between the two choices by pressing "space."

6) Confirm and Cancel

Pressing "enter" on "confirm" will start finding and replacing text. If there is no text that coincides with the text that was typed in, "no more searching data" is displayed, and the function is canceled.

Pressing "enter" on "cancel" will cancel the "replace" function.

4.3.4 Go to Location

The "go to location" command moves rapidly to a specific location. You can move to a specific page, paragraph, or line. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "go to location" by pressing "space-4," and then press "enter." While editing a document, press "enter-I (dots 1-2-3)" to activate this function. If "go to location" is executed, the word processor says, "move to page number:" If you type in a number here, the Braille Sense Plus B32 will take you to the page number that corresponds with the number you have just typed in. You can also type the letter "f (dots 1-2-4)" before the number. This will tell the Braille Sense Plus B32 that you are looking for a page number, and not a paragraph, or, line number. Type in the number of the page you want to move to without the plus

sign or minus sign, and then press "enter." The word processor will jump from start of the document to the specific page at once. If you want to move forward from your current location, put the plus sign in front of the number and letter. For example, if you want to move forward five pages, you would type "+f5." If you want to move backward from your current location, put the minus sign in front of the number and letter. If you want to move to the previous page, type "-f," and if you want to move to the next page, type "+f." If the page number you type in is not valid, the Braille Sense Plus B32 will say, "move range error."

You can also use this function to move to a specific paragraph. First, select "go to location" in the "go to" menu, or just press "enter-I (dots 1-2-3)." Then, the Braille Sense Plus B32 will say, "move to page number:" Before you type in the number of the paragraph that you want to go to, type "p (dots 1-2-3-4)," and then type the number of the paragraph that you want to go to. By typing in the letter "p (dots 1-2-3-4)," the Braille Sense Plus B32 will know that you are looking for a paragraph, and not a page or line. If you want to move forward from your current location, put the plus sign in front of the number and letter. If you want to move backward from your current location, put the minus sign in front of the number and letter. For example, if you want to move backward two paragraphs, you would type, "-p2." If you want to move to the previous paragraph, type "-p," and if you want to move to the next paragraph, type "+p." If the paragraph number you type in is not valid, the Braille Sense Plus B32 will say, "move range error."

You can also use this function to move to a specific line. First, select "go to location" in the "go to" menu, or just press "enter-I (dots 1-2-3)." Then, the Braille Sense Plus B32 will say, "move to page number:" Before you type in the number of the line that you want to go to, type "I (dots 1-2-3)," and then type the number of the line that you want to go to. By typing in the letter "I (dots 1-2-3)," the Braille Sense Plus B32 will know that you are looking for a line, and not a page or paragraph. If you want to move forward from your current location, put the plus sign in front of the number and letter. If you want to move backward from your current location, put the minus sign in front of the number and letter. For example, if you want to move backward two lines, you would type, "-I2." If you want to move to the previous

line, type "-I," and if you want to move to the next line, type "+I." If the line number you type in is not valid, the Braille Sense Plus B32 will say, "move range error."

You can also go to a specific line number on a specific page. The Braille Sense Plus B32 enables you to type in this information at the same time. To do this, press "enter-I (dots 1-2-3)," or you can select "go to location" in the "go to" menu. Then, when the Braille Sense Plus B32 says, "move to page number:" you can type in the page number followed by the line number. For example, to move to the 3rd line on the 20th page, you would type "20 3," or you could type "f20 3." When you use the command of the "go to location" function, you cannot use the "+" or "-" sign. You can only go directly to the page and line number.

4.3.5 Go to Previous Page

The "go to previous page" command allows you to move to the page that is located before the page you are currently on. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "go to previous page" by pressing "space-4," and then press "enter," or press "space-1-2-6" or "F1-F2" while you are in the document. Once you have activated the "go to previous page" function, the Braille Sense Plus B32 will go directly to the previous page.

4.3.6 Go to Next Page

The "go to next page" command allows you to move to the page that is located after the page you are currently on. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "go to next page" by pressing "space-4," and then press "enter." Or, you can press "space-3-4-5" or "F3-F4" while you are in the document. Once you have activated the "go to next page" function, the Braille Sense Plus B32 will go directly to the next page.

4.3.7 Set Mark

The "set mark" command marks a position in the document that you want to use later. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "set mark" by pressing "space-4," and then press "enter," or press "m (dots 1-3-4)" in the "go to" menu, which is the short cut. While editing a document, press "enter-m (dots 1-3-4)" to activate this command.

Move the cursor to the location that you want to mark, and press "enter-m (dots 1-3-4"). Then, the Braille Sense Plus B32 will say "mark name:." To name the mark, use the letters a through z. For example, if you put down the letter "a (dot 1)," the Braille Sense Plus B32 will move you to that point in the document immediately. If you are in the document, the Braille Sense Plus B32 will not show the mark sign. If you selected "view format character" in "settings," which was explained in section 4.1.7, you will see the bookmark sign in the document. You can go to marked text by using "space-3" or "space-6," and the bookmark sign will appear, which is "\$pl (mark name)." If you move the cursor to the mark location in a document, you can see dots 7-8 all through the mark sign. This means that the Braille Sense Plus B32 will deal with the marked text as a chunk, but not with every character one by one.

4.3.8 Go to Mark

The "go to mark" command finds a mark that has already been marked. When you want to execute this command, you can press "space-m (dots 1-3-4)," or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "go to mark" by pressing "space-4," and then press "enter," or press "j (dots 2-4-5)" in the "go to" menu, which is the short cut. You can jump to anywhere in a document to marked text with by pressing "enter-j (dots 2-4-5)."

If you press "enter-j (dots 2-4-5)," the Braille Sense Plus B32 will say "mark to move:." If you type in the character of the mark name that you want to locate, the Braille Sense Plus B32 will move the cursor to the marked text with dots 7-8 embossed in the first cell.

4.3.9 Go to Previous Document

If you have multiple documents open, you can go directly to the document that you had opened before the document that you are currently editing. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "go to previous document" by pressing "space-4," and then press "enter." Or, you can press "shift-tab (space -1-2)" while you are editing a document to go to the previous document.

4.3.10 Go to Next Document

If you have multiple documents open, you can go directly to the next document that is open. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to "go to" by pressing "space-4." Then, press "enter" on "go to." Move to "go to next document" by pressing "space-4," and then press "enter." Or, you can press "tab (space-4-5)" while you are editing a document to go to the next document.

4.4 Read Menu

The "read" menu reads the document in voice and in Braille when the user has opted to use read in voice and Braille. In order to call up the "read menu," press "space-m (dots 1-3-4)" or "F2," and then press "r (dots 1-2-3-5)." The submenus of the "read" menu are "read selected text," "read beginning of selected text," "read from beginning to cursor," "read from cursor to end," "auto scroll," and "read status."

4.4.1 Read Selected Text

The "read selected text" command allows you to have the Braille Sense Plus B32 read text that you have in a selection. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to the "read" menu by pressing "space-4," and then press "enter," or press "r (dots 1-2-3-5)" to call up the "read" menu. Press "enter" on "read selected text" in the "read" menu. While editing a document, you can press "backspace-b (dots 1-2)" to activate the "read selected text" function. Although you activate this function, the cursor location will

not move to the selected text. The cursor will stay where you have activated "read selected text."

4.4.2 Read Beginning of Selected Text

The "read beginning of selected text" command will allow you to hear the first line of the selected text, without moving the cursor location. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to the "read" menu by pressing "space-4." Then, press "enter." Move to "read beginning of selected text" by pressing "space-4," and then press "enter," or you can press "u (dots 1-3-6)" on the read menu, which is the short cut. While editing a document, you can press "enter-u (dots 1-3-6)" to activate this function. When you execute "read beginning of selected text," the cursor will stay in the same position it was at when you executed "read beginning of selected text."

4.4.3 Read from beginning to cursor

Using this function, the Braille Sense Plus B32 will audibly speak a document from the beginning to the position where the cursor is located. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to the "read" menu by pressing "space-4." Then, press "enter." Move to "read from beginning to cursor" by pressing "space-4," and then press "enter" or you can press "t (dots 2-3-4-5)" on the read menu, which is the short cut. While editing a document, you can press "backspace-g (dots 1-2-4-5)" to activate this function.

If you want to quit this function before you reach the cursor location, you can press "backspace-enter." Your cursor will stay where it was when you started this function. That is, the cursor will not move to the position to where you stopped the function.

4.4.4 Read from Cursor to End

This command will read a document from where the cursor is located to the end of the document. While the Braille Sense Plus B32 is reading the text, the cursor will stay in the same location that you were, before you started this command. The cursor will not be moved until the reading has been completed. Once the text has been

read, the cursor will move to the end of the document. To execute this command, press "space-m (dots 1-3-4)," and move to the "read" menu by pressing "space-4." Then, press "enter." You can move to "read from cursor to end" by pressing "space-4" and press "enter," or you can press "g (dots 1-2-4-5)" on the "read" menu, which is the short cut. While editing a document, you can press "enter-g (dots 1-2-4-5)" to activate this function.

If you stop this command before the end of a document, you can press "backspace-enter," which will move the cursor to where you stopped the command.

4.4.5 Auto Scroll

The "auto scroll" command scrolls automatically. The speed of the "auto scroll" is set in the "settings" menu, which is located in the "file" menu, which was explained in section 4.1.7. The auto scroll mode does not read the document using the voice. It is only displayed on the Braille display. It reads the document line by line automatically. To execute this command, press "space-m (dots 1-3-4)" or "F2," and move to the "read" menu by pressing "space-4." Then, press "enter." Move to "auto scroll" by pressing "space-4," and then press "enter," or you can press "a (dot 1)" on the read menu, which is the short cut. You can turn the auto scroll feature on and off by pressing the up and down scroll buttons simultaneously. For faster scrolling, press the right arrow key ("space-6"). For slower scrolling, press the left arrow key ("space-3"). If you want to read a line again that you have already scrolled past, you can read it again by pressing the up arrow key ("space-1") until you can get to what you want to read. Similarly, if you want to skip some lines that you do not wish to read, you can skip them by pressing the down arrow key ("space-4"). You can also access this function without opening the menu by pressing both scroll keys at the same time when in your document.

4.4.6 Read Status

This function will tell you information about your current file. If you activate this function, the Braille Sense Plus B32 will tell you the "filename," "edit mode (insert or overwrite)," and "file protection(write or read only)." To execute this command, press "space-m (dots 1-3-

4)" or "F2," and move to the "read" menu by pressing "space-4." Then, press "enter." Move to "read status" by pressing "space-4," and then press "enter," or you can press "s (dots 2-3-4)" in the read menu, which is the short cut. While editing a document, you can press "space-3-4" to activate this function. In order to return to the document that you are editing, press any key.

4.5 Layout

The "layout" command sets the layout for printing on an ink printer or embossing on a Braille printer. The "layout" menu has the following submenus: "Braille document layout," "print document layout," "Braille paragraph layout," and "print paragraph layout." The changes that are made with the "layout" command are not displayed on the Braille display. In order to check the layout, call up the menu by pressing "space-m (dots 1-3-4)" or "F2," and check the layout values one by one. The changed values will be displayed within the menu.

4.5.1 Braille Document Layout

While you are editing a document, press "space-m (dots 1-3-4)" or "F2" to call up the menu, and select "layout" or press "p (dots 1-2-3-4)," (which is the short cut), and then select "Braille document layout." Or, you can press "backspace-p (dots 1-2-3-4)." "Braille document layout" is used to set the width and height of the paper for embossing as well as the following options. Whenever you change a layout setting while you are editing a document, the setting will be valid on the rest of the document.

You can navigate the menu items with "space-1" or "space-4," and you can move to "confirm" or "cancel" by pressing "tab" ("space-4-5" or "F3"). You can skip an item by pressing "space-4" if you don't want to change the default setting.

The following are the items that can be changed:

1) Set characters per line

This sets the number of characters (Braille) per line to emboss in Braille. The default value is set to 32. Type in the number of characters per line, if you decide you want to change the value. Then, you can move to the next setting by pressing "space-4."

2) Set lines per page

This sets the number of lines per page to be embossed. It includes the line that the page number is printed in. For example, if it is set to 26, the content of the document will be embossed with 25 lines and the page number is printed as the 26th line. If you want to change the value, type in the number of lines that you want to emboss. Then, you can move to the next setting by pressing "space-4."

3) Print type

This sets whether the document will be embossed on a single sided or a double sided (both sides). The default value is set to double side embossing. If you want to emboss using single sided embossing, press "space" until "Print type: single sided" is displayed on the Braille display. Then, the setting will be changed to single side embossing. If you want to go back to double side printing again, press "space" again, and "print type: double sided" will be displayed. After setting your preference, move to the next setting by pressing "space-4."

4) Page numbering type

This sets the numbering type for embossing a document. The default type is set to "double sided." It means that the page number will be embossed on every page. The setting values are "double sided," "odd," "even," and "none." These settings are changed when you press "space." Pressing "backspace" will allow you to move in reverse order. When you have selected your preference, you need to press "space-4" in order to move to the next setting.

5) Set page numbering

This sets the position of the page number when embossing. The selections are "upper-right" and "lower-right." The default setting is set to "lower-right." Press "space" in order to change the setting. Pressing "backspace" will allow you to move in reverse order. After selecting your preference, you should press "space-4" in order to move to the next setting.

6) Header

This is used to edit the header that will be embossed on the head of every page. Move to "header" and type in the text to be embossed as the header. In order to move to the next setting, press "space-4."

7) Footer

This is used to edit the footer that will be embossed on the bottom of every page. Move to "footer" and type in the text to be embossed as the footer. After you set every field, move to "confirm" or "cancel," and press "tab ("space-4-5")." If you want to change a setting, or check your settings again, press "space-1" to move to the previous fields.

8) Confirm / Cancel

In order to apply a setting, press "enter" when "confirm" is displayed. If you do not want to change the setting, you will need to press "enter" when "cancel" is displayed.

4.5.2 Print Document Layout

This option will allow you to set the layout of the document for printing on an ink printer. Press "space-m (dots 1-3-4)" or "F2" to call up the menu while you are editing a document, and select "layout" or press "I (dots 1-2-3)" (which is the shortcut), and then select "print document layout." Or, press "backspace-t (dots 2-3-4-5)," which is the hot key for "print document layout." The settings in this menu are applied to all the paragraphs in the selected document. You can navigate the menu items with "space-1" or "space-4," and you can move to "confirm" or "cancel" by pressing "tab" ("space-4-5" or "F3"). You can skip an item by pressing "space-4" if you do not want to change the default setting.

The following is a detailed explanation of each setting:

1) Set top margin

This sets the top margin for ink printing. The top margin is the distance from the top of the paper to the first line of the printed paragraph. The default value is set to 20mm (about 0.78 inches). If you are going to change the default setting, you can type in a number, which will make the margin as big as you would like to have it.

2) Set bottom margin

This sets the bottom margin for ink printing. The bottom margin is the distance from the bottom of the paper to the last line of a printed paragraph. The default value is set to 20mm (about 0.78 inches). If you are going to change the default setting, you can

type in a number, which will make the margin as big as you would like to have it.

3) Set left margin

This sets the left margin for ink printing. The left margin is the distance from the left edge of the paper to the first text that is printed. The default value is set to 20 mm (about 0.78 inches). If you are going to change the default setting, you can type in a number, which will make the margin as big as you would like to have it.

4) Set right margin

This sets the right margin for ink printing. The right margin is the distance from the right end of the printed text to the right edge of the paper. The default value is set to 20mm (about 0.78 inches). If you are going to change the default setting, you can type in a number, which will make the margin as big as you would like to have it.

5) Set page numbering

This sets the position where the page numbers will be printed. The page number positions are "upper left," "upper middle," "upper right," "lower left," "lower middle," and "lower right." To change the setting, press "space." Pressing "backspace" will allow you to move in reverse order. After selecting your preference, you should press "space-4" in order to move to the next setting.

6) Header

This is used to edit the header that will be printed at the top of each page. Move to "header," and type in the text that you want to be printed.

7) Footer

This is used to edit the footer that will be printed at the bottom of each page. Move to "footer," and type in the text that you want to be printed.

8) Distance between lines

This sets the distance between the lines that will be printed. The default value is set to 150%. The distance can be anywhere from 100% to 300%. If you type in a value that exceeds this range, the Braille Sense Plus B32 will say "Out of range. Value too large," and wait for you to type in another value.

9) Confirm / cancel

In order to apply a setting, press "enter" when "confirm" is displayed. If you do not want to apply a setting, you will need to press "enter" when "cancel" is displayed. If you press "enter" on cancel, you will be taken out of the menu. You must press "tab ("space-4-5")" or "shift-tab ("space-1-2")" to get to the confirm and cancel buttons.

4.5.3 Braille Paragraph Layout

In order to call up the "Braille paragraph layout," press "space-m (dots 1-3-4)" or "F2" while you are editing a document. Then, press "enter" on "layout," or press "I (dots 1-2-3)" while in the "layout" menu (which is the short cut), and then select "Braille paragraph layout." Or, you can press "backspace-1-2-4-6." The changed layout will be applied only to the selected paragraph. These settings are not applied to other paragraphs.

You can navigate between the menu items by pressing "space-1" or "space-4." Move to "confirm" or "cancel" by pressing "tab" ("space-4-5" or "F3"). You can skip an item by pressing "space-4" if you do not want to change the default setting.

In this setting, you can set the following items:

1) Indent first line

This indents the first line of the paragraph as designated by the number of characters. The default value is set to 0. In order to change this setting, type in the number of characters to be indented on the "indent first line" setting item. Press the down scroll key or "space-4" in order to move to the next setting item.

2) Indent all lines except the first line

This indents all the lines of the paragraph, except the first line of the paragraph as designated by the number of columns. If you want to indent all of the text, except for the first line, by typing in a number. You can make the indent as big as you want it by changing the number of columns, which will indent all lines, except for the first line. Press "tab ("space-4-5")" in order to "confirm" and "cancel." If you want to change the setting of a previous item, move to it by pressing "space-1," and change it. The default is set to "0.)

3) Confirm / cancel

In order to apply changes, you need to press "enter" when "confirm" is displayed. If you want to exit from a setting without changing it, you should press "enter" when "cancel" is displayed. You must press "tab ("space-4-5")" or "shift-tab ("space-1-2")" to get to the confirm and cancel buttons.

4.5.4 Print Paragraph Layout

You can set the layout of the current paragraph for printing on an ink printer. In order to set "print paragraph layout," press "space-m (dots 1-3-4)" or "F2" while you are editing a document, and select "layout," or press "I (dots 1-2-3)" (which is the short cut), and select "print paragraph layout." Or, press "backspace-2-3-4-6," which is the hot key for "print paragraph layout." This setting applies only to the paragraph that you are on when the setting is changed. This setting change does not apply to other paragraphs. You can navigate the menu items by pressing "space-1" or "space-4," and you can move to "confirm" or "cancel" by pressing "tab ("space-4-5" or "F3")." You can skip an item by pressing "space-4" if you do not want to change the default setting.

The following is a detailed explanation of the settings for "print paragraph layout:"

1) Set left margin

This sets the left margin for ink printing. The default value is set to 0mm. In order to change the setting, you will need to type in the value. Move to the next setting by pressing the down scroll button or press "space-4."

2) Set right margin

This sets the right margin for ink printing. The default value is set to 0mm. In order to change the setting, you will need to type in the value. Move to the next setting by pressing the down scroll button or press "space-4."

3) Indent first line

This sets the indentation of the first line. The first line will be indented by the value that you select, and the other lines will not be indented. This setting is valid for the paragraphs that follow, unless the setting is changed. The default value is set to 0. In order to change the setting, you should type in the number of

characters. Press the down scroll button or press "space-4" in order to move to the next setting.

4) Indent all lines except the first line

All the lines in the paragraph, except the first line, are indented if this is set. This setting will be valid for the following paragraphs, unless the setting is changed. The default value is set to 0. In order to change the setting, you should type in the number of characters.

5) Alignment

This sets the alignment type. The default type is set to "left justified." The other options are "centered" and "right justified." Press "space" in order to change the setting.

6) Setting style

When printing a document through an ink printer, the style of each paragraph can be set to a desired style. Style includes "font type," "font size," and "text shape for text." You can select "text," "title," "sub title," "abstract 1," and "abstract 2" by pressing "space" or "backspace." The default fonts for each style are listed below.

Text: Times New Roman, Font size 11

Abstract1: Times New Roman, Font size 11, Boldface Abstract2: Times New Roman, Font size 14, Boldface Sub title: Courier New, Font size 16, Italic, Boldface, Centeraligned

Title: Times New Roman, Font size 20, Boldface, Centeraligned

7) Confirm / cancel

In order to apply a setting, press "enter" on "confirm." In order to cancel a setting, and move to "edit mode," press "enter" on "cancel." You must press "tab ("space-4-5")" or "shift-tab ("space-1-2")" to get to the confirm and cancel buttons.

4.6 Keys for Text Scrolling and Deleting

While reading a document, you can use the following commands to read Braille or hear speech. You can move character by character, word by word, or paragraph by paragraph.

The previous character: Left arrow ("space-3") The next character: Right arrow ("space-6")

The previous word: Space-2 The next word: Space-5

The beginning of line: Home key ("space-1-3")

The end of line: End key ("space-4-6")
The previous line: Up arrow ("space-1")
The next line: Down arrow ("space-4")

The next paragraph: "Space-5-6" or "enter-down scroll button"

The previous paragraph: "Space-2-3" or "backspace-up scroll button" The top of document: Control-home ("space-1-2-3" or "F1-F2-up

scroll button")

The bottom of document: Control-end ("space-4-5-6" or "F3-F4-down scroll button")

In addition, if you use the following commands, you can read the part of a document where the cursor is. For example, if you activate the read the current paragraph function, you will hear the entire paragraph where the cursor is located.

Read the current paragraph: "Space-2-3-5-6"

Read the current line: "Space-1-4" Read the current word: "Space-2-5" Read the current character: "Space-3-6"

If you want to delete a part where the cursor is, you can use the following keys. For example, if you activate the delete the current paragraph function, you can delete the entire paragraph where the cursor is located.

Delete the current paragraph: "Backspace-2-3-5-6"

Delete the current line: "Backspace-1-4" Delete the current word: "Backspace-2-5"

Delete the current character: "Space-d (dots 1-4-5)"

4.7 Cursor Location

While reading a document, you can check the cursor location. To do this, press "space-1-5-6." You will then hear, "00page 00line 00column 00%, 00/00 paragraph 00/00 line."

4.8 Hot keys in the word processor:

1) File menu

New document: Enter-n (dots 1-3-4-5)

Open: Enter-o (dots 1-3-5) Save: Enter-s (dots 2-3-4) Save as: Space-s (dots 2-3-4)

Close current document: Space-q (dots 1-2-3-4-5)

Print: Space-p (dots 1-2-3-4) Settings: Enter-e (dots 1-5) Exit: Space-z (dots 1-3-5-6)

2) Edit menu

Start selection: Enter-b (dots 1-2)

Copy: Enter-c (dots 1-4) Cut: Enter-x (dots 1-3-4-6) Paste: Enter-v (dots 1-2-3-6) Delete: Space-d (dots 1-4-5)

Delete blank lines: Backspace-e (dots 1-5) Add to clipboard: Enter-p (dots 1-2-3-4) Clear clipboard: Enter-d (dots 1-4-5)

Select All: Enter-a (dot 1)

Insert from file: Enter-I (dots 2-4)
Insert date: Enter-w (dots 2-4-5-6)

Toggle insert/overwrite mode: Space-i (dots 2-4)

Check spelling: Enter-k (dots 1-3)

Check spelling of the current word: Backspace-k (dots 1-3)

3) Go to menu

Find: Space-f (dots 1-2-4)

Find again: Enter-f (dots 1-2-4) Replace: Enter-r (dots 1-2-3-5) Go to location: Enter-l (dots 1-2-3)

Go to previous page: Space-1-2-6 or F1-F2 Go to next page: Space-3-4-5 or F3-F4

Set mark: Enter-m (dots 1-3-4) Go to mark: Enter-j (dots 2-4-5)

Go to previous document: Space-1-2 or space-F3

Go to next document: Space-4-5 or F3

4) Read menu

Read selected text: Backspace-b (dots 1-2)

Read beginning of selected text: Enter-u (dots 1-3-6)

Read from beginning to cursor: Backspace-g (dots 1-2-4-5)

Read from cursor to end: Enter-g (dots 1-2-4-5)

Auto scroll: up-down scroll buttons

Read status: Space-3-4

5) Layout menu

Braille document layout: Backspace-p (dots 1-2-3-4) Print document layout: Backspace-t (dots 2-3-4-5) Braille paragraph layout: Backspace-1-2-4-6

Print paragraph layout: Backspace-2-3-4-6

6) Miscellaneous hot keys

Move to previous character: left arrow key (space-3)

Move to next character: right arrow key (space-6)

Move to previous word: Space-2 Move to next word: Space-5

Move to the beginning of the line: Home (space-1-3)

Move to the end of the line: End (space-4-6)
Move to previous line: Up arrow key (space-1)
Move to next line: Down arrow key (space-4)

Move to previous paragraph: Space-2-3

Move to next paragraph: Space-5-6

Move to the beginning of the document: Ctrl-home (space-1-2-3)

Move to the end of the document: Ctrl-end (space-4-5-6)

Read current paragraph: Space-2-3-5-6

Read current line: Space-1-4
Read current word: Space-2-5
Read current character: Space-3-6

Delete current paragraph: Backspace-2-3-5-6

Delete current line: Backspace-1-4 Delete current word: Backspace-2-5

Delete current character: Space-d (dots 1-4-5) Confirm current cursor position: Space-1-5-6

Set view format character: Space-1-4-6

Set reading unit: Space-2-4-6 Set read only: Space-3-4-6

5. Address Manager

5.1 What is the "Address Manager"?

The "address manager" is a program that you can use to keep track of your contact information and schedule information, such as names, company addresses, home addresses, as well as other information.

"Address manager" has two main dialog boxes: "add address" and "search address."

In the "add address," dialog you can enter contact information, such as names, company addresses, home addresses and so on. The information that you have entered can be saved for later use.

In the "search address," dialog you can look for information that is stored in the "address manager." You can edit or delete information that you find. You can also select addresses to be printed using an ink or Braille printer.

You can also connect to a web site by pressing "enter" on a homepage address field if the field contains an address for a web site.

In the "program" menu, you can start "address manager" by typing "a (dot 1)," or by selecting "address manager." Press "space-4" or "space-1" repeatedly in the "program" menu until you arrive at the "address manager," and then press "enter" to open it.

Before going into the details of how to use the "address manager," let's discuss the structure of address data.

The address data that is stored in "address manager" consists of a set of records. A "record" is a collection of contact information about one person or company. Each record contains 23 fields. These 23 fields are: "last name," "first name," "company name," "title," "mobile phone," "home phone," "home fax," "company phone," "company fax," "home street address," "home city," "home state," "home zip code," "home country," "company street address," "company city," "company state," "company zip code," "company country." "home e-mail,"

"company e-mail," "home page," and "memo." Thus, one record contains all the information you can keep about a person or company.

5.2 Starting the Address Manager

When you press "enter" on "address manager" in the "program" menu, the Braille Sense Plus B32 will say "search address," and display the prompt, "Last name:." In other words, when you start the "address manager," the "search address" dialog box will be opened.

In "address manager," you can use the menus to conveniently browse and execute all of the available commands. When you cannot remember the exact hot key for the command that you want to execute, you can press "space-m (dots 1-3-4)" or "F2" to open the menu.

5.3 Using "Add Address"

This dialog box allows you to enter new addresses in the address manager. In order to use the "add address" function, press "space-m (dots 1-3-4)" or "F2" to bring up the "address manager" menu, and then press the up arrow key ("space-1") or the down arrow key ("space-4") to move to "add address." Then, press "enter." Or, press "enter-I (dots 2-4)" (which is the hot key) in "address manager." While you are entering an address, you can use the "search address" function (refer to section 5.4), "set address fields" (refer to section 5.3.2), "set backup option (refer to section 5.3.3)," "backup address list (refer to section 5.5.1)" "restore address list (refer to section 5.3.2)" and "exit" commands, using the menu or with other shortcut keys.

5.3.1 Adding an Address

"Add address" is a dialog box that contains a list of 22 input fields, the "memo" field, a "confirm" button, and a "cancel" button. In the input fields, you can enter the information corresponding to the 22 fields of a record. "Confirm" is used to save the information entered, and "cancel" is used to discard the entry. You can move among the input fields, "memo," "confirm," and "cancel" by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")".

Among the 22 input fields, you can move from one field to the next by pressing the up arrow key ("space-1") or the down arrow key ("space-4").

Here you should type in the appropriate information for each field, and press the down arrow key ("space-4") to move to the next field. You do not have to fill in all of the fields. If you want to skip a field, press the down arrow key ("space-4"), and the field will be left blank. You will then be prompted for the next field.

When you have entered information in the desired fields, you can save the information by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")" repeatedly to move to the "confirm" button. Then, press "enter." Or, you can press "enter" in any field.

If you don't want to save the information that you have entered, press "tab ("space-4-5")" or "shift-tab ("space-1-2")" repeatedly to move to the "cancel" button, and then press "enter."

After you cancel the entry, you will be prompted for another record, beginning with the "last name" field.

You can the use the cursor routing keys to move from one field to the next.

In any input field, if you press the first cursor routing key all the way to the left, the first input field ("last name:") will be displayed and you can type in a name there. If you want to enter a mobile phone number without entering other information, press the 5th cursor routing key, and then enter the phone number. In order to jump to the "home e-mail" field, which is the 20th field, you should press the 20th cursor routing key.

If you have pressed the 23th cursor routing key, or any key to the right of the 23th key is pressed, you will hear a warning sound because there are only 23 fields in a record.

You can enter telephone numbers using computer Braille (without a number sign) or regular grade 1 Braille (with or without a number sign). To type in a dash (-) while typing in a telephone number (e.g. 000-000-0000), you should press "space" or "dots 3-6."

If you want to put an extension number after any phone number, enter the phone number as described above, and then type a comma (,), followed by the extension number, as in "000-000-0000,100." In this case, you should press "dot 6" to enter the comma in computer Braille or "dot 2" in grade 1 Braille.

When you enter a home page address or an e-mail address, you should enter the information using computer Braille. For the @ (at sign), you should press "space-u (dots 1-3-6)" and then "dot 4." A period or dot (.) in a home page address (or an e-mail address) should be entered as "dots 4-6." A colon (:) can be typed in using "dots 1-5-6" and a slash (/) can be typed in using "dots 3-4."

By pressing "tab ("space-4-5")," you can get to the "memo" field. You can type in multiple lines of text in the "memo" field. When you want to start a new line of text, you should press "enter."

When you are done entering information for a record, you can press "tab (space-1-2)" until you reach the "confirm" button. Then, press "enter" on "confirm."

5.3.2 Setting Add Address Fields

"Set address fields" enables you to select one of the 22 fields to be shown when you enter contact information. There are 22 fields in a record, but you may not want to enter information in every one of the 22 fields. You can use "set address fields" to select only the fields that you need.

To use this function, press "space-m (dots 1-3-4)" or "F2" to bring up the menu, and then select "set address field," or press "o (dots 1-3-5)" (which is the short cut), and then press "enter." Or, you can press "enter-o (dots 1-3-5)" in the "add address" dialog box.

On the right side of each field name, "use" or "unused" is displayed. The default value is set to "use." In order to toggle the value, press "space."

After setting all the fields you want to change, move to the "confirm" button or the "cancel" button by pressing "tab ("space-4-5")" or "shift-

tab ("space-1-2")", and then press "enter" to save or cancel the changes. Another way you can cancel the changes is by pressing "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

5.3.3 Using "Search Address" in "Add address"

In "add address," use the "search address" function to jump to another record. To use the "find address" function, press "space-m (dots 1-3-4)" or "F2" to call up the menu. Next move to "find address," and then press "enter," or press "s (dots 2-3-4)." You can also press "enter-s (dots 2-3-4)" in the "add address" dialog box.

If you have entered any information and execute "search address," you will be asked "save changes? yes/no." Once you answer this, the "find address" dialog box will be displayed.

5.4 Searching For an Address

5.4.1 Using "search address"

The "search address" dialog box enables you to search for any information stored in "address manager." If you execute "address manager" in the "program" menu, "search address" is executed automatically. If you want to use "search address" in "add address," you can either select it from the menu, and press "enter," or press "enter-s (dots 2-3-4)" (which is the hot key), as explained in section 5.3.3. If you press "enter" in the "search address" dialog box, without typing any text, when "last name:" is displayed, you can browse through all of the records that are stored in "address manager." A "record" is a collection of information about one person. If more than one record is found, you can move to the next record by pressing "space-4." If you want to move to the previous record, you need to press "space-1."

For moving each field and record in the search result list, you can use the following keys.

Following are the move keys in the search result list Move to a previous field in a record: Space-2 Move to the next field in a record: Space-5 Move to the first field in a record: Space-1-3

Move to the last field in a record: Space-4-6

Move to the previous record: Space-1 Move to the next record: Space-4 Move to the first record: Space-1-2-3 Move to the last record: Space-4-5-6

Move to previous same field different record: Space-3 Move to next same field different record: Space-6

You can also search records using not only name field but also the other fields. If you want to find records with a company name, press "space-4" repeatedly until "company name:" is heard. Then, type the company name, and press "enter." The first record that has the company name will be displayed.

When you enter text to be searched for, you do not have to type the entire content of a field. For example, if you want to find a record about "Edward," type in "ed" in the "search name" field. Then, all the records whose name field contains "ed" will be found.

5.4.2 Setting Searching Address Fields

This option enables you to select the fields that you want to search. Press "space-m (dots 1-3-4)" or "F2" to bring up the menu, and select "set address search fields." Then, press "enter." Or, you can press "enter-o (dots 1-3-5)" (which is the hot key) in the "set address search fields" dialog box.

If you want to search only the name, mobile phone number, and company telephone number fields, move to those fields that you do not want to search by pressing "space-4" or "space-1," and then press "space" to change the value of that field to "unused." By pressing "space," you can toggle the value of a field between "used" and "unused." This works just like the "set address fields" function that was explained in section 5.3.2.

5.4.3 Using "Add Address" In "Search Address"

You can use the "add address" command in the "search address" dialog box. To do this, press "space-m (dots 1-3-4)" or "F2" to bring up the menu, and then select "add address." Then, press "enter."

You can also press "enter-I (dots 2-4)," which is the hot key for this option.

5.5 Backing up and restoring the address list

5.5.1 Backup Address List

If a cold reset occurs, or if your battery goes dead, all of the data in the address manager will be lost. So, it is very important that you make a backup file every time you make a change to the address list. To go to "backup address list," open the menu by pressing "space-m (dots 1-3-4)" or "F2." Then, use the up and down arrow keys ("space-1" or "space-4"), and find "backup address list." Then, press "enter." You can also press "u (dots 1-3-6)" while you are in the menu to get to "backup address list." Or, you can press "enter-u (dots 1-3-6)" to activate this function without calling up the menu.

If you already have a backup file, you will see the message "Backup file already exists. Continue to backup? yes." If you have made any changes to your address list, press "enter" to create a new backup file. If you want to keep the previous backup file, press "space-4," locate "no," and press "enter" on it. When you make a backup file in your address list, you will always have a new backup file with the extension DAT, and you will have another file with the extension BAK (which originated from the previous "address.dat" file).

5.5.2 Restore Address List

If you want to restore the address list after a cold reset, press "spacem (dots 1-3-4)" or "F2" to call up the menu, and use the up and down arrow keys to find "restore address list." Then, press "enter" on "restore address list." Or, you can press "r (dots 1-2-3-5)" while you are in the menu to find "restore address list." You can also press "enter-r (dots 1-2-3-5)" to activate this function, without calling up the menu.

If you activate the "restore address list" function, and you already have an address list, you will see the message, "Address file already exists. Which do you prefer? Append." If you press "enter," the backup address list will be appended to the current address list. If you press "space-4" once and press "enter" on "overwrite," you will install the new backup file, erasing the old backup file. For example, let us assume that you have three records in your address list and you have ten addresses in your backup file. If you select "append," you will have 13 records in your address list. In this case, three addresses could possibly be redundant. If you select "overwrite," you will have 10 addresses backed up, and the three original addresses will be deleted. If you don't want either "append" or "overwrite," press "space-4," locate "cancel," and press "enter" on it.

5.5.3 Setting Backup Option

To backup your address list, you can do it manually using the "backup address list" function. You can also backup your address list automatically by using the "set backup option." To activate the "set backup option" function, press "space-m (dots 1-3-4)" or "F2" to open up the menu. Then press "space-4" or "space-1" repeatedly to locate "set backup option." Then press "enter" on it. Or, you can press "e (dots 1-5)" in the menu to go to "set backup option." You can also activate the function without opening up the menu by pressing "entere (dots 1-5)."

If you activate the function, you will see a dialog box. The dialog box has three controls: "backup mode" radio button, a "confirm" button, and a "cancel" button. You can switch between controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." To switch between radio buttons, you can press "space-1," "backspace," "space-4," or "space."

The "backup mode" has three radio buttons: "always backup changes when exiting," "manual backup," and "prompt backup changes when exiting."

- 1) If you select the "always backup changes when exiting," a new backup file will be automatically created if you modify the address list or add other information when you exit the address manager.
- 2) If you select the "manual backup," it will not create a new backup fi le even though there may be changes in the address list. In this c ase, you can only make a new backup file by using the "backup ad dress list" menu.

3) If you select the "prompt backup changes when exiting," you will s ee the message "backup changes? Yes" when you exit the address s manager, if you have modified the address list or added other inf ormation. If you press "enter" on "yes," it will automatically create a new backup file and exit the address manager. If you press "spa ce-4" once and press "enter" on "no," it will exit without making a n ew backup file.

You can change the backup mode if you press "enter" after focusing on one of the three radio buttons. Or, you can press "enter" on "confirm" by moving to it by pressing "tab (space-4-5)." The default backup mode is set to "prompt backup changes when exiting."

5.6 Commands in the Found Records

5.6.1 Find again

If you want to search for another name, press "tab ("space-4-5")" or "shift-tab ("space-1-2")." The prompt, "last name:" will be displayed. Now, you can type in the new text that you want to look for.

Just as in a new search, you can start the search by pressing "enter." Even if you have canceled a search, you can go back to the "search address" dialog box by pressing "tab ("space-4-5")."

5.6.2 Opening a home page

If a record has a homepage address or an email address, you can open the homepage or send an email. Move to "home page," "home e-mail" or "company e-mail" by pressing "space-1" or "space-4." Then, press "enter" on "home page," "home e-mail" or "company e-mail."

If you press "enter" on a "home page," the Braille Sense Plus B32 will automatically connect to the web browser program. If you press "enter" on an "home e-mail" or "company e-mail," the Braille Sense Plus B32 will bring up the "email" program, so that you can send an email to the email address that you have selected.

Before you use this command, please make sure that you are connected to the internet.

5.6.3 Editing Addresses

In order to edit a field that is in a record, find the desired address by using the "search address" function, and then move to the field you want to change by using the "space-2" or the "space-5" repeatedly until you arrive at the field that you want to change. Then, press "space-m (dots 1-3-4)" to call up the "menu," and select "modify address." Then, press "enter," or you can press "enter-m (dots 1-3-4)," which is the hot key. You can now enter new information for that field. After you have finished entering the information, press "enter." The Braille Sense Plus B32 will save the changes that have been made, and you will be returned to the first field of the record.

To save the changes that have been made, and exit from "edit address" mode, move to "confirm" by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")", and then press "enter." In order to exit from edit mode without saving the changes that have been made, move to "cancel" by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")" and press "enter." You can also exit from the "modify address" by pressing "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)," which are the hot keys.

5.6.4 Deleting Addresses

To delete the record you are currently reading, call up the "menu" by pressing "space-m (dots 1-3-4)," and select "delete address." Then, press "enter" or press "d (dots 1-4-5)" (which is the short cut) in the "menu." Or, you can press "space-d (dots 1-4-5)" (which is the hot key) while the record is displayed. You can also delete more than one record at a time as follows:

1) Select the records to be deleted and use the "delete" command. To select the record that you want to delete, press "space" when the record is displayed. Selected records can be deleted by pressing the "delete" key ("enter-d (dots 1-4-5"). If you press "space" again on a selected record before you delete it, the selection will be canceled. The records you have selected will

show the, "*" symbol to the left of the "last name:," which is the first field of a record. The Braille Sense Plus B32 will say "selected." If you cancel a selection by pressing "space" on a selected record, the "*" will disappear, and the Braille Sense Plus B32 will say "cancel selection."

2) Select all and delete

If you want to delete all the records in "address manager," press "space-m (dots 1-3-4)" to call up the "menu" and select "select all." Then, press "enter." Next, press "space-m (dots 1-3-4)" to call up the "menu" again, and then select "delete address." Then, press "enter." Or, you can press "enter-a (dot 1)" (which is the hot key) and press "space-d (dots 1-4-5)" while you are using the "find address" function. If you select all records by "select all," "*" will be displayed to the left of "last name:" If you press "space-e (dots 1-5)," then all of the selections will be canceled and "*" will disappear.

5.6.5 Printing addresses

This option allows you to print the selected records to a Braille printer or an ink printer. First, search the records to be printed with the "search address" command, and then select the records that you want to print. To select a record, press "space" on the record to be printed. If you want to select all records in "address manager," press "enter-a (dot 1)," or select "select all" from the "menu," and press "enter." At the beginning of a selected record, "*" will be displayed on the Braille display.

After selecting the records that you want to print, press "space-m (dots 1-3-4)" to bring up the "menu," and then select "print address." Then, press "enter," or press "space-p (dots 1-2-3-4)," which is the hot key. The Braille Sense Plus B32 will now prompt you to select a printer. The default selection is "printer." If you press "space" once, the selection will be changed to "embosser." And, if you press "space" again, "cancel" will be selected. Each time when you press "space," the Braille Sense Plus B32 will cycle through "printer," "embosser," and "cancel." You can select one of them by pressing "enter" when the option you want to choose is displayed.

5.6.6 Saving Addresses to a File

You can save selected records to a file. Regarding how to select records, you can find a detailed explanation in section 5.6.4 and 5.6.5.

To save selected records in a document file format, press "space-m (dots 1-3-4)" to call up the "menu," select "save addresses as file," and then press "enter." Or, you can press "enter-t (dots 2-3-4-5)" (which is the hot key) after selecting the desired records. If you execute the "save addresses as file" command, the "file save" dialog box will be displayed and you will be asked to enter the file name and select a file format. After you type in the file name, and select one of the available file formats, you should press "enter" on "confirm," which will save the selected record(s) to a file. This dialog box is the same as the "save as" dialog box in the word processor, except that, here, when you are saving addresses to a file, the default file name is not displayed unlike the dialog box in the word processor." You should refer to section 4.1.4 to learn about the dialog box "save as" in the word processor.

5.7 Synchronizing With Microsoft Outlook

The "address manager" can be synchronized with Microsoft Outlook on your personal computer to help you keep track of your information. For a more detailed explanation of how to connect the Braille Sense Plus B32 to your computer, and for more information on how to use ActiveSync, please refer to chapter 16. Please take the following steps in order to synchronize the Braille Sense Plus B32 with Microsoft Outlook:

- 1) Download and install "ActiveSync" on to your personal computer.
- 2) Connect the Braille Sense Plus B32 to your personal computer, using a USB cable.
- 3) If the "partnership" dialog box opens on your PC after you connect the Braille Sense Plus B32 to your PC, select "yes," and press the "next" button on your PC.
- 4) Then, you will be asked for a device name. Type in "BrailleSensePlus" (or whatever you would like to call the Braille Sense Plus B32)

- 5) Press the "next" button. Then, the program list dialog box will be displayed on your PC. Click on the "check box" that is located next to "contacts." Note that the other check boxes should not be checked. Press the "next" button.
- 6) Then, the synchronization between Microsoft Outlook and the Braille Sense Plus B32 are complete. You can then check the contacts in Microsoft Outlook and the Braille Sense Plus B32.

5.8 Hot Keys in the Address Manager

1) Move keys for moving from field to field in add address or in the "menu"

Move to the previous field or menu item: Up arrow key (space-1) or up scroll button

Move to the next field or menu item: Down arrow key (space-4) or down scroll button

Move to the first field or menu item: Ctrl-home (space-1-2-3) Move to the last field or menu item: Ctrl-end (space-4-5-6)

Move Keys For Moving From Record To Record in the search result list

Move to a previous field in a record: Space-2

Move to the next field in a record: Space-5

Move to the first field in a record: Home (space-1-3) Move to the last field in a record: End (space-4-6)

Move to the previous record: Space-1 Move to the next record: Space-4 Move to the first record: Space-1-2-3

Move to the last record: Space-4-5-6

Move to previous same field different record: Space-3 Move to next same field different record: Space-6

3) Shortcut keys in the "menu"

Add address: I (dots 2-4) Find address: s (dots 2-3-4) Modify address: m (dots 1-3-4) Delete address: d (dots 1-4-5)

Select all: a (dot 1)

Save as a file: t (dots 2-3-4-5) Print address: p (dots 1-2-3-4) Backup address list: u (dots 1-3-6) Restore address list: r (dots 1-2-3-5) Setting backup option: e (dots 1-5)

4) Hot Keys For The Commands

Add address: Enter-I (dots 2-4) Find address: Enter-s (dots 2-3-4) Modify address: Enter-m (dots 1-3-4) Delete address: Space-d (dots 1-4-5)

Select all: Enter-a (dot 1)

Save as a file: Enter-t (dots 2-3-4-5)
Print address: Space-p (dots 1-2-3-4)
Backup address list: Enter-u (dots 1-3-6)
Restore address list: Enter-r (dots 1-2-3-5)
Setting backup option: Enter-e (dots 1-5)

Setting add/searching address fields: Enter-o (dots 1-3-5)

5) Miscellaneous hot keys

Tab: Space-4-5 Shift-tab: Space-1-2

Cancel: Space-e (dots 1-5) or F4

Exit: Space-z (dots 1-3-5-6)

6. Schedule Manager

6.1 Overview

The "Schedule manager" is a program that is used to manage important information about appointments, anniversaries, and events. The Schedule Manager can also inform you of appointments at a specified time. You can start the "schedule manager" from the "program" menu, by pressing the up or down arrow key ("space-1" or "space-4") to move to "schedule manager." Then, press "enter." Or, you can press "s (dots 2-3-4)" in the "program" menu, which is the short cut. The "Schedule manager" has two main dialog boxes: "add schedule" and "search schedule." In "add schedule," you can enter information about a new appointment. Using "search schedule," you can look for information about a specific appointment stored in the "schedule manager," and you can edit or delete the schedule information that is stored.

6.2 Starting "Schedule Manager"

If you press "enter" on "schedule manager," or press "s (dots 2-3-4)" (which is the short cut) in the "program" menu, the "find schedule" dialog box will appear, so that you can search stored information. The first thing you will hear is "find date:" followed by the current date. If you want to add new schedule information, press "space-m (dots 1-3-4)" or "F2" to bring up the menu. Then, select "add schedule," and then press "enter." Or, you can quickly open it by pressing "enter-I (dots 2-4)" in the "search schedule" dialog box. As in other programs on the Braille Sense Plus B32, you can use menus and shortcut keys in the "schedule manager." Section 6.13 lists all the hot keys and shortcut keys available in the "schedule manager."

6.3 Setting Date and Time

When you use "add schedule," "search schedule," or "wakeup call" (which are located in the "utility" menu), you are asked to set the date and time. The Braille Sense Plus B32 provides you with a consistent interface to enter time and date information in these dialog boxes. So before we start talking about using the "schedule manager" in this

section, we should explain how to enter the date and time. When you are asked to enter a date and time, you can either type in the date and time, or select it using shortcut keys, which are outlined at the end of this section. When you type numbers in date/time, you can use either computer Braille (without a number sign) or regular grade 1 Braille (with or without a number sign). When entering time, use "hh mm" format, two digits for the hour, and two digits for the minute. For example, use "10 05" to enter 5 minutes past 10. You can use a dash (-) or slash (/) to separate the hour field and minute field, but not a colon (:). You can enter a date in "mm dd yyyy" format, which uses two digits for the month, two digits for the day, and four digits for the year, as in "09 01 2004" to enter September 01, 2004. Again, you can use a space, dash (-), or slash (/) to separate the month, day, and year. To set the date and time with shortcut keys, you can use the following commands.

1) Date setting keys

Move to the next day: Space-6
Move to the previous day: Space-3
Move to the next week: Space-5
Move to the previous week: Space-2
Move to the next month: Space-4
Move to the previous month: Space-1
Move to the next year: Space-5-6
Move to the previous year: Space-2-3

2) Time setting keys

Move to 1 hour after: Space-4 Move to 1 hour before: Space-1 Move to 10 minutes after: Space-5 Move to 10 minutes before: Space-2 Move to 1 minute after: Space-6 Move to 1 minute before: Space-3

6.4 Adding a Schedule

To add a new appointment, press "space-m (dots 1-3-4)" or "F2" to bring up the menu. Select "add schedule," and press "enter," or press "enter-I (dots 2-4)" in the "search schedule" dialog box. The "add schedule" dialog box has a set of input fields, a "confirm" button,

and a "cancel" button. The input fields are "appointment starting date," "appointment starting time," "appointment ending date," "appointment ending time," "subject," "location," "memo," "alarm time," and "set recurrence schedule." Among the input fields, you can move from one field to the next by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")." For the "subject" and "memo" fields, you can type in text, and for the "appointment starting date", "appointment ending date", "appointment starting time", "appointment ending time" fields, you can either type in a date/time, or select it using shortcut keys, as explained in section 6.3. If you press "enter" on the "confirm" button, the schedule information will be saved. If you press "enter" on "cancel" button, the entry will not be saved.

6.4.1 Appointment Starting Date

When you start "add schedule", the "Appointment starting date" edit box is displayed first. By default, this field is set to the current date, which can be changed in the "set date and time" in "utility" program. If you want to use this date, just press "tab (space-4-5)" to move to the next field. If you want to enter a new date, you want to type month/day/year in this order. You can see "6.3 Setting Date and Time" for more details about how to enter a date. After you have entered the date, you should then press "tab (space-4-5)" to move to the next field. If you press "enter" by accident right after filling in this field, you will get the message, "no subject," and then the focus moves to the "subject" field.

6.4.2 Appointment Starting Time

"Appointment starting time" is the second field in the "add schedule" dialog box. Here you can set the time when your appointment starts. By default, this field shows the current time, which can be changed in the "set date and time" in the "utility" program. If you set the time format as "12 hour" in this option, the time will be displayed in "am/pm" format. Otherwise, the time will be displayed in 24 hour format. If you want to change the time, you should enter the time as explained in "6.3 Setting Date and Time." If you have set the time format to "12 hour," you will want to press "space-x (dot 1-3-4-6)" to change between am and pm. After you have entered the time, press the "tab (space-4-5)" to move to the next field. If you press "enter" by

accident right after entering this field, you will get the message, "no subject," and then the focus will move to the "subject" field.

6.4.3 Appointment Ending Date

The "Appointment ending date" is the third field in the "add schedule" dialog box, and here you can set the date when the appointment ends. By default, the same date as the date you set in the "appointment starting date" field is displayed. If you want to use this date, you can press "tab (space-4-5)" to move to the next field. If you want to enter a new date, you should type month/day/year in this order. You can refer to "6.3 Setting Date and Time" for more details about how to enter a date. After you have changed the date, you can press "tab (space-4-5)" to move to the next field. If you press "enter" by accident right after entering the date, you will get the message, "no subject," and the focus will move to the "subject" field.

6.4.4 Appointment Ending Time

"Appointment ending time" is the fourth field in the "add schedule" dialog box. Here you can set the time when the appointment ends. By default, the same time as the time you set in the "appointment starting time" field is displayed. If you want to change the time, type the time as you would in the "appointment starting time." You should refer to "6.3 Setting Date and Time" for more details about how to enter the time. After setting the time, press "tab (space-4-5)" to move to the next field. If you press "enter" by accident right after entering the time, you will get the message, "no subject," and then the focus moves to the "subject" field.

6.4.5 Subject

"Subject" is the fifth field where you can type in the subject of an appointment. If you do not enter anything in this field, you will not be able to save the record. If you press "enter" after typing in the subject, the record will be saved, leaving the "location" and "memo" field empty, and the "alarm time" field set to its default value ("time of appointment"). If you want to move to the next field, press "tab ("space-4-5")," instead of "enter."

6.4.6 Location

In the "Location" field, you can type appointed location. If you press "enter" after typing in the location, the record will be saved, leaving the "memo" field empty, and the "alarm time" field set to its default value ("time of appointment"). If you want to move to the next field, press "tab ("space-4-5")," instead of "enter."

6.4.7 Memo

In the "Memo" field, you can enter detailed information about an appointment. Here, you can type in more than one line. You can use most of the editing commands that are used in the "word processor." Press "enter" to enter information on a new line. You can leave this field blank if you want to. After you finish writing the information, you can press "tab ("space-4-5")" to move to the next field.

6.4.8 Alarm Time

The "alarm time" function allows you to set the time when you will be notified about an appointment. The alarm is set relative to the appointment time. For example, you may want the alarm to sound 30 minutes before your appointment, so that you are not late. The default value for this field is set to "time of appointment." This means that the alarm will sound at the same time as you have set for your appointment. You can set the time in the same way as when you set the appointment time. The time can be set anywhere from one minute to twenty-three hours and fifty-nine minutes. Refer to section 6.3 for more information about how to set the time. If you attempt to set the time to 0, the Braille Sense Plus B32 will display the message, "time of appointment." If you do not want to set an alarm, press "space-1" when "alarm time" is set to "time of appointment." Then, "alarm off" will be displayed, and the alarm for this appointment will be turned off. After setting the "alarm time," save this appointment by pressing "enter," or by pressing "tab ("space-4-5")" to move to the "confirm" button, and press "enter." If you have set the "alarm time," it will go off at the specified time even if the Braille Sense Plus B32 is turned off. If you want to stop the alarm, press "backspace-enter."

6.4.9 Setting a recurring Schedule

You can set this option when the schedule you are creating currently recurs periodically. If you clear this check box, the schedule will be set to occurring once. You can check or uncheck this option by pressing "space." That is, if you press "space" when this box is checked, it will be unchecked, and if you press "space" when this box is unchecked, it will be checked. If you have unchecked this, just press "enter", or press "tab (space-4-5)" repeatedly to move to the "confirm" button and press "enter", to save the schedule. If you want to set recurrence schedule, you should press "space" and then press "tab (space-4-5)" or "enter" to move to the combo box where you can set the recurrence pattern. In this combo box, you can select one of "daily", "weekly", "monthly" and "yearly." We will discuss these options in more detail in the next section.

6.4.9.1 Daily

If you select "daily," and press "tab (space-4-5)," the focus will move to "recurring interval of day" edit box. Here, you can enter the number of days after which the appointment recurs. You can type a number between 1 and 999. If you enter 1, the appointment recurs every day, and if you enter 2, it recurs every other day. One thing you have to be careful when you use this is that the difference between the starting and ending date should be shorter than the recurring interval value. For example, suppose that the appointment starts at 09:00, Feb. 1, 2006, and ends at 12:00, Feb. 2, 2006. If you set the recurring interval to 1, you will get an error message "The appointment duration" should be shorter than the recurring interval." This is because it is logically impossible that the appointment duration is 27 hours, and the appointment recurs 24 hours. This rule is applied in the same way when you set weekly, monthly, or yearly recurring appoints. If you press "tab (space-4-5)" after setting the recurring interval, the "recurrence ending date" check box appears. By default, it's unchecked, which indicates that there is no apparent ending date when the recurrence will stop. If you check this box by pressing "space," and press "tab (space-4-5)," the focus will move to the edit combo box that asks for the ending date. Enter the date when the recurrence will stop. 'You can directly type the date, or you can set

the date as described in "6.3 Setting date/time". Once you set the date, press "tab (space-4-5)" to move to the "confirm" button.

6.4.9.2 Weekly

After you set the "recurrence" to weekly, press "tab (space-4-5)" to move to the "recurring interval" edit box. Here you can set after how many weeks the appointment will recur. You can type a number between 1 and 999. If you set it to 1, the appointment will recur every week, and if you set it to 2, it will recur every other week. The restriction on the recurring interval as in "daily" is applied to "weekly." If the recurring interval is one week, the appointment duration should be shorter than one week. Otherwise, you will get an error message, "The appointment duration should be shorter than the recurring interval." If you press "tab (space-4-5)" after entering the recurring interval, the focus will move to a list box where you can select the day of the week on which the appointment recurs. You can move between the items in the list box, by pressing "space-1" or "space-4." To select or unselect the current item, press "space". You can make more than one selection. If you don't select any day, it will be set to the today's day of the week. Press "tab (space-4-5)" after selecting the days of the week when the appointments recurs. Then the focus will move to "set recurrence end date" check box. You can set the recurrence end date as described in 6.4.9.1.

6.4.9.3 Monthly

If you press "tab (space-4-5)" after setting the "recurrence to monthly," the focus will move to the "recurring type" combo box. Here, you can set the recurring type as "date" or "day of the week." To move between the two options, you can use "space-1" or "space-4." "date" is used when you want to set an appointment recurring on the same day of a month, for example, on the 17th of every month, or every other month. On the other hand, "day of the week" is used when you want to set an appointment recurring on the same week and the day of the week of a month, for example, on Wednesday of the second week of every month. After selecting the "recurring type," press "tab (space-4-5)" to move to the "recurring interval." In this field, you set after how many months the appointment will recur. You can type a number between 1 and 999. If you press "tab (space-4-5)"

after setting "recurring interval," different fields will be shown depending on what you have selected in "recurring type." If you set the "recurring type" to "date," an edit box will be shown, where you can type the day of the month when the appointment recurs. By default the date set in the "appointment starting date" is shown. You can type a number between 1 and 31. If you press "tab (space-4-5)" after setting this, the focus will move to "recurrence end date" and you can set the date in the same way as described in 6.4.9.1. If you have set the "recurring type" to "day of the week," you will be asked the "recurring week" first. You can set this to "first week," "second week," "third week," "fourth week" or "last week." This is for setting the week of a month when the appointment recurs. Here if you press "tab (space-4-5)," the focus will move to a combo box where you can select the day of the week when the appointment recurs. Since you can select only one of the 7 days, the one shown currently is the selected day. If you press "tab (space-4-5)" here, the focus will move to the "recurrence end date" check box, and you can set it in the same way as described in 6.4.9.1

6.4.9.4 Yearly

If you set the "recurrence" to "yearly," press "tab (space-4-5)" to move to the "recurring type" combo box. You can select either "date" or "day of the week," and you can move between them by pressing "space-1" or "space-4." If you set the "recurring type" to "date," you can set the month and the day of the month when the appointment recurs. If you set it to "day of the week," you can set the month, the week, and the day of the week when the appointment recurs every year. If you press "tab (space-4-5)" after setting "recurring type," the focus will move to the "month for recurrence" combo box. You can select one of the 12 months by pressing "space-1" or "space-4." If you press "tab (space-4-5)" here, the focus will move to different fields, depending on what you have set the "recurring type" to. If you have set the "recurring type" to "date," the focus moves to "day for recurrence" edit box. You can type a number between 1 and 31 here. If you press "tab (space-4-5)" here, the focus will move to "the recurring end date" check box, using the same way as described in 6.4.9.1. If you have set the "recurring type" to "day of the week," you have to set "recurring week" and "day of week for recurrence." You

can set the values of these combo boxes in the same way as described in 6.4.9.3.

6.4.10 Confirm

If you press "enter" on the "confirm" button, the appointment will be saved, and the "add schedule" dialog box will be closed.

6.4.11 Cancel

If you press "enter" on the "cancel" button, the appointment information you entered will be discarded, and you will be asked to enter information about another appointment. You can also cancel the entry by pressing "space-e (dots 1-5)."

6.5 Search Schedule

"Search schedule" is used for searching Appointments that you have entered before. When you start "schedule manager," the "search schedule" dialog box will be opened. You can also open this dialog box when you are in the "add schedule" dialog box, by pressing "enter-s (dots 2-3-4)." Or you can open the menu by pressing "spacem (dots 1-3-4)," and press "enter" on "search schedule." There are two methods to search for the schedule; "searching with subject" and "searching with date." With the "searching with subject," you can find schedule with the keywords in the subject field. With the "searching with date," you can find schedules with the specified date. In order to toggle the searching mode, press "space-m (dots 1-3-4)" or F2 to call up the menu and move to "toggle search mode" and press "enter." Or you can execute it by pressing "enter-f (dots 1-2-4)" without calling up the menu. Every time you press "enter-f (dots 1-2-4)," the Braille Sense Plus B32 will say "search mode: Date" or "search mode: Subject," and the searching mode will be toggled. The latest searching mode will be saved when you will exit the Schedule Manager. So if you execute the Schedule Manager and search any schedule, the latest searching mode will be displayed.

6.5.1 Searching with date

It searches the schedule with the date. If it is executed, the Braille Sense Plus B32 will say "find date: (current date)." If you just press "enter" here, the appointments occurring today will be searched for. If you want to search for another date, you can type the date in the format "mm/dd/yyyy," or use the "move by date" hotkeys as described in "6.3 Setting date and time." If you press "enter" after entering the date, the appointments occurring on the day will be shown. If there is no appointment on that day, "There is no schedule registered." will be announced. Otherwise, the first appointment on that day will be announced in the form of "date, time, and subject." If the appointment lasts for more than one day, "continuous schedule" will be announced. If the appointment recurs, "recurring schedule" will be announced. If you registered more than one appointment for that day, you can move between the appointments on that day by pressing "space-1" or "space-4." If you want to move to the first appointment on a day, you can press "space-1-3," and if you want to move to the last appointment on the day, press "space-4-6." To move to the appointments on another day, press "space-2" or "space-5." Then, the previous/next appointment occurring within four months will be displayed. If you want to move to the first appointment registered in the schedule manager, press "space-1-2-3," and if you want to move to the last appointment registered in the schedule manager, press "space-4-5-6." If you want to know more about a registered appointment, press "enter" on the desired appointment item. Then, if you press "space-1" or "space-4," you can hear the appointment starting date, starting time, ending date, ending time, subject, and memo.

6.5.2 Searching with subject

If it is executed, the Braille Sense Plus B32 will say "search subject:" Type in the keywords which you are searching. After you type in the keywords and press "enter," then all schedules with the keywords will be displayed.

If you press "enter" without typing in any word in "search subject:" edit box, the Braille Sense Plus B32 will display all schedules in your Braille Sense Plus B32.

In order to move to the next or previous schedule, press "space-4" or "space-1," respectively. Pressing "space-1-3" will move to the first

item of the schedule list, and pressing "space-4-6" will move to the last item of the schedule list.

For the recurring appointment and multiple day appointment, the Braille Sense Plus B32 will show the schedules of the first day only, if you search the schedule with subject. For example, if you registered any appointment on January 1, 2007 and made it recur the first day of every month, the Braille Sense Plus B32 will show this schedule on January 1, 2007 only when you search it with "searching with subject."

If you want to read the schedule in detail, you can press "enter" at the schedule that you want to read in detail. After you read the schedule in detail and return to the schedule list, press "space-e (dots 1-5)."

And if you want to search with the other keywords, press "tab (space-4-5)" to move to "search subject" edit box.

6.6 Modify Schedule

You can modify an appointment that you have scheduled. First, move to the appointment you want to modify in the find result list. Press "enter-m (dots 1-3-4)." Or open the menu by pressing "space-m (dots 1-3-4)" or "F2" and press "enter" on "modify schedule," or press the shortcut key "m (dots 1-3-4)" in the menu. Or you can press its hot key, "enter-m (dots 1-3-4)" in the find result list. If the appointment is a recurring schedule, a prompt, displaying "recurrence appointment. Open type?" will appear. This is asking whether you want to modify the recurring schedule or the schedule for a specific day. If you select "this occurrence," you will make changes for the appointment of the day, but the recurring appointments on other days will not be changed. If you select "the series," you will make changes for all the recurring appointments of the schedule. If you select "cancel," "modify schedule" dialog box will not be opened and go back to the previous status. You can select these values by pressing "space" or "backspace." Press "enter" to open the "modify schedule" dialog box. This dialog box contains the same controls as in the "add schedule" dialog box. The only difference is that each field has the value entered previously. You can make changes in these fields in the same way as described in 6.4. If you change a recurring schedule, all

the instances of the schedule will be changed according to the new values. Once you finish modifying the schedule, the information shown in the find result list will be updated accordingly.

6.7 Deleting a Schedule

If you want to delete a schedule, move to the schedule in the find result list. Then, press "space-m (dots 1-3-4)" to open the menu, and press "enter" on "delete schedule." Or you can press its hot key, "space-d (dots 1-4-5)" in the find result list. If the selected schedule is a recurring schedule, "recurring appointment. Delete type?" will be displayed. This is asking whether you want to delete the recurring schedule, or just the appointment for that day. If you select "this occurrence," only the appointment on that day will be deleted. If you select "the series," the recurring schedule itself will be deleted. You cannot select and delete multiple schedules at once. You can delete only the appointment currently focused.

6.8 Printing a Schedule

After finding an appointment using the "search schedule" command (as explained in section 6.5), you can print an appointment that you have found using the "print schedule" command. In the search results list, press "space-p (dots 1-2-3-4)," or call up the menu by pressing "space-m (dots 1-3-4)" or "F2," and press "p (dots 1-2-3-4)," or select "print schedule." Then, press "enter." The Braille Sense Plus B32 will ask you to specify the beginning date of the appointments to be printed. By default, the current date is displayed. You can specify a date that you want to search for. Refer to section 6.3 for information on how to enter dates. Now, press "tab ("space-4-5")" to set the end date of the appointments that you want to be printed. Again, you can enter the dates, as explained in section 6.3. If you press "enter" or "tab ("space-4-5")," you will be asked to select the type of printer you will use. "Printer" is the default setting. Press "space-1" or "space-4" to move between "embosser" and "printer." If you have selected the appropriate printer type, you can press "enter" to start printing. Before you press "enter" here, please make sure the Braille Sense Plus B32 is connected to the printer correctly. After the printing is finished, the Braille Sense Plus B32 will display the search results list.

6.9 Saving Appointments as a File

You can save appointments stored in "schedule manager" as a document file. In the search results list, press "enter-t (dots 2-3-4-5)," or call up the menu by pressing "space-m (dots 1-3-4)" or "F2," and then select "save schedule as file," and press "enter," or press "t (dots 2-3-4-5)" in the menu. Then, the Braille Sense Plus B32 will ask you to specify the beginning and end date of the appointments to be saved just like it did in "print schedule." After setting the beginning and end dates, press "enter" or "tab ("space-4-5")," and the "file save" dialog box will be displayed to prompt you to enter the name and the format of the file to be saved. This dialog box is the same as the "save as" dialog box in the "word processor." Please refer to section 4.1.4 for more information about the "save as" dialog box.

6.10 Backing Up and Restoring Your Appointments

6.10.1 Backup Schedule

If a cold reset occurs, or if your battery goes dead, all of the data in the schedule manager will be lost. So, it is very important to make a backup file every time you change your schedule. To backup your schedule, go to "backup schedule," open the menu by pressing "space-m (dots 1-3-4)" or "F2." Then, use the up and down arrow keys ("space-1" or "space-4"), and find "backup schedule." Then, press "enter." You can also press "u (dots 1-3-6)" while you are in the menu to get to "backup schedule." Or, you can press "enter-u (dots 1-3-6)" to activate this function without calling up the menu.

If you already have a backup file, you will see the message "Backup file already exists. Backup anyway? yes." If you have made any changes to your schedule, press "enter" here to create a new backup file. If you want to keep the previous backup file, press "space-4," locate "no," and press "enter" on it. If you make a backup file again in the schedule manager, you will have a new backup file with the extension DAT, and you will have another file with the extension BAK (which originated from the previous "schedule.dat.")

6.10.2 Restore Schedule

If you want to restore your schedule after a cold reset, press "spacem (dots 1-3-4)" or "F2" to call up the menu, and use the up and down arrow keys to find "restore schedule." Then, press "enter" on "restore schedule." Or, you can press "r (dots 1-2-3-5)" while you are in the menu to find "restore schedule." You can also press "enter-r (dots 1-2-3-5)" to activate this function, without calling up the menu.

If you activate the "restore schedule" function, and you already have an existing schedule, you will see the message "schedule file already exists. Which do you prefer? append?" If you press "enter" here, you will have a new schedule with the backup file appended. If you press "space-4" once and press "enter" on "overwrite," you will have a schedule restored from the backup file. For example, let us assume that you have a schedule for days 1 - 3 in your schedule and you have a schedule for days 1 - 5 in your backup file. If you select "append," you will have a schedule with 8 days. In this case, three days of the schedule could possibly be redundant. If you select "overwrite," you will have days 1 - 5 from your schedule back-up, and days 1 - 3 of the original schedule will be deleted. If you don't want to "append" or "overwrite," press "space-4" once more, locate "cancel," and press "enter" on it.

6.10.3 Setting Backup Option

To backup your schedule, you can backup your schedule manually by activating the "backup schedule" function. You can also backup the schedule automatically by activating the "set backup option" function. To activate the "set backup option" function, press "space-m (dots 1-3-4)" or "F2" to open up the menu. Next press "space-4" or "space-1" repeatedly to locate "set backup option." Then, press "enter" on "set backup option." Or, while you are in the menu, you can press "e (dots 1-5)" to jump directly to "set backup option." You can also activate the "set backup option" function without opening up the menu by pressing "enter-e (dots 1-5)."

If you activate this function, you will see a dialog box. The dialog box has three controls, "backup mode" radio button, a "confirm" button, and a "cancel" button. You can switch between controls by pressing

"tab (space-4-5)" or "shift-tab (space-1-2)." To move between the radio buttons, you can press "space-1," "backspace," "space-4," or "space."

The "backup mode" has three radio buttons: "always backup changes when exiting," "manual backup," and "prompt backup changes when exiting."

- If you select the "always backup changes when exiting," a new bac kup file will be created automatically if you have modified your sch edule or added other information before exiting the schedule mana ger.
- 2) If you select the "manual backup," a new backup file will not be cre ated, even though there have been changes made to your schedul e. If you select this option, you can only make a new backup file b y using the "backup schedule" menu.
- 3) If you select "prompt backup changes when exiting," you will see the message "backup changes? yes" if you have modified your schedule or added other information before exiting the schedule manager. If you press "enter" on "yes," a new backup file will be created, and you will exit the schedule manager. If you press "space-4" on ce, and press "enter" on "no," you will exit the schedule manager, and a new backup file will not be created.

You can change the backup mode if you press "enter" after focusing on one of the three radio buttons. Or, press "tab (space-4-5), and press "enter" on "confirm." The default backup mode is set to "prompt backup changes when exiting."

6.11 Setting Alarm Option

You can open the "set alarm options" dialog box by pressing "enter-o (dots 1-3-5)," or by pressing "enter" on "set alarm options" in the menu by pressing "space-m (dots 1-3-4)" or "F2" in the "schedule manager." This dialog box has a list of alarm option fields, a "confirm" button, and a "cancel" button. Alarm option fields include "alarm duration," "alarm repeat interval" and "repeat." You can move between these fields by pressing "space-1" or "space-4." You can

access the "confirm" and "cancel" buttons by pressing "tab ("spacedots 4-5")" or "shift-tab ("space-dots 1-2")."

6.11.1 Alarm Duration

With this option, you can change the duration of the alarm sound. You can set this option to a value that is between 5 and 600 seconds. The default value is set to 30 seconds. You should enter the number in computer Braille or regular grade 1 Braille, without a number sign. Press "enter" to save the changes, and exit from the dialog box. If you want to set the "alarm repeat interval" in the next field, you should press "space-4" to move to it.

6.11.2 Alarm Repeat Interval Time

When the alarm goes off, if you do not stop it by pressing "backspace-enter," the Braille Sense Plus B32 will keep giving you a notice about the appointment after a specified time interval. The "alarm repeat interval" option allows you to change this interval. You can set the value anywhere from 1 to 60 minutes, and the default value is set to 5 minutes. When you want to change the value, type in a number between 1 and 60 in computer Braille, or regular grade 1 Braille. You can type these numbers without a number sign. After entering the number, press "enter" to save the changes, and exit from the dialog box. Or, if you press "tab ("space-4-5")", the Braille Sense Plus B32 will move to the "repeat" edit box.

6.11.3 Repetition Times

The alarm will make a sound as the amount of time that you changed the alarm duration and it then stops. After a specified time interval, you will hear again the alarm sound.

"Repeat" is a field, which allows you to decide how many times the alarm will sound. You can set the value from 1 time to 10 times, and the default value is set to 3 times. To change the value, you type in a number between 1 and 10. After entering the number, you press "tab (space-4-5)," and press "enter" on the "confirm" button.

Or, if you press "enter" on the "repeat" edit box, the changed options will be saved, and the dialog box will be closed.

An alarm will repeat according to the number of times that you set for this option and will then stop automatically. The Braille display on the Braille Sense Plus B32 will also display the "date" and "subject" for the alarm.

6.11.4 Confirm

By pressing "enter" on the "confirm" button, you will save the changed settings, and close the "alarm option setting" dialog box.

6.11.5 Cancel

If you press "enter" on the "cancel" button, or press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)," the previous option settings will be restored and "set alarm option" dialog box will be closed.

6.12 Synchronizing With Microsoft Outlook

The "schedule manager" can be synchronized with Microsoft Outlook on your personal computer to help you keep track of your appointments. For a more detailed explanation of how to connect the Braille Sense Plus B32 to your computer, and for more information on how to use ActiveSync, refer to chapter 17. You should take the following steps in order to synchronize the Braille Sense Plus B32 with Microsoft Outlook:

- 1) Download and install "ActiveSync" on to your personal computer.
- 2) Connect the Braille Sense Plus B32 to your personal computer, using a USB cable.
- 3) If the "partnership" dialog box opens on your PC after you connect the Braille Sense Plus B32 to your PC, select "yes," and press the "next" button on your PC.
- 4) Then, you will be asked for a device name. Type in "BrailleSensePlus" (or whatever you would like to call the Braille Sense Plus B32),
- 5) Press the "next" button. Then, the program list dialog box will be displayed on your PC. Click on the "check box" that is located

- next to "calendar." Note that the other check boxes should not be checked. Press the "next" button.
- 6) Then, the synchronization between Microsoft Outlook and the Braille Sense Plus B32 is complete. Please check the contacts in Microsoft Outlook and the Braille Sense Plus B32.

6.13 Hot Keys for the Schedule Manager

- 1) Add Schedule
 - (1) Move between fields

Move to the next field: Tab (space-4-5)

Move to the previous field: Shift-tab (space-1-2)

(2) Hot keys for the Commands

search schedule: Enter-s (dots 2-3-4)

Alarm option: Enter-o (dots 1-3-5)

Backup schedule: Enter-u (dots 1-3-6)

Restore schedule: Enter-r (dots 1-2-3-5)

Setting backup option: Enter-e (dots 1-5)

Exit: Space-z (dots 1-3-5-6)

- 2) Search schedule
 - (1) Hot keys for the commands

Add schedule: Enter-I (dots 2-4)

Alarm option: Enter-o (dots 1-3-5)

Backup schedule: Enter-u (dots 1-3-6)

Restore schedule: Enter-r (dots 1-2-3-5)

Set backup option: Enter-e (dots 1-5)

Toggle search mode: Enter-f (dots 1-2-4)

Exit: Space-z (dots 1-3-5-6)

- 3) Move keys in the search result list
 - (1) Move from a appointment to another in the schedule list Move to the previous a in the same day: up arrow key (space-1) Move to the next appointment in the same day: down arrow key (space-4)

Move to the first appointment in the same day: Space-1-3

Move to the last appointment in the same day: Space-4-6

(2) Move from one appointment to another in all the appointments registered

Move to the previous schedule: Space-2

Move to the next schedule: Space-5

Move to the first schedule: Space-2-3 or space-1-2-3 Move to the last schedule: Space-5-6 or space-4-5-6

(3) Hot keys for the commands

Add schedule: Enter-I (dots 2-4)

Modify schedule: Enter-m (dots 1-3-4)
Delete schedule: Space-d (dots 1-4-5)
Alarm option: Enter-o (dots 1-3-5)

Backup schedule: Enter-u (dots 1-3-6) Restore schedule: Enter-r (dots 1-2-3-5) Set backup option: Enter-e (dots 1-5)

Save schedule as file: Enter-t (dots 2-3-4-5)

Print schedule: Space-p (dots 1-2-3-4)

4) Cancel / Exit

- (1) Cancel: Space-e (dots 1-5)
 It cancels the current job or setting like the "esc" key on a personal computer.
- (2) Exit: Space-z (dots 1-3-5-6)

 Exit from the schedule manager. It can be used as cancel key for any function.

7. E-mail

The e-mail program is used to communicate with others using the Internet. In order to use the e-mail program, you must have your own e-mail account, which has been provided to you by your Internet service provider.

The e-mail account that you have should support POP3 (Post Office Protocol 3) and SMTP (Simple Mail Transfer Protocol). You should check with your Internet service provider to make sure that your provider supports POP3 and SMTP.

Before you use the e-mail program, you will need to setup the Braille Sense Plus B32 to use the Internet, which is in the "utility" menu (see chapter 15).

When checking the "inbox" in the email program, the menus are different from the menus that are used when you are writing an email. You should read this chapter carefully, before you use the e-mail program on the Braille Sense Plus B32.

7.1 Executing E-mail and Service Registration

7.1.1 Launching the E-Mail Program

To launch the e-mail program on the Braille Sense Plus B32 press "f1" to bring up the "program" menu of the Braille Sense Plus B32, then press "space-4" repeatedly until "e-mail" is displayed, and then press "enter." Or, just press "e (dots 1-5)" on the "program" menu in order to execute the e-mail program.

When you launch the e-mail program for the first time, the Braille Sense Plus B32 will display "create service information at service manager in tool menu." Then, the "inbox" will be opened. The "inbox" is the main window of the e-mail program. When you run the e-mail program for the first time, this "inbox" is empty and the Braille Sense Plus B32 displays "no list 0/0."

If there are any e-mail messages that the Braille Sense Plus B32 has already received, "making mail list," "exist mail count xx" will be announced in voice and on the LCD display; however, "xx% processed" will be displayed on the Braille display. Once progress has reached100%, the "inbox" will be opened and it will show the received e-mail in the list.

7.1.2 Registering E-Mail Service

In order to receive e-mail, your e-mail service information must be registered in the Braille Sense Plus B32. If you have not yet registered your e-mail service information in the Braille Sense Plus B32, please register your e-mail service information as follows:

- 1) Call up the e-mail menu by pressing "space-m (dots 1-3-4)" or "F2."
- 2) Move to the "tools" menu by pressing "space-4."
- Press "enter" when "tools" is displayed. Then, "service manager" will be displayed.
- 4) Press "enter" on "service manager," then "service name: no list 0/0" will be displayed. You can also move to this menu by pressing "enter-m (dots 1-3-4)."
- 5) Move to "register" by pressing "tab (space-4-5)."
- 6) Press "enter" when "register" is displayed.
- 7) Then, the dialog box will be opened and "service name:" will be displayed. Type in the service name with the Braille keys. (Ex: Braille Sense Plus B32)
- 8) Press "space-4" to move to "display name:" Type in your name. This name will be shown as sender's name to a receiver.
- 9) Press "space-4" to move to "logon username:." Then, type in your e-mail ID using computer Braille. (Ex: Sense or sense@braillesense.com)
- 10) Press "space-4" to move to "password:." Type in your password using computer Braille. When you type in your password, the Braille Sense Plus B32 will display the password you typed in as "*." (Ex: ******)
- 11) Press "space-4" to move to "e-mail address:." Type in your e-mail address using computer Braille. (Ex: sense@braillesense.com)

- 12) Press "space-4" to move to "pop3 server:." Type in the POP3 server address using computer Braille (Ex: mail.braillesense.com). Check with your Internet service provider or network administrator to find out what you should use as the POP3 server name.
- 13) Press "space-4" to move to "smtp server:" and type in the SMTP server address (Ex: smtp.braillesense.com). Check with your Internet service provider or network administrator to find out what you should use as the SMTP server name.
- 14) Press "tab (space-4-5)" to move to "confirm," and then press "enter" in order to save the changes. Or, just press "enter."
- 15) Then, the Braille Sense Plus B32 will exit to "service name list" and show the registered service name (Ex: service name: Braille Sense Plus B32 1/1).
- 16) If you want to register another service, go to step 5 again, and follow the steps explained above.
- 17) When you finish registering the services, press "space-z (dots 1-3-5-6)" to exit to the "inbox."

In order to move from a setting item (Ex: ID, password) to the previous setting item, press "space-1." And, in order to move to the "confirm" button or the "cancel" button, press "tab (space-4-5)" or "shift-tab (space-1-2)."

If you made a typo in an item such as service name, ID, or password, you can correct the typo as follows:

- 1) In order to delete the letter where the cursor is located, press "space-d (dots 1-4-5)."
- 2) In order to delete the letter in front of the cursor position, press "backspace."
- 3) In order to delete the current line, press "backspace-1-4." Then, the Braille Sense Plus B32 will ask "delete line: yes." If you press "enter," the selected line will be deleted. If you do not want to delete the current line, press "space" to change from "yes" to "no" and press "enter."

When you need to type using computer Braille to type in your ID, password, and address, please use the following computer Braille:

- 1) Dot (.""): dots 4-6
- 2) At sign ("@"): Press "space-u" and release it, then press dot 4.

- 3) Under bar ("_"): dots 4-5-6
- 4) Dash ("-"): dots 3-6

You will find other menus like "information," "modify," "delete," and "close" in the "service manager." These menus will be explained in section 7.5.1.

7.2 Sending and Receiving E-Mail

7.2.1 Receiving E-mail

In order to receive e-mail, you must register your email service information as explained in section 7.1.2. The Braille Sense Plus B32 is capable of receiving plain text email and html email messages You can receive e-mail messages by doing the following.

- 1) Call up the e-mail menu by pressing "space-m (dots 1-3-4)" or "F2."
- 2) Move to "message" by pressing "space-4."
- 3) Press "enter" on the "message" menu. Then, "reply" will be displayed.
- 4) Move to "receive new mail" by pressing "space-4."
- 5) Press "enter" on "receive new mail." Then, a dialog box will appear where you can select the service list and "service name:" is displayed. You can move to this dialog box directly by pressing "enter-n (dots 1-3-4-5)." This dialog box consists of "service list," a "confirm" button, and a "cancel" button.
- 6) When "service name: (registered service name x/x)" is displayed, press "space-1" or "space-4" to move to the desired service.
- 7) Press "enter" when the desired service is displayed, or press "tab (space-4-5)" to move to the "confirm" button, and press "enter."
- 8) Then the Braille Sense Plus B32 will display "There are xx messages to receive. Now receiving..." "xx/xx mail received;" "Completed receiving new mail. total mail count: xx; received: xx, failed: xx" will be displayed. When the e-mail messages are downloaded from the server, the e-mail list is displayed in the "inbox" (Ex: subject: (subject of the email received) xx/xx).

In step 8 above, if the e-mail size is more than the Braille Sense Plus B32 can handle, it announces "Source data exceeds buffer size.

Skipping current mail." and then the Braille Sense Plus B32 will begin downloading the next e-mail message.

If you want to cancel the download, press "tab (space-4-5)" at step 7 above to move to the "cancel" button, and press "enter," or you can press "space-e (dots 1-5)."

7.2.2 Reading the Received E-mail Messages

If you downloaded e-mail from your server as explained in section 7.2.1, the e-mail messages will be listed in the "inbox." Each e-mail in the "inbox" has the following items.

- 1) Subject
- 2) Date
- 3) From (Sender)
- 4) Message
- 5) Attach (this will be displayed only for an e-mail that has an attached file)

You can move from one item to the next item or previous item by pressing "tab (space-4-5)" or "shift-tab (space-1-2)," respectively.

7.2.2.1 Subject Control

"Subject" shows the title of the e-mail; "subject: (subject of the e-mail) xx/yy." After the subject of the email, you will find "xx/yy," which shows the number (xx) of the current e-mail out of the total number (yy) of received e-mail messages. For example, "11/21" means that the e-mail is the 11th e-mail out of a total of 21 e-mail messages.

If there is an attached file to the e-mail, "a subject: (subject of the e-mail) xx/yy" will be displayed. The symbol "a (dot 1)" means that the e-mail has an attached file. It is displayed as "a (dot 1)" on the Braille display, and it is announced as "1 attachment," which indicates the number of the attached files in voice.

The Braille Sense Plus B32 also indicates which e-mail messages have been read, and which e-mail messages have been unread. E-mail messages that have not yet been read have the "-" sign placed in front of the subject. For example, let's suppose there is an email

with an attachment that has been unread. It would appear as "-a subject: (subject of the e-mail) xx/yy."

You can move from one e-mail message to the next e-mail message when this subject is displayed. You can move by using the following keys;

Move to the next e-mail: Space-4 Move to the previous e-mail: Space-1

Move to the first e-mail in the Inbox: Space-1-2-3 or space-1-3 Move to the last e-mail in the Inbox: Space-4-5-6 or space-4-6

7.2.2.2 Date Control

"Date" shows the date and time when the e-mail was received; "date: (date), (time) xx/yy." The date is displayed in the following order: day, month, date, and year. The time is displayed in the following order: hour, minute, and second with the 24 hour system. And, "xx/yy" shows the current number of the email out of the total number of e-mail messages received. You can also move from one e-mail message to the next e-mail message when the date is displayed. The move keys are explained in section 7.2.2.1.

The Braille Sense Plus B32 also indicates which e-mail messages have been read, and which e-mail messages have been unread. E-mail messages that have not yet been read will have the "-" sign placed in front of the date. For example, let's suppose there is an email that has been unread. It would appear as "- date: (date), (time) xx/yy."

7.2.2.3 Sender Control

"From" shows the sender information; "from: (sender's e-mail address) xx/yy."

The Braille Sense Plus B32 also indicates which e-mail messages have been read, and which e-mail messages have been unread. E-mail messages that have not yet been read will have the "-" sign placed in front of the sender. For example, let's suppose there is an email that has been unread. It would appear as "- from: (sender's e-mail address) xx/yy"

You can save the e-mail id of the sender using the following sequence:

- 1) Press "enter-I (dots 2-4)" when "from: (sender's e-mail address) xx/yy" is displayed.
- 2) Then, the "add address" dialog box will be opened, and "name: (sender's user name or e-mail address)" will be displayed.
- 3) Type in the sender's name with your Braille keyboard, or press "tab (space-4-5)" to move to "confirm," and press "enter."

When you type in the name, you can type it in directly without pressing the cursor key to designate the input position on the Braille cell, if you want to retype the name. But, if you designate a specified position by pressing a corresponding cursor key, you can modify the displayed name.

If the address that was typed in is saved, and the dialog box is closed, the Braille Sense Plus B32 will show you the "from" item again.

By saving the e-mail ID using the above method, the name and its e-mail id will be saved in the Braille Sense Plus B32. The saved e-mail ID can be used to send your message. This will be explained in section 7.2.3.3.

If you want to cancel saving the e-mail ID, press "tab (space-4-5)" to move to the "cancel" button, and press "enter," or just press "space-e (dots 1-5)."

7.2.2.4 Message Control

"Message" shows the message body of the selected e-mail. You can move to a message by pressing "tab (space-4-5)." Or, you can read a message by pressing "enter" when "subject," "date," or "from" is displayed. In case of pressing "enter" on "subject," "date," "from" controls, you will automatically hear the whole message body, if you want to stop this reading at this time, just press "backspace-enter." When you read the message, all of the control keys are the same as in the word processor.

7.2.2.5 Attachment Control

You can find and download the attached file at "Attach." It will appear only for the e-mail that has an attached file.

"Attach" is displayed in the form of "attach: (attached file name) xx/yy." The "yy" is the total number of the attached files to the e-mail and "xx" is the "xxth" attached file.

The following is the procedure to download attachments;

- 1) Move to the desired file name in "attach" by pressing "space-4" or "space-1."
- 2) Press "space" on the file name that you want to download. Then "*" will be displayed in front of the file name.
- 3) Press "enter" to download that file. Then "Current download path is set to /flashdisk/download. Do you want to change it? No" will be displayed. Press "enter" in here.

By doing so, the selected file will be saved in the "download" folder in "flashdisk."

If you have more than one attachment that you want to download, you can press "enter-a (dot 1)." If you want to download only the attached file that is displayed on the Braille display, just press "enter" without pressing "space."

If you want to change the download path, please refer to section 7.5.2.1 (Set Download Path).

7.2.3 Sending E-Mail Messages

In order to send an e-mail message, you should register your e-mail address as explained in section 7.1.2 (Registering e-mail service). Writing an e-mail message and sending procedure is as follows;

- 1) Call up the e-mail menu by pressing "space-m (dots 1-3-4)" or "F2." The "file" menu will be displayed.
- 2) Press "enter" on the "file" menu. Then "write new mail" will be displayed.
- 3) Press "enter" on "write new mail."

- 4) Then "To:" will be displayed on the Braille display. Pressing "enter-w (dots 2-4-5-6)" will take you directly to this stage.
- 5) Press "shift-tab (space-1-2)" to move to "account" combo box. Move to account that you want by using "space-1" or "space-4." Press "tab (spac-4-5)" to move to "To:."
- 6) Type in the e-mail address of the recipient when "To:" is displayed. Please type in the e-mail address using computer Braille (Ex: sense@braillesense.com).
- 7) Next, press "tab (space-4-5)" to move to "CC:."
- 8) Type in the e-mail address of the other recipient using computer Braille. If you do not need to carbon copy a recipient, you can skip to the next step.
- 9) Press "tab (space-4-)" to move to "BCC:."
- 10) Type in the e-mail address of another recipient using computer Braille. This e-mail address will not be seen by the recipient or the carbon copy recipient. If there is no "hidden recipient," you can skip to next step.
- 11) Press "tab (space-4-5)" to move to "subject:."
- 12) Type in the subject of the e-mail message at "subject:" You can input the subject in ASCII, Grade 1, or Grade 2. You can change the mode by pressing "space-g (dots 1-2-4-5)."
- 13) When you finish typing in the subject, press "tab (space-4-5)" to move to "message body:"
- 14) You can write an e-mail message. The input method and the editing method are the same as the input and editing method used in the word processor. You can also write the message in ASCII, Grade 1, or Grade 2.
- 15) When you finish writing the e-mail message, press "space-m (dots 1-3-4)" to call up the "e-mail" menu. Then the "file" menu will be displayed again.
- 16) Press "enter."
- 17) Press "space-4" to move to "send."
- 18) Press "enter" when "send" is displayed. Pressing "enter-s (dots 2-3-4)" will take you directly to this stage at step 14. Then, "Sending..." will be displayed, and the e-mail will be sent to the recipients. When the Braille Sense Plus B32 finishes sending e-mail, "Successfully sent new message." will be displayed. If it fails to send the e-mail, the Braille Sense Plus B32 will display "Failed to send message." If this occurs, the e-mail will be saved in the "storage box."

If the Braille Sense Plus B32 completed or failed to send the e-mail, it will return you to the "inbox."

If you have to set the default account, the Braille Sense Plus B32 focus to it in step 5 above. Otherwise, the Braille Sense Plus B32 will be displayed the first one in alphabetical order of registered accounts. The method which set the default account refers "7.5.1.1."

At "To:," "CC:," and "BCC:," you can input more than one e-mail address. You can also type in e-mail addresses that have been saved in the Braille Sense Plus B32 by searching the address list. This method will be explained in section 7.2.3.2 (Sending e-mail to Multiple Recipients) and section 7.2.3.3 (Searching Address List).

If you want to attach a file, execute "attach file," which will be explained in section 7.2.3.1 (File Attachment), between steps 14 and 15 above.

If you want to cancel writing and sending an e-mail during the execution of the above steps, you can exit by pressing "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)" before step 15. Then the Braille Sense Plus B32 will return you to the "inbox."

7.2.3.1 Sending a File Attachment

You can attach a file that you want to send with an e-mail while you are writing an e-mail or inputting the recipient, hidden recipient, or subject.

The following is the procedure to attach a file.

- 1) Call up the menu by pressing "space-m (dots 1-3-4)" or "F2." Then, the "file" menu will be displayed.
- 2) Press "enter" on the "file" menu. Then, "write new mail" will be displayed.
- 3) Move to "attach file" by pressing "space-4."
- 4) Press "enter" on "attach file." Then, "file list" will be opened. You can get to this step directly from step 1 by pressing "enter-f (dots 1-2-4)." The default folder for the "file list" is the "upload" folder, which is a sub folder of "flashdisk." If there are no folders in the "upload" folder of the Braille Sense Plus B32 due to any

reason, "no list" will be displayed. In this case, you have to make a folder in the "file manager," or move to the desired folder with the move keys that are explained below.

The move keys in the file list are as follows; Move to the upper level folder: Backspace

Move to previous item: Space-1 Move to next item: Space-4

Move to the beginning of the list: Space-1-2-3

Move to the end of the list: Space-4-5-6

- 5) Move to the desired file, and press "enter." If you want to attach more than one file, move to the desired file, and press "space" repeatedly. Then "*" will be displayed in front of the file names. Press "enter" if you want to attach the selected files.
- 6) If the selected files are attached, the Braille Sense Plus B32 will announce "xx attached," and then move to the stage before you executed step 1 in this procedure. "xx" is the number of the attached files.

If there are any files attached to an e-mail, the "attach" item will be displayed after the "message" item like the following: "attach: (attached file name) xx/yy (file size)." "yy" is the total number of attached files, and "xx" means the "xxth" file out of "yy" files. You can move and check the attached files by pressing "space-1" or "space-4." If there is an undesired file in the attached file list, you can delete it from the list by pressing "space-d (dots 1-4-5)." If you press "space-d (dots 1-4-5)," "delete (file name) file? Yes" will be displayed. If you press "enter," this file will be deleted from the attached file list. If you press "space" to switch from "yes" to "no," and then press "enter," your selection will be cancelled, and the file will remain on the attached file list.

7.2.3.2 Sending E-Mail to Multiple Recipients

You can type in more than one recipient, carbon copy recipient, or hidden recipient. If you type in more than one e-mail address in those items, the same e-mail will be sent to all of them at the same time.

When you input more than one recipient, you should insert a ';' or ',' between the e-mail addresses using the following Braille dots.

Semi-colon (;): Dots 5-6

Comma (,): Dot 6

For example, sense@braillesense.com;hims@braillesense.com.

7.2.3.3 Searching the Address List

You can type in the recipient at "To," "CC," and "BCC" from the address list without typing in the e-mail address directly.

The address list has the e-mail addresses that were typed in to the "address manager" and were typed in at the "from" control that was explained in section 7.2.2.3 (Sender control).

The following are the steps to search for e-mail addresses:

- 1) Press "space-m (dots 1-3-4)" or "F2" to call up the "e-mail" menu at "To," "CC," or "BCC." Then, "file" will be displayed.
- 2) Press "enter" on the "file" menu.
- 3) Press "space-4" to move to "lookup address."
- 4) Press "enter" on "lookup address." Then "search for address" will be displayed. Pressing "enter-I (dots 1-2-3)" will take you to this step directly.
- 5) Type in the last name of the desired recipient at "search for address," and then press "enter." Or, press "tab (space-4-5)" to move to "confirm," and then press "enter."
- 6) Then, "xx addresses are found" will be displayed, and the first item of the found addresses is also displayed. Here, "xx" is the number of the found addresses that have the same name in the address list (Ex: HIMS hims@brailleSense.com 1/xx).
- 7) Press "space-1" or "space-4" to move to the desired address, and press "enter" when the desired address is displayed. You can select more than one address by pressing "space." When you have chosen the addresses you want, press "enter."
- 8) Then, the selected addresses are inserted in "To," "CC" or "BCC." In step 5 above, if you press "enter" without typing in the desired name, all of the addresses in your address list will be displayed.

In step 5, if there is no matching address that you want to find, then "No mail address matched your search string." will be announced and "search for address" will be displayed again.

7.2.3.4 Saving E-Mail Messages as Text, and to the Storage Box

If you want to send an e-mail message later, you can save it as text in the storage box. This "save draft in storage box" function will save the email as text, and place it in the storage box.

The following describes how to save an email in storage box:

- 1) Press "space-m (dots 1-3-4)" or "F2" after you write the e-mail message. Then, the "file" menu will displayed.
- 2) Press "enter."
- Press "space-4" to move to "save draft in storage box."
- 4) Press "enter." Then, the dialog box for save will be opened, and "file name: (subject of writing e-mail).txt" will be displayed. You can jump to this stage by pressing "space-s (dots 2-3-4)."
- 5) Press "enter" on "file name: (subject of writing e-mail).txt," or press "tab (space-4-5)" to move to the "confirm" button. Then, the message will be saved as "(subject of writing e-mail).txt." If you want to name the e-mail message, type in a file name. The detailed procedure is the same as "save as" in the word processor. You can also change the path for saving it. Please refer to section 4.1.4 for the explanation of "save as" in the word processor in this user manual.
- 6) After the Braille Sense Plus B32 saves the e-mail message, it will return to the status it was at before step 1 above.

By following the explanation above, the e-mail message will be saved as "(subject of writing e-mail).txt" in the "flashdisk/email/storagebox." If you want to find this saved message, you can retrieve and send it by using "send mail in storage box," which will be explained later.

If you do not input the subject in the writing e-mail, it will be displayed as "noname" on the "file name."

If you want to save the file in another folder, and not in "flashdisk/email/storagebox," you will not find the e-mail message when you execute "send mail in storage box."

Regarding how to send email that is in the storage box, please refer to section 7.3.5 (Sending E-mail Saved in the Storage Box).

While you are typing in a "message," if you press "space-e (dots 1-5)" to cancel writing an e-mail, the Braille Sense Plus B32 will display "current writing mail. save? Yes." If you press "enter," then the Braille Sense Plus B32 will execute from step 5 above. If you want to return to the "inbox" without saving the email, press "space" to change "yes" to "no," and then press "enter."

If you press "space-z (dots 1-3-5-6)" instead of "space-e (dots 1-5)" while you are writing an e-mail message, the Braille Sense Plus B32 will return to the "inbox" without asking whether it will save the message or not.

7.2.4 Local Folder

The "local folder" function is located under the "file" menu. This function lets you navigate between different email folders. It also lets you cut or copy messages between email folders. To use the "local folder" function, use the following steps:

- 1) Open the menu by pressing "space-m (dots 1-3-4)" or "F2," and then press "enter" to open the "file" menu. Press "space-4" or "space-1" to move to "local folder." Then, press "enter" on "local folder." While you are in the "file" menu, the shortcut key is "d (dots 1-4-5)," and the hotkey is "enter-d (dots 1-4-5)."
- 2) The "local folder" dialog box consists of 3 controls: "folder name" list, a "confirm" button, and a "cancel" button. You can move between these controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")."
- 3) The first item of the "local folder" is "folder name: inbox 1/x." The "folder name" list will show the folders in the "email" folder that is one of the folders in "flashdisk." The "x" is the total number of the folders in the "email" folder. In the "folder name" list, you can move to another folder by pressing "space-4" or "space-1."
- 4) Then, move to the "confirm" button by pressing "tab ("space-4-5")." Press "enter" to open the selected email folder. Then, the email list will be displayed in the selected folder if there are emails in the selected folder. If "storagebox" is selected and there is no email in

this folder, the Braille Sense Plus B32 will say "there is no mail in the storage box," and return to the previous status. If you want to cancel, you press "tab ("space-4-5")" once more to move to the "cancel" button. And press "enter" on cancel. Pressing "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)" anywhere in the dialog box will cancel and close the "local folder" dialog box.

To move or copy e-mail messages to a different email folder, you can select e-mail messages by pressing "space." Press "enter-x (dots 1-3-4-6)" to cut, or press "enter-c (dots 1-4)" to copy the email. Go to the email folder where you want to paste the e-mail messages using "local folder." Then, press "enter-v (dots 1-2-3-6)" to paste. For more information on how to copy e-mail messages to another email folder or move e-mail messages to another email folder, see sections 7.4.10 and 7.4.11.

7.3 Functions of the InBox

7.3.1 Deleting E-mail in Inbox

You can delete email that you have received from the "inbox." You can delete an e-mail message that you have selected, or, more than one e-mail by selecting each of them individually.

7.3.1.1 Deleting One E-Mail Message

You can delete an e-mail message in the "inbox" by following the steps below;

- 1) Press "space-1" or "space-4" to move to the "subject" of the e-mail that you want to delete.
- 2) Press "space-d (dots 1-4-5)." Then "(subject of the selected e-mail) mail(s) delete? Yes" will be displayed.
- 3) Press "enter" if you want to delete it.

If you want to cancel it, at step 2 above, press "space" to change "yes" to "no," and then press "enter." Or, you can press "space-e (dots 1-5)" or space-z (dots 1-3-5-6)."

7.3.1.2 Deleting Multiple E-mail Messages

If you want to delete more than one e-mail message, delete the e-mail messages using the following steps:

- 1) Press "space-1" or "space-4" to move to the e-mail "subject" that you want to delete. You can select it in "date control," too.
- 2) Press "space" on the e-mail that you want to delete. Then "*" will be displayed in front of the selected e-mail subject, and the label ("subject:") will disappear. So, it will then be displayed as "* (e-mail subject) xx/yy."
- 3) Move to the other e-mail that you want to delete by pressing "space-4" or "space-1." Then, press "space."
- 4) You can select more e-mail messages that you want to delete. Once you finish selecting all of the e-mail messages you want to delete, press "space-d (dots 1-4-5)."
- 5) Then "xx mails delete? Yes" will be displayed. If you press "enter," the selected e-mail messages will be deleted from the Braille Sense Plus B32.

If you want to cancel the deletion when the "xx mails delete? Yes" is displayed, you can toggle "yes" to "no" by pressing "space," and then press "enter." Or, you can cancel it by pressing "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)" at step 2 above.

7.3.1.3 Deleting E-Mail by Making a Selection

If you want to delete multiple e-mail messages by designating a selection, you can delete them as follows:

- 1) Press "enter-a (dot 1)" on the "subject" or "date" control. Then, all of the e-mail messages in the "inbox" will be selected. Then, "*" will be displayed in front of all of the e-mail messages.
- 2) Press "space-d (dots 1-4-5)"
- 3) "xx mails delete? Yes" will be displayed. If you press "enter" on "yes," all of the selected e-mail messages will be deleted.

If you want to delete the successive e-mail messages, you can delete them using the following steps:

- 1) Press "enter-b (dots 1-2)" on the first e-mail where you want to start the selection.
- 2) Press "space-4" to move to the last e-mail that you want to delete. Then, press "space-d (dots 1-4-5)."
- 3) "xx mails delete? Yes" will be displayed. Press "enter" if you want to delete them.

You can Press "enter-b (dots 1-2)" which will make the selection, just like the "start selection" function in the word processor. In front of the e-mail subjects selected, "*" will be attached.

If you have pressed "enter-a (dot 1)" or "enter-b (dots 1-2)," but you want to cancel it, press "space" when "xx mails delete? Yes" is displayed to toggle "yes" to "no," and then press "enter."

Or, you can cancel it by pressing "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

7.3.2 Reply And Reply All to a Received E-Mail Message

When you reply to an email message that was received, you can edit or add a message to the original message or add another recipient. For example, you can reply to an e-mail message that you previously received in your "inbox." Let's demonstrate with an example. Suppose you received an email that had the following information: Sender's e-mail address: hims@brailleSense.com
Subject of the e-mail: Welcome to HIMS
You could reply to this e-mail by completing the following steps:

- 1) Press "space-m (dots 1-3-4)" or "F2" to call up the menu when you are in "subject," "date," or "message" control
- 2) Press "space-4" to move to the "message" menu.
- 3) Press "enter." Then, "reply" will be displayed.
- 4) Press "enter" on "reply." Then, "message body" will be displayed on the Braille display. You can find the original message body of the received email; "--- original message ---" followed by the received email message. You can get to this stage by pressing "enter-r (dots 1-2-3-5)."
- 5) Press "shift-tab (space-1-2)" to move to "subject," "BCC"," "CC," and "To." At "subject," "subject" Re: Welcome to HIMS" will be

- displayed. And, at "To," "To: hims@braillesense.com" will be displayed.
- 6) Press "tab (space-4-5)" to move to "message body." Type in the message that you want to add or edit. Type in the "message" that you want to add or edit. You can type in your message as in step 14 in section 7.2.3 (Sending e-mail message).

After you press "enter-r (dots 1-2-3-5)," you can write an e-mail message with the same method that was explained in section 7.2.3 (Sending E-mail) in this user manual. You can attach a file, and add or delete recipients as well as write an e-mail message.

If you want to add another e-mail recipient, you can input it as described in step 5 above. Press the "cursor routing key" that is located at the position where you want to add the recipient, and type in the new e-mail address. Use computer Braille when typing in this information.

You can also save the e-mail message that you are writing as a reply. The method is the same as that explained in section 7.2.3.4. It will be saved in the storage box.

You can reply to an email by using "reply all," as well as "reply." Pressing "reply" will send a message to only the original sender. Pressing "reply all" will send an email message back to the original sender as well as all other recipients to the original email. However, "reply all" will not send an email to you, even though you were a recipient of the original email.

To activate the "reply all" function, open the menu by pressing "space-m (dots 1-3-4) or "F2." Then, press "space-1" or "space-4" to move to "message." Then, press "enter" on "message." Use "space-4" to move to "reply all," and press "enter." You can activate the "reply all" function without calling up the menu by pressing "backspace-r (dots 1-2-3-5)." When you activate the "reply all" function, you will see all email addresses of the original sender and the original recipients in the "To" edit box. Then, you can use the same steps to send a message as you would when using the "reply" function.

7.3.3 Forwarding a Received E-Mail Message

"Forwarding" means that you will send an e-mail that you received to another person. You can also add or edit the message and subject. You can also attach a file to this e-mail.

Let's explain how to use "forward" with an example.

Let's suppose there is an e-mail message that you received as follows:

Sender's e-mail address: hims@braillesense.com

Subject of the e-mail: Welcome to HIMS

You can forward this e-mail to the others using the following method:

- 1) Press "space-m (dots 1-3-4)" or "F2" to call up the menu when subject, date, or message item is displayed.
- 2) Press "space-4" to move to the "message" menu.
- 3) Press "enter." Then, "reply" will be displayed.
- 4) Press "space-4" to move to "forward."
- 5) Press "enter." Then "To" will be displayed. You can also jump to this stage by pressing "enter-f (dots 1-2-4)." Input the e-mail address of the new recipient using computer Braille.
- 6) Press "tab (space-4-5)" to move to "CC," "BCC," and "subject." At "subject," the subject of the e-mail will be displayed like "subject: Fw: Welcome to HIMS."
- 7) Press "tab ("space-4-5")" to move to "message body." You can find the original e-mail message with the following message; "----forwarded message -----."
- 8) Type in the message. The method is the same as explained on section 7.2.3 (Sending e-mail message).

From step 5 of this procedure, the method to write e-mail is the same as explained in section 7.3.2. So, you can type in additional recipients and attach files to the email that you are forwarding.

You can also save the e-mail that you are writing in the storage box. How to save a message in the storage box is explained in section 7.2.3.4.

7.3.4 Saving a Received E-Mail Message

You may need to save an e-mail as a document when you are reading an e-mail message. You can do this by completing the following steps:

- 1) Press "space-m (dots 1-3-4)" or "F2" to call up the menu. Then, the "file" menu will be displayed.
- 2) Press "enter."
- 3) Press "space-4" to move to "save as text."
- 4) Press "enter" on "save as text." Then, the dialog box will be opened, and the Braille Sense Plus B32 will show "file name: (subject of e-mail under reading).txt." You can move to this stage directly by pressing "space-s (dots 2-3-4)."
- 5) Press "enter" when "file name: (subject of e-mail under reading).txt" is displayed, or press "tab (space-4-5)" to move to the "confirm" button, and press "enter." You can rename the file as explained in section 4.1.4 regarding the "save as" function in the word processor.
- 6) You will move back to step 1 (as described above) automatically if the e-mail is saved.

The text file will be saved in "flashdisk/work" with the file name "(subject of e-mail under reading).txt." You cannot change the file format. You can read the saved text file in the word processor.

In order to cancel "save as text," press "tab (space-4-5)" at step 5 one more time to move to "cancel," and then press "enter." Or, just press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

7.3.5 Sending E-Mail Saved in the Storage Box

There are two kinds of e-mail messages in the "storage box."

- 1) The e-mail message that the user saved, as explained in section 7.2.3.4 (Saving E-mail as Text, and to storage box).
- 2) The e-mail that was not sent due to a network error or another reason.

The e-mail saved in the "storage box" can be sent again using the steps below:

- 1) Press "space-m (dots 1-3-4)" or "F2" in the "inbox" to call up the "e-mail" menu.
- 2) Press "space-4" to move to the "message" menu.
- 3) Press "enter." Then, "reply" will be displayed.
- 4) Press "space-4" to move to "send mail from storage box."
- 5) Press "enter." Then, the e-mail subjects will be displayed that are saved in the "storage box." You can jump to this stage by pressing "enter-s (dots 2-3-4)."
- 6) Press "space-4" or "space-1" to move to the e-mail that you want to send again. Then, you can send it with the same method as explained in step 16 in section 7.2.3 (Sending E-mail Message).

The e-mail in the storage box consists of "subject," "Account," "To," "CC," "BCC," "subject," "message," and "attach" items. "Attach" will be displayed if a file is attached to this e-mail. You can move from one item to the next by pressing "tab (space-4-5)" and "shift-tab (space-1-2)."

You can move from one e-mail to the next e-mail by pressing "space-4" or "space-1."

The e-mail message saved in the "storage box" can also be modified. In step 5 above, press "tab (space-4-5)" when "subject" is displayed to move to the desired item, such as "to" or "message," etc. Then, you can modify the email message, but the "subject" cannot be modified.

In order to exit from "send mail in storage box," press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)." Then, the Braille Sense Plus B32 will return to "inbox."

7.3.6 Printing E-Mail Messages

You may want to print an email that you received in using either an embosser or an ink printer.

In order to print to an ink printer, do the following:

- 1) Connect the Braille Sense Plus B32 to an ink printer with the printer cable that was provided by the manufacturer of the printer. The printing port must be the same port that was set in the "print port" in the "option menu."
- 2) Press "space-m (dots 1-3-4)" or "F2" to call up the menu. Then, the "file" menu will be displayed.
- 3) Press "enter."
- 4) Press "space-4" to move to "print e-mail."
- 5) Press "enter." Then, the dialog box will be opened, and "printer" is displayed. If you press "space-p (dots 1-2-3-4)" you will be taken directly to this stage.
- 6) Press "enter" on "printer." Or, press "tab (space-4-5)" to move to the "confirm" button, and then press "enter." Then, the selected email will be printed through an ink printer.

If you want to print through a Braille printer (embosser), press "space" at step 5 above to change "printer" to "embosser," and then press "enter."

If you want to cancel printing, press "tab (space-4-5)" until the "cancel" button is displayed, and then press "enter." Or, you can press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

7.4 Edit Menu

The "edit" menu contains the following items: "select all," "start selection," "copy," "paste," "cut," "delete," "move to next unread message," "find," "find again," "copy to folder," and "move to folder." To access the "edit" menu, press "space-m (dots 1-3-4)" or "F2." Then, use "space-4" to move to the "edit" menu, and press "enter" on "edit."

7.4.1 Select All

The "select all" function will allow you to create a selection that will automatically select everything that can be selected where you are in the email program. This function will allow you to select text, as well as e-mail messages. To activate this function, press "space-m (dots 1-3-4)" or "F2." Then, you can use "space-4" to go to the "edit" menu,

and press "enter." Or, you can press "enter-a (dot 1)" to activate this function without calling up the menu.

7.4.2 Start Selection

The "start selection" function allows you to select a certain portion of text that you would like to edit. When you use the "start selection" function, the cursor will appear as blinking "dots 1-2-3-4-5-6-7-8." The "start selection" function allows you to make changes to only the text that is located within the selection, and the changes will not affect text outside of the selection. The "start selection" function is especially useful for copying, cutting, and pasting. You can also use the "start selection" function to create a selection of e-mail messages. You can make a selection in a document if you place the cursor on the location where you want to start the selection of text. If you want to use this function, press "space-m (dots 1-3-4)" or "F2" to open the "edit" menu, and then press "enter" on "start selection," or you can press "b ("dots1-2")" in the "edit" menu to get to the function. While editing a document, pressing "enter-b (dots 1-2)" will activate this function. The end point of the selection is where you place the cursor after setting the starting point. For example, if you have typed the word, "mother" in a document, and you want to select the word mother, you should place the cursor before the letter "m," and then place the cursor directly after the letter "r." Then, you will have selected the entire word.

7.4.3 Copy

The "copy" function is only available when you have an email open. After making a selection in an email, press "space-m (dots 1-3-4)" or "F2" to open the menu, and move to "edit" by pressing "space-4." Press "enter" to open the "edit" menu. Press "space-4" to move to "copy" and then press "enter," or press "c (dots 1-4)" in the "edit" menu. While editing a document, pressing "enter-c (dots 1-4)" will activate this function.

If you copy the selection, it will be copied to the clipboard. The clipboard is the virtual space that is used for storing copied data temporarily. However, if you decide to copy another selection, the data in the clipboard that you copied before will be erased, and the

selection that you have just copied will replace the selection that was on the clipboard.

7.4.4 Paste

The "paste" function is only available when you have an email open. To paste data on the clipboard, press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit" to enter into the "edit" menu. Move to "paste" by pressing "space-4" repeatedly and then press "enter" on "paste," or press "v (dots 1-2-3-6)" in the "edit" menu (which is the short cut) to paste the selection. While editing an email, press "enter-v (dots 1-2-3-6)" to activate this function.

7.4.5 Cut

The "cut" function is only available when you have an email open. To cut a selection, press "space-m (dots 1-3-4)" or "F2," and press "enter" on "edit" to enter into the "edit" menu. Move to "cut" by pressing "space-4" repeatedly, and then press "enter" on "cut," or press "x (dots 1-3-4-6)" in the "edit" menu (which is the short cut) to cut your selection. While editing a document, pressing "enter-x (dots 1-3-4-6)" will activate the "cut" function.

The difference between "cut" and "copy" is that if you execute the "cut" function, the data of the selection will not be moved to the clipboard and the selection in the document will be erased. However, the "copy" function will copy the selection to the clipboard, and the text in the selection will not be erased from the document.

7.4.6 Delete

To delete a selection or email, press "space-m (dots 1-3-4)" or "F2," and then press "enter" on "edit" to enter into the "edit" menu. Move to "delete" by pressing "space-4" repeatedly, and then press "enter" on "delete," or press "d (dots 1-4-5)" (as a short cut) in the "edit" menu to delete the selection. When you are editing an email, you can press "space-d (dots 1-4-5)" to activate this function.

7.4.7 Move to Next Unread Message

The "move to next unread message" option allows you to move to the next message that is unread. If you use this function on the last unread message in a list, you will be sent to the first unread message in the list. To activate this function while you are in the "subject," "date," or "from" control, open the menu by pressing "space-m (dots 1-3-4)" or "F2." Then, move to the "edit" menu by pressing "space-4" or "space-1." Then, press "enter" on "edit." Or, you can press "u (dots 1-3-6)" while you are in the "edit" menu. To use this function without calling up the menu, press "enter-u (dots 1-3-6)."

7.4.8 Find

The "find" command is used to find text in the current mailbox. Once you enter text to find, the "find" function will look for text that matches in "subject," "date," and/or "from." Find only works in "subject," "date," or "from" control.

The "find" dialog box consists of a "find:" edit box for text to search, a "search" radio button, a "direction" radio button, a "confirm" button, and a "cancel" button. In the "find" dialog box, you can move between the five controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")." The shortcut key is "f (dots 1-2-4)." You can access this function without calling up the menu by pressing "space-f (dots 1-2-4)."

To activate the "find" function, use the following steps:

- Open the menu by pressing "space-m (dots 1-3-4)" or "F2," and move to the "edit" menu by pressing "space-4." Then open the "e dit" menu by pressing "enter" on "edit."
- 2) Press "space-4" or "space-1" to navigate to "find," and then press "enter," or press the shortcut key, "f (dots 1-2-4)." Than find dial og box appear. When the find dialog box appears, the focus is on the "find:" edit box where the user can type the text that they want to find.
- 3) After typing in the text, press "tab ("space-4-5")" to move to the n ext control, "search" radio button. Here you can select between "all," "subject," "date," or "from." The "all" control means "subject," "date," and "from" controls together. You can select an

- item by pressing "space-4" or "space-1." By selecting a specific control, you can search the control for the text that you want to find.
- 4) Pressing "tab ("space-4-5")" moves to the "direction" radio button, which has two choices, "forward" or "backward." Pressing "space-4" or "space-1" lets you select the searching direction as "forward" or "backward."
- 5) Press "tab ("space-4-5")" to move you to the "confirm" button. Then, press "enter" to execute the function. If you want to cancel, press "tab ("space-4-5")" to move to the "cancel" button. Then, press "enter." Or, you can press "space-z (dots 1-3-5-6)" or "space-e (dots 1-5)" anywhere in this dialog box to cancel.

7.4.9 Find Again

The "find again" command finds the next text according to what you found using "find" dialog box, and it will go to the previous text if you set the direction to "backward" when you used the "find" function before. The "find again" function only works in the "subject," "date," or "from" control.

To activate the "find again" function, use the following steps:

- 1) Open the menu by pressing "space-m (dots 1-3-4) or "F2."
- 2) Move to the "edit" menu by pressing "space-4," and press "enter" on "edit." Then, navigate to "find again" by pressing "space-4" or "space-1." Then, press "enter" on "find again." Under the "edit" menu, the shortcut key is "g (dots 1-2-4-5)." To activate this function without calling up the menu, press "backspace-f (dots 1-2-4)."

7.4.10 Copy to Folder

The "copy to folder" command copies e-mail messages from one email folder to another email folder. It does not allow you to copy e-mail messages to a folder that you would find in the "file manager." For example, let's suppose you have the email folder, "inbox," and a folder you created called "important." The "copy to folder" function would allow you to copy an email from the "inbox" to the "important" email folder. Refer to section 7.2.4 for an explanation on how to navigate between email folders.

The dialog box consists of 6 controls: "folder list," "create folder" button, "delete folder" button, "rename folder" button, a "confirm" button, and a "cancel" button. You can move between the controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")." And you can move between items in the "folder list" by pressing "space-1" or "space-4." If you want to cancel while you are in these dialog boxes, press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)." Use the following steps to copy an email to a folder:

- 1) Select the mail you want to copy by pressing "space," or create a selection of e-mail messages by pressing "enter-b (dots 1-2)."
- 2) Go to the menu by pressing "space-m (dots 1-3-4)" or "F2," and p ress "space-4" or "space-1" to move to the "edit" menu. Then, pr ess "enter" to get in to the "edit" menu. Move to "copy to folder," and then press "enter," which will open a dialog box. The shortcu t key for "copy to folder" is "p (dots 1-2-3-4)" while you are in the "edit" menu. To activate the "copy to folder" function without calling up the menu, press "backspace-c (dots 1-4)."
- 3) Select an email folder to copy e-mail messages to in the "folder" I ist. Then, press "enter," or move to the "confirm" button, and pre ss "enter." This will copy e-mail messages to the selected email f older in the "folder list." However, the focus returns to the email f older where you copied the e-mail messages from.

In the dialog box, pressing "enter" on the "create folder" button opens a new dialog box. This dialog box consists of 3 controls: "folder name," a "confirm" button, and a "cancel" button. Here you can type in a name for the new email folder in the "folder name" control. Then, press "enter" to create a new email folder, or move to the "confirm" button by pressing "tab ("space-4-5")," and press "enter" to create a new email folder.

Pressing "enter" on the "delete folder" button deletes the selected email folder in the "folder list" control. Before the email folder is deleted, the Braille Sense Plus B32 asks for confirmation. You can toggle between "yes" and "no" by pressing "space." Then, press "enter" to delete the email folder. In the "folder list" in the "copy to folder" dialog box, the hot key for "delete folder" is "space-d (dots 1-4-5).

Like the "create folder" button, pressing the "rename folder" button opens a dialog box which has the same controls as the "create folder" dialog box. However, the "folder name" control shows the name of the folder that was selected from the "folder list." Here you can type in the name that you want to rename the folder with. After editing the folder name control, press "enter," or move to the "confirm" button, and press "enter."

The "inbox" and "storagebox" are protected from deletion and rename, so attempting to delete them will not work. If you attempt to delete or rename the "inbox" or the "storagebox," you will hear the warning sound to notify you of the error.

7.4.11 Move to Folder

The "move to folder" function moves e-mail messages from one email folder to another email folder. It does not allow you to move e-mail messages to a folder that you would find in the "file manager." For example, let's suppose you have the email folder, "inbox," and a folder you created called "important." The "move to folder" function would allow you to move an email from the "inbox" to the "important" email folder. Refer to section 7.2.4 for an explanation on how to navigate between email folders.

The dialog box consists of 6 controls: "folder list," "create folder" button, "delete folder" button, "rename folder" button, a "confirm" button, and a "cancel" button. You can move between the controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")." And you can move between items in the "folder list" by pressing "space-1" or "space-4." If you want to cancel while you are in these dialog boxes, press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

Use the following steps to move an email to a folder:

- 1) Select the mail you want to copy by pressing "space," or create a selection of e-mail messages by pressing "enter-b (dots 1-2)."
- 2) Go to the menu by pressing "space-m (dots 1-3-4)" or "F2," and p ress "space-4" or "space-1" to move to the "edit" menu. Then, pr ess "enter" to get in to the "edit" menu. Move to "move to folder." and then press "enter," which will open a dialog box. The shortc ut key for "move to folder" is "m (dots 1-3-4)" while you are in the

- "edit" menu. To activate the "move to folder" function without call ing up the menu, press "backspace-x (dots 1-4)."
- 3) Select an email folder to move e-mail messages to in the "folder" list. Then, press "enter," or move to the "confirm" button, and pre ss "enter." This will copy e-mail messages to the selected email f older in the "folder list." However, the focus returns to the email f older where you copied the e-mail messages from.

In the dialog box, pressing "enter" on the "create folder" button opens a new dialog box. This dialog box consists of 3 controls: "folder name," a "confirm" button, and a "cancel" button. You can type in a name for the new email folder in the "folder name" control. Then, press "enter" to create a new email folder, or move to the "confirm" button by pressing "tab ("space-4-5")," and press "enter" to create a new email folder.

Pressing "enter" on the "delete folder" button deletes the selected email folder in the "folder list" control. Before the email folder is deleted, the Braille Sense Plus B32 asks for confirmation. You can toggle between "yes" and "no" by pressing "space." Then, press "enter" to delete the email folder. In the "folder list" in the "move to folder" dialog box, the hot key for "delete folder" is "space-d (dots 1-4-5)."

Like the "create folder" button, pressing the "rename folder" button opens a dialog box which has the same controls as the "create folder" dialog box. However, the "folder name" control shows the name of the folder that was selected from the "folder list." Here you should type in the name that you want to rename the folder with. After editing the folder name control, press "enter," or move to the "confirm" button, and press "enter."

The "inbox" and "storagebox" are protected from deletion and rename, so attempting to delete them will not work. If you attempt to delete or rename the "inbox" or the "storagebox," you will hear the warning sound to notify you of the error.

7.4.12 Check Spelling

The "check spelling" function is used to check spelling while you are writing the e-mail message.

In order to bring up check spelling function, do the following;

- 1) Call up the menu by pressing "space-m (dots 1-3-4)" or "F2."
- 2) Move to the "edit" menu by pressing "space-4."
- 3) Press "enter" on the "edit" menu.
- 4) Press "space-4" until "check spelling" is heard. Or, press "k (dots 1-3)" in order to move to "check spelling" directly.
- 5) Press "enter" on the "check spelling." Or, you can call up the "check spelling" menu by pressing "enter-k (dots 1-3)" while you are editing a document.

If "check spelling" is executed, a dialog box with the following items will be displayed:

"Range" combo box

"Custom dictionary (c)" dialog

"Option (o)" dialog

"Begin (b)" button

"Cancel" button

You can move from one item to the next by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

The following is a detailed explanation for each item:

The "range" combo box is used to designate the range that is to be spell checked.

- 1) Whole document: check throughout the entire current document.
- 2) Chapter: check the current chapter where the cursor is located.
- 3) Sentence: check the current sentence where the cursor is located.
- 4) From cursor to bottom: check from the cursor position to the end of the document.
- 5) Current word: check just the word where the cursor is located. You can move from one item to the next by pressing "space-1" or "space-4."

When you press "enter" on the "custom dictionary" dialog, the following items will be displayed:

- 1) List: it shows the words that are registered in the custom dictionary. (Example: Braille 1/20). If there are no words registered, "no list" will be displayed.
- 2) Add word (a): if "enter" is pressed on this button, "add word:" will be displayed. If you want to add a word, press "enter" after you enter the new word. Then, the new word is added and the Braille Sense Plus B32 exits to the "add word" button.
- 3) Modify word (m): select the word to be modified on the "list" and then press "enter." The "modify word:" message is displayed. Input the correct word that will replace the selected word and then press "enter" in order to modify the selected word. The "modify word" button will be displayed again after the Braille Sense Plus B32 modifies the selected word.
- 4) Delete word (d): select the word to be deleted on your "list" and press "enter" in order to delete the selected word.
- 5) Cancel: this command closes the dialog box.

You can move from one item to the next item by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

When you press "enter" on the "option" dialog, the following items will be displayed:

- 1) Always suggest recommended word: if this option is set to "on," the Braille Sense Plus B32 will suggest a word if the word that is encountered is not in the dictionary. The default is set to "on." If the option is set to "off," the Braille Sense Plus B32 will not recommend a word. In order to toggle between "on" and "off," press "space."
- 2) Use main dictionary only: if this option is set "on," the spell checker will not look up any words in the "custom dictionary." It will only use the main dictionary. The default value is set to "off," and you can toggle between "on" and "off" by pressing "space."
- 3) Skip an upper-case word: if this option is set to "on," words with only upper-case letters will not be checked. The default is set to "on," and you can change it by pressing "space."

- 4) Skip a word which includes an address: if this option is set to "on," the words that contain an address will not be checked. The default is set to "on," and you can change it by pressing "space."
- 5) Skip a word which includes numbers: if this option is set to "on," the words that include the numbers will not be checked. The default value is set to "off," and you can change it by pressing "space."
- 6) Confirm: if you press "enter" on "confirm," the changes that you made above will be saved, and the Braille Sense Plus B32 will exit from the "option" dialog.
- 7) Cancel: if you press "enter" on "cancel," the changes that you have made above will be canceled and the Braille Sense Plus B32 exit from "option" dialog.

In order to move between the items 1) through 6), press "space-1" or "space-4." But, in order to move to "confirm" or "cancel," press "tab ("space-4-5")" or "shift-tab ("space-1-2")."

If you press "enter" on the "begin" button after you set all of the settings, the Braille Sense Plus B32 will start to check spelling. If you press "enter" on the "cancel" button, the "spell check" will be canceled. Once "spell check" is executed, the following dialog box will be displayed:

- 1) Window to show the text: it shows the sentence with the word to be checked currently. The cursor will be located at the word that is to be checked currently.
- 2) Change word edit box: it shows the word to be checked currently. You can input the correct word in edit box directly.
- 3) Recommendation word list: if the word to be checked is not in the dictionary, the Braille Sense will recommend words. You can move from one recommended word to the next by pressing "space-1" or "space-4."
- 4) Skip once (s): if you press "enter" on this button when a word is encountered that is not in the dictionary, the word will not be modified. You can also press the "Down arrow key" in order to skip the word.
- 5) Skip all (i): if you press "enter" on this button, the word that is the same word as the currently focused word will not be modified and skipped throughout the spell check range.

- 6) Add to custom dictionary (a): if you press "enter" on this button, the word that is currently focused is added to your "custom dictionary."
- 7) Modify once (c): focus on the modified word and select the desired word on the "recommendation word list," and then press "enter." Then, the currently focused word that is on your document will be replaced by the recommended word.
- 8) Modify all (m): focus on the modified word and select the desired word on the "recommendation word list," and then press "enter." The same words with the same spelling will be replaced by the new word throughout the document.
- 9) Cancel: if you press "enter" on the "cancel" button, the "spell check" will be ended.

You can move from one item to the next by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

When the spell check has completed, the Braille Sense Plus B32 will say "search: 00 mismatch: 00 replace: 00."

7.5 Settings in the Tool Menu

You can change the download path or set the e-mail service using the "tools" menu.

The "tools" menu has the following four sub menus:

- 1) Service manager
- 2) Set path
- 3) Set options
- 4) Set spam

Each sub menu will be explained in detail in this section.

7.5.1 Service Manager

"Service manager" is used to register, delete, or modify an e-mail service.

The following are the steps required to execute this sub menu.

- 1) Press "space-m (dot 1-3-4)" or "F2" to call up the "e-mail" menu.
- 2) Press "space-4" to move to the "tools" menu.
- 3) Press "enter." Then, the "service manager" will be displayed.

4) Press "enter." Then, "service name: (registered service name) 1/yy" will be displayed. You can move to this stage directly by pressing "enter-m (dots 1-3-4)." Then, the Braille Sense Plus B32 will display the first item of the "service manager" that is in "service list."

The "service manager" contains the following 6 items.

- 1) Service list
- 2) Information
- 3) Register
- 4) Modify
- 5) Delete
- 6) Close

You can move among these items by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." You can execute each item by pressing "enter" on the desired item that is displayed.

If you want to exit from the "service manager," move to the "close" button, and then press "enter." Or, press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

The following is a detailed explanation of each item. "Register" was already explained in section 7.1.2. Please refer to that section for information about "register."

7.5.1.1 Signature and Advanced

If you activate the "service manager," you will see "service name: your registered service name 1/xx" in the list. While registering your account, you can use "signature" to add a signature to all e-mail messages that you write, and "advanced" setting to changed advanced options.

- 1) Just as in Section 7.1.2, "registering e-mail service," when you are registering the "smtp server" in step 13. Then, you can press "tab ("space-4-5")" to go to the "advanced" button.
- 2) Press "enter" on the button.
- 3) You will hear "use secure POP3 (POP-SSL)." This check box is unselect by default. If the pop3 server uses the "SSL," select the ch

- eck box by pressing "space."
- 4) Press "space-4" to go to "pop3 port number: 110" by default. Here you can type in another pop3 port number in the computer edit bo x.
- 5) Press "space-4" to go to "use secure SMTP (SMTP-SSL)." This check box is unselect by default. If the smtp server uses the "SSL," s elect the check box by pressing "space."
- 6) Press "space-4" to go to "smtp port number? 25." This is also a computer edit box. Here you can type in another smtp port number.
- 7) Press "space-4" to go to "smtp username." Here, you can add ano ther smtp username if your Internet service provider requires you to use a different smtp username. You should use ASCII to type this in.
- 8) Press "space-4" to go to "smtp password." You can type in your p assword that corresponds to the above ID. It should be typed in u sing ASCII.
- 9) Press "space-4" to go to "use as default SMTP" check box. If you want to use the above new username and password that were set in steps 7 and 8, select the check box by pressing "space."
- 10) Press "tab ("space-4-5")" to go to "use signature: no." If you want to use a signature, press "space" choose "yes," or if you do not want a signature, leave it at "no."
- 11) Press "tab ("space-4-5")" to go to the "signature" button. Press "enter," and you will see the "signature" multi-edit box. You can ty pe your signature in here that you want to use. Press "tab ("spac e-4-5")," and press "enter" on "confirm." This will save the signatur e, and you will be returned to the "signature" button. You can canc el by pressing "enter" on "cancel" by pressing "tab ("space-4-5")" af ter typing-in a signature.
- 12) Press "tab ("space-4-5"), and press "enter" on "confirm."

7.5.1.2 Checking Registered Service List

The first item of the "service manager" is the "service list." It is displayed as "service name: (registered service name) 1/yy." The following is the method to check the registered service information:

1) Press "space-4" or "space-1" to move to the desired service in the service list.

- 2) If the desired service is displayed, press "enter" or "tab (space-4-5)" to move to the "information" button, and then press "enter."
- 3) Then, the information dialog box will be opened, and "service name: (Registered service name)" will be displayed (Ex: service name: Braille Sense Plus B32).
- 4) Press "space-4" or "tab ("space-4-5")" and make sure the information is correct for each item. Pressing "enter" on the "close" button will return you to the service list.

Make sure the information is correct for the selected service. The move keys are listed below to move among the items in the dialog box:

Move to the previous item: Space-1 Move to the next item: Space-4

Move to the first item: Space-1-3 or space-1-2-3 Move to the last item: Space-4-6 or space-4-5-6

Move to the previous control: Space-1-2 Move to the next control: Space-4-5

If the information displayed exceeds 32 Braille cells, the remaining parts can be checked by pressing the "down scroll button."

7.5.1.3 Modify

If the "service manager" is executed, "service name: (Registered service name) 1/yy" will be displayed in the "service list." The user can modify the desired information by using the following steps:

- 1) Press "space-4" or "space-1" to move to the desired service in the service list.
- 2) When the desired service is displayed, press "tab (space-4-5)" to move to the "modify" button, and then press "enter." Or, just press "m (dots 1-3-4)."
- 3) Then, the same message will appear that was explained in step 7 in section 7.1.2 (Registering E-mail Service). But, in this case, it is a "modification," so the Braille Sense Plus B32 will show you the current information. For example, "service name: Braille Sense Plus B32."
- 4) Please follow step 7 through step 13 in section 7.1.2.

5) When the modification is complete, it will return to the "service list."

You can move among the items (service name, logon username, password...) by pressing "space-1" or "space-4." You can move to the "confirm" button or the "cancel" button by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

On all of the items, the values that were typed in already will be displayed. If you type in new information, the new information will replace the old information. If you want to modify part of an item, press the "cursor routing key" at the desired position and type in the new information.

If you made a typo in an item (service name, logon username, password...), you can modify it using the following process:

- 1) You can delete the current letter by pressing "space-d (dots 1-4-5)."
- 2) Press "backspace" in order to delete the previous letter.
- 3) In order to delete the current line, press "backspace-1-4." Then, "delete line: yes" will be displayed. Press "enter" in order to delete the line. Otherwise, press "space" to change from "yes" to "no," and then press "enter."

7.5.1.4 Deleting the Registered Service

If the "service manager" is launched, the Braille Sense Plus B32 will show the "service list" in the form of "service name: (Registered service name) 1/yy."

You can delete the service that you want to delete using the following process:

- 1) Use "space-4" or "space-1" to move to the desired service in the "service list."
- 2) When the desired service is displayed, press "space-d (dots 1-4-5)" or "d (dots 1-4-5)." Or, press "tab (space-4-5)" to move to the "delete" button, and then press "enter."
- 3) Then, "Are you sure you want to delete the (Registered service name) service? Yes" will be displayed.
- 6) Press "enter" in order to delete it.

7) The Braille Sense Plus B32 will delete it, show "successfully deleted," and return to the "service list."

If you want to cancel the deletion, press "space" when "Are you sure you want to delete the (Registered service name) service? Yes" is displayed in order to change "yes" to "no," and then press "enter." Or, just press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

7.5.2 Set Path

"Set path" sets the default download path where file attachments and email are stored. You can set the download path using the following method:

- 1) Press "space-m (dots 1-3-4)" or "F2" to call up the "e-mail" menu in the "Inbox."
- 2) Press "space-4" to move to the "tools" menu.
- 3) Press "enter." Then, "service manager" will be opened.
- 4) Press "space-4" to move to "set path."
- 5) Press "enter" on "set path." Then "save attachments path: /flashdisk/download" will be displayed. You can move to this stage by pressing "enter-p (dots 1-2-3-4)."

"Set path" contains the following three items:

- 1) Save attachments path
- 2) Send attachments path
- 3) Disk to save E-mail in

You can move among these items by pressing "space-4" and "space-1." Each item consists of "path," "modify," and "close." At "path," the default path will be displayed. You can move among this information by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

"Set path" will be closed if you press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)." Or, you can close it by pressing enter on the "close" button.

7.5.2.1 Set the Save Attachments Path

The default path for downloaded attached files is "/flashdisk/download."

You can set the download path using the following method:

- 1) Execute steps 1 through 5, as explained in section 7.5.2 (Set path).
- 2) Press "enter" on "save attachments path: /flashdisk/download," or press "m (dots 1-3-4)." Or, press "tab (space-4-5)" to move to the "modify" button, and then press "enter."
- 3) Then, "no list" will be displayed when the "/flashdisk/download" folder is empty. But, if the folder has a lower level folder, "(Folder name) 1/yy" will be displayed. When "save attachment path" is executed, the Braille Sense Plus B32 will only show the folder. So, if there is no folder in the "download" folder, it will show "no list."
- 4) Move to the desired folder by pressing move keys below: Move to the upper level folder: Backspace Move to the previous item: Space-1 Move to the next item: Space-4
- 5) When you encounter the desired folder, press "space" to select it, and then press "enter." If a folder is selected, "*" will be displayed in front of the selected folder.

If you press "enter" to set the path, the Braille Sense Plus B32 will show the changed path. If you changed the path to the "work" folder that is one of the lower level folders located in "flashdisk," "save attachments path: /flashdisk/work" would be displayed.

When you download an attached file, if you press "enter" while "current download path is set to /flashdisk/download. Do you want to change it? yes" is displayed, this creates the same situation as step 3 above. Please follow the above remaining steps. In this case, if you select a folder, and press "enter," the attached file will be downloaded into the selected folder and return to the "inbox."

7.5.2.2 Set the Send Attachments Path

"Send attachments path" is the path where the files to be attached are saved. The default path is "/flashdisk/upload." You can change this path to a different path using the following method:

- 1) Execute steps 1 5, as explained in section 7.5.2.
- 2) Press "space-4" to move to "send attachments path: /flashdisk/upload."
- 3) Press "enter" or "m (dots 1-3-4)" on "send attachments path: /flashdisk/upload." Or, press "tab (space-4-5)" to move to the "modify" button and then press "enter."
- 4) Then, "no list" will be displayed when the "/flashdisk/upload" folder is empty. But, if the folder has a lower level folder, "(Folder name) 1/yy" will be displayed. When "send attachments path" is executed, the Braille Sense Plus B32 will only show the folder. So, if there are no folders in the "upload" folder, it will show "no list."
- 5) Move to the desired folder by pressing the following keys: Move to the upper level folder: Backspace Move to previous item: Space-1 Move to next item: Space-4
- 6) Press "space" to select the desired folder, and press "enter." "*" will be displayed in front of the selected folder.

If you finish setting the path by pressing "enter," the Braille Sense Plus B32 will show the changed path. If you changed the path from the "upload" folder to the "music" folder in the "flashdisk," it would display "send attachments path: /flashdisk/music."

7.5.2.3 Set the Disk to save E-mail

The e-mail messages that are downloaded from your network are saved in the "email" folder, which is a lower level folder of "flashdisk." If the size of an email you are receiving is so large that it cannot be downloaded and stored in the "flashdisk," you can change to a different disk using the following method:

- 1) Connect the external storage disc to the Braille Sense Plus B32.
- 2) Execute steps 1 5, as explained in section 7.5.2.
- 3) Press "space-4" to move to "disk to save E-mail in: /flashdisk."

- 4) Press "enter" or "m (dots 1-3-4)" on "disk to save E-mail in: /flashdisk." Or, press "tab (space-4-5)" to move to the "modify" button, and then press "enter."
- 5) Then, the "flashdisk" will be displayed. Press "space-4" or "space-1" to move to the disk list. If you have connected a USB memory stick or CF memory, "smd" (stick memory) or "cfd" (cf memory) will be displayed during step one above, respectively.
- 6) Press "enter" on the desired disk name.

It will show the disk name if the disc setting is completed by pressing "enter." If you changed it to "CF memory," it will show "disk to save E-mail in: /cfd." If it is changed, the "email" folder will be created automatically in the selected disc, and the e-mail messages will be downloaded in this disk.

7.5.3 Set Options

When you download e-mail from your e-mail server, you can set the Braille Sense Plus B32 to keep e-mail messages on the server or not. In the "set options," you can select it.

The default value is set to keep your e-mail on the mail server. You can change this setting by using the following method:

- 1) Press "space-m (dots 1-3-4)" or "F2" to call up the "e-mail" menu in the "inbox."
- 2) Move to the "tools" menu by pressing "space-4."
- 3) Press "enter." Then, "service manager" will be displayed.
- 4) Press "space-4" to move to "set options."
- 5) Press "enter." Then, "keep mail copies in server: Yes" will be displayed. Press "enter-o (dots 1-3-5)" in order to jump to this stage.
- 6) Press "space" to change "yes" to "no," and press "enter" if you do not want a copy of the email to remain on the e-mail server. By using the setting above, the new e-mail message will not be on the e-mail server if you downloaded the e-mail to the Braille Sense Plus B32. If an e-mail is not downloaded into the Braille Sense Plus B32 successfully, that e-mail will remain on the e-mail server. If you want the copy to remain on the e-mail server, you can change the setting from "no" to "yes" by pressing "enter" at step 6 above.

You can cancel "set options" while you are changing a setting by pressing "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

7.5.4 Spam Settings

When the Braille Sense Plus B32 downloads e-mail from the e-mail server, there may be a lot of e-mail messages that are spam. In this case, you can avoid downloading these spam e-mail messages by registering specified words in the subject or the specified e-mail address.

The spam e-mail messages that are set at "spam settings" will not be downloaded into the Braille Sense Plus B32, and will remain on the e-mail server.

Use the following steps to set up spam e-mail:

- 1) Press "space-m (dots 1-3-4)" or "F2" to call up the menu while you are in the "inbox."
- 2) Press "space-4" to move to the "tools" menu.
- 3) Press "enter." Then, "service manager" will be opened.
- 4) Press "space-4" to move to "spam settings."
- 5) Press "enter." Then, "type: subject 1/3" will be displayed. You can also jump to this stage by pressing "enter-e (dots 1-5)."

Now, you are in the "spam settings" menu.

"Spam settings" contains the following 6 items;

- 1) Type
- 2) List
- 3) Add
- 4) Modify
- 5) Deleté
- 6) Close

You can move among the items by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

In order to exit from "spam settings," move to the "close" button and press "enter," or press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

"Type" consists of 3 sub items; "subject," "e-mail address string," and "host." You can move among these sub items by pressing "space-1" or "space-4."

The "list" will be displayed in a different form according to the sub item of the "type."

If you have selected "subject," the list will be displayed as "subject: (Registered word) 1/xx." If you selected "e-mail address string," it will be displayed as "e-mail address string: (Registered e-mail address string) 1/xx." It will be displayed as "no list 0/0" if there is no registered word or e-mail address string.

Now we will explain how to register, modify, and delete the spam settings.

7.5.4.1 Add As Spam E-Mail

First, we will explain how to set the e-mail program to sort out spam by setting any specified words in the e-mail subject.

- 1) Execute steps 1 through 5, as explained in section 7.5.4.
- 2) Press "a (dot 1)" when "type: subject 1/3" is displayed. Or, press "tab (space-4-5)" to move to the "add" button, and then press "enter."
- 3) Then, the "add dialog box" will be opened and "subject add:" will be displayed.
- 4) Type in the words, and press "enter." Or, press "tab ("space-4-5")" to move to the "confirm" button, and then press "enter" after you type in the words.
- 5) Then, "successfully added spam data." will be announced and you will be returned to the "list." Then, "subject: (registered word) 1/1" will be displayed.

If you want to add more words, repeat step 2, and add the words. If there is more than one registered word, you can check it by pressing "space-1" or "space-4."

By adding the word as explained above, if there are any e-mail messages that include the words you entered in the subject of the message, the Braille Sense Plus B32 will download those e-mails

from the e-mail server, but will delete them automatically. So those e-mails will not be in the inbox.

You can also avoid receiving e-mail messages from a specific sender or host by registering it.

The following are the steps to register a sender's e-mail address:

- 1) Execute steps 1 to 5 in section 7.5.4.
- 2) Press "space-4" when "type: subject 1/3" is displayed. Then, "type: e-mail address string 2/3" will be displayed.
- 3) Press "a (dot 1)" or press "tab (space-4-5)" to move to the "add" button, and press "enter."
- 4) Then, the "add dialog box" will be opened, and "E-mail address string: (e-mail address)" will be displayed. The "(e-mail address)" is the sender's e-mail address that was focused.
- 5) Press "enter" on "E-mail address sting: (e-mail address)." Or, press "tab (space-4-5)" to move to the "confirm" button, and then press "enter."
- 6) Then, "successfully added spam data" will be announced and "E-mail address string: (Registered e-mail address) 1/1" will be displayed.

If you set it once, the e-mails with the e-mail ids will be downloaded from the e-mail server, but the Braille Sense Plus B32 will delete those e-mails automatically. So those e-mails will not be found in the inbox.

At step 5 above, you can add an additional e-mail address by modifying the e-mail address that you have typed in. If you type in a new e-mail address at "E-mail address string: (e-mail address)," the displayed e-mail address will be erased, and the new e-mail address will be displayed. But, if you press the "cursor routing key" at the position where you want to modify the displayed address, that address will be modified as you type in the modifications. If you want to add another e-mail address to the spam sender, repeat the above steps, starting with step 3 above. Or, when "E-mail address string: (registered e-mail address) 1/1" is displayed, you can add it by pressing "a (dot 1)" or pressing "tab (space-4-5)" to move to the "add" button, and press "enter." You can check the registered e-mail addresses by pressing "space-1" or "space-4."

If you want to register a specific host as a spam sender, do the following:

- 1) Execute steps 1 through 5, as explained in section 7.5.4.
- 2) Press "space-4" when "type: subject 1/3" is displayed in order to move to "type: host 3/3."
- 3) Press "a (dot 1)" on "type: host 3/3," or press "tab (space-4-5)" to move to the "add" button, and then press "enter."
- 4) Then, the "add dialog box" will be opened, and "host add: (host address)" will be displayed. Here, "host address" is the host address that was focused on when you executed this command.
- 5) Press "enter" on "host add: (host address)." Or, press "tab (space-4-5) to move to the "confirm" button, and then press "enter."
- 6) Then, the Braille Sense Plus B32 will say "successfully added spam data" and it will show "host: (registered host address) 1/1."

If you add the host address as above, the e-mails from the registered host will be downloaded from the e-mail server, but the Braille Sense Plus B32 will delete them automatically. So those e-mails will not be found in the inbox.

At step 5 above, you can add the additional host address by modifying the host address that you have typed in. If you type in a new host address at "host add: (host address)," the displayed host address will be erased, and the new host address will be displayed. But, if you press the "cursor routing key" at the position where you want to modify the displayed address, that address will be modified where you modify it.

If you want to add an additional host address, you can add it by repeating step 3 above. Or, when "host: (registered host address) 1/1" is displayed, you can add it by pressing "a (dot 1)" or pressing "tab (space-4-5)" to move to the "add" button, and then press "enter." You can check the registered host addresses by pressing "space-1" or "space-4."

When you register a subject, e-mail address, or host as spam e-mail, you may make a mistake while you are typing in a subject, e-mail

address, or host. In this case, you need to modify the subject while typing them in.

Please refer to the following correction methods:

- 1) In order to delete the current letter, press "space-d (dots 1-4-5)"
- 2) In order to delete the previous letter, press "backspace."
- 3) In order to delete the current line, press "backspace-1-4." Then, "delete line: yes" will be displayed. Press "enter" to delete the line. Or, if you do not want to delete the line, press "space" to toggle "yes" to "no," and then press "enter."

If you want to cancel setting spam at the "add dialog box," press "tab (space-4-5)" to move to the "cancel" button, and press "enter." Or, just press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

7.5.4.2 Modifying Spam Registration

In order to modify information that has been registered you can also use the methods explained in section 7.5.4.1. In order to modify a "subject" that has been registered, do the following:

- 1) Execute steps 1 through 5, as explained in section 7.5.4.
- 2) Move to "list" by pressing "tab (space-4-5)." Then, "subject: (Registered word) 1/xx" will be displayed.
- 3) Press "space-4" or "space-1" to move to the word to be modified.
- 4) Press "m (dots 1-3-4)" on the word to be modified. Or, press "tab (space-4-5)" to move to the "modify" button, and press "enter."
- 5) Then, the modify dialog box will be opened, and "subject modify: (Selected word)" will be displayed.
- 6) If you type in a new word directly, the displayed word will be erased, and the new word will be displayed. If you want to modify a part of the displayed word, press the "cursor routing key" at the position where you want to modify the word, and type in the letters that you want to modify.
- 7) Press "enter" after you type in the new word. Or, press "tab (space-4-5)" to move to the "confirm" button, and then press "enter."

8) Then "successfully modified spam data." will be announced, and you will be returned to the "list." If there is more than one word in the list, you can look them up by pressing "space-4" or "space-1."

If you want to modify the e-mail addresses or host addresses that have been registered, execute step 1 above. Press "space-4" to move to "type: e-mail address string 2/3" and "type: host 3/3." You can modify them with the same method as explained above.

If you mistyped any letter while modifying the subject, e-mail address, or host, you can correct it, as explained in section 7.5.4.1.

If you want to cancel registration, press "tab (space-4-5)" to move to the "cancel" button, and press "enter." Or, you can press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

7.5.4.3 Deleting Spam

You can delete an item that has been registered in the spam list. Let's start our explanation from "subject."

- 1) Execute steps 1 through 5, as explained in section 7.5.4.
- 2) Press "tab (space-4-5)" to move to the "list." Then, "subject: (Registered word) 1/xx" will be displayed.
- 3) Press "space-4" or "space-1" to delete the registered word.
- 4) Press "space-d (dots 1-4-5)" to delete the selected word. Or, press "tab (space-4-5)" to move to the "delete" button, and press "enter."
- 5) Then, "successfully deleted" will be announced and "list" will show again. You can check the remaining words by pressing "space-4" or "space-1."

You may delete an "e-mail address string" or "host" in the spam list, too. Execute step 1 above, and press "space-4" to move to "type: e-mail address string 2/3" or "type: host 3/3," and execute step 2 above. The method is the same as explained above.

7.6. Hot Keys for E-Mail

7.6.1 Hot Keys That Are Used in the Inbox

Call "service manager": Enter-m (dots 1-3-4) Receive new mail: Enter-n (dots 1-3-4-5)

Write mail: Enter-w (dots 2-4-5-6)

Reply: Enter-r (dots 1-2-3-5)

Reply all: Backspace-r (dots 1-2-3-5)

Forward: Enter-f (dots 1-2-4)

Call up "send mail in storage box": Enter-s (dots 2-3-4)

Call up "set path": Enter-p (dots 1-2-3-4)
Call up "set option": Enter-o (dots 1-3-5)
Call up "set spam": Enter-e (dots 1-5)
Call up "local folder": Enter-d (dots 1-4-5)

Find: Space-f (dots 1-2-4)

Find again: Backspace-f (dots 1-2-4)

Move to unread message: Enter-u (dots 1-3-4)

Move to folder: Backspace-x (dots 1-3-4-6)

Copy to folder: Backspace-c (dots 1-4)

Add a sender to the address list: Enter-I (dots 2-4) (This is valid only

at the "from" item of the "inbox").

Delete received e-mail: Space-d (dots 1-4-5) (It is valid only at the

"subject" and "date" item in the "inbox").

Save the received e-mail as text file: Space-s (dots 2-3-4)

Print the received e-mail: Space-p (dots 1-2-3-4)

Cancel: Space-e (dots 1-5)

Cancel and exit from e-mail program: Space-z (dots 1-3-5-6)

7.6.2 Hot Keys for Sending E-Mail Including Reply, Forward, and Save in the Mail Storage Box

Search address list: Enter-I (dots 1-2-3)

Attach file: Enter-f (dots 1-2-4) Send e-mail: Enter-s (dots 2-3-4)

Save in mail storage box: Space-s (dots 2-3-4)

Cancel: Space-e (dots 1-5)

Cancel and exit from e-mail program: Space-z (dots 1-3-5-6)

7.6.3 Hot Keys for Reading E-Mail Messages or Writing an E-mail Message

Start selection: Enter-b (dots 1-2)

Select all: Enter-a (dot 1)

Copy to the clipboard: Enter-c (dots 1-4)

Cut to the clipboard: Enter-x (dots 1-3-4-6) (It is not valid when you

are reading e-mail in the "inbox").

Paste from the clipboard: Enter-v (dots 1-2-3-6) (It is not valid when

you are reading e-mail in the "inbox").

Delete: Space-d (dots 1-2) (It is not valid when you are reading e-

mail in the "inbox").

Cancel block: Space-e (dots 1-5)

Check Spelling: enter-k (dots 1-3) (It is not valid when you are

reading e-mail in the "inbox")

8. Media Player

The Media Player on the Braille Sense Plus B32 is a program which you can use to play audio files. The Media Player will play the following formats, ac3, asf, asx, m3u, mp2, mp3, mp4, mpa, mpg, ogg, pls, rmp, wav, wax, wma, and wmv. Note that you will not be able to see the video with "avi" and "wmv" files.

You can control the playing of audio files using either the Braille keyboard commands or audio keys that are on the front panel of the Braille Sense Plus B32. The Media Player can play back recorded voices as well as music files.

8.1 Using the Audio Buttons

There are a series of buttons on the front panel of the Braille Sense Plus B32. These buttons can be used to control the Media Player. You will find five buttons on the Braille Sense Plus B32. Starting from the left, and going to the right, the buttons are called: "previous," "record," "stop," "play/pause," and "next." These buttons are used for playing and recording music or voice quickly and easily.

If the "play/pause" button is pressed while you are using a program other than the Media Player, the Braille Sense Plus B32 will play the files in the play list. If there are no files in the play list, the Braille Sense Plus B32 says, "There are no items to display." The other buttons, "previous," "stop," and "next" are available after you start playing audio by pressing the "play/pause" button. Note that the "record" button will not work while you are using other programs. Even if the Media Player starts when you press the "play/pause" button while you are using another program, the Braille Sense Plus B32 will not stop the program that is currently running.

8.1.1 Play/Pause Button

The "play/pause" button has a long, rectangle shape. To locate the "play/pause" button, find the button that is furthest to the right on the front panel. Then, move one button to the left. This is the "play/pause" button. With the "play/pause" button, you can easily

play audio files registered in the play list. If there are no files that have been registered in the play list, the Braille Sense Plus B32 will display the message, "There are no items to display." You have to add a file to the play list before it can be played. There is a detailed explanation on how to add files to the play list in section 8.2.2. If there is more than one file in the play list when you press the "play/pause" button, the Braille Sense Plus B32 will start playing all the files in the list one after another. If you press the "play/pause" button again while a file is being played, the playback will be paused. If you want to resume playing, press the button again. If you press the "play/pause" button while you are in the "record" dialog box, the sound that was recorded most recently will be played back to you.

8.1.2 Next button and previous button

These buttons have a triangular shape. The "previous" button is the first button from the left on the front panel, and it points to the left. The "next" button is the button that is farthest to the right on the front panel, and it points to the right. If you press the "next" button, the next file in the play list will be played, and pressing the "previous" button will play the previous file. If you press one of these buttons while an audio file is being played, the Braille Sense Plus B32 will stop playing the current file, and jump to the previous or next file (depending on which button you press) in the play list, and start playing it. If you press the "next" button (while the last file in the list is being played), or the "previous" button (while the first file in the list is being played), it will have no effect, as the Braille Sense Plus B32 will not stop playing the current file.

8.1.3 Record Button

The "record" button has a circular shape, and is used to record sound using the built-in or an external microphone. The "record" button is located directly to the right of the "previous" button. To use this button to record sound, you should be either in the "Media Player," or in the "program" menu. If you press the "record" button once, the Braille Sense Plus B32 will open the "record" dialog box. If you press the "record" button again, the Braille Sense Plus B32 will resume recording. When you press the "record" button while you are recording, the Braille Sense Plus B32 will pause your recording. You

can resume the recording by pressing the "record" button again. The recorded sound will be stored in a file, and placed in the "flashdisk/media/record" folder. See section 8.3.3 for more information about recorded files.

8.1.4 Stop Button

The "stop" button has a square shape, and is used to stop playing. If you press the "stop" button while an audio file is being played, the Braille Sense Plus B32 will stop playing. The next time the Braille Sense Plus B32 starts playing, it will start from the first file in the play list. If you press this button while recording, the Braille Sense Plus B32 will stop recording. If you press the "stop" button in "record" dialog box while the Braille Sense Plus B32 is not recording, the dialog box will close.

8.1.5 Using the Audio buttons in file open dialog box

You can open "open file" dialog box by long pressing "stop" button in the "Media Player" dialog box. And if you long press the "stop" button again, this dialog box will close. And then return to the "Media Player" dialog box.

"play/pause" button is same function as "enter" in "open file" dialog box. Also "stop" button, "record" button, "previous" button and "next" button is same function as "backspace", "space", "space-1" and "space-4" in "file open" dialog box.

Namely, you can move to up and down by pressing "previous" and "next" button in file list. And you can select and unselect by pressing "record" button. If you press "stop" button, you can move to upper folder. And if you press "play/pause" button, you can play the selected file in file list of "open file" dialog box.

In order to use this function, you must set the audio mode switch to "media mode."

8.2 Braille Keyboard and Extended Keys

You can use more of the features in the "Media Player" with the Braille keyboard than with the audio buttons. You can use the Braille keyboard commands to control the player in the "Media Player" dialog box. To open the "Media Player," press "enter" on "Media Player," or

press "m" in the "program menu." The "Media Player" is also opened when you play audio files by pressing the "play/pause" button on the front panel of the Braille Sense Plus B32. This dialog box contains two information tabs: "playback information" and "play list." Press "space-4-5" or "space-1-2" to move between these tabs. A detailed explanation of these tabs follows in sections 8.2.1, 8.2.2, and 8.2.3.

8.2.1 Playback Information Tab

The "playback information" tab displays the track number, the file name, and the current playback status such as (play, pause, or stop). If there are no files in the play list, the Braille Sense Plus B32 will display "title: There are no items to display." If you press "space-4," the Braille Sense Plus B32 will display playback time information. First, the elapsed or remaining time will be displayed. You can set whether the elapsed time or remaining time will be displayed, using the "playback settings" dialog box as explained in section 8.3.5.2. If you have selected the "remaining time" with this option, the - (minus sign), will be displayed before the time. Next to the elapsed/remaining time, the Braille Sense Plus B32 will display the total playback time of the currently selected file. If there are no files in the play list, "time: There are no items to display" will be displayed.

8.2.2 Play List Tab

The "play list" tab displays all the files in the play list. For each file in the play list, it displays the track number, file name, the current place of the file in the list, and the total number of files in the list. If there is no file in the play list, the Braille Sense Plus B32 will display the message "no list 0 of 0."

For example, if you had the following track on the Braille Sense Plus B32: "track 1 Chopin – Fantasie Impromptu 1/10," then "track 1" means this file is the first item in the play list. "Chopin – Fantasie Impromptu" is the file name. "1/10" means the file is the first of ten files in the play list. Whenever you register an audio file using the "file" menu (as explained in section 8.3.1), the file is added to the play list.

8.2.3 Hot Keys in the Play Information Tab and the Play List Tab

The hot keys that can be used in the "playback information" and the "play list" tabs are as follows:

1) Hot keys in the Play Information Tab

Hot key	Function
Space-4	Move to the next information
Space-1	Move to the previous
	information
Space	"Pause" when it is play state
	and "play" when it is pause
	state.
Enter	Start playing
Backspace	Stop playing
Dot 6	Play the next file
Dot 3	Play the previous file
Dots 4-6	Play the last file
Dots 1-3	Play the first file
Dots 5-6	Play the fifth file after the
	current file
Dots 2-3	Play the fifth file before the
	current file
Dot 4	One minute next
Dot 1	One minute previous
Dot 5, play and next button	Go forward 5 seconds and play
Dot 2, play and previous	Go backward 5 seconds and
button	play
Dots 3-4-5	Speed up
Dots 1-2-6	Speed down
Space-up scroll button	Volume up
Space-down scroll button	Volume down
Space-1-3-4	Open menu
Space-1-2-5	Open help
Space-4-5/Space-1-2	Move to "play list" tab
Space-1-3-5-6	Exit "Media Player"

2) Hot Keys in the Play List Tab

List less in the Play List Tab	
Hot key	Function
Space-4	Move to the next file
Space-1	Move to the previous file
Space-4-6	Move to the last file
Space-1-3	Move to the first file
Space	Select/resume current file
	(while playing, it is used as
	play/pause)
Enter-1-2	Start selecting files
Enter	Start playing the selected files
Backspace	Stop playing
Space-1-4-5	Delete the selected files in the
	play list
Dot 6	Play the next file
Dot 3	Play the previous file
Dots 4-6	Play the last file
Dots 1-3	Play the first file
Dots 5-6	Play the fifth file after the
	current file
Dots 2-3	Play the fifth file before the
	current file
Dot 4	One minute next
Dot 1	One minute previous
Dot 5	Go forward 5 seconds and
	play
Dot 2	Go backward five seconds and
	play
Dots 3-4-5	Speed up
Dots 1-2-6	Speed down
Space-up scroll button	Volume up
Space-down scroll button	Volume down
Space-1-3-4	Open menu
Space-1-2-5	Open help
Space-4-5/Space-1-2	Move to "playback information"
	tab
Space-1-3-5-6	Exit "Media Player"

8.3 How to Use the Media Player Menu

When you want to open the "Media Player" menu, you can press "space-m (dots 1-3-4)." You can also "F2" while in the "Media Player" dialog box. This menu contains five items: "file," "play," "record," "advanced" and "settings." Using the "file" menu, you can add or delete files in the play list. The "play" menu lists all of the commands related to playing files. The "record" menu opens the "recording" dialog box in which allows you to record sound and play it. The "advanced" menu contains commands related to bookmark and go to position. The "settings" menu allows you to set various Media Player options. A detailed explanation for each menu can be found in the section 8.3.

8.3.1 File

When you want to use the "file" menu, you can press "space-m (dots 1-3-4)" to call up the "Media Player" menu, and then press "enter" on "file," or press "f (dots 1-2-4)." A submenu will appear, which contains "open file," "open folder," "add file," "add folder," "save playlist," "save as playlist," "delete item," and "exit." You can move between these items by pressing "spaece-4" or "space-1." Press "enter" on the item you want to execute. If you want to go back to the menu that is one level up, you can press "space-e (dots 1-5)." Then press, "space-z (dots 1-3-5-6)." which will close the menu, and take you back to the "Media Player" dialog box.

8.3.1.1 Open File

You can use the "open file" menu item to add files to the play list and start playing. If you press "enter" on "open file," a dialog box will open, just like the "file list" in the "file manager." You can navigate through the file list just like you do in the "file list" in the "file manager." The audio files that can be played in the "Media Player" are files that have the extensions, ac3, asf, asx, m3u, mp2, mp3, ogg, pls, wav, wax, wma, and wmv. If you select all the files you want to play, and press "enter," the Braille Sense Plus B32 will register the files in the play list, and start playing the first file. You can select more than one file in the "open file" dialog box by pressing "space" on the file you want to play, and then move to another file to be played, and press "space." Once

you finish selecting all the files you want, press "enter." When you open the "open file" dialog box, files in the default folder will be displayed. The default folder is set to "/flashdisk/media." You can also open the "file open" dialog box by pressing "enter-o (dots 1-3-5)" in the "Media Player" dialog box.

8.3.1.2 Open Folder

This "open folder" menu item is used to select all of the audio files in the selected folders to the play list and play them one after another. If you press "enter" on "open folder" in "file" menu, or press "enter-f (dots 1-2-4)" in the "Media Player" dialog box, the "open folder" dialog box will be opened. The "open folder" dialog box is almost the same as the "open file" dialog box. The difference is that only folder names, and not file names will be displayed in the "folder open" dialog box. When you open the "open folder" dialog box, the default folder name will be displayed. The default folder is set to "flashdisk." Press "enter" to display all of the folders in "flashdisk," and press "space-1" or "space-4" to move between the folder names. If you want to move into the folder that you are currently pointed at (and list all the files in it) press "enter" on the folder name. Press "backspace" if you want to go up to the parent folder. If you want to select a folder, press "space" on the folder name. You can select more than one folder. Once you have selected all of the folders you want, press "enter." Then, the Braille Sense Plus B32 will add all of the audio files, with the extensions, "wav," "mp3," and "wma," from the selected folders to the play list and start playing the first file.

8.3.1.3 Add File

The "add file" menu item is used to add audio files to the play list. If you press "enter" on "add file" in the "file" menu, or press "backspace-o (dots 1-3-5)" in the "Media Player" dialog box, the same dialog box that is used for "open file" will be displayed. If you select all of the files that you want, and press "enter" (as in the "open file" dialog box), then the Braille Sense Plus B32 will add the selected files to the play list. However, the Braille Sense Plus B32 will not start playing these files. If you want to start playing the files in the play list, press the "play/pause" button on the front panel of the Braille Sense Plus B32. Or, you can press "enter" on "play" in the "play" menu. A detailed

explanation of the "play' menu can be found in section 8.3.2.

8.3.1.4 Add Folder

The "add folder" menu item is used to add all of the audio files in a selected folder to the play list. If you press "enter" on "add folder" in the "file" menu (or press "backspace-f (dots 1-2-4)" in the "Media Player" dialog box), the same dialog box that is used for "open folder" will be displayed. If you select all of the folders, and press "enter," the Braille Sense Plus B32 will add all of the audio files in the selected folders to the play list. However, it will not start playing any files. You can start playing the files in the play list by pressing the "play/pause" button on the front panel of the Braille Sense Plus B32, or press "enter" on "play" in the "play" menu. A detailed explanation of the "play" menu can be found in section 8.3.2.

8.3.1.5 Save play list

The "save playlist" menu item is used to save the play list to a disk drive. If you want to use this function, you can press "space-m (dots 1-3-4)" to open the "file" menu and execute the "save playlist" command by pressing "enter" on it, or you can press "s (dots 2-3-4)." Otherwise, you can press "enter-i (dots 2-4)" in the "Media Player" dialog box.

If you activate the "Media player" program and first execute "save playlist," the "save as playlist" dialog box will open. You can refer to section 8.3.1.6 that explains how to use the "save as playlist" dialog box.

If you execute "save" after you save the play list for once, the Braille Sense Plus B32 will save the play list with the same file name without using a dialog box. After saving a play list, it will return to "Media player" dialog box.

8.3.1.6 Save as play list

The "save as playlist" menu item is used to save the play list as a different file or on another disk drive. If you want to use this function, you can press "space-m (dots 1-3-4)" to open the "file" menu and

execute the "save as playlist" command by pressing "enter" on it, or you can press "I (dots 1-2-3)." Otherwise, you can press "space-s (dots 2-3-4)" in the "Media Player" dialog box.

If you execute "save as playlist," the "save as playlist" dialog box is displayed. This dialog box consists of "file list," "file name," a "confirm" button, and a "cancel" button. If the dialog box is opened, "file name:" is displayed. You can move from one tab to the other tab by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". The file format of saved play list is always the "m3u." By default, file is saved in "/flashdisk/media."

If you want to make a new file name, type in the new file name. You cannot use the following characters in a file mane. "|, \setminus , <, >, ?, :, *". If you want to change the saving location, move to the "file list" by pressing "shift-tab (space-1-2)." And you move to location that you want to save by using the navigation keys in "file manager" program.

8.3.1.7 Delete Item

If you want to delete a file from the play list, first, locate the file you want to delete in the "play list" tab by pressing "space-1" or "space-4" repeatedly. Then, bring up the "Media Player" menu by pressing "space-m (dots 1-3-4)," and press "enter" on "file." Now, move to "delete item" by pressing "space-4" repeatedly, and then press "enter." Or, you can press "space-d (dots 1-4-5)" on the file to be deleted in the "play list" tab. You can select more than one file in the "play list" tab by pressing "space" on each file to be deleted. "*" will be displayed before each selected item. If you press "space" on a selected item, the selection will be canceled and the "*" will disappear. Now, let's explain how to delete multiple files in a block from the play list. Press "enter-b (dots 1-2)" on the first file to be deleted. "Enter-b (dots 1-2)" is the start of the block. Next, if you press "space-4" or "space-1," the displayed files will be selected. After selecting the files you want to delete, press "space-d (dots 1-4-5)" in order to delete them.

8.3.1.8 Exit

You can exit from the "Media Player" by selecting "exit" in the "file" menu, or by pressing "space-z (dots 1-3-5-6)" in the "Media Player" dialog box. Then, the Braille Sense Plus B32 will stop playing (if it is playing a file), and exit from "Media Player" to the "program menu."

8.3.2 Play

The "play" submenu has all of the commands that can be used to control playback. To use this menu, first, press "space-m (dots 1-3-4)" to call up the "Media Player" menu. Next, press "space-4." The Braille Sense Plus B32 will then display "play (p)->." Then, press "enter," and the "play" submenu will be displayed. You can move to any menu item in this menu by pressing "space-4" or "space-1" repeatedly. To go back to the top level in the "Media Player" menu, press "space-e (dots 1-5)." Press "space-z (dots 1-3-5-6)" if you want to close the menu and go back to the "Media Player" dialog box. All of the commands that can be used in this menu will be explained in this section.

8.3.2.1 Play

If you press "enter" on "play," the Braille Sense Plus B32 will start playing the files in the play list. Also, if you press "enter" in the "Media Player" dialog box, the Braille Sense Plus B32 will start playing.

8.3.2.2 Previous Track

"Previous track" is used to play the previous file, while a file is being played. You can also do this by pressing "dot 3" in the "Media Player" dialog box.

8.3.2.3 Next Track

This item is used to play the next file in the play list, while a file is being played. You can also press "dot 6" in the "Media Player" dialog box to do this.

8.3.2.4 Back 5 Track

This is used to play the fifth file before the file that is currently being played. You can also press "dots 2-3" in the "Media Player" dialog box to do this.

8.3.2.5 Forward 5 Track

This is used to play the fifth file after the file that is currently being played. You can also do this by pressing "dots 5-6" in the "Media Player" dialog box.

8.3.2.6 First Track

This is used to play the first file in the play list. You can also do this by pressing "dots 1-3" in the "Media Player" dialog box.

8.3.2.7 Last Track

This is used to play the last file in the play list. You can also do this by pressing "dots 4-6" in the "Media Player" dialog box.

8.3.2.8 Back 1 Minute

This is used to start playing one minute before your current location. You can also press "dot 1" to activate this function, without calling up the menu.

8.3.2.9 Forward 1 Minute

This is used to start playing one minute after your current location. You can also press "dot 4" to activate this function, without calling up the menu.

8.3.2.10 Back 5 Seconds

This is used to go backward 5 seconds, and play from there, while a file is being played. You can also do this by pressing "dot 2" in the "Media Player" dialog box, or you can press the "previous" and "play" buttons together on the front panel.

8.3.2.11 Forward 5 Seconds

This is used to go forward 5 seconds, and play from there when a file is being played. You can also do this by pressing "dot 5" in the "Media Player" dialog box, or you can press the "next" button and the "play" button on the front panel.

8.3.2.12 Volume Up and Volume Down

These options are used to adjust the audio playback volume. Here, the volume level ranges from 0 to 10. You can also adjust the volume level by pressing "space-up scroll button (up)" or "space-down scroll button (down)" in the "Media Player" dialog box. The actual volume level depends on the value of "voice volume" that is set in the "option" menu as explained in section 2.4. For example, if "voice volume" is set to 5, and the volume level in the "Media Player" is set to its maximum 10, the actual volume is 5. If the volume level in the "Media Player" is set to 5, the actual volume level is 2.5.

8.3.2.13 Speed Up and Speed Down

You can use these controls to adjust the audio playback speed. The speed level ranges from 1 to 10. You can also adjust the speed level by pressing "dot 3-4-5" or "dot 1-2-6" in the "Media Player" dialog box. "Dot 3-4-5" can increase the audio playback speed, and "dot 1-2-6" can decrease the audio playback speed.

8.3.2.14 Pause

This item is for pausing playback while you are playing a file. If you use this command again, the Braille Sense Plus B32 will start playing again from the position where it stopped playing. You can also do this by pressing "space" in the "Media Player" dialog box.

8.3.2.15 Stop

This is used to stop playing the file that is currently being played. You can also do this by pressing "backspace" in the "Media Player" dialog box.

8.3.3 Record

This menu item is used to open the "record" dialog box. To open the "record" dialog box, first, press "space-m (dots 1-3-4)" or "F2" to bring up the "Media Player" menu. Press "space-4" twice to move to "record (r)," and then press "enter," or you can press "r (dots 1-2-3-5)." Then, the Braille Sense Plus B32 will display the "record" dialog box. You can also open this dialog box by pressing "enter-r (dots 1-2-3-5)" in the "Media Player" dialog box. The "record" dialog box contains an "information" tab and five buttons. You can move between these by pressing "space-4-5" or "space-1-2." You can press the buttons in this dialog box by pressing "enter" on the button you want to use. You can also press the buttons by typing the character displayed after the button name.

8.3.3.1 Record/Playback Information Tab

This tab is displayed only when the Braille Sense Plus B32 is recording, or when there is a file that has just been recorded. It means that the dialog box does not show any information when the Braille Sense Plus B32 is not recording, or if you exit from the dialog box. The information displayed in this tab includes: a file name, the current status, and two pieces of time information. The file name is the name of the file containing the sound that is currently being recorded or played. The current status can be one of the following: recording, playing, pause, or stop. The time information that is displayed first is the elapsed time while recording, and the elapsed or remaining time while playing, (depending on the "time" setting that is in the "playback setting" dialog box, which is explained in section 8.3.5.2). The time information that is displayed last, when you are recording, is the remaining time. The remaining time is limited by the remaining space on your flashdisk. While playing, the total length of the file in time will be displayed. You can move between time information and other information by pressing "space-4" or "space-1."

8.3.3.2 Record

This is used to start recording. You can also start recording by pressing the "record" button on the front panel of the Braille Sense Plus B32. While recording, the Braille Sense Plus B32 will display

the "recording information" tab. Whenever you start recording the Braille Sense Plus B32 will create a file. The file will be named "record01.wav," or "record02.wav" etc. The recorded sound will be saved to that file. These files are stored in a special folder. By default, these files are saved in "/flashdisk/media/record." You can change the saving folder and recoding file type by using the "record settings" option, which is explained in section 8.3.5.3. When recording, you can pause the recording by pressing "space 4-5" to move to the "pause" button, and then press "enter." You can also pause by pressing the "record" button on the front panel of the Braille Sense Plus B32. If you want to resume recording, press "enter" on the "continue" button, or press the "record" button on the front panel of the Braille Sense Plus B32 again. To stop recording, press "space-4-5" repeatedly on "record" to move to the "stop" button, and then press "enter."

8.3.3.3 Play

This button is used to play the file that has just been recorded. You can also start playing the recorded sound by pressing the "play" button on the front panel of the Braille Sense Plus B32. If you have not yet recorded a file after opening the "record" dialog box, pressing "enter" on the "play" button will not do anything. While playing, the "playback information" tab will be displayed. If you want to pause or stop playing, press "enter" after moving to the "pause" or "stop" button by pressing "space-4-5" repeatedly.

8.3.3.4 Stop

This is used to stop recording or playing. If you press "enter" on "stop" while recording, the Braille Sense Plus B32 will stop recording and show the "recording information" tab. If you press "enter" on the "stop" button while playing, the Braille Sense Plus B32 will stop playing and show the "playback information" tab. You can also stop recording or playing by pressing the "stop" button on the front panel of the Braille Sense Plus B32.

8.3.3.5 Pause

This item is used to pause the recording or playing a file while in the Media Player. If you press "enter" on "pause," or press the "play/pause" button on the front panel of the Braille Sense Plus B32, recording or playing will be paused, and the "recording information" or "playback information" tab will be displayed.

8.3.3.6 Continue

If you press "enter" on "continue" while the current status is "pause," the Braille Sense Plus B32 will resume recording or playing.

8.3.3.7 Cancel

If you press "enter" on "cancel," the Braille Sense Plus B32 will stop recording or playing, close the "record" dialog box, and return to the "Media Player" dialog box. If you press "enter" on "cancel" while recording, the recorded file will not be saved. If you want to save the recorded sound to a file, and exit from this dialog box; press "enter" on "stop," and then move to the "cancel" button, and press "enter." You can also use "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)" to cancel.

8.3.4 Advanced Menu

If you want to set a bookmark and delete a bookmark when you are listening to music or an audio file, you can execute the "advanced" menu. This menu will also let you jump to the time you want to go to in an audio file.

The "advanced" menu has four submenus:

- 1) Set bookmark
- 2) Delete bookmark
- 3) Jump to bookmark
- 4) Go to position

You can move between the menus by pressing "space-4" or "space-1." To execute this menu, press "enter."

8.3.4.1 Set Bookmark

If you execute this function when you are playing a file, or when a file is paused, a bookmark will be set. A bookmark will mark a specific location, so that you can come back directly to the spot where you placed the bookmark.

To execute this function,

- 1) Press "space-m (dots 1-3-4)" or "F2" and move to "advanced" by pressing "space-4."
- 2) Press "enter" on "advanced."
- 3) Move to "set bookmark" by pressing "space-4," and press "enter."
- 4) Or, press "enter-m (dots 1-3-4)" when playing a file, or when a file is paused.

If you exit the "Media Player" after setting a bookmark, the Braille Sense Plus B32 asks if you want to save the bookmark.

If you select "yes," the Braille Sense Plus B32 will save the bookmark, at your current position, and play from the bookmark position the next time that you execute the Media Player.

If you select "no," the Braille Sense Plus B32 will save the bookmark that is already set. If you select "erase," the Braille Sense Plus B32 will delete the bookmark that is already set.

8.3.4.2 Delete Bookmark

If you execute this function when you are playing a file, or when a file is paused, it will delete the bookmark that was created before. To execute this function,

- 1) Press "space-m (dots 1-3-4)" or "F2" and move to "advanced" by pressing "space-4."
- 2) Press "enter" on "advanced."
- 3) Move to "delete bookmark" by pressing "space-4," and press "enter."
- 4) Or, you can press "enter-d (dots 1-4-5)" when playing a file, or when a file is paused.

If you execute this function in a file that does not have a bookmark, the Braille Sense Plus B32 will display "There is no bookmark in selected file."

8.3.4.3 Jump to Bookmark

If you execute this function when you are playing a file, or when a file is paused, it will find a bookmark that has already been created. To execute this function,

- 1) Press "space-m (dots 1-3-4)" or "F2" and move to "advanced" by pressing "space-4."
- 2) Press "enter" on "advanced."
- 3) Move to "jump to bookmark" by pressing "space-4," and press "enter."
- 4) Or, you can press "enter-j (dots 2-4-5)" when playing a file, or when a file is paused.

If you execute this function in a file that does not have a bookmark, the Braille Sense Plus B32 will display "There is no bookmark in selected file."

8.3.4.4 Go to Position

If you execute this function when you are playing a file, or when a file is paused, it will move to a time that you specify, and begin playing the file.

To execute this function,

- 1) Press "space-m (dots 1-3-4)" or "F2" and move to "advanced" by pressing "space-4."
- 2) Press "enter" on "advanced."
- 3) Move to "go to position" by pressing "space-4," and press "enter."
- 4) Or, you can press "enter-g (dots 1-2-4-5)" when playing a file, or when a file is paused.
- 5) The Braille Sense Plus B32 will display "go to position: 0 minute."
- 6) Type in the amount of time that you want, and press "enter."

If you type in a longer time than the total playback time, the Braille Sense Plus B32 will display "invalid time," and play from the paused location.

8.3.5 Settings

Through this menu, you can change settings about recording, playing, and general Media Player options. To use the "settings" menu, press "space-m (dots 1-3-4)" to call up the "Media Player" menu. Press "space-4" three times to reach "settings," and then press "enter." Or, you can press "s" in the "Media Player" menu. Then, the "settings" submenu will appear, which contains three items: "configuration," "playback settings," and "recording settings."

8.3.5.1 Configuration Dialog Box

If you press "enter" on the first item, "configuration," or press "backspace-c (dots 1-4)" in the "Media Player" dialog box, the "configuration" dialog box will be displayed, which contains the following: the "Braille keyboard hold" option, "display title" option, a "confirm" button, and a "cancel" button. You can move between controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". And you can move between options by pressing "space-1" or "space-4."

The "Braille keyboard hold" option allows you to set whether or not you can use Braille keyboard commands in the "Media Player." If this is set to "on," you cannot use Braille keyboard commands. Its default value is set to "off," and you can change it by pressing "space" on "Braille keyboard hold," or by pressing the "previous" and "next" buttons on the front panel of the Braille Sense Plus B32 simultaneously. While the "Braille keyboard hold" option is "on," since you cannot use the Braille keyboard in "Media Player," you should press the "previous" and "next" buttons simultaneously to turn the option off.

The "display title" option allows you to set whether or not you can hear the track title when you move to previous/next track or transfer to next track automatically. If this is set to "on," you can hear the track title. The default value is set to "off," namely you can't hear the track

title when move to previous/next track. You can change the on or off by pressing "space."

To save the changed settings and exit, press "enter" after you change an option, or move to the "confirm" button by pressing "space-4-5" repeatedly. If you want to cancel the changes you made, and exit this dialog box, press "space-e (dots 1-5)," or "space-z (dots 1-3-5-6)." You can also press "enter" on the "cancel" button to close the dialog box without changing any options. The options set in this dialog box only have an effect in "Media Player." If "hold" is set to "off," you can call up the "program" menu by pressing "F1," and you can use another program.

8.3.5.2 Playback Settings Dialog Box

If you press "enter" on "playback settings," or press "p (dots 1-2-3-4)" on the "settings" menu, the "playback settings" dialog box will be displayed. In this dialog box, pressing "space-4-5" or "space-1-2" will circulate among setting options, "confirm" and "cancel." The setting options are the "display time" option, the "repeat" option, "playlist" option and "set speed" option. Press "space-4" or "space-1" to move from one option to the next or previous option. You can also open this dialog box by pressing "enter-s (dots 2-3-4)" in the "Media Player" dialog box.

The "display time" option allows you to set which type of time messages will be displayed in the "playback information" tab. You can set it to either "elapsed time" or "remaining time." You can change its value by pressing "space" on "time."

The "repeat" option allows you to set whether all files in the play list will be played repeatedly. If it this option is set to "yes," all files in the play list will be played repeatedly, and if it is set to "no," the Braille Sense Plus B32 will stop playing after playing the last file in the play list. Again, you can change the value of this option by pressing "space" on "repeat."

The next option is "playlist" option. When you want to play audio files from File Manager, you can select multiple files by pressing "space" and then play files by pressing "enter." At this time, if the play list has had a list of audio files, you will be asked if you want to overwrite the

play list or you want to append the selected files into the play list. The default value is "overwrite" and it means the play list will be filled with the selected files. And if you press "space" then the value will be set to "append" and the play list will be appended with the selected files.

The "set speed" option allows you to set the audio playback speed. The speed level ranges from 1 to 10. The default setting is the 5. If you change the value, press "space" or "backspace." The higher the number, audio playback speed is fast.

To save the changed settings and exit from this dialog box, press "enter" after you change all the options you want to change, or move to the "confirm" button by pressing "space-4-5" or "space-1-2" repeatedly, and then press "enter." If you want to cancel the changes, and exit from this dialog box, press enter on the "cancel" button, or press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)."

8.3.5.3 Record Settings Dialog Box

If you press enter on "record settings" in the "settings" menu, or press "backspace-s (dots 2-3-4)" in the "media player" dialog box, the Braille Sense Plus B32 will display the "record settings" dialog box, which contains "recording type," "sample rate" option, "bits per channel" option, "record mode" option, "set folder," "confirm" button and a "cancel" button. You can move between controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". And you can move between options by pressing "space-1" or "space-4."

The "recoding type" allows you to set the default file type of recording file. Its default value is set to "mp3." You can select between "wav" and "mp3" the value by pressing "space."

The three options are used to control the quality of recorded sound. Higher values in "sample rate" and "bits per channel" means a better quality of recorded sound, as well as a larger file size of recorded files. In other words, if you want to record high quality sound, the total time the Braille Sense Plus B32 can record will be shortened. On the other hand, if you set the lower values of these options, the Braille Sense Plus B32 can record sound longer, although the sound quality

may not be as good as when these options are set to higher values. You can change these values by pressing "space." When you record the file using the external microphone, you must set to "external mic" the "record mode." And when you record the file using the line-in-cable, you must set to "line in" the "record mode." And when you record the file using internal microphone, you must set to "internal mic" the "record mode."

The "set folder" allows you to set the default folder where the recorded files will be saved. Its default value is set to "/flashdisk/media/record." To specify a different folder, press "enter" on "set folder," and the same dialog box as the "open folder" dialog box will be displayed. Select a folder in the same way as in the "open folder" dialog box. (Refer to section 8.3.1.2 for more information about how to select a folder.)

If you save the changed settings, and exit from this dialog box, press "enter" after changing all of the options you want to change, or move to the "confirm" button, and press "enter." If you want to cancel the changes you made, press "enter" on the "cancel" button, or press "space-e (dots 1-5)."

8.4 Hot Keys in the Media Player

1) Hot Keys for the Commands for the File Menu

Open file: Enter-o (dots 1-3-5) Open folder: Enter-f (dots 1-2-4) Add file: Backspace-o (dots 1-3-5) Add folder: Backspace-f (dots 1-2-4)

Save play list: Enter-i (dots 2-4)

Save as play list: Space-s (dots 2-3-4) Delete item: Space-d (dots 1-4-5)

2) Hot Keys for Commands While in the Playback menu

Play: Enter, Play button

Previous track: Dot 3, Previous button

Next track: Dot 6, Next button

Back 5 track: Dots 2-3 Forward 5 track: Dots 5-6

First track: Dots 1-3

Last track: Dots 4-6
Back 1 minute: Dot 1
Forward 1 minute: Dot 4

Back 5 seconds: Dot 2, play and previous button Forward 5 seconds: Dot 5, play and next button

Volume up: Space-up scroll button

Volume down: Space-down scroll button

Speed up: Dots 3-4-5 Speed down: Dots 1-2-6

Pause/continue: Space, Play button

Stop: Backspace, Stop button

Delete play list during stop: Space-d (dots 1-4-5)

3) Hot Keys for the Commands in the Record Dialog Box Call up the record dialog box: Enter-r (dots 1-2-3-5), Record button

Record: Record button

Pause/continue recording: Space, Record button

Play: Play button

Pause/continue play: Space, Play button

Stop: Backspace, Stop button

4) Hot Keys for the Commands in the Advance Menu

Set bookmark: Enter-m (dots 1-3-4)
Delete bookmark: Enter-d (dots 1-4-5)
Jump to bookmark: Enter-j (dots 2-4-5)
Go to position: Enter-g (dots 1-2-4-5)

5) Hot Keys for the Commands in the Setting Menu Configuration dialog box: Backspace-c (dots 1-4) Hold/resume hole: Previous button-Next button Playback setting dialog box: Enter-s (dots 2-3-4) Record setting dialog box: Backspace-s (dots 2-3-4)

9. Radio

In order to use "Radio" program in the Braille Sense Plus B32, please connect the headphone to the headphone jack of the Braille Sense Plus B32. The headphone connected to the Braille Sense Plus B32 will work as a radio antenna.

In the program menu, please press scroll buttons to move to the "Radio" and press "enter," or just press "r (dots 1-2-3-5)" in order to execute radio program. Once the radio program is executed, your Braille Sense Plus B32 will announce the radio frequency. If you had executed the radio program, the Braille Sense Plus B32 will tune to the frequency that you listened to and announce the frequency. For your reference, the frequency range of the Braille Sense Plus B32 is from 87.5MHz to 108MHz.

9.1 Listening to radio via internal speakers

When you execute radio program after connecting the headphone to the headphone jack, sound from the radio will output through the headphone. If you want to listen to the radio through not only the headphone but also internal speakers, please set as follows;

- 1) Press space-m (dots 1-3-4) to call the radio menu and press "enter" at "file" menu and then press "enter" at "settings."
- 2) Or without calling menu, press "enter-e (dots 1-5)" in order to call the dialog box.
- 3) Then the dialog box will be opened and "external speaker: No" is a nnounced in voice.
- 4) Press "space" once to switch from "no" to "yes" and press "enter."

Then you can hear the radio sound from both headphone and internal speakers.

This setting is valid only in the Radio program. If you exit from Radio program and hear the sound through speakers, you have to unplug the headphone.

If the external speakers are selected in the "settings" dialog box and "space-4" is pressed, the Braille Sense Plus B32 will announce

"volume." You can adjust the radio volume. Radio volume can be adjusted without calling dialog box. "space-down scroll button" will decrease the volume and "space-up scroll button" will increase the radio volume.

9.2 Frequency control

During listening to the radio, if you want to tune to the other frequency, please press "space-m (dots 1-3-4)" to call the menu. Move to "frequency" and press "enter." And then move to "previous frequency," "next frequency," "auto scan backward," or "auto scan forward" and press "enter."

Without calling the menu, if you press "dot 2," your Braille Sense Plus B32 will search the next frequency. If you press "dot 5," your Braille Sense Plus B32 will search the previous frequency. If you press "dot 6," the frequency will increase by 0.1MHz. If you press "dot 3," the frequency will decrease by 0.1MHz.

You can input the frequency directly by pressing "space-f (dots 1-2-4)." If you press "space-f (dots 1-2-4)," then the dialog box will be opened. You can input the frequency in numbers and press "enter" to move to that frequency.

Besides using the Braille keys on the top panel, you can use audio buttons on the front panel. In order to use the audio buttons on the front panel, the audio mode switch should be moved to "FM" that is the left side of the switch. After setting the audio mode switch, pressing "previous" button will search the previous frequency and pressing "next" button will search the next frequency.

9.3 Registration of the channel and move among channels

During listening to the radio, you can register the frequency which you are listening to. Please do as follows;

- 1) Press "space-m (dots 1-3-4)" to call the menu and press "enter" at "presets"
- 2) And then press "enter" at "register preset" or press "enter-s (dots 2-3-4)" without calling menu.
- 3) Then register preset dialog box will be opened and "frequency: (cu

rrent frequency)" will be announced.

- 4) Press "space-4-5."
- 5) Then "label:" is announced. Please input the name of the channel to be registered.
- 6) Press "space-4-5" to move to "confirm" and press "enter." If you want to register the frequency other than the frequency which you are listening to, input the frequency when "frequency: (The current frequency" is displayed in the dialog box.)

After you register all the desired channels, you can move to the previous channel by pressing "dot 1," and move to the next channel by pressing "dot 4." Or you can move to the specified channel by pressing the initial letter of the registered label.

In order to delete any channel, move to the channel to be deleted and press "space-d (dots 1-4-5)." If "space-d (dots 1-2-4)" is pressed, the selected channel will be deleted without any warning message.

You can register and delete channels in the presets manager dialog box. Press "space-m (dots 1-3-4)" to call menu, press "enter" at "preset," move to the "preset manager" and press "enter." Or you can press "enter-m (dots 1-3-4)" without calling menu to open the preset manager dialog box.

Preset manager dialog box consist of "registered channel list", "register" button, "delete" button, "modify" button and "close" button. You can move from one control to the next control by pressing "tab (space-4-5 or F3)" or "shift-tab (space-1-2 or space-F3)."

If you press "register" button, the "register dialog box" that was explained above is opened. You can register the channels as explained above. And if you want to change the label of the registered channel, move to the desired channel item in the registered channel list by pressing "space-1" or "space-4," and press "tab (space-4-5)" to move to the "modify" button and press "enter." Then the "modify dialog box" will be opened. The structure of the "modify dialog box" is almost the same as that of "register dialog box." The difference between these two dialog boxes is that the channel label and frequency are displayed on the "modify dialog box."

If you want to delete any channel from the registered channels, select the desired channel in the channel list and move to "delete" button by pressing "tab (space-1-2)" and press "enter."

In order to exit from the preset manager dialog box, press "enter" at the "close" button, or just press "space-e (dots 1-5)."

Registering the channel and move among the registered channels are available using audio buttons on the front panel, too. In order to use the audio buttons, audio mode switch should be set to "FM radio."

If you press "record" button more than 2 seconds, "register dialog box" will be opened. In order to move to the previous channel to be registered, press "previous" button for more than 2 seconds. Pressing "next" button for more than 2 seconds will move to the next channel to be registered.

Pressing "stop" button for more than 2 seconds will delete the selected channel.

9.4 Recording radio sound

If you want to record the radio, press "space-m (dots 1-3-4)" to call menu, move to "record (r)" and press "enter." Or just press "enter-r (dots 1-2-3-5)" without calling menu. Then the record dialog box will be opened and the Braille Sense Plus B32 starts recording. The record dialog box consists of "pause/continue" button, "stop" button, "cancel" button and "record status" status bar. You can move among these controls by pressing "tab (space-4-5 or F3)" or "shift-tab (space-1-2 or space-F3)."

While recording the radio, if you press enter at "pause" button, recording will pause, and the name of button is changed to "continue." If you press "continue" button, recording will be continued. "Record status" will show the frequency of the radio under recording. If you press "enter" at "stop" button, recording radio will stop. Recorded files will be saved in the "flashdisk/media/radio" folder. The file name will be "registered channel label (frequency)-xx.mp3." "xx" will start from 01 and increased by one when recording the radio sound. If unregistered channel is recorded, "radio" will be used as a file name instead of "registered channel label." If you stop recording, the record dialog box will be closed automatically. If you press "enter"

at "cancel" button, the recorded file will not be saved and close the dialog box.

During recording, you cannot change the channel and frequency.

During listening to the radio, you can record without calling the record dialog box by pressing the "record" button on the front panel. Before you use the "record" button out of the audio buttons on the front panel, please set the audio mode switch to the FM radio mode. If you press the "record" button, the record dialog box will be opened and recording will start.

If you press "stop" button on the front panel during recording, recording will stop and the recorded audio file will be saved. If you press the "pause" button during recording, the "pause" button will be changed to the "continue" button. Please press the "continue" button to continue recording. Pressing "previous" button or "next" button will move among controls in the record dialog box.

9.4.1 Changing record folder

If you want to change the folder for saving recorded files, please do as follows;

- 1) Press "space-m (dots 1-3-4)" to call menu and press "enter" at "fil e."
- 2) Press "enter" at "record settings." Or press "backspace-s (dots 2-3-4)" without calling menu.
- 3) Then the record dialog box will be opened and "recoding type: mp3" is announced.
- 4) Press Space-4-5 to move to "record folder."
- 5) Then "record folder: flashdisk/media/radio" is displayed. Press "ent er."
- 6) Then the list in the radio folder will be displayed. Press "backspac e" to move to upper level folder, and press "space-1" or "space-4" to move to desired folder.
- 7) Press "space" at the desired folder and press "enter."
- 8) Then "record folder: (Changed folder)" is announced.
- 9) Press "space-4-5" to move to "confirm" button and press "enter."

In the record settings dialog box, you can set recording type, sample rate, bit per channel and channel. In order to change the recording

type, you press the "space." And then you can select between "wav" and "mp3." In order to change the sample rate and bit per channel, press "space-1" or "space-4" to move to the desired item to be changed when "sampling rate: 8000Hz" is displayed. At the desired item, press "space" and change the value. After you change all items as you desire, press "space-4-5" to move to "confirm" button and press "enter."

If the values of sample rate, bit per channel and channels are getting higher, the recorded audio quality will be better. But it requires more large storage space in the flash memory. So please select proper values for your recording purposes.

9.5 Additional features

1) Sensitivity adjustment

When you activate the radio program, if the Braille Sense Plus B32 cannot tune to the broadcasting frequency, please adjust the sensitivity. In order to adjust the sensitivity, call "settings dialog box" as explained in the Section 9.1. And press "space-4" to move to "sensitivity" and press "space" or "backspace" to adjust the sensitivity. Higher value will make the Braille Sense Plus B32 radio be more sensitive. If the sensitivity is increased, you can tune to more frequencies.

2) Mute

During listening to the radio, if you want to make it silent for a while, press "space." This is mute function. Pressing "space" once again will cancel mute mode. Or you can use mute function by pressing "stop" button on the front panel and cancel mute mode by pressing "play" button on the front panel. If mute mode is activated, radio sound will not be heard but TTS (text to speech) sound will be heard.

9.6 Hot Keys in the Radio

Call up the sets dialog box: Enter-e (dots 1-5)
Call up the menu: space-m (dots 1-3-4) or F2
Internal speakers on/off: Space-x (dots 1-3-4-6)

Move to next frequency: dot 6 Move to previous frequency: dot 3

Auto previous frequency: dot 2, short press previous button

Auto next frequency: dot 5, short press next button

Go to frequency: space-f (dots 1-2-4)

Move to previous channel: dot 1, long press previous button

Move to next channel: dot 4, long press next button

Registry channel: Enter-s (dots 2-3-4), long press record button

Delete the channel: long press stop button

Call up the record dialog box: Enter-r (dots 1-2-3-5)

Record start/pause: short press record button

Record stop: short press stop button Mute on: short press stop button, space Muto off: short press play button, space Volume up: Space-up scroll button

Volume down: Space-down scroll button

10. Web Browser

You can use the Web Browser on the Braille Sense Plus B32 to read pages on the Internet, as well as reading html books that you have saved to disk. In addition, you can download and read books from places such as Web Braille, and BookShare. Note that you will need to have setup an account in order to access many of the books on these sites.

When you want to launch the Web Browser, select Web Browser in the "program" menu, and press "enter." Or, you can press "b (dots 1-2)" in the "program" menu. You can also launch the Web Browser by pressing "space-w (dots 2-4-5-6)" while you are in the "program" menu. When you press these keys, the Braille Sense Plus B32, will open up a computer edit box. You can then type in the URL that you want to go to. After you type in you're the web page address, press "enter," to open the web page. Then, the Web Browser will open, and take you to the specific URL that you typed in. The Braille Sense Plus B32 will connect to the web page that is registered as the "home page" in the Web Browser. Please note that the Web Browser supports SSL 1.0 to 3.0. A more detailed explanation of the Web Browser can be found within this chapter.

10.1 File

The "file" menu can be executed by selecting "file" after pressing "space-m (dots 1-3-4)" or "F2," which calls up the Web Browser menu. "File" will appear on the Braille display. When you press "enter" on "file," you can enter into the "file" menu. To move from one submenu to another submenu, press the up arrow key ("space-1") or the down arrow key ("space-4"). The following is a detailed explanation of the Web Browser "file" menu.

10.1.1 Open URL

Press "space-m (dots 1-3-4)" or "F2" to open the Web Browser menu. Then, move to "file," and press "enter." The first item that is displayed on the Braille display is "open URL." Press "enter" to get into the "open URL" edit window, or press "enter-u (dots 1-3-6)" while the

Web Browser is open. When "open URL" is executed, the edit window for an address will be displayed. On the Braille display, you will see the address of the current page. You can enter a new web page address that you want to connect to. You need to enter the new address in computer Braille such as "www.yahoo.com." Then, press "enter."

You can check the addresses that have been entered previously by pressing the down arrow key ("space-4"). Move to the address that you want to open using the up arrow key ("space-1") or the down arrow key ("space-4"), and press "enter" when the desired URL is displayed on the Braille display. You can go to a specific web page either by typing in a new address, or by selecting one of the previously entered addresses.

If the Braille Sense Plus B32 cannot connect to the desired web page, and it only shows progress on the Braille display, press "backspace-enter" to stop connecting, and call up "open URL" again. You can type in the address and try to connect again. You can stop the Web Browser from connecting by pressing "space-z (dots 1-3-5-6). Sometimes, this can happen due to network or Internet problems.

10.1.2 Open

In order to enter into "open," press "space-m (dots 1-3-4)" or "F2" to call up the "menu," and press "enter" on "file." Go to "open" by pressing "space-4," and press "enter." Or, you can press "enter-o (dots 1-3-5)" when the Web Browser is active. Then the "open dialog box" will show up.

"Open dialog box" consists of "file list," "file name," "type," "confirm" button and "cancel" button. You can move among those controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." When the "open dialog box" is opened, "file name" will be focused. Type in a file name, and press "enter," or press "shift-tab ("space-1-2")" to move to the file list. Select the desired file name, and press "enter." The default folder is "/flashdisk/download," and it can be changed by the same method as explained in the "file manager." There are three types of files in "file type"; "*.*," "htm," "html." Default

is "*.*" and it means that all types of files will be shown in the file list.

At the "file type," press "space-1" or "space-4" to select the file type. In order to check the current path, press "space-3-4." You can use this command in the following dialog boxes: "save as," "add to favorite," and the "favorite list."

10.1.3 Save As

In order to execute "save as," call up the "menu" by pressing "spacem (dots 1-3-4)" or "F2," and press "enter" on "file." Move to "save as" by pressing "space-4" and press "enter," or press "space-s (dots 2-3-4)" while the Web Browser is activated. When you press "enter" on "save as," the "save as" dialog box will appear. Here you can type in a new file name, and press "enter" to save the file as a new file. "Save as" will give you the opportunity to save html files with different file names. This is similar to "save as" in the word processor.

In this dialog box, there are "file name" edit combo box, "type" combo box, "confirm" button, "cancel" button and "file list." You can move among these items by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

The first item to be displayed when "save as" is executed is "file name" edit combo box. You can type in the file name to be saved in this edit box.

If you want to edit the file name that is displayed on the Braille display, press the cursor routing key that corresponds with the text that you want to edit. Please remember that ":" cannot be used in file names. You have to delete ":" if there is one in your file name.

If you want to select the file name from the existing file name, press "shift-tab (space-1-2)" to move to "file list." The default folder is "/flashdisk/download." In order to move to upper level, press "backspace" and if you want to enter the selected folder or select a file, press "enter" on the folder or file that you want to select. And press "space-4" or "space-1" in order to move next or previous folder or file.

There is a "type" option combo box that is the next item of "file name" edit combo box. You can move from "file name" to "type" by pressing "space-4-5." The available file types are htm, html, brl, brf and txt file

format. Use "space-4" or "space-1" to select the file type that you want.

Press "tab (space-4-5)" to move to "confirm" and press "enter" to save as the file name and type as selected. Or, press "tab" again to move to "cancel" and press "enter" to cancel "save as."

If you do not want to save with a new file name, press "escape ("space-e")" or "exit ("space-z")."

10.1.4 Page Information

"Page information" shows how many tables, links, and controls are in the current page.

In order to enter into "page information," press "space-m (dots 1-3-4)" to call up the "menu," and press "enter" on "file." Move to "page information" by pressing "space-4" a few times, and then press "enter." Or, you can press the letter "I (dots 2-4)."

"Page information" can be shown in one line. However, if there are too many characters to be displayed, you will need to press the scroll button to read the additional lines.

10.1.5 Exit

This command terminates the Web Browser, and returns the Braille Sense Plus B32 to the program list. You can exit from the Web Browser by pressing "space-z (dots 1-3-5-6)," or by selecting "exit" from the Web Browser file menu.

10.2 Read

The "read" menu can read the page generally. In order to call up the "read" menu, press "space-m (dots 1-3-4)," and press "enter" on "read" or press "r."

The "read" menu has three submenus:

- 1) Read from beginning to cursor
- 2) Read from cursor to end

3) Auto scroll

You can move between the menus by pressing "space-4" or "space-1." To execute the menu, press "enter."

10.2.1 Read from Beginning to Cursor

This function will read the current page from the beginning to the cursor location.

To execute this function, press "enter" on "read from beginning to cursor" in the "read" menu. Or, you can press "backspace-g (1-2-4-5)" when you open a web page.

If you want to quit this function before the cursor location, press "backspace-enter." If you execute this function, the Braille display and LCD change to correspond with the voice output.

10.2.2 Read from Cursor to End

This function will read the current page from the cursor to the end of the current page.

To execute it, press "enter" on "read from cursor to end" in the "read" menu. Or you can press "enter-g (1-2-4-5)" when you open a web page.

If you want to quit this function before the end of the current page, press "backspace-enter." If you execute this function, the Braille display and LCD change to correspond with the voice output.

10.2.3 Auto Scroll

This function will scroll the current page from the cursor to the end of the current page.

To execute the "auto scroll" function, press "enter" on "auto scroll" in the "read" menu. Or, you can press the up and down scroll buttons simultaneously when you open a web page. If you quit this function before the end of current page, you can press "backspace-enter."

If you execute this function, the Braille display and LCD change to correspond with the voice output.

For a faster scroll during scrolling, press "space-6." For a slower scroll during scrolling, press the "space-3."

10.3 Edit

"Edit" menu is used to copy any part of the web page or add it to the clipboard.

In order to call up the "edit" menu, press "space-m (dots 1-3-4)," and press "enter" on "edit" or press "e (dots 1-5)."

10.3.1 Start selection

This command cannot be used on the controls in the web page, but can be used on the text or on the edit box. This means that it cannot be used on the links when setting the block, but it can be used to make selection to make a block on the text or on the edit box of the bulletin board.

In order to use this command, press "space-m (dots 1-3-4)", move to "edit" menu by pressing "space-4" and press "enter" at the starting point of selection. And press "enter" on the "start selection." Then move to the end of selection that you want to select.

You can also set the starting point of the block by pressing "enter-b (dots 1-2)" without calling up the menu.

10.3.2 Copy

The selected part of the web page can be copied to the edit box in the web page, word documents or the edit box of the other programs. To copy the selected part of the web page, press "space-m (dots 1-3-4)," move to the "edit" menu by pressing "space-4" and press "enter." And move to "copy" by pressing "space-4" and press "enter" on "copy." Or you can copy the selected part by pressing "enter-c (dots 1-4)" without calling up the menu.

10.3.3 Add to clipboard

You can copy various parts of the web page to the clipboard, and then you can copy them to the edit box or the other program at once. In order to add the selected parts of the web page by pressing "space-m (dots 1-3-4)," move to "edit" menu by pressing "space-4" and press "enter." And press "space-4" to move to the "add to clipboard" and press "enter." Or you can add to the clipboard by pressing "enter-p (dots 1-2-3-4)" without calling up the menu.

10.3.4 Copy URL

When you use the "copy URL" function you can copy the address of the web page that you are on.

In order to copy the address of web page, you press the "space-m (dots 1-3-4)", move to "edit" menu by pressing "space-4" and press "enter." And press "space-4" to move to the "copy URL" and press "enter." Or you can copy to URL by pressing "backspace-d (dots 1-4-5)" without calling up the menu.

The web address of the page will then be placed on the clipboard. You can paste it to a document, or wherever you can paste text on the Braille Sense Plus B32.

10.3.5 Copy Link

The "copy link" function allows you to copy a link in the web page that you are on. For example, if you tab ("space 4-5") to a link, and select the "copy link" function, then the link will be copied to the clipboard. In order to copy a link in the web page, you press the "space-m (dots 1-3-4)", move to "edit" menu by pressing "space-4" and press "enter." And press "space-4" to move to the "copy link" and press "enter." Or you can copy to link by pressing "backspace-I (dots 1-2-3)" without calling up the menu.

The link will then be placed on the clipboard, so that you can paste it to a document, or wherever you can paste text in the Braille Sense Plus B32.

10.4 Go To

In order to enter into the "go to" menu, press "space-m (dots 1-3-4)" or "F2," and go to "go to" by pressing "space-4." Then, press "enter." The sub menus are explained in the following sections.

10.4.1 Go to Home Page

The first page that your Web Browser loads when the Web Browser opens is called the "home page." You can set your favorite site as your home page. As soon as your "home page" is set, your Web Browser will show you the same "home page" every time you start the Web Browser.

The default home page is www.braillesense.com. In order to move to the home page while you are reading another web page, press "space-m (dots 1-3-4)" or "F2," and go to the "go to" menu by pressing "space-4," and press "enter." The first sub menu in the "go to" menu is "go to home page." You can activate "go to home page" by pressing "enter," or by pressing "backspace-h (dots 1-2-5)" while your Web Browser is opened.

10.4.2 Go to Previous Page

The previous page is the page shown just before the current page. For example, when the Web Browser is activated, the first page that opens is the home page that is set as the default home page on the Braille Sense Plus B32. You can search and load the web page of Yahoo, which is www.yahoo.com. Then, the Braille Sense Plus B32 will connect to the Yahoo web page. When "go to previous page" is activated, the Braille Sense Plus B32 will show you the last position in the previous page (the home page) that was displayed before the current page.

In order to move to the previous page, press "space-m (dots 1-3-4)" or "F2" to call up the "menu," and go to the "go to" menu by pressing "space-4," and press "enter." Go to "go to previous page" by pressing "space-4," and then press "enter." Or, you can press "backspace-p (dots 1-2-3-4)" or "backspace" with the left arrow key ("space-3"). This command does not work on the first page in the Braille Sense

Plus B32 because there is no previous page when you first open the Web Browser.

10.4.3 Go to Next Page

When you have opened multiple web pages, you can go back and forth from the current page to the previous page, or to the next page. For example, when you first open the Web Browser, you connect to your home page. Then, you connect to the web site of Yahoo, and next, you connect to the Lycos web site. In this case, the next page from the Yahoo web site is the Lycos web site. In order to move to the next page, press "space-m (dots 1-3-4)" or "F2" to call up the menu, and then go to the "go to" menu by pressing "space-4." Then, press "enter." Go to the "go to next page" by pressing "space-4," and press "enter," or you can press "backspace-n (dots 1-3-4-5)" or "backspace" with the right arrow key ("space-6"). This command does not work on the last page because there is no page after the last page.

10.4.4 Go to Previous Heading

If you activate the "go to previous heading" function, you can go to a heading that is located before your current location. To execute the "go to previous heading" function, open the menu by pressing "spacem (dots 1-3-4)" or "F2," and press "space-4" repeatedly to move to the "go to" menu. Press "enter" on "go to." Then, use "space-1" or "space-4" to move to "go to previous heading," and press "enter." Or, press "u (dots 1-3-6)" in the submenu. To activate this function without opening up the menu, press "backspace-b (dots 1-2)" while in a web page.

10.4.5 Go to Next Heading

If you activate the "go to next heading" function, you can go forward to a heading from your current location. To execute the "go to next heading" function, open up the menu by pressing "space-m (dots 1-3-4)" or "F2," and press "space-4" repeatedly to move to the "go to" menu. Press "enter" on "go to." Then, use "space-1" or "space-4" to move to "go to next heading." Then, press "enter" on "go to next heading." Or, just press "d (dots 1-4-5)" in the submenu. You can

also activate this function without opening up the menu by pressing "backspace-f (dots 1-2-4)" while you are in a web page.

10.4.6 Go to Previous/Next Text

This menu can be used to go to the next text or the previous text while you are reading the web page.

In order to execute the "go to next text" menu, do the following:

- 1) Call up the menu by pressing "space-m (dots 1-3-4)" or "F2."
- 2) Move to "go to" by pressing "space-4."
- 3) Press "enter" on the "go to" menu
- 4) Press "space-4" until "go to next text" will be displayed. Or, you can press "a (dots 1)" in order to move to "go to next text" directly.
- 5) Press "enter" on "go to next text."

Or you can call up the "go to next text" menu by pressing "space-1-2-4-5-6" while the web page is being read.

In order to execute "go to previous text" menu, do the following:

- 1) Call up the menu by pressing "space-m (dots 1-3-4)" or "F2."
- 2) Move to "go to" by pressing "space-4."
- 3) Press "enter" on the "go to" menu
- 4) Press "space-4" until "go to previous text" is displayed. Or, you can press "b (dot 1-2)" in order to move to "go to previous text" directly.
- 5) Press "enter" on "go to previous text."

Or, you can call up the "go to previous text" menu by pressing "space-2-4-6" while a web page is being read.

10.4.7 Refresh

If a web page opens incorrectly due to a network problem, or if you want to refresh the current page, press "space-m (dots 1-3-4)" or "F2," and go to the "go to" menu by pressing "space-4." Then, press "enter." Go to "refresh" by pressing "space-4," and press "enter," or you can press "enter-r (dots 1-2-3-5)" without calling up the menu.

10.4.8 History

The "history" is the list of the web page addresses (and their titles) that have been visited either by clicking on a link or by typing in the address directly. When "history" is executed, the Braille Sense Plus B32 will display the titles of the web pages in the history list.

If you have visited a web page such as www.yahoo.com previously, The history list on the Braille Sense Plus B32 will show you the title of the page as, "Yahoo!."

In order to visit the Yahoo web site by using the history list, first, press "space-m (dots 1-3-4)" to call up the "menu," and go to the "go to" menu by pressing "space-4." Then, press "enter." Go to "history" by pressing "space-4," and press "enter." You can always open the history list by pressing "enter-h (dots 1-2-5)" while the Web Browser is running. The Braille Sense Plus B32 will show the history list. Move to the title of the web site that you want to select by pressing "space-4" or "space-1." If you want the "history" list to show the web address, instead of the title, of the website, you can press "space-I (dots 2-4)." If you press "space-4," the display will show the title again, instead of the address. After you move to the desired web site, you should then press "enter" to connect to that web site.

In order to delete an undesired item from the history list, select that item on the history list, and press the "del key (space-d (dots 1-4-5))." And if you want to delete the all file in history list, press the "enter-a (dot 1)" and press "space-d (dots 1-4-5)."

The maximum number of items in the history list is 300. If the list exceeds 300 items, the oldest item will be deleted automatically from the history list, and the new item will be added as the first item on the list.

10.4.9 Find

This feature is similar to the function of "find" in the word processor. The "find dialog box" will allow you to find text on the current web page.

In order to execute the "find" menu, press "space-m (dots 1-3-4)" or "F2" to call up the menu, and go to the "go to" menu by pressing "space-4." Then, press "enter." Go to "find" by pressing "space-4," and press "enter," or you can press "space-f (dots 1-2-4)" while the Web Browser is loaded.

When "find" is executed, the dialog box that contains the edit window for entering text and the searching direction will appear. As in any other dialog box, you can press the "tab ("space-4-5")" or "shift-tab ("space-1-2")" to move from one control to another. Enter the text to search for, and select the search direction. Then, press "enter." The Braille Sense Plus B32 will then find the text, and move the cursor position to the text.

The default search direction is set to "forward." This means that the Braille Sense Plus B32 will search for the specified text from the current cursor position to the end of the page. If you want to change the search direction, select "backward," and then press "enter." The selected search direction will remain until the Web Browser is closed, unless you choose the other direction.

10.4.10 Find Again

The "find again" function searches the text again in the direction that you have selected. In order to enter into "find again," press "space-m (dots 1-3-4)" or "F2," and go to the "go to" menu by pressing "space-4." Then, press "enter." Move to "find again" by pressing "space-4." Then, press "enter." Or, you can press "enter-f (dots 1-2-4)," which is the hot key for "find again" while the Web Browser is running.

"Find again" finds the text that you have entered in "find." There is no edit box in "find again." If you want to find another key word, you should use the "find" function explained as in section 10.4.9.

10.4.11 Link List

This function will list all the links in the current page. If you want to activate it, press "space-m (dots 1-3-4)" and press "enter" on "link list" in "go to" menu. Or without calling up the menu, press "backspace-i (dots 2-4)." Then you will see "link list dialog box." In the dialog box,

you can find the following controls: "link list," "focus link" button, "activate link" button, and "cancel" button. You can move control by control by pressing "space-4-5" or "space-1-2." In the "link list," you can move by pressing "space-1" or "space-4." If you want to move to the selected page in "link list," press "enter" on the link of focus in "link list." Or move to "activate link" button by pressing "space-4-5" or "space-1-2" and press "enter" there. If you want to go to the link position selected in "link list," move to "focus link" button by pressing "space-4-5," and press "enter" there. To close the dialog box, move to "cancel" button, and press "enter" there. Or just press "space-z (dots 1-3-5-6)" or press "space-e (dots 1-5)."

10.5 Favorites

In order to enter into "favorites," press "space-m (dots 1-3-4)" or "F2," and move to "favorites" by pressing "space-4," and press "enter." If there are web sites that you frequently visit, it would be very inconvenient to enter the long address every time. In such a case, you can add these web site addresses in the "favorites" list. Then, you can visit the web sites that are stored in your "favorites" list by simply selecting the address in the "favorites" list.

10.5.1 Set Current As Your Home Page

The "home page" is the web site that you connect to automatically when the Web Browser is opened. The user can set any web site as the home page.

In order to set the "home page," you have to go to the web page that you want to register as the home page. While the web page is displayed, press "space-m (dots 1-3-4)" or "F2," and move to "favorites" by pressing "space-4." Then, press "enter." Then "set current as your home page" will be displayed on the Braille display and press "enter." Then, the current web site will be registered as your home page automatically, and the Braille Sense Plus B32 will say "registered," and it displays the current web page. Or, you can press "enter-s (dots 2-3-4)" without calling up menu.

10.5.2 Add To Favorites

You can add the web page that you are reading now to the "favorites" list. In order to add the web page to the "favorites" list, press "spacem (dots 1-3-4)" or "F2," and move to "favorites" by pressing "space-4." Then, press "enter." Then, move to "add to favorites" by pressing "space-4," and then press "enter." You can activate "add to favorites" by pressing "backspace-a (dot 1)" when the Web Browser is running.

"Add to favorites" is a dialog box that contains the following: a list box that shows the current favorites list (including the folders and files of your favorites), an edit window for the web page address where you can enter, type, confirm, and cancel. You can move from one item to the next by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")".

When you open "add to favorites," the edit window will appear first. In this edit window, you can type in the title of the current web page that you are reading. The extension name (.URL) will be attached automatically to the title name that you have written.

If you want to edit only a part of the current title name, press the cursor routing key that is furthest to the left. Then, the current title name will be displayed on the Braille display. You can press the cursor routing key where you want to edit the text, and then modify it. Make sure that you do not use ":" in the title name.

The favorites list will be saved in the "/flashdisk/favorite" folder. This folder is the default folder, and you cannot make your desired folder above this folder (a higher level folder).

If you want to add your "favorites" list to the folder you made, rather than the default folder, press "shift-tab ("space-1-2")", and select the desired folder by pressing "space-1" or "space-4." Then, press "enter."

10.5.3 Favorites List

You can check the list of the web sites that are saved in "add to favorites." The user can copy, delete, or rename the title of the sites in the favorites list.

In order to open the "favorites" list, press "space-m (dots 1-3-4)," and move to "favorites" by pressing "space-4." Then, press "enter." Move to the "favorites list" by pressing "space-4," and press "enter." Or, you can press "enter-I (dots 1-2-3)" while the Web Browser is running. When you press these keys, the Braille Sense Plus B32, will display the favorites list dialog box. This dialog box contains the following: the favorites list, an edit window for the title, a type combo box, a confirm button, and a cancel button. You can move from one item to the next by pressing the "tab ("space-4-5")" or "shift-tab ("space-1-2")".

When the "favorites list" is open, an edit window will appear first. The edit window will display the message, "name:." You can enter one of the titles that you have entered previously. You can open the web page by pressing "enter" after entering the title. If there are no titles that match the one you entered, the Braille Sense Plus B32 will say "invalid name" and return to the edit window. If there is a title in the "favorites list," the Braille Sense Plus B32 will connect to the web page.

If you do not remember the exact title, you can find it from the "favorites" list, using the method that is outlined below.

When the edit window appears, press "shift-tab ("space-1-2")" in order to move to the "favorites list." Then the Braille Sense Plus B32 will display the "favorites list." You can move between folders and files by pressing "space-1" or "space-4."

Press "enter" on the title of the web site that you want to visit. On this list, folders are enclosed by quotation marks. When you press "enter" on the folder, you can get into the folder.

You can also edit the titles in the "favorites list." When the title name is displayed on your display, press the following hot keys and enter your desired text.

In the favorite list, you can find only the files with the file format that was selected in the "type" combo box. Press "tab (space-4-5)" to move to "type" combo box. In the type combo box, there are two kinds of file formats; "*.*" and "url." Press "space-1" or "space-4" select one out of these two file formats. If you select "*.*" then all types of files will be shown.

10.6 Options

Using the "options" menu, you can select the type that is gets the web page.

In order to execute the option menu, press "space-m (dots 1-3-4)," and move to "options" pressing "space-4." Then, press "enter." Or, you can press "backspace-o (dots 1-3-5)" while the web browser is running. When you press these keys, the Braille Sense Plus B32 open the "options dialog box." And it will tell the "user agent: windows CE." You can select one in the "windows XP", "windows CE" and "pocket PC," using the "space" key.

After you select the value that you want, press "enter." The "option dialog box" is closed, and the Braille Sense Plus B32 will open the web page which you chosen type.

10.7 Read Page

On the web page, there are links, controls, and other various elements, as well as text. In order to read web pages properly, the Web Browser should classify each element, and notify the user with its information.

When reading a web page by moving with "space-4" or "space-1," one element will be displayed on one line. The links and controls will be displayed with their respective symbols for the user to distinguish each element.

There is a more detailed explanation of this feature within this section.

10.7. Moving Between Controls

A control is a link, an edit box, a radio button, or a combo box. These same controls are found in Windows on a personal computer. Web pages also use various kinds of controls for user input. Each control has different purposes. Therefore, the user has to know exactly what type of control is being used. For example, in an edit box, the user enters a text string. In a combo box and list box, the user should select one of the items listed in the combo box or list box. The Braille Sense Plus B32 Web Browser uses symbols to identify what type of control is being used. In order to move from one control to another

without reading the text in between controls, the Braille Sense Plus B32 provides the following "move to control" methods:

- 1) Move to the previous control: "Shift-tab (space-1-2)"
 This command moves to the nearest previous control from the current position. If there are no more previous controls, the warning sound will be played.
- 2) Move to the next control: "Tab (space-4-5)"

 This command moves to the next control from the current position.

 If there are no more controls, the warning sound will be played.

When you find controls in web pages, the Braille Sense Plus B32 will show control symbols ahead of the contents of the control. The followings are a list of control symbols.

Control name	Symbol
Link	LN
Anchor	ANC
Edit box	EB
Multi edit box	MEB
List Box	LB
Combo box	СВ
Radio button select	SRB
Radio button	URB
unselect	
Check box check	SCHB
Check box uncheck	UCHB
Button	BT

- 1) Link: If you press "enter" on link, you will move to the page that the link is referencing.
- 2) Anchor: If you press "enter" on anchor, you will move to the referenced part of the web page.
- 3) Edit box: You can start entering the text at the cursor position. After you finish entering the text, press "space-4" to move to the next item. If there is any text in the edit box, it will be spoken and displayed on the Braille display.
- 4) Multi edit box: This is similar to the edit box. It is an edit box that allows you to enter plural lines in one edit box. You can start a

- new line by pressing "enter." After you finish entering the text, press "tab (space-4-5)" in order to move to the next item.
- 5) List box, combo box: In order to change a selection in the combo box, press "backspace-space-4" or "backspace-space-1." You can move to the next item by pressing "space-4."
- 6) Radio button, check box: In order to select or cancel the selection, press "enter."
- 7) Button: If you press "enter" on a button, you will move to the referenced page.

10.7.2 Moving to a Form

A "form" is a page that has all of the controls, except the "link" control. The edit windows, buttons, and combo boxes are included in a "form." When you navigate some web pages, if there are many links, it would be very cumbersome to navigate to a form because you would have to push too many "tab" or "shift-tab" keys to get to a form. In this case, you can use the "moving to the form" function.

- Move to the previous form: Space-1-2-3-4-6
 You can move to the previous form by pressing this key. If there
 are no previous forms, the Braille Sense Plus B32 will play the
 warning sound.
- 2) Move to the next form: Space-1-3-4-5-6 You can move to the next form by pressing this key. If there are no more forms. The Braille Sense Plus B32 will play the warning sound.
 - If there are no forms on a web page, the Braille Sense Plus B32 will say, "no control."

10.7.3 Table

At the beginning position of the table, the Braille Sense Plus B32 shows the table number, and the number of rows and columns on the table.

For example, there are two big tables (we call these "upper level tables") on one web page. Each table has 3 sub tables (we call these "lower level tables") with 3 rows and 2 columns on each. In this case, when the Braille Sense Plus B32 shows the first sub table on the

second big table, it displays "table 2-1 3 rows, 2 columns." At the end of the sub table, the Braille Sense Plus B32 will display "table 2-1."

If the table consists of only 1 row and 1 column, or empty space that has only border or background, such tables are not considered tables in the Braille Sense Plus B32.

The Braille Sense Plus B32 provides a way to move table by table, and cell by cell, in order for the user to comprehend the structure of the table. In order to move cell by cell, the cell position and contents of the cell will be displayed. However, the position information will only be announced in voice.

For example, if you have move to a cell that is positioned on the second row and third column, and the content of the cell is "news," the Braille Sense Plus B32 will announce, "row 2 cell 3 news." In this case, "row 2 cell 3" will be announced in voice only, while "news" will be displayed in Braille.

If a table is included in the cell, the Braille Sense Plus B32 will announce "table cell." If there is not a table in the cell, you will hear "empty cell."

In the "table cell," if you want to move to any cell within the lower level table, press "space-4" to move to the starting line of the lower level table.

Moving by cell is only valid in the table. If this command is executed outside of the table, a warning sound will be played.

- 1) Move to the previous table: Space-3-4-5-6
 It moves to the starting position of the previous table. If there are no previous tables, the warning sound will be played.
- Move to the next table: Space-1-4-5-6
 It moves to the starting position of the next table. If there are no more tables, the warning sound will be played.
- 3) Move to the previous cell: Space-2-3
 It moves to the previous cell. If the current cell is the first cell, it will move to the starting line of the table. If this command is

- pressed on the starting line of the table, the warning sound will be played.
- 4) Move to next cell: Space-5-6
 It moves to the next cell. If the current cell is the last cell, it moves to the end line of the table. If it is pressed on the end line of the table, the warning sound will be played.
- 5) Move to upper cell: Space-3-5
 It moves to the cell in the previous row within the same column. If
 the current cell is on the first row, the warning sound will be played.
- 6) Move to lower cell: Space-2-6
 It moves to the cell in the next line, within the same column. If the current cell is on the last row, the warning sound will be played.
- 7) Current cell: Space-2-3-5-6
 It announces and displays the content of the current cell again.
- 8) Move to the previous cell in the upper level table: Backspace-2-3 It moves to the previous cell from the current cell that contains the current table. If the current table cell is the first cell of the highest level table, it will show the starting line of the table. It does not work on the highest level table.
- 9) Move to the next cell of the upper level table: Backspace-5-6 It moves to the next cell from the current cell that contains the current table. If the current table cell is the last cell in the highest level table, it moves to the end line of the table. It does not work on the highest level table.
- 10) Move to the upper cell of the upper level table: Backspace-3-5 It moves to the previous row, within the same column, to the table cell that contains current table. If the cell that contains the current table is located on the first row of the upper level table, the warning sound will be played. It does not work on the highest level table.
- 11) Move to the lower cell of the upper level table: Backspace-2-6 It moves to the next row, within the same column, to the table cell that contains the current table. If the table cell that contains current table is at the last row of the upper level table, the warning sound will be played. It does not work on the highest level table.
- 12) Check the position: Space-1-5-6
 It announces the position of the current cell in the table. It shows
 the position in both Braille and voice, such as "table 2-3 row 3, cell
 4."

10.7.4 Move to the Frame

- Move to the previous frame: Space-3-4-6
 It moves to the starting position of the previous frame. If there are no previous frames, the warning sound will be played.
- 2) Move to the next frame: Space-1-4-6
 It moves to the starting position of the next frame. If there are no more frames, the warning sound will be played.

10.7.5 Playback of Streaming Audio Files

When you come across a link for a streaming audio file, pressing "enter" on the link plays the file, and opens the "add to favorites" dialog box where you can add the link to your "favorites list." You can download real audio files but not play them in the Web Browser. Streaming audio files that were added in the "add to favorites" dialog box will appear in "favorites list" with "ASF-" in front of the file names. "ASF" denotes that the link is a streaming audio file. Streaming audio files only can be played while the Braille Sense Plus B32's "Web Browser" is open and connected to the web. The following are the playback commands for streaming audio files, and these commands only work in the "Web Browser."

- 1) Pause/Replay: "Play" button on the front panel
- 2) Stop: "Stop" button on the front panel
- 3) Turn up the volume: Space-up scroll button
- 4) Turn down the volume: Space-down scroll button
- 5) Five seconds back: "Previous" button on the front panel
- 6) Five seconds forward: "Next" button on the front panel

Playback of a streaming audio file does not stop if you switch to another program or go to other web pages, until you press the "stop button" on the front panel while you are in the "Web Browser."

10.8 Hot keys in the Web Browser

File Menu

Open URL: Enter-u (dots 1-3-6)

Open: Enter-o (dots 1-3-5) Save as: Space-s (dots 2-3-4) Information: Enter-I (dots 2-4) Exit: Space-z (dots 1-3-5-6)

Read Menu

Read from beginning to cursor: Backspace-g (dots 1-2-4-5)

Read from cursor to end: Enter-g (dots 1-2-4-5) Auto scroll: Up scroll button-down scroll button

Edit menu

Start selection: Enter-b (dots 1-2)

Copy: Enter-c (dots 1-4)

Add to clipboard: Enter-p (dots 1-2-3-4) Copy URL: Backspace-d (dots 1-4-5) Copy link: Backspace-I (dots 1-2-3)

Go to menu

Go to the home page: Backspace-h (dots 1-2-5)

Go to the previous page: Backspace-space-3 or backspace-p (dots

1-2-3-4)

Go to the next page: Backspace-space-6 or backspace-n (dots 1-3-

4-5)

Go to previous heading: Backspace-b (dots 1-2) Go to next heading: Backspace-f (dots 1-2-4)

Go to previous text: Space-2-4-6 Go to next text: Space-1-2-4-5-6 Refresh: Enter-r (dots 1-2-3-5)

Open the history list: Enter-h (dots 1-2-5)

Check the address of the selected title in the history list: Space-I

(dots 2-4)

Find: Space-f (dots 1-2-4) Find again: Enter-f (dots 1-2-4)

Link list: Backspace-I (dots 2-4)

Favorites

Set current as your home page: Enter-s (dots 2-3-4)

Add to favorites: Backspace-a (dot 1) Favorites list: Enter-I (dots 1-2-3)

Options setting: backspace-o (dots 1-3-5)

Hot Keys When Playing Audio Files in the Web Browser

Turn up the volume: Space-up scroll button

Turn down the volume: Space-down scroll button

Five seconds before: Previous button of the front panel

Five seconds after: Next button of the front panel Pause/Replay: Play button of the front panel

Stop: Stop button of the front panel

Reading Web Pages

Move between controls

Move to the previous control: Shift-tab (space-1-2)

Move to the next control: Tab (space-4-5)

Select the next item in the combo box (list box): Backspace-space-4 Select the previous item in the combo box (list box): Backspace-

space-1

Moving to the form

Move to the previous form: Space-1-2-3-4-6 Move to the next form: Space-1-3-4-5-6

Table navigation hot keys

Move to the previous table: Space-3-4-5-6 Move to the next table: Space-1-4-5-6 Move to the previous cell: Space-2-3

Move to the next cell: Space-5-6 Move to the upper cell: Space-3-5 Move to the lower cell: Space-2-6 Read current cell: Space-2-3-5-6

Move to the previous cell of the upper level table: Backspace-2-3 Move to the next cell of the upper level table: Backspace-5-6 Move to the upper cell of the upper level table: Backspace-3-5 Move to the lower cell of the upper level table: Backspace-2-6

Check the current position: Space-1-5-6

Move to frame

Move to the previous frame: Space-3-4-6 Move to the next frame: Space-1-4-6

Read the current line: Space-r (dots 1-2-3-5)

10.9 What the Web Browser Does Not Support

- 1) Images are not supported.
- 2) Any executable files on web sites cannot be executed. It is because the operating system on the Braille Sense Plus B32 is different from the operating system on a personal computer.
- 3) A web page using flash can be opened, but the flash content may not be read.
- 4) Some web pages that use JavaScript cannot be opened.

11. DAISY Player

Using the DAISY Player, on the Braille Sense Plus B32, you can listen to files and read books that use the DAISY format. DAISY is an acronym for (DIGITAL ACCESSIBLE INFORMATION SYSTEM). One advantage to DAISY books is that you can listen to the audio as well as read the associated text with the audio. The Braille Sense Plus B32 supports DAISY books that are version 3.0 or earlier. When you want to run the player, press "enter" on "DAISY Player" in the "program" menu, or press the shortcut key "d (dots 1-4-5)" in the Braille Sense Plus B32 "program" menu. When you run the DAISY Player, you will see all of the disks available on the Braille Sense Plus B32 (regardless of whether each disk has DAISY-formatted files or not). You can navigate through the list with "space-1" or "space-4." You can open a disk containing DAISY-formatted files by pressing "enter" on the name of the disk. After opening the disk, you will find all of the folders that are on the disk, and any DAISY file titles that are on the disk that you have opened. Once you find a DAISY file that you want to open, press "space" to select it. Then, press "enter" to play the file.

If you have DAISY files in a folder on a disk, you can go in to the folder by pressing "enter" on the folder. Make sure that you do not press "space" on the folder. You will find all of the folders on the disk, and you can navigate through the disk by using the same navigation keys that are used in the file manager. Then, you can go to the folder that has the DAISY files that you want to read or listen to. Press "space" to select the folder, and press "enter" to play the DAISY file. If you only have one DAISY file, it will automatically start playing after showing the title. You can play the DAISY file by pressing "enter" on the selected file after navigating the file list with "space-1" or "space-4." If you replay a file that you have listened to before, you can start listening to the file at the location where you stopped earlier. To stop playing a file, press "space-z (dots 1-3-5-6)," which will move you to the prompt box. Once there, you can select "yes" or "no" with "space" or "backspace." When you want to exit from the DAISY Player, press "space-z (dots 1-3-5-6)," which will move you to the prompt box. Once in the prompt box, you can select "yes" or "no" with "space" or "backspace."

You can open the DAISY Player menu by pressing "space-m (dots 1-3-4)" or "F2" when you are in the DAISY Player. In the menu, you will find "file," "document," "mark," and "heading." You can move between these menu items with "space-1" or "space-4," and press "enter" when you want to activate the selected menu item.

You can also play the DAISY contents using the audio buttons on the front panel. In order to use the audio buttons to control the DAISY player, the audio mode switch that was explained in the Section 2.11 (Switching audio mode) should be set to DAISY mode that is the center of the audio mode switch. Once the audio mode is set to DAISY mode, you can play the DAISY contents by pressing "play" button on the front panel. Also you can pause the DAISY player by pressing "play" button on the front panel when playing the DAISY contents. How to use the audio buttons to control the DAISY player is explained in the following sections.

11.1 Components of the DAISY Player

While running the DAISY Player, you will find four controls components: "heading," "information," "play," and "pause." You can move between the controls with "tab ("F3" or "space-4-5")" or "shift-tab ("space-F3" or "space-1-2")." While playing a file in the DAISY Player, you will find a "heading," which will show you a prefixed heading or affixed text if one has been prepared. In "information," you can find the current page, level, phrase, elapsed time, and running time. You can move between these items with "space-1" or "space-4." You can press "enter" on "pause" or "play," which will let you pause or play the audio. If you are anywhere in the four control components, you can play or pause by pressing "space."

11.2 File

When in the "file" menu, you can open a new DAISY file, check file information on the file that is currently open, and set voice parameters. You can open the "file" menu by pressing "space-m (dots 1-3-4)" or "F2," and then press "enter" on "file." Or, you can press "f (dots 1-2-4)." In the "file" menu, you will find items such as, "open DAISY," "voice settings," "book-info," and "exit." You can move

between these items with "space-1" or "space-4." You can activate the selected item by pressing "enter."

11.2.1 Open DAISY

You can open another DAISY file with using "open DAISY." To get to "open DAISY," press "space-m (dots 1-3-4) to call up the menu, and then press "tab ("space-4-5") until you hear "open DAISY." Or, you can use the hot key "enter-o (dots 1-3-5)" without pressing "space-m (dots1-3-4)."

When you activate "open DAISY," you can see the disk list while pausing or playing a file. Once here, you can open a file, as explained above in section 11.

You can open "open DAISY" dialog box by long pressing "stop" button when play or pause the DAISY contents. And if you long press the "stop" button again, this dialog box will close. And then return to the previous position.

"Play" button is same function as "enter" in "open DAISY" dialog box. Also "stop" button, "record" button, "previous" button and "next" button is same function as "backspace", "space", "space-1" and "space-4" in "open DAISY" dialog box.

Namely, you can move to up and down by pressing "previous" and "next" button in list of "open DAISY" dialog box. And you can select and unselect by pressing "record" button. If you press "stop" button, you can move to upper folder. And if you press "play" button, you can play the selected file in file list of "open DAISY" dialog box. In order to use this function, you must set the audio mode switch to "DAISY mode."

11.2.2 Voice Settings

In the "voice settings," you can set the DAISY Player voice parameters. Press "space-m (dots1-3-4)" or "F2," and navigate to "voice settings," which is located under the "file" menu. Or, you can activate the "voice settings" by pressing the hot key "enter-s (dots 2-3-4)." If you activate "voice settings," you can open the "voice settings" dialog box without stopping the file that is currently playing. In the dialog box, you will find the "voice control" tab with "set speed," "set volume," a "confirm" button, and a "cancel" button. You can

move between the three controls with "tab (space-4-5)" or "shift-tab (space-1-2)." In "voice control," you can move between "set speed" and "set volume" with "space-1" or "space-4." You can increase the levels of speed and volume with "space," and decrease them with "backspace." After setting the levels, press "enter" to confirm your choice. Without using the "voice settings" menu, you can increase or decrease the speed with "dots 3-4-5" or "dots 1-2-6." You can also control the volume by pressing "space-up scroll button" to decrease the volume or "space-down scroll button" to increase the volume.

11.2.3 Book-Info

Using "book-info," you can check the information on the file that is currently playing. Press "space-m (dots 1-3-4)" and press "enter" on "file." Press "space-4" repeatedly to move to "book-info" and press "enter" on "book-info." Or you can activate "book-info" by pressing "enter-i (dots 2-4)." Activating "book-info" will open the "book-info" dialog box without stopping the playing of the file. In the dialog box, you will find one state box that contains "running time and pages," another state box that contains the "mark information," and "close." You can move between the three controls with "tab (space-4-5)" or "shift-tab (space-1-2)." In the first state box, you will find "total time," "read time," "remaining time," "total pages," "current page," and "remaining pages." In the other state box, you will find the "total marks" and "mark page." You can move between the items with "space-1" or "space-4." If you want to close the dialog box, press "enter" on "close," which will return you to the current file.

11.2.4 Exit

When you want to quit the DAISY Player, press "space-m (dots 1-3-4)" or "F2," and press "enter" on "file." And press "space-4" repeatedly to move to "exit" and press "enter" on "exit." Or, you can press "space-z (dots 1-3-5-6)" without using the "exit" menu. While exiting, you will hear the message "Exit DAISY player. Are you sure?" Then, press "enter" on "yes," which is the default; or if you do not want to exit, you can select "no" by pressing "space," and then press "enter."

11.3 Document

When in the "document" menu, you can move by phrase or level while playing. If you want to activate the "document menu," press "space-m (dots1-3-4)" and then press "d (dots 1-4-5)." In this menu, you will find items such as, "play/pause," "previous phrase," "next phrase," "previous page," "next page," "go to page," "up level," and "down level." You can move between these items with "space-1" or "space-4." To activate a menu item, select the menu item, and then press "enter."

11.3.1 Play and Pause

You can access "play/pause" in the menu by pressing "space-m (dots 1-3-4)" or "F2," and then press "enter" on "document." Then, use "space-4" to move to "play/pause," and press "enter." You can also activate "play/pause" without calling up the menu by pressing "space." While playing, you can move to the beginning of a document by pressing "space-1-2-3" or "space-1-3." You can move to the last phrase by pressing "space-4-5-6" or "space-4-6."

11.3.2 Move by Phrase

You can access this command in the menu by pressing "space-m (dots 1-3-4)" or "F2," and then press "enter" on "document." Then, use "space-4" to move to "previous phrase" or "next phrase," and press "enter." You can move to the next, previous, next fifth, or previous fifth phrase without calling up the menu by pressing "dot 6," "dot 3," "dot 4," or "dot 1," respectively.

Also you can move to the previous or next phrase without calling up the menu by a short pressing "previous" button or "next" button in the front panel. In order to move by phrase with "previous" or "next" button, you must set the audio mode switch to "daisy mode."

11.3.3 Move by Page

You can access this item in the menu by pressing "space-m (dots 1-3-4)" or "F2," and then press "enter" on "document." Then, use "space-4" to move to "previous page," "next page," or "go to page," and press "enter." You can move to the next or previous page

without calling up the menu by pressing "space-3-4-5" or "space-1-2-6" during play or pause. You can jump to whatever page you want to go to by pressing "enter-g (dots 1-2-4-5)." If you activate "go to page," you will find an edit box asking "move to page number"" Here you can type in the page number that you want to move to. Press "enter," and the Braille Sense Plus B32 will move you to that page.

11.3.4 Move by Level

You can access this function in the menu by pressing "space-m (dots 1-3-4)" or "F2," and then press "enter" on "document." Then, use "space-4" to move to "up level" or "down level," and press "enter." Or, you can go to the upper-level and lower-level without calling up the menu by pressing "dots 2-3" or "dots 5-6." You can move to the next or previous level by pressing "dot 5" or "dot 2" on the present level.

11.4 Mark

When you are in the "mark" menu, you can put in a mark or jump to a mark while you are playing a file. You can open the "mark" menu by pressing "space-m (dots1-3-4)" or "F2," and then "m (dots 1-3-4)." When you are in the "mark" menu, you will find the following submenus: "previous mark," "next mark," "set mark," "move to mark," and "delete mark." You can move between the sub-menus with "space-1" or "space-4."

11.4.1 Previous Mark

The "previous mark" function will allow you to move to a location where you have placed a mark. If you have passed a mark while listening to a DAISY Player file, you can move to that mark by using the "previous mark" function. You can access the "previous mark" function by pressing "enter" on "mark," and then move to "previous mark" by pressing "space-4" and press "enter." Or just press "p (dots 1-2-3-4)" to execute "previous mark." Then, press "enter" on "previous mark." You can also move to the previous mark by pressing "space-3" during reading DAISY contents.

11.4.2 Next Mark

The "next mark" function will allow you to move to a location where you have placed a mark. If you have placed a mark in a DAISY Player file, and you have not yet passed it, you can move to that mark by using the "next mark" function. You can access the "next mark" function by pressing "enter" on "mark," and then move to "next mark" by pressing "space-4" and press "enter." Or just press "n (dots 1-3-4-5)" to execute "next mark." Then, press "enter" on "next mark." You can also move to the previous mark by pressing "space-6" during reading DAISY contents.

11.4.3 Set Mark

You can set a mark anywhere you want while playing a file. You can set a mark in the "set mark" menu. Otherwise, you can set a mark by pressing "enter-m (dots 1-3-4)." You can also activate this function by pressing "space-m (dots 1-3-4)" or "F2." Then, press "enter" on "mark." Use "space-4" to move to "set mark," and then press "enter." Or press "m (dots 1-3-4)" when you are in the "mark" menu. The "set mark" dialog box will then open, which will ask you to "enter mark name:." You can only use one letter, in ASCII, as a mark name.

11.4.4 Move to Mark

Without using the menu, you can move to the next or previous mark by pressing "space-6" or "space-3" during play/pause. You can also move to the mark you want by pressing "enter-j (dots 2-4-5)." You can also access this feature in the menu by pressing "space-m (dots 1-3-4)" or by pressing "F2." You can then, use "space-4" to move to "mark," and press "enter." Or, you can press "j (dots 2-4-5)" when you are in the "mark" menu. If you activate the "move to mark" function, you will find the edit box asking "mark name to move to:." Here you can type in the mark name that you want to go to. Make sure that you have already set a mark. Otherwise, you will not be able to move to a mark.

11.4.5 Deleting a Mark

Without using the menu, you can activate the "delete mark" function by pressing "space-d (dots 1-4-5)." You can also activate this function by pressing "space-m (dots 1-3-4)" or "F2." Then use, "space-4" to move to "mark," and press "enter." Then, use "space-4" to move to "delete mark," and press "enter" on "delete mark." If you activate the "delete mark" function, an edit box will appear asking, "enter mark name to delete:." Make certain that you want to delete the mark that you have entered. If you type in a mark in this edit box, the mark name will be deleted without pressing "enter."

11.5 Heading

When in the "heading" menu, you can move in a document by your text heading, or you can search a heading while the DAISY Player is playing. You can open the "heading" menu by pressing "space-m (dots1-3-4)" or "F2," and then press "h (dots 1-3-5)." Then, you can see the sub-menu: "previous heading," "next heading," "scan heading," "read heading," "first heading," "last heading," "find heading," and "find again." You can move between the sub-menu items with "space-1" or "space-4."

11.5.1 Move by Heading

While playing a DAISY file, you can move heading by heading without using the "heading" menu. You can move to the next, previous, first, and last heading by pressing "space-5," "space-2," "space-2-3," and "space-5-6," respectively.

Also you can move to the previous or next heading without calling up the menu using audio buttons on the front panel. Before you use this feature, you have to set the audio mode button on the front panel to "daisy mode." In order to move to previous or next heading, press "previous" or "next" button for about 2 seconds and release it. Then it will move to the previous or next heading.

11.5.2 Find Heading

You can find any heading you want while playing a DAISY file. Without using the "find heading" menu, you can activate "find

heading" by pressing "space-f (dots 1-2-4)." When you have pressed this hot key, you will see a dialog box that shows the message, "heading to find:" You will also see a "search direction:," a "confirm" button, and a "cancel" button. You can move between the four items with "tab (space-dots 4-5)" or "shift-tab (space-dots 1-2)." At the "heading to find:" edit box, you can input the mark name that you want to find. And select the searching direction to "previous" or "next" at "search direction" prompt by pressing "space."

11.5.3 Scan Heading and Read Heading

While playing a DAISY Player file, you can check your current heading (or heading list) from your current location to the last heading. You can scan them by activating the "read heading" or "scan heading" in the "heading" menu.

Without using the menu (pressing "space-m (dots1-3-4)" and then "h (dots 1-2-5")"), you can check the current heading (in the file that is currently being played) by pressing "enter-w (dots 2-4-5-6)." If you activate this function, you will see the current heading name and level. By pressing "enter-n (dots 1-3-4-5)," you can scan the heading list from the present to the end. If you activate the "scan heading" menu, you will see the heading list from the present to the end. In the list, if you find one that you want to listen to, press "enter" or "space" to play it. Using this method, you are able to skip other headings and play what you want. If you want to cancel the scan heading function, press "space-e (dots 1-5)" or "space-z (dots 1-3-5-6)." Then, you will be returned to where you were before.

11.6 Hot Keys in the DAISY Player

Play

Play/Pause: Space

Move to the beginning of document: space-1-3 or space-1-2-3

Move to the last phrase: space-4-6 or space-4-5-6

Increase the speed: dots 3-4-5 Decrease the speed: dots 1-2-6

Increase the volume: Space-up scroll button Decrease the volume: Space-down scroll button

Move by Phrase

Move to the next phrase: dot 6 or short press "next" button

Move to the previous phrase: dot 3 or short press "previous" button

Move to the next fifth phrase: dot 4 Move to the previous fifth phrase: dot 1

Move by page

Move to the next page: Space-3-4-5 Move to the previous page: Space-1-2-6 Go to the page: Enter-g (dots 1-2-4-5)

Move by level

Move to the upper-level: dots 5-6 Move to the down-level: dots 2-3

Move to the next level at the preset level: dot 5 Move to the previous level at the preset level: dot 2

Move by heading

Move to the next heading: Space-5 or long press "next" button

Move to the previous heading: Space-2 or long press "previous"

button

Move to the last heading: Space-5-6 Move to the first heading: Space-2-3

Check the currently-reading level and heading: Enter-w (dots 2-4-5-6) Scan the heading list from the present to the end: Enter-n (dots 1-3-4-

5

Heading

Find heading: Space-f (dots 1-2-4) Find again: Enter-f (dots 1-2-4) Scan heading: Enter-n (dots 1-3-4-5) Read heading: Enter-w (dots 2-4-5-6)

Set mark

Set mark at current position: Enter-m (dots 1-3-4)

Move to the next mark: Space-6 Move to the previous mark: Space-3 Delete mark: Space-d (dots 1-4-5)

Miscellaneous Hot Keys

Move to the title list: Space-1-2-5-6 Open DAISY file: Enter-o (dots 1-3-5) Voice setting: Enter-s (dots 2-3-4) Check the book-info: Enter-I (dots 2-4)

12. Bluetooth Manager

The Braille Sense Plus B32 is Bluetooth capable. Bluetooth is the latest in wireless technology that allows for a Personal Area Network (PAN). Unlike a traditional Wireless Local Area Network (WLAN), these networks are limited to approximately 30 feet or less. Bluetooth enables users to exchange various types of information. In order to use Bluetooth with the Braille Sense Plus B32, you must change the Bluetooth option to "on" in the option menu. Please refer to the section 2.4.2.34 in this user manual.

Bluetooth on the Braille Sense Plus B32 allows you to transfer files from the Braille Sense Plus B32 to a computer, use the Internet connection your computer is using, or use the Braille Sense Plus B32 as a wireless Braille display. To use the Braille Sense Plus B32 as a wireless Braille display, you must be running the screen readers; Window-Eyes, JAWS or Supernova. Please note that Bluetooth is currently an evolving standard, and you may experience different functionality, depending on the operating system that you are using.

The Braille Sense Plus B32 uses the built-in Bluetooth Manager program to allow the user to use the Bluetooth functionality in the Braille Sense Plus B32. You can access the Bluetooth Manager in several ways. To access Bluetooth Manager from the Program menu, you can either press "space-1" or "space-4" until you hear Bluetooth Manager, or press the "space" until you get to Bluetooth Manager. When you hear Bluetooth Manager, press "enter" to activate it. Or, you can press "I (dots 1-2-3)" to open the Bluetooth Manager from the "program" menu without having to press "enter" on it.

12.1 Bluetooth Device List

After the Bluetooth Manager has been activated, it will begin scanning for other Bluetooth devices that are in range, and for the services available from the other Bluetooth devices. For example, if you have a computer with Bluetooth enabled nearby, then the Braille Sense Plus B32 will attempt to find it. It may take a while to find all of the Bluetooth devices in range, so expect to wait about 30 to 40 seconds for this process to complete. You will hear "Scanning for

devices. Please wait..." message and beep sound when this process begins. And when the Bluetooth device is detected, the Braille Sense Plus B32 announces "find (Bluetooth device name)." Until the end of scanning all devices, any keys on the Braille Sense Plus B32 will not work, and you cannot stop scanning the device. You have to wait until the completion of the scanning devices.

If Bluetooth option in Option menu set to "off," or if the Braille Sense Plus B32 does not recognize it, the Braille Sense Plus B32 will say the message, "Bluetooth not activated." Then, the Braille Sense Plus B32 will automatically exit the Bluetooth Manager.

Once the Braille Sense Plus B32 has found other Bluetooth devices that are in range, they will be displayed as "device name(untrusted (or trusted)) xx/yy" where xx is the number where the device appears in the list, and yy is the total number of devices. And "trusted" means that the service has been authenticated, and "untrusted" means that the service has not been authenticated.

This part of the Bluetooth Manager is known as the Bluetooth Device List, and thus, the menu for this section is called the Bluetooth Device List menu. If there are no other Bluetooth devices in range, the Braille Sense Plus B32 will say "no list 0/0." You can press "space-1" or "space-4" to move through the list. To select the device from the list, press "enter" on the device name.

If the Bluetooth device trusted, the device setting will be automatically saved in the memory of the Braille Sense Plus B32. If you want to delete this setting, you press "enter-s (dots 2-3-4)" on Bluetooth device name in the Bluetooth Service List. The Braille Sense Plus B32 will say "Device settings removed." Removing this setting will apply only to the current device.

Once the Braille Sense Plus B32 has finished searching for other Bluetooth devices, you can access the menu by pressing "space-m (dots 1-3-4)" or by pressing "F2." The "Bluetooth Device List menu" has the "scan device," "device name" and "exit." You can navigate the menu items with "space-1" or "space-4."

The first menu item is "scan device." This item allows you to rescan for other Bluetooth devices. To activate this item, press "space-m (dots 1-3-4)" for "F2" and then press "enter" on "scan device." You

can also access this option by pressing "r (dots 1-2-3-5)" while you are in the Bluetooth Device List menu, or you can activate it directly without calling up the menu by pressing "enter-r (dots 1-2-3-5)."

You can access the next item in the menu by pressing "space-m (dots 1-3-4)" and then "space-1" or "space-4" until you get to "device name," and press "enter." You can also press "n (dots 1-3-4-5)" while you are in the Bluetooth Device List menu to activate "device name." This item allows you to give the Braille Sense Plus B32 a specific name. The default name for the Bluetooth device name is "BrailleSensePlus." You can activate this item by pressing "enter" on it, or you can access it without calling up the menu by pressing "enter-n (dots 1-3-4-5)." After you activate this item, you will find a computer edit box that contains your current device name. To modify the name, type the new name and then press "enter." Once you have entered the new name, you should close all programs and reset the Braille Sense Plus B32 by pressing the reset button with your finger on the rear panel. To cancel your changes, press "space-e (dots 1-5)" or "F4." You will then be returned to the Bluetooth Device List.

The next item in the Bluetooth Device List menu is the "exit" item. This item will exit the Bluetooth manager program. To activate this item, press "space-m (dots 1-3-4)" and then press "space-1" or "space-4" to navigate to "exit." Then, press "enter" on "exit." You can also access the item while in the menu by pressing "z (dots 1-3-5-6)" while you are in the Bluetooth Device List menu or at any time without calling up the menu by pressing "space-z (dots 1-3-5-6)."

12.2 Bluetooth Service List

Once you know which remote Bluetooth device you want to connect to, press "space-1" or "space-4" to navigate to the device you want to connect to in the Bluetooth Device List, and then press "enter" on the device name. You will then hear, "Scanning for service. Please wait..." Please note that no keys will work during scanning the devices. The Braille Sense Plus B32 will begin scanning services that are available from the remote Bluetooth device. The Braille Sense Plus B32 support the services: LAN, FTP, ActiveSync, Serial port, USB port and Bluetooth DUN. In order to access all of these functions, you must make sure that the remote Bluetooth device is in

Discoverable mode, and that all services are enabled. It is possible to have certain services enabled on your remote Bluetooth device, while having other services that are disabled. For example, you could have LAN and FTP enabled, while having ActiveSync and Serial Port disabled. If this is the case, then the Braille Sense Plus B32 will only display LAN and FTP.

Once the Braille Sense Plus B32 has found all of the available services, it will display the services in a list in the following format: "service name xx/yy" where xx is the number of the service that you are on, and yy is the number of total available services. You can move through the available services by pressing "space-1" or "space-4." You can press "backspace" to return to the Bluetooth Device List. Once the Braille Sense Plus B32 has finished searching service, you can access the menu by pressing "space-m (dots 1-3-4)" or by pressing "F2." The "Bluetooth Service List menu" has the "device name," "open FTP," "disconnect" and "exit." You can navigate the menu items with "space-1" or "space-4."

How to use "device name" and "exit" in the "Bluetooth service list" menu are the same as how to use them in the "Bluetooth device list" menu. Please refer to Section 12.1 (Bluetooth device list).

The "Open FTP" menu item allows you to open a direct FTP connection with a remote Bluetooth device without having to select the device and then the service. However, you must have connected the service first before the Braille Sense Plus B32 will allow you to transfer files. If you have not connected the FTP service already, and you activate this function, you will hear, "FTP service disconnected." You can access "Open FTP" by pressing "space-m (dots 1-3-4)" and then "space-1" or "space-4" to navigate to "Open FTP." Once you are at "Open FTP," press "enter" to activate it, and the Braille Sense Plus B32 will say, "connecting service." You can also activate it by pressing "t (dots 2-3-4-5)" while you are in the Bluetooth Device List menu, or by pressing "enter-t (dots 2-3-4-5)" without calling up the menu. This chapter will cover connecting various Bluetooth services later in more detail.

The "disconnect" menu item will allow you to disconnect services that are connected to other Bluetooth devices. You can access this item

by pressing "space-m (dots 1-3-4)" and then "space-1" or "space-4." Then, press "enter" to activate it. You can also activate this item while you are in the Bluetooth Service List menu by pressing "d (dots 1-4-5)," or you can activate it without calling up the menu by pressing "enter-d (dots 1-4-5)."

In order to disconnect any service, press "space-1" or "space-4" at the Bluetooth service list to move to the service that you want to disconnect, and execute the "disconnect" command.

You can disconnect the currently focused service only. This means that you can disconnect only one service at one time. You cannot disconnect plural services at once.

If there are no services connected to other Bluetooth devices, and you activate this function, you will hear, "There is no service connected."

12.2.1 Connecting Service

To authenticate a service and connect to it, press "enter" on the service. Once you have pressed "enter" on the service, you will hear "connecting service." Then, you will hear "pin code:" You must use ASCII characters when you type in this edit box. On the Braille display, you will see "pin code:" This edit box will only appear when you have pressed enter on a service that not say "connected" after the service name. You can exit the edit box or cancel any text you have typed in by pressing "space-z (dots 1-3-5-6)." You will then be returned to the Bluetooth Service List.

If you have typed in a pin code, and have pressed "enter," you will hear, "please wait for authentication." If the remote device is setup correctly, and has not been set up to allow this device to always connect, then the remote device will ask for a pin code. If the remote Bluetooth device pin code matches the pin code that was typed in the Braille Sense Plus B32, then the service will authenticate. If this occurs, you will hear, "pin code authentication passed." Then, while the service connects, you will hear, "please wait for access permission." If the remote Bluetooth device does not give access permission, then you will hear, "connection failed," and you will be returned to the Bluetooth Services List. If the remote Bluetooth device gives you access permission, then the Braille Sense Plus B32 will say "connection succeeded." If the connection succeeds, then

you will see "connected" after the services that have successfully connected. Some of the service may be connected without inputting pin code depending on the Remote Bluetooth device settings.

It is possible to setup the remote Bluetooth device to always accept the connection from the Braille Sense Plus B32, or to require a pin code each time. These options must be changed on the remote Bluetooth device. However, if you press "enter-s (dots 2-3-4)" while in the Bluetooth Service List, all authentication will be removed, and the Braille Sense Plus B32 and the remote Bluetooth device will ask you for a pin code the next time you try to connect the service.

After you have connected to a service, you can press "enter-d (dots 1-4-5)" to disconnect the service, and the Braille Sense Plus B32 will say "service disconnected." You will then be returned to the Bluetooth Service List. If you disconnect a service, "connect" will disappear from the Bluetooth Service List.

If you connect to the FTP service, you will see a list of files and folders that are on the remote Bluetooth device. The rest of this chapter will discuss each service in detail.

12.2.2 LAN Service

With the LAN service, you can connect to the Internet through your computer. If you connect this service, you can use the web browser and email program, just like if you were connected to the Internet via a dial-up modem or wireless LAN card. However, you must setup Internet Connection Sharing (ICS) on your remote Bluetooth device. Without ICS properly setup, you will not be able to connect to the Internet using the LAN service. For information on how to setup ICS for your remote Bluetooth device, please refer to the documentation that came with your Bluetooth adapter. Setting up ICS requires knowledge of network architecture, so it may be a good idea to contact a local network technician or your network administrator for help to set up ICS.

12.2.3 FTP Service

This service will work similar to using FTP on the Internet. It will allow you to transfer folders and files to and from the Braille Sense Plus B32 between it and the remote Bluetooth device. When referring to the FTP service, we will refer to the file/folder list in the remote Bluetooth device as "remote folder list" and the file/folder list of the Braille Sense Plus B32 as the "local folder list."

After you have successfully connected to the FTP service, the Bluetooth Manager will take you to the remote folder list. The remote folder list that you are taken to is determined by the remote Bluetooth device. Typically, this folder is called the Bluetooth Exchange Folder on the remote Bluetooth device, but you should check your remote Bluetooth device for information on this folder.

The remote folder list is very similar to the File Manager. With the FTP service, you can perform the following functions:

- 1. Copy
- 2. Paste
- 3. Send to
- 4. Retrieve file
- 5. New folder
- Delete file/folder
- 7. Open local folder. If you press "enter" on this, you will be taken to the local folder list. If you are in the local folder list, this menu will be changed to "move remote folder."
- 8. Select all
- 9. Information

In the next few sections, we will discuss the various FTP functions. Please note that while sending data to and from the remote Bluetooth device, the remote Bluetooth device may still need to give access permission to the Braille Sense Plus B32. Please consult the documentation for the remote Bluetooth device for details.

12.2.3.1 Copy and Paste

These functions will allow you to copy and paste files between the local folder and the remote folder.

You can use the following steps to move files from a local folder to the remote folder:

- 1. After you connect to the FTP service, you will be in the remote folder list. While in the remote folder list, you should press "spacem (dots 1-3-4)" or "F2" to open the FTP menu. Then, you should press "space-1" or "space-4" to navigate to "open local folder," and press "enter." You can also press "o (dots 1-3-5)" while in the menu, or you can press "enter-o (dots 1-3-5)" without having to call up the menu. After activating this function, you will hear, "open local folder." Then, you will be taken to the Disk list that appears in file manager. You will be taken to "flashdisk" by default, but if you have a CF memory card or USB memory stick inserted, you can navigate to them by pressing "space-1" or "space-4."
- 2. Just like navigating in the file manager, you can access a disk by pressing "enter" on it. Use the exact same navigation keys as the file manager to navigate the local folder. You can refer to chapter 3 of this manual to find the various file manager commands. Note that you cannot select folders. You can only select files. If you try to select a folder, the Braille Sense Plus B32 will say "deactivated."
- 3. Once you have selected files by pressing the "space," you can copy them by pressing "space-m (dots 1-3-4)" or "F2," and then navigate to "copy" by pressing "space-1" or "space-4," and press "enter." Or, you can press "enter-c (dots 1-4)" to activate the function without calling up the menu.
- 4. After you have activated the copy function, you will hear, "copying" and then "open remote folder." You will then be moved to the remote folder list.
- 5. In the remote folder list, you can navigate to the folder where you want to paste the file. Once you are in the folder where you want to paste the file, press "enter-v (dots 1-2-3-6)." Or, you can press "space-m (dots 1-3-4)," and then use "space-1" or "space-4" to get to the "paste" function, and press "enter." While pasting, you will hear a sound that indicates that the Braille Sense Plus B32 is working. If the file is larger than 300 KB, you will also hear the progress meter each time an additional 10% has been completed. If the file is less than 300 KB, then you will only hear the sound, and not the progress meter.
- 6. When the file has been pasted successfully, you will see the message, "xxx file pasted," where xxx is the name of the file. If the

file is not pasted successfully, you will hear, "xxx file not pasted." After the file is pasted successfully, you will also hear, "paste completed," and you will be returned to the remote folder list.

The following steps should be used to copy a file from the remote folder list to the local folder list:

- 1. After the FTP service has connected, you can navigate through the remote folder, just like in the file manager. If you need to reference the navigation keys for the file manager, please refer to chapter 3 in this manual.
- 2. Once you have selected the files that you want to copy by pressing the "space," you can open the FTP menu by pressing "space-m (dots 1-3-4)," and then use "space-1" or "space-4" to navigate to "copy," and press "enter." You can also activate this function without calling up the menu by pressing "enter-c (dots 1-4)." Note that you cannot copy folders to send to the local folder.
- 3. Next, open the menu by pressing "space-m (dots 1-3-4)," move to "open local folder" with "space-1" or "space-4," and press "enter." You can also activate this function without calling up the menu by pressing "enter-o (dots 1-3-5)." After you have activated this function, you will see the Disk list, just like when you open the file manager. You will be taken to "flashdisk" by default. However, if you have a CF memory card or USB memory stick inserted, you can navigate to those disks by pressing "space-1" or "space-4." Please refer to chapter 3 in this manual regarding navigation keys in the file manager.
- 4. After entering a disk, open the menu by pressing "space-m (dots 1-3-4)." Then, move to "paste" with "space-1" or "space-4," and press "enter." You can also activate this function without calling up the menu by pressing "enter-v (dots 1-2-3-6)." While pasting, you will hear a sound that indicates that the Braille Sense Plus B32 is working. If the file is larger than 300 KB, you will also hear the progress meter each time an additional 10% has been completed. If the file is less than 300 KB, then you will only hear the sound, and not the progress meter.
- 5. When the file has been pasted successfully, you will see the message, "xxx file pasted," where xxx is the name of the file. If the file is not pasted successfully, you will hear, "xxx file not pasted."

After the file is pasted successfully, you will also hear, "paste completed," and you will be returned to the local folder list.

12.2.3.2 Send To

This function will allow you to send files from the local folder list to the remote folder list. It is only available in the local folder list. This is very similar to the copy and paste function. The difference is that you do not have to paste the file to the remote folder. It is done as soon as you activate the "send to" function. When you activate this function, the file can only be sent to the root of the remote folder list. To activate the "send to" function, perform the following steps:

- 1. After the FTP service is connected, you can press "space-m (dots 1-3-4)" while you are in the remote folder list to open the menu. Then, press "space-1" or "space-4" to move to "open local folder," and press "enter." You can also activate this function without calling up the menu by pressing "enter-o (dots 1-3-5)."
- 2. After you have activated this function, you will see the disk list, just like when you open the file manager. You will be taken to "flashdisk" by default. However, if you have a CF memory card or USB memory stick inserted, you can navigate to those disks by pressing "space-1" or "space-4." Please refer to chapter 3 in this manual regarding navigation keys in the file manager.
- 3. Then, select a file by pressing "space" on the file. You can only select files and not folders.
- 4. After you have selected a file, press "space-m (dots 1-3-4)," and then press "space-1" or "space-4" to move to "send to," and press "enter." Or, you can press "enter-s (dots 2-3-4)" to activate the "send to" function without having to call up the menu.
- 5. Just like copying and pasting, you will hear a sound that indicates that the Braille Sense Plus B32 is working. If the file is larger than 300 KB, you will also hear the progress meter each time an additional 10% has been completed. If the file is less than 300 KB, then you will only hear the sound, and not the progress meter. When the transfer has completed, you will hear, "xxx file sent," where xxx is the name of the file. If the file does not transfer, you will hear, "xxx file not sent." Once all of the files have been transferred completely, you will hear, "sent completely," and you will be returned to the remote folder list.

12.2.3.3 Retrieve File

The "retrieve file" function will allow you to retrieve a file from the remote folder list, and move it to the local folder. This function is available while in the remote folder list. You can only save files to the "flashdisk/download" folder with this function. Perform the following steps to activate the "retrieve file" function:

- 1. After you have connected the FTP service, you will be connected to the remote folder list. You can navigate through the list using the same commands as in the file manager. You can reference these commands by referring to chapter 3 of this manual.
- 2. Select the file that you want to retrieve by pressing the "space" on it. Note that you cannot select folders.
- 3. After you have selected the file, press "space-m (dots 1-3-4)" to open the menu, and then use "space-1" or "space-4" to move to "retrieve file," and press "enter." You can also activate this function without calling up the menu by press "enter-r (dots 1-2-3-5)."
- 4. Just like copying and pasting, you will hear a sound that indicates that the Braille Sense Plus B32 is working. If the file is larger than 300 KB, you will also hear the progress meter each time an additional 10% has been completed. If the file is less than 300 KB, then you will only hear the sound, and not the progress meter. When the transfer has completed, you will hear, "xxx file retrieved," where xxx is the name of the file. If the file does not transfer, you will hear, "xxx file not retrieved." Once all of the files have been transferred completely, you will hear, "retrieve completed," and you will be returned to the remote folder list.

12.2.3.4 New Folder

The "new folder" function will allow you to create a new folder in the local folder list or the remote folder list. To create a new folder, perform the following steps:

1. After the FTP service has connected, navigate to the local or remote folder list and move to the folder where you want to make new folder. You can move between the "remote folder list" and "local folder list" by pressing "enter-o (dots 1-3-5)." And how to

- move among the items in the folder list is the same as how to move in the File Manager.
- 2. Press "space-m (dots 1-3-4)" to open the menu, and then use "space-1" or "space-4" to navigate to "new folder," and press "enter." Or, you can activate this function without calling up the menu by pressing "enter-f (dots 1-2-4)."
- 3. You will then see an edit box that says, "new folder name:." Type in the new folder name using ASCII characters, and then press "enter." If the folder is created successfully, you will hear, "xxx folder created," where xxx is the name of the folder. You will then be automatically returned to the list that you were in, whether it was the remote or local folder list.
- 4. To cancel any changes that you made, press "space-z (dots 1-3-5-6)," and you will be returned to the previous list.

12.2.3.5 Delete File/Folder

This function will allow you to delete files or folders in the remote or local folder list. Note that if a folder contains folders, you will not be able to delete the folder. To activate this function, perform the following steps:

- 1. After you have connected to the FTP service, navigate to the local or remote folder list, and select the file(s) or folder(s) that you want to delete by pressing the "space" on them. The navigation keys are exactly the same as when using the file manager. To reference these keys, please refer to chapter 3 of this manual. You can move to between "remote folder list" and "local folder list" by pressing "enter-o (dots 1-3-5)."
- 2. Once you have selected the file(s) or folder(s), press "space-m (dots 1-3-4)," and then use "space-1" or "space-4" to move to "delete file/folder," and press "enter." You can also activate this function without calling up the menu by pressing "space-d (dots 1-4-5)."
- 3. If the file(s) or folder(s) is/are deleted successfully, you will hear, "delete completed."

12.2.3.6 Information

This function will allow you to check information regarding files or folders that are located in the remote or local folder list. You can activate this function by performing the following steps:

- 1. After you have connected to the FTP service, navigate to the local or remote folder list, and select the file or folder that you want to know information about. The navigation keys are exactly the same as when using the file manager. To reference these keys, please refer to chapter 3 in this manual.
- 2. Then, press "space-m (dots 1-3-4)" to open the menu, and then use "space-1" or "space-4" to move to "information," and press "enter." Or, you can activate this function without calling up the menu by pressing "enter-i (dots 2-4)."
- 3. After you have activated the function, you will see the "information dialog box," which consists of "type," "size," "date," "attribute," "confirm," and "cancel." You can move between these controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." If you select multiple files, the "information" function will display the number of selected files and size.

12.2.4 ActiveSync Service

This service works the same way as when you connect the Braille Sense Plus B32 to a computer via a USB cable, and use ActiveSync. If the connection succeeds when activating it by pressing "enter" on ActiveSync, you will hear the sound that ActiveSync makes when there is a successful connection. Just as with all of the Bluetooth services, the remote Bluetooth device may need to authorize the Braille Sense Plus B32. You will then be returned to the Bluetooth Service list. Just like using ActiveSync via USB, you can copy and paste files from the Braille Sense Plus B32 from the remote Bluetooth device to the Braille Sense Plus B32 and visa versa.

If you want to disconnect the service, you can press "enter-d (dots 1-4-5)" while in the Bluetooth Manager, and the Braille Sense Plus B32 will say, "service disconnected," and you will be returned to the Bluetooth Service list. You will no longer see the word "connected" after ActiveSync in the Bluetooth Service list.

You cannot use ActiveSync via USB and Bluetooth at the same time. If the remote Bluetooth device is connected via USB and using ActiveSync, you must disconnect the remote Bluetooth device in order to use the ActiveSync service via Bluetooth.

12.2.5 Serial Port

If you connect this service, you should not connect the other services. The Serial Port service will allow you to use your Braille Sense Plus B32 as a wireless Braille display via Bluetooth. In order to use the Braille Sense Plus B32 as a wireless Bluetooth display, please reference the following sections. Note that you must be using Window-Eyes in order to use the Braille Sense Plus B32 as a wireless Braille display. Note that following explanation is how to use the serial port when the Window-Eyes is installed as a screen reader program in PC. If you are using JAWS or Supernova as a screen reader, please contact HIMS by e-mail. The e-mail id of HIMS is hims@himsintl.com.

12.2.5.1 Setting up the Braille Sense Plus B32 to Work as a Bluetooth Braille Display

The following steps will walk you through setting up the Braille Sense Plus B32 to work as a Bluetooth Braille display. These instructions assume that you already have Bluetooth installed on your computer. The following instructions assume that you are running Window-Eyes 5.5, or greater, and at least Windows XP, Service Pack 2. Before starting, make sure that your Braille Sense Plus B32 is turned on. Although it may not be necessary, you should close all applications that are running on the Braille Sense Plus B32, and be in the Program menu for best performance. If you have more than one Braille Sense Plus B32, make sure that only the Braille Sense Plus B32 that you want to configure is turned on.

12.2.5.2 Setting up the Computer

1. Navigate to the Bluetooth icon in the System Tray. You may do this in Windows XP by pressing "windows key-b," and then use the Right or Left Arrow Keys until you reach the Bluetooth icon. Then, press the "context menu key." Note that if you don't have the

Bluetooth icon in the System Tray, you may have to change the settings for the Bluetooth icon to appear. Go to the Windows Control Panel, Bluetooth Devices, Options, and then check the check box that says "Show the Bluetooth Icon in the Notification Area."

- 2. Press the "up or Down" Arrow keys until you get to "Open Bluetooth settings."
- 3. Press "enter."
- 4. Select the Device tab control. You may need to press Ctrl-Tab in order to select this tab control.
- 5. Tab to the Add button.
- 6. Press "enter."
- 7. Press "space" to check the checkbox for "My device is setup and ready to be found."
- 8. Press enter."
- 9. The XP machine will find the Braille Sense Plus B32, and it will be called "Windows CE." Remember that the Braille Sense Plus B32 must be turned on in order to be found as mentioned above. If you forgot to turn the Braille Sense Plus B32 on, leave it turned on, exit the Bluetooth settings, and start at step number 1 above.
- 10. Press the "down arrow" key to focus Windows CE.
- 11. Tab to the Next button.
- 12. Press "enter."
- 13. Press "down arrow" to focus the radio button, "Let me choose my own passkey." Focus will automatically be put in the edit box, and you may hear a tool tip that says, "We recommend using a passkey that is 8 to 16 digits long." You should type your passkey here. For example, you might type, "1111."
- 14. Press "enter." Windows will then begin exchanging the passkeys, and a new dialog will appear on the computer.
- 15. The Braille Sense Plus B32 will then ask for the passkey by saying, "Computer Edit Box Pin Code?" Using the same passkey that was typed in to the computer, type in the same passkey on the Braille Sense Plus B32 and press "enter" on the Braille Sense Plus B32.
- 16. The computer will say the message, "Found new hardware" and the final dialog should appear on the computer. Remember that you can press "ctrl-shift-w" to have the entire dialog read using Window-Eyes. The dialog should display that the Bluetooth device was successfully set up. It is very important to note the COM ports for the outgoing COM port and the incoming COM port. For

- example, the outgoing COM port may be COM 5, and the incoming COM port may be COM 6. Do not be surprised if your COM ports are not set to COM 5 and COM 6. The COM ports used can vary from computer to computer.
- 17. Press "tab" to get to the Finish button, and then press "enter" to activate it.
- 18. You will then be taken back to the Bluetooth devices setting dialog. Press Ctrl-Tab twice to focus the COM ports tab control.
- 19. Press "tab" to get to the list of COM ports, and then press the Down Arrow to move through the list of COM ports to make sure that they match the COM ports that were mentioned when you completed the Bluetooth device wizard. You should hear your first COM port, then the direction, and then the name. After you press "down" Arrow again, you should hear the next COM port, the direction, and name. For example, when you press the "down arrow" key the first time, you might hear, "COM 5 Outgoing Windows CE Blue Tooth Serial." When you press the "down arrow" key a second time, you might hear, "COM 6 Incoming WindowsCE."
- 20. Tab to the OK button, and press Enter. You have now setup the Braille Sense Plus B32 and the computer. However, you must properly setup Window-Eyes in order to use the Braille Sense Plus B32 as a Bluetooth Braille display.

12.2.5.3 Setting up Window-Eyes

- 1. Press "ctrl-backslash" to open the Window-Eyes Control Panel.
- 2. Press" alt-f" to open the File menu.
- 3. Press the "up arrow", or "down arrow" to move to Select Braille Display, and press "enter." Or, just press B to open the Select Braille Display dialog without using the Arrow Keys.
- 4. Press the "down arrow" or the letter "b" until you hear Braille Sense Plus B32.
- 5. Press "tab" to get to the COM port list box
- 6. Select the COM port that was given as the outgoing COM port when you setup the computer to interact with the Braille Sense Plus B32 via Bluetooth.
- 7. Press "enter"

Now that you have set up Window-Eyes, you need to finish the setup on the Braille Sense Plus B32.

12.2.5.3 Setting up the Braille Sense Plus B32

- 1. Press "f1" to get to the Program menu.
- 2. Press "space-1" or "space-4" to get to the Utility menu, or just press the letter u."
- 3. Press "enter."
- 4. Press "space-1" or "space-4" to get to Terminal for Screen Reader, and press" enter."
- 5. Press "space-1" or "space-4" to get to Bluetooth Serial Port, and press "enter."

The Braille Sense Plus B32 should be connected as a Bluetooth Braille display. To exit this mode from the Braille Sense Plus B32, press "space-z." Please note that "f1" on the Braille Sense Plus B32 will still take you to the Program menu. This is to allow you to use the applications on the Braille Sense Plus B32 at the same time, and be able to switch back to using the Braille Sense Plus B32 as a Bluetooth Braille display.

12.2.6 Using Multiple Services Simultaneously

You can use the LAN, FTP, and ActiveSync Bluetooth services all at the same time. However, if you plan to use any of these services at the same time, you should connect the FTP service before connecting the LAN and ActiveSync services. Otherwise, you may experience problems. However, if you want to connect to the Serial Port, you should not connect to any of the other Bluetooth services in the Bluetooth Service list.

12.3 Hot keys in Bluetooth Manager

Scanning Bluetooth device: Enter-r (dots 1-2-3-5) Connecting device: Enter on the device name Connecting service: Enter on the service name

Disconnect service: Enter-d (dots 1-4-5)

Move to Bluetooth device list in service list: Backspace

Remove device setting in Bluetooth device list: Enter-s (dots 2-3-4)

1) FTP service

Open local folder/move remote folder: Enter-o (dots 1-3-5)

Copy: Enter-c (dots 1-4)
Paste: Enter-v (dots 1-2-3-6)
Send to: Enter-s (dots 2-3-4)

Retrieve file: Enter-r (dots 1-2-3-5) New folder: Enter-f (dots 1-2-4)

Delete file/folder: Space-d (dots 1-4-5)

Information: Enter-i (dots 2-4)

13. MSN messenger

The MSN Messenger program on the Braille Sense Plus B32 is very similar in its operation to that which runs on a Personal computer. This is because we have made every attempt to keep the structure and features the same as those that are found in the MSN messenger program that runs on a PC. Using MSN Messenger, you can chat online with other registered users of MSN Messenger. Note that you will need to setup your MSN Messenger account with Microsoft before using this service. To start MSN Messenger, in the program menu, press "space-4" repeatedly until you get to "MSN Messenger," and press "enter." Or you can just press its shortcut key, "n (dots 1-3-4-5)."

13.1 Getting Started with MSN Messenger

When you first launch MSN Messenger, the Braille Sense Plus B32 will check for the network status, and if a network connection is available, a log-in dialog box will be displayed.

- 1) When the log-in dialog box appears, you will be placed in the "e-mail address" computer edit box. Here, you should type the email address that you have registered for your MSN passport. Note that the e-mail address should be typed using computer Braille.
- 2) Press "tab (space-4-5)" to move to the "password" computer edit box. Now, Type the password that you have setup for your MSN Messenger account. Again, you will want to use computer Braille for this.
- 3) Press "tab (space-4-5)" to move to the "remember me" check box. By default, this check box is unchecked. You can check the check box by pressing "space." Next time when you run the messenger program, the email address will be displayed automatically for you.
- 4) Press "tab (space-4-5)" to move to the "save password" check box. By default, this will be unchecked. You can check this option by pressing "space." Then, next time you run the messenger program, the password will be entered automatically, and it will be displayed in the password edit box as "****". To use this feature, you should also check the "remember me" check box. Otherwise, the

- password will not be stored even if you have checked the "save password" check box.
- 5) Press "tab (space-4-5)" to move to the "confirm" button. Pressing "enter" here will log you in to your Messenger account. Once you are logged in, a contact list will appear. If you want to cancel logging in, press "tab (space-4-5)" once more at the "confirm" button, to move to the "cancel" button. Then press "enter." Or you can also press "space-z (dots 1-3-5-6)." Then the messenger program will close.

If you have successfully logged in and checked "remember me" and "save password" check boxes, you can log in by just pressing "enter" when you are at the "email" edit box the next time you want to log in. When the Braille Sense Plus B32 is not connected to the Internet, if you execute the MSN Messenger and try to log in, the Braille Sense Plus B32 will announce "connection failed. Check Internet settings" and return to the log-in dialog box.

13.2 Using a Contact List

If you have successfully logged in, a list box containing your contact list will appear. In this list, the contact information for those who are online and for those who are offline will be grouped together. You can move through the entire list by pressing "space-4" or "space-1" repeatedly. When this list box appears, the number of people who are online will be displayed first. Then, the list of people who are online will be shown in the format, "(current status) nickname xx/yy" in Braille, and "nickname, current status, xx/yy" in speech. Where "yy" is the number of people who are online or offline, and "xx" is the order of the current item in the online or offline group. In Braille, the current status, "online", is displayed as "nln", and "offline" as "fln". In speech, they are announced as "online" and "offline", respectively. When the status is "idle", it is displayed as "idl" in Braille, and "idle" in speech. If the status of a person changes after you log in, you will hear different sound depending on their status.

The hotkeys you can use in this list box is as follows.

- 1) Move to the previous item : Space-1 or up scroll button
- 2) Move to the next item : Space-4 or down scroll button
- 3) Move between online and offline groups : Space-5-6

You can have the received message stay on the Braille display until you are done reading it. When in the Contacts list box you can press "enter-I (dots 1-2-3)." When you are asked to "confirm the received message: no," select "yes" by press the "space." When a message is received the message will stay on the Braille display until you close it with "space-e (dots 1-5)."

If you want to close the messenger program, press "enter" on "close" in the file menu. Or you can press "space-z (dots 1-3-5-6)."

13.2.1 Instant Messaging

When you want to have a conversation with a person in your list of contacts, move to the list item corresponding to the person you want to contact, and press "space-m (dots 1-3-4)" to open the menu. Move to "actions" and press "enter." Press "enter" again on "send instant message." Or instead of using the menu, you can press "enter" or "enter-s (dots 2-3-4)" at the contact item. Then, the "instant message" dialog box will appear, where you can have a conversation with your contact online. The "instant message" dialog box will be described in more detail in 13.3.

13.2.2 Adding, Deleting, or Viewing Contact Information

You can add a contact by doing the following.

- 1) Press "space-m (dots 1-3-4)" or F2 to open the menu. Move to "contacts" by pressing "space-4," and then press "enter." Press "enter" on "add contact." You could also press "enter-a (dot 1") instead of using the menu.
- 2) Then, the "add" dialog box will be displayed, and you will be placed in the "e-mail address" edit box. Type the email address of the person you want to add, in computer Braille.
- 3) Press "tab (space-4-5)" to move to the "confirm" button, and press "enter." Then, the contact information will be stored and you will be placed back in the contact list box. If you want to cancel adding the contact information, press "tab (space-4-5)" to move to the "cancel" button, and press "enter."

The added contact will be displayed as offline until the person accepts your request for adding him or her to your contact list. As soon as the request is accepted, their status will be changed to online.

You can delete a contact that you have registered by doing the following.

- 1) Move to the contact you want to delete, by pressing "space-1" or "space-4" repeatedly.
- 2) Press "space-m (dots 1-3-4)" to open the menu. Press "space-4" to move to "contacts," and press "enter." Move to "delete contact" by pressing "space-4," and press "enter." Or instead of using the menu, just press "enter-d (dots 1-4-5)."
- 3) Then, the "delete contact" dialog box will be displayed, showing the email address of the person to be deleted in the "e-mail address" edit box. Make sure that the address is correct, and if not, make a change to it.
- 4) Press "tab (space-4-5)" to move to the "confirm" button, and press "enter." Then, the item will be deleted and the contact list box will appear again. If you want to cancel deleting, press "tab (space-4-5)" once more at the "confirm" button, to move to the "cancel" button. Then press "enter."

You can delete a contact regardless of whether he/she is online or offline.

You can view information of a contact by doing the following.

- 1) Move to the item whose information you want to know, by pressing "space-4" or "space-1."
- 2) Press "space-m (dots 1-3-4)" to open the menu. Press "space-4" to move to "contacts," and press "enter." Move to "contact information" by pressing "space-4," and press "enter." Or instead of using the menu, just press "enter-v (dots 1-2-3-6)."
- 3) Then, you will be placed the "contact information" dialog box. First, "nickname" is focused. Press "tab (space-4-5)" to move to the email address of the contact. Press "tab (space-4-5)" again to move to his/her status.
- 4) After you have read all the information about the contact, press "tab (space-4-5)" to move to the "close" button, and press "enter."

Or you can just press "space-e (dots 1-5)." Then, the dialog box will be closed and the contact list box will appear again.

13.2.3 Changing Your Nickname, Status and Viewing Your Information

You can change your nickname as follows.

- 1) Press "space-m (dots 1-3-4)" or F2 to open the menu. Press "space-4" repeatedly to move to "tools," and press "enter." Press "enter" on "nickname." Or instead of using the menu, just press "enter-p (dots 1-2-3-4)."
- 2) Then, the "change nickname" dialog box will appear, and the "nickname" edit box will be focused. Type the nickname you like. You can use alphabets, numbers, and other symbols in the nickname.
- 3) Press "tab (space-4-5)" to move to the "confirm" button, and press "enter." Then your nickname will be changed and you will be placed back in the contact list box.

To view your nickname or email address, you can use "my status" as follows.

- 1) Press "space-m (dots 1-3-4)" to open the menu. Press "enter" on "file." Then, move to "my status" by pressing "space-4," and then press "enter." Or instead of using the menu, just press "enter-m (dots 1-3-4)."
- 2) Then, the dialog box will appear, and your nickname will be displayed. Press "tab (space-4-5)" to move to your email address, and "tab (space-4-5)" again to move to "status," and so on.
- 3) When you have read through all of the information, you can press "tab (space-4-5)" to move to the "close" button, and then press "enter." Or you can just press "space-e (dots 1-5)." Then, the information dialog box will be closed and you will be placed in the contact list box.

You can change your status by doing the following.

1) Press "space-m (dots 1-3-4)" or F2 to open the menu. Press "enter" on "file." Move to "set my status" by pressing "space-4,"

and press "enter." Or instead of using the menu, just press "enter-t (dots 2-3-4-5)."

- 2) Then, the "set my status" dialog box will appear, and the "status" combo box will have focus. Move to the status item that you want by pressing "space-4" or "space-1."
- 3) Press "tab (space-4-5)" to move to the "confirm" button, and press "enter." Then your online status will be changed and you will be placed in the contact list box.

13.2.4 Additional Features

1) Sign out

When you are logged in and you want to log in to another account, you will need to log out first, and then log in to the other account. Press "space-m (dots 1-3-4)" to open the menu. Press "enter" on "file." Press "space-4" repeatedly to move to "sign out" and press "enter." Then, you are logged out, and the log in dialog box will appear again. In the "e-mail address" and "password" edit box, the email address and password used in the previous login will be displayed by default. To log in to another account, you first need to delete the log in information from the first account, and type the log in information of the other account.

2) Save account

If you did not check the "remember me" and "save password" check boxes in the login dialog box, later, you may want to save the account information once you are logged in. You can use the "save account" option for this. It is exactly the same as checking the two check boxes in the login dialog box. To use "save account," you should press "space-m (dots 1-3-4)" to open the menu. Press "space-4" repeatedly to move to "tools," and press "enter." Press "space-4" to move to "save account," and press "enter." Then, you will hear "save account? Yes." In here, you press "enter" and then you will be placed back in the contact list box.

3) View chat and last message

When you are having a conversation with more than one person simultaneously, you can view a list of messages that you have received previously. You can use the "last message option," or when using "view chat" go back to the instant message dialog box which you have used recently in the current instant message dialog box.

To use "view chat," you should press "space-m (dots 1-3-4)" to open the menu and press "enter" on "file" menu. Press "space-4" to move to "view chat," and press "enter." Or you press "enter-r (dots 1-2-3-5)" without call up menu.

To use "last message," you should press "space-m (dots 1-3-4)" to open the menu. Press "space-4" repeatedly to move to "actions," and press "enter." Press "space-4" to move to "last message," and press "enter." Or you press "backspace-r (dots 1-2-3-5)" without call up menu. When executing "last message" you can see the "list of messages." In this list, you can move through the messages by pressing "space-1" or "space-4" repeatedly. If you press "enter" on a message, then the focus will move to the corresponding instant message dialog box.

4) Play keyboard sound

You can select whether your message input is converted into the sound or not to use "play keyboard sound" when you are writing your message to a person in the instant message dialog box. In other words, you can choose whether you will hear a person's message input while inputting your message or your message input continuously when a person send you a message. You need to take the following steps for this function.

- (1) Press "space-m (dots 1-3-4)" to call the menu.
- (2) Press "space-4" to move to the "tools" and press "enter."
- (3) Press "space-4" to move to the "play keyboard sound" and press "enter." Or, you can press "enter-k (dots 1-3)" to move to the "play keyboard sound" directly. Then, you can see "play keyboard sound: yes" message.
- (4) If you press "enter," you can hear your input message even if a person send you a message.

If you press "space-4" first and then press "enter," you can hear a person's input message even if you are writing your message.

- 5) Message sound notification while in current window
 You can select whether you use beep sound for the messages or
 not to use "notify message sound in current window" when you are
 communicating with a person in the instant message dialog box.
 You need to take the following steps for this function.
 - (1) Press "space-m (dots 1-3-4)" to call the menu.
 - (2) Press "space-4" to move to the "tools" and press "enter."
 - (3) Press "space-4" to move to the "message sound notification while in current window" and press "enter." Or, you can press "backspace-s (dots 2-3-4)" to move to the "message sound notification while in current window" directly. Then, you can see "play message sound notification while in current window: yes" message.
 - (4) If you press "enter," you can hear beep sound when you communicate with a person.
 - (5) If you press "space-4" first and then press "enter," you can't hear beep sound when you communicate with a person. However, if you are not in instant message dialog box, but in contact list, you will hear beep sound even if you selected no option of "notify message sound in current window" because it is applied for current messaging window only.
- 6) Message sound notification while messenger is in the background You can select whether you use beep sound for receipt of the messages or not to use "message sound notification while messenger is in the background" when you are using another program like as word processor. You need to take the following steps for this function.
 - (1) Press "space-m (dots 1-3-4)" to call the menu.
 - (2) Press "space-4" to move to the "tools" and press "enter."
 - (3) Press "space-4" to move to the "message sound notification while messenger is in the background" and press "enter." Or, you can press "backspace-m (dots 1-3-4)" to move to the "message sound notification while messenger is in the background" directly. Then, you can see "play message sound notification while messenger is in the background: yes" message.
 - (4) If you press "enter," you can hear beep sound when a person send you a message.

If you press "space-4" first and then press "enter," there is no beep sound and you can't find out new message before you check messenger program.

13.3 Instant Message Dialog Box

If you press "enter" on an item in the contact list box, the instant message dialog box will appear. The instant message dialog box consists of "history" window, "input" edit box, "send" and "close" buttons. The "history" window lists all the messages that have been sent to and from other contacts. In the "input" edit box, you can type your message to be sent to another person. You can move between these controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." When you are sending an instant message, the "input" edit box will be focused when the dialog box appears. On the other hand, if the dialog box was opened to read received messages, the "history" window will be focused. In the "input" edit box, you can type one line, and by pressing "enter," you can send the message. You can also move to the "send" button, and press "enter" to send the message. Then the message will also be added to the "history" window. In the "history" window, for each message, the nickname of the person who wrote the message will be displayed first, and then the content of the message will be displayed. Each message is considered as a paragraph. When you are in the instant message dialog box, if the other person sends a message, the message will be displayed in Braille and announced in speech immediately. If you receive a message while the focus is at the "input" edit box, the focus will not be changed. If the focus is at the "history" window, the content of the window will not be updated until you move to another control and go back to the "history" window.

While you are in the instant message dialog box, you can move to the contact list box by pressing "space-1-2-6" (or F1-F2) or "space-3-4-5" (or F3-F4). If you press the key again, you will go back to the instant message dialog box. More than one instant message dialog box can be opened at the same time. For example, while you are in an instant message dialog box, if you go to the contact list box by pressing "space-1-2-6," and press "enter" on another contact, another instant message dialog box will be opened.

If you want to close the instant message dialog box, press "enter" on the "close" button, or press "space-e (dots 1-5)." Then, the dialog box will be closed, and you will be placed back in the contact list box.

13.3.1 Inviting Others to Start a Conversation

You can invite others to have a conversation together at the same time. That is, you can have a conversation with more than one person in one instant message dialog box. You can invite or add another participant as follows. Press "space-m (dots 1-3-4)" to open the menu. Move to "actions" by pressing "space-4" repeatedly, and press "enter." Press "enter" on "invite a contact." Or instead of using the menu, you can just press "enter-i (dots 2-4)." Then, the list of people who are online will be displayed. Press "space-1" or "space-4" repeatedly to move to the contact you want to invite. Press "enter." Then you will get a message that says the person has been invited, and you will be placed back in the current instant message dialog box. Now, you are able to have a conversation with more than one person in one dialog box.

13.3.2 Saving and Printing Your Messages

You can save or print the messages that are shown in the "history" window. If you want to save the messages, press "space-m (dots 1-3-4)" to open the menu. Press "enter" on "file." Move to "save as" and press "enter." Or instead of using the menu, you can just press "space-s (dots 2-3-4)." Then, the save dialog box will appear and the "file name" edit box will be focused. This dialog box has the same controls, and you can use it in the same way as the "save as" dialog box in "word processor."

If you want to print the messages, first, press "space-m (dots 1-3-4)" to open the menu. Then, press "enter" on "file." Move to "print" by pressing "space-4" repeatedly, and press "enter." Or instead of using the menu, you can just press "space-p (dots 1-2-3-4)." Then, the "print" dialog box will be displayed. This dialog box is the same as the "print" dialog box in the "word processor." The messages can be printed or embossed in Braille.

13.3.3 Copying and Pasting Instant Messages

You can copy, paste, and delete the messages in the "history" window or "input" edit box, as you can do in the "word processor." However, since the "history" window is read only, you cannot paste, cut, and delete the messages in the "history" window. To select a block of text, move the cursor to the starting point, and press "enter-b (dots 1-2)." Then, move to the end point of the text to be selected. Press "enter-c (dots 1-4)" to copy, "enter-x (dots 1-3-4-6)" to cut. Then, move the cursor to the place where you want to insert the copied text (the "input" edit box, or an edit box of another program), and press "enter-v (dots 1-2-3-6)" to paste the text. If you press "enter-a (dot 1)," you can select all the text in the current control. You can perform these functions using the "edit" menu.

13.3.4 Searching Messages

You can search the messages in the "history" window for text. This is very useful especially when you have exchanged a lot of messages. The "find" dialog box is used for this, and it works the same as the one in the "word processor." Press "space-m (dots 1-3-4)" to open the menu. Press "space-4" to move to "edit," and press "enter." Press "space-4" repeatedly to move to "find, and press "enter." Or instead of using the menu, just press "space-f (dots 1-2-4)." Then, the "find" dialog box will appear, and the "text to find" edit box will be focused. Type the string to look for and set the searching direction, and then press "enter." Then, the focus will move to the message that contains the text. If you want to find it again in the same direction, press "enter-f (dots 1-2-4)." If the text is not found, you will get the message, "not found," and the cursor will be located where you invoked the "find" dialog box.

13.4 Hot Keys in MSN Messenger

1) Log-in dialog box

Move to the next control: Tab (Space-4-5 or F3)

Move to the previous control: Shift-tab (Space-1-2 or Space-F3)

Check or uncheck a check box: Space

2) The contact list box

Move to the previous item: Space-1 or up scroll button Move to the next item: Space-4 or down scroll button Move between online and offline groups: Space-5-6

Open the menu: Space-m (dots 1-3-4) or F2

Logout: Enter-n (dots 1-3-4-5) View chat: Enter-r (dots 1-2-3-5) My status: Enter-m (dots 1-3-4) Close: Enter-z (dots 1-3-5-6) Add contact: Enter-a (dot 1)

Delete contact: Enter-d (dots 1-4-5)

Contact information: Enter-v (dots 1-2-3-6). Send instant message: Enter-s (dots 2-3-4) Last message: Backspace-r (dots 1-2-3-5) Play keyboard sound: Enter-k (dots 1-3)

Message sound notification while in current window: Backspace-s (dots 2-3-4)

Message sound notification while messenger is in the background:

Backspace-m (dots 1-3-4)

Nickname: Enter-p (dots 1-3-4) Save account: Enter-o (dots 1-3-5)

Confirm the Received Message: Enter-I (Dots 1-2-3)

3) Instant message dialog box

Move to the next control: Tab (Space-4-5 or F3)

Move to the previous control: Shift-Tab (Space-1-2 or Space-F3)

Move between the instant message dialog box and the contact

list box: Space-1-2-6 or Space-3-4-5, F1-F2, or F3-F4

Save as: Space-s (dots 2-3-4)
Print: Space-p (dots 1-2-3-4)
Close: Space-e (dots 1-5)
Cut: Enter-x (dots 1-3-4-6)
Copy: Enter-c (dots 1-4)

Delete: Enter-d (dots 1-4-5)
Paste: Enter-v (dots 1-2-3-6)
Select all: Enter-a (dot 1)

Start selection: Enter-b (dots 1-2)

Find: Space-f (dots 1-2-4) Find again: Enter-f (dots 1-2-4) Invitation: Enter-I (dots 2-4)

14. Database Manager

The database manager is a program that can be used to create a database in the form that you specify. You can use the DataBase Manager to add records and search for data in your records. A table contains at least one record, and a record consists of at least one field. You can specify attributes for each of the fields. In other words, a record is made up of a group of one or more fields.

When the database manager is started, it will check whether or not a table has been registered or created already. If no table has been registered yet, a "table manager" dialog box will appear to help you to register a new table. If there is at least one table already registered, a "search records" dialog box will appear and the "search" edit box will be focused, so that you can search for data records in the tables. If you want to close the program while you are adding or searching a table, press "space-z (dots 1-3-5-6)." Or you can use the menu. Press "space-m (dots 1-3-4)" or F2 to open the menu. Move to "exit" by pressing "space-1" or "space-4" (or Left or down scroll button) repeatedly, and press "enter." Or you can type "z (dots 1-3-5-6)" in the menu.

The major navigation keys that can be used in this program are as follows.

- Moving by controls
 Move to the previous control: Shift-Tab (space-1-2) or Space-F3
 Move to the next control: Tab (Space-4-5) or F3
- Moving in a list box
 Move to the previous list item: Space-1 or up scroll button
 Move to the next list item: Space-4 or down scroll button
- 3) Changing the selection in a prompt box Select the next value: Space-4 or Space, or down scroll button Select the previous value: Space-1 or Backspace, or up scroll button

The menu in the database manager consists of the following items. You can open this menu by pressing "space-m (dots 1-3-4)" or F2.

- Table manager: Here you can create, delete, and modify tables, records, and their fields. When you run the database manager for the first time, the "table manager" dialog box will appear.
- 2) Add record: You can add records to the current table.
- 3) Search records: You can search records in the current table. You can also search each field in the table.
- 4) List of records found: You can use this menu item to go through a list of records found in the table by the previous search. Here, you can delete or modify each record in the list. If you didn't search for anything before you use this function, the message, "no list 0/0," will be displayed.
- 5) Setting backup option: You can select the method to back up the database.
- 6) Backup database: You can backup all database files that are used in the database manager.
- 7) Restore database: You can restore the database files that are backed up already.
- 8) Exit: It is used to close the database manager.

Each of these menu items will be discussed in the following sections below.

14.1 Table Manager

The "table manager" dialog box is where you can create, delete, or modify a table. This dialog box contains the following controls.

- 1) Table name list: It displays the name of registered tables, and their order in the list.
- 2) Add table button: Using this option, you can create a new table.
- 3) Modify table button: Using this option, you can change the name of a table, or modify the structure of the table, by adding or deleting fields.
- 4) Delete table button: Using this option, you can delete the table that you have selected in the table name list.
- 5) Set default table button: Using this option, you can set the table that opens by default when you run the program.
- 6) Close button: After closing the "table manager" dialog box, it will take you back to where you were before you started the "table manager" dialog box. When there is no registered table, if you

press "enter" at the "close" button, the database manager program will be closed.

You can move between each of these controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

14.1.1 Add Table

"Add table" is a dialog box where you can create a new table. This dialog box contains "table name" edit box, "registered fields" list, "add field" button, "modify field" button, "delete field" button, "previous field" button, "next field" button, "confirm" button and "cancel" button. You can move between these controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

Suppose you want to create a table called "addressbook" which contains 4 fields: name, telephone, address, and memo. You can create this table as follows.

- 1) In the "table manager" dialog box, press "tab (space-4-5)" to move to the "add table" button, and press "enter." Or you can just press "a (dot 1)" in the dialog box.
- 2) Then, the "add table" dialog box will appear, and the "table name" edit box will be focused.
- 3) Type "addressbook" and then press "tab (space-4-5)."
- 4) Then, the "registered fields" list will be focused. At first, "no list 0/0" will be displayed in the list. As you add fields to this table, they will be added to this list box.
- 5) Press "tab (space-4-5)" to move to the "add field" button, and press "enter." Or you can just press its shortcut key, "a (dot 1)."
- 6) Then the "add field" dialog box will be opened, and the "field name" edit box will be focused.
- 7) Type "name" here, and then press "tab (space-4-5)."
- 8) Then, the "field type" combo box will be focused. Press "space-4" or "space-1" to move to "edit box," and press "tab (space-4-5)."
- 9) The "primary key" check box will be focused. If you want to set the current field as the primary key, press "space" in order to check it.
- 10) Press "tab (space-4-5)" to move to the "confirm" button, and press "enter." Now, the "name" field has been added to the "addressbook" table.

If you want to cancel adding the field, press "tab (space-4-5)" once more to move to the "cancel" button, and press "enter." If you have added a new field, you will get a message saying that a new field has been added. Then, the "registered fields" list will be shown again. Now, "name" field appears in the list, with the form, "name (edit box, pri) 1/1". Since only one primary key exists in a table, if you have set a field as the primary key, the "set primary key" check box will not be shown in the "add field" dialog box when you add another field. Add the "telephone", "address", and "memo" fields by repeating the step 5 through 10 above. Note that you may want to set the "field type" of "telephone" field to "number", "address" to "edit box", and "memo" to "multi edit box". Once you have added all of the fields you want, press "tab (space-4-5)" to move to the "confirm" button, and press "enter."

If you need to change a name of a field that is registered, move to a field name that you want to change on a "registered fields" list. Then press "m (dots 1-3-4)" or "tab (space-4-5)", and enter on a "modify field." It appears as "field name: (selected filed name)", here you type the Name you want, and press "enter."

Even though you can change a name of a field, it is not possible to change the property of that field.

If you want to delete an already registered field, press "space-1" or "space-4" repeatedly in the "registered fields" list to move to the name of the field you want to delete. And then press "tab (space-4-5)" repeatedly move to "delete field" button and press enter or press "d (dots 1-4-5)," the shortcut key for the "delete field" button. Or you can also press "tab (space-4-5)" repeatedly to move to the "delete field" button and press "enter."

To change the order of a field, which is in your table, you can move to the field that you want to change. This can be done when you are in the "registered fields" list. Once you are on the field, press "p (dots 1-2-3-4)" or "n (dots 1-3-4-5)." Or you press "tab (space-4-5)" and enter on a "previous field" button or "next field" button.

Then, the "add table" dialog box will be closed, and the "table name" list box will be shown again. The newly created table will be added to this list, and "address book 1/1" will be shown in the list. To close the

"table manager" dialog box, press "tab (space-4-5) to move to the "close" button, and press "enter." Or you can just press "space-z (dots 1-3-5-6)" to close the dialog box. Then, the "search records" dialog box will be opened, and the "name" field, the first field of the "address book" table, will be shown. Here, you can type the name you want to search for.

14.1.2 Modify Table

"Modify table" is used to modify the name or structure of a registered table. It contains the same controls as in the "add table" dialog box. To modify a table, press "space-m (dots 1-3-4)" or F2 to open the menu, and press "enter" on "table manager." Or you can just press the hotkey for "table manager", "enter-t (dots 2-3-4-5)." The "table name" list will be focused when the "table manager" dialog box is opened. Press "space-1" or "space-4" to move to the table that you want to modify, and press "m (dots 1-3-4)," the shortcut key for the "modify table" button. Or you can press "tab (space-4-5)" repeatedly to move to the "modify table" button, and press "enter." Then, a dialog box where you can modify the table will appear. This table is same as the "add table" dialog box. The only difference is that the "table name" edit box, and "registered fields" list contain the information already stored in the table. You can not change the name of table. If you want to add additional fields, press "tab (space-4-5)" to move to "add field" and press "enter." And then type in the new field name and press "enter." If you want to delete an already registered field, press "space-1" or "space-4" repeatedly in the "registered fields" list to move to the name of the field you want to delete. And then press "tab (space-4-5)" repeatedly move to "delete field" button and press enter or press "d (dots 1-4-5)," the shortcut key for the "delete field" button. Or you can also press "tab (space-4-5)" repeatedly to move to the "delete field" button and press "enter."

To change the order of a field, which is in your table, you can move to the field that you want to change. This can be done when you are in the "registered fields" list. Once you are on the field, press "p (dots 1-2-3-4)" or "n (dots 1-3-4-5)". Or you press "tab (space-4-5)" and enter on a "previous field" button or "next field" button.

If you need to change a name of a field that is registered, move to a field name that you want to change on a "registered fields" list. Then press "m (dots 1-3-4)" or "tab (space-4-5)", and enter on a "modify field." It appears as "field name: (selected filed name)", here you type the Name you want, and press "enter".

Even though you can change a name of a field, it is not possible to change the property of that field.

14.1.3 Delete table

This option is used when you want to delete a table. To delete a table, Press "space-m (dots 1-3-4)" or F2 to open the menu, and press "enter" on "table manager." Or you can press "enter-t (dots 2-3-4-5)," the hotkey for "table manager." When the "table manager" dialog box is opened, the "table name" edit box will be focused. In this list box, you can move to the name of the table you want to delete by pressing "space-4" or "space-1" repeatedly, and press "d (dots 1-4-5)," the shortcut key for the "delete table" button. Or you can press "tab (space-4-5)" repeatedly to move to the "delete table" button, and press "enter." Then, "delete table? Yes" will be displayed. If you want to delete, press "enter," and if you want to cancel, press "space" to select "no," and press "enter."

14.1.4 Set Default Table

When you set a table as the default table, whenever the database manager is started, the table will be activated and you will be placed in the search dialog. You can search and add fields on this table. If you have registered more than one table and there is a table you use more frequently than the others, it may be convenient for you to set this table as the default table. However, if no table has been set as the default table, the table that was used the last time will be activated when the database manager is started. To set a table as the default table, press "space-m (dots 1-3-4)" or F2 to open the menu, and press "enter" on table manager. Or you can also press "enter-t (dots 2-3-4-5)," the hotkey for "table manager." Then, the "table manager" dialog box will appear, and the "table name" list will be focused. In this list, press "space-4" or "space-1" repeatedly to move to the name of the table you want to set as the default table. Then press "s (dots 2-3-4)," the shortcut key for the "set default

table," or press "tab (space-4-5)" repeatedly to move to the "set default table" button and press "enter." Or you can press "enter" on the name of the table in the "table name" list. Then, you will get a message saying that the table is set as the default table, and the "table manager" dialog box will be closed.

14.2 Add Record

You can use this option to add information to a table that you have created. When the database manager is started, the "search records" dialog box will be opened at first. To open the "add record" dialog box, press "space-m (dots 1-3-4)" to open the menu, and press "enter" on "add record." Or instead of using the menu, you can just press "enter-i (dots 2-4)." You can think of a record as a collection of information (fields) for an object (record). Let's consider the "addressbook" table you created in the previous section. Adding records to this table can be performed as follows.

- 1) Press "space-m (dots 1-3-4)" or F2 to open the menu, and press "enter" on "add record." Or instead of using the menu, just press "enter-i (dots 2-4)."
- 2) Then the "name" field, the first field in the "addressbook" table, will be shown. Here, you type the name you want to add, and press "tab (space-4-5)."
- 3) Then, the "telephone" field will be focused. Here, type the phone number. Since this field is of "number" type, you can type only a limited set of characters such as numbers and hyphen. You can enter a number without the leading number sign. If you press "space" instead of (hyphen), the hyphen will be entered.
- 4) Press "tab (space-4-5)" to move to the "address" field. Type the address.
- 5) Press "tab (space-4-5)" to move to the "memo" field. Since this field is of "multi edit box" type, you can type multiple lines. To start a new line, press "enter."
- 6) Press "tab (space-4-5)" to move to the "confirm" button. If you press "enter" here, the one record that you have just entered will be added to the table. If you do not want to save the record you have just typed in, press "tab (space-4-5)" once more to move to the "cancel" button, and press "enter." Or you can just press "space-e (dots 1-5)."

If you have added a record, the "name" field will be focused again so that you can add another record. If you press "shift-tab (space-1-2)" at a field, the focus will be moved to the previous field.

To go back to the "searching address" dialog box, press "enter-s (dots 2-3-4)." To open the "table manager" dialog box, press "enter-t (dots 2-3-4-5)." If you open these dialog boxes while you are entering a record, you will be asked if you want to save the record. Select "yes" or "no by pressing "space" or "backspace," and press "enter." If you select "yes", the record will be saved, and if you select "no", it will not be saved and open the specified dialog box. If you select "cancel," the dialog box will not be opened.

14.3 Search Records

After you have added your records, if you want to search for information that is in your records, you can use the "search records" dialog box. To open the "search records" dialog box, press "space-m (dots 1-3-4)" and press "enter" on "search records." Or instead of using the menu, just press "enter-s (dots 2-3-4)." Then, the "search records" dialog box will be opened, and the first field of the table will be focused. Here, you can type the text that you want to search for. If you want to search for records using content from more than one field, press "tab (space-4-5)" to move to another field. Type the text to search for, and press "enter." Then, the "list of records found" will be opened and the search result will be shown in the "list of records found." Being able to search in more than one field can be useful if you are searching for those who have the same first and last name.

In the "list of records found," each record will be shown in the following form. "(the name of the first field): (other information in the record) xx/yy". "yy" is the total number of records found, and "xx" is the order of the current record in the list. If no record has been found, you will get the message "no matched record," and the current field will be shown again, so that you can type another text to search for. You can move through the "list of records found" as follows.

1) Move by records

Move to the next record: Space-4 or down scroll button Move to the previous record: Space-1 or up scroll button

Move to the last record: Space-4-5-6

Move to previous same field different record: Space-3

Move to next same field different record: Space-6

Move to the first record: Space-1-2-3

2) Move between the fields in a record

Move to the next field: Space-5 Move to the previous field: Space-2

Move to the last field: Space-4-6 Move to the first field: Space-1-3

In the "list of records found," if you want to search for different text, you can press "enter-s (dots 2-3-4)" again to open the "search records" dialog box. Then, type the new text that you want to search for.

If you want to delete a record found, press "space-1" or "space-4" to move to the record, and press "space-d (dots 1-4-5)" in any of the fields in the record. Then, you will be asked if you really want to delete the record. Here, you can select "yes" or "no" by pressing "space" or "backspace." If you press "enter" after selecting "yes," the record will be deleted, and if you select "no," the deletion will be canceled. If you want to search for records in another table, press "enter-t (dots 2-3-4-5)" to open the "table manager" dialog box, and press "enter" on the name of the table that you want to activate. If you want to change the content of a record, select the record by pressing "space-1" or "space-4" repeatedly. And press "enter-m (dots 1-3-4)" at any field in the record. Then, the same dialog box as the "add record" dialog box will be opened. To change the content of some fields, move to the fields by pressing "tab (space-4-5)," type the new content of the fields, and press "enter." To save the modified content of a record, press "enter" after typing the contents of all the fields that you want to change. Or you can move to the "confirm" button by pressing "tab (space-4-5)" repeatedly, and press "enter." If you want to cancel modifying the record, press "tab (space-4-5)" once more to move to the "cancel" button and press "enter."

14.4 List of Records Found

The "list of records found" will appear when the "search records" was performed successfully. While you are using the "add record" or "search records" dialog box, if you want to go to the "list of records found," press "space-m (dots 1-3-4)" or F2 to open the menu, and press "enter" on "list of records found". Or instead of using the menu, you can just press "enter-f (dots 1-2-4)."

14.5 Setting Backup Option

To backup your database file, you can do it manually using the "backup database" function. You can also backup your database file automatically by using the "setting backup option." To activate the "setting backup option" function, press "space-m (dots 1-3-4)" or "F2" to open up the menu. Then press "space-4" or "space-1" repeatedly to move "setting backup option." Then press "enter" on it. Or, you can press "e (dots 1-5)" in the menu to go to "setting backup option." You can also activate the function without opening up the menu by pressing "enter-e (dots 1-5)."

If you activate the function, you will see a dialog box. The dialog box has three controls: "backup mode" radio button, a "confirm" button, and a "cancel" button. You can switch between controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." To switch between radio buttons, you can press "space-1," "backspace," "space-4," or "space."

The "backup mode" has three radio buttons: "manual backup," "always backup changes when exiting," and "prompt backup changes when exiting."

- 1) If you select the "manual backup," it will not create a new backup file even though there may be changes in the database. In this case, you can only make a new backup file by using the "backup database" menu.
- 2) If you select the "always backup changes when exiting," a new backup file will be automatically created if you modify the database or add other information when you exit the database manager.
- 3) If you select the "prompt backup changes when exiting," you will s ee the message "backup changes? yes" when you exit the database manager, if you have modified the database or added ot

her information. If you press "enter" on "yes," it will automatically c reate a new backup file and exit the database manager. If you pre ss "space-4" once and press "enter" on "no," it will exit without mak ing a new backup file.

You can change the backup mode if you press "enter" after focusing on one of the three radio buttons. Or, you can press "enter" on "confirm" by moving to it by pressing "tab (space-4-5)." The default backup mode is set to "prompt backup changes when exiting."

14.6 Backup Database

If a cold reset occurs, or if your battery goes dead, all of the data in the Database manager will be lost. So, it is very important that you make a backup file every time you make a change to the Database file. To go to "backup database," open the menu by pressing "spacem (dots 1-3-4)" or "F2." Then, use the "space-1" or "space-4," and find "backup database." Then, press "enter." You can also press "u (dots 1-3-6)" while you are in the menu to get to "backup database." Or, you can press "enter-u (dots 1-3-6)" to activate this function without calling up the menu.

If you already have a backup file, you will hear the message "backup changes? Yes." If you have made any changes to your database file, press "enter" to create a new backup file. If you want to keep the previous backup file, press "space," locate "no," and press "enter" on it. When you make a backup file in your database manager, you will always have a new backup file with the extension SDF. The name of backup file is "UserDatabase.sdf"

14.7 Restore Database

If you want to restore the database file after a cold reset, press "space-m (dots 1-3-4)" or "F2" to call up the menu, and use the up and down arrow keys to find "restore database." Then, press "enter" on "restore database." Or, you can press "r (dots 1-2-3-5)" while you are in the menu to find "restore database." You can also press "enter-o (dots 1-3-5)" to activate this function, without calling up the menu.

If you activate the "restore database" function, and you already have an database file, you will hear the message, "database file already exists. restore? Yes" If you press "enter," the backup database file will be restored to the current database file. If you want to cancel, you press "space" and press "enter."

14.8 Hot Keys for Database Manager

Add record: Enter-i (dots 2-4)

Search records: Enter-s (dots 2-3-4) Table manager: enter-t (dots 2-3-4-5)

List of records found: Enter-r (dots 1-2-3-5) Setting backup option: Enter-e (dots 1-5) Backup database: Enter-u (dots 1-3-6) Restore database: Enter-o (dots 1-3-5)

1) Move by controls

Move to the next control: Tab (Space-4-5 or F3)
Move to the previous control: Shift-Tab (Space-1-2 or Space-F3)

2) Move in a list box

Move to the next list item: Space-4 or down scroll button Move to the previous list item: Space-1 or up scroll button

3) Select your answer in the prompt box

Move to the next answer: Space-4, Space, or down scroll button Move to the previous answer: Space-1, Backspace, or up scroll button

4) Move in the "list of records found"

Move to the next record: Space-4 or down scroll button Move to the previous record: Space-1 or up scroll button

Move to the last record: Space-4-5-6 Move to the first record: Space-1-2-3

Move to the next field: Space-5 Move to the previous field: Space-2 Move to the last field: Space-4-6 Move to the first field: Space-1-3

Move to previous same field different record: Space-3 Move to next same field different record: Space-6

15. Utility

The "utility" menu provides several special functions for use with the Braille Sense Plus B32. The "utility" menu has the following items:

"Calculator," (where you can do simple math equations as well as scientific calculations), "set date and time," (where you can set the Braille Sense Plus B32 internal clock), "check date and time," (where you can check the date and time), "check power status," (where you can check the remaining battery power), "setup Internet," (where you can adjust your Internet settings), "terminal for screen reader," (which allows you to connect the Braille Sense Plus B32 to your PC for use as a Braille display, external speaker, as well as many other useful functions). To access the menu items, press "space-1" or "space-4" in the "program menu," and press "enter" on the "utility" menu. Or, you can press "u (dots 1-3-6)" in the "program menu" to open the utility menu. The "utility" menu has several submenus under each of the menu items. The following sections will discuss each of these menu options and their functions in greater detail.

15.1 Calculator

Using the calculator on the Braille Sense Plus B32 you can do simple math equations as well as complex scientific calculations. The results and formulas will be displayed in Braille, and spoken by the Braille Sense Plus B32. While using the calculator, you can refer to the "help" menu by pressing "space-h (dots 1-2-5)." The "help" menu is very useful as you can quickly access hot key information for the various programs on the Braille Sense Plus B32.

When you want to use the calculator you can press "c (dots 1-4)" from within the "utility" menu. When using the calculator on the Braille Sense Plus B32, you need to type using computer Braille when calculating or inserting your formulas. You can initialize your calculation line by pressing "backspace-c (dots 1-4)." If you insert numbers or a function into a result, the result will disappear; and if you put in operators, you can get to the next step. In addition, you can keep your result in the calculator's memory, and you can recall it when you need the result. You can use the function and operators

via the calculator menu or you can use the hot keys depending on which method works best for you.

All of these functions are explained in greater detail below.

15.1.1 General Functions

"General functions" is a dialog box that contains the "general function list," a "confirm" button, and a "cancel" button. In the dialog box, you can navigate through the items with "tab ("space-4-5")" and "shift-tab ("space-1-2")". In the general function list, you can navigate the operators using "space-1" or "space-4." Or, in the list, you can press the first letter of the operator that you want to go to. In the "calculator," you can open the menu by pressing "space-m (dots 1-3-4)" or "F2," and press "enter" on "general functions." Or, you can press "g (dots 1-2-4-5)" in the menu to access "general functions." After starting the calculation, 0 will be displayed in computer Braille. On the calculation line, you can access the "general functions" by pressing "enter-g (dots 1-2-4-5)." If the dialog box pops up first, you will be placed on the general function list. Once in the list, you can select what you want, and press "enter" on it to run the operator since the default is set to the "confirm" button in the dialog. In the dialog box, you can cancel the operator selection by pressing "enter" on "cancel," "space-z (dots 1-3-5-6)," or "space-e (dots 1-5)." You can use hot keys of the operators for convenient access.

The hot keys of the operators are as follows:

Plus: dots 3-4-6 Minus: dots 3-6 Division: dots 3-4

Multiplication: dots 1-6 Percent: dots 1-4-6 Power: Backspace-4-5

Square Root: Enter-q (dots 1-2-3-4-5)

Decimal point: dots 4-6

Left parenthesis: dots 1-2-3-5-6 Right parenthesis: dots 2-3-4-5-6

PI: Enter-p (dots 1-2-3-4)

Exponential function: Enter-e (dots 1-5)

If you want to enter in negative numbers, you should type in minus (dots 3-6) and the number together in parentheses. For example, you should type in minus 2 in the following manner: (-2).

For the percent operation, you can get the result when you put in the numbers first and the percent sign (%) just after typing in the numbers. Immediately after you have typed in the percent sign (%), the number that you have typed in will be converted into a percent value. For example, 90 + 20% equals 90 + 18. You will see the number 18 on pressing the % sign since 18 is 20% of 90. So, you get 108 for your answer.

15.1.2 Variable Calculators

The "variable calculators" will keep your resulting answers and calculations in the memory. The "variable calculators" menu has four submenu items: "recall item," "delete all saved items," "save item," and "statistics functions." You can move between these items by pressing "space-4" or "space-1" repeatedly, and then press "enter" on the desired feature. To access these menu items, press "space-m (dots 1-3-4)" to call up the menu, and press "enter" on "variable calculators." Or, you can press "v (dots 1-2-3-6)" when you are in the menu.

15.1.2.1 Recall Items

"Recall items" is a dialog box, that has the following items "list," "delete," "display detail," a "confirm" button, and a "cancel" button. You can navigate through each of these items by pressing tab ("space-4-5") or shift-tab ("space-1-2"). You can access "recall items" by pressing "r (dots 1-2-3-5)" in the "variable calculators" menu. Otherwise, you can access the dialog box by pressing "backspace-r (dots 1-2-3-5)" in the calculation line. The "item list" displays "an item name: the result value," and you can move in the item name list by pressing "space-1" or "space-4." You can insert the item's result into your calculation if you press "enter" on the item name. You can also copy each item in the "item list." Press the "space" key to select an item in the "item list." Then, press "enter-i (dots 2-4)" to copy the selected items to the clipboard. The "display detail" shows the item name and its result with the default set to "no." If you want to review

the detailed information, press "space" to switch to "yes." Then, it will display "item name: the formula = its result value" in Braille. "Delete" is used to get rid of your registered item. If you want to delete an item, first, you should select the item that you want to be deleted, and then press "enter" on "delete." You can find the deleted item in "item list" by pressing "tab (space-4-5)." Or, you can press "space-d (dots 1-4-5)" on what you want to delete in the item name list. If you want to delete all of the items, you can select all of them by pressing "enter-a (dot 1)," and press "space-d (dots 1-4-5)." If you only want to delete some of them, you can select the items by pressing "space," and press "space-d (dots 1-4-5)" on the selected items.

15.1.2.2 Delete All Saved Items

When you use this function, you can delete all of the saved items that are stored in the "recall items." To activate it, you can call up the menu by pressing "space-m (dots 1-3-4)" or press "F2." Then, use the "space-1" or "space-4" to get to the "variable calculators" menu, and press "enter." Next, use the up and down arrows to go to "delete all saved items," and press "enter." You can also press "enter-d (dots 1-4-5)" while you are in the calculation line.

15.1.2.3 Save Items

"Save items" is a dialog box that has an edit window for typing in the item name, a "confirm" button and a "cancel" button. You can move between the control items by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". In the "variable calculators" menu, you can access "save items" by pressing "s (dots 2-3-5)." When you are in the calculation line, you can press "backspace-s (dots 2-3-4)" to open the save items dialog box. When you are on the calculation line if you type in the item name, and formula, "a=2+sin(30)," followed by pressing "enter," the calculation will be saved automatically. In your calculating result, you can access "save items" to type in an item name in the edit box, and then you can save it by pressing "enter" directly or by pressing "enter" on the "confirm" button. If you type in function names like "sin," "cos," or "pi" as an item name, you will see the message "invalid item name," and if you type in names that have already been saved, you will see a message that says, "replace variable a with current value? Yes." If you want to change the value,

press "enter" on "yes." And if you do not want to change the value, press "enter" on "no." Press "space" to toggle between "yes" and "no."

15.1.2.4 Statistics Function

If you select this menu item, a dialog box opens, which consists of a list box containing all the stored variables, a list box displaying the results of several functions, and a "close" button. You can move between these elements by pressing "tab (space-4-5)," or "shift-tab (space-1-2)." You can bring up this dialog box by pressing "backspace-t (dots 2-3-4-5)" in the calculator line, or by pressing "t (dots 2-3-4-5)" in the "variable calculators" menu. In the variable list, the variable names and their current values are displayed. You can move between these variables by pressing "space-4" or "space-1." In order to select a variable to be used in the calculation, press "space" on it. This list is the same as the one in the "recall items" dialog box. The only difference is that this dialog box always displays variable names and values, regardless of the value of "detail display" option. After you select all of the variables to be used in the calculation, you can press "tab (space-4-5)" to move to the "result" list. The "result" list displays the sum, average, variance, and standard deviation of selected variables. You can move between these items by pressing "space-4" or "space-1." If you want to copy some results in the list to the clipboard, first press "space" on the items to be copied, and then press "enter-I (dots 2-4)." (However, "copy to clipboard" in the menu cannot be used. Only this hotkey will work.) Once they are copied to the clipboard, they can be pasted in the word processor or other programs. To close the dialog box, press "space-z (dots 1-3-5-6)" or press "enter" on the "close" button. To get the statistics about another set of variables after reading the result, press "shift-tab (space-1-2)" to go back to the variable list. Then, press "space-e (dots 1-5)" to cancel all the selections. Now, select all the variables to be calculated in the same way as you did before, and press "tab (space dots-4-5) to read the result.

15.1.3 Sine Functions

The "sine functions" menu will be activated when you press "enter" on "sine functions," or press "s (dots 2-3-4)" in the menu. You can open

the menu by pressing "space-m (dots 1-3-4)." Or, you can activate the "sine functions" menu by pressing "enter-s (dots 2-3-4)" in your calculation line. The "sine function" list consists of "sine," "arc sine," and "hyperbolic sine." If you press "enter" on one of the three functions while moving with "space-1" or "space-4," or if you press "enter" on "confirm" on one of the functions while moving with tab ("space-4-5"), you can insert it into your calculation line after selecting one of the sine functions. Or, you can insert one of the three sine functions by pressing the first letter of each in the list.

15.1.4 Cosine Functions

You can activate the "cosine functions" by pressing "enter" on "cosine function," or if you press "c (dots 1-4)" in the menu. You can open the menu by pressing "space-m (dots 1-3-4). Or, in your calculation line, you can open the "cosine function" by pressing "enter-c (dots 1-4)." The "cosine function" list consists of "cosine," "arc cosine," and "hyperbolic cosine." If you press "enter" on one of the three functions while moving with "space-1" or "space-4," or if you press "enter" on "confirm" while moving with tab ("space-4-5"), you can insert it into your calculation line after selecting one of the three cosine functions. Or, you can insert one of the three cosine functions by pressing the first letter of each in the list.

15.1.5 Tangent Functions

You can activate the "tangent functions" when you press "enter" on "tangent functions," or if you press "t (dots 2-3-4-5)" in the menu. You can also open the menu by pressing "space-m (dots 1-3-4)." Or, in your calculation line, you can open the "tangent functions" by pressing "enter-t (dots 2-3-4-5)." The "tangent functions" list consists of "tangent," "arc tangent," and "hyperbolic tangent." If you press "enter" on one of the three functions while moving with "space-1" or "space-4," or if you press "enter" on "confirm" on one of the functions while moving with tab ("space-4-5"), you can insert it into your calculation line after selecting one of the three tangent functions. Or you can insert one of the three tangent functions by pressing the first letter of each in the list.

15.1.6 Logarithm Functions

The "logarithm functions" is a dialog box, which contains the following: "function list," a "confirm" button, and a "cancel" button. You can move between the three items by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". The function list consists of "common logarithm" and "natural logarithm," in which you can move by pressing "space-1" or "space-4."

You can activate the "logarithm functions" menu by pressing "enter" on "logarithm functions," or if you press "I (dots 1-2-3)" in the menu. Of course, you can open the menu by pressing "space-m (dots 1-3-4)." Or, in your calculation line, you can activate the "logarithm function" by pressing "enter-I (dots 1-2-3)."

When running the "logarithm functions," If you press "enter" on one of the functions while moving with "space-1" or "space-4," or if you press "enter" on "confirm" on one of the functions while moving with "tab ("space-4-5")"," you can insert it into your calculation line after selecting one of the logarithm functions. Or, you can insert "natural logarithm" by pressing "n (dots 1-3-4-5)" in the list. You can insert "common logarithm" by pressing "c (dots 1-4)."

15.1.7 Copy to Clipboard

The "copy to clipboard" function is used to copy your formula or result into the clipboard for pasting your formula or result in a document of the word processor. You can activate it by pressing "enter" on the "copy to clipboard," or by pressing "I (dots 2-4)" in the menu. You can open the menu by pressing "space-m (dots 1-3-4)" while running the calculator. Or, in the calculation line, you can press "enter-I (dots 2-4)" for the quick copy of your calculation into the clipboard directly. After copying, you can paste it in your document of the word processor.

When you activate "copy to clipboard," you will hear "copy completed," and the Braille Sense Plus B32 will return to your calculation line.

15.1.8 Option Settings

"Option settings" is a dialog box, which contains the following: "setting list," a "confirm" button, and a "cancel" button. You can move between the three items by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". The "setting list" consists of "radian" and "degree," in which you can move by pressing "space-1" or "space-4."

If you select "radian," you can get the PI value while using the trigonometric function. If you select "degree" and activate PI, you will get a wrong answer. You can activate the "option settings" if you press "enter" on it, or if you press "o (dots 1-3-5)" in the menu. Of course, you can open the menu by pressing "space-m (dots 1-3-4). Or, in your calculation line, you can activate the "option settings" by pressing "enter-o (dots 1-3-5)."

When running the "option settings," if you press "enter" on what you want in the setting list while moving with "space-1" or "space-4," or if you press "enter" on "confirm" on what you want in the setting list, while moving with "tab ("space-4-5")"," you will set the option.

15.1.9 Exit

This is used to exit the calculator. You can quit a calculation if you press "enter" on "exit," or if you press "z" in the menu. Of course, you can open the menu by pressing "space-m (dots 1-3-4). Or, in your calculation line, you can exit by pressing "space-z (dots 1-3-5-6)".

15.1.10 Sample Math Calculations

The following are examples for each of the math functions that you can perform when using the calculator on the Braille Sense Plus B32.

General functions:

1. Addition Plus

For Plus press "dots 3-4-6."

For example, to add the numbers 10 and 20, you would enter: 10+20.

The result is displayed as 30.

2. Subtraction Minus

For Minus, press "dots 3-6."

For example, to add the numbers 10 and 20, and then subtract 5, you would enter: 10+20-5. The result is displayed as 25.

3. Multiplication

For multiplication, press "dots 1-6."

For example, to multiply 10 by 20, you would enter: 10*20.

The result is displayed as 200.

4. Division

For Division, press "dots 1-4."

For example, to divide 20 by 10, you would enter: 20/10. The result is displayed as 2.

5. Percent

For Percent, "press dots 1-4-6."

If you want to calculate, what a 10 percent mark-up of 20 would be, enter the following, 20+10% which gives you the result 22. You get this answer because, 2 is 10percent of 20.

To calculate a 10 percent mark-down on 20, press: 20-10% which gives the result 18.

You get this answer because, 2 is 10 percent of 20.

To calculate what percentage 20 is of 10, press: 20/10% which gives you the result 200.

To calculate 10 percent of 20, press: 20*10% which gives the result 2. That is, 10 percent is 0.1. 20*0.1 = 2.

6. Power

For Power, press "BACKSPACE" with "dots 4-5."

For example, to calculate 2 to the power of 10, you would press: 2^10. The answer will be given as 1024.

7. Calculating Square Root

To perform the Square root function, you can press "enter" with "dots 1-2-3-4-5."

For example, to calculate the square root of 16, you press: Enter with dots 1-2-3-4-5, 16 ")". Then, press enter. Your answer will be given as 4.

8. Exponential

For Exponential you can press "enter" with "dots 1-5." For example, to calculate the Exponential of 2, you would press: Enter with dots 1-5 then 2, followed by the ")" and "enter." That is, exp (2) which gives the result 7.3890561.

9. Trigonometric Functions

Sine Functions:

For Sine, press "Enter" with "dots 2-3-4," and then "s." This is shown on the Braille display as, sin(.

For Arc Sine, press "enter" with "dots 2-3-4," then "a." This is displayed as asin(.

For Hyperbolic sine, press "enter" with "dots 2-3-4," then "h." This is displayed as sinh(.

In order to calculate the sine of a 30 degree angle you would type the following: Enter with dots 2-3-4, then "s," 30 and then")." Press "enter" and your answer is displayed as 0.5.

Cosine Functions:

For Cosine, you would press "enter with "dots 1-3," and then you would press "c." This is displayed as cos(.

For Arc cosine, press "enter," with "dots 1-3," then, "a." This is displayed as acos(.

For Hyperbolic cosine, press "enter" with "dots 1-3," then, "h." This is displayed as cosh(.

For example, to calculate the cosine of the 30 degree angles, you press: Enter with dots 1-3, C, 30 and then ")". Then, press "enter." Your answer will be given as

0.8660254.

Tangent Functions:

For Tangent, press Enter with dots 2-3-4-5 and then T. This is displayed as tan(.

For Arc tangent, press Enter with dots 2-3-4-5 then A. This is displayed as atan(.

For Hyperbolic tangent, press "enter," with "dots 2-3-4-5," then, "h." This is displayed as tanh(.

For example, to calculate the tangent of the 30 degree angles, you press: Enter with dots 2-3-4-5, T, 30 and then ")". That is, tan(30) which gives you the result of 0.57735027.

Logarithm Functions:

Common logarithm

For Common logarithm, press "Enter" with "dots 1-2-3," and then "n." This is displayed as log(.

For example, to calculate the common logarithm of the 100, you press: Enter with dots 1-2-3, N, 100 and then ")". That is, log(100) which gives the result 2.

Natural Logarithm

For Natural logarithm, press "enter" with "dots 1-2-3," and then, "e." This is displayed as In(.

For example, to calculate the natural logarithm of the 100, you press: Enter with dots 1-2-3, E, 100 and then ")". That is, ln(100) which gives the result 4.60517019.

15.2 Set Date and Time

If you want to set the Braille Sense Plus B32 internal clock, you can set it by pressing "enter" on "set date and time" in the "utility" menu. In the "utility" menu, you can locate the set date and time by pressing "t (dots 2-3-4-5)," or you can find it by navigating the "utility" menu with "space-1" or "space-4."

The set date and time is a dialog box, which consists of "time zone," "use daylight savings," "time format," "time," "date," a "confirm" button,

and a "cancel" button. You can move between each of these items by pressing "tab (space-4-5)" or "shift-tab (space-1-2)".

If you activate "set date and time" for the first time, you may see "time zone? Pacific Time (US & Canada); Tijuana (GMPT-08:00)" which is set as the default. In "time zone," you can review the "time zone" list by pressing "space-4" or "space-1," or by typing in the first letter of represented cities. If you selected one of the time zones, you can move to the next item by pressing "tab ("space-4-5")"," or you can move to the previous item by pressing "shift-tab ("space-1-2")".

The "use daylight savings" will display according to "time zone." Namely if daylight saving time is used in selected time zone, this item will display. If not so, this item is not display. You can check and uncheck this item by using "space."

The next item is "time format," where you can switch between 12 hour and 24 hour time. You can toggle between which time to use with "space-1" or "space-4."

Once you select a time, you can move to the next "time" by pressing "tab ("space-4-5")"." In "time," you can set your time. If you select 12 hour clock in the "time format," you can see A.M. or P.M. after the hour and minute. In the 12 hour clock, you can set the time after selecting A.M. or P.M. by pressing "space-x (dots 1-3-4-6)." In the 24 hour clock setting, you can type in a 24-hour-system number regardless of A.M. or P.M. When you put numbers in the time, you need to put a "space" or ": (colon)" between the hour and the minute. To set your time, you can move to the date by pressing "tab (space-4-5)." In the date, you should put in the month, date, and year in that order. You should use a 2-digit number for the month, a 2-digit number for the date, and a 4-digit number for the year while typing in a "space" or "/ (slash)" between them. After you have completed the necessary information, you can press "enter" on "confirm" by moving with "tab (space-4-5)," and then you will return to "set date and time." Or, you can press "enter" when you have completed entering all of the information because the default is set to "confirm."

15.3 Check Date and Time

You can check the current date and time here. To activate this function, press "space-4" or "space-1" in the "utility" menu, and then press "enter" on "check date and time." Or, you can activate this function by pressing "d" in the menu. Anywhere in the Braille Sense Plus B32, you can press "space-t (dots 2-3-4-5)" to check the time. If you press "space-t (dots 2-3-4-5)," the Braille Sense Plus B32 will say the time, and the Braille Sense Plus B32 will display the current time in Braille. Then, if you press tab ("space-4-5"), the Braille Sense Plus B32 will say and display today's date.

15.4 Wake up alarm

If you have set up the "wake up alarm" function, an alarm will sound on the Braille Sense Plus B32 at the specified time every day. If you want to open "wake up alarm," go to the "program" menu, move to "utility," and then press "enter." Then, use the "space-1" or "space-4" to find "wake up alarm," and then press "enter" on "wake up alarm." If this is the first time you have opened "wake up alarm," and you have not yet set the time or date in the Braille Sense Plus B32, the Braille Sense Plus B32 will then say, "set time:" After you set the time, the Braille Sense Plus B32 will display the "wake up alarm" dialog box. The Braille Sense Plus B32 will then say, "set time:" The "wake up alarm" dialog box contains the following: "set time," "bell," "term," "alarm duration," "repeat interval," "wake up call times" a "confirm" button, and a "cancel" button. You can move among these by pressing "tab ("space-4-5")" and "shift-tab ("space-1-2")". If you want to check the wakeup call settings, open this dialog box again. It will show you the current wakeup call settings. When the alarm sounds, the Braille display on the Braille Sense Plus B32 will also display the message "wake up alarm." If you want to stop the alarm, press "backspace-enter." After you press "backspace-enter," the Braille Sense Plus B32 will remain on, even though the power switch is turned to "off." In order to turn the Braille Sense Plus B32 off, you must turn the power switch to "on," and then back to "off" after you hit "backspace-enter." Then, the Braille Sense Plus B32 will be turned off, and the alarm will not sound again until you set it again. If you do not plan on being able to turn the unit off and on, you should turn on

the "power saving mode" in the "option" menu (as explained in section 2.4) to avoid draining the battery.

15.4.1 Set Time

When you open the "wake up alarm" dialog box, the Braille Sense Plus B32 will display the "set time" field. The value is set to the current time or the time specified previously. Here you can directly type in the time, or set the time using the shortcut keys, as explained in section 6.3. After you set the time, you should press "tab ("space-4-5")" to move to the next field. While you are anywhere in the Braille Sense Plus B32, you can check the time by pressing "space-t (dots 2-3-4-5)" to check the time.

15.4.2 Alarm Sound

You can select an alarm sound for the wake up alarm. If you press "tab ("space-4-5")" on "set time," you will hear the alarm sound that is currently set. Press "space-1" or "space-4" to change the alarm sound, and you will hear the different alarm sounds. Select one of the three alarm sounds that are available. If you have selected the sound that you want, press "tab (space-4-5)" to move to the next field.

15.4.3 Term

In this field, you can set which day of the week the alarm will go off. There are four options: "off," "once," "week days," and "every day." Move between these options by pressing "space-1" or "space-4." If "term" is set to "off," the alarm will not go off at the specified time at all. If "term" is set to "once," the alarm will go off only once. If "term" is set to "week day," the alarm will go off at the same time every weekday, Monday through Friday. If "term" is set to "everyday," the alarm will go off at the specified time 7 days a week, even on weekends. When you have selected the option you like, press "tab ("space-4-5")" to move to the next field.

15.4.4 Ringing Duration

This option sets the amount of time that the alarm will sound. The options are 1 minute, 2 minutes, or 3 minutes. Move between these

options by pressing "space-1" or "space-4." If you set the ringing duration to "1 minute," the alarm will sound for one minute, and then the alarm will be silent. To stop the alarm, press "backspace-enter."

15.4.5 Repeat Interval

This option sets the amount of time that will be between the times that the alarm sounds. For example, after the alarm has stopped sounding, it will ring again in 3 minutes, if you set the repeat interval to three minutes. The available settings are 1, 3, 5, 10, 15, or 20 minutes. Move between these options by pressing "space-1" or "space-4."

15.4.6 Wakeup Call Times

This option allows you to decide how many times the alarm will sound. The available settings are anywhere from 1 to 10 times. For example, if the alarm is not turned off by pressing "backspace-enter," it will repeat according to the number of times that you set for this option. Move between these options by pressing "space-1" or "space-4."

15.4.7 Confirm Cancel

If you press "enter" on the "confirm" button, the changed options will be saved, and the dialog box will be closed. If you do not want to save the changes you have made, press "enter" on the "cancel" button. The Braille Sense Plus B32 will keep the previous "wakeup call" settings, and close the dialog box.

15.5 Calendar

You can activate the calendar by pressing "enter" on "calendar" in the "utility" menu, or by pressing "I (dots 1-2-3)." The following options will be available when you are using the calendar. "solar calendar," "lunar calendar," and "day of week." In the calendar, you can check the three kinds of information starting from the year 1841 to the year 2043. If you type in a date that is not in the range and press "enter," you will get the message, "invalid date," and return to where you where you were typing in the date.

15.5.1 Using the Calendar

The "calendar" is composed of the "solar calendar," "lunar calendar," and "day of week." In the "lunar calendar," a leap month will display the month with "I (dots 1-2-3)." The calendar works according to a date unit. The default is the date that the Braille Sense Plus B32 was set to the last time the date was set. You can check the date in two ways.

The following is an explanation of how to check the dates.

1) Moving items

You can switch between "solar calendar," "lunar calendar," and "day of week" by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")".

2) Typing in date

In the calendar, you can type in a month, date, and year. For the year, you should type in a 4-digit number, and for the month and date, you should type in 2-digit numbers. It is possible to type these numbers in using computer Braille and regular grade 1 Braille without using the number sign. You can put "space" or "/ (slash)" between the month, date, and year. If you press "enter" after typing in a date, you can hear the date once, and go to the next item. For example, if you put the date in the "solar calendar," you will be on the "lunar calendar."

3) Hotkeys for switching dates

After putting in a date, you can check the "solar calendar," "lunar calendar," and "day of week" by pressing "tab (space-4-5)" or "shift-tab (space-1-2)."

Move to the next day: Space-6
Move to the previous day: Space-3
Move to the next week: Space-5
Move to the previous week: Space-2
Move to the next month: Space-4
Move to the previous month: Space-1
Move to the next year: Space-5-6
Move to the previous year: Space-2-3

15.6 Pronunciation Dictionary

The "pronunciation dictionary" is used to register or modify the Braille Sense Plus B32's pronunciation while it is speaking. You can activate it by pressing "p (dots 1-2-3-4)" in the "utility" menu.

The "pronunciation dictionary" is composed of the list, "add word" button, "modify word" button, "delete word" button and "close" button. You can move through those controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." The list will be shown as "word: xx - vv" where "xx" is the original word and "yy" is the word you wanted to hear instead of the original word. For example, if you wanted to hear "world health organization" for the original word "WHO" and added the word, the list will be listed as "word: WHO – world health organization." If there are many items on the list, you can move up or down through lists by pressing "space-1" or "space-4." Also you can click the cursor routing key corresponding to the item position you want to focus. For example, if there are 10 items in the list and you want to focus the 5th item, you can just click the 5th cursor routing key and you will focus on the 5th item on the list. The list will not be listed by the alphabetical order and it will be listed by the sequential order to be added.

If you want to add new word, you can add the word by pressing "enter" on "add word" button or you can press "space-I (dots 2-4)." Then you will meet "add entry:" Here you can type in the word you want to change its pronunciation and press "tab (space-4-5)" then you will meet "replacement:" Here you can type in the word you want to hear the pronunciation and then press "enter" or press "tab (space-4-5)" to move to "confirm" button and then press "enter." The word will be added completely and the focus will be returned to "add word" button. In case of adding the word by pressing "space-I (dots 2-4)," newly added word will be displayed. If you want to cancel this modification, you can press "enter" on "cancel" button or press "space-e (dots 1-5)" or press "space-z (dots 1-3-5-6)."

If you want to modify the registered word, in the list, you can move up or down by pressing "space-1" or "space-4" so that you focus the item you want to modify. And after moving to "modify word" button by pressing "tab (space-4-5)," press "enter." Or on the item you want to

modify, just press "space-m (dots 1-3-4)." Then you will meet "modify entry: (focused word)." At this time, if you press "tab (space-4-5)" once, you will meet "replacement: (new pronunciation)." Here you can type in the pronunciation you want to change and then press "enter." Or press "tab (space-4-5)" again to move to "confirm" button and then press "enter." Then the word will be modified completely and the focus will be returned to "modify word" button. In case of modifying the word by pressing "space-m (dots 1-3-4)," the modified word will be displayed. If you want to cancel this modification, you can press "enter" on "cancel" button or press "space-e (dots 1-5)" or press "space-z (dots 1-3-5-6)."

If you want to delete the registered word, in the list, you can move up or down by pressing "space-1" or "space-4" so that you focus the item you want to delete. And after moving to "delete word" button by pressing "tab (space-4-5)," press "enter." Or on the item you want to delete, just press "space-d (dots 1-4-5)." Then you will meet the prompt, "delete: yes." If you are sure to delete the item, press "enter." Otherwise press "space" to switch to "no" and then press "enter."

If you want to exit "pronunciation dictionary," you can press "enter" on "close" button or press "space-z (dots 1-3-5-6)."

15.7 Stopwatch

When you press "enter" on the "stopwatch," you will show "00:00:00." If you press "enter," the stopwatch will start. If you press "enter" again, it will pause, and the Braille Sense Plus B32 will say the elapsed time, and display it in Braille. Pressing "enter" again will restart the stopwatch from where it paused.

If you press "backspace" on "work" or "pause," it will let you know the elapsed time and will initialize into "00:00:00." While the stopwatch is working, pressing "space" will make the Braille Sense Plus B32 say the elapsed time at the moment. In this case, the Braille display is still just displaying the clock.

While the stopwatch is running, pressing "space-F2" will stop displaying the time while the stopwatch is still running. If you press "space-F2," the time will be displayed again.

If you press "tab ("space-4-5")" or "shift-tab ("space-1-2")" before the start of the stopwatch or while it is running, you can switch to the "count down timer." If you activate the "count down timer," you will be asked to put in hours, minutes, and seconds. When typing in the hours, minutes, and seconds, you should type in a two-digit number for the hour, minute and the second, regardless of whether you are using computer Braille or regular grade 1 Braille without using a number sign. If you press "enter" without typing in any numbers, the "count down timer" will start with the default, which is set to one minute. When started, the "count down timer" will display "count down xx minute," and it will start running. If you press "enter" in the "count down timer," the Braille Sense Plus B32 will tell you the remaining time, and then it will pause. If you press "enter" again, it will restart. Pressing "backspace" will initialize the "count down timer." If the timer reaches zero, you will hear a 10-second alarm, and the "count down timer" will initialize. If you press "backspaceenter" while the alarm is sounding, the alarm will stop and your timer will initialize, and will be ready to accept a new time.

If you press "tab (space-4-5)" or "shift-tab (space-1-2)" again anywhere in the count down timer, the stopwatch will be ready. If you want to exit the stopwatch or "count down timer," press "space-z (dots 1-3-5-6)" anywhere within the stopwatch or "count down timer," and you will return to the "stopwatch" menu.

15.8 Terminal for Screen reader

The "terminal for screen reader" function allows the Braille Sense Plus B32 to be used as a Braille display when hooked up to a computer that uses a compatible screen reader such as Window-Eyes, JAWS or Supernova. Before using this function, make sure that the Braille Sense Plus B32 is connected to your personal computer via a serial cable, bluetooth serial or to the USB client port. To turn on this function, go to the "utility" menu, and press "enter." Then, press "space-4," until you hear "terminal for screen reader." Then, press "enter." If you activate "terminal for screen reader," you will see the list of connection methods. In the list, you will see "serial port," "bluetooth serial port" and "USB port." Press "space-1" or "space-4" until you reach what you want to select. If you have

selected one, press "enter" and you will hear "terminal mode." The Braille Sense Plus B32 will no longer say anything, as it is now simply acting as a Braille display for your computer. If you fail to connect, you will be returned to the list of connection methods.

For information and support files on connecting the Braille Sense Plus B32 to the USB port with Window-Eyes see:

GWKB1043 - Configuring the Braille Sense Plus B32 to Work as a Braille Display via the USB Port

http://www.gwmicro.com/Support/Knowledge_Base/?kbnumber=GW KB1043

For information and support files on connecting the Braille Sense Plus B32 to the USB port with JAWS see:

GWKB1046 - Using the Braille Sense Plus B32 as a Refreshable Braille Display with JAWS

http://www.gwmicro.com/Support/Knowledge_Base/?kbnumber=GW KB1046

For more information on Bluetooth, refer to Section 13.

15.9 Setup Internet

The "setup Internet" function is used to set up your IP configuration. In "setup Internet," you will find "LAN," "modem," "ADSL," "Bluetooth DUN" and "wireless LAN." You can move between the four items by pressing "space-4" or "space-1." The "LAN" setup should be used if you are connecting to the Internet via a network or router. The "modem" setup should be used if you are connecting to the Internet via a dial-up modem. The "ADSL" setup should be used if you are connecting to the Internet via a DSL modem. To connect to the Internet via a wireless network, use the "wireless LAN" function.

If you want to activate "setup Internet," press "enter" on "setup Internet" in the "utility" menu, or press "I (dots 2-4)" in the "utility" menu. You can move through the "utility" menu items with "space-1" or "space-4."

If you want to access to Internet with the Braille Sense Plus B32, you must set the Internet settings at "setup Internet" that is one of the submenus of "utility" menu.

Or, if the PC in which the Active Sync program is installed is connected to Internet and the Braille Sense Plus B32 is connected to that PC, then you can connect the Braille Sense Plus B32 to Internet.

The functions of this menu are explained in greater detail in the following sections.

15.9.1 LAN Setup

If you are going to set up a LAN, you should first connect a LAN cable to the Braille Sense Plus B32. In this setup, you can decide whether you will use the automatic or manual setup to setup your IP configuration. If you want to set it up automatically, press "enter" on "setup IP: Automatic." Then, it will be set up automatically. For the automatic setup, your host server should provide DHCP service (Dynamic Host Configuration Protocol).

If you want to set up your IP configuration manually, move to "manual" by pressing "space-4" from the "setup IP: Automatic," and press "enter." Then, you will find the following: "IP," "subnet mask," "gateway," and "primary DNS." These settings require specific information. Please contact your Internet service provider for the right information. To type in the information, you should use computer Braille, and after typing in the information, you can move to the next item by pressing "space-4." Finally after completing the "primary DNS," press "enter." Then, you will see the message "setting completed." You will be returned to "setup internet" with your information saved. You can then use e-mail, msn messenger or the web browser.

15.9.2 Modem & Bluetooth DUN setup

If you are going to set up the Braille Sense Plus B32 to connect to the Internet via a modem, you should first put in a CF type modem card into the CF slot, and connect a phone line to the modem on the CF card. Then, activate "setup Internet" in the "utility" menu. After you have activated "setup Internet," move to the modem by pressing "space-1" or "space-4," and then press "enter."

If you wish to connect to Mobile network using Bluetooth DUN, you can move to "setup internet" in the "utility" menu and select "Bluetooth DUN" and enter on it. In this case, you don't need to insert CF

modem card into the Braille Sense Plus B32 and its user interface is same as setting up connection using the modem.

The modem setup contains the following: "connect list," "default," "register," "modify," "delete," and "close." You can move between these by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". Within each item, you can move by pressing "space-4" or "space-1."

The "connect list" has registered connection names. You can move between these by pressing "space-4" or "space-1."

The "default" is to set to the default connection name in the Internet setup. If you want to choose a connection as the default, go to the "connect list," and move to "default" by pressing "tab ("space-4-5")"." Then, press "enter."

"Register" is a dialog box where you can set up the environment regarding the connect group names. It has "connect name list," a "confirm" button, and a "cancel" button. You can move between these by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". The "connect name list" has "connect name," "connect number," "id," "password," and "modem speed." In "connect name," you can type in the host name to connect with, and in the "connect number," you can type in the number of the host. Here you can type in numbers and commas (,) only. You can type in numbers using computer Braille. In "ID" and "password," use computer Braille to type the ID and password that are required by the host server. In case of Bluetooth DUN, you can make the connection to Mobile network without any password according to Mobile server. In the modem speed, select one from the list by pressing "backspace" or "space." After completing each item, you can move to the next item by pressing "tab ("space-4-5")"." Finally, with "modem speed" completed, you can press "enter" to save your registration. Before saving it, you can cancel your choices by moving to "cancel" by pressing "tab ("space-4-5")"," and press "enter" on it.

"Modify" is used to modify the connect group. You can do this by moving to what you want to select in the "connect list," and then press "enter." You can also press "tab ("space-4-5")" to locate "modify." Otherwise, you can press "enter-m (1-3-4)" on the "connect name" in

the "connect list" directly. "Modify" has the same items as "register," and you use the menus in the same way.

In "delete," if you want to delete an item, you can move to what you want to delete in the "connect list," and then press "enter" on "delete." Use "tab ("space-4-5")" to move between the items. Or, you can delete an item by pressing "space-d (dots 1-4-5)" on what you want to delete in the "connect list."

If you want to exit the "modem setup," you can press "space-z (dots 1-3-5-6)," or you can press "enter" on "close" by moving to it by pressing "tab ("space-4-5")".

15.9.3 ADSL Setup

If you want to connect the Braille Sense Plus B32 to the Internet via a DSL connection, you should use the ADSL setup. First, you should plug in a LAN cable to the Braille Sense Plus B32's LAN port. If you press "enter" on "setup internet," you will first see "CB LAN 1/5." Then, go to ADSL by pressing "space-4" repeatedly. Press "enter" on "ADSL." It contains the following controls: connect list, default, register, modify, delete, and close. You can move between the controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". Within each control, you can move item by item by pressing "space-4" or "space-1."

In the "connect list," you will see the registered connect names. Select one by pressing "enter" on it. In "default," you can make one of the registered connect names the default connection. If you make a connection the default connection, that will be the connection that is used to connect to the Internet first. In "register," you can manage the connect names in the list. It has three controls: edit field, a confirm button, and a cancel button. You can move between the three controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". The edit field contains the following: connect name, ID, and password. You can move between the controls by pressing "space-4" or "space-1." When in the "connect name" control, type in the server host name. In "ID" and "password," you can type in what you want in ASCII. After completed filling in the appropriate information, press "enter" or press "enter" on "confirm" after pressing "tab ("space-

4-5")" moving. To cancel everything that has been typed in to the edit field, go to "cancel," and press "enter."

In "modify," you can modify a connect name. If you want to modify a connection in the "connect list," select the connect name you want to modify in the list. Then, press "enter" on "modify." Or, after you have selected the connect name, press "enter-m (dots 1-3-4)." "Modify" contains the same items as "register," and the text is typed in the same way.

Using "delete," you can delete selected connect names. If you want to delete a connect name in the "connect list," select the connect name you want to delete in the list, and then press "enter" on "delete." Or, after you have selected the connect name, press "space-d (dots 1-4-5)."

If you want to exit the ADSL setup, press "space-z (dots 1-3-5-6)," or press "enter" on "close."

15.9.4 Setup Wireless LAN

If you want to connect to a wireless network, you should use the "setup wireless LAN" function. In order to use the "setup wireless LAN" function, you must change the wireless option to "on" in the option menu.

Go to the "utility" menu that is located in the "program" menu by pressing "F1," and then press "space-4" repeatedly to move to the "utility" menu. Then, press "enter" on "utility." Next, move to "setup Internet" by pressing "space-1" or "space-4," and then press "enter" on "setup Internet." And then press "enter" on "wireless LAN."

The "wireless LAN" dialog box consists of the "access point" list, "advanced" button and "close" button. You can move between these controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")". If you do not have a wireless LAN turned on, you will hear "no item" when you press "enter" on "wireless LAN."

When you first open the "wireless LAN" dialog box, the focus is on the "access point" list. The list has the information of wireless access

points which is searched and the "add new..." to additional registration.

"Access point" list will let you know the "access point name," "encryption," and "sensitivity" of each item. (Ex: linksys, encryption: WEP, sensitivity: good.) If there is more than one access point in the list, you can move between them by pressing "space-1" or "space-4." Move to the "access point" that you want to connect to. And press "enter." Then you will show "the key is provided automatically" check box. If you don't use network key in Access Point, just press "enter." And if you are using network key in Access Point, press "space" and press "tab (space-4-5)." And then edit box will be displayed. In edit box, you have to input the encryption key and press "enter." And if your settings are correct, then you will hear "connected" after the "sensitivity," with connecting sound.

If you want to register new profile for hide Access Point, press the "add new…" then the dialog box to register new profile will be opened and this dialog box is same when opening "advance" common dialog box.

The "advance" common dialog box is used to modify the registered profile or add new profile or check the existed profile. If you press "enter" on the "advance" button while wireless LAN turned off, "no item" will be displayed. Pressing "enter" on the "advance" button, while wireless LAN turned on. The "advance" dialog box has 5 controls. You can navigate among these controls by pressing "tab ("space-4-5")" or "shift-tab ("space-1-2")".

The "advance" common dialog box contains "profile list," "add common dialog" button, "remove" button, "properties common dialog" button and "close" button controls.

- 1) "profile list": Here you will see the profile lists that you have registered. You can move through the list by pressing "space-4" or "space-1."
- 2) "add common dialog" button: You can register a profile here and this dialog is same when entering on 'add new' in lists of Access Point. "Add common dialog" has the 10 controls.

- (1) "setup IP: Automatic" combo box: You can switch between automatic and manual by pressing "space-4" or "space-1." If you select "manual," you will need to enter your IP address, subnet mask, gateway IP address, and DNS IP address by yourself. You can move between these computer edit boxes by pressing "space-4" or "space-1." Press "tab ("space-4-5")" to move to the next control.
- (2) "network name (SSID)" computer edit box: The edit box is empty and you can type in network name you prefer.
- (3) "network mode" combo box: Here you can select between "infrastructure," and "802.11 ad-hoc" mode by pressing "space-1" or "space-4."
- (4) "network authentication mode" combo box: Here you can select between "open," "shared," and "wpa-psk" by pressing "space-1" or "space-4."
- (5) "data encryption" combo box: Here you can select the data encryption method by pressing "space-1" or "space-4." If you select "open" or "shared" in network authentication mode, you can choose between "disable" and "wep." And if you select "wpa-psk" in network authentication mode, you can choose "tkip."
- (6) "the key is provided automatically" check box: If the "access point" does not provide a key for users automatically, uncheck this check box by pressing "space." The default is that the check box is checked.
- (7) "network key" computer edit box: This is a computer edit box to type the network key if the key is not provided automatically.
- (8) "key index" edit box: This is an edit box to type the key number of the wireless access point that matches the network key input.
- (9) "confirm" button: Pressing this button applies the changes.
- (10) "cancel" button: You can press this button to cancel the setup.

Selecting "open" in "data encryption" skips numbers 6 through 8, and checking "the key is provided automatically" check box will omit the numbers 7, 8.

3) "remove" button: If you want to delete a profile item in the profile list, select the profile item you wish to delete, and then press "r (dots 1-

- 2-3-5)" or go to the "remove" button by pressing "tab ("space-4-5")", and then press "enter" on "remove" button.
- 4) "properties common dialog" button: If you want to get information about a selected profile item in the profile list, press "enter" on the "properties common dialog" button after focusing on a profile item by using "tab ("space-4-5")". You can reconfirm the registered information in each item. You can modify an item here directly. In order to exit from "advance" dialog box, you can press "space-e(dots 1-5)" or "space-z(dots 1-3-5-6)".

15.10 Network Status

Using this program, you can check if the Braille Sense Plus B32 is currently connected to the Internet. This program provides you with the information about the current connection type, the current IP of the unit, subnet mask, gateway, and mac address. To run this program, press "enter" on "network status," or press "n (dots 1-3-4-5)" in the "utility" menu. If you start the program, a list of information about the connection type and address will be displayed. If you press "tab (space-4-5)," the Braille Sense Plus B32 will display a "renew" button. If you press "tab (space-4-5) again, "exit" will be displayed. If you press "shift-tab (space-1-2)," the Braille Sense Plus B32 will move between these elements in the opposite direction. The first item in the information list (status) shows if the Braille Sense Plus B32 is currently connected to the Internet (online/offline), and what the current connection type is (LAN, Modem, ADSL, or Wireless LAN). The next item is the "current IP address," followed by "subnet mask," and then "gateway," and finally "mac address." You can move between these items by pressing "space-4" or "space-1." If the Braille Sense Plus B32 is not currently connected to the Internet, the status information shows that the Braille Sense Plus B32 is offline. If you press "enter" on the "renew" button, it tries to connect to Internet using the parameters specified in "setup Internet" once again, and displays on/offline status. To end this program, press "space-z (dots 1-3-5-6)" at any time in the program. Or pressing "enter" on the "exit" button will close the program too. You can also press "space-n (dots 1-3-4-5)" while you are in the "program" menu to open network status.

15.11 Check Power Status

You can activate "check power status" function by pressing "b" or press "enter" on the "check power status" in the "utility" menu. You can move to it by pressing "space-4" or "space-1" in the "utility" menu. Anywhere in the Braille Sense Plus B32, you can activate this function by pressing "space-1-6." In "check power status," you can check two kinds of information regarding the Braille Sense Plus B32's power. It will let you know the recharging percentage and if the Braille Sense Plus B32 is using the AC adapter or the battery. If you activate this function, you will see "xx% charged, using battery or AC power." After checking it, you can exit by pressing "space-z (1-3-5-6)," which will return you to the menu.

15.12 Backup/Restore Option

"Backup/restore option setting" is a program where you can backup/restore the option settings for each program in the Braille Sense Plus B32 all at once. This program can be found in the "utility" menu. You can run this program by pressing "k (dots 1-3)" in the "utility" menu. If you run this program, a dialog box will be opened. This dialog box contains: "program option check box list", "select all" button, "backup" button, "restore" button, and "cancel" button. You can move between the check boxes in the "program option list", by pressing "space-1" or "space-4." You can move between these controls by pressing "tab (space-4-5)" or "shift-tab (space-1-2)." The "program option check box list" contains "option settings", "file manager option", "word processor option", "address manager option", "schedule manager option", "media player option", "web browser option", "e-mail option", "messenger option", "Bluetooth option" and "database manager option".

In this list, you move to the program option and check it by pressing "space." If you want to uncheck it you can do so by pressing "space" again. After you select all the options you want to backup or restore, press "enter" on the "backup" or "restore" button. If you want to select all of the programs in the list, press "enter" on the "select all" button. If you press "enter" on "backup" or "restore" button, the dialog box will be closed.

If you press a "backup" button, it lets you see a list in which you can select a path where to store a backup file. It shows up "flashdisk" as default values. Here you move to disk or folder where you want to store a file, by using navigation key in a "file manager" program. And you select a folder or disk by pressing "space," press "enter", it turns up that a backup file is stored in selected folder. Each one of these options has its own backup file. This means that when you backup each of the 5 options, it will generate 5 backup files. If you need to store a backup file in a root of disk, refer to this way. When it comes out a name of disk, you press "enter" after selecting a disk by pressing "space."

If you press a "restore" button, it lets you see a list in which you can select a path where to restore a backup file. A way how to move or select a folder or disk is the same as "backup." If you select a folder that is not back upped, you can be seen a message which tells that there is no backup option file.

If you cold reset your Braille Sense Plus B32, or its battery is fully discharged, the main option settings and settings for each program will be lost, and initialized to the default values. If you backup options using this program right before you cold reset, you can restore the option settings you set previously.

15.13 Upgrade Braille Sense Plus B32 OS

If you activate this function, you can update the Braille Sense Plus B32 either through an Internet connection or from a disk that contains the upgrade file. If you decide to upgrade using an Internet connection, you must first complete the "setup Internet" function. If you update the Braille Sense Plus B32, all of the settings will be returned to their default status. Data in the flashdisk will be protected. However, we recommend that you backup your files before updating the Braille Sense Plus B32 OS.

While updating, you cannot cancel the update. Note that you must not press the reset button while updating, and you should avoid power failure. We recommend that you do not touch the Braille Sense Plus B32 while it is updating. It may take up to 30 minutes to update the Braille Sense Plus B32, though it depends on the speed of

your Internet connection. On completing the setup, the Braille Sense Plus B32 will reboot again to finish the update.

15.13.1 Upgrading the Braille Sense Plus B32 OS Using the Internet

To upgrade the Braille Sense Plus B32 OS via the Internet, complete the following steps:

- 1) Make sure an Internet connection is available. Press "enter" on "U pgrade Braille Sense Plus B32 OS" in the "utility" menu. Then, "U pgrade: Online" will appear.
- 2) Now, press "enter" on "Upgrade: Online." The Braille Sense Plus B32 will connect to the HIMS server, and your current software ver sion will be compared to the HIMS server version. You will then b e asked if you want to continue to upgrade. If you press "enter" on "no," the upgrade will be cancelled. Press "space" to toggle between "yes" and "no." If you press "enter" on "yes," the Braille Sense Plus B32 will download the upgrade file, the upgrade will stop. If the upgrade fails, it will give you the message "Internet connection is not available. Check your cable and try again." To try the upgrade again, press "space-z (1-3-5-6)" to cancel, and then activate upgrade Braille Sense Plus B32 OS again. If the connection is successful, the updated files will be downloaded, and the Braille Sense Plus B32 will start upgrading. If you do not have enough memory available on the flashdisk, the Braille Sense Plus B32 will be unable to update until you make room for the upgrade files by deleting any unnecessary files from the Braille Sense Plus B32.
- 3) After downloading the upgrade file, Braille Sense Plus B32 will aut omatically start the upgrading process. Please remember that you must not do anything to the Braille Sense Plus B32 until the upgrade is complete. When the upgrade is complete, you will be returned to the "program" menu, and you will hear "file manager."
- 4) After you have completed the upgrade, you should check the softw are version by pressing "space-v (dots 1-2-3-6)" while you are in the "program" menu.

15.13.2 Upgrading the Braille Sense Plus B32 OS from a Disk

To upgrade the Braille Sense Plus B32 OS from a disk, complete the following steps:

- Connect a disk (such as a compact flash card, SD card or USB me mory stick) to the Braille Sense Plus B32. The disk must have the upgrade file stored on it. Then, press "enter" on "Upgrade Braille Sense Plus B32 OS."
- 2) Then, "Upgrade: online" will appear. Press "space-4" to go to the "Upgrade: Offline." Then, press "enter." Then, you will see the disk list. Press "space-4" repeatedly to go to the disk that contains the upgrade file. Then, press "enter."
- 3) You will then be asked if you want to continue to upgrade. If you p ress "enter" on "no," the upgrade will be cancelled. Press "space" t o toggle between "yes" and "no." If you press "enter" on "yes," the Braille Sense Plus B32 will start upgrading.

 This step will not appear when your current software version

is not the latest version.

- 4) The Braille Sense Plus B32 will automatically start the upgrading p rocess. Please remember that you must not do anything to the Br aille Sense Plus B32 until the upgrade is complete. When the upg rade is complete, you will be returned to the "program" menu, and you will hear "file manager."
- 5) After you have completed the upgrade, you should check the softw are version by pressing "space-v (dots 1-2-3-6)" while you are in the "program" menu.

15.14 Hot Keys for Utility

Calculator: c (dots 1-4)

Calculator initialize: Backspace-c (dots 1-4) Delete numbers or operators: Backspace

General function: Enter-g (dots 1-2-4-5)

Plus: dots 3-4-6 Minus: dots 3-6 Division: dots 3-4 Multiplication: dots 1-6 Percent: dots 1-4-6 Power: Backspace-4-5

Square Root: Enter-q (dots 1-2-3-4-5)

Decimal Point: dots 4-6

Left Parenthesis: dots 1-2-3-5-6 Right Parenthesis: dots 2-3-4-5-6

PI: Enter-p (dots 1-2-3-4) Exp: Enter-e (dots 1-5)

Variable Function:

Recall Items: Backspace-r (dots 1-2-3-5)
Delete all saved items: Enter-d (dots 1-4-5)
Save Items: Backspace-s (dots 2-3-4)

Trigonometric Function: Enter-s (dots 2-3-4)

Sine: Enter-s (dots 2-3-4), s (dots 2-3-4) Arc Sine: Enter-s (dots 2-3-4), a (dot 1)

Hyperbolic Sine: Enter-s (dots 2-3-4), h (dots 1-2-5)

Cosine: Enter-c (dots 1-4), c (dots 1-4) Arc Cosine: Enter-c (dots 1-4), a (dot 1)

Hyperbolic Cosine: Enter-c (dots 1-4), h (dots 1-2-5)

Tangent: Enter-t (dots 2-3-4-5), t (dots 2-3-4-5) Arc Tangent: Enter-t (dots 2-3-4-5), a (dot 1)

Hyperbolic Tangent: Enter-t (dots 2-3-4-5), h (dots 1-2-5)

Logarithm Function: Enter-I (dots 1-2-3)

Natural Logarithm: Enter-I (dots 1-2-3), e (dots 1-5)

Common Logarithm: Enter-I (dots 1-2-3), n (dots 1-3-4-5)

Copy to Clipboard: Enter-I (dots 2-4)

Option Setting: Enter-o (dots 1-3-5)

Setting date and time: t (dots 2-3-4-5)

Move to the next day: Space-6 Move to the previous day: Space-3 Move to the next week: Space-5 Move to the previous week: Space-2

Move to the next month: Space-4 Move to the previous month: Space-1

Move to the next year: Space-5-6 Move to the previous year: Space-2-3

Move to 1 hour after: Space-4
Move to 1 hour before: Space-1
Move to 10 minutes after: Space-5
Move to 10 minutes before: Space-2
Move to 1 minute after: Space-6
Move to 1 minute before: Space-3

Switch Between a.m. and p.m.: Space-x (dots 1-3-4-6)

Checking date and time: Space-t (dots 2-3-4-5)

Calendar: I (dots 1-2-3)

Move items

Move to the previous item: Tab (space-4-5) Move to the next item: Shift-tab (space-1-2)

Move key for date in calendar

Move to the next day: Space-6
Move to the previous day: Space-3
Move to the next week: Space-5
Move to the previous week: Space-2
Move to the next month: Space-4
Move to the previous month: Space-1
Move to the next year: Space-5-6
Move to the previous year: Space-2-3

Pronunciation dictionary: p (dots 1-2-3-4) Move to the previous control: Tab (space-4-5) Move to the next control: Shift-tab (space-1-2) Move to the previous item in entry: space-1

Move to the next item in entry: space-4

Add word: Space-I (dots 2-4)

Modify word: Space-m (dots 1-3-4) Delete word: Space-d (dots 1-4-5)

Stopwatch: w (dots 2-4-5-6)

Stopwatch start, pause, restart: enter Check the elapsed time: backspace Stop Braille display: Space-F2

Restart Braille display: Space-F2

Switch between stopwatch and count down timer: "tab ("space-4-5")"

or "shift-tab ("space-1-2")"

Count down timer pause or restart: enter Count down timer Initialize: backspace

Exit stopwatch or count down timer: Space-z (dots 1-3-5-6)

Setup internet: I (dots 2-4)

Check power status: Space-1-6

Check network status: Space-n (dots 1-3-4-5)

Backup/restore option: k (dots 1-3)

Move to previous item: Space-1 or up scroll key Move to next item: Space-4 or down scroll key

Move to previous control: Shift-tab (space-1-2 or space-F3)

Move to next control: Tab (space-4-5 or F3)

Upgrade Braille Sense Plus B32 OS: u (dots 1-3-6)

Check download information: Space-I (dots 2-4) Cancel download and exit: Space-z (dots 1-3-5-6)

16. Using the help menu

The help section consists of various text files that will allow you to read about the many functions of the Braille Sense Plus B32. You will find the following help sections:

- 1. Help overview
- 2. Basic functions help
- 3. File manager help
- 4. Word processor help
- 5. address manager help
- 6. Schedule manager help
- 7. Email help
- 8. Media player help
- 9. Radio help
- 10. Web browser help
- 11. Daisy player help
- 12. Bluetooth manager help
- 13. MSN messenger help
- 14. Database manager help
- 15. Utility help
- 16. Using the help menu
- 17. Using activesync
- 18. Command summary
- 19. Command summary for USB keyboard
- 20. Troubleshooting guide
- 21. Accessories
- 22. Information about the Braille Sense Plus B32

The section, "Help overview," gives an entire overview of the Braille Sense Plus B32. This section covers all of the functions of the Braille Sense Plus B32. To access the help file, press "F1" to go to the "program" menu, and use "space-4" repeatedly until you find "help." Then, press "enter" on "help." Then, press "enter" on "Help overview." The navigation keys are the same as in the word processor. For a list of the navigation keys, please see section 18.3.2. When you are reading the manual on the Braille Sense Plus B32, you can search for text in the various sections by pressing "space-f (dots 1-2-4)," type the text you wish to find, and then press

"enter." You can find the next occurrence of the particular text that you have previously searched for by pressing "enter-f (dots 1-2-4)."

The section, "Basic functions help," gives an explanation of the "option" menu functions and common function, and how to use them. To access the help file, press "F1" to go to the "program" menu, and use "space-4" repeatedly until you find "help." Then, press "enter" on "help." Then, press "enter" on "Basic functions help." The navigation keys are the same as in the word processor. For a list of the navigation keys, please see section 18.3.2. Remember that when you are reading the manual on the Braille Sense Plus B32, you can search for text in the various sections by pressing "space-f (dots 1-2-4)," type the text you wish to find, and then press "enter."

You can find the next occurrence of the particular text that you have previously searched for by pressing "enter-f (dots 1-2-4)."

The remaining sections cover each of the functions of the Braille Sense Plus B32 in detail. To access these help files, press "F1" to go to the "program" menu, and use "space-4" repeatedly until you find "help." Then, press "enter" on "help." Then, press "enter" on the section that you want to read. The navigation keys are the same as in the word processor. For a list of the navigation keys, please see section 18.3.2. Remember that when you are reading the manual on the Braille Sense Plus B32, you can search for text in the various sections by pressing "space-f (dots 1-2-4)," type the text you wish to find, and then press "enter." Also, you can find the next occurrence of the particular text that you have previously searched for by pressing "enter-f (dots 1-2-4)."

The "Miscellaneous Hot Keys" section 18.3.2, lists the various hot keys that are available in the Braille Sense Plus B32. To access this section, press "F1" to go to the "program" menu, and use "space-4" repeatedly until you find "help." Then, press "enter" on "help." Then, press "enter" on "Command summary." The navigation keys are the same as in the word processor. For a list of the navigation keys, please see section 18.3.2. Remember that when you are reading the manual on the Braille Sense Plus B32, you can search for text in the various sections by pressing "space-f (dots 1-2-4)," type the text you wish to find, and then press "enter." You can find the next occurrence

of the particular text that you have typed previously by pressing "enter-f (dots 1-2-4)."

The "information about the Braille Sense Plus B32" section gives the copyright and version of the Braille Sense Plus B32, as well as the version of Windows CE that the Braille Sense Plus B32 is using. To access "information about the Braille Sense Plus B32" section, press "F1" to go to the "program" menu, and use "space-4" repeatedly until you find "help." Then, press "enter" on "help." Then, press "enter" on "information about the Braille Sense Plus B32."

If you want to save the information about the Braille Sense Plus B32, press "enter" on "Information about the Braille Sense Plus B32" of "help" and press "tab (space-4-5 or F3)". Braille Sense Plus B32 will display "save button." You press "enter" on this button. Then Braille Sense Plus B32 will display "save completed" and return to "save" button.

The saving file is named "bs-information.txt." And this file is stored in "flashdisk."

17. Using ActiveSync

17.1 What is ActiveSync?

ActiveSync is a program that allows mobile devices to connect to a personal computer. This program enables file transfers from a personal computer to a mobile device and vise versa. Also this program is able to synchronize the Braille Sense Plus B32 with Microsoft Outlook. ActiveSync is not shipped with the Braille Sense Plus B32. If you would like to use ActiveSync, you will have to download it from the Internet on to your personal computer.

17.2 Connecting the Braille Sense Plus B32 to a PC

Before connecting the Braille Sense Plus B32 to your personal computer for the first time, make sure that the Braille Sense Plus B32 is turned off. Once you have ActiveSync installed, you will need to plug a USB cable in to the USB slave port on the rear panel of the Braille Sense Plus B32. Then, plug the other end of the USB cable in to a USB port on your personal computer. Now, turn on the Braille Sense Plus B32. You will hear several sounds. First, on the Braille Sense Plus B32, you will hear chimes. Then, you will hear a "dingdong" sound on your computer, which lets you know the computer is connected properly to the Braille Sense Plus B32. You will again hear chimes on the Braille Sense Plus B32, and then on your computer.

17.3 Setting up the Braille Sense Plus B32 in the ActiveSync Program

After you have turned on the Braille Sense Plus B32, and you have heard all of the sounds, a screen will come up on your computer that has the heading, "Set Up a Partnership." You have a "yes" option and a "no" option on this screen. If you select "yes" on this screen, the next time you connect the Braille Sense Plus B32 to your computer, you will be able to have it synchronize with Microsoft Outlook automatically. If you select "no," the "Set Up a Partnership" screen will come up every time you connect the Braille Sense Plus B32 to your computer.

If you want to be able to synchronize the Braille Sense Plus B32 with Microsoft Outlook, select "yes," and then press the "next" button. Then, you will be asked to select a name that you want to call the mobile device. You can only use the following characters: _, A-Z, or 0-9. You cannot use spaces. Once you have entered an appropriate name, press "next." Then, a list of functions will appear on your computer. Each function has a check box located next to it. Make sure that only the "contacts" check box (that corresponds with Microsoft Outlook) is checked. Then, press "next." Then, the next dialog box that appears will say, "setup complete." Then, press "finish." ActiveSync will then look for changes, and synchronize with Microsoft Outlook. For more information on how to use ActiveSync or Microsoft Outlook, please visit www.microsoft.com.

17.4 Transferring Files to the Braille Sense Plus B32 Via ActiveSync

In order to transfer files to the Braille Sense Plus B32 from your computer, you will first need to find the file(s) on your PC that you want to transfer. Once you have found the file(s) that you want to transfer, make sure the files have been selected by using the "spacebar." After you have selected the file(s), press "ctrl-c" on your PC to copy the file(s). Then, go to the desktop on your computer by pressing "Windows-key-d." Press the letter "m" until you find "My computer." Press "enter" on "My computer." Then, press the letter "m" until you hear "mobile device," and press "enter." The mobile device is the Braille Sense Plus B32. After you have opened "mobile device," you will enter in to the file list on the Braille Sense Plus B32. One of the items in the list is "my computer." Press the letter "m" until you hear "my computer," and press "enter." Then, another file list will open. In this list, you will find the folder called "flashdisk." This is the same "flashdisk" that you hear under "file manager." Press "f" until you hear "flashdisk," and then press "enter." You will notice that all of the folders that you find in the "flashdisk" under "file manager" are located here. You can paste the file(s) here directly by pressing "ctrlv," or you can paste the file(s) in to one of the folders by pressing enter on one of the folders, and then pressing "ctrl-v" to paste the file(s).

If you want to copy folders from the Braille Sense Plus B32 to your PC via ActiveSync, follow the same steps; except, you will need to copy files from the Braille Sense Plus B32, and paste the file(s) to your PC in the directory where you want to store the file(s).

18. Command Summary

18.1 Common Combination Keys

Call up the program menu: F1

Run the individual program in the program menu F1-"shortcut key"

(varies for each program)
Call up the task ID list: F1-F4

Switch to previous program: Space-F2-F3

Switch to next program: F2-F3

Call up the menu in the individual program: Space-m (dots 1-3-4) or

F2

Exit: Space-z (dots 1-3-5-6)

Escape: Space-e (space-1-5) or F4

Move to the next control in a dialog box: Tab (space-4-5 or F3)

Move to the previous control in the dialog box: Shift-tab (space-1-2

or F3-F4)

Move to the previous character: Left arrow key (space-3)

Move to the next character: Right arrow key (space-6)

Move to the previous line/item: Up arrow key (space-1)

Move to the next line/item: Down arrow key (space-4)

Move to the beginning of line/item: Home key (space-1-3 or F2-up scroll button)

Move to the end of line/item: End key (space-4-6 or F3-down scroll

button)
Move to the top of a document or to the first item: Ctrl-home (space-1-2-3 or F1-F2-up scroll button)

Move to the bottom of a document or to the last item: Ctrl-end (space-4-5-6 or F3-F4-down scroll button)

Move to the previous page or to the first item of the previous 32-item group: Page up (space 1-2-6 or F1-F2)

Move to the next page or to the first item of the next 32-item group:

Page down (space 3-4-5 or F3-F4)

Scroll left: Up scroll button
Scroll right: Down scroll button

Move the cursor to each cell or move to an item: The corresponding

cursor routing key

Capital sign: Space-u (dots 1-3-6)

Read the current item again: Space-r (dots 1-2-3-5)

Say current time: Space-t (dots 2-3-4-5)

Check power status: Space-1-6

Call up the "option" menu: Space-o (dots 1-3-5)

Online help: Space-h (dots 1-2-5)

Checking software version: Space-v (dots 1-2-3-6) only in the Braille

Sense Plus B32 "program" menu.

Check network status: Space-n (dots 1-3-4-5) in the Braille Sense

Plus B32 "program" menu

Increase the voice volume: Backspace-F4 Decrease the voice volume: Backspace-F1

Increase the voice rate: Space-F4
Decrease the voice rate: Space-F1
Increase the voice tone: Enter-F4
Decrease the voice tone: Enter-F1

One-handed mode on: hold down F3 while turning on One-handed mode off: hold down F4 while turning on

Scroll voice on/off: F3-up scroll button

Selecting Braille cursor: F4-up scroll button

Selection control information: F2-down scroll button

Eight dot mode on/off: F1-down scroll button

18.2 File Manager

18.2.1 Navigation keys on the file list and menu list

Move to previous item: Up arrow key (space-1) or up scroll button Move to next item: Down arrow key (space-4) or down scroll button

Move to the beginning of the list: Ctrl-home (space-1-2-3)

Move to the end of the list: Ctrl-end (space-4-5-6)

18.2.2 Navigation Keys for the File List

Fast move to folder list or move to file list: Space-5-6

Move between file list and address window: Tab (space-4-5 or F3) /

shift-tab (space-1-2 or F3-F4)

Enter into selected folder or open the selected file: Enter

Move to the upper level folder: Backspace

Fast move to the top level disk: Space-1-2-5-6

18.2.3 Item (folder or File) Selection Key

Select item by item: Space

Continuous selection: Enter-b (dots 1-2)

Select all: Enter-a (dot 1)

18.2.4 Hot Keys for the Commands

Open: Enter-o (dots 1-3-5)
Open with: Enter-e (dots 1-5)
Zip: Enter-z (dots 1-3-5-6)
Unzip: Enter-u (dots 1-3-6)
Send: Enter-s (dots 2-3-4)
Copy: Enter-c (dots 1-4)
Cut: Enter-x (dots 1-3-4-6)
Paste: Enter-v (dots 1-2-3-6)

Delete: Enter-d (dots 1-4-5)

Rename: Enter-r (dots 1-2-3-5)

New document: Enter-n (dots 1-3-4-5)

New folder: Enter-f (dots 1-2-4)

File conversion: Enter-t (dots 2-3-4-5)

Select all: Enter-a (dot 1)

Sort files by: Enter-g (dots 1-2-4-5) Set file info: Enter-I (dots 1-2-3)

Display only files of type: Enter-w (dots 2-4-5-6)

Search file: Space-f (dots 1-2-4) Information: Enter-i (dots 2-4)

18.3 Word Processor

18.3.1 Hot Keys for the Commands

New document: Enter-n (dots 1-3-4-5)

Open: Enter-o (dots 1-3-5) Save: Enter-s (dots 2-3-4) Save as: Space-s (dots 2-3-4)

Close current document: Space-q (dots 1-2-3-4-5)

Print: Space-p (dots 1-2-3-4)

Environment setting: Enter-e (dots 1-5)

Exit: Space-z (dots 1-3-5-6)

Start selection: Enter-b (dots 1-2)

Copy: Enter-c (dots 1-4)

Add to the clipboard: Enter-p (dots 1-2-3-4)

Clear clipboard: Enter-d (dots 1-4-5)

Delete: Space-d (dots 1-4-5)
Cut: Enter-x (dots 1-3-4-6)
Paste: Enter-v (dots 1-2-3-6)
Insert from file: Enter-I (dots 2-4)
Insert date: Enter-w (dots 2-4-5-6)

Delete blank lines: Backspace-e (dots 1-5)

Select all: Enter-a (dot 1)

Change insert/overwrite mode: Space-i (dots 2-4)

Check spelling: Enter-k (dots 1-3)

Check spelling of the current word: Backspace-k (dots 1-3)

Find: Space-f (dots 1-2-4) Find again: Enter-f (dots 1-2-4) Replace: Enter-r (dots 1-2-3-5) Go to location: Enter-I (dots 1-2-3)

Go to previous page: Space-1-2-6 or F1-F2 Go to next page: Space-3-4-5 or F3-F4

Set Mark: Enter-m (dots 1-3-4)
Go to the mark: Enter-j (dots 2-4-5)

Go to previous document: Tab (space-1-2 or space-F3)

Go to next document: Shift-tab (space-4-5 or F3)

Read selected text: Backspace-b (dots 1-2)

Read beginning of selected text: Enter-u (dots 1-3-6)

Read from beginning to cursor: Backspace-g (dots 1-2-4-5)

Read from cursor to end: Enter-g (dots 1-2-4-5)

Auto scroll: up-down scroll buttons

Read status: Space-3-4

Braille document layout: Backspace-p (dots 1-2-3-4)

Braille paragraph layout: Backspace-1-2-4-6

General document layout: Backspace-t (dots 2-3-4-5)

General paragraph layout: Backspace-2-3-4-6

18.3.2 Miscellaneous Hot Keys

Move to previous character: Left arrow key (space-3) Move to next character: Right arrow key (space-6)

Move to previous word: Space-2 Move to next word: Space-5

Move to the beginning of the line: Home (space-1-3)

Move to the end of the line: End (space-4-6)

Move to previous line: Up arrow key (space-1) or up scroll button Move to next line: Down arrow key (space-4) or down scroll button

Move to previous paragraph: Space-2-3 Move to next paragraph: Space-5-6

Move to the beginning of the document: Ctrl-home (space-1-2-3)

Move to the end of the document: Ctrl-end (space-4-5-6)

Read current paragraph: Space-2-3-5-6

Read current line: Space-1-4
Read current word: Space-2-5
Read current character: Space-3-6

Delete current paragraph: Backspace-1-3-4-6

Delete current line: Backspace-1-4 Delete current word: Backspace-2-5

Delete current character: Space-d (dots 1-4-5) Confirm current cursor position: Space-1-5-6 Set view format character: Space-1-4-6

Set reading unit: Space-2-4-6 Set read only: Space-3-4-6

18.4 Address Manager

18.4.1 Move keys for adding an address or in the menu

Move to the previous field or menu item: Up arrow key (space-1) or up scroll button

Move to the next field or menu item: Down arrow key (space-4) or down scroll button

Move to the first field or menu item: Ctrl-home (space-1-2-3) Move to the last field or menu item: Ctrl-end (space-4-5-6)

18.4.2 Move Keys in the Search Result List

Move to the previous field: Space-2 Move to the next field: Space-5

Move to the first field: Home (space-1-3) Move to the last field: End (space-4-6)

Move to the previous record: Space-1 or up scroll button Move to the next record: Space-4 or down scroll button

Move to the first record: Space-1-2-3 Move to the last record: Space-4-5-6

Move to previous same field different record: Space-3 Move to next same field different record: Space-6

18.4.3 Hot keys for the Commands

Add address: Enter-I (dots 2-4)
Find address: Enter-s (dots 2-3-4)
Edit address: Enter-m (dots1-3-4)
Delete address: Space-d (dots 1-4-5)

Select all: Enter-a (dot 1)

Save as a file: Enter-t (dots 2-3-4-5)
Print address: Space-p (dots 1-2-3-4)
Backup address list: Enter-u (dots 1-3-6)
Restore address list: Enter-r (dots 1-2-3-5)
Setting backup option: Enter-e (dots 1-5)

Setting add/searching address fields: Enter-o (dots 1-3-5)

18.4.4 Miscellaneous Hot Keys

Tab: Space-4-5 or F3

Shift-tab: Space-1-2 or Space-F3 Cancel: Space-e (dots 1-5) or F4

Exit: Space-z (dots 1-3-5-6)

18.5 Schedule Manager

18.5.1 Hot keys for the commands

Move to the next field: Tab (space-4-5 or F3)

Move to the previous field: Shift-tab (space-1-2 or space-F3)

Add schedule: Enter-I (dots 2-4)

Search schedule: Enter-s (dots 2-3-4)

Modify schedule: Enter-m (dots 1-3-4)
Delete schedule: Space-d (dots 1-4-5)
Backup schedule: Enter-u (dots 1-3-6)
Restore schedule: Enter-r (dots 1-2-3-5)
Set backup option: Enter-e (dots 1-5)
Alarm option: Enter-o (dots 1-3-5)

Save schedule as file: Enter-t (dots 2-3-4-5)

Print schedule: Space-p (dots 1-2-3-4)

18.5.2 Move Keys in the Search Result List

 Move from an appointment to another in the schedule list Move to the previous appointment in the same day: Up arrow key (space-1)

Move to the next appointment in the same day: Down arrow key (space-4)

Move to the first appointment in the same day: Space-1-3 Move to the last appointment in the same day: Space-4-6

2) Move from one appointment to another in all the appointments registered

Move to the previous schedule: Space-2 Move to the next schedule: Space-5

Move to the first schedule: Space-2-3 or space-1-2-3 Move to the last schedule: Space-5-6 or space-4-5-6

18.6 E-mail

18.6.1 Hot keys that are used in the inbox

Call "service manager": Enter-m (dots 1-3-4) Receive new mail: Enter-n (dots 1-3-4-5)

Write mail: Enter-w (dots 2-4-5-6)

Reply: Enter-r (dots 1-2-3-5)

Reply all: Backspace-r (dots 1-2-3-5)

Forward: Enter-f (dots 1-2-4)

Call up "send mail in storage box": Enter-s (dots 2-3-4)

Call up "set path": Enter-p (dots 1-2-3-4) Call up "set option": Enter-o (dots 1-3-5) Call up "set spam": Enter-e (dots 1-5) Call up "local folder": Enter-d (dots 1-4-5)

Find: Space-f (dots 1-2-4)

Find again: Backspace-f (dots 1-2-4)

Move to unread message: Enter-u (dots 1-3-4) Move to folder: Backspace-x (dots 1-3-4-6) Copy to folder: Backspace-c (dots 1-4)

Add a sender to the address list: Enter-I (dots 2-4) (This is valid only

at the "from" item of the "inbox")

Delete received e-mail: Space-d (dots 1-4-5) (It is valid only at the

"subject" and "date" item in the "inbox")

Save the received e-mail as text file: Space-s (dots 2-3-4)

Print the received e-mail: Space-p (dots 1-2-3-4)

Cancel: Space-e (dots 1-5)

Cancel and exit from e-mail program: Space-z (dots 1-3-5-6)

18.6.2 Hot keys for Sending E-Mail Including Reply, Forward, and Save in the Mail Storage Box

Search address list: Enter-I (dots 1-2-3)

Attach file: Enter-f (dots 1-2-4) Send e-mail: Enter-s (dots 2-3-4)

Save in mail storage box: Space-s (dots 2-3-4)

Cancel: Space-e (dots 1-5)

Cancel and exit from e-mail program: Space-z (dots 1-3-5-6)

18.6.3 Hot Keys for Reading E-Mails or Writing an E-Mail Message

Start selection: Enter-b (dots 1-2)

Select all: Enter-a (dot 1)

Copy to the clipboard: Enter-c (dots 1-4)

Cut to the clipboard: Enter-x (dots 1-3-4-6) (This is not available

when you are reading e-mail in the "inbox")

Paste from the clipboard: Enter-v (dots 1-2-3-6) (This is not available

when you are reading e-mail in the "inbox")

Delete selection and delete a letter: Space-d (dots 1-2) (It is not valid

when you are reading e-mail in the "inbox")

Cancel block: Space-e (dots 1-5)

18.7 Media Player

18.7.1 Hot keys for commands

Open file: Enter-o (dots 1-3-5)
Open folder: Enter-f (dots 1-2-4)
Add file: Backspace-o (dots 1-3-5)
Add folder: Backspace-f (dots 1-2-4)
Save play list: Enter-i (dots 2-4)

Save as play list: Space-s (dots 2-3-4) Delete item: Space-d (dots 1-4-5)

Play: Enter, Play button

Pause/continue: Space, Play button

Stop: Backspace, Stop button

Previous track: Dot 3, previous button

Next track: Dot 6, next button 5th previous track: Dots 2-3 5th next track: Dots 5-6 First track: Dots 1-3

Last track: Dots 1-3

One minute previous: Dot 1 One minute next: Dot 4 5 seconds previous: Dot 2 5 seconds next: Dot 5

Volume up: Space-up scroll button

Volume down: Space-down scroll button

Speed up: Dots 3-4-5 Speed down: Dots 1-2-6

Call up the record dialog box: Enter-r (dots 1-2-3-5), Record button

Record: Record button

Pause/continue recording: Space, Record button

Play: Play button

Pause/continue play: Space, Play button

Stop: Backspace, Stop button

Delete play list during stop: Space-d (dots 1-4-5)

Set bookmark: Enter-m (dots 1-3-4) Delete bookmark: Enter-d (dots 1-4-5) Jump to bookmark: Enter-j (dots 2-4-5) Go to position: Enter-g (dots 1-2-4-5)

Configuration dialog box: backspace-c (dots 1-4)
Hold/resume hole: Previous button-next button
Playback setting dialog box: Enter-s (dots 2-3-4)
Record setting dialog box: Backspace-s (dots 2-3-4)

18.7.2 Hot Keys in the Play Information Tab

Move to the next information: Space-4 Move to the previous information: Space-1

"Pause" when it is play state and "play" when it is pause state: Space

Start playing: Enter

Stop playing: Backspace Play the next file: Dot 6 Play the previous file: Dot 3 Play the last file: Dots 4-6 Play the first file: Dots 1-3

Play the fifth file after the current file: Dots 5-6 Play the fifth file before the current file: Dots 2-3

One minute previous: Dot 1 One minute next: Dot 4

Go forward 5 seconds and play: Dot 5 Go backward 5 seconds and play: Dot 2

Volume up: Space-up scroll button

Volume down: Space-down scroll button

Speed up: Dots 3-4-5 Speed down: Dots 1-2-6

Open menu: Space-m (dots 1-3-4) Open help: Space-h (dots 1-2-5)

Move to "play list" tab: Space-4-5/space-1-2 Exit "media player": Space-z (dots 1-3-5-6)

18.7.3 Hot Keys in the Play List Tab

Move to the next file: Space-4 Move to the previous file: Space-1 Move to the last file: Space-4-6 Move to the first file: Space-1-3

Select/resume current file (while playing, it is used as play/pause):

Space

Start selecting files: Enter-b (dots 1-2) Start playing the selected files: Enter

Stop playing: Backspace

Delete the selected files in the play list: Space-d (dots 1-4-5)

Play the next file: Dot 6
Play the previous file: Dot 3
Play the last file: Dots 4-6
Play the first file: Dots 1-3

Play the fifth file after the current file: Dots 5-6 Play the fifth file before the current file: Dots 2-3

One minute previous: Dot 1 One minute next: Dot 4

Go forward 5 seconds and play: Dot 5 Go backward 5 seconds and play: Dot 2

Volume up: Space-up scroll button

Volume down: Space-down scroll button

Speed up: Dots 3-4-5 Speed down: Dots 1-2-6

Open menu: Space-m (dots 1-3-4) Open help: Space-h (dots 1-2-5)

Move to "playback information" tab: Space-4-5/Space-1-2

Exit "media player": Space-z (dots 1-3-5-6)

18.8 Radio

Call up the sets dialog box: Enter-e (dots 1-5)
Call up the menu: space-m (dots 1-3-4) or F2
Internal speakers on/off: Space-x (dots 1-3-4-6)

Move to next frequency: dot 6 Move to previous frequency: dot 3

Auto previous frequency: dot 2, short press previous button

Auto next frequency: dot 5, short press next button

Go to frequency: space-f (dots 1-2-4)

Move to previous channel: dot 1, long press previous button

Move to next channel: dot 4, long press next button

Registry channel: Enter-s (dots 2-3-4), long press record button

Delete the channel: long press stop button

Call up the record dialog box: Enter-r (dots 1-2-3-5)

Record start/pause: short press record button

Record stop: short press stop button

Mute on: short press stop button, space Muto off: short press play button, space Volume up: Space-up scroll button

Volume down: Space-down scroll button

18.9 Web Browser

18.9.1 Hot keys for the command

Open URL: Enter-u (dots 1-3-6)

Open: Enter-o (dots 1-3-5) Save as: Space-s (dots 2-3-4) Information: Enter-I (dots 2-4) Exit: Space-z (dots 1-3-5-6)

Read from beginning to cursor: Backspace-g (dots 1-2-4-5)

Read from cursor to end: Enter-g (dots 1-2-4-5) Auto scroll: Up scroll button-down scroll button

Start selection: Enter-b (dots 1-2)

Copy: Enter-c (dots 1-4)

Add to clipboard: Enter-p (dots 1-2-3-4) Copy URL: Backspace-d (dots 1-4-5) Copy link: Backspace-I (dots 1-2-3)

Go to the home page: Backspace-h (dots 1-2-5)

Go to the previous page: Backspace-Space-3 or backspace-p

(dots 1-2-3-4)

Go to the next page: Backspace-Space-6 or backspace-n (dots

1-3-4-5)

Go to previous heading: Backspace-b (dots 1-2) Go to next heading: Backspace-f (dots 1-2-4)

Go to previous text: Space-2-4-6 Go to next text: Space-1-2-4-5-6 Refresh: Enter-r (dots 1-2-3-5)

Open the history list: Enter-h (dots 1-2-5)

Check the address of the selected title in the history list: Space-I

(dots 2-4)

Find: Space-f (dots 1-2-4) Find again: Enter-f (dots 1-2-4) Link list: Backspace-I (dots 2-4)

Set current as your home page: Enter-s (dots 2-3-4)

Add to favorites: Backspace-a (dot 1) Favorites list: Enter-I (dots 1-2-3)

Option settings: Backspace-o (dots 1-3-5)

18.9.2 Hot Keys When Playing Audio Files in web browser

Turn up the volume: Space-up scroll button

Turn down the volume: Space-down scroll button

Five seconds before: Previous button of the front panel

Five seconds after: Next button of the front panel Pause/Replay: Play button of the front panel

Stop: Stop button of the front panel

18.9.3 Hot Keys for Reading Web Pages

Move to the previous control: Shift-tab (space-1-2)

Move to the next control: Tab (space-4-5)

Select the next item in the combo box (list box): Backspace-Space-4 Select the previous item in the combo box (list box): Backspace-

Space-1

Move to the previous form: Space-1-2-3-4-6

Move to the next form: Space-1-3-4-5-6

Move to the previous table: Space-3-4-5-6

Move to the next table: Space-1-4-5-6

Move to the previous cell: Space-2-3

Move to the next cell: Space-5-6

Move to the upper cell: Space-3-5

Move to the lower cell: Space-2-6

Read current cell: Space-2-3-5-6

Move to the previous cell of the upper level table: Backspace-2-3

Move to the next cell of the upper level table: Backspace-5-6

Move to the upper cell of the upper level table: Backspace-3-5

Move to the lower cell of the upper level table: Backspace-2-6

Check the current position: Space-1-5-6 Move to the previous frame: Space-3-4-6

Move to the next frame: Space-1-4-6

Read the current line: Space-r (dots 1-2-3-5)

18.10 Daisy Player

Move to the title list: Space-dots 1-2-5-6 Open daisy file: Enter-o (dots 1-3-5) Voice setting: Enter-s (dots 2-3-4) Check the book-info: Enter-I (dots 2-4)

Exit: Space-z (dots 1-3-5-6)

Play/Pause: Space

Move to the beginning of document: space-1-3 or space-1-2-3

Move to the last phrase: space-4-6 or space-4-5-6

Increase the speed: dots 3-4-5 Decrease the speed: dots 1-2-6

Increase the volume: Space-up scroll button Decrease the volume: Space-down scroll button

Move to the next phrase: dot 6 or short press "next" button

Move to the previous phrase: dot 3 or short press "previous" button

Move to the next fifty phrase: dot 4
Move to the previous fifty phrase: dot 1
Move to the next page: Space-3-4-5
Move to the previous page: Space-1-2-6
Go to the page: Enter-g (dots 1-2-4-5)
Move to the upper-level: dots 5-6

Move to the upper-level: dots 5-6 Move to the down-level: dots 2-3

Move to the next level at the preset level: dot 5 Move to the previous level at the preset level: dot 2

Move to the next heading: Space-5 or long press "next" button

Move to the previous heading: Space-2 or long press "previous" button

Move to the last heading: Space-5-6 Move to the first heading: Space-2-3

Check the currently-reading level and heading: Enter-w (dots 2-4-5-6) Scan the heading list from the present to the end: Enter-n (dots 1-3-4-5-6)

Find heading: Space-f (dots 1-2-4) Find again: Enter-f (dots 1-2-4)

Set mark at current position: Enter-m (dots 1-3-4)

Move to the next mark: Space-dot 6 Move to the previous mark: Space-dot 3 Delete mark: Space-d (dots 1-4-5)

18.11 Bluetooth Manager

Scanning bluetooth device: enter-r (dots 1-2-3-5) Connecting device: enter in the device name Connecting service: enter in the service name Disconnect the service: enter-d (dots 1-4-5)

Move to Bluetooth device list in service list: Backspace

Remove device setting in Bluetooth device list: Enter-s (dots 2-3-4)

1) FTP service

Open local folder: enter-o (dots 1-3-5)

Copy: enter-c (dots 1-4)
Paste: enter-v (dots 1-2-3-6)
Send to: enter-s (dots 2-3-4)

Retrieve file: enter-r (dots 1-2-3-5) New folder: enter-f (dots 1-2-4)

Delete file/folder: space-d (dots 1-4-5)

Information: enter-i (dots 2-4)

18.12 MSN messenger

1) Log-in dialog box

Move to the next control: Tab (Space-4-5 or F3)

Move to the previous control: Shift-tab (Space-1-2 or Space-F3)

Check or uncheck a check box: Space

2) The contact list box

Move to the previous item: Space-1 or up scroll button Move to the next item: Space-4 or down scroll button Move between online and offline groups: Space-5-6

Open the menu: Space-m (dots 1-3-4) or F2

Logout: Enter-n (dots 1-3-4-5) View chat: Enter-r (dots 1-2-3-5) My status: Enter-m (dots 1-3-4)

Exit: Enter-z (dots 1-3-5-6) Add contact: Enter-a (dot 1)

Delete contact: Enter-d (dots 1-4-5)

Contact information: Enter-v (dots 1-2-3-6).

Send instant message: Enter-s (dots 2-3-4) Last message: Backspace-r (dots 1-2-3-5) Play keyboard sound: Enter-k (dots 1-3)

Message sound notification while in current window: Backspace-s

(dots 2-3-4)

Message sound notification while messenger is in the

background: Backspace-m (dots 1-3-4)

Nickname: Enter-p (dots 1-3-4) Save account: Enter-o (dots 1-3-5)

Confirm the Received Message, "Enter-I (dots-1-2-3)

3) Instant message dialog box

Move to the next control: Tab (Space-4-5 or F3)

Move to the previous control: Shift-Tab (Space-1-2) or Space-F3 Move between the instant message dialog box and the contact

list box : Space-1-2-6 or Space-3-4-5, F1-F2, or F3-F4

Save as: Space-s (dots 2-3-4) Print: Space-p (dots 1-2-3-4) Close: Space-e (dots 1-5) Cut: Enter-x (dots 1-3-4-6) Copy: Enter-c (dots 1-4) Delete: Enter-d (dots 1-4-5)

Paste: Enter-v (dots 1-2-3-6)

Select all: Enter-a (dot 1)

Start selection: Enter-b (dots 1-2)

Find: Space-f (dots 1-2-4) Find again: Enter-f (dots 1-2-4) Invitation: Enter-I (dots 2-4)

18.13 Database Manager

Add record: Enter-i (dots 2-4)

Search records: Enter-s (dots 2-3-4)
Table manager: Enter-t (dots 2-3-4-5)

List of records found: Enter-r (dots 1-2-3-5) Setting backup option: Enter-e (dots 1-5) Backup database: Enter-u (dots 1-3-6) Restore database: Enter-o (dots 1-3-5)

1) Move by controls

Move to the next control: Tab (Space-4-5 or F3)
Move to the previous control: Shift-Tab (Space-1-2 or Space-F3)

2) Move in a list box

Move to the next list item: Space-4 or down scroll button Move to the previous list item: Space-1 or up scroll button

3) Select your answer in the prompt box

Move to the next answer: Space-4, Space, or down scroll button Move to the previous answer: Space-1, Backspace, or up scroll button

4) Move in the "list of records found"

Move to the next record: Space-4 or down scroll button Move to the previous record: Space-1 or up scroll button

Move to the last record: Space-4-5-6 Move to the first record: Space-1-2-3

Move to the next field: Space-5 Move to the previous field: Space-2

Move to previous same field different record: Space-3 Move to next same field different record: Space-6

Move to the last field: Space-4-6 Move to the first field: Space-1-3

18.14 Utility

18.14.1 Calculator

Calculator initialize: Backspace-c (dots 1-4) Delete numbers or operators: Backspace

General function: Enter-g (dots 1-2-4-5)

Plus: Dots 3-4-6 Minus: Dots 3-6 Division: Dots 3-4

Multiplication: Dots 1-6 Percent: Dots 1-4-6 Power: Backspace-4-5

Square Root: Enter-q (dots 1-2-3-4-5)

Decimal Point: Dots 4-6

Left Parenthesis: Dots 1-2-3-5-6 Right Parenthesis: Dots 2-3-4-5-6 PI: Enter-p (dots 1-2-3-4) Exp: Enter-e (dots 1-5)

Recall Items: Backspace-r (dots 1-2-3-5)
Delete all save items: Enter-d (dots 1-4-5)
Save Items: Backspace-s (dots 2-3-4)

Trigonometric Function: Enter-s (dots 2-3-4) Sine: Enter-s (dots 2-3-4), s (dots 2-3-4) Arc Sine: Enter-s (dots 2-3-4), a (dot 1)

Hyperbolic Sine: Enter-s (dots 2-3-4), h (dots 1-2-5)

Cosine: Enter-c (dots 1-4), c (dots 1-4) Arc Cosine: Enter-c (dots 1-4), a (dot 1)

Hyperbolic Cosine: Enter-c (dots 1-4), h (dots 1-2-5)

Tangent: Enter-t (dots 2-3-4-5), t (dots 2-3-4-5) Arc Tangent: Enter-t (dots 2-3-4-5), a (dot 1)

Hyperbolic Tangent: Enter-t (dots 2-3-4-5), h (dots 1-2-5)

Logarithm Function: Enter-I (dots 1-2-3)

Natural Logarithm: Enter-I (dots 1-2-3), e (dots 1-5)

Common Logarithm: Enter-I (dots 1-2-3), n (dots 1-3-4-5)

Copy to Clipboard: Enter-I (dots 2-4) Option Setting: Enter-o (dots 1-3-5)

18.14.2 Setting Date and Time

Move to the next day: Space-6

Move to the previous day: Space-3

Move to the next week: Space-5

Move to the previous week: Space-2

Move to the next month: Space-4

Move to the previous month: Space-1

Move to the next year: Space-5-6

Move to the previous year: Space-2-3

Move to 1 hour after: Space-4 Move to 1 hour before: Space-1

Move to 10 minutes after: Space-5

Move to 10 minutes before: Space-2

Move to 1 minute after: Space-6

Move to 1 minute before: Space-3

Switch between A.M. and P.M.: Space-x (dots 1-3-4-6)

18.14.3 Checking Date and Time

Checking date and time: Space-t (dots 2-3-4-5)

18.14.4 Calendar

Move to the previous item: Tab (space-4-5) Move to the next item: Shift-tab (space-1-2)

Move to the next day: Space-6
Move to the previous day: Space-3
Move to the next week: Space-5
Move to the previous week: Space-2
Move to the next month: Space-4
Move to the previous month: Space-1
Move to the next year: Space-5-6
Move to the previous year: Space-2-3

18.14.5 Pronunciation dictionary

Move to the previous control: Tab (space-4-5) Move to the next control: Shift-tab (space-1-2) Move to the previous item in entry: space-1 Move to the next item in entry: space-4 Add word: Space-I (dots 2-4)

Modify word: Space-m (dots 1-3-4) Delete word: Space-d (dots 1-4-5)

18.14.6 Stopwatch

Stopwatch start, pause, restart: Enter Check the elapsed time: Backspace

Stop and restart Braille display: Space-F2

Switch between stopwatch and count down timer: Tab (space-4-

5) or shift-tab (space-1-2)

Count down timer pause or restart: Enter Count down timer Initialize: Backspace

Exit stopwatch or count down timer: Space-z (dots 1-3-5-6)

18.14.7 Check Network Status

Check network status: Space-n (dots 1-3-4-5)

18.14.8 Check Power Status

Check power status: Space-1-6

18.14.9 Backup/restore option

Move to previous item: Space-1 or up scroll button Move to next item: Space-4 or down scroll button

Move to previous control: Shift-tab (space-1-2 or space-F3)

Move to next control: Tab (space-4-5 or F3)

Select/unselect check box: Space

18.14.10 Upgrading the Braille Sense Plus B32 OS

Check download information: Space-I (dots 2-4) Cancel download and exit: Space-z (dots 1-3-5-6)

19. Command Summary for USB Keyboards

19.1 Common Combination Keys

Call up the program menu: Ctrl-F10 Call up the task ID list: Alt-F10

Call up the menu in the individual program: Alt or F10

Run the individual program in the program menu: Ctrl-Alt-"shortcut

key" (varies for each program)

Switch to previous program: Ctrl-shift-tab

Switch to next program: Ctrl-tab

Exit: Alt-F4

Escape: ESC key

Move to the next control in a dialog box: Tab

Move to the previous control in the dialog box: Shift-tab

Move to the previous character: Left arrow key Move to the next character: Right arrow key Move to the previous line item: Up arrow key Move to the next line item: Down arrow key Move to the beginning of line item: Home key

Move to the end of line item: End key

Move to the top of a document or to the first item: Ctrl-home Move to the bottom of a document or to the last item: Ctrl-end Move to the previous page or to the first item of the previous 32-

item group: Page up

Move to the next page or to the first item of the next 32-item group:

Page down

Read the current item again: Ctrl-shift-r

Say current time: Ctrl-shift-t Check power status: Ctrl-shift-b

Print spool: Alt-shift-p

Call up the "option" menu: Ctrl-shift-o

Online help: F1

Checking your version: Ctrl-shift-v only in the Braille Sense Plus B32

"program" menu.

Check network status: Ctrl-shift-n in the Braille Sense Plus B32

"program" menu

Voice volume up: F7

Voice volume down: Shift-F7

Voice rate up: F8

Voice rate down: Shift-F8

Voice tone up: F9

Voice tone down: Shift-F9

Voice on/off: Ctrl-F7

19.2 File Manager

19.2.1 Navigation keys on the file list and menu list

Move to previous item: Up Arrow key Move to next item: Down Arrow key

Move to the beginning of the list: Ctrl-home

Move to the end of the list: Ctrl-end

19.2.2 Navigation Keys in the File List

Fast move to folder list or move to file list: Ctrl-down Arrow Move between file list and address window: Tab / shift-tab Enter into selected folder or open the selected file: Enter

Move to the upper level folder: Backspace Fast move to the top level disk: Ctrl-shift-\

19.2.3 Item (Folder or File) Selection Keys

Select item by item: Space Continuous selection: Ctrl-b

Select all: Ctrl-a

19.2.4 Hot Keys for the Commands

Open: Ctrl-o

Open with: Ctrl-e

Zip: Ctrl-z Unzip: Ctrl-u Send: Ctrl-s Copy: Ctrl-c Cut: Ctrl-x Paste: Ctrl-v Delete: DEL Rename: Ctrl-r

New document: Ctrl-n New folder: Ctrl-f File conversion: Ctrl-t

Select all: Ctrl-a Sort files by: Ctrl-g Set file info: Ctrl-l

Display only files of type: Ctrl-w

Search file: Ctrl-shift-f Information: Ctrl-I

19.3 Word Processor

19.3.1 Hot keys for the command

New document: Ctrl-n

Open: Ctrl-o Save: Ctrl-s

Save as: Ctrl-shift-s

Close current document: Ctrl-shift-q

Print: Ctrl-shift-p Settings: Ctrl-e

Exit: Alt-f4

Start selection: Ctrl-b

Copy: Ctrl-c

Add to the clipboard: Ctrl-p Clear clipboard: Ctrl-d

Delete: Del (No use space-d)

Cut: Ctrl-x Paste: Ctrl-v

Delete blank lines: Alt-e

Select All: Ctrl-a Insert from file: Ctrl-I Insert date: Ctrl-w

Change insert/overwrite mode: Ctrl-shift-i

Check spelling: Ctrl-k

Check spelling of the current word: Alt-k

Find: Ctrl-Shift-f

Find again: F3 (No use Ctrl-f)

Replace: Ctrl-r

Go to location: Ctrl-l

Go to previous page: Page up key Go to next page: Page down key

Set bookmark: Ctrl-m Go to bookmark: Ctrl-j

Go to previous document: Shift-tab

Go to next document: tab

Read selected text: Alt-b

Read beginning of selected text: Ctrl-u Read from beginning to cursor: Alt-g

Read from cursor to end: Ctrl-g

Auto scroll: Ctrl-shift-a Read status: Ctrl-shift-/

Braille document layout: Alt-p Print document layout: Alt-t

Braille paragraph layout: Alt-shift-p Print paragraph layout: Alt-shift-t

19.3.2 Miscellaneous Hot Keys

Move to previous character: Left arrow key Move to next character: Right arrow key Move to previous word: Ctrl-Left arrow Move to next word: Ctrl-Right arrow

Move to the beginning of the line: Home key

Move to the end of the line: End key Move to previous line: Up arrow key Move to next line: Down arrow key

Move to previous paragraph: Ctrl-up arrow Move to next paragraph: Ctrl-down arrow

Move to the beginning of the document: Ctrl-home

Move to the end of the document: Ctrl-end

Read current paragraph: Ctrl-shift-v

Read current line: Ctrl-shift-c Read current word: Ctrl-shift-x Read current character: Ctrl-shift-z Delete current paragraph: Del-v

Delete current line: Del-c Delete current word: Del-x Delete current character: DEL

Confirm current cursor position: ctrl-shift-; Set view format character: Ctrl-shift-5

Set reading unit: Ctrl-shift-{
Set read only: Ctrl-shift-+

19.4 Address Manager

19.4.1 Move keys for moving from field to field in the record or in the menu

Move to the previous field or menu item: Left Arrow Move to the next field or menu item: Right Arrow

Move to the first field or menu item: Home Move to the last field or menu item: End

19.4.2 Move Keys for Moving from Record to Record

Move to the previous record: Up Arrow Move to the next record: Down Arrow Move to the first record: Ctrl-Home Move to the last record: Ctrl-End

19.4.3 Hot Keys for the Commands

Add address: Ctrl-I Find address: Ctrl-s Modify address: Ctrl-m Delete address: DEL

Select all: Ctrl-a Save as a file: Ctrl-t

Print address: Ctrl-shift-p Backup address list: Ctrl-u Restore address list: Ctrl-r

Backup option: Ctrl-e

19.4.4 Miscellaneous Hot Keys

Tab: tab

Shift-tab: Shift-tab

Cancel: ESC Exit: Alt-f4

19.5 Schedule Manager

19.5.1 Hot keys for the commands

Move to the next field: Tab

Move to the previous field: Shift tab

Add schedule: Ctrl-I Modify schedule: Ctrl-m Delete schedule: DEL Alarm option: Ctrl-o

Save schedule as file: Ctrl-t Print schedule: Ctrl-shift-p Backup schedule list: Ctrl-u Restore schedule list: Ctrl-r

Backup option: Ctrl-e

19.5.2 Movement Keys for the Search Result List

- Move from an appointment to another in the schedule list Move to the previous appointment in the same day: Up Arrow Move to the next appointment in the same day: Down Arrow Move to the first appointment in the same day: Home Move to the last appointment in the same day: End
- 2) Move from one appointment to another in all the appointments registered

Move to the previous schedule: Ctrl-Left Arrow Move to the next schedule: Ctrl-Right Arrow

Move to the first schedule: Ctrl-Home Move to the last schedule: Ctrl-End

19.6 E-mail

19.6.1 Hot keys for reading e-mails

Call "service manager": Ctrl-m

Receive new mail: Ctrl-n

Write mail: Ctrl-w

Reply: Ctrl-r Reply all: Alt-r Forward: Ctrl-f

Call up "send mail in storage box": Ctrl-s

Call up "set path": Ctrl-p Call up "set option": Ctrl-o Call up "set spam": Ctrl-e Call up "local folder": Ctrl-d

Find: Ctrl-shift-f

Find again: f3 (Backspace-f)

Move to folder: Alt-x Copy to folder: Alt-c

Add a sender to the address list: Ctrl-I (This is valid only at the "from"

item).

Delete received e-mail: DEL (It is valid only at the "subject" and

"date" item).

Save the received e-mail as text file: Ctrl-shift-s

Print the received e-mail: Ctrl-shift-p

Move to unread message: Ctrl-u (It is valid only at the "subject" and

"date" item)
Cancel: ESC

Cancel and exit from e-mail program: Alt-f4

19.6.2 Hot Keys for Sending E-mail Including Reply, Forward, and Save in the Pail Storage Box

Search address list: Ctrl-I

Attach file: Ctrl-f Send e-mail: Ctrl-s

Save in mail storage box: Ctrl-shift-s

Cancel: ESC

Cancel and exit from e-mail program: Alt-f4

19.6.3 Hot Keys for Reading E-mail messages or Writing an E-mail Message

Start selection: Ctrl-b

Select all: Ctrl-a

Copy to the clipboard: Ctrl-c

Cut to the clipboard: Ctrl-x (It is not valid when you are reading e-

mail).

Paste from the clipboard: Ctrl-v (It is not valid when you are reading

e-mail).

Delete selection and delete a letter: DEL (It is not valid when you are

reading e-mail).
Cancel block: ESC

19.7 Media Player

19.7.1 Hot keys for commands

Open file: Ctrl-o Open folder: Ctrl-f

Add file: Alt-o Add folder: Alt-f Save play list: Ctrl-I

Save as play list: Ctrl-shift-s

Delete time: DEL

Play: Enter

Previous track: ctrl-Left arrow Next track: ctrl-right arrow

5th previous track: ctrl-up arrow 5th next track: ctrl-down arrow

First track: ctrl-home key Last track: ctrl-end key

One minute previous: alt-down arrow

One minute next: alt-up arrow 5 seconds previous: alt-left arrow 5 seconds next: alt-right arrow Volume up: Shift-up arrow

Volume down: Shift-down arrow

Speed up: Shift-left arrow

Speed down: Shift-right arrow

Pause/Continue: Space

Stop: backspace

Delete play list during stop: DEL

Record: Ctrl-r Play: Enter

Stop: backspace

Pause/Continue recording: Space

Configuration dialog box: Alt-c

Set bookmark: Ctrl-m Delete bookmark: Ctrl-d Jump to bookmark: Ctrl-j Go to position: Ctrl-g

Playback setting dialog box: Ctrl-s Record setting dialog box: Alt-s

19.7.2 Hot Keys in the Play Information Tab

Move to the next information: Down arrow Move to the previous information: Up arrow Pause/Play when it is pause state: Space

Start playing: Enter Stop playing: Backspace

Play the next file: ctrl-right arrow Play the previous file: ctrl-Left arrow

Play the last file: ctrl-end key Play the first file: ctrl-home key

Play the fifth file after the current file: ctrl-down arrow Play the fifth file before the current file: ctrl-up arrow

Go forward 5 seconds and play: alt-right arrow Go backward 5 seconds and play: alt-left arrow

Volume up: Shift-up arrow

Volume down: Shift-down arrow

Speed up: Shift-left arrow Speed down: Shift-right arrow

Open menu: Alt

Open help: F1 or Space-h

Move to "play list" tab: Tab/Shift-tab Exit "media player": Alt-F4 or Space-z

19.7.3 Hot Keys in the Play List Tab

Move to the next file: Down arrow Move to the previous file: Up arrow

Move to the last file: END key
Move to the first file: HOME key

Select resume current file (while playing, it is used as plays/pause):

Space

Start selecting files: Ctrl-b

Start playing the selected files: Enter

Stop playing: Backspace

Delete the selected files in the play list: DEL

Play the next file: ctrl-right arrow Play the previous file: ctrl-Left arrow

Play the last file: ctrl-end key Play the first file: ctrl-home key

Play the fifth file after the current file: ctrl-down arrow Play the fifth file before the current file: ctrl-up arrow

Go forward 5 seconds and play: alt-right arrow Go backward five seconds and play: alt-left arrow

Volume up: Shift-up arrow

Volume down: Shift-down arrow

Speed up: Shift-left arrow Speed down: Shift-right arrow

Open menu: Alt or F10

Open help: F1

Move to "playback information" tab: Tab/shift-tab

Exit "media player": Alt-f4 or space-z

19.8 Radio

Call up the sets dialog box: Ctrl-e

Call up the menu: Alt or F10

Internal speakers on/off: Ctrl-shift-x

Move to next frequency: ,
Move to previous frequency: '

Auto previous frequency: 1
Auto next frequency: "

Go to frequency: Ctrl-shift-f Move to previous channel: a

Move to next channel: `Registry channel: Ctrl-s

Call up the record dialog box: Ctrl-r

Mute on/off: Space

Volume up: Shift-up arrow

Volume down: Shift-down arrow

19.9 Web Browser

19.9.1 Hot keys for the command

Open URL: Ctrl-u Open: Ctrl-o

Save as: Ctrl-shift-s or Space-s

Page information: Ctrl-I Exit: Alt-f4 or Space-z

Read from beginning to cursor: Alt-g

Read from cursor to end: Ctrl-g

Auto scroll: Ctrl-shift-a

Copy selection: Ctrl-b

Copy: Ctrl-c

Add clipboard: Ctrl-p Copy URL: Alt-d

Copy link address: Alt-I

Go to the home page: Alt-h

Go to the previous page: Alt-p or Alt-left arrow Go to the next page: Alt-n or Alt-right arrow Go to previous text: Ctrl-shift-{ or Space-{ Go to next text: Ctrl-shift-} or Space-}

Go to previous heading: Alt-b

Go to next heading: Alt-f

Refresh: Ctrl-r

Open the history list: Ctrl-h

Check the address of the selected title in the history list: Ctrl-shift-i or

space-I

Find: Ctrl-shift-f or space-f Find again: F3 or ctrl-f

Link list: Alt-i

Register as your home page: Ctrl-s

Add to favorites: Alt-a Favorites list: Ctrl-l

19.9.2 Hot Keys When Playing Audio Files in web browser

Turn up the volume: Shift-up arrow

Turn down the volume: Shift-down arrow

19.8.3 Hot Keys for Reading Web Pages

Move to the previous control: Shift-tab

Move to the next control: Tab

Select the next item in the combo box (list box): Alt-down arrow Select the previous item in the combo box (list box): Alt-up arrow

Move to the previous form: Ctrl-shift-1

Move to the next form: Ctrl-1

Move to the previous table: Ctrl-shift-2

Move to the next table: Ctrl-2

Move to the previous cell: Ctrl-shift-left arrow Move to the next cell: Ctrl-shift-right arrow Move to the upper cell: Ctrl-shift-up arrow Move to the lower cell: Ctrl-shift-down arrow

Read current cell: Ctrl-shift-c

Move to the previous cell of the upper level table: Ctrl-left arrow Move to the next cell of the upper level table: Ctrl-right arrow Move to the upper cell of the upper level table: Ctrl-up arrow Move to the lower cell of the upper level table: Ctrl-down arrow

Check the current position: Ctrl-shift-b

Move to the previous frame: Ctrl-shift-3

Move to the next frame: Ctrl-3

Read the current line: Ctrl-shift-r or space-r

19.10 Daisy Player

Play/Pause: Space

Move to the beginning of document: Home or ctrl-home

Move to the last phrase: End or ctrl-end Increase the speed: Shift-left arrow Decrease the speed: Shift-right arrow Increase the volume: Shift-up arrow Decrease the volume: Shift-down arrow

Move to the next phrase: Ctrl-right arrow Move to the previous phrase: Ctrl-left arrow Move to the next fifty phrase: Ctrl-up arrow

Move to the previous fifty phrase: Ctrl-down arrow

Move to the next page: Page down key Move to the previous page: Page up key

Go to the page: Ctrl-g

Move to the upper-level: Alt-up arrow Move to the down-level: Alt-down arrow

Move to the next level at the preset level: Alt-right arrow Move to the previous level at the preset level: Alt-left arrow

Move to the next heading: Ctrl-shift-right arrow Move to the previous heading: Ctrl-shift-left arrow

Move to the first heading: Ctrl-shift-home Move to the last heading: Ctrl-shift-end

Check the currently-reading level and heading: Ctrl-w Scan the heading list from the present to the end: Ctrl-n

Find heading: Ctrl-shift-f

Find again: F3

Set mark at current position: Ctrl-m Move to the next mark: Right arrow Move to the previous mark: Left arrow Delete mark: DEL key or Space-d Move to the title list: Ctrl-shift-\

Open daisy file: Ctrl-o Check the book-info: Ctrl-I

Voice setting: Ctrl-s

19.11 Bluetooth Manager

Scanning bluetooth device: Ctrl-r

Connecting device: enter in the device name Connecting service: enter in the service name

Disconnect the service: Ctrl-d

Move to Bluetooth device list in service list: Backspace

1) FTP service

Open local/remote folder: Ctrl-o

Copy: Ctrl-c
Paste: Ctrl-v
Send to: Ctrl-s
Retrieve file: Ctrl-r
New folder: Ctrl-f
Delete file/folder: DEL

Information: Ctrl-i

19.12 MSN messenger

1) Log-in dialog box

Move to the next control: Tab

Move to the previous control: Shift-tab Check or uncheck a check box: Space

2) The contact list box

Move to the previous item: Up arrow key Move to the next item: Down arrow key

Move between online and offline groups: Ctrl-down arrow

Open the menu: Alt

Logout: Ctrl-n View chat: Ctrl-r My status: Ctrl-m

Exit: Ctrl-z

Add contact: Ctrl-a

Delete contact: Ctrl-d Contact information: Ctrl-v Send instant message: Ctrl-s

Last message: Alt-r

Play keyboard sound: Ctrl-k

Message sound notification while in current window: Alt-s Message sound notification while messenger is in the

background: Alt-m Nickname: Ctrl-p Save account: Ctrl-o

Confirm the Received Message: Ctrl-I

3) Instant message dialog box

Move to the next control: Tab

Move to the previous control: Shift-Tab

Move between the instant message dialog box and the contact

list box: Page up, Page down

Save as: Ctrl-shift-s Print: Ctrl-shift-p Close: Ctrl-shift-e

Cut: Ctrl-x
Copy: Ctrl-c
Delete: Ctrl-d
Paste: Ctrl-v
Select all: Ctrl-a
Start selection: Ctrl-b

Find: Ctrl-shift-f Find again: F3 Invitation: Ctrl-i

19.13 Database Manager

Add record: Ctrl-i

Search records: Ctrl-s Table manager: Ctrl-t

List of records found: Ctrl-r Setting backup option: Ctrl-e Backup database: Ctrl-u Restore database: Ctrl-o 1) Move by controls

Move to the next control: Tab

Move to the previous control: Shift-Tab

2) Move in a list box

Move to the next list item: Down arrow key Move to the previous list item: Up arrow key

3) Select your answer in the prompt box

Move to the next answer: Space, or down arrow key Move to the previous answer: Backspace, or up arrow key

4) Move in the "list of records found"

Move to the next record: Down arrow key Move to the previous record: Up arrow key

Move to the last record: Ctrl-end Move to the first record: Ctrl-home Move to the next field: Ctrl-right arrow Move to the previous field: Ctrl-left arrow

Move to previous same field different record: Left arrow key Move to next same field different record: Right arrow key

Move to the last field: End key Move to the first field: Home key

19.14 Utility

19.14.1 Calculator

Calculator initialize: Alt-c

Delete numbers or operators: Backspace

General function: Ctrl-g

Plus: +
Minus: Division: /
Multiplication: *
Percent: %

Power: Alt-shift-6 Square Root: Ctrl-q Decimal Point: . Left Parenthesis: (

Left Parenthesis: (Right Parenthesis:)

PI: Ctrl-p

Exp: Ctrl-e

Recall Items: Alt-r

Delete all saved items: Ctrl-d

Save Items: Alt-s

Trigonometric Function: Ctrl-s

Sine: Ctrl-s, s Arc Sine: Ctrl-s, a

Hyperbolic Sine: Ctrl-s, h

Cosine: Ctrl-c, c Arc Cosine: Ctrl-c, a

Hyperbolic Cosine: Ctrl-c, h

Tangent: Ctrl-t, t Arc Tangent: Ctrl-t, a

Hyperbolic Tangent: Ctrl-t, h

Logarithm Function: Ctrl-I Natural Logarithm: Ctrl-I, e Common Logarithm: Ctrl-I, n

Copy to Clipboard: Ctrl-I Option Setting: Ctrl-o

19.14.2 Setting the Date and Time

Move to the next day: Right arrow
Move to the previous day: Left arrow
Move to the next week: Ctrl-right arrow
Move to the previous week: Ctrl-left arrow
Move to the next month: Down arrow
Move to the previous month: Up arrow
Move to the next year: Ctrl-down arrow
Move to the previous year: Ctrl-up arrow

Move to 1 hour after: Down arrow Move to 1 hour before: Up arrow

Move to 10 minutes after: Ctrl-right arrow Move to 10 minutes before: Ctrl-left arrow

Move to 1 minute after: Right arrow

Move to 1 minute before: Left arrow

Switch Between A.M. and P.M.: Ctrl-shift-x

19.14.3 Checking the Date and Time

Checking date and time: Ctrl-shift-t or space-t

19.14.4 Calendar

Move to the previous item: Tab Move to the next item: Shift-tab

Move to the next day: Right arrow
Move to the previous day: Left arrow
Move to the next week: Ctrl-right arrow
Move to the previous week: Ctrl-left arrow
Move to the next month: Down arrow
Move to the previous month: Up arrow
Move to the next year: Ctrl-down arrow
Move to the previous year: Ctrl-up arrow

19.14.5 Pronunciation dictionary

Move to the previous control: Tab Move to the next control: Shift-tab

Move to the previous item in entry: up arrow Move to the next item in entry: down arrow

Add word: Ctrl-shift-I Modify word: Ctrl-shift-m

Delete word: Del

19.14.6 Stopwatch

Stopwatch start, pause, restart: Enter

Check the elapsed time: Space Stop Braille display: Space-F2 Restart Braille display: Space-F2

Switch between stopwatch and count down timer: Tab

Count down timer pause or restart: Enter Count down timer Initialize: Backspace

Exit stopwatch or count down timer: Alt-f4

19.14.7 Check Network Status

Check network status: Ctrl-shift-n

19.14.8 Check Power Status

Check power status: Ctrl-shift-b

18.14.9 Backup/restore option

Move to previous item: up arrow Move to next item: down arrow Move to previous control: Shift-tab

Move to next control: Tab

Select/unselect check box: Space

19.14.10 Upgrading Braille Sense Plus B32 OS

Check download information: Ctrl-shift-i

Cancel download and exit: Alt-f4

20. Troubleshooting Guide

If you are having trouble with the Braille Sense Plus B32, please try the following suggestions according to your problem:

20.1 The Braille Sense Plus B32 Will Not Turn On

- 1) Check to make sure that the battery is inserted in to its compartment properly.
- 2) If the battery is inserted properly, connect the AC adapter, and plug the AC adapter in to an electrical outlet. The battery may need to be charged.
- 3) Or, Check the location of keyboard lock switch. If this switch put on "lock," power switch does not work.

20.2 The Voice Cannot Be Heard

- 1) Make sure the volume is turned up. Press "backspace-F4" to turn up the volume.
- 2) Make sure the voice is turned on. Press "space-o (dots 1-3-5)" to open the "option" menu. Press "F3-F4" once. Then, press "space." Then, press "enter." This will turn on the voice.

20.3 The Voice is Too Fast to Understand

1) Press "space-F1" to slow down the voice rate.

20.4 The Voice Tone Is Too Low or Too High to Understand

1) Press "enter-F1" to lower the tone, or press "enter-F4" to raise the voice tone.

20.5 Lost Your Place

1) If you have lost your place in the Braille Sense Plus B32, and cannot remember where you are press "F1" to access the "program" menu. Then, press "F2-F3" to switch between programs that are open. If you are in the word processor, pressing "space1-5-6" will give you your current location.

20.6 No Internet Connection

- 1) If you are using a LAN, make sure that the Ethernet cable is connected.
- 2) If you are using a modem, make sure that the phone line is connected to the modem.
- 3) If you are using a DSL connection, make sure that that the Ethernet cable is connected.

20.7 Email

2) If you are having trouble downloading email, please contact your Internet service provider to make sure that you have the correct POP3 and SMTP settings.

20.8 The Braille display Does Not Display Braille

2) If the Braille display does not display Braille, make sure that the Braille display is turned on. In order to do this, press "space-o (dots 1-3-5)," and press "space." Then, press "enter." The Braille display will now be turned on if this option was set to off.

20.9 The Braille Sense Plus B32 Does Not Respond

2) If the Braille Sense Plus B32 does not respond to keystrokes or commands, it may be necessary to reset the unit. Please note that if you press the reset button, all of your options will be reset to the factory defaults. To reset the Braille Sense Plus B32, press the reset button, or press "1-2-3-4-5-6-F2-F3." Do NOT hold the reset button for more than 5 seconds.

20.10 The LCD Does Not Come On

1) If the LCD screen does not come on, make sure that it is turned on. Press "space-o (dots 1-3-5)." Then, press "F3-F4" twice. Press "space" to turn the LCD screen option on, and then press "enter" to save the option.

21. Accessories

For information on available accessories for the Braille Sense Plus B32, please contact HIMS. You can contact HIMS at hims@himsintl.com. Or, you can contact HIMS by phone at +82-42-864-4460. You can also visit HIMS on the web at www.himsintl.com.

22. Obtaining Support

If you are having any problems with your Braille Sense Plus B32, please contact the dealer from whom you bought your unit. If you require further assistance, please contact us at hims@himsintl.com. Or, you can contact HIMS by phone at +82-42-864-4460.