

User Guide





Brailliant™ BI 20X User Guide

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1. Getting Started

Welcome to your new Brailliant™ BI 20X Braille display.

This user guide provides instructions for orientation, usage, navigation, and updating of the device. For more information please refer to the <u>Brailliant BI 20X product page</u> on the HumanWare website or call your nearest HumanWare supplier.

1.1. In the Box

The box contains the following items:

- Brailliant™ X Series braille display
- USB-C to USB-A cable
- USB to AC adapter
- Nylon carrying case with lanyard
- Print Getting Started guides

1.2. Orientation of Brailliant BI 20X

The Brailliant BI 20X has a 20-cell braille display, a Perkins-style keyboard, two Space bars, a Home button and four thumb keys for navigation.

1.2.1. Top Face

The top face of the Brailliant can be divided into two sections: front and rear.

The front section of the top face consists of a refreshable braille display containing 20 braille cells and 20 cursor routing buttons. Each cursor routing button is associated with the braille cell directly below it. When editing text, pressing one of the cursor routing buttons moves the editing cursor to the associated braille cell. For any other instance, pressing any cursor button activates a selected item.

When you are not editing text, any cursor button activates a selected item.

The rear section of the top face includes a Perkins-style braille keyboard where each key represents a Dot on a braille cell. The keys under your left hand represent Dots 1, 2, 3, and Backspace, where Dot 1 is located under your index finger and Backspace under your little finger. The keys under your right hand represent Dots 4, 5, 6, and Enter, where Dot 4 is located under your index finger and Enter under your little finger.

1.2.2. Front Edge

On the front edge of the Brailliant are five buttons. From left to right, the buttons are as follows:

- Previous thumb key
- Left thumb key
- Home button (circular shape) used to return to the Main menu or exit Terminal mode

- Right thumb key
- Next thumb key

1.2.3. Left Edge

On the left edge, from front to back are the following:

- USB-A port
- Power button press and hold this button for 2 seconds to turn the device ON.
- Green LED visually indicates the status of the device
- USB-C port use the cable that came with your Brailliant to connect it to a power outlet or a PC.

1.2.4. Right Edge

On the right edge, from front to back are the following:

- Two volume buttons (Currently not active)
- 3.5mm Audio jack (Currently not active)

1.2.5. Rear Edge

The rear edge only contains an SD card port located near the left edge of the device. This port allows you to insert SD cards for external storage.

1.2.6. Bottom Side

In each corner underneath your Brailliant are four anti-slip pads.

In the middle, closer to the front edge is a slightly indented rectangle with a different texture. In this rectangle is a sticker containing printed hardware information about your Brailliant. Above the sticker, there is a braille label containing the serial number of your device.

Towards the back left of the device is the battery compartment. It is closed and secured with two Phillips-head screws.

1.3. Charging Brailliant BI 20X

Prior to using your Brailliant, make sure it is charged completely.

Connect the USB-C end of the recharge cable to the USB-C port located on the left edge of your Brailliant. Minimal effort is required and forcing the connection can damage the cable or the device.

Connect the USB-A end of the recharge cable to the power adapter, then plug the power adapter into a power outlet. Use the provided power adapter for optimal recharge.

Alternatively, you can charge the device using your computer and the USB-A to USB-C recharge cable, but note that this method of charging is slower than charging with a power adapter.

1.4. Powering On and Off

The Power button is on the left edge of the Brailliant. It is oval-shaped with a raised dot in the center.

If your device is charged, press and hold the Power button for approximately 2 seconds to power on the Brailliant. There is a quick vibration and "starting" appears on the braille display along with a tactile loading animation that circles during start-up.

A few moments after you boot your device for the first time, you will be welcomed with a language selection menu. Press Enter to open the list of languages, select one and press Enter to close the list. Close the dialog box once the changes are completed.

After a few seconds, the start-up is complete and "terminal" appears on the braille display. Your Brailliant is now ready for use.

To power Off, press and hold the Power button for approximately 2 seconds. A confirmation message appears on the braille display. Select Ok by pressing the Previous or Next thumb key, then press Enter or a Cursor-routing key.

Alternatively, you can follow these steps to power Off the Brailliant:

- 1. Press P to reach the Power Off menu item.
- 2. Press Enter or a cursor routing key.
- 3. Select Ok by pressing the Previous or Next thumb key.
- 4. Press Enter or a cursor routing key.

1.5. Adjusting the Sleep Mode

To preserve the battery, Brailliant goes into Sleep mode after 5 minutes of inactivity. You can adjust the length of time in the Options. You can also manually put your device into Sleep mode by a short press of the power button.

To wake up the device, press the Power button.

1.6. About the About Menu

The About menu provides various information about your device, such as version numbers, model number, serial number, licenses, and copyright.

To open the About Menu:

- 1. Go to the Main menu.
- 2. Select Options.
- 3. Press Enter.
- 4. Go to the About item.
- 5. Press Enter.

Alternatively, you can use the shortcut Space + I to open the About dialog.

1.7. Launching the Main Menu

The KeySoft Main menu is your Brailliant's default home menu. From the main menu, you can access all KeySoft Lite applications. When you start your Brailliant or close an application, you automatically return to this menu.

You can at any time return to the main menu by simply pressing the Home button on your Brailliant (the button shaped like a circle located on the front edge of your Brailliant, in the middle). Alternatively, you can use the Go to Main Menu command on the keyboard by pressing SPACE with DOTS 1 2 3 4 5 6.

2. Navigating and Using Menus

KeySoft Lite is the heart of your Brailliant BI 20X, supporting all applications that are built in your braille display. KeySoft's main menu can also be customized, which will allow you to hide and unhide applications from the Main menu. More information on customizing your Main Menu can be found in the <u>Customize KeySofts Main Menu section</u>.

2.1. Navigating the Main Menu

The Main menu contains the following items:

- Terminal
- Editor: KeyPad
- Victor Reader
- File manager : keyFiles
- Calculator : keyCalc
- Options
- Online services

• Date and time

- User guide
- Power Off

Press the Previous or Next thumb keys to scroll through the list to the menu item of your choice. Then press Enter or a cursor routing key to access it.

You can return to the Main menu at any time by pressing the Home button or Space with all six Dots.

2.2. Panning Text on the Braille Display

Often times the text on the braille display is too long to fit on a single line. To read the entire sentence, scroll or "pan" the text ahead or back by pressing the Left and Right thumb keys on

the Brailliant. The Left and Right thumb keys are the second and third buttons on the front edge of the device.

2.3. Using the Context Menu for Additional Functions

The Contextual Menu lists all available actions for the KeySoft application you are currently working in as well as their associated commands. It can be very useful when you forget how to do a specific command.

To activate the Context Menu, press Space + M. A menu opens with a list of actions you can perform at that particular moment. Scroll through the menu to the desired action and press Enter or a cursor routing key.

Press Space + E to exit the Context Menu.

2.4. Navigating by First Letters of Words

Most of the time, you can jump to an item in a menu by typing the first letter of that item. Doing so automatically moves your focus to the first item in the list starting with that letter. Typing the same letter twice moves the focus to the second item in the list starting with that letter, and so on.

For example, to reach the Options menu on the Brailliant, you type the letter 'O' on your keyboard.

Note that KeySoft apps found on your main menu are optimized for first letter navigation.

2.5. Using Shortcuts/Key Combinations to Navigate

As the name implies, shortcuts, also known as key combinations, make it easy to quickly navigate through a menu or file.

The most commonly used shortcuts on the Brailliant BI 20X are indicated in Table 1.

Table 1: Shortcut/Key Combination Table

Action	Shortcut or Key Combination
Activate Selected item	Enter or cursor routing key
Escape or Back	Space + E
Previous item	Previous thumb key or Space + Dot 1
Next item	Next thumb key or Space + Dot 4
Jump to any item in a list	Type the first letter of the item or app
Pan left and right	Left or Right thumb key
Go to top	Space + Dots 1-2-3
Go to bottom	Space + Dots 4-5-6

Action	Shortcut or Key Combination
Toggle Braille grade	Backspace + G
Switch Braille profile	Enter + L
Battery level	Enter + P
Context menu	Space + M
Main menu	Space + Dots 1-2-3-4-5-6 or Home button
System information	Space + I
Time	Enter + T
Date	Enter + D
Eject media	Enter + E
Options	Space + O
Create a Quick Note	Backspace + N

Note: All commands that include Enter or Backspace must have the Space Bar added to them when using computer braille.

3. Using the KeyPad Application

KeyPad is an application that allows you to open, edit, and create text files on the Brailliant. You can open .docx, .doc, .txt, .brf, .brl, pdf, .ban and .bra files with KeyPad. The files you create or modify are saved as a .txt file.

To open KeyPad, press the Next thumb key until you reach Editor: KeyPad or press 'e' in the Main menu, then press Enter or a cursor routing key.

KeyPad opens a sub menu, which includes Create file, Open file, Editor settings, and Close.

3.1. Create a File

There are several ways to create a file depending on your current location on the device.

- If you are in the KeyPad menu, select Create file and press Enter or a cursor routing key.
- From the Context menu, select and activate File menu, then Create file.
- Alternatively, press Backspace + N from anywhere on the device to quickly create a new file.

The cursor is visible between two braille brackets. You can begin writing in your new file.

3.2. Open a File

If you are in the KeyPad menu, select Open file and press Enter or a cursor routing key. From any other location, press Backspace + O, then select the file you wish to open using the Previous and Next thumb keys.

Note that the Brailliant can display an error message when a PDF file is opened. This generally occurs when the file contains images rather than text.

3.3. Close a File

To close a file that is opened in KeyPad, press Space + E. Alternatively, open the Context menu using Space + M, then scroll to and activate the File menu. Select Close file item.

If there are changes to your file that have not been saved, you are asked if you want to save the changes before closing.

3.4. Save a Text File

There are two types of saving in KeyPad: Save and Save as.

Save: Press Space + S to save your file to an already existing filename.

Save as: Press Backspace + S to save a copy of your file with a new filename and change the location.

If your file has never been saved, KeyPad asks you to enter a new filename regardless of the save method you choose.

3.5. Auto Scrolling Through Written Text in the KeyPad

The KeyPad app features an Auto Scroll functionality that automatically pans through the written text on the braille display.

To start Auto Scrolling, press Enter + Dots 1-2-4-5-6.

To stop Auto Scrolling, press any key.

3.5.1. Modifying Auto Scroll Speed

You can change the Auto Scroll speed when auto-scrolling inside a file.

To slow down Auto Scroll, press Enter + Dot 3.

To speed up Auto Scroll, press Enter + Dot 6.

3.6. Finding Text in a File

To find text in your file, press Space + F. Enter your search term in the blank field. Your cursor is placed at the first location the text is found.

Press Space + N to find additional instances of the search word.

Press Space + P to reach previous instances of the search word.

3.6.1. Finding and Replacing Text

To find and replace text:

- 1. Press Backspace + F.
- 2. Enter the text to find in the first edit box.
- 3. Enter the text to replace it within the second prompted edit box.
- 4. Press the Next button to find the next instance of the word.
- 5. Press the Next button to find Replace All.

3.7. Cutting, Copying, and Pasting Text

KeyPad lets you cut, copy, and paste text in a way similar to computer programs.

To select the text, position your cursor on the first character using a cursor routing button, then press Enter + S.

Alternatively, you can select text from the Context menu:

- 1. Open the Context menu with Space + M.
- 2. Scroll down to Edit.
- 3. Press Enter or a cursor routing key.
- 4. Scroll down to Select Text.
- 5. Press Enter or a cursor routing key.

This marks the start of your selection. Now go to the location at the end of your selection, and press Enter + S to end the selection.

To select All text included in the file, press Enter + Dots 1-2-3-4-5-6.

To Copy the selected text, press Backspace + Y.

To Cut the selected text, press Backspace + X.

To Paste the copied or cut text, position your cursor where you want the text to be pasted using a cursor routing button and press Backspace + V.

As always, these commands can be accessed through the Context menu.

3.8. Using the Read Mode

Read mode allows you to read files without the possibility of editing content by mistake. You cannot edit files while in Read mode.

To activate or deactivate Read mode, press Space + X.

To activate or deactivate Read mode from the Context menu:

- 1. Press Space + M to activate the Context menu.
- 2. Scroll to File using the Previous and Next thumb keys.

- 3. Press Enter or a cursor routing key.
- 4. Scroll to Read mode using the Previous and Next thumb keys.
- 5. Press Enter or a cursor routing key.

3.9. Inserting Date and Time

When creating a file in the KeyPad application, you have the option to insert the current date and time in the file.

To insert date and time:

- 1. Press Space + M to activate the Context menu.
- 2. Scroll to Edit using the Previous and Next thumb keys.
- 3. Press Enter or a cursor routing key.
- 4. Scroll to Insert using the Previous and Next thumb keys.
- 5. Press Enter or a cursor routing key.
- 6. Scroll to Insert date or Insert time using the Previous and Next thumb keys.
- 7. Press Enter or a cursor routing key.

3.10. KeyPad Commands Table

The KeyPad commands are listed in Table 2.

Table 2: KeyPad Commands

Action	Shortcut or Key Combination
Activate edit mode	Enter or a cursor routing key
Leave edit mode	Space + E
Create file	Backspace + N
Open file	Backspace + O
Save	Space + S
Save as	Backspace + S
Find	Space + F
Find next	Space + N
Find previous	Space + P
Replace	Backspace + F
Start/Stop selection	Enter + S
Select all	Enter + Dots 1-2-3-4-5-6
Сору	Backspace + Y

Action	Shortcut or Key Combination
Cut	Backspace + X
Paste	Backspace + V
Delete previous word	Backspace + Dot 2
Delete current word	Backspace + Dots 2-5
Delete previous character	Backspace
Move to next edit box while editing	Enter
Move to next edit box without editing	Next thumb key
Move to previous edit box without editing	Previous thumb key
Move insertion point to start of text field document	Space + Dots 1-2-3
Move insertion point to end of text field document	Space + Dots 4-5-6
Start auto-scroll	Enter + Dots 1-2-4-5-6
Increase auto-scroll speed	Enter + Dot 6
Decrease auto-scroll speed	Enter + Dot 3
Toggle Reading mode	Space + X

4. Using Victor Reader

Victor Reader is the application you use to read books on the Brailliant. It supports the following file formats:

- .brf
- .pef
- .txt
- .html
- .docx
- DAISY
- .rtf
- .ban
- .bra
- pdf

To open the Victor Reader app, press the Next thumb key until you reach Victor Reader, or press 'V' in the Main menu. Press Enter or a cursor routing key to access the app.

The Victor Reader menu includes Book list, Recently read, Search, and Close.

4.1. Navigating the Book List

In Victor Reader, your books are stored in a Book list, comparable to a directory containing all the available media on your device in alphabetical order.

Use the Previous and Next thumb keys to select a book from your Book list, then press Enter or a cursor routing key.

Note that the Brailliant can display an error message if a PDF file book is opened. This generally occurs when the file contains images rather than text.

To close a book and return to the Book list, press Space + E or Space + B.

4.1.1. Searching for Books

To search for a specific book on the device:

- 1. Select Search from the Victor Reader menu or press Space + F.
- 2. Type in the text/name of book.
- Press Enter.

You are presented with a list of books matching your search criteria.

- 4. Use the Previous and Next thumb keys to scroll to the book.
- 5. Press Enter or a cursor routing key to open it.

4.1.2. Accessing Recently Opened Books

You can open a list of the last five books you previously opened for quick access.

To open a list of the five most recent books, press Enter + R or select Recently read from the Victor Reader menu.

You can scroll through the five most recent books using the Previous and Next thumb keys. Press Enter or a cursor routing key to open a book from the list.

4.1.3. Managing Your Books

When browsing the Book list, you can copy, move, or delete a selected book from the Victor Reader application to an external storage device. The actions that are available for each book depend on the type and location of the book. The Context menu tells you what actions are available.

The basic rules are:

- Books located on the SD card can be deleted.
- Books downloaded from online services can be moved or deleted.
- Books can only be copied or moved to/from when external storage is connected.
- You are unable to copy or move books from within the internal storage.

To copy, move, or delete a book:

- 1. Access the book list by pressing Space + B.
- 2. Select a book using the Previous or Next thumb keys.
- 3. Press Backspace + M to open the Manage Book menu.
- 4. Select Copy to, Move to, or Delete.

4.2. Navigating and Accessing Additional Information in Books

The easiest way to navigate inside a book is by using the thumb keys. Use the Left and Right thumb keys to pan the text left and right.

4.2.1. Changing the Navigation Level for Books

The Victor Reader includes different navigation levels to make navigating through a book easier. Navigation levels are dependent on each book and may differ from book to book.

To change the Navigation level:

- 1. Press Space + T.
- 2. Scroll through the available Navigation levels using the Previous and Next thumb keys.
- 3. Press Enter or a cursor routing key to select the Navigation level.

Once the Navigation level is selected, use the Previous and Next thumb keys to navigate at this Navigation level.

For example, if you selected the "Sentence" Navigation level, pressing the Next thumb key would move you from sentence to sentence within the book.

4.2.2. Navigating by Page, Heading, Percentage, or Bookmarks

To reach a specific page, heading, book percentage, or bookmark:

- 1. Press Enter + G.
- 2. Scroll through the navigation options using the Previous and Next thumb keys.
- 3. Choose between Page, Heading, Percent, or Bookmark.
- 4. Press enter or a cursor routing key.
- Enter a value.
- 6. Press Enter.

4.2.3. Auto-Scrolling Through Text in Books in the Victor Reader App

The Auto-scroll feature of the Brailliant BI 20X allows you to scroll through the text of an open book automatically.

To turn On Auto-scroll, press Enter + Dots 1-2-4-5-6 when inside a book. Press any key to stop the Auto-scroll and return to the regular Panning mode.

You can modify the Auto-scroll speed when auto-scrolling inside a book.

To slow down Auto-scroll, press Enter + Dot 3.

To speed up Auto-scroll, press Enter + Dot 6.

4.2.4. Finding Your Current Position in a Book

Use the Where am I command whenever you need to know your current position within a book.

To activate the Where am I command, press Space + Dots 1-5-6.

Alternatively, access the Context menu by pressing Space + M. Go to Where am I using the Previous and Next thumb keys, then press Enter or a cursor routing key to activate the item.

Use the Previous and Next thumb keys to scroll through the available elements (Heading, Percent, Page, and Line). Use the Left and Right thumb keys to pan the text left and right.

4.2.5. Navigating to the Beginning or End of a Book

You can reach the beginning or end of a book using shortcuts.

To reach the beginning of a book, press Space + Dots 1-2-3.

To reach the end of a book, press Space + Dots 4-5-6.

4.2.6. Searching for Text in a Book

Another way to navigate within a book is to search for a specific string of text.

To search for text, press the Space + F command. You are prompted to enter the text. Type the text, then press Enter.

4.2.7. Accessing Additional Book Information

You can display additional information about the book you are currently reading on the device (title, author, description, date, language, subject, publisher, and bookmarks).

To display additional book information, press Space + I.

You can also press Space + M to open the Context menu. Use the Previous and Next thumb keys to select the Book Information menu item, then press Enter or a cursor routing key to activate it.

Use the Previous and Next thumb keys to scroll through the available book information. Use the Left and Right thumb keys to pan the text left and right.

4.3. Adding, Navigating, Highlighting, and Removing Bookmarks

Bookmarks are a useful way to keep your location within the book and allow you to return quickly to that position at a later time.

To open the Bookmark menu, press Enter + M. You can also press Space + M to open the Context menu and select Bookmark menu.

4.3.1. Inserting a Bookmark

To add a bookmark in a book:

- 1. Press Enter + M to open the Bookmark menu.
- 2. Select Insert Bookmark using the Previous and Next thumb keys.
- 3. Press Enter or a cursor routing key.
- 4. Enter a specific unused bookmark number.

Note: If you do not enter a number, Brailliant selects the first available number and assigns it to the bookmark.

5. Press Enter.

Alternatively, you can insert a Quick Bookmark by pressing Enter + B.

4.3.2. Navigating to Bookmarks

To jump to a bookmark, press Enter + J. You are prompted to enter the bookmark number. Enter the bookmark number you wish to navigate to, then press Enter.

4.3.3. Highlighting Bookmarks

The Highlight Bookmarks menu item is used to define the Start and the End positions of a passage. Using highlighted bookmarks is a great way to study important passages in textbooks.

To highlight bookmarks:

- 1. Open the Bookmark menu by pressing Enter + M.
- 2. Select Highlight Bookmark Start using the Previous and Next thumb keys.
- 3. Press Enter or a cursor routing key.
- 4. Enter a specific unused bookmark number.

Note: If you do not enter a number, your Brailliant selects the first available number and assigns it to the bookmark.

- 5. Press Enter.
- 6. Navigate to the end point of the highlighted passage.
- 7. Open the Bookmark menu by pressing Enter + M.
- 8. Select Highlight Bookmark End using the Previous and Next thumb keys.
- 9. Press Enter or a cursor routing key.

The current position is set as the ending position. If the end position is placed before the start position, they are switched.

You can also insert a Quick Bookmark. It is used to mark the end of the Highlight Bookmark.

To insert a Quick Bookmark:

- 1. Press Enter + H to open the Highlight Bookmark list.
- 2. Select a Highlight Bookmark number.
- 3. Press Enter.

The content of the current Highlight Bookmark is displayed.

- 4. Use the thumb keys to navigate.
- 5. Press Space + E to close the Highlight Bookmark and return to the entire book content.

4.3.4. Removing Bookmarks

To remove a saved Bookmark:

- 1. Press Enter + M to open the Bookmark menu.
- 2. Scroll to Remove Bookmark using the Previous and Next thumb keys.
- 3. Press Enter or a cursor routing key.
- 4. Enter the Bookmark number you want to remove.
- 5. Press Enter.

Note: If you want to remove all bookmarks type 99999 when prompted Bookmark number.

4.4. Victor Reader and Reading Commands Table

The Victor Reader and reading commands are listed in Table 3.

Table 3: Victor Reader/Reading Commands

Action	Shortcut or Key Combination
Book list	Space + B
Manage books	Backspace + M

Action	Shortcut or Key Combination
Go to Option menu	Enter + G
Bookmark menu	Enter + M
Jump to bookmark	Enter + J
Insert Quick Bookmark	Enter + B
Show Highlight Bookmarks	Enter + H
Open Navigation level	Space + T
Previous element	Previous thumb key
Next element	Next thumb key
Start Auto-scroll	Enter + Dots 1-2-4-5-6
Increase Auto-scroll speed	Enter + Dot 6
Decrease Auto-scroll speed	Enter + Dot 3
Where am I	Space + Dots 1-5-6
Info	Space + I
Go to beginning of book	Space + Dots 1-2-3
Go to end of book	Space + Dots 4-5-6
Open recent books	Enter + R
Search for books or text	Space + F
Find next	Space + N
Find previous	Space + P
Next non-blank line	Enter + Dot 4
Previous non-blank line	Enter + Dot 1
Previous character	Space + Dot 3
Next character	Space + Dot 6
Previous word	Space + Dot 2
Next word	Space + Dot 5
Previous paragraph	Space + Dots 2-3
Next paragraph	Space + Dots 5-6

5. Using Terminal Mode

One of the main features of the Brailliant is Terminal mode. When connected to a host device running a screen reader, such as a computer or a smart device, Terminal Mode displays all text selected on the host device.

You can connect to your host device either through *Bluetooth*® wireless technology, or by connecting the USB-C cable included with your Brailliant to the host device. Up to five Bluetooth devices and one USB can be connected at one time.

5.1. Connecting and Exiting Terminal Mode

To connect in Terminal mode, make sure you have a Windows®, iOS®, or Mac® device with a screen reader running.

To activate Terminal mode:

- 1. Press Space + Dots 1-2-3-4-5-6 or the Home button to enter the Main menu.
- 2. Go to Terminal by pressing 't' or by using the Previous and Next thumb keys.
- 3. Press Enter or a cursor routing key.

To exit Terminal mode and access the list of connected devices, press the Home button once.

5.1.1. Determining Brailliant BI 20X Compatibility

The Brailliant is compatible with the following:

Screen readers: JAWS[®] 18+ (version 18 and newer), NVDA, SuperNova and VoiceOver

Operating systems: any Windows 8+, macOS® 10.15+ (Catalina), or iOS device 13.4+

5.1.2. Waking Your iOS Device Using the Brailliant

With your iOS device locked, pressing any cursor routing keys on the Brailliant wakes it up to enter your passcode. This allows you to keep your iOS device in a pocket or bag while you use the Brailliant as its controller and output.

5.1.3. Connecting by USB

To connect via USB:

- 1. Connect the Brailliant to a Windows or Mac computer with the USB-C cable.
- 2. Select Connected devices (first item in the Terminal menu).
- 3. Press Enter.
- 4. Select USB connection.
- Press Enter.
- 6. Wait for the connection to be established.

If the connection is successful, the content of your host device is shown on the braille display.

The Brailliant is now also available as an external keyboard to type on the host device.

5.1.4. Connecting by Bluetooth

To pair a new device in Bluetooth:

- 1. From the host device, activate Bluetooth.
- 2. On the Brailliant, go to the Main menu.
- 3. Select Terminal and press Enter or a cursor routing key.
- 4. In the Terminal menu, select Add Bluetooth device and Press Enter.
 - If Bluetooth is Off, it is automatically activated. Note that once the Bluetooth mode is activated, your display is now in a 5-minute discoverable mode.
- 5. The braille display will prompt instructions on how to connect to the host device. From the host device, initiate the Bluetooth pairing with the Brailliant BI 20X.
- 6. On the braille display, a message will prompt: "xx is connected", where xx is the name of the host device.
 - The focus is directed to the list of connected devices.
- 7. Use the Use Previous and Next thumb keys to move through the list of connected devices until you reach the host device you are trying to connect with. Press Enter or a cursor routing key to activate it.

If the connection is successful, the content of your host device is shown on the braille display.

5.2. Navigating Between Connected Devices

When you have more than one device connected with the Brailliant, you can switch devices at any time.

To switch to another connected device:

- 1. Press the Home button to return to the list of connected devices.
- 2. Select the connected device using the Previous and Next thumb keys.
- 3. Press Enter or a cursor routing key.

Note: When a Bluetooth device is connected, an 8-dot symbol is displayed after the device name. If the 8-dot symbol is not visible, click on the device to establish the connection.

If you have problems with a Bluetooth connection, you can click on Reconnect devices. This turns Bluetooth Off and back On and reconnects your devices. Use this option only if you are not getting any braille when connected to a device.

6. Using KeyFiles

KeyFiles allows you to browse, delete, copy, and perform all the file operations you would expect from a PC file manager.

To open KeyFiles, press the Next thumb key until you reach File Manager: KeyFiles.

Alternatively, you can open KeyFiles by pressing F in the Main menu, then press Enter or a cursor routing key.

6.1. Browsing Files

You can browse through your files and folders using the Previous and Next thumb keys. Folder names have an 8-dot symbol in front of the folder name. Press Enter on a folder to open it.

Press Space + E to return to the parent folder. Alternatively, you can scroll to the Back item, then press Enter or a cursor routing key.

6.1.1. Selecting a Drive in KeyFile

Before using KeyFiles, you first need to choose which drive you wish to access: the internal memory, an SD card, or a USB flash drive.

To select a drive, press Space + D to display a list of available drives. Scroll through the list using the Previous or Next thumb keys, then press Enter or a cursor routing key to confirm your choice.

You are now at the root of your selected drive.

Press Space + D at any time to return to the Drive Selection screen.

6.1.2. Accessing File and Folder Information

To get additional information on a file or folder, select it using the Previous or Next thumb keys, then press Space + I.

You can now scroll through a list of information on the file or folder using the Previous and Next thumb keys. Use the Left and Right thumb keys to pan the text left and right.

6.1.3. Displaying the Current File Path

The Where Am I function allows you to display the path of your current location on the braille display of the Brailliant.

To display your current file path, press Space + Dots 1-5-6.

6.1.4. Searching for Files and Folders

You can promptly access a certain file or folder by performing a search in KeyFiles.

To start searching for a file or folder in KeyFiles:

- 1. Press Space + F.
- 2. Type in the file or folder name.
- 3. Press Enter.

A list of files and folders related to your search results is generated on the braille display.

4. Press Space + E to close the search result.

6.1.5. Sorting Files or Folders

By default, file and folder names are sorted alphabetically. However, you can sort the files and folders using different parameters.

To change the sorting parameters of your files and folders:

- 1. Press Space + V.
 - Brailliant displays a list of sorting options available: Name, Date, Size, and Type.
- 2. Scroll through the list using the Previous or Next thumb key.
- 3. Press Enter or a cursor routing key to activate the sorting option of your choice.

Selecting the same sorting parameter already selected, changes the information from ascending to descending and back again when selected once more.

6.2. Modifying Files and Folders

KeyFiles on the Brailliant lets you work with files similarly to a computer or tablet.

6.2.1. Creating a New Folder

KeyFiles gives you the possibility to create new folders.

The simplest way to do this is by pressing Space + N and entering the name of the new folder in the blank field. Then, press Enter to create it.

6.2.2. Renaming Files or Folders

To rename a file or folder:

- 1. Select the file or folder you wish to rename using the Previous and Next thumb keys.
- 2. Press Backspace + R.
- 3. Enter the new file or folder name.
- 4. Press Enter to rename the file or folder.

Note: The file name must be unique in your current directory, and only one file or folder can be renamed at a time.

6.2.3. Selecting Files or Folders for Applying Additional Actions

Before you can perform an action on a file or folder, such as cut, copy, or paste, you must first select (or Mark) the desired file or folder.

To Mark a file or folder, select the file using the Previous or Next thumb keys, then press Backspace + L.

To Unmark a file or folder, select it and press Backspace + L again.

To Mark All files and folders in the current directory, press Enter + Dots 1-2-3-4-5-6.

6.2.4. Copying, Cutting, and Pasting Files or Folders

Copying and Cutting Files and Folders

To copy a single file or folder, select the file using the Previous or Next thumb keys, then press Backspace + Y.

To cut a single file or folder, select the file using the Previous or Next thumb keys, then press Backspace + X.

To copy or cut multiple files or folders:

- 1. Select the file or folder to copy using the Previous or Next thumb keys.
- 2. Press Backspace + L to Mark the file or folder.
- 3. Repeat this step to Mark all files or folders to be copied.
- Press Backspace + Y to copy OR Backspace + X to cut.
 The files or folders are now copied/cut to the clipboard and ready to be pasted.

Pasting Files and Folders

To paste the copied or cut files or folders, navigate to the location where you want to paste to, then press Backspace + V.

6.2.5. Deleting Files or Folders

To delete a single file or folder, select the file using the Previous or Next thumb keys, then press Backspace + Dots 2-3-5-6.

To delete multiple files or folders:

- 1. Select the file or folder you wish to delete using the Previous or Next thumb keys.
- 2. Once selected, press Backspace + L to Mark the file or folder.
- 3. Repeat this step to Mark all files or folders you wish to delete.
- 4. When ready to delete the Marked files or folders, press Backspace + Dots 2-3-5-6.

Note: Brailliant asks if you are sure you want to delete the files and/or folders **only** when Confirm Deletion has been set to On in the Options menu. Select Yes using the Previous or Next thumb keys, and press Enter or a cursor routing key to confirm the deletion. For more information on the Confirm Deletion setting, go to the <u>Setting User Preferences section</u>.

6.3. KeyFiles Commands Table

The KeyFiles commands are listed in Table 4.

Table 4: KeyFiles Commands

Action	Shortcut or Key Combination
Create new folder	Space + N
File info	Space + I
Mark/Unmark	Backspace + L
Mark all/Unmark all	Enter + Dots 1-2-3-4-5-6
Rename file	Backspace + R
Delete file	Backspace + Dots 2-3-5-6
Copy file	Backspace + Y
Cut file	Backspace + X
Paste file	Backspace + V
Search file	Space + F
Sort files	Space + V
Where am I	Space + Dots 1-5-6
Select drive	Space + D
Go to parent folder	Space + E
Eject media	Enter + E

7. Using the KeyCalc Application

The Brailliant features a calculator app that enables you to perform the most common operations.

Note: KeyCalc currently supports Computer Braille only.

To open KeyCalc:

- 1. Go to the Main menu.
- 2. Press C **OR** press the Previous or Next thumb keys until you reach the Calculator: KeyCalc menu item.
- 3. Press Enter or a cursor routing key.

7.1. Operating the Calculator

To use KeyCalc, write your complete equation, then press Enter to get the result.

For example, type the equation 20-(6+8) (with no spaces). Press Enter and Brailliant displays 6 as the answer.

To clear the previous equation, press Space + Dots 3-5-6.

To add operators such as + or -, open the Context menu using Space + M. Refer to the <u>KeyCalc</u> <u>Commands Table section</u>, for a full list of KeyCalc commands and operators.

7.2. KeyCalc Commands Table

The KeyCalc commands are listed in Table 5.

Table 5: Calculator Commands using US Computer Braille

Action	Shortcut or Key Combination
Plus	Dots 3-4-6
Minus	Dots 3-6
Multiply	Dots 1-6
Divide	Dots 3-4
Equals	Enter
Clear	Space + Dots 3-5-6
Decimal point	Dots 4-6
Percent	Dots 1-4-6
Square root	Space + Dots 3-4-5
Pi	Space + Y

8. Using the Date and Time Application

The Brailliant features an application that gives you the current date and time.

To open Date and Time:

- 1. Go to the Main menu.
- 2. Press the Previous or Next thumb keys until you reach the Date and Time menu item.
- 3. Press Enter or a cursor routing key.

8.1. Displaying the Time and Date

When you open the Date and Time application, Brailliant displays the current time.

Pan right once using the Right thumb key to display the date.

Pan left using the Left thumb key to return to the time.

To quickly review the date and time, press Enter + T for the time and Enter + D for date from anywhere on the Brailliant.

8.2. Setting the Time and Date

To change the time and date, press Space + M from the Date and Time application.

A submenu opens with the following options:

Change time: Type the current hour inside the square brackets, press Enter; repeat for the minutes.

Change date: Type the current year inside the square brackets and press Enter; repeat for the month and day.

Daylight saving time: Press Enter to turn daylight saving time On or Off.

Time format: Press Enter to change between 24h and 12h time format.

Date format: Select the preferred date format (listed below) and press Enter.

- Day, Month, Year
- Month, Day
- Month, Day, Year
- Year, Month, Day
- Day, Month

9. Options Menu

The Options menu allows you to modify the settings of your Brailliant, and contains the following items:

- User settings
- Braille profile
- Wifi
- Bluetooth
- Main menu applications
- Change language
- Activate exam mode
- Software update
- About

To open the Options menu, press the Next thumb key until you reach Options **OR** press 'O' in the Main menu, then press Enter or a cursor routing key. Alternatively, you can access the Options Menu by pressing Space + O.

10. User Settings

10.1. User Setting Options Table

The user Settings options are listed in Table 6.

Table 6: Options Operations

Setting	Option/Result
Airplane mode	On or Off; when On, all wireless functionalities are disabled
Format Markers	On or Off; when Off, format markers are hidden
Cursor visible	On or Off
Message display time	1–30 seconds: time of message displayed
Sleep time	Number in minutes; 0 to turn Off
Word wrap	On or Off
Condense blank lines	On or Off; when On, blank lines are not visible
Confirm deletion	On or Off; when On, Brailliant asks for confirmation of file deletion
Vibration	On or Off; when On, Brailliant vibrates
Веер	On or Off; when On, Brailliant beeps
Thumb keys configuration	Map the Previous Item, Next Item, Pan Left, and Pan Right commands to the thumb key of your choice.
Wireless notifications	Enable or disable wireless and Bluetooth connection feedback

10.2. Adding, Configuring, and Deleting Braille Profiles

The Braille Profile menu lists all the available Braille Profiles on your Brailliant. The active Braille Profile is underlined with dots 7 and 8 on the device.

Scroll through the available Braille Profiles using the Next and Previous thumb keys, then press Enter or a cursor routing key to select it.

10.2.1. Adding a Braille Profile

To add a Braille Profile, select Add Braille Profile, then press Enter or a cursor routing key.

You are prompted to enter the following options:

Profile name: Type the name for the profile in the brackets, then press Enter.

Braille grade: Choose between Uncontracted, Contracted, and Computer braille, then press Enter. Note that the Brailliant allows you to hide contracted braille and/or computer braille when toggling between the Braille grades.

Computer braille table: Select your computer braille table, then press Enter. Select none to avoid Computer braille toggle.

Uncontracted braille table: Select your uncontracted braille table, then press Enter.

Contracted braille table: Select your contracted braille table, then press Enter. Select none to avoid Contracted braille toggle.

Save configuration: Press Enter to save your configuration.

The new Braille Profile is now available in the Braille Profile Settings menu.

10.2.2. Configuring or Deleting a Braille Profile

To configure or delete a Braille Profile:

- 1. Scroll through the available Braille Profiles using the Next and Previous thumb keys.
- 2. Press Space + M to open the Context menu.
- 3. Select Configure Braille Profile **OR** Delete Braille Profile.
- 4. Press Enter.

10.3. Using a Wi-Fi Network or Bluetooth

Brailliant BI 20X features 2.4 GHz Wi-Fi capabilities.

10.3.1. Connecting to a Wi-Fi Network

Select New Connection from the Wi-Fi menu, then press Enter or a cursor routing key to access it.

There are three connection choices:

Scan for SSID: Select this option to discover the available networks in your vicinity. When Brailliant is done scanning, it displays a list of all the networks it found.

Press Enter or a cursor routing key to select this network. Then enter the password, and press Enter to complete the connection.

WPS Connection: Select this option to establish a Wi-Fi Connection using WPS. The Brailliant displays "loading..." for approximately 30 seconds. Press the WPS button on your network Router to turn on discovery of new devices. After a few seconds, you are automatically connected to the network.

Manually Connect: To enter the SSID of your network and the password manually, select this option. When done, press Enter to connect.

10.3.2. Wi-Fi Settings Table

The available Wi-Fi Settings are listed in Table 7.

Table 7: Wi-Fi Settings

Setting	Option/Result
Wi-Fi	Press Enter to turn Wi-Fi On or Off
Status	Provides information about your current Wi-Fi status
New connection	Press Enter to create a new Wi-Fi connection
Launch connection	Connect to a Wi-Fi network known by your device
Delete connection	Make your device forget a known Wi-Fi network
Network settings	Change advanced network settings, such as Mode, IP, Subnet mask, Gateway, and DNS
Import Wi-Fi	Import Wi-Fi network information from a file

10.4. Choosing Bluetooth Mode Options

The following Bluetooth mode options are available on the Brailliant BI 20X.

Bluetooth mode: On or Off

Connect device: Connect the Brailliant with a paired Bluetooth device

Disconnect device: Disconnect the active Bluetooth connection

Delete paired device: Makes your device forget a Bluetooth device

11. Customize KeySoft's Main Menu

The Customization function allows you to take items off the Main menu of the Brailliant.. This feature is useful for beginners who wish to simplify the usage of their device.

To customize the main menu applications:

- 1. Go to the Main menu.
- 2. Select Options.
- 3. Press Enter.
- 4. Go to Main menu applications.
- 5. Press Enter.
- 6. A list of the Main menu applications will appear. Go to the application you wish to take off the menu, and press on Enter to toggle it to Off. Pressing Enter again will toggle it back to On.

7. Press on Save to apply the changes.

12. Change Language

To change the system language of the Brailliant BI 20X:

- 1. Go to the Main menu.
- 2. Select Options.
- 3. Select Change Language.
- 4. Select the Language option and press Enter. A list will appear on the display.
- 5. Select the language of your choice from the list.
- 6. Select Close.
- 7. You will be prompted to select the option Replace Braille default profile. If you click on Ok, a new Braille profile will be created with a Braille table allowing to read Braille menus in the selected language. Press Cancel if you wish to stay with your current Braille profile.
- 8. When prompted, reboot the Brailliant to apply the changes.

13. Accessing and Using Online Services

This Online Services menu contains online libraries included on your Brailliant. The Online Services are subscription-based and require you to enter your account credentials.

Note: Make sure you have an established internet connection with the Brailliant before using Online Services.

Books from online libraries are downloaded in the Online-books folder of the Brailliant. All books are included in the Main Book list of the Victor Reader application.

13.1. Activating Bookshare and Downloading Books

Bookshare® online library contains copyrighted content for people with qualifying print disabilities. More information about Bookshare is available from http://www.bookshare.org.

You are able to search for books and download them to the Brailliant wirelessly. Newspapers and magazines are currently not available in the online search.

To activate the Bookshare service and download a book:

- 1. Enter your Bookshare account email address and password.
- 2. Select your preferred book format (DAISY or BRF).
- 3. Search books by title, author, full text search, and/or browse by categories. You can also search for the most recent or popular books.
- 4. Press Enter or a cursor routing key on a book to get more information.

- 5. Use Previous and Next thumb keys to navigate between the title, author, and book description.
- 6. Press Enter on the Download item to download the book to the Brailliant.

13.2. Configuring, Managing, and Syncing an NFB Newsline Account

If you have an NFB Newsline® account, the Brailliant allows you to connect to your account and download NFB material for reading in the Victor Reader.

Configure account: Enter your NFB Newsline credentials, select the issue update frequency, and determine whether your Brailliant should keep or delete outdated issues.

Manage publications: Select which material you wish to subscribe to. Subscribed material is underlined.

Sync content now: Downloads the latest issues of your subscribed material.

13.3. NLS Bard

The Brailliant can access BARD directly. You can view and download books from the most popular books list and the most recent books and magazines list. You can browse subject categories and search the collection. You can also download books and magazines from your wish list as well as add and remove items from it. Before you can access BARD, you must connect your device to a Wi-Fi network (see Connecting to a Wi-Fi Network for detailed instructions) and login to your BARD account.

13.3.1. Connecting to BARD for the first time

To access BARD, select NLS BARD from the Online Services Menu. The first time you do this, you will be prompted to enter your BARD username and password. You cannot log in with a temporary password. If you have a temporary password, you will need to use a web browser to create a permanent password and then log in with those credentials.

After typing your username, press Enter. You will be prompted to enter your password. Once typed, press the Enter key. You will briefly see the word "loading..." followed by "login successful."

Once you have logged into BARD successfully, each time you enter NLS BARD, you will see "login successful" and the first item of the NLS BARD Menu will appear.

13.3.2. Downloading Books and Magazines from BARD

The NLS BARD menu contains the following items:

- Most Popular
- Most Recent Books
- Most Recent Magazines

- Browse Categories
- Browse magazines
- Search Collection
- Wishlist
- Download history
- Remove Account

Each of these menu items will take you to a list of books or magazines. Press Enter on a book to get more information. Use the Previous and Next thumb keys to navigate among the title, author and the book description. Press Enter on the Download item if you wish to download the book to your Brailliant.

13.3.3. Reading a Book you have downloaded

After you have downloaded a book or magazine, you can download additional items, or you can read one of them. To read an item, return to the Main Menu by pressing the Home button . Navigate to Victor Reader and press Enter. Press Enter on Book List. Here you will find your downloaded items. Press Enter on the title you wish to read and you will be at the beginning of the book.

14. Exam Mode

The Exam mode is used to block certain functions and applications from the Brailliant for a certain amount of time. While the Exam mode is active, you will only have access to the Terminal functions. Note that in the exam mode, the Bluetooth connection is deactivated; Terminal mode is only accessible via USB. All other applications and the use of an external memory (USB drive or SD card) are blocked while this mode is active.

When activating the Exam mode, you will be prompted to enter a time between 1 and 360 minutes (6 hours) and will be asked to enter a desired password to turn off the exam mode.

To unlock the device, you will need to either wait for the selected time to run out or enter the selected password.

Upon restarting the device, if the period selected is not completed yet, the device will automatically go back to Exam mode.

To activate the Exam mode:

- 1. Go to the Main menu.
- 2. Select Options.
- Press Enter.
- 4. Go to Activate Exam mode.
- 5. Press Enter.
- 6. Enter the desired time (between 1 and 360 minutes).

- 7. Enter the desired password to activate the exam mode.
- 8. Press Enter.

15. Technical Specifications

15.1. Navigation components

- 4 Thumb keys
- 8-key Braille keyboard
- 2 Space bars
- Cursor routing keys

15.2. Long-life battery

- Lasts up to 20 hours
- Recharges from PC through USB port
- Auto shut-off
- Lithium-ion polymer battery
- Compatible with any standard USB A/C adapter

15.3. Connectivity

- USB 2.0
- SD card
- Wi-Fi 2.4 GHz
- Bluetooth V4.2

15.4. Portability

Dimensions: 166 mm x 100 mm x 23 mm

Weight: Maximum 1 lbs

16. Updating the Brailliant BI 20X

16.1. Updating the Brailliant BI 20X manually

When connected to the Internet with the Brailliant, you can manually check if an update is available.

To check for an update manually:

- 1. Go to the Main menu.
- 2. Select Options.
- Press Enter.
- 4. Select Software update.
- 5. Press Enter.

- 6. Select Check for update.
- 7. Press Enter.

If prompted with a new update, select Download by pressing the Previous or Next thumb key to download the update now or Remind me later to update it later. You can continue to use the Brailliant while the update is downloading.

Note that the device must be plugged in and the battery must be more than 50% charged for the update to be performed.

After a few minutes, Brailliant asks you to install the downloaded update. Select Ok to install it. The Brailliant reboots and a progress indicator line is shown on the braille display.

At the end of the update process, all 8 dots of the 20 braille cells raise one column at a time and then the device shuts down.

16.2. Updating the Brailliant BI 20X via USB or a SD card

If your device is not connected to the Internet, you can also download the update file on a computer and transfer it on a USB flash drive or a SD card. To update the Brailliant via USB or SD:

- 1. Insert the USB flash drive or SD card containing the update file into the device. Note that the update file needs to be placed at the root of the USB drive or SD card.
- 2. When the Brailliant detects an update file on the USB drive or SD card, the braille display will prompt that an update is available for installation.
- 3. Use the Next Thumb key to reach the Ok item, and press Enter to activate the update prompted. The device will shut down and restart to process the update.

16.3. Automatic Check for Update Feature

By default, an Automatic check for update feature is enabled. When connected to the Internet, the Brailliant regularly looks if a new update is available for download. If an update is available, the Brailliant will prompt you to download it.

To disable/enable the Automatic check for update feature, follow these steps:

- 1. Go to the Main menu.
- 2. Select Options.
- 3. Press Enter.
- 4. Go to Software Update.
- 5. Press Enter.
- 6. Select Automatic check for updates.
- 7. Press Enter to enable/disable the feature.

Note that when enabled, the Brailliant will check every 23 hours if a new update is available.

17. Customer Support

For customer support, please contact the HumanWare office nearest you or visit our Website

at: www.humanware.com/support

Global: support@humanware.com

North America: 1 800 722-3393 us.support@humanware.com

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Appendix A – Command Summary

Shortcut/Key Combination Table

Action	Shortcut or Key Combination
Activate Selected item	Enter or cursor routing key
Escape or Back	Space + E
Previous item	Previous thumb key or Space + Dot 1
Next item	Next thumb key or Space + Dot 4
Jump to any item in a list	Type the first letter of the item or app
Pan left and right	Left or Right thumb key
Go to top	Space + Dots 1-2-3
Go to bottom	Space + Dots 4-5-6
Toggle Braille grade	Backspace + G
Switch Braille profile	Enter + L
Battery level	Enter + P
Context menu	Space + M
Main menu	Space + Dots 1-2-3-4-5-6 or Home button
System information	Space + I
Time	Enter + T
Date	Enter + D
Eject media	Enter + E
Options	Space + O
Create a Quick Note	Backspace + N

KeyPad Commands

Action	Shortcut or Key Combination
Activate edit mode	Enter or a cursor routing key
Leave edit mode	Space + E
Create file	Backspace + N
Open file	Backspace + O
Save	Space + S
Save as	Backspace + S
Find	Space + F
Find next	Space + N

Action	Shortcut or Key Combination
Find previous	Space + P
Replace	Backspace + F
Start/Stop selection	Enter + S
Select all	Enter + Dots 1-2-3-4-5-6
Сору	Backspace + Y
Cut	Backspace + X
Paste	Backspace + V
Delete previous word	Backspace + Dot 2
Delete current word	Backspace + Dots 2-5
Delete previous character	Backspace
Move to next edit box while editing	Enter
Move to next edit box without editing	Next thumb key
Move to previous edit box without editing	Previous thumb key
Move insertion point to start of text field document	Space + Dots 1-2-3
Move insertion point to end of text field document	Space + Dots 4-5-6
Start auto-scroll	Enter + Dots 1-2-4-5-6
Increase auto-scroll speed	Enter + Dot 6
Decrease auto-scroll speed	Enter + Dot 3
Toggle Reading mode	Space + X

Victor Reader/Reading Commands

Action	Shortcut or Key Combination
Book list	Space + B
Manage books	Backspace + M
Go to Option menu	Enter + G
Bookmark menu	Enter + M
Jump to bookmark	Enter + J
Insert Quick Bookmark	Enter + B
Show Highlight Bookmarks	Enter + H
Open Navigation level	Space + T
Previous element	Previous thumb key

Action	Shortcut or Key Combination
Next element	Next thumb key
Start Auto-scroll	Enter + Dots 1-2-4-5-6
Increase Auto-scroll speed	Enter + Dot 6
Decrease Auto-scroll speed	Enter + Dot 3
Where am I	Space + Dots 1-5-6
Info	Space + I
Go to beginning of book	Space + Dots 1-2-3
Go to end of book	Space + Dots 4-5-6
Open recent books	Enter + R
Search for books or text	Space + F
Find next	Space + N
Find previous	Space + P
Next non-blank line	Enter + Dot 4
Previous non-blank line	Enter + Dot 1
Previous character	Space + Dot 3
Next character	Space + Dot 6
Previous word	Space + Dot 2
Next word	Space + Dot 5
Previous paragraph	Space + Dots 2-3
Next paragraph	Space + Dots 5-6

KeyFiles Commands

Action	Shortcut or Key Combination
Create new folder	Space + N
File info	Space + I
Mark/Unmark	Backspace + L
Mark all/Unmark all	Enter + Dots 1-2-3-4-5-6
Rename file	Backspace + R
Delete file	Backspace + Dots 2-3-5-6
Copy file	Backspace + Y
Cut file	Backspace + X
Paste file	Backspace + V
Search file	Space + F

Action	Shortcut or Key Combination
Sort files	Space + V
Where am I	Space + Dots 1-5-6
Select drive	Space + D
Go to parent folder	Space + E
Eject media	Enter + E

Calculator Commands using US Computer Braille

Action	Shortcut or Key Combination
Plus	Dots 3-4-6
Minus	Dots 3-6
Multiply	Dots 1-6
Divide	Dots 3-4
Equals	Enter
Clear	Space + Dots 3-5-6
Decimal point	Dots 4-6
Percent	Dots 1-4-6
Square root	Space + Dots 3-4-5
Pi	Space + Y

Appendix - Braille Tables

United States 8 dot Computer Braille

exclamation mark: '!' 2,3,4,6

quote: "" 5

pound: '#' 3,4,5,6

dollar sign: '\$' 1,2,4,6

percent: '%' 1,4,6

ampersand: '&' 1,2,3,4,6

apostrophe: "' 3

left paren: '(' 1,2,3,5,6

right paren: ')' 2,3,4,5,6

asterisk: '*' 1,6

plus sign: '+' 3,4,6

comma: ',' 6

dash: ' ' 3,6

period: '.' 4,6

forward slash: '/' 3,4

colon: ':' 1,5,6

semi colon: ';' 5,6

less than: '<' 1,2,6

equals: '=' 1,2,3,4,5,6

greater than: '>' 3,4,5

question mark: '?' 1,4,5,6

at symbol: '@' 4,7

left square bracket: '[' 2,4,6,7

back slash: '\' 1,2,5,6,7

right square bracket: ']' 1,2,4,5,6,7

carat sign: '^' 4,5,7

underscore: ' '4,5,6

grave accent: '`' 4

left curly bracket: '{' 2,4,6

vertical bar: '|' 1,2,5,6

right curly bracket: '}' 1,2,4,5,6

tilde: '~' 4,5

'0': 3,5,6

'1': 2

'2': 2,3

'3': 2,5

'4': 2,5,6

'5': 2,6

'6': 2,3,5

'7': 2,3,5,6

'8': 2,3,6

'9': 3,5

Uppercase letters:

'A': 1,7

'B': 1,2,7

'C': 1,4,7

'D': 1,4,5,7

'E': 1,5,7

'F': 1,2,4,7

'G': 1,2,4,5,7

'H': 1,2,5,7

'l': 2,4,7

'J': 2,4,5,7

'K': 1,3,7

'L': 1,2,3,7

'M': 1,3,4,7

'N': 1,3,4,5,7

'O': 1,3,5,7

'P': 1,2,3,4,7

'Q': 1,2,3,4,5,7

'R': 1,2,3,5,7

'S': 2,3,4,7

'T': 2,3,4,5,7

'U': 1,3,6,7

'V': 1,2,3,6,7

'W': 2,4,5,6,7

'X': 1,3,4,6,7

'Y': 1,3,4,5,6,7

'Z': 1,3,5,6,7

Lowercase letters:

'a': 1

'b': 1,2

'c': 1,4

'd': 1,4,5

'e': 1,5

'f': 1,2,4

'g': 1,2,4,5

'h': 1,2,5

'i': 2,4

'j': 2,4,5

'k': 1,3

'l': 1,2,3

'm': 1,3,4

'n': 1,3,4,5

'o': 1,3,5

'p': 1,2,3,4

'q': 1,2,3,4,5

'r': 1,2,3,5

's': 2,3,4

't': 2,3,4,5

'u': 1,3,6

'v': 1,2,3,6

'w': 2,4,5,6

'x': 1,3,4,6

'y': 1,3,4,5,6

'z': 1,3,5,6

United Kingdom 8 dot Computer Braille

exclamation mark: '!': 2,3,4,6

quote: "" 4

pound: '#' 5,6

dollar sign: '\$' 4,5,6

percent: '%' 4,6

ampersand: '&' 1,2,3,4,6

apostrophe: "' 3

left paren: '(' 4,5

right paren: ')' 3,4,5

asterisk: '*' 3,5

plus sign: '+' 2,3,5

comma: ',' 2

dash: ' ' 3,6

period: '.' 2,5,6

forward slash: '/' 3,4

colon: ':' 2,5

semi colon: ';' 2,3

less than: '<' 2,3,6

equals: '=' 2,3,5,6

greater than: '>' 3,5,6

question mark: '?' 2,6

at symbol: '@' 2,3,4,6,7

left square bracket: '[' 1,2,3,5,6,7

back slash: '\' 5,7

right square bracket: ']' 2,3,4,5,6,7

carat sign: '^' 6,7

underscore: '_' 3,4,6

grave accent: '`' 2,3,4,6

left curly bracket: '{' 1,2,3,5,6

vertical bar: '|' 5

right curly bracket: '}' 2,3,4,5,6

tilde: '~' 6

Pounds sterling: '£' 2,3,6,7,8

degree sign: '°' 1,3,4,6,8

'0': 1,2,3,4,5,6

'1': 1,6

'2': 1,2,6

'3': 1,4,6

'4': 1,4,5,6

'5': 1,5,6

'6': 1,2,4,6

'7': 1,2,4,5,6

'8': 1,2,5,6

'9': 2,4,6

Uppercase letters:

'A': 1,7

'B': 1,2,7

'C': 1,4,7

'D': 1,4,5,7

'E': 1,5,7

'F': 1,2,4,7

'G': 1,2,4,5,7

'H': 1,2,5,7

'I': 2,4,7

'J': 2,4,5,7

'K': 1,3,7

'L': 1,2,3,7

'M': 1,3,4,7

'N': 1,3,4,5,7

'O': 1,3,5,7

'P': 1,2,3,4,7

'Q': 1,2,3,4,5,7

'R': 1,2,3,5,7

'S': 2,3,4,7

'T': 2,3,4,5,7

'U': 1,3,6,7

'V': 1,2,3,6,7

'W': 2,4,5,6,7

'X': 1,3,4,6,7

'Y': 1,3,4,5,6,7

'Z': 1,3,5,6,7

Lowercase letters:

'a': 1

'b': 1,2

'c': 1,4

'd': 1,4,5

'e': 1,5

'f': 1,2,4

- 'g': 1,2,4,5
- 'h': 1,2,5
- 'i': 2,4
- 'j': 2,4,5
- 'k': 1,3
- 'l': 1,2,3
- 'm': 1,3,4
- 'n': 1,3,4,5
- 'o': 1,3,5
- 'p': 1,2,3,4
- 'q': 1,2,3,4,5
- 'r': 1,2,3,5
- 's': 2,3,4
- 't': 2,3,4,5
- 'u': 1,3,6
- 'v': 1,2,3,6
- 'w': 2,4,5,6
- 'x': 1,3,4,6
- 'y': 1,3,4,5,6
- 'z': 1,3,5,6