Braille eMotion 40

User Manual

**ENGLISH MANUAL  
for Software Version 1.0**

**SELVAS Healthcare, Inc.**

155, Sinseong-ro, Yuseong-gu,

Daejeon, 34109, Republic of KOREA

Tel: +82-42-879-3000

Fax: +82 42 864 4462

**Email:** [**hims.support@selvashc.com**](file:///C:\Users\shinj\Downloads\hims.support@selvashc.com)

Website: [www.himsintl.com](file:///C:\Users\shinj\Downloads\www.himsintl.com)

**Safety Precautions**

For your safety and protection of the Braille eMotion 40, please read and abide by the following safety precautions.

1. The input voltage of the AC adapter is 100V - 240V, and the outputs are DC 5V 3A and 9V 2A
2. The battery may not be fully charged when it is shipped. Before you use the Braille eMotion 40, you should ensure the battery is fully charged.
3. When you use the Braille eMotion 40 with the battery for the first time, the battery status may not be displayed accurately. To avoid this, leave the Braille eMotion 40 connected to the AC adapter for about three hours with the unit turned on. If you want to use the Braille eMotion 40 immediately, you may use it while it is charging.
4. There is a risk of explosion if the battery is replaced by an incorrect type. Please make certain to use only battery packs produced specifically for the Braille eMotion 40 by SELVAS Healthcare. Please dispose of used batteries according to the instructions.
5. If the usage time is less than 50% as compared to the stated battery run time in the product specifications, even after a full charge, it is recommended that you replace the battery.
6. If you drill into or disassemble the product or battery using a sharp point, it may cause electric shock, explosion or fire.
7. When you are using the Braille eMotion 40 on battery power, the status of the remaining battery power is announced when the battery charge is low. When the battery’s charge falls below 15 percent, connect the AC adapter to the unit for recharging. If the remaining battery charge drops to five percent, and the unit is not connected to the AC adapter, the Braille eMotion 40 goes in to Sleep Mode one minute after the announcement of the battery’s status. If the battery level falls to 2%, the unit shuts down to preserve settings, etc. The amount of battery life per charge varies depending on the options you have set and the number and type of tasks you are running.
8. Your Braille eMotion 40 needs to be handled with care. The Braille eMotion 40 is a very delicate machine. Please handle the unit in a proper, careful manner. The Braille eMotion 40 is very sensitive to dust. Make sure to keep it away from dusty environments.
9. The Braille cells are very sensitive, intricate parts. If the Braille cells are not working properly due to the presence of dust or for any other reason, please contact our repair center, or the dealer from whom you purchased the Braille eMotion 40 for support.
10. You should register your Braille eMotion 40 in order to ensure further maintenance, service, and upgrade information. In the US, please visit www.hims-inc.com, to register your information. If you have any trouble when registering your information, please contact the dealer from whom you purchased your Braille eMotion 40 for help. International customers should contact their regional dealer for product registration information.
11. Do not disassemble the Braille eMotion 40 yourself. Do not have anyone else who is not authorized by HIMS take apart the Braille eMotion 40. If an unqualified person disassembles the unit, serious damage may occur. If an unauthorized person disassembles the unit, it is excluded from any free maintenance, and the warranty becomes void. If any liquid or external force damages the unit, it may also be excluded from free maintenance, even if the damage occurs during the warranty period. The Braille eMotion 40 contains a Liquid Contact Indicator sticker that will change color if the unit comes in contact with water or other liquids. This indicator will not activate under humid or other conditions that fall within the product’s normal environmental requirements.
12. Do not leave your Braille eMotion 40 in closed, high temperature environments such as inside a car on a hot summer day, as the battery may be damaged or catch fire. Please do not let your Braille eMotion 40 remain in such environments for long periods of time.
13. To prevent possible damage to your hearing, do not listen to audio at high volume levels for long periods.

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.

This equipment can generate, use and 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 or more 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 connected.

- Consult the dealer or an experienced radio/TV technician for help.

**FCC regulatory conformance:**

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE: 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 or more 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 connected.

- Consult the dealer or an experienced radio/TV technician for help

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user’s authority to operate the equipment.

**RF Exposure Information and Statement**

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types Tablet PC (FCC ID: 2AL4D-B340T) has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use on the body is 2.4GHz:0.85W/kg, 5GHz:0.70W/kg. This device was tested for typical body-worn operations with the back of the handset kept 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 5mm separation distance between the user's body and the back of the handset. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

5G WIFI indoor used only

**I. Your Braille eMotion 40 packing box should contain the following items:**

1. Braille eMotion 40
2. Carrying Case
3. AC Adapter
4. USB C to A cable
5. Braille Getting Started Guide

**II. How to use this manual**

In this manual 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 from every location on the Braille eMotion 40. Some hot keys and shortcut keys are program specific, thus, they require that you be within a specific program for them to work.

Shortcut keys refer to keystrokes used to quickly activate a function from within a menu. Hot keys refer to keys that will activate a function regardless of where you are within the program. When functions are described in this manual, shortcut keys are shown in parentheses, and hot keys are shown in quotes.

This user manual notes how to press hot keys and shortcut keys in the following manner: Keys that are to be pressed at the same time are separated by a - (dash). When you see “Space-b (dots 1-2),” this means that you should press “Space” and dots 1 and 2 simultaneously.

If you are unable to find a solution to a problem within the manual, or if you need assistance with the Braille eMotion 40, please email us at [hims.support@selvashc.com](mailto:hims.support@selvashc.com). You may also visit us on the web at [www.himsintl.com](http://www.himsintl.com); or, you can call us at +82-42-879-3000.

**Table of Contents**

[1. Introduction 16](#_Toc163211431)

[1.1 What is the Braille eMotion 40? 16](#_Toc163211432)

[1.2 Physical Tour 16](#_Toc163211433)

[1.2.1 The Top Panel 16](#_Toc163211434)

[1.2.2 The Front Edge 18](#_Toc163211435)

[1.2.3 The Right Edge 19](#_Toc163211436)

[1.2.4 The Left Edge 20](#_Toc163211437)

[1.3 Hardware Specifications 20](#_Toc163211438)

[1.4 Memory on the Braille eMotion 40 21](#_Toc163211439)

[2. Basic Functions of the Braille eMotion 40 22](#_Toc163211440)

[2.1 How to Enter Commands 22](#_Toc163211441)

[2.1.1 Basic Alerts and Messages 22](#_Toc163211442)

[2.2 Menu Concepts 23](#_Toc163211443)

[2.2.1 Control Symbols 25](#_Toc163211444)

[2.3 Using the Function Keys 28](#_Toc163211445)

[2.4 The Power Supply and the Battery Pack 30](#_Toc163211446)

[2.5 Adjusting Volume and other properties. 31](#_Toc163211447)

[2.6 Using Speech and Braille 33](#_Toc163211448)

[2.7 Entering Text 33](#_Toc163211449)

[2.8 Multi-Tasking 34](#_Toc163211450)

[2.9 Locking the Keys 35](#_Toc163211451)

[2.10 One-Handed Mode 35](#_Toc163211452)

[2.11 Using Typing Mode 36](#_Toc163211453)

[2.12 Special Boot Sequences 37](#_Toc163211454)

[3. Customizing your Braille display 37](#_Toc163211455)

[3.1 Braille Options 38](#_Toc163211456)

[3.2 Voice options 40](#_Toc163211457)

[3.3 General Options 41](#_Toc163211458)

[3.4 Set Time and Date 43](#_Toc163211459)

[3.5 Setup Internet 45](#_Toc163211460)

[3.5.1 Setup Wireless LAN 45](#_Toc163211461)

[3.6 Bluetooth Manager 48](#_Toc163211462)

[3.6.1 Bluetooth Device List 49](#_Toc163211463)

[3.6.2 Bluetooth Service List 51](#_Toc163211464)

[3.6.2.1 Connecting a Service 52](#_Toc163211465)

[3.7 Backup/Restore Braille eMotion 40 Settings 53](#_Toc163211466)

[3.8 Initialize Braille eMotion 40 Options 54](#_Toc163211467)

[4. File Management 55](#_Toc163211468)

[4.1 Overview 55](#_Toc163211469)

[4.1.1 Navigating the File List 56](#_Toc163211470)

[4.1.2 Selecting Folders and Files 57](#_Toc163211471)

[4.2 Working with Files and Folders 58](#_Toc163211472)

[4.2.1 Entering and Exiting Folders 58](#_Toc163211473)

[4.2.2 Ejecting USB Drives and SD Cards 59](#_Toc163211474)

[4.3 The File Menu 59](#_Toc163211475)

[4.4 The Edit Menu 61](#_Toc163211476)

[4.5 The View Menu 61](#_Toc163211477)

[4.6 Using the Address Window 62](#_Toc163211478)

[5. Notepad 63](#_Toc163211479)

[5.1 File Menu 64](#_Toc163211480)

[5.2 Edit Menu 65](#_Toc163211481)

[5.3 Insert Menu 66](#_Toc163211482)

[5.4 Go to Menu 67](#_Toc163211483)

[5.5 Read Menu 67](#_Toc163211484)

[5.6 Layout Menu 68](#_Toc163211485)

[6. Connectivity 70](#_Toc163211486)

[6.1 Establishing a Connection 72](#_Toc163211487)

[6.2 Connecting to a Screen reader 74](#_Toc163211488)

[6.2.1 Connecting to PC via USB 74](#_Toc163211489)

[6.2.2 Connecting to PC via Bluetooth serial port 74](#_Toc163211490)

[6.2.3 Using the Braille eMotion 40 with JAWS for Windows 75](#_Toc163211491)

[6.2.4 Using Braille eMotion 40 as a Braille display with NVDA 76](#_Toc163211492)

[6.2.5 Using Braille eMotion 40 with VoiceOver on the Mac. 76](#_Toc163211493)

[6.2.6 Using the Braille eMotion 40 with IOS devices 78](#_Toc163211494)

[6.2.7 Using the Braille eMotion 40 with TalkBack for Android. 78](#_Toc163211495)

[6.4 Terminal Clipboard 79](#_Toc163211496)

[7 Document Reader 80](#_Toc163211497)

[7.1 General Document Navigation 80](#_Toc163211498)

[7.2 The File menu 81](#_Toc163211499)

[7.3 The Edit Menu 82](#_Toc163211500)

[7.4 The Go To Menu 82](#_Toc163211501)

[7.5 The Read Menu 83](#_Toc163211502)

[7.6 The Mark Menu 83](#_Toc163211503)

[8 DAISY Player 84](#_Toc163211504)

[8.1 Arrangement of the DAISY Player 85](#_Toc163211505)

[8.2 The File Menu 86](#_Toc163211506)

[8.3 The Document Menu 86](#_Toc163211507)

[8.4 The Mark Menu 87](#_Toc163211508)

[8.5 The Headings Menu 87](#_Toc163211509)

[8.6 The Memo Menu 88](#_Toc163211510)

[9 Media Player 88](#_Toc163211511)

[9.1 Media Player Layout 89](#_Toc163211512)

[9.2 The File Menu 90](#_Toc163211513)

[9.3 The Play Menu 90](#_Toc163211514)

[9.4 The Position Menu 91](#_Toc163211515)

[9.5 The Mark Menu 92](#_Toc163211516)

[9.6 The Settings Menu 92](#_Toc163211517)

[9.7 Playing Audio Books 92](#_Toc163211518)

[9.8 Using Background Play 93](#_Toc163211519)

[10. Utilities 94](#_Toc163211520)

[10.1 Voice Recorder 94](#_Toc163211521)

[10.1.1 Making Recordings 95](#_Toc163211522)

[10.1.2 Making DAISY Recordings 96](#_Toc163211523)

[10.1.3 Playing individual Recordings 97](#_Toc163211524)

[10.1.4 Record Settings 97](#_Toc163211525)

[10.2 Calculator 99](#_Toc163211526)

[10.2.1 General Functions 99](#_Toc163211527)

[10.2.2 Fractional Arithmetic 100](#_Toc163211528)

[10.2.3 Memory Functions 100](#_Toc163211529)

[10.2.4 Sine Functions 102](#_Toc163211530)

[10.2.5 Cosine Functions 102](#_Toc163211531)

[10.2.6 Tangent Functions 102](#_Toc163211532)

[10.2.7 Logarithm Functions 103](#_Toc163211533)

[10.2.8 Convert Unit 103](#_Toc163211534)

[10.2.9 Copy to Clipboard 104](#_Toc163211535)

[10.2.10 Return Formula 105](#_Toc163211536)

[10.2.11 Option Settings 105](#_Toc163211537)

[10.3 Display Time and Date 105](#_Toc163211538)

[10.4 Wake Up Alarm 106](#_Toc163211539)

[10.5 Stopwatch 108](#_Toc163211540)

[10.6 Backup/Restore Flashdisk 109](#_Toc163211541)

[10.7 Format 110](#_Toc163211542)

[10.8 Set Sleep Timer 111](#_Toc163211543)

[10.9 Upgrade Braille eMotion 40 Firmware 111](#_Toc163211544)

[10.9.1 Upgrading the Braille eMotion 40 Firmware Using the Internet 113](#_Toc163211545)

[10.9.2 Upgrading the Braille eMotion 40 Firmware from a Disk 114](#_Toc163211546)

[11. Getting Help 115](#_Toc163211547)

[12 Key Commands for Connectivity 116](#_Toc163211548)

[12.1 General Connectivity Commands 116](#_Toc163211549)

[12.2 Commands for JAWS For Windows 117](#_Toc163211550)

[12.2.1 General commands: 117](#_Toc163211551)

[12.2.2 Navigation and Selection Commands: 118](#_Toc163211552)

[12.2.3 Voice and Braille Configuration Commands 120](#_Toc163211553)

[12.2.4 JAWS Commands: 121](#_Toc163211554)

[12.3 Commands for NVDA 121](#_Toc163211555)

[12.3.1 Original NVDA key map 121](#_Toc163211556)

[12.3.2 General HID Braille Commands 123](#_Toc163211557)

[12.4 Commands for VoiceOver for MAC 124](#_Toc163211558)

[12.4.1 General and Navigation 124](#_Toc163211559)

[12.4.2 VoiceOver and Braille 126](#_Toc163211560)

[12.5 Commands for iOS: 127](#_Toc163211561)

[12.5.1 General and Navigation 127](#_Toc163211562)

[12.5.2 Reading and Editing 129](#_Toc163211563)

[12.5.3 VoiceOver and Braille 129](#_Toc163211564)

[12.6 Commands for Android 130](#_Toc163211565)

[12.6.1 General Commands 130](#_Toc163211566)

[12.6.2 Text Navigation and Selection 132](#_Toc163211567)

[13. Key Commands for Internal Applications 133](#_Toc163211568)

[13.1 Common Hotkeys 133](#_Toc163211569)

[13.2 Quick Launch Commands 136](#_Toc163211570)

[13.3 File Manager 137](#_Toc163211571)

[13.3.1 Commands for the File/Folder List 137](#_Toc163211572)

[13.3.2 File Menu Commands 138](#_Toc163211573)

[13.3.3 Edit Menu Commands 138](#_Toc163211574)

[13.3.4 View Menu Commands 139](#_Toc163211575)

[13.4 Notepad Commands 139](#_Toc163211576)

[13.4.1 File Menu Commands 139](#_Toc163211577)

[13.4.2 Edit Menu Commands 139](#_Toc163211578)

[13.4.3 Insert Menu Commands 140](#_Toc163211579)

[13.4.4 Go To Commands 140](#_Toc163211580)

[13.4.5 Read Commands 141](#_Toc163211581)

[13.4.6 Layout Commands 142](#_Toc163211582)

[13.4.7 Miscellaneous Hot Keys 142](#_Toc163211583)

[13.5 Document Reader Commands 142](#_Toc163211584)

[13.5.1 File commands: 142](#_Toc163211585)

[13.5.2 Edit Commands: 143](#_Toc163211586)

[13.5.3 Read Commands: 143](#_Toc163211587)

[13.5.4 Go To Commands: 143](#_Toc163211588)

[13.5.5 Mark Commands: 144](#_Toc163211589)

[13.6 DAISY Player Commands 144](#_Toc163211590)

[13.6.1 Reading Commands 144](#_Toc163211591)

[13.6.2 Navigation Commands 145](#_Toc163211592)

[13.6.3 Mark and Memo Commands 146](#_Toc163211593)

[13.7 Media Player Commands 146](#_Toc163211594)

[13.7.1 File Commands 146](#_Toc163211595)

[13.7.2 Playback Commands 147](#_Toc163211596)

[13.7.3 Mark and Position Commands 148](#_Toc163211597)

[13.7.4 Hot Keys in the Play Information Tab 148](#_Toc163211598)

[13.7.5 Hot Keys in the Playlist Tab 149](#_Toc163211599)

[13.7.6 Background Playback Commands 149](#_Toc163211600)

[13.8 Utilities Commands 150](#_Toc163211601)

[13.8.1 Voice Recorder Commands 150](#_Toc163211602)

[13.8.2 Calculator Commands 150](#_Toc163211603)

[13.8.3 Wakeup Alarm 151](#_Toc163211604)

[13.8.4 Stopwatch 152](#_Toc163211605)

[13.9 Settings Commands 152](#_Toc163211606)

[13.9.1 Setting Time and Date 152](#_Toc163211607)

[13.9.2 Bluetooth Manager 153](#_Toc163211608)

[13.9.3 Backup/Restore Personalized Settings 153](#_Toc163211609)

# 1. Introduction

## 1.1 What is the Braille eMotion 40?

The Braille eMotion 40 is a HIMS branded smart Braille display developed and manufactured by SELVAS Healthcare, for people who are blind and visually impaired. The Braille eMotion 40 has a variety of powerful capabilities, including the following.

1. Use the Braille eMotion 40 as a USB or Bluetooth Braille display with a compatible screen reader, such as JAWS, NVDA, SuperNova, Microsoft Narrator, VoiceOver for Mac and iOS and TalkBack for Android™.
2. Read TXT, BRF, RTF, PDF, EPUB, and Microsoft Word files.
3. Take notes or create basic documents using the Notepad.
4. Play audio and video media, and read DAISY text and audio books,.
5. Perform scientific and graphic calculations, and set alarms and timers.
6. Create high quality recordings, using the internal stereo microphones.

## 1.2 Physical Tour

To get the most from your Braille eMotion 40, it is important to become oriented to the buttons and ports as well as learning their functions. This section will orient you to your Braille eMotion 40.

Place the Braille eMotion 40 on a desk or table top with the Braille display nearest you.

### 1.2.1 The Top Panel

On the top face of the Braille eMotion 40, near the top edge, are located 8 Perkins-style keys, with an additional, horizontally oriented button in the center. To the left of the horizontal button are dots 1, 2, 3, and “Backspace”, (or dot 7). To the right of the horizontal button, are dots 4, 5, 6, and “Enter), (or dot 8). The horizontal button in the center is used alone to change the current grade of Braille, and in conjunction with other keys to change input parameters, such as the current Braille code, or to switch between Standalone and Terminal Modes.

To the upper left of the “Backspace” key, there are 3 small square keys with Braille labels. The left-most key is labeled with a W, and controls Wi-fi. Short press the Wi-fi key to toggle Wi-fi on and off. Long press to open the Internet Setup dialog. To the right of the Wi-fi key, is the Bluetooth key, labeled with the letter B. It operates similarly to the Wi-fi key, with a short press toggling Bluetooth on and off, and a long press opening the Bluetooth Manager. To the right of the Bluetooth key is the Connectivity button, labeled with the letter C. Short press the “Connectivity” button to open Connectivity Mode and return to your most recent available connection. Long press it to bring up the Connectivity menu.

To the right of the “Enter” key, is a larger squarish button with rounded corners. This is the “Power” key. When the eMotion is running, short press this key to bring it in and out of Sleep Mode or to boot from shut down. When the unit is running, long press it to bring up the Power options. Hold the Power key for 10 seconds, to force a reboot if the unit is not responding, or is behaving erratically.

To the left and right of the keyboard are located the rectangular stereo speaker grills.

Below the Perkins keyboard is a 40 cell Braille display. Above the Braille display, there are cursor routing buttons corresponding to each of the 40 Braille cells. When you are editing documents, you can use these keys to route your cursor to the character of the corresponding Braille cell. The cursor routing keys also serve as shortcut keys for navigating lists and groups of fields in certain places on the unit. A dot is placed on each 5th cursor routing button for easier orientation.

On each side of the Braille display are two capsule shaped keys. These are the "UP" and "DOWN" scroll keys. The scroll keys are used to scroll the Braille display through menus, fields, lists or text. You can use the scroll keys to scroll by display length, paragraph, line, sentence, or character. You can set the navigation unit of the scroll keys in the "Braille Options". (See chapter 3.)

Below the Braille cells is a slightly sloped section near the center of the device. This section contains 3 keys. From left to right, these are the Control key, the spacebar, and the Alt key.

### 1.2.2 The Front Edge

The front edge contains several controls. From left to right are located the Left Cursor button, F1, F2, the left stereo microphone, the Home key, the right stereo microphone, F3, F4, the Right Cursor button, and the Micro SD card slot. The left and Right Cursor buttons, work together with other keys to control various aspects of navigation. Pressing them individually scrolls the Braille display in a similar manner to the Left and Right Scroll buttons, and the navigation element used can be defined in the “Braille Options”. Change the navigation element for the Cursor keys from anywhere by pressing both Cursor keys simultaneously. Press either of the Cursor buttons together with the Left or Right scroll keys to cycle the movement unit by which those particular Scroll keys navigate. Function keys 1-4 perform various operations, depending on your position on the unit, and will be described in context in the subsequent chapters of this manual.

In the center of the front edge is a protruding section, containing the “Home” button, with the stereo microphones on either side. A short press of the “Home” button opens the main menu from anywhere on the device, except in Terminal Mode. Two short presses of the “Home” button opens the Task Manager. Three short presses of the “Home” button toggles voice output on/off. Holding the “Home” button for 3 seconds locks and unlocks the keyboard.

Near the right end of the front edge is a small, rectangular slot for inserting the Micro Sd card for additional storage. Press the Micro SD card in to the slot until you feel it

click in to place. To release it, gently press in on the card and release.

The card will pop out enough for you to grasp it with your fingers and

remove it.

### 1.2.3 The Right Edge

The Right edge of the Braille eMotion 40 contains the USB C port, the headphone jack, and the Voice Control and Volume buttons. . The USB C port nearest the rear of the unit is for powering and charging the unit, as well as connecting to a PC for use as a Braille display, and to transfer data. Use the 3.5 mm audio jack to connect headphones or external speakers.

Below the headphone jack is the “Voice Control” button. The Voice Control button allows you to quickly access Speed, volume, and pitch settings for the TTS, or audio speed, volume and equalizer during audio playback. Cycle through the settings with repeated presses of the Voice Control button, and use the Volume buttons to adjust the chosen setting. By default, the Volume Up and Down buttons will control the volume of the content to which you are currently listening. If you are listening to media, they control media volume. If you are reading a DAISY text book or document file, they adjust the volume of the reading voice. If you are in a menu or list, by default, the Volume buttons control the eMotion’s Main Volume.

Long press the “Volume Down” button to obtain battery status. Long press the “Volume Up” button to announce the Date and Time. Long press the “Voice Control” button to initialize voice/audio settings for your current context.

### 1.2.4 The Left Edge

The left edge of the Braille eMotion 40 contains the “Record” button, and the USB host port.

The button nearest the rear is the “Record button. Press the record button quickly to open the Voice Recorder application. Long press it to automatically start a new recording.

Nearer the front of the device is a USB A host port, for connecting USB drives, QWERTY keyboards and USB audio devices to the Braille eMotion 40.

Congratulations! You are now familiar with the basic functions of the buttons and ports of the Braille eMotion 40. The rest of the manual discusses each function in greater detail to help you maximize the potential of your Braille eMotion 40.

## 1.3 Hardware Specifications

1. Operating system: Android™ 12

2. Internal storage: 64GB UFS 2.1 (around 43GB available to user).

3. RAM: 4GB LPDDR4X.

4. CPU: Octa (4 x 2.0 GHz Kryo Gold, 4 x 1.8 GHz Kryo Silver)

5. Battery: Li-ion 3.8V, 5000 mAh (Built-in).

6. Battery running time: About 20 hours (with Braille and TTS, internal speaker at mid volume)

7. Keyboard: 9 key Perkins-Style Braille keyboard, Control and Alt, 4 function keys, 40 cursor routing keys, 4 scroll buttons, 2 cursor buttons, home key and input selector button.

8. Braille display: 40 refreshable Braille cells.

9. Wireless: 　 Wi-Fi 802.11a/b/g/n/ac, Dual-band; Bluetooth 5.0(HID, A2DP, HFP)

10. Interface: USB C x 1, USB A X 1, 1 Micro SD card slot (FAT32 and exFAT supported)

11. Sound: Internal stereo speakers, stereo headphone jack.

12. Voice recording: Internal stereo MEMS microphones, headset/USB microphone.

13. Vibrate motor: installed.

## 1.4 Memory on the Braille eMotion 40

The Braille eMotion 40 has 4GB of RAM (random access memory) and 64GB of flash memory. The RAM is memory reserved for running programs. RAM is a temporary storage area for any program files that are running or any currently open documents. The data in the RAM area disappears if your battery depletes, and the AC adapter is not connected. The RAM data also disappears when Braille eMotion 40 reboots for any reason. This means, if you have an open document which you have not saved, the unsaved data disappears.

# 2. Basic Functions of the Braille eMotion 40

## 2.1 How to Enter Commands

The commands used to operate the Braille eMotion 40 are comprised of various combinations of the Braille and function keys. In this user manual, the "-" (dash) is used to indicate that keys should be pressed simultaneously. For example, "Space-Z" indicates that the user should press "space" and Z at the same time. This manual also contains expressions like "Space-2-4-6". This means that the spacebar with dots 2, 4, and 6 should be pressed and released simultaneously.

In a menu or dialog, when your cursor is placed on your desired command, you can execute most commands by pressing "Enter". To cancel a function or close a program or menu, and return to your previous location, press "Space-Z".

### 2.1.1 Basic Alerts and Messages

There are instances where the Braille eMotion 40 alerts you to events for which you have asked it to notify you.

Braille eMotion 40 system messages are displayed and spoken, and automatically disappear when any key is pressed, or after a set number of seconds. For example, when you connect the AC adapter to the Braille eMotion 40, the Braille eMotion 40 speaks the message "AC adapter connected." When you disconnect it, the Braille eMotion 40 says, "AC adaptor disconnected." You can determine for how much time system alerts remain on the Braille display in the “Braille Options” described in the next chapter.

## 2.2 Menu Concepts

Menus on the Braille eMotion 40 provide you with a list of programs, actions, or options from which you can select. If a menu item has a sub menu, selecting it brings up another list of choices.

When using a program on the Braille eMotion 40, press "Space-M" or F2 to bring up its menu. Press the "Up" scroll key or "Space-1" to move to the previous item, and press the "Down" scroll key or "Space-4" to move to the next item.

To move to the first item in the menu, press "Space-1-2-3." To move to the last item in the menu, press "Space-4-5-6." When placed on the first item of a sub menu, pressing "Backspace" returns you to the upper Menu. To repeat the current item, press "Space-R". To open a sub menu or execute the current item, press “Enter”.

You can also quickly jump to and execute a menu item by pressing the menu item's shortcut key, usually the first letter of the item name. Often menu items can also be executed instantly, directly from your current position in the program, with a hotkey.

Shortcut keys are displayed in parentheses following the menu names. Hotkeys generally consist of a modifier such as "Enter," "Space," or "Backspace", pressed simultaneously with a letter or dot combination. These are displayed following the shortcut keys.

For example, if you are in the Notepad, and press "Space-M" or "F2," then press "Enter" on "File," you hear "New (n) pull down Enter-n". The word "New" is the menu option. You would press the letter N to jump to "New" from within the "File" menu. Press "Enter-n" to access the "New" document command from anywhere in the Notepad. The n is the shortcut key and "Enter-n" is the hotkey. It is important to note that some hotkey commands are global, thus will work from anywhere on the unit, and some are program specific. For example, if you want to activate the "new document" option in the Notepad, you cannot press "Enter-n" from the main menu to activate this option. You must be in the Notepad for "Enter-n" to activate the "new document" command. However, if you wish to activate the "display time and Date" option in the "Utilities" menu, this can be done from anywhere on the unit using "Space-T" as this is a global hot key.

Let's begin going through the various menus. First, turn the unit on as explained in chapter 1. Now, bring up the "Program" menu by pressing the "Home" key. The "Program" menu is the main menu of the Braille eMotion 40. You can access all of the programming, option settings, utilities, and help from this menu.

The "Program" menu consists of 7 programs: My eMotion, File Manager, Notepad, Connectivity, Document Reader, DAISY Player, and Media Player; then 3 sub menus: Utilities, Settings and Help.

The first item in the "Program" menu is "My eMotion". If "Space-4" is pressed, the next menu item is displayed and spoken. Pressing "Space-4" repeatedly, continues your navigational progress down the list of items in the "Program" menu. When you reach the bottom of the list, the “Help" menu item is displayed as it is the last item in the "Program" menu.

You could also jump quickly to the "Help" menu item by pressing "Space-4-5-6" when "My emotion" is displayed. Press "Space-1-2-3," and the Braille eMotion 40 jumps back to the top. Press "Enter" on an item you want to execute or open. If you are in a submenu, and wish to return to the main "Program" menu, press "Space-E" or F4.

The "Utilities" menu contains the “Voice Recorder”, "Calculator", “Display time and Date", "Wake Up Alarm", "Stopwatch", “Backup/Restore Flashdisk”, "Format", "Sleep Timer" and "Upgrade Braille eMotion 40 Firmware".

The "Settings" menu contains “Braille Options”, “Voice Options”, “general options”, "Set Time and Date", "Setup Internet", "Bluetooth Manager", "Backup/Restore Settings", and "Initialize Braille eMotion 40 Options”.

The "Help" menu contains “User Guide” and “Information”. The “User Guide item opens a navigable version of the Braille eMotion 40 User Manual. The “Information” dialog provides the copyright and version of the Braille eMotion 40, as well as the operating system version, the version of the Braille eMotion 40 firmware, and other useful items such as Mac address, network information and where to get service and support. When the "information" dialog is open, you can save the information about the Braille eMotion 40 by pressing "tab (Space-4-5 or F3)", to navigate to the "Save" button and press "Enter". The unit displays "Successfully saved", and returns you to the "Save" button. The saved file is named "bs-information.txt", and is stored in "flashdisk" for easy access.

For more information on a specific program, please see the section of this user manual related to that program.

The "Home" command for accessing the "Program" menu is an example of a global hotkey. This means that pressing the "Home" key takes you to the "Program" menu immediately from anywhere on the Braille eMotion 40.

There are also global quick launch commands for most Braille eMotion 40 programs, usually comprised of either F1 or F3 and a letter or dot combination. These quick launch commands immediately launch their associated application from anywhere on the Braille eMotion 40. See the Commands Summary section for a complete list of the quick launch commands.

### 2.2.1 Control Symbols

The Braille eMotion 40 uses several control symbols to note the type of information being displayed: examples are list items, menus, and edit boxes. These symbols can appear "Before" or "After" the text, or the appearance of this information may be set to "off", determined by the "Control information" setting in the "Global Options". For example, if "Control information" is set to "before", and you bring up the Notepad’s program menu, The Braille eMotion 40 displays, "MN File (f) pull down".

The following table shows the types of controls and the symbols that are used to indicate them.

Name

Symbol

Comments

Menu

MN

A menu that has submenus.

Menu item

MI

A menu item that does not have a sub menu.

List item

LI

An item that is part of a list.

Edit box

EB

After this symbol, the edit box name is displayed. You can find the edit box after the edit box name. Edit boxes that begin with the symbol "EB" are one line, such as those for a text search.

Multi edit box

MEB

This indicates a multi-line edit box.

Computer edit box

CE

An edit box requiring ASCII Braille input, such as when entering a file name.

Combo box

CB

Indicates a combo box in which you can choose an item by pressing the up scroll button or the down scroll button.

(Ex: "CB Type:" in the "Open dialog box" of the Notepad)

Edit combo box

ECB

choose the desired item by pressing the up or down scroll button, or by directly typing in the item name.

(Ex: "ECB File name: (cursor) in the "Open dialog box" of the Notepad program)

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 "Space" or "Backspace".

(Ex: When you exit from the Notepad, "PB Save: Yes")

Static box

ST

ST indicates the current status.

(Ex: "ST noname.hbl/insert mode/write" in the Notepad program)

The symbols enable you to understand what type of input control or menu you are working with. For example, if "MN," "MI," or "LI" are displayed, you know you can move from one item to the previous and next items by pressing the "Up" and "Down" scroll keys. If "ECB," "EB," "CB," or "MEB" are displayed, you know you are in an input area where you must type. If "BT" is displayed, you can press "Enter" to activate the "button".

## 2.3 Using the Function Keys

There are four function keys on the Braille eMotion 40. You can use these function keys to open the menus, cancel tasks, and move to other items.

The "F1" key opens the File Search dialog from anywhere on the unit, and is used in combination with other keys to open various Braille eMotion 40 programs.

From within Braille eMotion 40 programs, the "F2" key opens the program specific menu, similar to pressing “Alt” in Windows.

* Note: you may also use "Space-M" to perform this function.

The "F3" key functions as "Tab ("Space-4-5")". "Space-F3" serves as "Shift-Tab ("Space-1-2")". F3 is also used together with other keys to open Braille eMotion 40 programs.

The "F4" key functions like the "Escape" key on a PC. You can also use "Space-E". Please note that "Escape" does not exit a program, as does "Space-Z" but rather, exits menus, dialogs, or prompt boxes.

You can use the function keys in combination to perform various other tasks. Pressing "F1" and "F2" at the same time functions as "Page Up". Pressing the "F3" and "F4" keys together serves as "Page Down". "F1" and "F4" together opens the task list. Pressing the "F2" and "F3" keys together cycles through the running programs; similar to pressing "alt-tab" on your PC. The Task List and task switching are explained in greater detail in section 2.8.

The keys to the left and right of the spacebar are referred to as Control and Alt. This is because, when using the emotion in Terminal Mode, these keys function as Control and Alt on a QWERTY keyboard so that you may take advantage of keyboard shortcuts when they are present. In Braille eMotion 40 specific applications, Control and Alt operate similarly to "Space-1" and "Space-4" and provide an alternative method for scrolling through menus and lists.

As explained in the Introduction, the Home button on the center of the front edge, has several functions. Press it anywhere outside of Terminal Mode to go to the Main Menu. Press it twice quickly to bring up the Task Manager. Press it 3 times quickly to toggle the voice on and off. Long press it for more than 3 seconds to lock and unlock the keyboard. When in terminal Mode, the “Home” key generally opens the Home Screen or Desktop of the connected device.

The “Center” button is located in the center of the keyboard, between dots 1 and 4. Press it quickly to change the current grade of Braille. Press it with “Enter” to switch to the next Braille code in the cycle. Press it with “Backspace” to switch to the previous Braille code in the cycle. Note: you can also change the Braille code in the “Braille Options” described in the next chapter. The “center” button is also used in conjunction with other keys to control media play in the background.

When in Terminal Mode, the “Center” button invokes the Terminal Clipboard. The “Center” button is also used in conjunction with other keys to switch Braille display connections and control other connectivity related functions. Press “Center” with “Space” to switch between Terminal Mode and internal (Standalone) program operations.

The “Cursor” buttons work with other keys to support various aspects of navigation, background media playback, and other functions. If you hold the “Cursor” buttons while pressing the Left or Right scroll keys, you will cycle through the various scroll key options for whichever set you are currently pressing. Pressing “Cursor” and “Enter” together pauses playback or recording in the background.

Press the “cursor” button with F1 or F3 to move back by the current movement unit when media is playing in the background. Press the “Cursor” button with F2 or F4 to move forward by the current movement unit during media background play.

Use the left Cursor button with Center” to change the to the previous media movement unit. Use the right cursor button with “Center” to change to the next media movement unit.

Pressing the “Left Cursor Key” by itself scrolls the Braille display backward, and pressing the “Right Cursor Key” scrolls the Braille display forward. The movement unit by which the Cursor keys scroll the display can be defined in the “Braille Options”, or can be adjusted from anywhere by pressing both Cursor keys simultaneously.

## 2.4 The Power Supply and the Battery Pack

To check the battery power status, press "Space-1-6 or long press the “volume down” key." The unit displays the following 2 items:

1. Battery power level: expressed as a percentage of the remaining battery power compared to a full charge.

2. Power source (battery, or AC power [USB C])

If the battery power level drops under 15 percent, the Braille eMotion 40 displays the battery status on the Braille display, and it announces that the battery has less than 15 percent of its power remaining. If the battery power level falls below five percent, the Braille eMotion 40 gives you a warning indicating that your battery power level is under five percent, and the Braille eMotion 40 will be automatically put to sleep in one minute, unless you connect it to a power supply. When the level reaches 2 percent, the unit automatically shuts down.

\*Note: if the battery is completely depleted, the unit cannot boot. When you connect the Braille eMotion 40 to power in this state, a Braille message appears showing you that the unit is charging, and the percentage of the charge. This is to alert you that you must charge the device for a few minutes before you can boot the device.

We recommend charging the unit to around 5% before attempting to boot the device. When the charging status appears, hold the Power button for around 5 seconds.

Before using the Braille eMotion 40 for the first time, please charge the battery for at least 3 hours. You may use the unit during the initial charge, however, it is recommended if you do, that the unit remain connected to power for at least 3 hours to fully charge the battery.

Braille eMotion 40 can be charged via any USB C charger. It is compatible with the Quik Charge power specification, and should charge in about 2.5 hours with the included power adapter. However, charging time will vary according to the power specification of the charger being used.

Braille eMotion 40 will operate on average for about 20 hours on a single charge. However, this will also vary greatly if USB or Bluetooth devices are connected, if media is playing, etc.

## 2.5 Adjusting Volume and other properties.

You can use the Voice Control button and the Volume buttons on the right side of Braille eMotion 40 to adjust the volume of media playback, the guide voice, and the reading voice. You can also use it to change various other settings, such as speed, and media equalizer.

To adjust a setting, press the Voice Control button just above the Volume buttons repeatedly until you reach your desired setting. Then, use the Volume buttons to increase or decrease the value of that setting.

The available settings differ depending on your location in Braille eMotion 40, but will always include the master (Main Volume” setting along with the context specific options. The following settings are available in their respective locations on Braille eMotion 40.

1. From the Home Menu: Guide Voice Volume, Guide Voice Speed and Guide Voice Pitch.
2. From the Media Player: Media Volume, Media Playback Speed and Media Equalizer.
3. During DAISY text and document playback: Reading Voice Volume, Reading Voice Speed, and Reading Voice Pitch.
4. During DAISY Audio Playback: DAISY Audio Volume, and DAISY Audio Speed.

\*Note: the Volume buttons will automatically return to their default setting of controlling the volume of the content to which you are currently listening after 5 seconds of inactivity. You will know this has occurred, as Braille eMotion 40 emits a short beep sound to indicate this. You can initialize all the associated settings for your current context to their defaults, by long pressing the Voice Control key.

You can long press the “Volume Down” key to announce the battery and charging status. Long press the “Volume Up” key to announce the current time.

## 2.6 Using Speech and Braille

When using the Braille eMotion 40, you can choose to read using Braille only or speech only. You can also use both Braille and speech simultaneously. However, you cannot turn off both Braille and speech as you would have no method of receiving information from the Braille eMotion 40. Use "Backspace-F2" to toggle the speech on and off. Press "Backspace-F3" to toggle the Braille on and off. You can also control these settings in the Braille and Voice options.

## 2.7 Entering Text

In a document, "edit box" or "multi edit box" on the Braille eMotion 40, you can enter either grade 1 or grade 2 Braille. By default, the unit uses UEB Braille, and you are free to use UEB, even when writing e-mail or Web addresses. However, if using the traditional US Braille code, some areas of the unit, such as the file name edit boxes, contain a "computer edit box" requiring you to enter text in computer Braille.

To enter a capital letter in computer Braille, use the upper case indicator (Space-U" before the letter you want capitalized. For example, if you want to enter H in a computer edit box, press "Space-U" then H. If you press "Space-U" twice, caps lock is turned on. Press "Space-U" again to turn off caps lock.

You can also press "Space-Backspace" simultaneously with the letter to capitalize it. To input the "at sign," you may either use "Space-U" followed by dot 4, or "Space-Backspace-dot 4".

To enter numbers in contracted or uncontracted Braille, use the "number sign followed by the number. However, when using computer Braille, you use no number sign and must enter numbers as "dropped" numbers (Nemeth numbers).

## 2.8 Multi-Tasking

Braille eMotion 40 can run many tasks at once. For example, you can work with the Notepad while listening to music, and place calculations into a document at the same time. To do this, open the Media Player and play a music file. While the audio is playing, press the "Home" key to bring up the "Program" menu and launch the Notepad.

If you try to run a program that is currently running, The Braille eMotion 40 does not open a new instance of the program, but rather, returns you to the instance of the program that is already running. For example, while working with a document called "Notes" you decide to execute the "File Manager." Next, you navigate to a document called "journal" in the file list and press "Enter." The Notepad does not load a second time, but rather, "journal" is opened in the same instance of the Notepad in which "notes" is already loaded. You can switch among multiple open documents in a single instance of the Notepad with F3 and Space-F3. Switching documents is explained in more detail in section 5.

To switch between currently running programs press "F1-F4" or the “Home” key twice quickly to open the Task List. The Task List shows all the currently running programs in list form. To return to any application, simply navigate to it and press "Enter". To force closing of an application in this list, press "Space-D". To close all applications, press “F3” to tab to the “Close All” button, and press “Enter”, or press “Enter-Space-D”.

If you have pressed "Home" to bring up the "Program" menu, or "F1-F4" to open the Task List and you decide not to access a different application, you can press "escape" ("Space-e" or "F4") to return to your previous location on the unit.

You can use "F2-F3" to immediately cycle among all running programs without opening the Task List. This is similar to using "alt-tab" on your PC. If you are running three programs and are in the second program, pressing "F2" and "F3" moves you to the third program. If you press "F2-F3" again, you are placed in the first program.

In the above case, if you were to press "Space-Z" to close the currently open program, you are then placed in the previous program. However, if there is only one program running, pressing "Space-Z" closes the program and places you in the "Program" menu.

## 2.9 Locking the Keys

You can lock the keys on the Braille eMotion 40 to prevent the accidental pressing of keys. To do this, long press the “Home key”.

Braille eMotion 40 announces, "all keys locked". This means all keys on the unit are disabled including the on/off switch.

To unlock the keyboard, long press the “Home” key once more, and the unit returns to normal operation.

## 2.10 One-Handed Mode

Braille eMotion 40 provides a One-handed mode for users restricted to the use of one hand for Braille input. To toggle One-handed mode on/off, press “Backspace-1-2-3”. You can also turn One-handed mode on or off in the "Global Options" dialog.

When One-handed mode is on, use the following methods to input text:

1. To type a character, press the dots in any combination or order. When you have pressed all dots, press "Space" to complete the entry of the character. For example, if you want to type "h," you press "dot 1" and "dot 2" separately or together and then press "dot 5." Finally, press "Space".

2. To press a command that includes "Space," press "Space" both before and after the dot combination. For example, to press "Space-o (dots 1-3-5)," press "Space" 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," press "Backspace" or "Enter" before the dot combination. Then press keys that make up the dot combination. Finally press "Space". For example, to press "Enter-l (dots 1-2-3)", press "Enter", and then press "dots 1-2-3." then, press "Space".

4. To press "Space," "Backspace" and "Enter", press the key twice. For example, to press "Space" to create a space between words, press "Space" twice.

The operation of the scroll keys and function keys remains the same as in normal mode.

If One-handed mode is on, the Braille eMotion 40 announces this each time it is powered on, as well as how to return to normal operation.

## 2.11 Using Typing Mode

While you are typing in a document, you may wish to turn off the navigation keystrokes, especially if you type very fast, as you may accidentally navigate when you intend to enter text. To turn on "Typing Mode", press "Backspace-Space-Enter-M” " from within a document. "Start typing mode" is announced and displayed.

When using "Typing Mode", if you press "Space-dot 4", instead of moving to the next line, the "Space" and "Dot 4" are entered into the document.

To cancel "Typing Mode", Press "Backspace-Space-Enter-M” " once again. "End typing mode" is announced and displayed. After "Typing Mode" is canceled, navigation commands return to normal operation.

## 2.12 Special Boot Sequences

Braille eMotion 40 offers several hot keys for booting the unit under specific conditions, for example, in or out of One-Handed Mode, or booting with speech muted. Each of these sequences should be initiated from a complete Power Off state, they will not work when awakening the unit from Sleep mode.

If you hold the “F1” key while powering on the device, it will boot in a muted state. Holding “F2” while powering on will boot in an unmuted state.

Holding “F3” while powering on will boot the device in One-Handed Mode. Holding “F4” while powering on will boot with One-Handed Mode turned off.

Hold the “Home” button while powering on the device to initialize all Braille eMotion 40 options back to their factory settings. Hold “F3-F4” while powering on to format the internal flashdisk.

# 3. Customizing your Braille display

When you receive your Braille display, one of the first things you will want to do is to configure it to act the way you want it to. The " Settings" menu allows you to configure and customize your Braille display to meet your specific needs and preferences.

To open the "Settings" menu, press "Home" to bring up the main menu. Press "Space-4" until you reach "Settings" and press "Enter". Or, just press S from the main menu to quickly jump to and open the "Settings" menu.

The "Settings" menu contains the following items: “Braille Options”, “Voice Options”, “General options”, "Set Time and Date", "Setup Internet", "Bluetooth Manager", "Backup/Restore Braille eMotion 40 Settings", and “Initialize Braille eMotion 40 Options". The following sections discuss each of these items in detail.

When in a settings dialog, navigate among the options using “Space-1” and “Space-4”. You can toggle an option on or off or cycle through the available values of a setting with the "space" and "Backspace" keys. To save your changes, press "Enter" or tab to the "Confirm" button and press "Enter". Braille eMotion 40 says, " options Saved”," and you are returned to your previous position on the Braille display. To cancel without saving changes, press the "F4" key, "Space-E" or "Space-Z".

Many of the various Options in these menus also have global hotkeys, allowing you to adjust these settings from anywhere on the unit. When focused on an option, press “Space-3-6” to announce the shortcut within the current dialog, as well as the global hotkey if it exists.

You can also access a sub menu of options at any time from anywhere on the unit by pressing “Space-O”. This hot key presents you with a sub menu of the major categories, “Braille Options”, “Voice Options” and “General Options”. No matter your position on the unit, changing these options will affect global change. However, it is also possible to customize reading voice settings specifically for the Notepad, Document Reader and DAISY Player separate from the global system settings. You can access the program specific settings under the “Voice Settings” option in the File menu of each of these programs.

## 3.1 Braille Options

The "Braille Options" dialog contains the following settings. For each setting, the shortcut key appears in parentheses, and the global hotkey, if available, is shown in quotes.

1. Braille display: (B). "Backspace-F3". Toggles the Braille display On/Off.
2. Braille Cursor: (C). "F4-Up Scroll". Defines how the Braille cursor appears on the Braille display: "Always Up", "Blinking" or "Off". Note the cursor appears as dots-7-8 in most situations. When selecting text, it notes the end of the selection with blinking dots-1-2-3-4-5-6-7-8.
3. Eight Dot Mode: (E). "F1-Down Scroll". Toggles Eight Dot Mode on/off for ASCII text entry.
4. View/input Braille Grade: (G). "Space-G". Lets you choose what grade of Braille you want to use when viewing/entering text: Uncontracted Braille, Contracted Braille, or Computer Braille.
5. Use Computer Braille Input: (I). “F2-F3-X”. Allows you to switch to computer Braille input regardless of what the View Grade is set to.
6. Braille Code: (C). "Center-Backspace and center-Enter". Defines the rules by which Braille is translated to text and vice versa: "US", "UK", "UEB", or one of several foreign language Braille codes. When foreign language codes are set, you can read and write Braille according to that language's Braille rules. The Braille language also affects lists, combo boxes, and edit boxes. Prompts, menus, buttons and static boxes remain in English.
7. Message Display Time: (M). defines how the Braille eMotion 40 deals with system messages: ignore, stand by until you press a key, or, display for from 1 to 10 seconds before disappearing.
8. Left Scroll Buttons: (L “Left Scroll Up or Down with Left Cursor key”). Defines the operation of the scroll buttons: "Scroll display", "Move by line", "Move by character", "Move by paragraph" and "Move by sentence".
9. Right Scroll buttons: (L “Right Scroll Up or down with Right Cursor Key”). Defines the function of the right Scroll buttons with the same options as above.
10. Cursor Keys: (K) “Left Cursor-Right Cursor”. Defines the navigation functions of the Cursor keys when used by themselves; offers the same navigation functions as the 2 sets of Scroll keys above.

## 3.2 Voice options

The "Voice Options" dialog contains the following settings. For each setting, the shortcut key appears in parentheses, and the global hotkey, if available, is shown in quotes.

1. Voice: (V). "Backspace-F2". Toggles the voice output On/Off.
2. Voice Name: (V). Use this option to choose the personality of the reading voice.
3. Use secondary Voice: (V). determines whether text in mixed languages will use a secondary language voice during continuous reading.
4. Secondary Voice Name: (S). Allows you to choose the voice personality for the secondary voice. \* Does not appear if the secondary Voice option is set to off.
5. Scroll Voice: (S). Choose whether you want the Braille eMotion 40 to speak while using the scroll buttons as you read.
6. Voice Volume: (L). "Backspace-F1 and Backspace-F4". Raises or lowers the volume of the text-to-speech.
7. Voice Rate: (R). "Space-F1 and Space-F4". Controls the rate of the speech.
8. Voice Pitch: (T). "Enter-F1 and Enter-F4". Adjusts the pitch of the Braille eMotion 40 voice.
9. Punctuation Level: (P). Use this setting to choose how you want the Braille eMotion 40 to read punctuation marks and symbols: "All", "Off", "Punctuation," or "Symbols".
10. Keyboard Echo: (K). Defines how Braille eMotion 40 speaks as you type: "On with characters and words," "On with characters," "On with words," or "Off".
11. Capitalization alert: (U). Choose how the Braille eMotion 40 alerts you that a character is capitalized, either when typing or when navigating a document or edit box by character: "Off", "Say cap," or "Pitch".
12. Numbers: (N). Defines how Braille eMotion 40 speaks numbers: when set to "On", Braille eMotion 40 speaks numbers, and when set to "Off", it speaks digits.

\*Note: Voice volume and rate can also be controlled using the Voice Control and Volume buttons as described in the last chapter.

To install additional voices, press “F3” from the Settings list, and press “Enter” on the “Install Voice” button. You are placed in a list of Vocalizer voices that can be installed on the Braille eMotion 40. Use “Space-1” and “Space-4” to navigate the list, and press “Enter” to install the current voice.

To install multiple voices at once, from the voices list, press “Space” on each of the voices you wish to install to select them, and press “Enter” to install all selected voices.

## 3.3 General Options

1. Main Volume: (V). "Backspace-SPACE-F1 and Backspace-Space-F4", or the Volume Up and Down buttons. Controls the master volume of the unit, including system sounds, audio and speech.
2. System Alerts: (A). Choose whether the Braille eMotion 40 alerts you to various events using audio signals, vibration signals, both, or no signal.
3. Battery Alerts: (B). Choose how you are alerted when your battery is low: "Message", "Beep", "Final Message" or "Final Beep".
4. Play Power On/Off Sound: (P). Choose whether you hear a sound when you turn on/off the Braille eMotion 40.
5. Skip Empty Lines: (E). Choose to have the Braille eMotion 40 alert you to a blank line by announcing "Blank" or skip empty lines.
6. Control Information: (I). Define where information is announced regarding the type of control on which you are currently located, a list item, menu, combo box, etc. Choose from Before, After and Off.
7. Hide passwords: (P). Choose whether the characters of a password are hidden as you type them.
8. Hot Key Information: (H). Defines how hot key information is announced: "Letters," "Dot patterns," or "Off".
9. Announce shortcut keys: (S). Lets you choose whether the Braille eMotion 40 speaks the menu shortcut key for a function as you encounter it.
10. Sleep Mode: (P). Set Braille eMotion 40 to save power by automatically shutting down after a certain period of time: "On", "Off", or "Message". (Only active when using battery power.)
11. Sleep Mode Kick In: (K). Use this option to set the time of inactivity before entering SLEEP Mode: 10 minutes, 40 minutes, or 30 minutes.
12. One-Handed Mode: (H). This option allows users with only the use of one hand to use the Braille eMotion 40 in a specific mode adapted for that purpose. For detailed information about one-handed mode, refer to section 2.10.
13. Default notepad Document Type: (Q). Set the default document type for new documents you create using the Notepad: “DOCX document”, "Sense document", "Braille document,", "DOC document" or "Text document".
14. Automatically synchronize with time server: (T). Using this feature, you can ensure the accuracy of the time on the Braille eMotion 40 by synchronizing with an atomic clock when Braille eMotion 40 is connected to the Internet.
15. Time Announcement: (T). Set the Braille eMotion 40 to announce the time every 5 minutes, every 10 minutes, 30 minutes or every hour.
16. Progress indicator: (P). Defines how the progress of tasks like opening a document or copying files is indicated: "Silent," (no progress indication) "Beep," (continuous beeps while the task is performed) and "Message" (progress is shown as a percentage).
17. Send Audio During connectivity: (B). determines whether or not, when connecting as a Bluetooth Braille display, audio from the connected device is transferred to the eMotion.
18. Language: (L). Allows you to easily change the system language of the unit to any open firmware localization. \*Several things to note: Currently Braille and TTS need to be changed separately via their respective options. Additionally, any open applications need to be closed and re-opened before they will appear in the changed language.

## 3.4 Set Time and Date

To set the Braille eMotion 40's internal clock, press "Enter" on "Set Time and Date" in the "Settings" menu. Or press T to open the "set time and date" dialog from the menu. You can launch the "Set Time and Date" dialog from anywhere on the unit by pressing "F3-T".

The set time and date is a dialog, consisting of the following: "Time zone", "Time format", "Time", "Date Format", "Date", "Synchronize with time server", a "Confirm" button, and a "Cancel" button. You can move among these items by pressing “F3” or “Space-F3”.

When you activate "Set Time and Date", "Time zone?" appears followed by the default time zone. You can choose your desired time zone by navigating to it using "Space-1" or "Space-4" or by typing the first letter of the time zone. Once done, move to the next item using "F3".

The next item is "Time format", the options for which are 12 hour and 24 hour time. You can toggle between the two using "Space-1" or "Space-4".

The next item is "Time". When typing the time, separate the hour and minute using a space or a colon.

If you select 12 hour clock in the "Time format", A.M. or P.M. is displayed after the hour and minute. In the 12 hour clock, you can toggle A.M. it P.M. by pressing "Space-X".

Tab to "Date format". You can choose to display the date in either the "short" or "long" format. The short format displays the date numerically, while the long format displays the Month spelled out and shows the date as it would appear in literary form. Toggle between the two using "Space-1" and "Space-4".

The next item is "Date". Type the "Date" month, date, and year as mm/dd/yyyy. Use 2 digits for the month, 2 digits for the day, and 4 digits for the year, separating them by a space or a slash.

The next item is "Synchronize with time server", used to synchronize time and date with a time server on the Internet. This function is extremely useful when the date and time of Braille eMotion 40 is faster or slower than the current time. To execute this function, your Braille eMotion 40 must be connected to the Internet. When connected, press "Enter" on the "Synchronize with time server" button. After synchronization, it displays the synchronized time in the "Time" edit combo box. The synchronized date is also displayed in the "Date" edit combo box.

If you do not wish to enter date and time information directly, you can navigate using the following commands:

When setting time:

Move forward 1 hour: Space-4

Move back 1 hour: Space-1

Move forward 10 minutes: Space-5

Move back 10 minutes: Space-2

Move forward 1 minute: Space-6

Move back 1 minute: Space-3

When setting date:

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

When you have completed entering all of the information, press "Enter" to save your settings, or "Tab to "Confirm" and press "Enter", and you are returned to the "Settings" menu.

## 3.5 Setup Internet

The "Setup internet" function is used to configure your Braille eMotion 40 to use a Wireless connection to access the Internet.

To activate "Setup internet", press "Enter" on "Setup internet" in the "Settings" menu, or press "I". You can open the "Setup Internet" menu from anywhere on the unit by pressing "F3-I" or by long pressing the “Wi-fi” key on the upper left of the keyboard.

### 3.5.1 Setup Wireless LAN

Before setting up a Wireless LAN connection, be sure wireless is turned on. You can toggle wireless on and off from anywhere on the Braille eMotion 40 by short pressing the “Wi-fi” key. In addition, when you choose this option, if Wireless is not turned on, Braille eMotion 40 automatically activates Wireless LAN.

The "Wireless LAN" dialog consists of the "access points" list, "Advanced" button, "Options" button and "Close" button. You can move among these controls by pressing "F3" or "Space-F3". If wireless is not turned on, the "access points" list displays "no items".

When wireless is on, this list shows the wireless "access points" (networks) in range of your Braille display. The "Access points" list displays 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 among them by pressing "Space-1" or "Space-4". Move to the "access point" to which you want to connect, and press "Enter". If the access point has no encryption, the Braille eMotion 40 announces, "Connecting to (access point name)". If connection is successful, the connecting sound is heard. If the network is encrypted and requires a network key, when you press "Enter" on the access point, the "Network key" edit box is displayed. Type the network key in computer Braille in the edit box and press "Enter". If your settings are correct, the unit says, "Completed setting profile" and the connecting sound is heard.

The "Advanced" dialog is used to modify an existing profile, manually add a new profile, or check the settings of an existing profile. Pressing "Enter" on the "advanced" button, while wireless LAN is turned on, displays a list of the wireless profiles saved on the Braille eMotion 40.

The "Advanced" dialog has 6 controls: the "profile list", "Connect" button, "Add" common dialog button, "Remove" button, "Properties" common dialog button, and "Close" button. You can navigate among these controls by pressing "F3" or "Space-F3". Navigate the items in the Profile list using "Space-1" and "space-4". Press "Enter" to activate one of the buttons.

Use the "Add" button: to manually add a profile, specifically where an SSID is hidden, and thus does not appear in the "access points" list. The "Add" dialog" contains 6 controls.

1) "Network name (SSID)" computer edit box: Type the network ID in the computer edit box.

2) security, Use Space to choose among the security types for your network.

3) As most networks do have some security, the next item in the tab order will likely be “password”. This will not appear if you choose “None”, or “Enhanced Open”. Please enter the password in computer braille, and Tab to the next item.

4) The next item is a check box allowing you to decide whether to access additional advanced options. If you check this, the following will appear in the tab order:

A) Proxy: the options for which are “Detect Automatically”, “Metered” and “Unmetered”.

B) Proxy: the options for which are “None”, “Manual” and “Auto-Config”.

C) Proxy Host name: A computer edit box in which you should type this.

D) Proxy Host Port: Another computer edit box in to which you should enter the information.

E) Bypass Proxy for: Enter the relevant info in to the computer edit box.

F) IP Settings: Use Space to choose between DHCP or Static. Choose Static if you need to set a specific IP address for your device.

G) Privacy: a combo box from which you can choose between “Use randomized MAC” or “Use device MAC”. If you are connecting to a school network or other professional network that requires your device to be identified by its Mac address, you should choose “Use device MAC”.

H) Hidden network: A Yes/No combo box with which you identify whether the network is visible or not.

5) Confirm Button: Press Enter on this button to save your settings.

6) "Cancel" button: You can select this button to cancel the setup.

To delete a profile item in the profile list, select the profile item you wish to delete, and press R or "Tab" to the "Remove" button and press "Enter".

To get information about a selected profile item in the profile list, "Tab" to the "Properties" button and press "Enter". In the "Properties" dialog, you can reconfirm or modify the information for each profile.

To exit the "Advance" dialog, press "Space-E" or "Space-Z".

The "Options" dialog allows you to set

how the Braille eMotion 40 scans for and detects wireless networks. Use "Space" to adjust the options in the dialog, and press "Enter" to save your settings.

The first option lets you choose whether Wi-fi is turned on automatically. The second option allows you to choose whether you receive notifications when networks are available.

## 3.6 Bluetooth Manager

The Braille eMotion 40 is Bluetooth capable, or rather, you can connect the Braille eMotion 40 to various devices such as keyboards, audio devices, and other computers without the need for cables. You can also use Bluetooth to transfer files, or to connect the Braille eMotion 40 as a Braille display with a compatible screen reader. Bluetooth is the latest in wireless technology and enables wireless connectivity via 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 over this wireless connection.

You can toggle Bluetooth on/off from anywhere on the unit by pressing the “Bluetooth” key on the upper left of the keyboard.

To access the Bluetooth Manager from the program menu, navigate to the "Settings" menu, and press "Enter. Then, navigate to "Bluetooth Manager", and press "Enter". You can also press "F3-M" to launch the Bluetooth Manager from anywhere on the unit.

### 3.6.1 Bluetooth Device List

When the Bluetooth Manager is activated, you are placed in a dialog with 2 items: a paired devices list, and a "Search" button to scan for available devices. For example, if you have a computer with Bluetooth enabled nearby, the Braille eMotion 40 attempts to find it. It may take 30 to 40 seconds to discover all of the Bluetooth devices in range. The Braille eMotion 40 announces and displays, "Scanning for devices. Please wait...” Full cells are filled in on the Braille display to indicate scanning progress.

When a Bluetooth device is detected, the Braille eMotion 40 announces "found (Bluetooth device name)".

* Note: while the Braille eMotion 40 is scanning for Bluetooth devices, it cannot respond to key presses. In addition, you may not cancel the scan once it has begun, but must wait for its completion before the Braille eMotion 40 returns to normal operation.

When the scanning process completes, you are placed in the Bluetooth Device List. If the Braille eMotion 40 has found other Bluetooth devices in range, they are displayed as "device name (untrusted (or trusted)) xx/yy" where xx is the number at which the device appears in the list, and yy is the total number of devices. "Trusted" indicates that the service has been authenticated, "untrusted" indicates the service has not been authenticated.

If there are no other Bluetooth devices in range, the Braille eMotion 40 announces, "no items". You can press "Space-1" or "Space-4" to move through the list. To select a device from the list, press "Enter" on the device name.

If the Bluetooth device is trusted, settings for connecting the device are automatically saved in the Braille eMotion 40. If you want to delete this information, press "Space-D" on the Bluetooth device name in the list. The Braille eMotion 40 announces, "Device settings removed". Removal of the settings applies only to the current device.

From the Bluetooth Device List, you can access the menu by pressing "F2". The "Bluetooth Device List menu" contains "Rescan for Devices", "Delete Pair Information", "Options" and "Exit". You can navigate among the menu items using "Space-1" or "Space-4".

The first menu item is "Rescan for Device". This option initiates a new scan for other Bluetooth devices. To activate this item, press "Enter" on "Rescan for Devices" in the menu. Or you can activate it directly from the list by pressing "Enter-R".

The next menu item is "Delete Pair Information". This item allows you to remove the connection settings for the current device. To activate this item, press "Enter" on "Delete Pair Information" from the menu, or press “Space-D" to activate it from the Device List.

The "Options" item lets you determine if the Braille eMotion 40 is discoverable to other Bluetooth devices. Press "Space" to check or uncheck the option.

The final item in the Bluetooth Device List menu is "Exit". This option exits the Bluetooth Manager program. To activate this item, press "Enter" on "Exit" from within the menu, or exit the program any time by pressing "Space-Z".

### 3.6.2 Bluetooth Service List

When you locate a Bluetooth device to which you'd like to connect, press "Space-1" or "Space-4" to navigate to the device in the Bluetooth Device List, and press "Enter" on the device name. The unit announces, "Scanning for services. Please wait...” Please note The Braille eMotion 40 does not respond to key presses during the scanning process.

The Braille eMotion 40 supports the following Bluetooth services: FTP, Serial port, USB port, and headset. To access any of these functions, be sure that the remote Bluetooth device is in Discoverable mode, and that the service you wish to access is enabled on that device. It is possible to have certain services enabled on your remote Bluetooth device, while disabling others. The Braille eMotion 40 only sees and displays services which are enabled on your remote device, even if others are available.

When the Braille eMotion 40 has found all of the available services, the services are displayed in a list in the following format: "service name xx/yy" where xx is the number at which the service appears in the list, and yy is the total number of available services. You can move through the available services by pressing "Space-1" or "Space-4". Press "Backspace" to return to the Bluetooth Device List.

From the Bluetooth Service List, you can access the menu by pressing "Space-M" or by pressing "F2". The "Bluetooth Service List menu" contains "Open FTP", "Disconnect" and "Exit". You can navigate the menu items using "Space-1" or "Space-4".

The "Open FTP" menu item allows you to quickly open a direct FTP connection with a remote Bluetooth device without accessing the Device and Service lists. However, you must have connected the FTP service previously for the Braille eMotion 40 to allow you to transfer files. If you have not connected the FTP service, and you activate this function, the unit announces, "FTP service disconnected".

You can access "Open FTP” by pressing "Enter" on it from within the menu, or by pressing "Enter-T" directly from the Bluetooth Service List. The Braille eMotion 40 says, "Connecting service". Detailed information on connecting various service types is covered later in this chapter.

The "Disconnect" menu item allows you to disconnect services with other Bluetooth devices. You can access this item by pressing "Enter" on "disconnect" from within the menu. Or you can activate it directly from the Bluetooth Service List by pressing "Enter-D".

If there are no services connected and you activate this function, the unit says, "There is no service connected".

#### 3.6.2.1 Connecting a Service

To authenticate a service and connect to it, press "Enter" on the service. The Braille eMotion 40 announces, "Connecting service". You are then prompted for a "PIN code:" You must use ASCII characters when you type the pin code. This edit box only appears when you have not previously connected to a service, and a pin code is required by the device. You can exit the edit box or delete text you have typed by pressing "Space-Z" and you are returned to the Bluetooth Service List.

When you finish typing the pin code, press "Enter". The unit announces, "Please wait for authentication". If the remote device is setup correctly, and has not been set up to allow this device to always connect, the remote device also asks for a pin code. Please be sure to enter the same pin code on both devices. If the remote Bluetooth device pin code matches the pin code on the Braille eMotion 40, the service should authenticate. If connection is successful, the unit announces, "PIN code authentication accepted".

You are then prompted, "Please wait. Access permission". If the remote Bluetooth device does not give access permission, the unit says, "Connection failed", and you are returned to the Bluetooth Services List. If the remote Bluetooth device gives you access permission, the Braille eMotion 40 says "Connection succeeded". If the connection succeeds, "Connected" is displayed after the service in the Bluetooth Service List. Some services may be connected without inputting a pin code depending on the Remote Bluetooth device settings.

## 3.7 Backup/Restore Braille eMotion 40 Settings

If you hard reset your Braille eMotion 40 or initialize the Braille eMotion 40 Options, the main option settings and settings for each program are initialized to the default values. If you have created a backup of your settings, you can restore the option settings after the hard reset.

You can run this utility by pressing K from the "Settings" menu. You can also launch the "Backup/Restore Braille eMotion 40 Settings" dialog from anywhere on the unit by pressing "F3-K".

The "backup/restore" dialog contains: the "program option check box list", a "Select all" button, a "Backup" button, a "Restore" button, and a "Cancel" button. You can move among the check boxes in the "program option check box list", by pressing "Space-1" or "Space-4". You can move among the controls in the dialog by pressing "F3" or "Space-F3".

The "program option check box list" contains "Options settings", "File manager options", "Notepad options", "E-mail Options", "Media Player options", "Radio Options", "DAISY Player options", "Address manager options", "Schedule manager options", "Web browser options", “Excel Viewer Options", "Wake Up Alarm Options" and “Bluetooth manager options".

In this list, move to the program options you want to backup or restore and check the item by pressing "Space". You can uncheck a checked item by pressing "Space" again. To select all of the program options in the list, press "Enter" on the "Select all" button.

After selecting all the options you want to backup or restore, press "Enter" on the "Backup" or "Restore" button, or press "Enter-B" to backup or "Enter-R" to restore. If you select the "Backup" button, you are prompted to select a path for storing the backup file. You can accept the default path, or choose an alternative. Navigate to the folder in which to store the backup files using normal file/folder navigation commands. Select the folder or drive in which to store the backup by pressing "Space", and press "Enter" to start the backup process. If you select the "Restore" button, you are prompted for the path from which to restore backup files. Again, use normal file and folder navigation to select the folder containing your backup files. If you select a folder in which there is no backup, you receive a message indicating there is no backup option file. To restore your settings, select the folder containing the backup files by pressing "Space", then press "Enter" to initiate the restore process.

## 3.8 Initialize Braille eMotion 40 Options

You can use the "Initialize Braille eMotion 40 Options" item to restore the Braille eMotion 40 to the factory default settings. \*Note: this resets all option settings to their defaults, but does not erase your data.

To launch this function, navigate to it in the "Settings" menu, and press "Enter", or press C.

You are prompted, "Do you want to initialize options?" Use "Space" to choose "Yes" or "No". Choosing "Yes" initiates the factory reset process. Choosing "No" cancels the function and returns you to the "Settings" menu.

You can also perform this function by holding the “Home” key while booting the Braille eMotion 40 from a complete shut down.

# 4. File Management

## 4.1 Overview

The first 2 items in the main menu both relate to file management. The “My eMotion” option displays the main folders of the internal flashdisk that are used by the Braille eMotion 40, for reading DAISY content, reading books and documents, and playing music. You can open the “My eMotion” area by pressing “Enter” on it from the main menu, or by pressing the letter “Y”.

The functionality and structure of the "File Manager" on the Braille eMotion 40 are similar to "Windows Explorer" on a PC, and offer access to all files and folders on the flashdisk as well as any connected USB drive or SD card. To run the "File Manager", press F from the "Program" menu or press "Enter" when your cursor is placed on "File Manager". You can launch the "File Manager" from anywhere on the unit by pressing "F1-F". Close the "File Manager" or “My eMotion” by pressing "Space-Z".

With a few exceptions, the “My eMotion” area and the full “File Manager” operate identically, other than the “My eMotion” program offering a narrower scope of access to only those folders on the internal flashdisk automatically used by the Braille eMotion 40. Subsequent documentation in this chapter will refer to the “File Manager”, however, this term applies in general to both file management applications, unless otherwise specified.

As previously mentioned, the ”My eMotion” program opens in a list of common folders used by the internal programming of the Braille eMotion 40, including “Books”, “DAISY”, “Documents” and “Music”.

When you first open the "File Manager", you are placed in the drive list. By default, you are placed on the internal "flashdisk". If an SD card or USB drive is connected, it also appears in the list. You can use "Space-1" or "Space-4" or the scroll buttons to navigate the items in the drive list. Press "Enter" on the drive you want to open. The Braille eMotion 40 then displays the list of the files/folders on that drive.

The "File Manager" contains both menus and hot keys, allowing you to easily activate items in the program with a single keystroke as well as to access functions through the menus for commands you have not memorized. You can bring up the menus by pressing "Space-M" or "F2". For the purposes of the directions in this chapter and the rest of this manual, we will use F2. However, either keystroke will perform this function.

Use Space-1" and Space-4" to navigate among the available menus. To open a menu, press "Enter". Again, use "Space-1" or "Space-4" to navigate among the items in a menu, and press "Enter" to execute a menu item.

The File Manager also contains dialogs. You can navigate among the controls in a dialog box by using the equivalents of "Tab" on a PC. You can use "F3" or "Space-4-5" for "Tab" and "Space-F3" or "Space-1-2" for "Shift-Tab". For the purposes of instructions in this manual, we will use "F3" and Space-F3", or you will be directed to "Tab" or "Shift-Tab".

### 4.1.1 Navigating the File List

The "File Manager" contains two kinds of lists: the "file list" and the "menu list", or rather, the list of items contained in the "File Manager" menu. The menus in the Braille eMotion 40 wrap. This means, when you reach the end of the list of items in a menu, the Braille eMotion 40 automatically brings 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 eMotion 40 remains at the end of the list, even if you press "Space-4". The following is a list of the keystrokes used for navigating lists:

* Note: the following keystrokes can be used to navigate any list on the Braille eMotion 40.

1. Move to previous item: (Space-1) or up scroll button

2. Move to next item: (Space-4) or down scroll button

3. Move to the beginning of a list: Space-1-2-3

4. Move to the end of a list: Space-4-5-6

The following keystrokes are valid only in a "file list".

1. Jump to folder or file list: Space-5-6

2. Move between file list and address window: (Space-4-5 or F3) / (Space-1-2 or Space-F3)

3. Enter the selected folder or open the selected file: Enter

4. Move back a level in the folder structure: Backspace

5. Jump to the drive list: Space-1-2-5-6

6. Move to the previous group of 40 items: Page up (space 1-2-6 or F1-F2)

7. Move to the next group of 40 items: Page down (space 3-4-5 or F3-F4)

8. Jump to a file or folder by pressing the first character of the folder or file name. You must use ASCII characters.

### 4.1.2 Selecting Folders and Files

1. Select individual items "Space": \* is displayed in front of the item to denote its selection. Pressing "Space" again on the selected folder or file cancels the selection.

2. Continuous selection "Enter-b": This selects all of the items from the point where this command is executed to the item where the cursor is located. \* appears in front of the selected items.

3. Select all "Enter-a": This selects all the files and folders in the current list. You can toggle selection and de-selection of items by pressing "Space". When the "Select All" command is executed, the Braille eMotion 40 says the number of selected files, and \* appears in front of the selected files on the Braille display.

## 4.2 Working with Files and Folders

When viewing the contents of a drive or folder, the items in quotation marks are folders, and the items without quotation marks are files.

The items in the list are followed by numbers, such as 1/5 or 2/5. The numbers following the items indicate an item's placement in the list and the total number of items in the list. For example, "database 1/5," indicates "database" is the first folder in a list containing five items.

### 4.2.1 Entering and Exiting Folders

There are several ways to open a folder.

1. Bring up the menu by pressing "F2". Select the "Open" option from the list and press "Enter".

2. Press the hot key "Enter-O" to activate the "Open" command and open the desired folder.

3. Finally, as described above, you can simply press "Enter" on the selected folder.

To exit the current folder, use the "Backspace" key. You are returned to the previous level in the folder structure.

### 4.2.2 Ejecting USB Drives and SD Cards

\*Note: this section applies specifically and only to the “File Manager” application.

The Android operating system requires that drives are ejected properly before removing them. If not done, re-inserting them in to the Braille eMotion 40 or connecting to other mobile devices or computers may result in all files appearing as though they have no data, or have a size of 0 bytes. Before disconnecting a USB drive or SD card, press “Backspace-Enter-U” or “Backspace-Enter-3-6” to it from the system. If your drive is showing files with no data, please re-insert it in to the Braille eMotion 40, and press the Unmount key to eject it properly, and the data should, be visible once again.

## 4.3 The File Menu

To open the "File" menu, press "F2" to bring up the menu, and press "Enter" on "File". Use normal list commands to navigate to your desired option and press "Enter".

The Braille eMotion 40 supports the following file formats:

1. Document files: hbl, brl, txt, brf, rtf, doc/docx, PDF and unprotected EPUB.

2. Web formats: html.

3. Media formats: ac3, asf, asx, m3u, mp2, mp3, MP4, ogg, pls, wav, wax, wma, wmv and flac.

4. DAISY formats: DAISY 2.0, 3.0, BookShare.

The menu contains the following items. Shortcuts are placed in parentheses, and hotkeys are in quotes.

1) Open: (O) "Enter-O". Opens the selected file in the associated application for its file type.

2) Open in Document Reader: (K) “Backspace-R”. Appears only for supported document types, allowing you to open the file in the Read only Document reader as opposed to the default Notepad.

3) Open With: € “Enter-E”. Appears only for DAISY and media folders, allowing you to open them as a whole: DAISY book packages in the DAISY Player, and media folders as a media play list in the Media Player.

4) Zip (Z) "Enter-Z". Compresses the current file or folder.

5) Unzip (U) "Enter-U". Appears only for compressed files, extracts the current file.

6) Send To: (S) "Enter-S". Lets you send the current file or folder to a different location. Targets include any connected local drives.

7) Rename (R) "Enter-R". Rename the current file or folder.

8) New Document: (N) "Enter-N". Create a new document using DOCX, DOC, TXT, BRL, or HBL.

9) New Folder: (F) "Enter-F". Creates a new folder.

10) File Conversion: (T) "Enter-T". Converts selected document files to TXT, BRL, or HBL.

11) Find File: (F) "Space-F". Search the current drive or folder for a specific file by name.

12) Find Text: (F) "Backspace-F". Search Word, Text, and Braille files on the current drive or folder for specific text strings.

13) Merge Files: (M) "Enter-M". Select 2 or more text or Braille files to merge together.

14) Split Files: (P) "Enter-P". Split text or Braille files by paragraph or word count, by size, or into a certain number of files of equal size.

15) Information: (I) "Enter-I". Provides basic properties of the current file or folder.

16) Exit: (Z) "Space-Z". Closes the File Manager.

## 4.4 The Edit Menu

The Edit Menu contains the following items:

1) Copy: (C) "Enter-C". Copies the selected files or folders to the clipboard.

2) Cut: (X) "Enter-X". Cuts the selected files or folders to the clipboard.

3) Paste: (V) "Enter-V". Pastes the files or folders on the clipboard to the current location.

4) Delete: (D) "Space-D". Deletes the selected files or folders.

5) Select All: (A) "Enter-A". Selects all the files and folders in the current list.

## 4.5 The View Menu

The View Menu contains the following options:

1) Sort Files By: (G) "Enter-G". Determines in what order files and folders are displayed.

2) Set File Info: (L) "Enter-L". Determines what information is displayed about each file or folder in the list.

3) Display Only Files of Type: (W) "Enter-W". Filters files by file type.

4) Hide System Folders: (H) "Enter-H". Hides Android system folders that do not contain user content. These are hidden by default.

5) Set Start Folder: (S) “Backspace-S”. Lets you choose the location the File Manager opens to.

## 4.6 Using the Address Window

\*Note: this section applies specifically and only to the “File Manager” application.

This edit box lets you type the direct path of the file name you want to open. This window also contains the history list for easily accessing recently opened files or directories.

When you are in a file or folder list, you can press "tab (Space-4-5)" to navigate to the address window. The Braille eMotion 40 displays the current path including the current drive name, such as "flashdisk/download/". The address window is only visible when you are in a file or folder list. When you are in the drive list, the address window is not available.

You can edit the text by relocating the cursor with a cursor routing key, the Braille eMotion 40 inserts the text at the cursor location. 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 eMotion 40 displays the list of the files in the download folder. If you type "flashdisk/Documents/sample.txt" in the address window, and press "Enter," the Braille eMotion 40 loads the Notepad, and opens the file "sample.txt".

Use "Space-1" or "Space-4" in the Address Window to review the history list (a list of file and folder paths you have recently opened). To open a file in the history list, press "Enter". The file opens with the appropriate application. (See section 4.2.3).

# 5. Notepad

The Braille eMotion 40 Notepad supports reading and creation of RTF, TXT, HBL, BRL and BRF files as well as unformatted DOCX files, and will open PDF, EPUB, DOCX and DOC files.

\*Note: though you can open Word documents in the notepad, all document formatting will be stripped. Response time for navigation and searching will be reduced in the Notepad, but if a Word document is saved from within it, all formatting will be lost.

You can launch the "Notepad" in a couple of ways:

Press "F1" to open the main "Program" menu. Navigate to "notepad" using "Space-4" and press "Enter". You can also press N from the main menu to quickly jump to and open the "notepad”.

You can launch the "Notepad" from anywhere on the unit by pressing "F1-N".

When you launch the Notepad on the Braille eMotion 40, it places you in a new, blank document. You can activate all the functions of the Notepad via the Notepad menu or by using hot keys. The menu in the Notepad consists of File, Edit, insert, Go To, Read, and Layout. To access these menus, press "Space-M" or "F2". Select a menu item using "Space-1" or "Space-4", and press "Enter". Or, you can press "Space-M or "F2" followed by the shortcut for the corresponding menu item.

Use "Space-1" and "Space-4" or the Up and Down scroll keys to navigate menus, settings or file lists. Use "Space-4-5" and "Space-1-2" or "F3" and "Space-F3" to tab among controls in a dialog.

Press "Enter" to execute an item.

## 5.1 File Menu

The File menu contains the following options:

1) New: (N). Creates a new document, by default named "noname". You can create a DOCX or DOC file without formatting, or a TXT, BRL or HBL file.

2) Open: (O) "Enter-O". Opens an existing file. Supported file types include all those listed at the beginning of this chapter.

3) Recent File list: (R “Backspace-Enter-H”. Displays files you’ve recently opened in the Notepad.

4) Opened Documents List: (D) “Backspace-Enter-O”. Displays all the currently opened documents in a list, so that you do not have to Tab and Shift-Tab through all of them.

5) Save: (S) "Enter-S". Save the current file. Tab between name, location and file type. Use normal file management navigation to choose a different folder.

6) Save As: (A) "Space-S". Save the current file under a different name, as a type or in a different location. You can choose to password protect files by choosing the HPF file format.

7) Close Current document: (Q) “Space-Q”. Appears only if more than one document is currently open, and closes only the current file

8) Settings: (E) "Enter-E". Dialog to set various document options. Tab among settings list, location Info check boxes, Default folder, Set Password, and Confirm and Cancel buttons. Settings list includes View Format Characters, Reading unit for Space-1 and Space-4, Read Only On/Off, Automatic Save Interval, Auto Scroll Speed, Apply Settings to All Documents, Home/End movement unit, New Document default name and Show Right to Left Braille. Use “Space-1” and “Space-4” to move among the settings in the Settings list, and Space or Backspace to change the value of the setting.

9) voice Settings: (V) “Backspace-V”. Allows you to set reading/editing voice settings specifically for the Notepad, separate from the main system voice. You can choose to turn the voice on or off, choose the voice personality from among any of the voices you have installed, and set the Volume, pitch, and speed. Use “F3” and “Space-F3” to navigate among the settings, and “Space-1” and “Space-4” to change the value of a setting. Press “Enter” to save your changes.

10) Exit: (Z) "Space-Z". Closes the Notepad.

\* The Braille eMotion 40 allows you to encrypt and password protect files which you do not wish for anyone else to be able to open. Before you save a document as a protected file, you must set a password in the "Settings" option under the "File" menu. The "Set Password" dialog consists of 5 items: "Delete the original file" checkbox, ?, a "Password?" edit box, a "Retype Password" edit box, a "confirm" button, and a "cancel" button. Once the password is set, use the save as dialog, and choose HPF as your file type.

## 5.2 Edit Menu

The Edit Menu contains the following items:

1) Start Selection: (B) "Enter-B". Marks the beginning of the selection. The end of the selection is marked by the current cursor position.

2) Copy: (C) "Enter-C". Copies selected text to the clipboard.

3) Cut: (X) "Enter-X". Cuts the selected text to the clipboard.

4) Paste: (V) "Enter-V". Pastes text from the clipboard to the current location.

5) Delete: (D) "Space-D". Deletes selected text.

6) Delete Blank lines: (L) "Backspace-E". Deletes blank lines from the selected text area.

7) Add to clipboard: (P) "Enter-P". Appends selected text to the clipboard without deleting the prior selection.

8) Clear clipboard: (E) "Enter-D". Empties the clipboard.

9) Select All: (A) "Enter-A". Selects all the text in the document.

10) Toggle Insert/overwrite Mode: (I) “Space-I”. determines whether, when you type text, if it is inserted at the current position, or overwrites the current text.

## 5.3 Insert Menu

1) Set Mark: (M) "Enter-M". Sets a bookmark at the current cursor position.

2) Jump to Mark: (J) "Enter-J". Jumps to a previously set mark.

3) Delete Mark: (D) "Backspace-D". Deletes a previously set mark.

4) Insert from File: (I) "Enter-I". Inserts information from another file.

5) Insert Date: (W) "Enter-W". Inserts the current date.

6) Insert time: (T) "Backspace-W". Inserts the current time.

7) Insert Page Break: (P) “Backspace-Space-Enter-P”. Inserts a form feed.

8) Insert Tab: (T) “Backspace-Space-Enter-I”. Indents 5 spaces from current position.

## 5.4 Go to Menu

1) Find: (F) "Space-F". Opens Find dialog where you can enter a text string to search, choose whether to match case, and choose the search direction.

2) Find Next: (H) "Enter-F". Finds the next instance of the previously searched string.

3) Find Previous: (V) "Backspace-F". Finds the previous instance of the search string from your current position.

4) Find and Replace: (R) "Enter-R". Dialog to search for a text string and replace with an alternative string. Choose search direction, match case, and whether to replace one instance, from cursor to end, or all.

5) Go To Location: (L) "Enter-L". Go to a location in the document according to page, paragraph, line or percentage.

6) Go To Previous Sentence: (E) "Space-2-3-6". Moves back one sentence.

7) Go To Next Sentence: (X) "Space-3-5-6". Moves forward one sentence.

8) Go To Previous Page: (B) "Space-1-2-6). Moves back one page.

9) Go To Next Page: (G) "Space-3-4-5". Moves forward one page.

10) Go To Previous Document: (P) "Shift-Tab". If multiple documents are open, moves to the previous document in the order the files were opened.

11) Go To Next Document: (N) "Tab". If multiple documents are opened, moves to the next document in the file open order.

## 5.5 Read Menu

1) Read Selected Text: (B) "Backspace-B". Reads the selected block of text.

2) Read beginning of Selected Text: (U) "Enter-U". Reads the first line of a selected text block.

3) Read from Beginning to Cursor: (T) "Backspace-G". Reads from the beginning of the document to the current cursor position.

4) Read from Cursor to End: (Q) "Enter-G". Reads from the current cursor position to the end of the document.

5) Auto Scroll: (A) "Up/Down Scroll". Starts and stops the auto scroll function. Set the speed of the auto scroll in the Settings under the File menu.

6) Read Current Sentence (E) "Space-1-4-5-6". Reads the current sentence.

7) Read Current Line: (L) "Space-1-4". Reads the current line.

8) Read Current Word: (W) "Space-2-5". Reads the current word. Press twice to spell.

9) Read Current Character: (C) "Space-3-6". Reads the current character. Press twice to hear the military alphabet equivalent.

10) Read Cursor Position: (R) "Space-1-5-6". Reads current cursor position as page, paragraph, word, and line.

11) Read Status: (S) "Space-3-4". Reads title of document and indicates Insert or Overwrite mode.

12) Read Character Count: (I) "Backspace-I". Reads the current and total character count of the current document.

## 5.6 Layout Menu

1) Braille Paragraph Layout: (B) "Backspace-1-2-4-6". Determines the Braille format of the current paragraph.

2) Braille Document Layout: (P) "Backspace-P". Determines Braille document format for embossing.

# 6. Connectivity

The "Connectivity" menu allows you to manage and move among the various Braille Display connections you have established with your Braille eMotion 40. To open the "Connectivity" menu, from the main menu, navigate to it with the arrow keys and press "Enter", or press the letter C.

You can also open “Connectivity” from anywhere by pressing the “Connect” key on the top left of the keyboard.

When you first open "Connectivity", you are asked if you want to establish a USB Legacy connection, a USB HID Braille connection, or Bluetooth connection. Use "Space-1" and "Space-4" to make your choice and press "Enter". If you choose either of the USB connections, you are placed in Terminal Mode, and the Braille display connection becomes active when you connect via USB to a device running a screen reader. If you choose Bluetooth, you are placed in Pairing Mode.

Regarding the 2 USB connection types, the screen reader you are using will determine which of these you need. JAWS for Windows currently requires you to use the USB Legacy connection. NVDA supports both the Legacy and HID Braille connections. If you have an older Mac computer, you will need to use the Legacy connection, however the new silicon Macs will use the HID Braille connection. You may also use the USB HID Braille connection with mobile phones that support it.

The final item in the Connectivity Menu is the “Pairing list”. Once you have established connections, you may re-activate them from this list, or by using shortcuts described later in this section.

Once pairings have been established, short pressing the “Connectivity” key will place you in Terminal Mode with an attempt to connect to your most recently used connection. If no connection is available, you are placed in Pairing Mode. Long pressing the “Connectivity” key will bring up the Connectivity menu.

Braille eMotion 40 supports 1 USB and 5 Bluetooth connections. From the Pairing List, press “Space-1” or “Space-4” to move among the active connections, and press “Enter” on the one you wish to switch to.

\*Note: you can activate only connections that are currently connected in this manner, though all saved pairings will be visible. As you navigate the Pairing List, the Braille eMotion informs you whether each connection is active, connected, or has no indication if neither are true.

When in Terminal mode, you can switch among the active connections by pressing “Space” with the “Connect” key to move to the next connection in the Pairing list, and “Backspace” with the “Connect” key to move to the previous connection in the Pairing List.

To disconnect a currently connected device, press “Space-D”. To remove a saved pairing, press “Enter-D”.

When in Terminal Mode, to switch between Bluetooth and USB, press “Center-Backspace-U” to activate the USB Legacy connection, and “Center-Enter-U” to activate the USB HID Braille connection. If using a USB connection, press “Center-Enter-B” to return to using Bluetooth.

When using an active connection, call the Pairing List with “Center-L”. Initiate a new Bluetooth connection, or rather, activate Pairing Mode by pressing “Center-C”.

To close the Connectivity area and return to the Braille eMotion 40’s standalone programming, press Backspace-Space-Z.

You can also remain connected as a Braille display, and toggle between the stand alone programs and the Terminal by pressing “Space” with the “Center” key. Each time you press “Center-Space” it will toggle from one to the other, and the Braille keyboard and commands will operate according to each context. For example, if you switch to Standalone Mode, and press the “Home” key, you are placed in the Main Menu. If you return to Terminal Mode and press the same key, in most operating systems, you will return to the Home screen or desktop of your connected device.

## 6.1 Establishing a Connection

If you choose either of the USB options, you are directly placed in Terminal Mode. If you connect Braille eMotion 40 to a computer, it will automatically be recognized, however, no Braille output will occur automatically, unless a screen reader is running, and the screen reader has been configured to use a HIMS Braille display.

When using USB HID Braille with VoiceOver, please note that the Common VoiceOver Braille commands should be used rather than the emotion specific key map. See section 12 of this manual for a list of supported commands.

If you choose Bluetooth, Pairing Mode is initiated, and you must establish the Bluetooth pairing with your phone or PC.

When using a Bluetooth connection, you can also choose to send the connected device’s audio directly to the eMotion, thus, having Braille and audio on one device. Whether or not the audio is transmitted is determined by the “Send Audio During connectivity” option in Braille eMotion’s “General Options”. By default, this is set to off, thus, audio will not be transmitted unless you change this setting to “On” in the “General Options” before entering Connectivity.

A few notes on sending audio:

1. For Mac and iOS: you will receive an alert that you will need to accept before audio will connect. And, you may find, especially with the Mac, that audio lags a bit.
2. For Android, you will also have to accept an alert, in addition, you may find that the phone is either quiet or silent until you press the Volume Up button on the phone. This seems to be an oddity with Android and Bluetooth audio.
3. For Windows, we’re still somewhat in process of perfecting this support. There are many Windows device configurations running various versions of the Windows operating system, thus, many variables affecting audio support via this method. Some things to keep in mind: You will get an alert in Windows. Even if you don’t hear it, please check the Windows Notification Center to discover whether it has popped up. Once approved, audio still may not change. You may still need to go to your computer’s sound settings to choose the eMotion as an audio source. This notification seems to disappear rather quickly, and may require you to initiate the pairing a few times before you are able to activate it. We will continue to work on improving this process for future upgrades.

While in an active connection, you can toggle the sending of audio on and off by pressing “center-A”.

The following screen readers have been tested and are known to be supported. However, any screen reader that offers support for the HIMS Braille EDGE should also support Braille eMotion 40.

1) Jaws (Freedom scientific)

2) Supernova (Dolphin)

3) System Access (Serotek)

4) NVDA (NV Access)

5) Microsoft Narrator

6) Voice over for Mac and iOS (Apple)

7) BrailleBack and TalkBack Braille for Android (Google)

## 6.2 Connecting to a Screen reader

### 6.2.1 Connecting to PC via USB

To connect the Braille eMotion 40 to a screen reader such as Jaws, SuperNova or NVDA via USB, follow the stes below. \*Note: As Braille eMotion uses a modern generic USB connection, no driver installation is required.

1. Long press the “Connectivity” key to open the Connectivity menu.
2. Choose either the USB Legacy or USB HID Braille connection as is appropriate for the screen reader you are connecting to. “Terminal mode” is displayed on the Braille eMotion 40.
3. Connect the Braille eMotion 40 to the PC via the USB cable.
4. Follow the instructions for connecting the display with your screen reader via USB.

### 6.2.2 Connecting to PC via Bluetooth serial port

The following steps will walk you through setting up the Braille eMotion 40 to be used as a Terminal for Screen Reader (A Braille display). Before you begin, make sure that your Braille eMotion 40 is turned on and in pairing Mode. To enter pairing Mode, open the Connectivity menu, and choose Bluetooth Braille Connection. Braille eMotion 40 will display “Pairing Braille EDGE”.

If you have already established a Bluetooth connection, you can activate Pairing Mode with “Center-C”.

be aware of your Braille eMotion 40’s designated Bluetooth name.

1. Open the Control Panel.
2. Open Devices and Printers
3. Tab to “Add a Device” and press “Enter”.
4. Windows searches for devices and displays them in a list.
5. Use the Up or Down arrow to navigate to the Braille eMotion 40 and press “Enter”.
6. The computer should display the message, "Found new hardware" and the final dialog should appear on the computer. The dialog should display that the Bluetooth device was successfully set up. It is very important to note the Bluetooth COM port when setting up the Braille connection, as you will need this when setting up your screen reader.

### 6.2.3 Using the Braille eMotion 40 with JAWS for Windows

Use the following instructions to set up the Braille eMotion 40 as a Braille display with the JAWS screen reader from Freedom Scientific:

1. Make sure Braille eMotion 40 is powered on, and in terminal Mode. If you are using USB, please connect the Braille eMotion 40 to your computer via the included USB cable.
2. Navigate to the JAWS Window and press “Alt” to open the menu.
3. Press “Enter” on the “Options” menu
4. Use the Up or Down arrow to navigate to “Braille” and press “Enter”.
5. Choose HIMS Braille EDGE as your Braille device.
6. Tab to “Advanced” and press “Enter”.
7. Choose USB as the port if connecting via USB, or the correct Com Port if using Bluetooth.
8. Tab to “OK” and press “Enter”.
9. You are prompted that you must restart JAWS for the settings to take effect. Restart JAWS for Windows, and Braille should begin displaying.

### 6.2.4 Using Braille eMotion 40 as a Braille display with NVDA

Use the following instructions to set up the Braille eMotion 40 for use as a Braille display with the free NVDA screen reader from NV Access.

1. Make sure Braille eMotion 40 is powered on, and in Terminal Mode. If you are using USB, please connect the Braille eMotion 40 to your computer via the included USB cable.
2. Press “NVDA key-N” to open the NVDA menu.
3. Arrow down to “Preferences” and press “Enter”.
4. Arrow down to “Braille Settings” and press “Enter”.
5. Choose “HIMS Braille Sense/Braille EDGE” from the Braille Display combo box.
6. Tab to the “Port” combo box and ensure that it is set correctly. (NVDA employs automatic port detection, so you should not need to change this setting)
7. Tab among the various combo boxes to choose options such as output and Input tables, cursor options, etc. Use the Up and Down arrows to navigate among the choices in each combo box.
8. When you have finished choosing your settings, Tab to “OK” and press “Enter”.

**Note:** Make sure the “Save configuration on Exit” box is checked in the NVDA menu in order to ensure your settings for the Braille eMotion 40 are saved, thus the Braille eMotion 40 will automatically connect each time you use NVDA in the future.

### 6.2.5 Using Braille eMotion 40 with VoiceOver on the Mac.

To use the Braille eMotion 40 as a USB braille display with a Mac running VoiceOver, you can simply power on the Braille eMotion 40, choose the USB connection from the Connectivity menu, and connect it to the Mac via USB. The unit is immediately recognized, and VoiceOver output is shown on the Braille display.

Use the following steps to connect the Braille eMotion 40 as a Bluetooth Braille display with a Mac running VoiceOver when Braille eMotion 40 is in Bluetooth Connection Mode:

1. Press Vo-F8 to open VoiceOver Utility.
2. Navigate to “Categories” and press Vo-Shift-Down to begin interacting with it.
3. Press B for Braille.
4. Press Vo-Shift-Up to stop interacting with the Categories group.
5. Press Vo-Right to “Display”, and press Vo-Space to activate it.
6. Navigate to “Add”, and press VoSpace to activate.
7. VoiceOver announces, “Searching for Bluetooth devices”.
8. Navigate to the “Bluetooth devices” list and press Vo-Shift-Down to interact with the table.
9. Navigate to “Braille EDGE” and press Vo-Shift-Up to stop interacting with the table.
10. Navigate to “Remember this device” and press Vo-Space to check the box.
11. Navigate to “select” and press Vo-Space” to activate it.
12. VoiceOver asks for the pairing code and places you in the edit box.
13. Type 0000 and press “Enter”.

You should hear a chime indicating VoiceOver has connected to your Braille eMotion 40 and you should begin seeing VoiceOver output on the Braille display.

### 6.2.6 Using the Braille eMotion 40 with IOS devices

Use the following instructions to connect the Braille eMotion 40 as a Bluetooth Braille display with your iPhone, iPad, or iPod, first ensuring Braille eMotion 40 is in Bluetooth connection Mode.

**Note:** These instructions refer to the iPhone, however, they apply to all compatible i-devices: iPhone 3Gs and higher, iPad, and iPod Touch 3G and later.

On the i-Phone:

1. Navigate to Settings/General/Accessibility/VoiceOver/Braille.
2. If Bluetooth is not activated on the I-Phone, it will prompt you to do this. WHEN Bluetooth is activated, the I-Phone searches for devices.
3. The Braille eMotion 40 should appear in the list of available Braille devices under the name “BrailleEDGE.
4. Double tap it in the Braille devices list.
5. You should hear a chime on the iPhone, and the text displayed on the iPhone should appear on the Braille display of your Braille eMotion 40.

### 6.2.7 Using the Braille eMotion 40 with TalkBack for Android.

Use the following steps to use your Braille eMotion 40 as a Braille display with TalkBack, first ensuring Braille eMotion 40 is in Bluetooth connection Mode.

1. On your Android phone, swipe up and right to open the TalkBack menu.
2. Swipe right until you reach “Braille Display Settings”, and double tap it.
3. Ensure the “Use Braille Display” switch is set to on. If it is not, double tap it to change the status.
4. Swipe right until you see your Braille eMotion 40 in the list, and double tap it.
5. Navigate to the “Connect” button, and double tap it.
6. You should hear a chime, and Braille should begin displaying from your Android phone on your Braille eMotion 40l.

## 6.4 Terminal Clipboard

Terminal Clipboard allows you to create and edit text on the Braille eMotion 40 before sending it via the Terminal for Screen Reader to the connected device. This can be useful in instances like when using VoiceOver on an i-device, in which characters are translated as they are sent to the iPhone or iPad.

Sometimes, creating/editing text when using a Braille display can be a tedious business. As explained above, the Terminal Clipboard allows you to create and edit text on the Braille eMotion 40 and send the completed text to the connected computer or Smartphone via the Terminal for Screen reader.

To enter "Terminal Clipboard", press the “Center” button in the center of the Braille keys. The Braille eMotion 40 displays "Terminal Clipboard", and places you in an edit box. Type and edit your text using normal text entry and edit commands. In "Terminal Clipboard", the Braille display and keyboard are temporarily disabled from sending/receiving information to/from your connected computer or i-device, so that you may use them for creating/editing your text.

For more information on text entry and editing, please see section 3 of this manual on the Notepad. When you are finished typing the text you wish to send to your computer or smartphone, press "enter”, and the text is quickly inputted to the device via the Terminal for Screen reader, and your Braille eMotion 40 returns to sending/receiving information to and from the connected device.

# 7 Document Reader

The Document Reader allows you to open files in most supported text-based formats in a Read Only environment with special navigation features. In general, it allows you to read and interact with the elements of these files in a fashion similar to the DAISY Player, or a file opened in Read Only mode.

The Document Reader supports the following file types: Txt, RTF, BRL, BRF, Doc, DOCX, PDF, EPUB, XML, HTM and HTML.

You can activate all the functions of the Document Reader via the menu or by using hot keys. The menu consists of File, Edit, Go To, Read, and Mark. To access these menus, press "Space-M" or "F2". Select a menu item using "Space-1" or "Space-4" , and press "Enter". Or, you can press "Space-M or "F2" followed by the shortcut for the corresponding menu item. For example, to open the edit menu, press "Space-M" or "F2" to open the menu, and press E.

The Document Reader also contains various lists and settings dialogs. Use "Space-1" and "Space-4" or the Up and Down scroll keys to navigate menus, settings or file lists. Use "Space-4-5" and "Space-1-2" or "F3" and "Space-F3" to tab among controls in a dialog.

## 7.1 General Document Navigation

When you first launch the Document Reader, by default, you are placed in the "Open" dialog. You can change the Document Reader's start position using the "Start Settings" described later. You can also access the Open File" dialog any time by selecting "Open" from the "File" menu, or pressing "Enter-O".

You are placed in the list of folders and files in your "DOCUMENTS" folder. Use normal File and folder navigation to locate the file you want, and press "Enter".

By default, when you press "Enter" to open a document, Braille eMotion 40 places you at the position at which you last exited the file. If you wish to have the document automatically start reading aloud, you can change this behavior in the "Voice Settings" described in section 7.2.

You may navigate as the file reads aloud (continuous Reading Mode) or you may press "enter" to toggle to "Manual Mode" in which case, text is only read as you navigate to it, and only the selected element is read.

In addition to the navigation keys described in the remaining sections of this chapter, you may use normal document navigation commands to read documents in the Document Reader as described in chapter 5 of this manual.

## 7.2 The File menu

1) Open: (O) "Enter-O". Brings up the "Open File" dialog from which you can open any of the supported file types listed above.

2) Recent Documents: (R) "Enter-R". Shows documents recently opened in the Document Reader in a list. Press "Enter" on a document you want to read.

3) Page Settings: (P) "Backspace-P". The page settings allow you to define how the document reader determines the amount of text to move by when navigating by page. The "Page Settings" dialog contains 4 items: an edit box in which you can "Set lines per page", edit box in which you can "Set characters per line", a "Confirm" button and a "Cancel" button.

4) Voice Settings: (S) "Enter-S". The "Voice Settings" let you define how the document is read when using speech, including the ability not to use speech at all. The "Voice Settings" list includes the following: Voice: (On/Off), Default Reading Mode: (Continuous or Manual), Set Volume, Set Speed and Set Pitch. You can also set your reading voice form among any of the Braille eMotion 40 Vocalizer voices you have installed.

5) Document Information: (I) "Enter-I". The "Document Information" option provides information on your current position in the document relative to the whole. The information includes the current and total page, paragraph, sentence and line, as well as the title of the document you are currently reading.

6) Start Setting: (E) "Enter-E". The "Start setting" determines where you are placed when the Document Reader is launched. The options in the "Start Setting" combo box are "Open File dialog", "Recent Documents", and "No Startup Action", in which case, the unit simply lands on a blank screen, from which you can choose what function to perform.

7) Exit with Bookmark: (Z) "Space-Z". Use this to close the "Document Reader and save the position in your current document.

8) Exit and delete all marks: (Q) "Enter-Z". This option closes the Document Reader and deletes any existing marks in the current document.

9) Exit without bookmark: (C) "Backspace-Z". This option closes the Document Reader, but does not save your position in the current document.

## 7.3 The Edit Menu

1) Start Selection: (B) "Enter-B". Allows you to select a certain portion of text that you would like to copy to the clipboard. The end point of the selected text is determined by the location at which you place the cursor after setting the start pointwith "Enter-B".

2) Copy: (C) "Enter-C". After selecting text, activate "Copy" from the "Edit" menu, or press "Enter-C" while in a document.

3) Add to Clipboard: (P) "Enter-P". To add selected text to the clipboard, select "Add to Clipboard" from the "Edit" menu, or press "Enter-P" while in a document.

4) Clear Clipboard: (E) "Enter-D". To delete the text in the clipboard, select "Clear Clipboard" from the "Edit" menu, or press "Enter-D" while in a document.

5) Select All: (A) "Enter-A". Selects all the text in your current document.

## 7.4 The Go To Menu

1) Find: (F) "Space-F". The find function allows you to search for text in a document. The Find dialog consists of "Text to find", "Search direction", "Match case", a "Confirm" button, and a "Cancel" button.

2) Find Next: (H) "Enter-F". "Find Again" looks for additional instances of the text that was searched for in the previous "Find".

3) Find Previous: (V) "Backspace-F". The "Find Previous" function works the same ways the 'Find Again" function described above, however, searches the document in the backward direction.

4) Go to Location: (G) "Enter-L". The "Go to Location" command moves quickly to a specific page, paragraph, or line.

5) Go to Headings List: (T) "Enter-T". The "Go to Headings List" function only appears when you are reading HTML, XML, or EPUB documents, and brings up a list of headings in your current document. Use "Space-1" and "Space-4" to move among the headings, and press "Enter" to jump to the current heading in the list.

6) Go to Previous Heading: (P) "Backspace-space-2-3-5". Moves to the previous heading in an EPUB, XML, HTM, HTML or DOCX document.

7) Go to Next Heading: (N) "Backspace-Space-2-5-6". Moves to the next heading in an EPUB, XML, HTM, HTML, or DOCX document.

## 7.5 The Read Menu

1) Read Selected Text: (B) "Backspace-B". Speaks the text you currently have selected. Note: this option is only available in "Manual Reading Mode".

2) Toggle Reading Mode: (G) "Enter". The "Toggle Reading Mode" option allows you to toggle between "Continuous" and "Manual" reading modes. Press "Enter" while reading a document to toggle between Manual and Continuous reading.

3) Read Current Page: (C) "Backspace". Speaks the current page. Read the prior page using "dots-1-2-6", and read the next page using "dots-3-4-5".

4) Read Current Paragraph: (P) "Space-2-3-5-6". Speaks the current paragraph. Read the prior paragraph using "Space-2-3", and read the next paragraph using "Space-5-6".

5) Read Current Line: (L) "Space-1-4". Speaks the current line. Read the prior line using "Space-1", and read the next line using "Space-4".

6) Read Current Sentence: (S) "Space-1-4-5-6". Speaks the current sentence.

## 7.6 The Mark Menu

1) Set Mark: (M) "Enter-M". You can set marks while playing a file to note positions you would like to return to later. You may set up to 1000 marks per document.

2) Jump to Mark: (J) "Enter-J". You are prompted for the "Mark name to move to:". Type the mark name in the edit box and press "Enter".

3) Delete a Mark: (D) "Space-D". You are prompted to "Enter mark name to delete". Type it and press "Enter".

4) Next Mark: (N) "Enter-N". The "Next Mark" function allows you to move to a marked location ahead of your current position.

5) Previous Mark: (B) "Backspace-M". The "Previous Mark" function allows you to move to a marked location before your current position.

6) Mark List: (K) "ENTER-K". Use "Space-1" and "Space-4" to navigate the list, and press "Enter" on a mark to go to its location in the document.

7) Mark Alert Options: (O) "Backspace-O". You can use the Mark Alert Options" setting to configure how you want to be alerted when marks appear in your document as you read. The alert options are "Beep", "Message" and "No alert".

# 8 DAISY Player

Using the DAISY Player on the Braille eMotion 40, 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 in DAISY books where both text and audio are present.

The Braille eMotion 40 supports DAISY books that are version 3.0 or earlier. The DAISY Player supports the following book types:

DAISY 2.0/2.02/3.0, DAISY XML/Digital Talking Book.

ANSI/NISO Z39.86 4002, 4005.

Bookshare.org DAISY content,

NIMAS 1.1

DRM: supports 4006 PDTB2 authentication.

## 8.1 Arrangement of the DAISY Player

To launch the DAISY Player, press "Enter" on "DAISY Player" in the Braille eMotion 40 main menu. You can also launch the DAISY player from anywhere on the unit by pressing "F1-D".

When you launch the DAISY Player, you are placed in Braille eMotion 40's drive list. Press "Enter" on the drive containing the DAISY book you want to open.

Use normal folder navigation to locate the folder containing a DAISY book you want to open. Press "Space" to select it, then press "Enter" to open it. You must first select the folder containing the book, because a DAISY book contains multiple files, thus, Braille eMotion 40 needs to know exactly from which folder to get all the book text and information.

If you replay a book that you have listened to before, playback resumes from the location where you last exited. To stop playing a DAISY book, press "Space-Z". A prompt box appears asking if you would like to exit the DAISY Player. Select "Yes" or "No" with "Space" or "Backspace" and press "Enter".

Open the DAISY Player menu by pressing "Space-M" or "F2". The menu contains "File", "Document", "Mark", and "Heading". You can navigate the menu items using "Space-1" and "Space-4". To activate a menu item, press "Enter".

Or, you can press "Space-M or "F2" followed by the shortcut for the corresponding menu item. For example to open the "Heading" menu, press "Space-M" or "F2" to open the menu, and press H.

The DAISY Player also contains various lists and dialog boxes. Use "Space-1" and "Space-4" or the Up and Down scroll keys to navigate menus, settings or file lists. Use "Space-4-5" and "Space-1-2" or "F3" and "Space-F3" to tab among controls in a dialog.

Press "Enter" to execute an item.

While playing DAISY content, you are placed in a dialog in which four controls/components are available: "heading", "Information", "Play" and "Pause". "Tab" through this information using "F3".

"Heading" shows you a prefixed heading or navigation element as well as the text under that element if text exists. In "information", you can find the current page, level, phrase, elapsed time, and running time. You can move among these items with "Space-1" or "Space-4". You can press "Enter" on "Pause" or "Play", to pause or play the audio. From anywhere in the dialog, you can also toggle play/pause with "Space".

## 8.2 The File Menu

1) Open DAISY: (O) "Enter-O". Calls the "Open DAISY" dialog.

2) Voice Settings: (S) "Enter-S". Set auto playback settings, mark alerts, and rate, pitch and volume of the reading voice. You can also set the reading voice among any of the Braille eMotion 40 vocalizer voices you have installed.

3) Book Info: (I) "Enter-I". Obtain information about the currently playing DAISY book.

4) Exit: (Z) "Space-Z". Closes the DAISY Player.

5) Exit and delete Bookmark: (Q) “Enter-Z”. exits and deletes any existing exit mark.

6) Exit Without Bookmark: © “Backspace-Z”. Closes without marking your exit position.

## 8.3 The Document Menu

1) Play/Pause: (P) "Space-P". Pause and resume playback. You can also use the "Play" button.

2) Previous Page: (U) "Dots-1-2-6". Moves back one page.

3) Next Page: (D) "Dots-3-4-5". Moves forward one page.

4) Go To Page: (G) "Enter-G". Enter the number of the specific page you want to go to.

5) Go To Percent: ® “Enter-E”. Go to a specific position in the book according to percentage.

6) Go To Time: (T) “Backspace-T”. Available only in DAISY audio: go to a position in the book according to the elapsed time.

7) Move by Previous Movement Unit: (H) "Dot-3". Move back by specified movement type.

8) Move by Next Movement Unit: (L) "Dot-6". Move forward by specified movement type.

9) Change to Previous Movement Unit: (I) "Dots-2-3". Cycle backward one movement type.

10) Change to Next Movement Unit: (E) "Dots-5-6". Cycle forward one movement type.

## 8.4 The Mark Menu

1) Set Mark: (M) "Enter-M". Bookmark a position.

2) Jump to Mark: (J) "Enter-J". Move to a previously set mark.

3) Delete Mark: (D) "Space-D". Delete a previously set mark.

## 8.5 The Headings Menu

1) Headings List: (L) "Enter-H". Open the list of headings in the book.

2) Scan for Next Heading: (N) "Enter-N". Move to the next available heading.

3) Read Current Heading: (W) "Enter-W". Read the heading under which the current text is located.

4) First Heading: (T) "Dots-1-3". Move to the first heading.

5) Last Heading: (B) "Dots-4-6". Move to the final heading of the book.

6) Find: (F) "Space-F". Search for text.

7) Find Again: (R) "Enter-F". Find the next instance of the search string you specified in the "Find" dialog.

## 8.6 The Memo Menu

1) Insert Memo: (M) "Backspace-M". Insert an annotation.

2) Read Memo: (R) "Backspace-R". Read the current memo.

3) Previous Memo: (P) "Backspace-P". Move back one memo from your current position.

4) Next Memo: (N) "Backspace-N". Move to the next memo from your current position.

5) Delete Memo: (D) "Backspace-D". Delete the current memo.

# 9 Media Player

You can use the Media Player to play audio and video files, playlists, or Internet media streams. The Media Player supports the following formats, ac3, asf, asx, m3u, mp2, mp3, MP 4, mpa, mpg, ogg, pls, wav, wax, wma, flac, midi wmv, and MOV.

You can control the playing of media files using Braille keyboard commands. To launch the "Media Player", navigate to it in the main menu and press "Enter". Or, launch it from anywhere on the unit by pressing "F1-M".

## 9.1 Media Player Layout

The playback dialog contains two information tabs: "playback information" and "playlist". Press "F3" or "Space-F3" to move between these tabs.

The "playback information" tab displays the track number, the file name, and the current playback status: (play, pause, or stop). If there are no files in the playlist, the Braille eMotion 40 displays "Title: There are no items to display". If you press "Space-4", the Braille eMotion 40 displays playback time information.

When in the Playback tab, you can use the cursor routers to jump to specific areas of the media file. For example, if you want to move to a place near the middle of the file, press cursor router 20 or 21. If you want to move to a place near 75%, press cursor router 30.

The "playlist" tab displays all the files in the playlist. For each file in the playlist, it displays the track number, file name, the location of the file in the list, and the total number of files in the list. If there is no file in the playlist, the Braille eMotion 40 displays the message "no items".

The Braille eMotion 40's Media Player supports the viewing of lyrics for MP3 files which contain them. The "Lyrics tab appears in the tab order only if the file you are playing contains lyrics in its file information. The lyrics are displayed in a multi edit box which you can read and navigate using normal document navigation commands.

The Media Player menu contains five items: "File", "Play", "Position", "Mark" and "Settings".

To open the Media Player menu, press "Space-M" or "F2". Select a menu item using "Space-1" or "Space-4" and press "Enter". Or, you can press "Space-M or "F2" followed by the shortcut for the corresponding menu item.

Use "Space-1" and "Space-4" or the Up and Down scroll keys to navigate menus, settings or file lists. Use "Space-4-5" and "Space-1-2" or "F3" and "Space-F3" to tab among controls in a dialog.

Press "Enter" to execute an item.

## 9.2 The File Menu

1) Open File: (O) "Enter-O". Opens a media file and creates a new playlist.

2) Open Folder: (F) "Enter-F". Creates a new playlist with all the media files in the selected folder.

3) Add File: (A) "Backspace-O". Adds the selected files to the current playlist.

4) Add Folder: (I) "Backspace-F". Adds all the media files in the selected folders to the current playlist.

5) Save Playlist: (S) "Space-I". Saves the current playlist.

6) Save As Playlist. Saves the currently playing files as a playlist.

7) Delete Item: (D) "Space-D". Deletes the current item from the playlist.

8) Tag Information: (T) "Enter-T". Opens the properties for the current media file.

9) Open URL: (U) "Enter-U". Opens a website for streaming playback.

10) Exit: (Z) "Enter-Z". Exits the Media Player.

## 9.3 The Play Menu

1) Play (P) "Enter". Initiates playback.

2) Previous Track: (B) "Dot-3". Moves back 1 track.

3) Next Track: (N) "Dot-6". Moves forward 1 track.

4) Back 5 Tracks: (D) "Dots-2-3". Moves back 5 tracks.

5) Forward 5 tracks: (U) "Dots-5-6". Moves forward 5 tracks.

6) First Track: (T) "Dots-1-3". Moves to the first track in the playlist.

7) Last Track: (E) "Dots-4-6". Moves to the last track in the playlist.

8) Volume Up: (H) "Space-Up Scroll". Increases the volume.

9) Volume Down: (L) "Space-Down Scroll". Decreases the volume.

10) Speed Up: (K) "Dots-3-4-5". Increases the playback speed.

11) Slow Down: (M) "Dots-1-2-6". Decreases playback speed.

12) Pause: (A) "Space". Pauses playback. Press again to resume.

13) Stop: (S) "Backspace". Stops playback.

## 9.4 The Position Menu

1) Mark Position: (M) "Enter-M". Marks the current position for later use.

2) Delete marked Position: (D) "Enter-D". Unmark the marked position.

3) Jump to Marked Position: (J) "Enter-J". Go to the position previously marked.

4) Go to Time: (G) "Enter-G". Go to a specific time in the file.

5) Go to Percent: (E) "Backspace-P". Move to a place in the file according to its percentage.

6) Go to Number: (N) “Enter-N”. Takes you to the file with the associated number in the current playlist.

7) Set Start Point: (L) "Enter-P". Set a start point for repeat play.

8) Release Point: (R) "Space-E". Set the end point for repeat playback.

9) Chapter List: © “Backspace-L”. Opens a list of chapters if chapter markup exists in the file. During playback, press “Space-2-3-6” to move back by chapter, and “Space-3-5-6” to move forward a chapter.

## 9.5 The Mark Menu

1) Set Mark: (S) "Backspace-M". Bookmark a specific point the media file.

2) Jump to Mark: (M) "Backspace-J". Move to a previously set mark.

3) Previous Mark: (P) "Backspace-dot-3". Moves back one mark from your current position.

4) Next Mark: (N) "Backspace-dot-6". Moves to the next mark after your current position.

5) Delete Mark: (D) "Backspace-D". Deletes a mark.

6) Mark Manager: (K) "Backspace-K". View and modify all marks in the current file.

## 9.6 The Settings Menu

1) Configuration: (C) "Backspace-C". Lets you configure file information display, Mark Alerts, and exit position saving.

2) Playback Settings: (P) "Enter-S". Settings for Repeat Shuffle and other playlist settings. Also allows you to choose whether to show progress of file playback position with dots-7-8 on the Braille display.

3) Effect Settings: (E) "Enter-E". Set Equalizer and bass boost.

## 9.7 Playing Audio Books

When playing an audio book, it is likely you will want files and folders that make up the book to be treated differently than a music playlist, both in terms of navigation and marked positions. For this reason, files and folders that are placed in the “Audiobooks” folder on your flashdisk, SD card, or connected USB drive are handled in a different manner from audio files in any other location on your device.

Firstly, regardless of how you’ve set the “save marked position” setting, exit marks are saved for all files and folders in the Audiobooks folder, as it’s likely you will wish to return to your former position the next time you open content from that location. In addition, if you open a folder from within the Media player using the “Enter-F” command, these marks apply to the folder as a whole, rather than each individual file. \* Note: if you open an individual file in the Media Player, or from the File Manager, the marked position can apply only to that file.

In the same manner, when accessing a folder within the “Audiobooks” folder, any bookmarks you set apply to the book as a whole., Additionally, the “Go To Time”, and “Go To Percentage” commands also apply to the entirety of the folder rather than the current file as is normally the case.

To play any folder of audio files as an audio book, copy it to the “Audiobooks” folder of the flashdisk or any connected drive. In the Media Player, use the “Open folder” command to open the folder as an audio book. By default, Android should automatically create the “Audiobooks” folder on any connected drive, however, there are some instances where this does not happen. If this folder is not automatically created on your connected drive, you may create it, and the Media Player will recognize it, and act on it as described above.

## 9.8 Using Background Play

You may often find that you want to play media while performing other tasks. Braille eMotion 40 allows you to control media in the background while other tasks are in the foreground using hot keys.

Press the “cursor” key with “Enter” to toggle pausing/playing media. Press “Cursor” with “F1” or “F3” to move forward by the selected movement unit, and “Cursor” with “F2” or “F4” to move back by the selected movement unit. Press the Left or right “Cursor” key with the “center” button to select the previous or next movement unit.

# 10. Utilities

The "Utilities" menu provides several special functions and settings for the Braille eMotion 40. Move among the items in the "Utilities" menu using "Space-1" and "Space-4" and press "Enter" to open an item.

You can access functions for each program using hot keys, or via that program's menus or dialogs. If a program has menus, press "Space-M" or "F2" to open the menu. Select a menu item using "Space-1" or "Space-4", and press "Enter". Or, you can press "Space-M or "F2" followed by the shortcut for the corresponding menu item.

In dialogs, use "Space-4-5" and "Space-1-2" or "F3" and "Space-F3" to tab and shift-tab among controls.

Use "Space-1" and "Space-4" or the Up and Down scroll keys to navigate menus, settings or file lists. Press "Enter" to execute an item.

## 10.1 Voice Recorder

The Voice Recorder application allows you to create MP3 or WAV individual recordings, or record DAISY books using WAV or MP3 from the internal stereo microphones, a 4-pole headset, or an Android compatible USB audio device.

You can launch the Voice recorder by navigating to the Utilities Menu, and pressing “V”, or by short pressing the “Record” button.

The “Record” dialog contains the “Record” button”, the “Record Settings” button, a “Recordings” button, an “exit” button, and a status area. Use “F3” and “Space-F3” to move among the controls.

### 10.1.1 Making Recordings

When you launch the Voice Recorder, the device prompts you to record, and displays the source from which you will be recording: “Microphone Record”, “USB Record”, etc. You can set the recording source using the “Record Settings” dialog described later, or connect a USB source, and the Braille eMotion 40 will automatically use it.

When you see the “record” prompt, you are placed in standby mode. Press “Enter” to initiate recording. Press "Space-Z" when finished. You can also long press the "Record" button to immediately start recording without prompt. Press it again to finish. Use the Cursor button with “Enter” during a recording to pause and resume recording.

\*Note: The Braille eMotion 40 supports recording and playback through generic plug and play USB audio devices, including mixers, USB headsets, USB microphones, and other generic USB sound card devices. While many devices are supported, be aware that devices that require specialized drivers or apps are not likely to work. Nor can you use multi-track recording devices, as they generally require a digital audio work station to operate. However, most plug and play audio devices that mix down to stereo output will work beautifully.

When using external devices, there are a few things to be aware of:

* + 1. If a USB source is connected, it will always take priority.
    2. If more than one USB source is connected, as in the case of a camera and second separate audio device, the most recently connected source will take precedence.
    3. USB audio sources completely ignore the Recording Source setting, this applies only to internal sources, and connecting a USB source makes it irrelevant, as the USB source automatically takes over, and cannot be chosen using this setting.
    4. If you connect any headphones, 4 pole or otherwise, while a USB source is connected, the USB audio connection is canceled, and the recorder will use the internal recording source setting.
    5. By default, Braille eMotion 40 audio is silenced during recording to avoid loop back issues with some headsets. If you want to loop back Braille eMotion 40 audio using a mixer, please be sure to turn the “Headphone Monitoring” setting and “Mute System Audio While recording” setting to off, and use the mixer itself to monitor the output.

### 10.1.2 Making DAISY Recordings

You can use the Braille Sense's Record function to record DAISY files as well as simple WAV and MP3 recordings. To record in DAISY format, set the recording method to "DAISY" in the "Record Settings" dialog.

When you initiate DAISY recording, you are prompted, "Start title recording", after which time the Braille Sense gives you about 10 seconds to record a title before automatically moving to recording heading 1.

You can manually insert navigation points in to your DAISY books as you record. Type “Backspace-H” to insert a heading. Type “Backspace-P” to insert a phrase. Type “Backspace-G” to insert a page. Each time you press one of these keys, Braille Sense displays the start of the navigation point: for example, "Starting page 8" or "Start heading 3".

When you stop recording, the unit announces, "building" to let you know the DAISY book is being created. Recorded DAISY files are saved to flashdisk/DAISY/Record, and can be played in the DAISY Player. You can, of course, also locate the individual recordings using the File Manager and play them in the Media Player.

### 10.1.3 Playing individual Recordings

When you finish creating an individual recording, you are placed on a “Play” button so that you can hear what you just recorded. Press “Enter” on this button to start playback. Alternatively, you can press “Enter-P” to play the currently focused recording.

To hear previously recorded files, Tab to the “Recordings” button and press “Enter”. You are placed in the folder you have set to store recorded files, by default, this is set to flashdisk/music/record. You can use normal file/folder navigation to access any WAV or MP3 file on the unit, and press Enter to start playback.

During playback, press “Space” to toggle Pause/play, and “Backspace” to stop playback. Adjust the volume with “Space-Up/Down Scroll”, and adjust the speed with “dots-3-4-5” and “dots-1-2-6”. Use the cursor routers to move to various positions in the file, just as you do in the Media Player.

### 10.1.4 Record Settings

The “Record Settings” dialog contains the following options:

1. Recording Type: choose between WAV or MP3.
2. Sample Rate: choose from several increments ranging from 8000 to 48,000 HZ.
3. Bitrate: determines the quality of an MP3 recording, does not appear when type is set to WAV. Choose from increments ranging from 64K to 340K which is CD quality.
4. Mic Volume: determines the gain of the microphones, Set to High, Medium or Low.
5. Recording Source: microphone will use an external mic if plugged in, and the built-in mics if not; Headset will use a 4-pole headset if connected and the built-in mics if not; Line In will use a stereo line in source if connected and the built-in mics if not. \*Note that, if a USB device is connected, it will take precedence no matter which option is chosen here.
6. File name Type: determines whether recordings are named by number, or by the time and date they were created.
7. Earphone monitoring: On/Off. Determines whether you hear what is being recorded through headphones as you are recording. Note that, if earphone monitoring is on, system audio will be muted during recording regardless of how that option is set.
8. Mute System Audio While Recording: on/Off. By default, this is turned on so that system audio and TTS do not interrupt what you are recording. System prompts are still displayed in Braille. If you wish to record system audio for a demonstration, or to record a stream, etc, set this setting to off, and use a mixer that offers Loop Back or USB Return to send the system audio through to your recording.
9. Recording Method: Normal or DAISY. The normal Recording method creates individual WAV or MP3 files, while the DAISY method builds several recordings in to a DAISY audio book as specified by the navigation points you create as you record.
10. Set Folder: determines where individual or DAISY recordings are stored. If you choose the Normal Recording method, the default folder is flashdisk/music/record. If you choose the DAISY Recording method, the default folder is flashdisk/daisy/record.
11. Record File Name: determines the base file name for recordings. By default, this is set as “record”, however, you can edit it to your liking. The rest of the file name is determined by the “File Name Type” setting described above.

## 10.2 Calculator

Using the calculator on the Braille eMotion 40, you can do simple math equations as well as complex scientific calculations. The results and expressions are displayed in Braille, and spoken by the Braille eMotion 40.

To use the calculator, press C from within the "Utilities" menu. You can launch the "Calculator" from anywhere on the unit by pressing "F3-C". When the calculator is opened, 0 is displayed in computer Braille.

You may type using computer Braille, UEB, or Nemeth Braille when inserting expressions. Press "Backspace-G" to cycle the Braille codes. Clear the calculator with "Backspace-C". If you insert numbers or a function into a result, the result disappears; and if you enter operators, you move to the next step. In addition, you can keep your result in the calculator's memory, and recall it later. You can activate the functions and operators via the calculator menu or you can use the hot keys associated with the various functions.

### 10.2.1 General Functions

To access general mathematical operations, open the menu by pressing "Space-m or "F2" and press "Enter" on "General Functions". From the calculation line, access the "General Functions" by pressing "Enter-G".

"General functions" is a dialog box that contains the "general function list", a "Confirm" button, and a "Cancel" button. You can navigate the operators using "Space-1" or "Space-4". Or, you can press the first letter of the operator you want to access.

Select your desired operation and press "Enter" to perform it. You can also use hot keys to quickly execute operations. Press "Space-H" for a list of hot keys in the Calculator.

To enter negative numbers type minus (dots 3-6) and the number in parentheses. For the percent operation, type the numbers first followed by the percent sign. Immediately after you type the percent sign (%), the number you have typed in is converted into a percent value.

### 10.2.2 Fractional Arithmetic

The Braille eMotion 40 can perform fractional operations such as simplifying and multiplying fractions as well as converting fractions to decimals.

You can also convert fractions to decimals, decimals to fractions, improper fractions to mixed numbers, or mixed numbers to improper fractions. When your result is fractional, you can bring up the "fraction options" by pressing "Space-3-4". Press "Space-1" and "Space-4" to move among the available options. If the fraction is a simple fraction, your options are ""fraction to decimal" and "return original fraction". If the fraction is an improper fraction, you also have an option to return "improper fraction to mixed number". If your fraction is a mixed number, the "mixed number to improper fraction" appears. Finally, if your result is a decimal and you press "Space-3-4", the decimal is converted to a fraction.

### 10.2.3 Memory Functions

The "Memory Functions" act on stored answers and calculations in memory. To access these functions, press "F2" to open the menu, and press "Enter" on "Memory Functions".

"Recall Items" is a dialog, containing "Variable list", "Delete", "Display detail", "Confirm", and "Cancel". You can access the dialog by pressing "Backspace-R" in the calculation line or by selecting it from the "Memory Functions" menu.

The "Variable list" displays "item name: value". Insert the value into your calculation by pressing "Enter" on the item name. You can also copy items in the "Variable list". Press "Space" to select an item in the "Variable list". Then, press "Enter-I" to copy the selected items to the clipboard.

The "Display detail" shows the item name and its result with the default set to "No". To review the detailed information, press "Space" to switch to "Yes". Then, it displays "item name: the expression = its result value" in Braille.

"Delete" is used to remove a variable item from the list.

You can delete all of the saved items stored in the "Recall Items". Select "Delete All Saved Items" from the "Memory Functions" menu, or press "Enter-D" from the calculation line.

"Save Items" is a dialog that allows you to define variables according to the current expression or result in the calculator and save them for future use. The dialog contains an edit box for typing in the variable name, a "Confirm" button and a "Cancel" button. SELECT "Save Items" from the "Memory Functions" menu, or press "Backspace-S" from the calculation line.

When the dialog is opened, the "item name" edit box is focused. Type a name for the variable, and press "Enter" or move to "confirm", and press "Enter". The current expression or result is then saved under the variable name you just specified.

If you type names under variables which have already been created, you are prompted, "Replace variable xx with current value? Yes". If you type function names like "sin", "cos", or "pi" as a variable name, you are warned, "Invalid item name", as you cannot use these functions in variable names.

You can also define variables directly from the calculation line by typing "variable=expression" and press "Enter" to save the variable.

If you select the Statistics function, a dialog opens, which consists of a list box containing all the stored variables and their values, a list box displaying the results of several functions, and a "Close" button. Press "Backspace-T" to activate this function from the calculation line,

Press "Space" to select each variable in the list that you want included in the data set for which the statistics are calculated. TAB to the "result" list to view the sum, average, variance, and standard deviation of the selected variables. You can also select items from the result list and copy them to the clipboard.

### 10.2.4 Sine Functions

Select "Sine Functions" in the Calculator's menu, or press "Enter-S" in the calculation line. The "sine function" list consists of "Sine", "Arc sine", and "Hyperbolic sine". If you press "Enter" on one of the three functions you can insert it into your calculation.

### 10.2.5 Cosine Functions

Select "Cosine Functions" from the Calculator's menu, or press "Enter-I" from the calculation line. The "cosine function" list consists of "Cosine", "Arc cosine", and "Hyperbolic cosine". If you press "Enter" on one of the three functions, the calculation is performed. Or, you can activate one of the three cosine functions by pressing the first letter of each from the list.

### 10.2.6 Tangent Functions

You can open the "Tangent Functions" by pressing "Enter-T" from the calculation line, or by selecting "Tangent Functions" from the Calculator's menu. The "tangent functions" list consists of "Tangent", "Arc tangent", and "Hyperbolic tangent". If you press "Enter" on one of the three functions, the calculation is performed.

### 10.2.7 Logarithm Functions

You can open the "Logarithm Functions" by pressing "Enter-L" from the calculation line, or by selecting "Logarithmic Functions" from the Calculator's menu.

The "Logarithm Functions" is a dialog, which contains a "function list", a "Confirm" button, and a "Cancel" button. The function list consists of "Common logarithm" and "Natural logarithm". If you press "Enter" on one of the logarithm functions, the calculation is inserted into your calculation line.

### 10.2.8 Convert Unit

The "Convert Unit" dialog allows you to convert measurements of mass, area, volume, distance, and temperature from metric measure to imperial measure as well as other standards of measurement and units of measurement within the same system. It also converts several units of measurement related to programming and computers.

To open the "Convert Unit" dialog, Select "Convert Unit" from the Calculator's menu, or press "Enter-U" from anywhere in the Calculator.

The "Convert Unit" dialog contains the following items: "Unit Category" combo box, "Current Unit" combo box, "Change Unit" combo box, "Input Number" edit box, "Convert" button, "Cancel" button and the "Result" static box. You can move among the controls in the dialog using "Tab (F3 or Space-4-5)" or "Shift-Tab (Space-F3 or Space-1-2)". Use "Space-1" or "Space-4" to move among the items in the combo boxes.

The available unit categories are Distance, Area, Mass, Volume, Temperature, Data, numbers and Text. When you have chosen your measurement category, the "Current Unit" and "Change Unit" combo boxes will contain measurement units according to your chosen category. The available distance units are: Millimeters, Centimeters, Meters, Kilometers, Inches, Feet, Yards, and Miles. The available units of area are: Square Meters, Are, Square feet, Square Yards, Acres, and Hectares. The available units of mass are: Grams, Kilograms, Tones, Grains, Ounces, and Pounds. The available units of volume are: Deciliter, Milliliter, Liter, Cubic Centimeter, Cubic Meter, Cubic Inch, Cubic Foot, Cubic Yard, Gallon, Fluid oz, Cups and Quarts. The available units of temperature are: Celsius, Fahrenheit and Kelvin.

The available data units are bit, byte, kilobyte, megabyte and gigabyte. The available numeric units are Hex, Dec and binary. Finally, the text conversion allows you to discover the ASCII equivalent to any text character.

Choose your unit to convert from in the first combo box. Choose your unit to convert to in the "Change" combo box. Type the number of the measurement you want to convert in the "Input Number" edit box. Finally, to convert the measurement, Tab to the "Convert" button and press "Enter". If you wish to cancel the conversion, Tab to the "Cancel" button and press "Enter". When you activate the "Convert" button, the conversion result is displayed in the "Result" static box.

### 10.2.9 Copy to Clipboard

The "Copy to Clipboard" function is used to copy your expression or result to the clipboard for pasting your expression or result in a document. You can also access up to 40 lines of calculation history and copy them as well. Press "Enter" on the "Copy to Clipboard" option in the menu, or press "Enter-C" in the calculation line to copy the current expression. You can now paste the calculation to a document in the Notepad or to another application on the unit.

To access the cumulative calculation history, press "Enter-H". You can then use normal selection commands to select the lines of the history you wish to copy. Press “Space-D” to delete an item from the cumulative history.

### 10.2.10 Return Formula

There may be times, after viewing a result, that you wish to be reminded what expression you used to obtain that result. The "return formula" function allows you to return the expression you just entered

When your result is displayed, press "Enter-R", or select "Return Formula" from the menu.

The expression you entered to obtain your current result is displayed.

### 10.2.11 Option Settings

You can activate the "Option Settings" by pressing "Enter" on the menu option, or from your calculation line, press "Enter-O".

The "Option Settings" dialog contains combo boxes for changing various settings, an "OK" button, and a "Cancel" button. The "available settings are "Angle Unit", "Calculator Braille Code", “decimal places to display” and “Display Using Scientific notation”. You can navigate among the controls using “F3” or “Space-F3”. Use "Space" to change the value of each setting.

When setting the angle unit, 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 as this is not a valid calculation.

You can set the Calculator Braille code to computer Braille, Nemeth or UEB math Braille as described previously. You can use "Space-G" to change this setting from anywhere in the calculator.

## 10.3 Display Time and Date

Use this function to check the current date and time. Navigate to "Display Time and Date" in the "Utilities" menu, and press "Enter". You can also query the time and date from anywhere on the Braille eMotion 40 with "Space-T" or by long pressing the “Volume Up” button. You can Tab to display today's date.

## 10.4 Wake Up Alarm

You can use this function to set multiple alarms to remind you of recurring events, or wake you up at different times on varying days of the week. To open "Wake up alarm", from the "Utilities" menu, use "Space-1" or "Space-4" to navigate to "Wake up alarm", and press "Enter". You can launch the "Wake Up Alarm" from anywhere on the unit by pressing "F3-A" If you have not yet set the time or date in the Braille eMotion 40, the unit prompts, "Set time:" After you set the time, the Braille eMotion 40 displays the "Wake up alarm" dialog.

The “Wake Up Alarm” dialog contains 5 items: Alarms list, an “Add” button, “Modify” button, “Delete” button, and a “Close” button. Use “F3” and “Space-F3” to move among the controls. Use “Space-1” and “Space-4” to navigate the Alarms list. You can also add an alarm by pressing “Enter-A”, modify with “Enter-M”, and delete an alarm with “Space-D”.

The "Add alarm" dialog contains: "Set time", "Bell", "Term", "Alarm duration", "Repeat interval", "Wake up call times", a "Confirm" button, and a "Cancel" button.

When the alarm sounds, the Braille display displays the message "Wake up alarm. Press Escape to stop the alarm".

When you open the "Wake up alarm" dialog, the Braille eMotion 40 displays the "Set time" field. The value is set to the current time or the time specified previously. Here you can directly type the time, or set the time using the shortcut keys, as explained in section 8.1.3.

Tab to the next field and select from one of 3 alarm sounds, a vibration, or a media file for the wake up alarm. Press "Space-1" or "Space-4" to change the alarm sound. As you move among the sounds, the various alarm sounds are played. When you reach the 4th option, "Vibrate motor", the Braille eMotion 40 produces a long vibration representing the one you would feel should you choose to use this option to alert you of your alarm.

If you choose "Media File", Tab to the "File Name" button and press "enter" to browse for the file you wish to use as your alarm sound. You are placed in a File Manager control with the focus inside the 'Media" folder. Locate the file you wish to use, and press 'Enter".

When you have selected your desired alarm type, Tab to the next field.

In the term field, you can set which days of the week the alarm sounds. There are four options: "Off", "Once", "Week days", and "Every day". If the "Term" is set to "Off", the alarm does not go off at the specified time, no matter how the other options in the dialog are set.

The duration option sets the amount of time that the alarm sounds. The options are 1 minute, 2 minutes, or 3 minutes. If you set the ringing duration to "1 minute", the alarm sounds for one minute, and then is silent. To stop the alarm before a minute has passed, press "Backspace-enter".

The repeat interval defines the amount of time that is between the times that the alarm sounds. For example, if you set the repeat interval to three minutes, after the alarm has stopped sounding, it rings again in 3 minutes. The available settings are 1, 3, 5, 10, 15, or 40 minutes.

If the alarm is not turned off by pressing "Backspace-enter", it repeats according to the number of times you set the Wake Up Call Time option. The available settings are 1 to 10.

Press "Enter" to save your setting, or "Space-Z" to cancel setting the alarm.

## 10.5 Stopwatch

You can launch the "Stopwatch" from anywhere on the unit by pressing "F3-W". Or, you can navigate to it in the "Utilities" menu and press "Enter".

"00:00:00" is displayed. Press "Enter", to start the stopwatch running. Press "Enter" again, to pause, and the Braille eMotion 40 announces the elapsed time, and displays it in Braille. Pressing "Enter" again restarts the stopwatch running.

If you press "Backspace" while the stopwatch is paused or running, The Braille eMotion 40 announces the elapsed time and clears to "00:00:00". While the stopwatch is running, pressing "Space" gives you the elapsed time. As the stopwatch is still running, the Braille display continues displaying the time second by second as it passes.

Press "Space-F2" to stop displaying the time. If you press "Space-F2" once more, the time is displayed again.

Tab to switch to the "Countdown timer". You are asked to type hours, minutes, and seconds. Type a two-digit number for the hour, minute, and the second using Computer Braille or grade 1. You do not need to use a number sign. If you press "Enter" without typing any numbers, the "Countdown timer" starts counting down by the default time, which is set to one minute. When started, the "Countdown timer" displays "countdown xx minute", and begins running.

Press "Enter" on the "Countdown timer", and the Braille eMotion 40 tells you the remaining time, and pauses countdown. Press "Enter" again to restart the timer. Pressing "Backspace" clears the "Countdown timer". If the timer reaches zero, a 10-second alarm sounds, and the "Countdown timer" clears. If you press "Backspace-enter" while the alarm is sounding, the alarm stops and your timer clears, and is ready to accept a new time.

To exit the "Stopwatch" program, press "Space-Z".

## 10.6 Backup/Restore Flashdisk

The Backup/Restore Flashdisk utility lets you create a password protected zip backup of your flashdisk data to an SD card or connected USB drive. You can execute this utility by pressing “K” from within the Utilities Menu, or “F3-P” from anywhere on the unit

You are placed on the “Backup” button, which also announces the amount of data to be backed up. You can press “f3” or “Space-F3” to access the “Restore” and “Close” buttons.

Pressing “Enter” on the “Backup” button places you in a list of available drives to which you can save the backup, each announcing the amount of free space available. Press “Enter” on the drive you wish to use.

\*Note: We recommend using ExFat SD cards or drives 64GB and above. It is not possible to create a zip file of more than 4 GB of data to a FAT32 drive or card, and most backups will be larger than 4 GB, as the user flashdisk can hold nearly 44 GB of data.

When you have chosen your drive, you are asked to create a password. If you wish to password protect your zip backup, type a password of no more than 8 characters in the computer edit box. Press F3 to re-type the password. If you do not wish to use a password, Tab once more to “Don’t use password”, and press “Enter”.

Braille eMotion 40 creates a compressed backup, announcing the progress as a percentage. When finished, the unit then updates the file system. This may take a few minutes. Finally, you are asked whether you want to unmount the disk. If you want to disconnect the drive immediately, please choose yes, or the file system may not remain intact. If you intend to leave the disk connected for a time, you can say no. When you disconnect later, the system should be fine.

When the backup is complete, a folder called “Braille eMotion 40 Backup” appears on the root of the backup drive, containing a zip file with the Braille eMotion 40 device name and the time and date.

To restore a backup, choose the drive, then the backup file from the restore dialog. If you password protected your backup, you are prompted to enter the password before the restoration begins.

## 10.7 Format

WARNING!! The Braille eMotion 40 makes it possible to format the flashdisk to solve corruption problems and/or start over with a clean internal drive. Formatting the flashdisk erases everything on the flashdisk. Be extremely cautious when executing this command. If you execute this command, you will lose all of your data. You will NOT be able to retrieve this data once the command is executed. To format the flashdisk, press and hold the “Home” key while powering up from a complete shut down.

You can also access the "format" function by pressing F from the "Utilities" menu. Or, you can launch it from anywhere on the Braille eMotion 40 by pressing "F3-F".

When you format any disk on the Braille eMotion 40, all information is erased. Therefore, before you format, you are advised to backup any important data if possible.

1) From the Utilities menu, press "Enter" on "Format" and "flashdisk" is focused. Press "Enter", or choose another disk from the list, and press "Enter". \*Note: the disk will be formatted according to its current file system, FAT32 or ExFat.

2) You are prompted, "Format flashdisk?" Yes". Press "Enter"

3) You are prompted, "All data will be lost. Continue? Yes". Press "Enter".

4) The unit announces, "Now formatting flashdisk" and the format is started.

5) When the format is complete, you are returned to the "Disk" list.

To cancel the format, press "Space", or press "Enter" on "No" in step 2 or 3.

## 10.8 Set Sleep Timer

You can set the sleep timer to turn the Braille eMotion 40 off after a specified amount of time regardless of what you are doing.

To set the Sleep Timer, navigate to "Sleep Timer" in the Utilities" menu and press "Enter". Or press "Space-J" from anywhere on the unit.

You are prompted, "Sleep timer: 0". Enter the number of minutes for the sleep timer in the edit box. The available settings range from 0 to 180. Press "Enter".

When the sleep timer is set, even if the device is active, it powers off after the specified amount of time. If you set the sleep timer for "5" minutes and press "Space-J (dots 2-4-5)" after 2 minutes, "3" is displayed in the edit box, indicating the time remaining before the sleep timer powers the unit off.

## 10.9 Upgrade Braille eMotion 40 Firmware

Using this utility, you can update the Braille eMotion 40 either via an Internet connection or from external media containing the upgrade files. If you choose the "Online" method, be sure you have an active Internet connection before attempting the upgrade. When you update the Braille eMotion 40, settings are usually maintained. However, if there are changes to setting values in the firmware, all settings will be initialized. Therefore, it is recommended that you back up your settings using the backup/restore utility in the “Settings” menu. Data in the flashdisk is protected. However, we recommend you backup your files before updating the Braille eMotion 40 Firmware as unexpected problems can occur.

* Note: You cannot cancel the update once it has started. You must not reset the unit during an upgrade. You must keep the unit connected to AC power throughout the upgrade process. We recommend you do not touch the Braille eMotion 40 while it is updating. It may take up to 60 minutes to update the Braille eMotion 40, possibly even longer depending on the speed of your Internet connection and how many apps you have installed.
* Also note: the upgrade files are temporarily stored on the flashdisk for installation. If you do not have enough memory available on the flashdisk, the Braille eMotion 40 is unable to update until you make room for the upgrade files.

You can access the "Upgrade Firmware" option via the "Utilities" menu, or launch it from anywhere on the unit using "F3-U".

When you have chosen your upgrade method, and the upgrade files are downloaded or detected, Braille eMotion 40 will extract all of the necessary program files. Progress is announced every few seconds.

Once done, the Braille eMotion 40 will reboot, and the system files will be upgraded. During this process, there is no speech, but the progress will be shown in Braille as a percentage.

Once this has completed, all the applications will be upgraded.

When the system files have been upgraded and the applications initialized, the software will load and boot. During this process, the Braille eMotion 40 displays “Starting Braille eMotion 40” in Braille, and a progress indicator of changing dots appears on the right.

When the system reboots, if there are no new or changed setting values in the firmware, the Main Menu loads, and your settings are restored. If setting values have been changed, all Settings are initialized, and the system boots and runs the Quick Guide.

When the system boots for the final time after the upgrade, the release Note is displayed. Press “F4” to exit to the Main Menu. If you want to save the release Note to the Documents folder, Tab to save and press “Enter”. To display it again at any time, press “F2-F3-R” from the main Menu.

### 10.9.1 Upgrading the Braille eMotion 40 Firmware Using the Internet

To upgrade the Braille eMotion 40 Firmware via the Internet, follow these steps:

1) Make sure you are connected to the Internet and plugged into AC power. Press "Enter" on "Upgrade Braille eMotion 40 Firmware" in the "Utilities" menu.

2) Press "Enter" on "Upgrade: Online". The Braille eMotion 40 connects to the HIMS server, and your current software version is compared to the HIMS server version. You are prompted to continue with the upgrade.

3) The Braille eMotion 40 begins downloading the upgrade files. The upgrade is around 1.3 GB. Thus, depending on the speed of your Internet connection, it may take a long time to download. If the upgrade fails, you may receive the message, "Internet connection is not available. To try the upgrade again, press "Space-Z" to cancel, and activate "Upgrade Braille eMotion 40 Firmware" again. If the connection is successful, the upgrade files are downloaded.

4) After downloading the upgrade files, Braille eMotion 40 automatically starts the upgrade process. Please remember you must not touch the Braille eMotion 40 until the upgrade is complete, as pressing keys, resetting, or unplugging the unit can interrupt the upgrade process, thus resulting in an incomplete installation. When the upgrade is complete, you are returned to the "program" menu, and the unit announces, "File manager".

5) After the upgrade is complete, check the software version by pressing "Space-V" while in the "program" menu.

### 10.9.2 Upgrading the Braille eMotion 40 Firmware from a Disk

To upgrade the Braille eMotion 40 Firmware from a disk, follow these steps:

1) Download the upgrade file from the HIMS website. Note: the file is a .bin file, however, some versions of Windows may rename it as a .zip file. Do not extract this file. Simply rename the extension back to .bin. Copy the file to the root of an external storage device such as an SD card or USB thumb drive.

2) Connect the SD card or USB drive to the Braille eMotion 40, and be sure the Braille eMotion 40 is connected to AC power. Then, press "Enter" on "Upgrade Braille eMotion 40 Firmware" from the "Utilities" menu.

3) "Upgrade: Online" is displayed. Press "Space-4" to go to the "Upgrade: Offline" option. Press "Enter".

4) If you are already running the latest version of the software, you are asked to continue with the upgrade. If you press "Enter" on "No", the upgrade is cancelled. Press "Space" to toggle between "Yes" and "No".

5) The Braille eMotion 40 starts the upgrade process. Please remember you must not touch the Braille eMotion 40 until the upgrade is complete. When the upgrade is complete, you are returned to the "program" menu, and "File manager" is displayed.

6) When the upgrade is complete, check the software version by pressing "Space-V" while in the "program" menu.

# 11. Getting Help

The “Help” menu consists of a navigable version of the Braille eMotion 40 User Guide, as well as general information about your Braille eMotion 40. To access the User Guide, open the “Help” menu, and press “Enter” on “user guide”.

You can also launch the User Guide from anywhere on the unit using "F1-H".

The User Manual will load, and you will be placed in the Navigation menu. Use "Space-dot-1” and “Space-dot-4" to navigate to the section you wish to read. To navigate to sub sections for the focused section, press F3. Then, use “Space-1” and “Space-4” once again to navigate the sub sections. To move back a level in the structure, press “Space-F3”.

Press "Enter" on the focused section to open the manual at that location and start reading. Keys for navigating are the same as those in the Notepad. For a list of navigation keys, please see chapter 5. You can return to the Navigation menu at any time by pressing “Space-N”.

As you read the manual on the Braille eMotion 40, you can search for text by pressing "Space-F". Type the text you wish to find, and press "Enter". You can find the next occurrence of the particular text you searched for by pressing "Enter-F".

The Introduction section gives a physical orientation to the Braille eMotion 40 and an overview of its functionality.

The section, "Basic Functions", gives a basic overview of the programming and operation of the Braille eMotion 40

The section, "Customizing your Braille display" provides an explanation of time and date setup, internet Setup, Bluetooth connectivity, and the “Braille”, “Voice” and "Global Options" and how to use them to configure your Braille eMotion 40 according to your preferences.

Most of the remaining sections cover each of the functions of the Braille eMotion 40 in detail.

The "Commands Summary" section is a quick reference of hot keys for all the programs on the Braille eMotion 40, useful when you simply want to know the keystroke for performing an action without reading the entirety of the instructions on a given program.

You can also get help related to the specific task you are performing. Use "Space-H" within any program to get a list of keystrokes available in that program.

# 12 Key Commands for Connectivity

## 12.1 General Connectivity Commands

Activate Connectivity Mode: press Connect key

Open Connectivity menu: Long press Connect key

Move to next connection: Space-connect key

Move to previous connection: Backspace-connect key

Disconnect current connection: Space-d

Delete current connection: Enter-d

Switch to Legacy USB: Center-backspace-u

Switch to HID Braille USB: Center-Enter-u

Switch to Bluetooth: Center-Enter-b

Call the Pairing List: Center-l

Initiate Bluetooth Pairing Mode: Center-c

Toggle Bluetooth audio sending On/Off: Center-A

Toggle standalone and Terminal modes: Space-Center

Close Connectivity: Backspace-Space-z

## 12.2 Commands for JAWS For Windows

### 12.2.1 General commands:

Cycle among line, structured, attributes, and speech output modes: Dot 1

Indicate which text attributes should be displayed: Dot 2

Toggle between the JAWS and PC cursor: Dot 3

Move the active cursor when Braille movement keys are pressed: Dot 4

Perform and speak native keystroke: Dot 6

Silence speech: Control

Activate the menu bar: Alt

Open Start menu: F1

Click the right mouse button: F2

Tab: F3

Escape: F4

Shift-Tab: Space-F3

Alt-Tab: F2-F3

Alt-enter: Alt-Enter

Alt Left Mouse click: Alt-5

List Tray icons: Enter-L

Show Notification history: Enter-N

Go to Desktop: Home key

Announce battery and charging status: Backspace-B

Announce battery and Connection status: Backspace-W

Announce System time: Space-T

Announce last alert: Space-1-2-3-4-5-6

Toggle progress bar announcement: Backspace-P

Read highlighted word in context: Backspace-C

Say Window Title: Backspace-Enter-T

Say bottom of Window: Enter-4-5-6

Read dialog Box in Tab order: Enter-B

Activate Say All: Enter-G

Toggle Navigation Quick Keys: Space-Q

### 12.2.2 Navigation and Selection Commands:

toggle Typing Mode: Backspace-Space-T

Previous character: Space-3

Next character: Space-6

Previous word: Space-2

Next word: Space-5

Previous line: Space-1

Next line: Space-4

Previous paragraph: Space-2-3

Next paragraph: Space-5-6

Page Up: Space-1-2-6

Page Down: Space-3-4-5

Home/Start of line: Space-1-3

End/End of line: Space-4-6

Top of File: Space-1-2-3

Bottom of File: Space-4-5-6

ShiftTab: Space-1-2

Tab: Space-4-5

Open the menu bar: Space-M

Escape: Space-E

Next Document Window: Backspace-N

Close Document Window: Control-D

Close List box: Control-L

Show headings list: Dots-1-2-5, (H)

Show Links list: Backspace-L

JAWS find: Space-F

JAWS Find Next: Enter-F

JAWS Find Previous: Backspace-F

Select Prior line: Backspace-Space-1

Select prior word: Backspace-Space-2

Select prior character: Backspace-Space-3

Select next line: Space-Enter-4

Select next word: Space-Enter-5

Select next character: Space-Enter-6

Say Selected Text: Backspace-Space-S

Copy to Clipboard: Control or Enter-C

Cut to clipboard: Control or Enter-X

Paste from clipboard: Control or Enter-V

Send Window text to clipboard: Space-W

Undo: Control or Enter-Z

### 12.2.3 Voice and Braille Configuration Commands

Decrease voice Volume: Backspace-F1

Decrease Voice Rate: Space-"F1

Decrease Voice Pitch: Enter-F1

Increase Voice Volume: Backspace-F4

Increase Voice Rate: Space-F4

Increase Voice pitch: Enter-F4:

Mute synthesizer: Backspace-F2

Set Typing Echo: Enter-F2

Set punctuation level: Enter-F3

Set screen echo: Backspace-S

Adjust JAWS verbosity: Backspace-V

Toggle speech history: Backspace-H

Silence speech: Backspace-Enter

Move Braille left: Left Cursor key

Move Braille right: Right Cursor key

Braille Pan Left: Up Scroll key

Braille Pan Right: Down Scroll key

Set Braille View: Alt-V

Split pan left: Backspace-Space

Split Pan right: Space-Enter

Show time in status cells: Space-3-4

Toggle Braille display of table headers: Backspace-T

Toggle Braille table cell reading: Enter-T

Turn Braille Marking off: Backspace-M

Change Braille Grade: Backspace-G

### 12.2.4 JAWS Commands:

OCR document: Enter-O

Run JAWS Manager: Backspace-2-3

Start JAWS task list: Space-Enter-T

Toggle Keyboard Help: Dots-1-3 (k)

## 12.3 Commands for NVDA

### 12.3.1 Original NVDA key map

Route to braille cell: Cursor router

Scroll braille display back: Up Scroll key

Scroll braille display forward: Down Scroll key

Move to current focus: Up and Down Scroll keys

Control key: F1

Windows key: F3

Alt key: Space-M or F2

Shift key: Left Cursor

Insert key: Space-I or Right Cursor

Applications key: Space-P or F2

Caps Lock key: Space-U

Tab key: Space-4-5 or F3

Shift-Alt-Tab: F1-F2-F3

Alt-Tab: F2-F3

Shift-Tab: Space-1-2 or Space-F3

Alt-F4: Space-Z

Home key: Space-1-3

End key: Space-4-6

Control-Home: Space-1-2-3

Control-End: Space-4-5-6

PageUp: Space-1-2-6

PageDown: Space-3-4-5

Control-PageUp: Space-Enter-1-2-6

Control-PageDown: Space-Enter-3-4-5

UpArrow: Space-1

DownArrow: Space-4

Control-UpArrow: Space-2-3

Control-DownArrow: Space-5-6

Alt-UpArrow: Backspace-Space2-3

Alt-DownArrow: Backspace-Space-5-6

Shift-UpArrow: Space-Up scroll

Shift-DownArrow: Space-Down Scroll

LeftArrow: Space-3

RightArrow: Space-6

Control-LeftArrow: Space-2

Control-RightArrow: Space-5

Alt-LeftArrow: Backspace-Space-2

Alt-RightArrow: Backspace-Space-5

Escape key: Space-E or F4

Delete key: Space-D

F1 key: Space-H

F3 key: Space-Enter-C

F4 key: Backspace-F1

windows-B: F3-B

Windows-D: F3-D

## 12.3.2 General HID Braille Commands

Scroll braille display back: Up Scroll

Scroll braille display forward: Down Scroll key

Route to braille cell: Cursor Router

Toggle braille tethered to: Up-Down Scroll

UpArrow: Space-1

DownArrow: Space-4

LeftArrow: Space-3

RightArrow: Space-6

Shift-Tab: Space-1-3

Tab key: Space-4-6

Alt key: Space-M

Escape key: Space-E

Enter key: Dot 8

Windows key: Space-3-4

Alt-Tab: Space-T

NVDA Menu: Space-N

Windows-D: Space-D

Say All: Space-1-2-3-4-5-6

## 12.4 Commands for VoiceOver for MAC

### 12.4.1 General and Navigation

Move to previous item: Space-1

Move to next item: Space-4

Move up: Space-3

Move down: Space-6

Go to first item: Space-1-2-3 or F1

Go to last item: Space-4-5-6 or F2

Start Interacting: Space-2-3-6

Stop Interacting: Space-3-5-6

Item Chooser: Space-I

Find: Space-F

Go to Menu bar: Space-S or Control key

Open Shortcut Menu: Space-2-5

Escape: Space-1-2

Scroll left one page: Space-2-4-6

Scroll right one page: Space-1-3-5

Scroll up one page: Space-3-6-5-6

Scroll down one page: Space-1-4-5-6

Speak page number or rows being displayed: Space-3-4

Select previous rotor setting: Space-2-3

Select next rotor setting: Space-5-6

Perform action for item: Space-3-6

Go to Dock: F3

Go to Desktop: F4

Go to Linked item: Left Cursor

Go to Popup item: Right Cursor

Increase Volume: Space-3-4-5

Decrease Volume: Space-1-2-6

Read page from top: Space-W

Read contents of the VoiceOver Cursor: Space-R

Read text attributes: Space-2-3-4-5-6

Select all: Space-2-3-5-6

Select left: Space-2-3-5

Select right: Space-2-5-6

### 12.4.2 VoiceOver and Braille

Open VoiceOver Utility: Space-u

Toggle Screen Curtain: Space-1-2-3-4-5-6

Pause or continue speech: Space-P

Toggle speech on/off: Space-M

Open VoiceOver Help: Space-H or Home key

Start/Stop Keyboard Help: Space-K

Create custom label: Space-1-2-3-4-6

Toggle QuickNav: Space-Q

Pan braille to the left: Space-2

Pan braille to the right: Space-5

Toggle announcement history: Space-N

Translate: Space-4-5

Map Braille key to Delete key: Space-D

Map Braille key to Return key: Space-E

Map Braille key to Tab key: Space-T

Switch between contracted and uncontracted braille: Space-G

Go to Desktop: Backspace-2-5-6

Map Braille key to Shift key: Backspace-Space-4

Map Braille key to toggle Shift key: Space-Enter-4

Map Braille key to Command key: Backspace-Space-1

Map Braille key to toggle Command key: Space-Enter-1

Map Braille key to Control key: Backspace-Space-3

Map Braille key to toggle Control key: Space-Enter-3

Map Braille key to Option key: Backspace-Space-2

Map Braille key to toggle Option key: Space-Enter-2

Map Braille key to Fn key: Backspace-Space-5

Map Braille key to toggle Fn key: Space-Enter-5

Map Braille key to Delete key: Backspace or Backspace-Space

Map Braille key to Return Key: Enter, or Space-Enter

## 12.5 Commands for iOS:

Note: when using USB HID Braille, the Braille keyboard equivalents must be used in cases where both emotion specific and Braille keyboard commands are available. When using a traditional Bluetooth connection, the braille emotion specific keys may be used.

### 12.5.1 General and Navigation

Go to Previous item: Space-1

Go to Next item: Space-4

Go to First item: Space-1-2-3

Go to Last item: Space-4-5-6

Go to Center item: Backspace-space-C

Item Chooser: Space-I

Activate selected item: Cursor router

Long press selected item: Backspace-Enter-3-6

3D touch selected item: Space-3-5-6

Speak item summary: Space-3-4

Scroll Up one page: F1 or Space-3-4-5-6

Scroll Down one page: F2 or Space-1-4-5-6

Scroll Left one page: Left Cursor key or Space-2-4-6

Scroll Right one page: Right Cursor key or Space-1-3-5

Speak page number or rows being displayed: Space-3-4

Move to next window: Space-2-6

Move to previous window: Space-3-5

Move to previous container: Backspace-Space-1

Move to next container: Backspace-Space-4

Previous rotor item: Space-3

Next rotor item: Space-6

Previous Rotor Setting: F3 or Space-2-3

Next Rotor Setting: F4 or Space-5-6

Home screen: Home key or Space-h

App Switcher: Home key twice or Space-h twice

Back button: Space-B

Status Bar: Space-S

Control Center: Space-2-5

Notification Center: Space-4-6

Volume up: Space-3-4-5

Volume down: Space-1-2-6

Play/Pause Music: Space-1-5-6

### 12.5.2 Reading and Editing

Read from Current Position: Space-R

Read from Top: Space-W

Select all: Space-2-3-5-6

Select left: Space-2-3-5

Select right: Space-2-5-6

Tab: Space-T

Shift Tab: Space-1-2-5-6

Cut: Space-X

Copy: Space-C

Paste: Space-V

Activate Delete key: Space-D

Activate Return key: Space-E

Undo Typing: Space-Z

Redo Typing: Space-2-3-4-6

Text search: Space-F

Output text style: Space-2-3-4-5-6

Start dictation in text field: Space-1-5-6

### 12.5.3 VoiceOver and Braille

Pan braille to the left: Space-2

Pan braille to the right: Space-5

Translate: Space-4-5

Next Braille Output: Control key or Space-g

Next Braille Input: Alt key or Space-2-3-6

Show/hide keyboard: Space-1-4-6:

Toggle announcement history: Space-N

Pause or continue speech: Space-P

Toggle Speech on/off: Space-M

Toggle Quick Nav: Space-Q

Toggle single letter quick nav: Backspace-Space-Q

Toggle screen curtain: Space-1-2-3-4-5-6

Create custom label: Space-1-2-3-4-6

VoiceOver help: Space-K

## 12.6 Commands for Android

### 12.6.1 General Commands

Previous item: Backspace-1-2

Next item: Enter-4-5

Activate current item, Cursor routing key

Touch and hold current item: Space-Enter

Scroll backward: Backspace-2-4-6

Scroll forward: Enter-1-3-5

Adjust Reading Control Up: Backspace-3

Adjust Reading Control down: Enter-6

Previous Reading Control: Backspace-2-3

Next Reading Control: Enter-5-6

Previous Window: Backspace-w

Next window: Enter-w

Top of page or text: Space-1-2-3

Bottom of page or text: Space-4-5-6

Previous heading: Backspace-h

Next heading: Enter-h

Previous Web control: Backspace-c

Next Web control: Enter-c

Previous link: Backspace-l

Next link: Enter-l

Pan down: Right Scroll Down

Pan Up, Right Scroll Up

Down one line: Left Scroll Down

Up one line: Left Scroll Up

Auto Scroll on/off: Space-1-2-4-5-6

Go Back: Space-b

Go Home: Space-h

Open Notifications: Space-n

Open Recent Apps: Space-r

Open Quick Settings: Space-q

Open All Apps: Space-p

Open Screen Search: Space-3-4

Edit Custom Label: Space-Enter-m

Open TalkBack menu: Space-m

TalkBack Speech on/off: Backspace-Enter-m

Stop Reading: Backspace-Enter

Open TalkBack Settings: Backspace-Enter-t

Switch to next input language: Backspace-Enter-i

Switch to next Reading Language: Backspace-Enter-o

Switch Braille grade: Space-g

Braille Display keyboard help: Backspace-Enter-k or Beft Cursor button

Open Braille Display Settings: Backspace-Enter-b

Turn off Braille display: Dots-1-2-3-4-5-6-7-8

### 12.6.2 Text Navigation and Selection

Previous character: Space-3

Next character: Space-6

Previous word: Space-2

Next word: Space-5

Previous line: Space-1

Next line: Space-4.

Select All: Space-Enter-1-2-3-4-5-6

Select previous character: Space-Enter3

Select next character: Space-Enter-6

Select previous word: Space-Enter-2

Select next word: Space-Enter-5

Copy text: Space-Enter-c

Cut text: Space-Enter-x

Paste text: Space-Enter-v

Delete: Backspace

Enter: Enter key

Delete a word: Backspace-space-2

# 13. Key Commands for Internal Applications

## 13.1 Common Hotkeys

Voice on/off: Backspace-F2

Braille on/off: Backspace-F3

Scroll voice on/off: F3-Up Scroll button

Increase voice volume: Backspace-F4, or Volume Up key

Decrease the voice volume: Backspace-F1, or Volume Down key

Increase the voice rate: Space-F4, or Volume Up key after changing Voice Control setting

Decrease the voice rate: Space-F1, or Volume Down key after changing Voice Control setting

Increase the voice pitch: Enter-F4

Decrease the voice pitch: Enter-F1

Increase the main volume: Backspace-Space-F4, or Volume Up key after changing Voice Control setting

Decrease the main volume: Backspace-Space-F1, or Volume Down key after changing Voice Control setting

One-handed mode on/off: Backspace-1-2-3

Bluetooth on/off: short press the Bluetooth key

Wireless LAN on/off: short press the Wi-fi key

Open main menu: short press the Home key

Open Running Tasks list: F1-F4, or Home key twice

Switch to next running task: F2-F3

Switch to previous running task: Space-F2-F3

Open program specific menu: F2, or Space-m (dots-1-3-4)

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

Escape: F4, or Space-e (dots-1-5)

Tab in a dialog: F3, or Space-4-5

Shift-tab in a dialog: Space-F3 or Space-1-2

Previous character: Space-3

Next character: Space-6

Previous word: Space-2

Next word: Space-5

Previous line/item: Space-1

Next line/item: Space-4.

Beginning of line/item: Space-1-3

End of line/item: Space-4-6

Top of a document or list: Space-1-2-3

Bottom of a document or list: Space-4-5-6

Page Up: Space-1-2-6

Page Down: Space-3-4-5

Scroll back: Up Scroll button

Scroll forward: Down Scroll button

Move cursor to a cell or list item: corresponding cursor routing key

Repeat current item: Space-r (dots-1-2-3-5)

Get help: Space-h (dots-1-2-5)

Check software version: Space-v (dots 1-2-3-6) only from Main menu

Say current time: Space-t (dots-2-3-4-5), or long press the Volume Down key.

Display power status: Space-1-6, or long press the Volume Up key.

Display network status: Space-n (dots 1-3-4-5) from Main menu

Display flash disk empty space: Space-i (dots 2-4) from Main menu

Change Braille grade: Center key or Space-G (dots-1-2-4-5)

Change to next Braille Code: Center-Enter

Change to previous Braille code: Center-backspace

Change to previous scroll key operation: Cursor key with Scroll Up button

Change to next Scroll key operation: Cursor key with Down Scroll button

Lock/unlock keyboard: Long press Home key

Typing mode on/off: Backspace-Space-Enter-M (dots 1-3-4)

Eight dot mode on/off: F1-down scroll button

Select Braille cursor type: F4-up scroll button

Select display of control information: F2-down scroll button

Toggle Hide Passwords On/Off: F3-Down Scroll button

Set Punctuation level: Enter-F3

Set keyboard echo: Enter-F2

Turn Sleep Mode On/Off: Control-Alt-S (dots-2-3-4)

Set Sleep Timer: Space-j (dots 2-4-5)

## 13.2 Quick Launch Commands

Use the following commands to launch their associated applications from anywhere on the Braille eMotion.

Use F1 in combination with each letter to launch the following applications:

Connectivity: C (dots-1-4)

DAISY Player: D (dots 1-4-5)

File Manager: F (dots 1-2-4)

Help: H (dots 1-2-5)

Media Player: M (dots 1-3-4)

Notepad: N (dots-1-3-4-5)

Document Reader: K (dots-1-3)

My eMotion: Y (dots-1-3-4-5-6)

Use F3 in combination with each letter to launch the applications below:

Wake up alarm: A (dot 1)

Braille Options: B (dots-1-2)

Calculator: C (dots 1-4)

Format: F (dots 1-2-4)

Setup Internet: I (dots 2-4)

Backup/Restore Personalized Settings: K (dots 1-3)

Bluetooth Manager: M (dots 1-3-4)

General Options: O (dots-1-3-5)

Backup/Restore Flashdisk: P (dots-1-2-3-4)

Set Time & Date: T (dots 2-3-4-5)

Voice Options: V: (dots-3-4-5-6)

Upgrade Braille eMotion: U (dots 1-3-6)

Stopwatch: W (dots 2-4-5-6)

## 13.3 File Manager

### 13.3.1 Commands for the File/Folder List

Move to previous item: Space-1 or up scroll button

Move to next item: Space-4 or down scroll button

Move to the beginning of the list: Space-1-2-3 or Space-1-3

Move to the end of the list: Space-4-5-6 or Space-4-6

Jump to folder list or file list: Space-5-6

Move between file list and address window: Tab (Space-4-5 or F3) / shift-tab (Space-1-2 or Space-F3)

Enter selected folder or open selected file: Enter

Move up one folder level: Backspace

Jump to the top level of the disk: Space-1-2-5-6

Move up 40 items: Space-1-2-3 or F1-F2

Move down 40 items: Space-3-4-5 or F3-F4

Select individual item: Space

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

Select all: Enter-a (dot 1)

### 13.3.2 File Menu Commands

Open: Enter-o (dots 1-3-5)

Open in Document Reader: Backspace-R (dots-1-2-3-5)

Open with: Enter-e (dots 1-5)

Zip: Enter-z (dots 1-3-5-6)

Unzip: Enter-u (dots 1-3-6)

Send To: Enter-s (dots 2-3-4)

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)

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

Find Text: Backspace-f (dots 1-2-4)

Merge files: Enter-m (dots 1-3-4)

Split files: Enter-p (dots 1-2-3-4)

Information: Enter-i (dots 2-4)

### 13.3.3 Edit Menu Commands

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: Enter-d (dots 1-4-5)

Select all: Enter-a (dot 1)

### 13.3.4 View Menu Commands

Sort files by: Enter-g (dots 1-2-4-5)

Set file info: Enter-l (dots 1-2-3)

Display only files of type: Enter-w (dots 2-4-5-6)

Hide system folders: Enter-h (dots-1-2-5)

Set start Folder: Backspace-S (dots-2-3-4)

## 13.4 Notepad Commands

### 13.4.1 File Menu Commands

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

Open: Enter-o (dots 1-3-5)

Recent File List: Backspace-Enter-H (dots-1-2-5)

Opened Documents List: Backspace-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)

Settings: Enter-e (dots 1-5)

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

### 13.4.2 Edit Menu Commands

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)

Delete blank lines: Backspace-e (dots 1-5)

Select all: Enter-a (dot 1)

Toggle Insert/Overwrite mode: Space-i (dots-2-4)

### 13.4.3 Insert Menu Commands

Set Mark: Enter-m (dots 1-3-4)

Jump to mark: Enter-j (dots 2-4-5)

Delete Mark: Backspace-d (dots 1-4-5)

Insert from file: Enter-i (dots 2-4)

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

Insert time: Backspace-w (dots 2-4-5-6)

Insert Page Break: Backspace-Space-Enter-P (dots-1-2-3-4)

Insert tab: Backspace-Space-Enter-I (dots-2-4)

### 13.4.4 Go To Commands

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

Find next: Enter-f (dots 1-2-4)

Find previous: Backspace-f (dots-1-2-4)

Find and Replace: Enter-r (dots 1-2-3-5)

Go to location: Enter-l (dots 1-2-3)

Go To Previous Sentence: Space-2-3-6

Go To Next Sentence: Space-3-5-6

Go to previous page: Space-1-2-6 or F1-F2

Go to next page: Space-3-4-5 or F3-F4

Go to previous document: Tab (Space-1-2 or Space-F3)

Go to next document: Shift-tab (Space-4-5 or F3)

### 13.4.5 Read Commands

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

Read Current Sentence: Space-1-4-5-6

Read current line: Space-1-4

Read current word: Space-2-5

Read current character: Space-3-6

Read status: Space-3-4

Read current cursor position: Space-1-5-6)

Read character count: Enter-3-4

### 13.4.6 Layout Commands

Braille document layout: Backspace-p (dots 1-2-3-4)

Braille paragraph layout: Backspace-1-2-4-6

### 13.4.7 Miscellaneous Hot Keys

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)

Set reading unit: Space-2-4-6

Set read only: Space-3-4-6

## 13.5 Document Reader Commands

### 13.5.1 File commands:

Open File: Enter-O (dots-1-3-5)

Recent Documents list: Enter-R (dots-1-2-3-5

Page Settings: Backspace-P (dots-1-2-3-4)

Voice Settings: Enter-S (dots-2-3-4)

Start Setting: Enter-e (dots-1-5)

Document information: Enter-I (dots-2-4)

Exit and Save Bookmark: Space-Z (dots-1-3-5-6)

Exit and remove bookmark: Enter-Z (dots-1-3-5-6)

Exit without saving bookmark: Backspace-Z (dots-1-3-5-6)

### 13.5.2 Edit Commands:

Start Selection: Enter-B (dots-1-2)

Copy: Enter-C (dots-1-4)

Add to Clipboard: Enter-P (dots-1-2-3-4)

Clear Clipboard: Enter-D (dots-1-4-5)

Select All: Enter-A (dot-1)

### 13.5.3 Read Commands:

Toggle Manual/continuous Read Mode: Enter.

Pause/resume reading: Space

Read Selected Text: Backspace-B (dots-1-2)

Read current page: Backspace.

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

Read current line: Space-1-4.

Read current sentence: dots-2-3-5-6.

### 13.5.4 Go To Commands:

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

Find Next: Enter-F (dots-1-2-4)

Find Previous: Backspace-F (dots-1-2-4)

Go to location: Enter-G (dots-1-2-4-5-

Go to Headings list: Enter-T (dots-2-3-4-5)

Go to Previous Heading: Backspace-Space-2-3-5

Go to Next heading: Backspace-Space-2-5-6

Move back by double Enter: Backspace-Space-2-3.

Move forward by Double Enter: Space-Enter-5-6.

### 13.5.5 Mark Commands:

Set Mark: enter-M (dots-1-3-4)

Move to Mark: Enter-J (dots-2-4-5)

Delete Mark: Space-D (dots-1-4-5)

Next Mark: Enter-N (dots-1-3-4-5)

Previous Mark: Backspace-M (dots-1-3-4)

Mark Manager; enter-k (dots-1-3)

Mark Alert options: Backspace-O (dots-1-3-5)

## 13.6 DAISY Player Commands

### 13.6.1 Reading Commands

Read title: Space-dots 1-2-5-6

Open DAISY book: Enter-o (dots 1-3-5)

Play/Pause: Space

Voice settings: Enter-s (dots 2-3-4)

Check book-info: Enter-i (dots 2-4)

Increase volume: Backspace-dot-4

Decrease Volume: Backspace-dot-1

Increase Speed: Backspace-dot-5

Decrease Speed: Backspace-dot-2

Increase Pitch: Backspace-dot-6

Decrease Pitch: Backspace-dot-3

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

Exit and erase position without prompt: Enter-z (dots-1-3-5-6)

Exit and erase marks without prompt: Backspace-z (dots-1-3-5-6)

### 13.6.2 Navigation Commands

Go to beginning: Space-1-3 or Space-1-2-3

Go to end: Space-4-6 or Space-4-5-6

Move to the next page: Space-3-4-5

Move to the previous page: Space-1-2-6

Go to page: Enter-g (dots 1-2-4-5)

Select previous text/time unit: Dot 1

Select next text/time unit: Dot 4

Move to previous text/time unit: Dot 2

Move to next text/time unit: Dot 5

Select previous movement unit: Dots 2-3

Select next movement unit: Dots 5-6

Move to the previous unit: Dot 3 or short press Previous button

Move to the next unit: Dot 6 or short press Next button

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-4-6

Move to the first heading: Space-1-3

Check the current-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)

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

Headings list: Enter-h (dots 1-2-5)

Find again: Enter-f (dots 1-2-4)

### 13.6.3 Mark and Memo Commands

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)

Create memo: Backspace-m (dots-1-3-4)

Read memo: Backspace-r (dots-1-2-3-5)

Read previous memo: Backspace-p (dots-1-2-3-4)

Read Next Memo: Backspace-n (dots-1-3-4-5)

Delete Memo: Backspace-d (dots-1-4-5)

## 13.7 Media Player Commands

### 13.7.1 File 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 playlist: Enter-i (dots 2-4)

Save as playlist: Space-s (dots 2-3-4)

Delete item: Space-d (dots 1-4-5)

Get tag information: Enter-t (dots 2-3-4-5)

### 13.7.2 Playback Commands

Play: Enter

Pause/play: Space

Stop: Backspace

Previous track: Dot 3

Next track: Dot 6

Back 5 tracks: Dots 2-3

Forward 5 tracks: Dots 5-6

First track: Dots 1-3

Last track: Dots 4-6

Volume up: Space-Up Scroll button

Volume down: Space-Down Scroll button

Speed up: Dots 3-4-5

Slow down: Dots 1-2-6

Change time index: Dot 2 or Dot 5

Move to next position by time index: Dot 4

Move to previous position by time index: Dot 1

Move to previous chapter: Space-2-3-6

Move to next chapter: Space-3-5-6

Open chapter list: Backspace-L (dots-1-2-3)

Delete playlist: Space-d (dots 1-4-5)

Configuration dialog: Backspace-c (dots 1-4)

Playback settings dialog: Enter-s (dots 2-3-4)

Record settings dialog: Backspace-s (dots 2-3-4)

Effect settings dialog: Enter-e (dots 1-5)

### 13.7.3 Mark and Position Commands

Set marked position: Enter-m (dots 1-3-4)

Delete marked position: Enter-d (dots 1-4-5)

Jump to marked position: Enter-j (dots 2-4-5)

Go to position: Enter-g (dots 1-2-4-5)

Set mark: Backspace-m (dots 1-3-4)

Move to mark: Backspace-j (dots 2-4-5)

Move to previous mark: Backspace-dot 3

Move to next mark: Backspace-dot 6

Delete mark: Backspace-d (dots 1-4-5)

Mark manager: Backspace-k (dots 1-3)

### 13.7.4 Hot Keys in the Play Information Tab

Move to the next item: Space-dot-4

Move to the previous item: Space-dot-1

Open menu: F2 or Space-m (dots 1-3-4)

Open help: Space-h (dots 1-2-5)

Move to Playlist tab: Space-4-e/Space-1-2

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

### 13.7.5 Hot Keys in the Playlist 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

Play current file: Space

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

Start playing the selected files: Enter

Stop playing: Backspace

Delete the selected files from the playlist: Space-d (dots 1-4-5)

Move to "playback information" tab: Space-4-e/Space-1-2

### 13.7.6 Background Playback Commands

Toggle pausing/playing media: Cursor key-Enter

Move forward by the selected movement unit: Cursor-F1 or F3

Move back by the selected movement unit: Cursor-F2 or F4

Select previous movement unit: Center-Left Cursor

Select next movement unit: Center-Right Cursor

## 13.8 Utilities Commands

### 13.8.1 Voice Recorder Commands

Automatically start recording: Long press Record key

Open voice Recorder application: short press Record key

Pause/Continue recording: Record button or Space

Cancel Recording: F4 or Space-E (dots-1-5)

Stop: Enter-S (dots-2-3-4)

Play: Enter-P (dots-1-2-3-4)

Volume up: Space-Up Scroll button

Volume down: Space-Down Scroll button

Speed up: Dots 3-4-5

Slow down: Dots 1-2-6

Record settings: Backspace-S (dots-2-3-4)

### 13.8.2 Calculator Commands

Clear calculator: Backspace-c (dots 1-4)

Delete numbers or operators: Backspace

Calculation history: Enter-h (dots 1-2-5)

General functions: Enter-g (dots 1-2-4-5)

PI: Enter-p (dots 1-2-3-4)

Exp: Enter-e (dots 1-5)

Trigonometric Functions: 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-i (dots 2-4), i (dots 2-4)

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-l (dots 1-2-3)

Natural Logarithm: Enter-l (dots 1-2-3), e (dots 1-5)

Common Logarithm: Enter-l (dots 1-2-3), n (dots 1-3-4-5)

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)

Convert Unit: Enter-u (dots 1-3-6)

Copy to Clipboard: Enter-c (dots 1-4)

Option Settings: Enter-o (dots 1-3-5)

Fraction options: Space-dots 3-4

Return formula: Enter-r (dots1-2-3-5)

Change Braille code: Space-g (dots1-2-4-5)

### 13.8.3 Wakeup Alarm

Add Alarm: Enter-A (dot-1)

Modify Alarm: Enter-M (dots-1-3-4)

Delete Alarm: Space-D (dots-1-4-5)

### 13.8.4 Stopwatch

Stopwatch start, pause, restart: Enter

Check the elapsed time: Backspace

Stop and restart Braille display: Space-F2

Switch between stopwatch and countdown timer: Space-4-5 or Space-1-2

Count down timer pause or restart: Enter

Count down timer Initialize: Backspace

Exit stopwatch or countdown timer: Space-z (dots 1-3-5-6)

## 13.9 Settings Commands

### 13.9.1 Setting Time and Date

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)

### 13.9.2 Bluetooth Manager

Rescan for Bluetooth devices: Enter-r (dots 1-2-3-5)

Connect device: enter on the device name

Connect service: enter on the service name

Disconnect the service in Bluetooth service list: Enter-d (dots 1-4-5)

Move to Bluetooth device list in service list: Backspace

Remove device settings in Bluetooth device list: Space-d (dots 1-4-5)

### 13.9.3 Backup/Restore Personalized Settings

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

Backup: Enter-b (dots 1-2)

Restore: Enter-r (dots1-2-3-5)