BrailleSense 6 and 6 mini Education Getting Started Guide

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Welcome and Quick Tips

Welcome to the BrailleSense 6 tutorial series! This is a series of documents that will help you get to know the BrailleSense and discover its many features. Each topic is written with step-by-step directions. It is not necessary to have extensive braille knowledge to help a student through these steps, as dot numbers are used for all commands.

Structure

We recommend that you begin at the start of this document. This will orient you to the device and help set it up for a student's first use. Following orientation and setup, please browse through the rest of the document to learn more about specific applications, such as Email, Word Processor, or Calculator. Feel free to begin with the topics most applicable to your situation.

Powering on and off

When the BrailleSense arrives, it will be turned off completely. After installing the battery, hold the power button until the device beeps and vibrates. The power button is located on the front edge of the device, on the right side. It takes about 30 seconds for the device to boot for the first time. You will know the device has turned on when it begins speaking. Typically, the BrailleSense will be in a "sleep mode" when it is not in use. To put it in "sleep mode", tap the power button.

Quick Start Guide

The first time the BrailleSense is started, it will launch a Quick Start Guide. This guide will orient you to the BrailleSense. It will describe all ports, buttons and keys, and talk you through setting the date and time and some other basic options. Don't worry - these documents walk you through everything in the quick start guide. You are welcome to walk through the guide following the spoken instructions, or you can wait and set options following our instructions. To close the quick start guide, press Space with E, or Space with dots 1 and 5. It will ask if you are sure you want to exit. Say yes by pressing Enter, the key to the right of dot 6. This is the furthest right key on the braille keyboard.

Using the LCD screen

The BrailleSense 6 contains a small LCD screen for visual output. Instead of showing a full window, like on a tablet or computer, it will show the text that currently is shown on the braille display. This makes it easy to know what the braille reader is seeing at any time. The LCD screen is off by default to save battery life. To enable it, you must be at the main menu. To get there, press "F1". To turn on the LCD screen, press Enter with dots 4-5-6. This means, press all four keys on the right half of the braille keyboard at the same time. The first time these keys are pressed, the LCD turns on. Press these keys again to enable the backlight, making the LCD easier to read in some situations. To turn it off, press these four keys one more time.

Note: The BrailleSense 6 mini does not contain an LCD screen.

Connecting a Monitor, keyboard, or mouse

When exploring the BrailleSense, it may be helpful for sighted users to connect a standard monitor, keyboard, or mouse. The BrailleSense connects to many external devices. You simply need to plug them in, and they begin to work (unless specific drivers are required).

If connecting a monitor or TV, it will likely connect through HDMI. You will need a USB-C to HDMI adapter. Many users have these already for laptops and other devices. Locate the USB-C port nearest the front of the device. This is marked with the letter "v" for video. Connect the adapter and cable to the TV/monitor, and video output will begin if the device is powered on.

Keyboards and mice can connect through the same USB-C port or either of the larger standard USB ports found on the BrailleSense 6. You may begin to use a keyboard and mouse as soon as it is connected. The braille keyboard, speech, and braille display continue to function while these external devices are connected.

Charging the BrailleSense

The BrailleSense 6 charges through USB-C. This is the same port used to charge newer Apple laptops, iPads, Chromebooks, Android smartphones, and countless other devices. You do not need to use the charger that comes with the BrailleSense. You may charge with any USB-C charger. Connect the charger to the small USB-C port toward the back of the right edge of the device.

Getting Help

It is easy to get help on the BrailleSense! Press Space with the letter H (Space + Dots 1-2-5) from anywhere on BrailleSense to get a list of commands that can be used to navigate the current program or menu. Use the scroll keys (on either side of the braille display) to read through the list. To exit the help screen, just remember "e" for exit. Press Space with e (Space + dots 1-5) to return to your previous location.

Understanding the Function Keys

There are four function keys on the BrailleSense, appearing below the braille keyboard. These are important keys to learn and provide common tasks. Below is an explanation of the four keys, and a comparison to common keystrokes on computers.

Key	Explanation	PC Analogy	Mac Analogy
F1	Moves to main menu	Like pressing windows key	Like moving to the dock or desktop
F2	Opens a program menu (file, edit, view, tools, etc.)	Like pressing alt key	Like moving to menu bar (VO + M)
F3	Moves between controls in a dialog	Similar to tab	Similar to tab
F4	Closes a dialog, message, or prompt	Like pressing escape (does not close a program)	Like pressing escape (does not close a program)

Contacting HIMS technical support

Our technical support staff are happy to assist you in your use of the BrailleSense. Please feel free to call our support department between 8:30 am and 5:30 pm Central Time at 888-520-4467, or you can email us at support@hims-inc.com.

BrailleSense 6 Hardware Overview

Top Panel
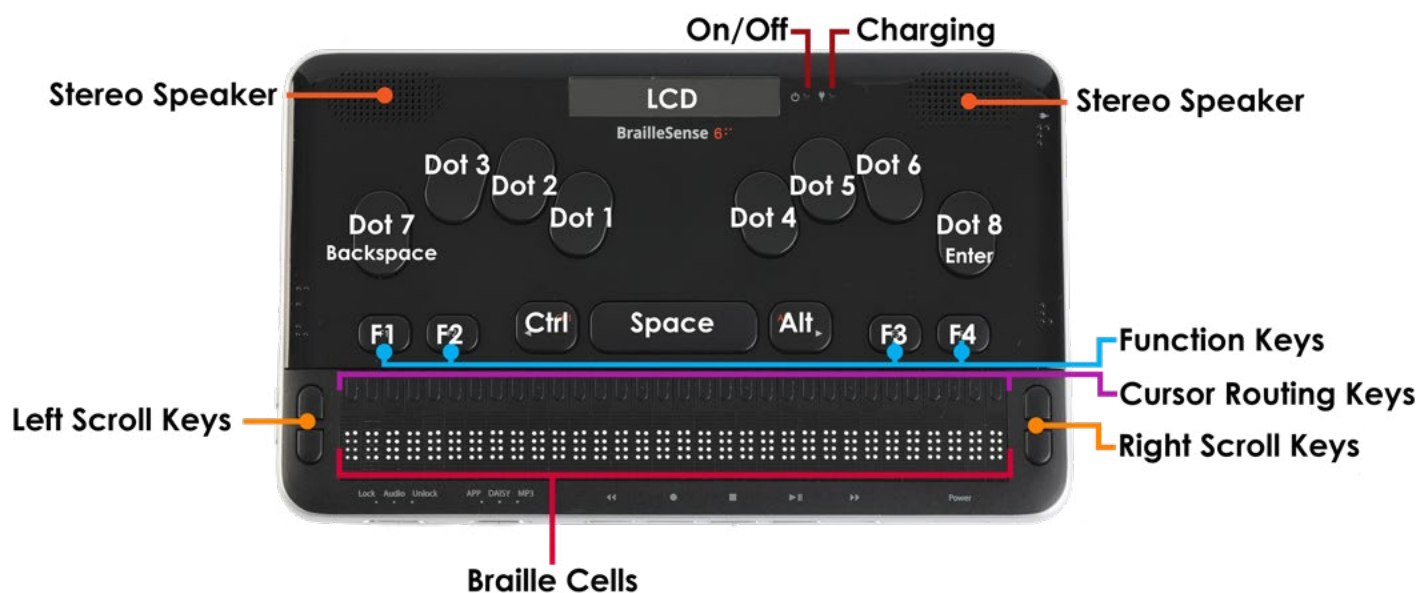
On the top face of the BrailleSense 6 is located a 9 key Perkins-style keyboard, consisting of Braille dots 1:6, "Space", "Backspace", and "Enter".

On the same row as the Space bar are Control and Alt, as well as 4 marked function keys. Moving from left to right, the row contains F1, F2, Control, Space, Alt, F3 and F4.

Below the keyboard is a 32 cell Braille display. Above the Braille display, there are cursor routing buttons corresponding to each of the 32 Braille cells. When you are editing documents, you can use these keys to route your cursor to the character of the corresponding Braille cell. 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.

Near the top center of the unit's top panel, is a liquid crystal display (LCD). The LCD displays the output of the unit visually so that a sighted person can see what is shown on the BrailleSense 6. There are also 2 LED indicators to the right of the LCD. The indicator nearest the LCD shows On/Off status, and the LED to the right indicates charging status.

Stereo speakers are located on the top left and right corners for audio output.

Front Panel

On the far left of the front panel is located a 3-position slide switch. In the "Lock" position, which is furthest left, all keys on the top and front panel are locked. In the "Audio" position, which is the center switch position, then the top panel will be locked, but the front panel will be unlocked. In the "Unlock" position, which is the furthest left switch position, all keys are unlocked.

To the right of it is another 3-position slide switch. This is the "Media Mode" switch and determines which type of content the front panel buttons control. In the "App" position, which is furthest to the left, the media keys are used to control and navigate inside of applications. The center switch position is "Daisy", and this allows the media keys to control Daisy files. In the furthest right position is "MP3" which is used to control audio files.

To the right of the "Media Mode" switch, are five buttons, with a dot on the center one. These buttons control media and DAISY playback as well as providing shortcut keys for other areas of the unit when they are set to Application Mode. As explained above, the type of content controlled by these buttons depends on the position of the "Media Mode" switch. These five buttons are explained further in the relevant training materials.

To the right of the media buttons is the Power button. To turn on the unit, press and hold this button until you hear a beep and feel a vibration. The first time you power on the unit, it will take some time to boot up.

Once the unit boots, you can press the Power button quickly to put the unit in standby "screen off" mode. This is like locking the screen on a phone or tablet. Press it quickly again to unlock it and return to the position at which you entered Screen off Mode. Press and hold the Power button to completely power down the system.

Right Panel

USB-C Port
Video and Perpipherals

USB Type-A

USB-C Port
Power and PC

The Right edge of the BrailleSense 6 contains 2 USB C ports with a USB A port between them. 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, to transfer data to and from a computer, or to use with a USB drive. The USB C port nearest the front of the unit is used to connect portable video monitors and will host other compatible USB C devices as well. To eliminate confusion over which port offers which functions, Braille letter indicators are placed on the top of the casing near each port: the letter p for the power and data port, and the letter v for the video and host port.

Between the 2 USB C ports is an additional USB A host port for connecting drives, printers, audio devices, cameras, etc.

Rear Panel

USB Type-A Port

The rear panel of the BrailleSense 6 contains another USB A host port, for connecting drives, keyboards and mice, cameras, printers, audio gear and other compatible USB peripherals.

Left Panel
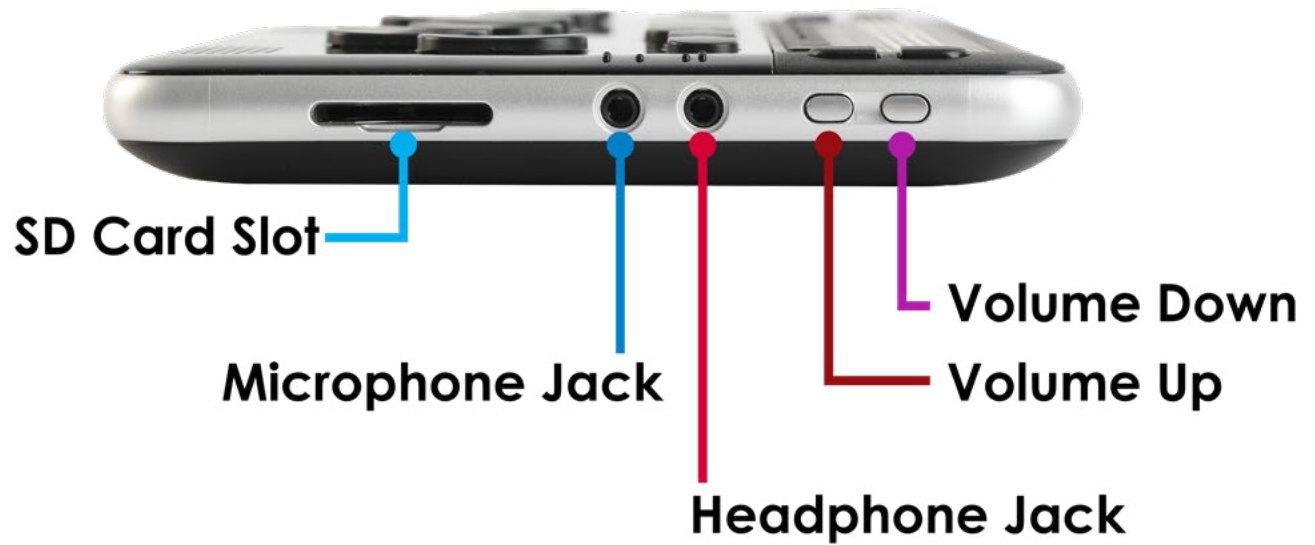
Near the front of the unit on the left panel are 2 small buttons for raising and lowering the master volume of the unit. Use the button nearer the front to decrease the volume, and the button behind it to increase it.

Behind the volume buttons are located 2 small, round jacks. The one nearest the front is the stereo headphone jack, and the one nearer the rear of the unit is the stereo microphone jack for connecting a stereo microphone or line level recording source.

Nearest the back of the left panel is a full-size SD card slot for auxiliary storage.

Bottom Face
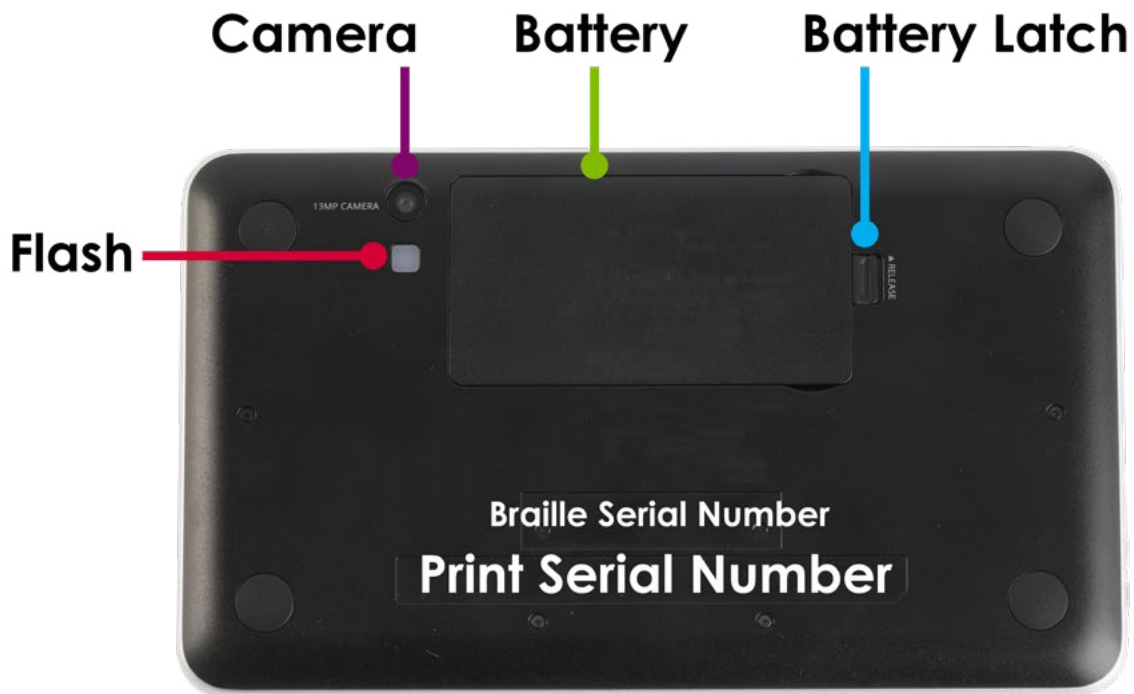
The underside of the unit contains the battery compartment and the camera. The battery contains a rounded edge along one of the sides of its length. This rounded edge should be placed alongside the back edge of the unit's casing. The battery has 2 small protrusions that should be pointed to the right. Place the battery in the unit right side first, and then press down on the left side to click it into place. To remove the battery, use a finger to pull the battery release lock toward the left edge of the unit, and pull the battery out.

The 13-megapixel camera is located near the upper right corner of the underside of the unit. Applications for OCR and photo capture can be downloaded on Google Play. For best results, hold the BrailleSense 9 to 12 inches above the paper, with the unit off set to the left to account for the camera position.

BrailleSense 6 mini Hardware Overview

Top Panel
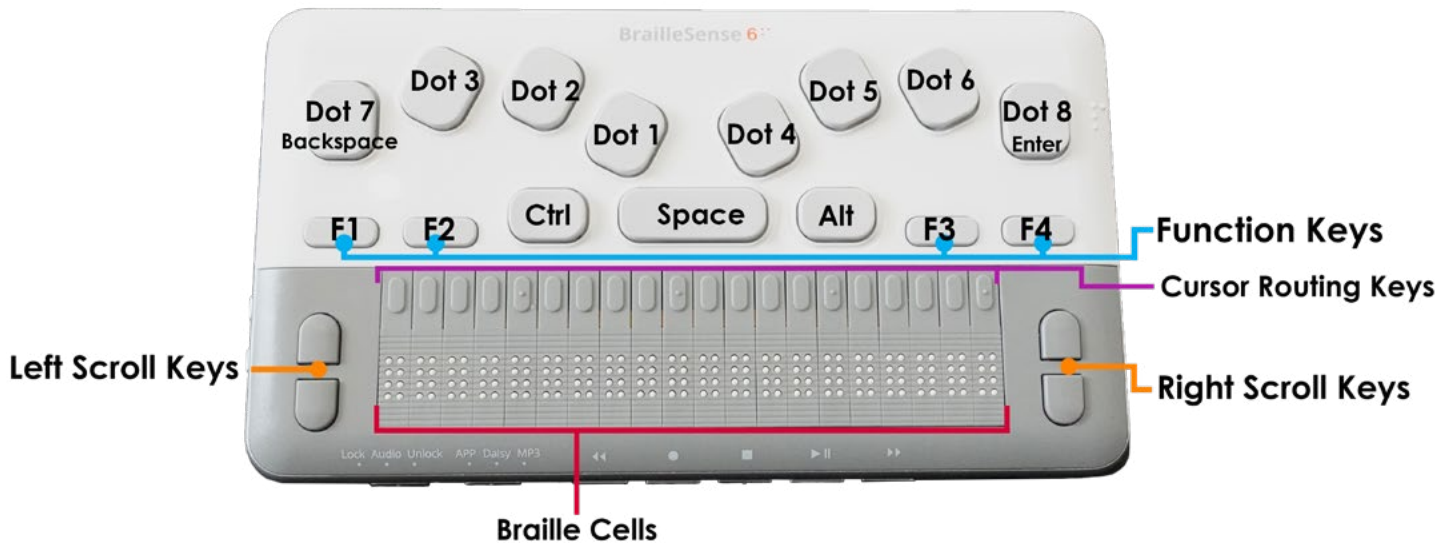
On the top face of the BrailleSense 6 mini is located a 9 key Perkins-style keyboard, consisting of Braille dots 1:6, "Space", "Backspace", and "Enter".

On the same row as the Space bar are Control and Alt, as well as 4 marked function keys. Moving from left to right, the row contains F1, F2, Control, Space, Alt, F3 and F4.

Below the keyboard is a 20 cell Braille display. Above the Braille display, there are cursor routing buttons corresponding to each of the 20 Braille cells. When you are editing documents, you can use these keys to route your cursor to the character of the corresponding Braille cell. 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.

Front Panel

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Right Panel

USB-C Port
Video and Perpipherals

USB-C Port
Power and PC

The Right edge of the BrailleSense 6 mini contains 2 USB C ports. 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, to transfer data to and from a computer, or to use with a USB drive. The USB C port nearest the front of the unit is used to connect portable video monitors and will host other compatible USB C devices as well. To eliminate confusion over which port offers which functions, Braille letter indicators are placed on the top of the casing near each port: the letter p for the power and data port, and the letter v for the video and host port.

Rear Panel

The rear panel of the BrailleSense 6 mini contains no ports or other elements.

Left Panel
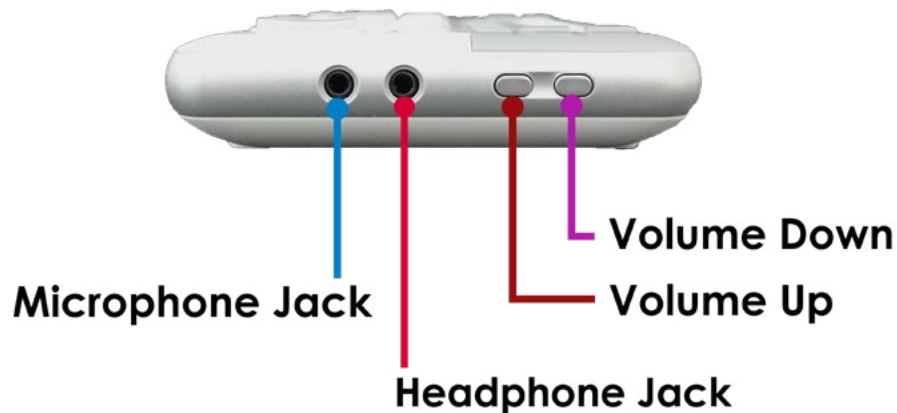
Volume Down

Microphone Jack   Volume Up

Headphone Jack

Near the front of the unit on the left panel are 2 small buttons for raising and lowering the master volume of the unit. Use the button nearer the front to decrease the volume, and the button behind it to increase it.

Behind the volume buttons are located 2 small, round jacks. The one nearest the front is the stereo headphone jack, and the one nearer the rear of the unit is the stereo microphone jack for connecting a stereo microphone or line level recording source.

Bottom Face
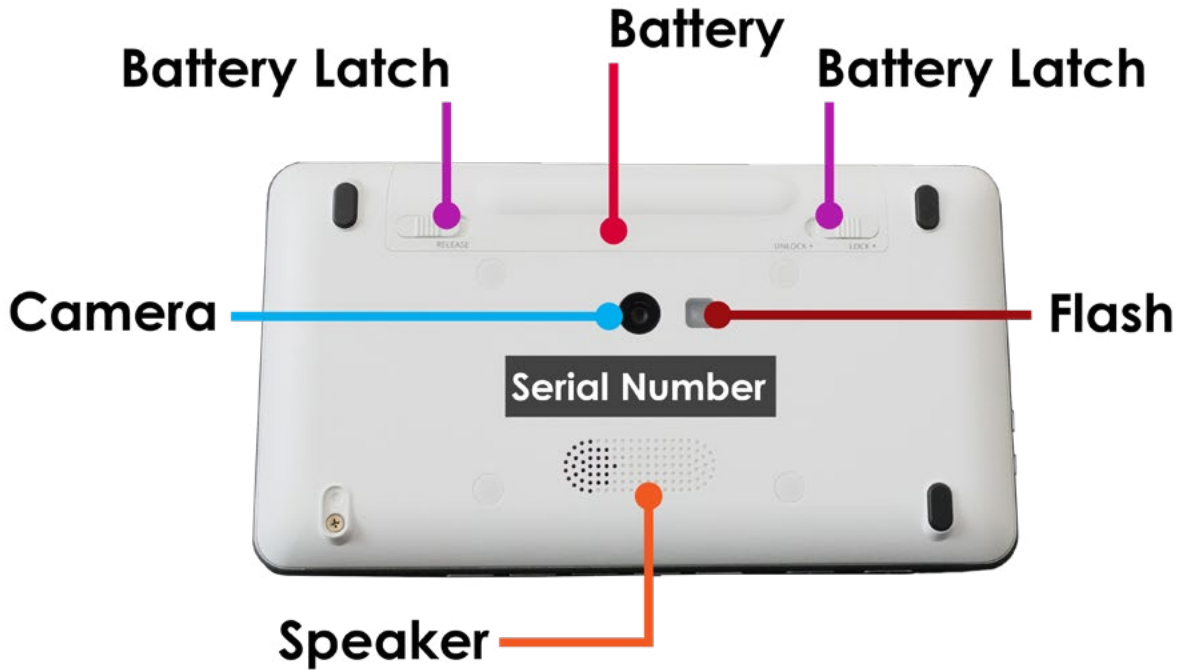
The underside of the unit contains the battery compartment, a camera with LED flash, a Speaker, and the device serial number.

The battery contains a rounded edge along one of the sides of its length. This rounded edge should be placed alongside the back edge of the unit's casing. On the inside wall of the battery compartment is a micro-SD card slot for additional storage.

The 13-megapixel camera is located near the center of the underside of the unit with the LED Flash to the right. Finally, below the label for the serial number, you'll find a rectangular speaker grill for the mono speaker.

Basic Main Menu Navigation

If you have used other HIMS braille products, the menu structure should be very familiar. There are some differences between the BrailleSense 6 and other HIMS products that do not use an Android operating system, but these differences are limited to using 3rd party android apps. If you are familiar with other products, many of the concepts should be very similar.

Program Menu

The Program Menu is the main menu of the BrailleSense 6 and is the first menu when turning on the device and begins with File Manager. There are several methods to navigating the main menu, and different behaviors when using each method. Understanding these concepts is important to effectively navigate the BrailleSense 6.

Getting to the Main Menu

Concept: F1 is the Home Key

In almost every circumstance pressing the F1 key will take you to the top of the main menu in the BrailleSense 6. The only time this is not true is when you have a prompt that requires you to act, for example when the Word Processor is asking if you want to save a document.

Step	Action
Open main program menu	F1

Scroll to Next or Previous Item

Concept: Multiple Methods to Scrolling in the Main Menu

There are multiple methods to scroll through the main menu. The choice of which to use is up to the individual user, however, using Space and Backspace to move through the main menu and sub-menus may create issues as these methods of moving to different items in the File Manager produces different behaviors.

Scroll Up in Main Menu	Scroll Down in Main Menu
Space + Dot 1	Space + Dot 4
Up Scroll Key	Down Scroll Key
Control	Alt
Backspace	Space

It should be noted that using Space + Dot 1 and Space + Dot 4 will navigate to the next item while using the scroll keys will pan the braille display to show the next set of characters. This means that if you have a 32-cell notetaker and the item that is being displayed in braille has more than 32 characters (including spaces) that using the scroll keys will show the remaining characters. Alternatively, using Space + Dot 1 or Space + Dot 4 will ignore the remaining characters and simply move to the next item.

Shortcut Keys and First Letter Navigation

Concept: Shortcut Keys Open Items, Does Not Jump to Items

Navigation the BrailleSense 6 in the Main Menu may operate differently than expected if you have never used a HIMS product before. Within the Main Menu, each item uses a "Shortcut Key". A Shortcut Key will open the application or sub-folder from within the Main Menu, whereas First Letter Navigation moves you to the first item beginning with that letter.

EXCEPTION: In the "All Apps" menu, there are no Shortcut Keys, only first letter navigation.

Concept	Behavior	Example
Shortcut Key	Opens Item Immediately	Shortcut Key W: Opens Word Processor
First Letter Navigation	Jumps to Item	First Letter W: Jumps to first item with "W" at beginning of name

To illustrate, pressing the letter W in the Main Menu of the BrailleSense 6 will open the Word Processor immediately. With other devices, pressing the letter W will move you to the first item beginning with the letter W, then you must press Enter to open the item. In the BrailleSense 6, the Shortcut Key is often the first letter of the item unless there are multiple items with the same first letter.

Concept: Learning and Using Shortcut Keys

The use of Shortcut Keys should be mostly intuitive for new users, as they often use the first letter of an item. But in situations where this is not the case, you can learn the Shortcut Keys through two methods.

Shortcut Key Identification	Behavior
Displayed with menu name in parentheses	Shortcut keys are displayed in parentheses following the menu names. *Requires "Announce shortcut keys" to be set to "On" in Global Options (default setting = "On").
Shortcut Key / Hotkey Identifying Keystroke	Pressing Space + Dots 3, 6 will provide the Shortcut Key and Hotkey if they are available

By default, menu names will include a letter in parentheses at the end. This letter is the Shortcut Key for that item. For example, the Word Processor in the main menu reads as "Word Processor (w)", where the letter "w" inside the parentheses is the shortcut key.

Alternatively, you can use the keystroke Space + Dot 3 + Dot 6 to announce the Shortcut Key and Hot Key. This is a good alternative if the announcements of shortcut keys have been turned off in Global Options.

Concept: First Letter Navigation Jumps to Items

Within the main menu and all sub-menus of the BrailleSense 6 the use of letter keystrokes will act as a Shortcut Key except for the "All Apps" menu. The "All Apps" menu is where you will find a list of all 3rd party apps, including the pre-loaded Google apps, on the BrailleSense 6.

Within the "All Apps" menu, pressing a letter will jump to the first item with the matching beginning letter. This is no different than first letter navigation with other devices.

Situation	Behavior	Example
In menu on item with different beginning letter	Jumps to first item with beginning letter	Pressing the letter "D" moves to "Docs"

Situation	Behavior	Example
In menu on first or subsequent item with same beginning letter	Jumps to next item with beginning letter	Pressing the letter "D" moves you to "Downloads"
In menu on last item with same beginning letter	Jumps to first item with beginning letter	Pressing the letter "D" moves back to "Docs"

Pressing the same letter will move you through all items with the same beginning letter, sorted alphabetically, until the last item. When you reach the last item with a matching beginning letter, then you will move back to the first item.

Move to First and Last Item in Main Menu

Concept: Common Braille Keystrokes

If you have used braille devices before and you wish to move to the first or last item in the main menu and sub-menus, then the keystrokes should be the same.

Action	Keystroke
Jump to Top	Space + Dots 1-2-3
Jump to Bottom	Space + Dots 4-5-6

Enter Sub-Menus

Concept: Multiple Methods to Enter Sub-Menus

Within the main menu of the BrailleSense 6, you will find a mix of applications and sub-menus. For example, the item named "File Manager" is the application, while "Media" is a sub-menu. To navigate into sub-menus, there are two methods; using the Shortcut Key, or scrolling then pressing Enter.

Method	Behavior	Example
Shortcut Key	Opens Item Immediately	Shortcut Key S: Opens the "Settings" sub-menu
Scroll	Moves through items individually	Press Space + Dot 4 to go to "Settings", then press Enter to open.

For example, to open the "Settings" sub-menu using the Shortcut Key, simply press the letter "S". To use the scroll method, press Space + Dot 4 or one of the scrolling alternatives, then once you are on the Settings sub-menu press the Enter key.

Exit Sub-Menus

Concept: Multiple Methods to Exit Sub-Menus

When you are in a sub-menu on the BrailleSense 6, there are several ways to exit the sub-menu and return to the main menu.

Keystroke	Behavior
Backspace	Returns to main menu with focus on sub-menu that was left
F4	Returns to main menu with focus on sub-menu that was left
F1	Returns to top of main menu, with focus on File Manager

To exit a sub-menu, you can choose to press either Space + E, F4, or F1. Except for pressing F1 which returns you to the top of the main menu, pressing Space + E or F4 will return you to the sub-menu in which you left.

Open Applications

Concept: Shortcut Keys vs Scroll and Enter

To open an application from the main menu, follow the same step as entering sub-menus.

Method	Behavior	Example
Shortcut Key	Opens Item Immediately	Shortcut Key W: Opens the Word Processor
Scroll	Moves through items individually	Press Space + Dot 4 to move to "Word Processor", then press Enter to open.

EXCEPTION: In the "All Apps" menu, there are no Shortcut Keys, only first letter navigation.

Concept: In "All Apps" Replace Shortcut Keys with First Letter Navigation

Within the "All Apps" sub-menu there are no Shortcut Keys, so instead of opening an application when pressing a letter, you will jump to the first item with a matching first letter. Alternatively, you may use the same scroll method as previously described.

Method	Behavior	Example
First Letter Navigation	Jumps to Item	First Letter G: Jumps to first item with "G" at beginning of name
Scroll	Moves through items individually	Press Space + Dot 4 to move to "Gmail", then press Enter to open.

Braille Settings

Change Braille Code (including languages)

Use the following steps to choose between UEB and US Braille codes or choose a braille code in a different language.

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to "Braille Code (c)"	Shortcut key: C	Dots 1-4
Toggle to desired braille code	Space / Backspace	
Save settings	Enter	

Change Braille Grade

For UEB and US Braille code, you can choose between Uncontracted, Contracted, and Computer Braille options.

Step	Action	Keystroke
Toggle braille grade	Space + G	Space + Dots 1-2-4-5

Alternate Method

Step	Action	Keystroke
Open Global Options Menu	Space + O	Space + Dots 1-3-5
Navigate to "View/Input grade (g)"	G	Dots 1-2-4-5
Toggle to desired braille grade	Space / Backspace	
Save settings	Enter	

Turn Braille On/Off

Step	Action	Keystroke
Toggle Braille On / Off	Backspace + F3	

Alternate Method

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Toggle Braille On / Off	Space or Backspace	

Speech Settings

Turn Voice On/Off

NOTE: While it is possible to turn both the Voice and Braille off on the BrailleSense 6, it is not possible to turn both off. If you turn the Voice off while Braille is also off, then Braille will turn back on automatically, and vice versa.

Step	Action
Toggle Voice On / Off	Backspace + F2

Alternative

Step	Action	Keystroke
Open Global Options	Space + O	SPACE + Dots 1-3-5
Navigate to "Voice (v)"	V	Dots 1-2-3-6
Toggle Voice On or Off	Space	
Save settings	Enter	

Adjust Main Volume

NOTE: The Main Volume controls the volume on the BrailleSense. In addition, the Main Volume influences the Voice Volume, which is controlled separately. An analogy to this would be how adjusting your computer's speaker volume (Main Volume) will change the volume coming from a YouTube video which has its own volume controls (Voice Volume).

Step	Action
Decrease Main Volume	The Decrease volume button is on the left panel, closest to the front edge.
Increase Main Volume	The Increase volume button is located on the left panel, second closest to the front edge.

Alternative

Step	Action
Decrease Main Volume	Backspace + Space + F1
Increase Main Volume	Backspace + Space + F4

Adjust Voice Volume

NOTE: The Voice Volume is separate from the Main Volume. This allows a user to have the voice volume different from that of a video or audio recording. The Main Volume sets the upper limit of volume for the device, so if the Voice Volume is set at the maximum, but the Main Volume is too low, then it may be difficult to hear the voice.

Step	Action
Volume Down	Backspace + F1
Volume Up	Backspace + F4

Alternative

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to "Voice volume (l)"	L	Dots 1-2-3
Toggle to desired Voice Volume	Space	
Save settings	Enter	

Adjust Voice Rate

Step	Action
Decrease Voice Rate	Space + F1
Increase Voice Rate	Space + F4

Alternative

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to "Voice rate (r)"	R	Dots 1-2-3-5
Toggle to desired Voice Rate	Space	
Save settings	Enter	

Adjust Voice Pitch

Step	Action
Decrease Voice Pitch	Enter + F1
Increase Voice Pitch	Enter + F4

Alternative

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to "Voice pitch (t)"	T	Dots 2-3-4-5
Toggle to desired Voice Pitch	Space	
Save settings	Enter	

Internet Setup

Helpful: Unhide Passwords

By default, passwords are hidden with asterisks. If your password contains special characters, you might find it helpful to show the password in braille and speech to ensure you are typing the password correctly. Use the following steps to unhide your passwords.

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to Hide Passwords	P twice	Dots 1-2-3-4
Toggle to "Off"	Space	
Save Settings	Enter	

Connect to Wi-Fi

Step	Action	Keystroke
Open "Setup Internet"	F3 + I	F3 + Dots 2-4
Open "Wireless LAN"	Enter	
Navigate to preferred Access Point	Scroll	Space + Dot 1 Scroll Up Space + Dot 4 Scroll Down
Open Network key dialog box	Enter	
Type the network key		
Submit network key	Enter	

Connect to 802.1x Wi-Fi

Step	Action	Keystroke
Open "Setup Internet"	F3 + I	F3 + Dots 2-4
Open "Wireless LAN"	Enter	
Navigate to preferred Access Point	Scroll	Space + Dot 1 Scroll Up Space + Dot 4 Scroll Down
Open Network key dialog box	Enter	
Navigate to "Identity"	F3	
Type your username		
Navigate to "Network key"	F3	
Type the network key		
Submit Credentials, connect to network	Press Enter	Enter

Remove Profile

The BrailleSense will remember your passwords when you connect to WiFi networks which is often helpful. However, if you happen to type in the wrong password then you will want to remove the profile as the BrailleSense will attempt to use the incorrect password. If you happen to Enter the wrong password, use these instructions to remove the profile.

Step	Action	Keystroke
From the Access Point Dialog, Move to "Advanced"	F3	
Open the Advanced dialog	Enter	
In the list of Profiles, navigate to the desired profile you wish to delete	Space + Dot-4 / Space + Dot-1	
Remove profile	Space-D	Space+ Dots 1-4-5
Close dialog	F4	

Once the profile is removed, navigate to the access point, press Enter, and retype the correct password.

BrailleSense General Functions

Setup Date and Time

Before you can check the date and time it must first be set up. This can be done in the getting started guide when you turn on your device for the first time. You can follow these instructions to get the same result. Being connected to the internet is required for the following steps.

Step	Action	Keystroke
Open Set Time and Date Dialog	F3 - T	F3 - Dots 2-3-4-5
Change to preferred Time Zone	Scroll / First letter navigation	
Navigate to Time Format	F3	
Change preferred Time Format	Space	
Navigate to "Time" and check if format is as desired.	F3	
Navigate to Date Format	F3	
Change preferred Date Format	Space	
Navigate to "Date" and check if format is as desired.	F3	
Navigate to "Synchronize with time server"	F3	
Synchronize	Enter	

Check Date and Time

Once you have set your date and time you will no longer need internet connection.

Step	Action	Keystroke
Check Date and Time	Space + T	Space + Dots 2-3-4-5
Close date/time	Space + E	Space + Dots 1-5

Additional Common Functions

Check battery status: Space + Dots 1-6
Check internet status: Space + N (Space + Dots 1-3-4-5)
Toggle Wi-Fi On and Off: Backspace + Dots 1-4-5-6
Toggle Bluetooth On and Off: Backspace + Dots 3-4-5-6
Access Contextual Help: Space + H (Space + Dots 1-2-5)
Turn LCD screen on/off: Enter + Dots 4-5-6 (from main menu only)
Turn one-handed mode on/off: Backspace + Dots 1-2-3 (from main menu only)

Gmail OAuth Email Account Setup

Setting up Email

When setting up an email you can use both UEB and US braille codes. Please note that when using US braille, most fields will require Computer Braille. You will know this is the case when the field name is followed by "CE" in braille and speech announces "Computer Edit Box". You can quickly change your braille grade to computer braille by pressing Space + g (Space + Dots 1-2-4-5).

For computer braille, the "at sign" can be written in two ways. The first is Space + Backspace + Dot 4 and the second method is pressing Space + u (Space + Dots 1-3-6) followed by dot 4. A period is dots 4-6. In UEB, the "at sign" is written by pressing dot 4 followed by dot 1.

Step	Action	Keystroke
From the main menu, open the Email application	E	Dots 1-5
If you do not already have an account in the email app then you will be presented with the Accounts Manager Dialog. If you have one account already but want to add another then open the Accounts Manager Dialog using the hotkey.	Enter + M	Enter + Dots 1-3-4
Open Add dialog	Enter + A	Enter + Dot 1
Change the Default mail server to IMAP	Space	
Navigate to Server Type	F3	
Change Server type to "Google"	Space + Dot 4	
Navigate to Account Name	F3	
Type the name of the account. This field helps you distinguish between different email accounts in the email app		
Navigate to Display Name	F3	
Type the display name. This is the name people see when getting an email from you.		
Navigate to Email Address	F3	
Type your email address		
Navigate to Logon Username	F3	
Type your Username. This is typically your email address.		
Navigate to "Sign in with Google" button, then press Enter	F3, Enter	

OAuth Options

After having entered the information into the BrailleSense Email application you will be taken to an OAuth page. If you have previously added an account then you will be presented with a page that reads "Choose an Account" with one or more accounts that have been used to login. If you have not logged in with an account you will be presented with a page that reads "Sign in to continue to BrailleSense E-mail". Move to the steps that apply to you.

Choose An Account

Step	Action	Keystroke
Navigate to the account you wish to use	F3 until account reached	
Once at the account, press Enter	Enter	
You will be placed in a page asking for access to your Google Account. Navigate to the "Allow" button using first letter navigation	First letter navigation: A	Dot 1
Press Enter		
You will get a notification saying the account was successfully added, and you will be placed back in the Accounts Manager dialog		
Close Accounts Manager dialog	F4	

Adding an Account

Step	Action	Keystroke
When the OAuth page loads you will be placed directly at the Email edit box. Press Enter to activate the edit box.	Enter	
Type your email address		
Navigate to the "Next" button	F3 until button reached	
Press Enter	Enter	
The next page will load and you will be placed directly in the password edit box. Press Enter to activate the edit box.	Enter	
Type your password		
One your password has been typed, press Enter to submit	Enter	
You will be placed in a page asking for access to your Google Account. Navigate to the "Allow" button using first letter navigation	First letter navigation: A	Dot 1
Press Enter		
You will get a notification saying the account was successfully added, and you will be placed back in the Accounts Manager dialog		
Close Accounts Manager dialog	F4	

IMAP/POP Email Account Setup

Setting up Email

When setting up an email you can use both UEB and US braille codes. Please note that when using US braille, most fields will require Computer Braille. You will know this is the case when the field name is followed by "CE" in braille, and speech will announce "Computer Edit Box". You can quickly change your braille grade to computer braille by pressing Space + g (Space + Dots 1-2-4-5).

For computer braille, the "at sign" can be written with Space + Backspace + Dot 4 or by pressing Space + u (Space + Dots 1-3-6) followed by dot 4. A period is dots 4-6. In UEB, the "at sign" is written by pressing dot 4 followed by dot 1.

Before beginning, please ensure that your email account is properly configured. Configuration instructions are provided by your email service provider.

Step	Action	Keystroke
From the main menu, open the Email application	E	Dots 1-5
Open Accounts Manager dialog	Enter + M	Enter + Dots 1-3-4
Open Add dialog	Enter + A	Enter + Dot 1
Choose the default mail server. IMAP is recommended.	Space	
Navigate to Server Type	F3	
Scroll to desired server type, such as Google or Outlook, or leave it as Manual	Scroll	
Navigate to Account Name	F3	
Type the name of the account. This is a label in the email application so you can distinguish between email accounts.		
Navigate to Display Name	F3	
Type the display name. This is the name people see when getting an email from you.		
Navigate to Email Address	F3	
Type your email address		
Navigate to Logon Username	F3	
Type your Username. This is typically your email address again for most email providers.		
Navigate to Password	F3	
Type your password.		
Navigate to Incoming Server	F3	
If the Server Type is set to Manual, type the incoming server address provided by your email provider.		
Navigate to Outgoing server	F3	
If the Server Type is set to Manual, type the outgoing server address provided by your email provider.	F3	
Navigate to Advanced	F3	
Open the Advanced dialog box	Enter	
If applicable, change the secure IMAP / POP3 to yes	Space	
Navigate to IMAP / POP port Number	F3	
If necessary, type the port number, otherwise leave it as default value.		
Navigate to SMTP encryption type	F3	
If applicable, change the SMTP encryption type. SSL or TLS is recommended. Refer to your email provider for guidance.	Space	
If necessary, type the port number, otherwise leave it as default value.		
Save Advanced settings	Enter	
Navigate to Confirm button	F3	
Close Add dialog and save settings	Enter	
At this point you should receive a notification that your email was successfully added.		
Navigate to the Close button for the Accounts Manager dialog	Space + F3	
Close Accounts Manager dialog	Enter	
You are now in the email application and ready to use your account.		

Bookshare.org Account Setup

Setting up Bookshare

The BrailleSense 6 contains an application that allows a teacher or student to search for or download a book from Bookshare.org. This interface is easy to use and will allow a student or teacher to quickly find and download books that are needed for class, or for a student to read independently. The account sign-in process is required the first time the BookShare Download application is used, but the account can be remembered for future use. A student will not need to repeat these steps.

When signing into an account, you can use both UEB and US braille codes. Please note that when using US braille, most fields will require Computer Braille. You will know this is the case when the field name is followed by "CE" in braille and speech announces "Computer Edit Box". You can quickly change your braille grade to computer braille by pressing Space + g (Space + Dots 1-2-4-5).

For computer braille, the "at sign" can be written with Space + Backspace + Dot 4. A period is dots 4-6. In UEB, the "at sign" is written by pressing dot 4 followed by dot 1.

Before beginning, please ensure that you are connected to the internet.

Step	Action	Keystroke
From the main menu, open the Bookshare Download application	K, then B (located in books menu)	Dots 1-3, then 1-2
The sign-in screen uses the Android web view, which uses different commands then the BrailleSense interface. Press Enter to open the edit box labeled "Email or username"	Enter	
Type your email address or Bookshare username		
Move to the "Password" edit box	Press F3 twice	
Press Enter to open the "password" edit box	Enter	
Enter your password		
Press Enter to sign in	Enter	
You are presented with a security screen. Move to the button labeled "approve" by pressing the letter A twice	A	Dot 1
Press the "approve" button	Enter	
If the BrailleSense does not speak after several seconds, press any key to gain focus in the Bookshare Download application		
You are now in the Bookshare application and ready to use your account. The application will remember your login information so these steps will not need to be repeated. See the Bookshare Download document for instructions on finding and downloading books		

Setting up a Wi-Fi Printer

Overview

When printing and embossing documents there are several considerations to be made: some of the most important ones being the capabilities of your current printer or embosser. Some models of printers and embossers can only support printing through a USB connection while others may have Wi-Fi print capabilities.

It is important to understand that in the BrailleSense 6 notetakers that printing is handled in the Word Processor, while embossing is handled from the Notepad.

Connecting to a Wi-Fi Printer

When connecting to a Wi-Fi printer the BrailleSense and printer will need to be on the same Wi-Fi network, and the printer will need to be powered on.

Step	Action	Keystroke
Open Android System Settings	F3 + E	F3 + Dots 1-5
Navigate to "Connected Devices"	F3 until reached	
Open Connected Devices Menu	Enter	
Navigate to "Connection preferences"	F3 until reached	
Open Connection preferences	Enter	
Navigate to "Printing"	First Letter: P	Dots 1-2-3-4
Open Printing page	Enter	
Navigate to "Default Print Services"	First Letter: D	Dots 1-4-5
Open Default Print Services	Enter	
Navigate to desired printer	F3 until reached	
Select printer	Enter	

Printing to a Wi-Fi Connected Printer

Printing a document to a Wi-Fi Connected Printer requires that you are on the same internet connection as the printer and the printer is turned on.

Step	Action	Keystroke
From within the Word Processor, open the Print Dialog box	Space + P	Space + dots 1-2-3-4
If desired, adjust the start page by typing it in	Type	
Navigate to the End page number, then type it in, if desired	F3, then type	
Confirm page range to print	Enter	
If the print dialog reads "Select a printer", then open the printer dropdown	Enter	
Move to desired printer	Space + dot 4 / Space + dot 1	
Choose desired printer	Enter	
Once desired printer is shown, move to the Print button	First letter: P	Dots 1-2-3-4
Begin the print	Enter	

NOTE: If this is the first time using the print service in Android you may get a notification that reads "Use Default Print Service? Your document may pass through one or more servers on its way to the printer." If this is the case, then use the following steps.

Step	Action	Keystroke
Navigate to "OK" button	First letter: O	Dots 1-3-5
Confirm choice	Enter	

You will only need to confirm this one time.

Logging Into Cloud Drives

The BrailleSense gives access to Google Drive, OneDrive, and Dropbox through the File Manager. This makes working with content stored on those cloud-based storage platforms as easy as managing files on the BrailleSense itself. The following instructions explain how to log into each drive to set it up for access from the BrailleSense File Manager. This process only needs to be completed once.

Note: Android third-party app commands are needed to navigate the sign in web views below. This means that you must press Enter to activate edit boxes before typing, and first letter navigation can be used as indicated in these instructions.

Google Drive

Step	Action	Keystroke
Open File Manager	F1 + F	F1 + dots 1-2-4
Move to "Google Drive"	G	Dots 1-2-4-5
Open Google Drive	Enter	
Navigate to "email or phone"	F3 until you reach correct option	
Enter edit mode	Enter	
Type email address		
Activate "next" button	Enter	
Enter password edit field	Enter	
Type password		
Press next button	Enter	
A screen with a list of permissions will be displayed.		
Move to "allow" button	A	Dot 1
Activate "allow" button	Enter	

Once you hear "My drive folder", you have successfully signed into Google Drive.

OneDrive
OneDrive is Microsoft's cloud storage platform. To log in:

Step	Action	Keystroke
Open File Manager	F1 + F	F1 + dots 1-2-4
Move to OneDrive	O	Dots 1-3-5
Open OneDrive	Enter	
BrailleSense speaks "Enter your email, phone, or Skype."		
Enter edit mode	Enter	
Type your Microsoft username		
Press next button	Enter	
When BrailleSense speaks "enter your password," press Enter to go into edit mode	Enter	
Type your password		
Log in to OneDrive	Enter	

Once you hear "My drive folder", you have successfully signed into OneDrive.

Dropbox

Step	Action	Keystroke
Open File Manager	F1 + F	F1 + dots 1-2-4
Move to Dropbox	D	Dots 1-4-5
Open Dropbox	Enter	
Navigate to "Email" field	E	Dots 1-5
Activate edit mode	Enter	
Type email address		
Move to password field	F3	
Activate edit mode	Enter	
Type password		
Activate "sign in" button	Enter	
Move to "allow" button	A twice	Dot 1, then dot 1
Press "allow" button	Enter	

You should then hear the first item in your Dropbox spoken, indicating that sign in was successful.

Create, Open, Save, and Close Documents

The BrailleSense 6 Word Processor supports creation of formatted DOCX and DOC files, and can open DOC, DOCX, PPT, PPTX, and PPTM files. Other file types, such as BRF and BRL files are supported by other applications.

Word Processor vs Notepad

An important distinction to make is when to use the Word Processor versus the Notepad on the BrailleSense notetakers. In general, if the document is going to be shared with a sighted colleague, will be printed on a printer, or is going to contain any formatting, then the Word Processor is the app to use. If the document is for personal notes, is going to be embossed, and does not contain any formatting then use the Notepad.

Create a Blank Document / Open Word Processor

You can create a blank document with the Word Processor by simply opening the Word Processor. Opening the Word Processor always opens in a blank document by default unless you already have an active document open.

Option 1: Open from the Main Menu

Step	Action	Keystroke
From the main menu, open the Word Processor	First Letter Navigation: W	Dots 2-4-5-6

Option 2: Global Hot Key

Using the Global Hot Key will allow you to open the Word Processor from anywhere using a single keystroke.

Step	Action	Keystroke
Open the Word Processor from anywhere on the device	Global Hot Key: F1 + W	F1 + Dots 2-4-5-6

Open Existing Documents

Open Existing Document from within the Word Processor

Step	Action	Keystroke
From the main menu, open the Word Processor	First Letter Navigation: W	Dots 2-4-5-6
Open the "Open Dialog" box	Hot Key: Enter + O	Enter + Dots 1-3-5
Navigate to file list in your default folder	Space + F3	
If applicable, move to the parent folder	Backspace	
If applicable, navigate to your desired folder	First Letter Navigation or Scroll	
If applicable, enter your desired folder	Enter	
Navigate to your desired file	First Letter Navigation or Scroll	
Open your desired file	Enter	
The word processor will ask if you wish to save the open document. Press y for Yes or n for No.		Y = Dots 1-3-4-5-6 N = Dots 1-3-4-5

Open Existing Document from the File Manager

Step	Action	Keystroke
From the main menu, open the File Manager	F	Dots 1-2-4
Navigate to your desired folder	First Letter Navigation or Scroll	
Open your desired folder	Enter	
Navigate to your desired file	First Letter Navigation or Scroll	
Open the file	Enter	

Open a recent document without closing existing document

Step	Action	Keystroke
Begin in an existing document		
Open "Recent File List" dialog	Backspace + Enter + H	Backspace + Enter + Dots 1-2-5
Navigate to desired file	Scroll	
Open file	Enter	
If unsaved changes have been made you will be asked if you want to save the file. Press y for yes or n for no.		Y = Dots 1-3-4-5-6 N = Dots 1-3-4-5

Open a new blank document without closing existing document

Opening a new blank document will also close the existing document that was open in the Word Processor. If the existing document was blank or had no changes made to it since the last time it was saved, then you will not be asked to save the existing document. However, if changes have been made to the existing document, then you will be asked if you wish to save the file.

Step	Action	Keystroke
Begin in an open Word Processor document		
Open new blank document	Enter + N	Enter + Dots 1-3-4-5
If unsaved changes have been made you will be asked if you want to save the file. Press Y for yes or N for no.		Y = Dots 1-3-4-5-6 N = Dots 1-3-4-5

Open Second Existing Document

If you are working on one document, but wish to open a second one that already exists, follow these instructions:

Step	Action	Keystroke
Open the Open Dialog	Enter + O	Enter + Dots 1-3-5
Navigate to file		
Open File	Enter	

Switching Documents

Switch between open documents

Step	Action	Keystroke
With two or more documents open, switch between open documents	F3	
If unsaved changes have been made you will be asked if you want to save the file. Press y for yes or n for no.		Y = Dots 1-3-4-5-6 N = Dots 1-3-4-5

Switch between open documents alternative

Step	Action	Keystroke
With two or more documents open, open the "Opened Documents" dialog	Backspace + Enter + O	Backspace + Enter + Dots 1-3-5
Scroll to your desired file		
Press Enter	Enter	
If unsaved changes have been made you will be asked if you want to save the file. Press y for yes or n for no.		y = Dots 1-3-4-5-6 n = Dots 1-3-4-5

Saving Documents

Save a document

When the "save" command is first used, the save dialog will appear, allowing you to name a file and choose where it is saved. If Enter + S is pressed again, the changes are saved, and a dialog box is not shown because the file already has a name.

Step	Action	Keystroke
Save the document	Enter + S	Enter + Dots 2-3-4
If first time saving, name the document	Type the file name	
Save the document with written name	Enter	

Save As

Use the "save as" command to save another copy of a file (giving it a new name or saving in a different folder). The "save as" function is useful when a student may want to save a first draft of an assignment, then work on a second copy that can become their final submission.

Step	Action	Keystroke
Open "Save As" Dialog	Space + S	Space + Dots 2-3-4
Name the document	Type the file name	
Save the file name	Enter	

Save document to different folder with Save As

Step	Action	Keystroke
In an existing document open the "Save As" dialog box	Space + S	Space + Dots 2-3-4
Name the document if applicable	Type the file name	
Navigate to file list in your default folder	Space + F3	
Move to the parent folder	Backspace	
Navigate to your desired folder	First Letter Navigation or Scroll	
Enter your desired folder	Enter	
If you wish to change the file name, navigate to the "file name" field, then type the new document name	F3	
Navigate to the Confirm Button	F3	
Press Enter	Enter	

Closing Documents

Close a Single Document

You will want to close a single document when you have two or more documents open, and you only wish to close the one you are actively working on without affecting the others.

Step	Action	Keystroke
Close the current document	Space + Q	Space + Dots 1-2-3-4-5
If unsaved changes have been made you will be asked if you want to save the file. Press y for yes or n for no.		Y = Dots 1-3-4-5-6 N = Dots 1-3-4-5

Close the Word Processor and all open documents

Step	Action	Keystroke
Close the Word Processor and all documents	Space + Z	Space + Dots 1-3-5-6
If unsaved changes have been made you will be asked if you want to save the file. Press y for yes or n for no.		Y = Dots 1-3-4-5-6 N = Dots 1-3-4-5

Reading and Listening in the Word Processor

Concept – Reading Units versus Scrolling

You can read a document in many ways on the BrailleSense 6, but it is important to distinguish between using the scroll keys and a reading unit. A reading unit determines how far the cursor will advance in the Word Processor based on the structure of the text, and includes the ability to move my Paragraph, Sentence, and Line. If you have speech turned on, then the BrailleSense 6 will read all the text in that unit aloud and place the cursor at the next unit. If your speech is off, then it will simply move the cursor to the next reading unit.

Alternatively, using the scroll keys behaves the same way, however, scroll key settings are controlled in the Global Options settings and the set behavior applies both inside of the Word Processor and outside the Word Processor. For example, setting the left scroll keys to navigate by Sentence will move you by sentence in the Word Processor and in the Web Browser as well.

If you wish to simply read a document in braille, then you can choose to turn your speech off by pressing Backspace + F2 and read by reading unit or with the scroll keys.

Read with Reading Units

Read by Reading Units

A reading unit refers to the amount the BrailleSense moves when using space + dot 1 or space + dot 4. In a document. The possible options are line, sentence, and paragraph.

Step	Action	Keystroke
Read forward	Space + Dot 4	
Read backward	Space + Dot 1	

Adjust Reading Units

Step	Action	Keystroke
Toggle Reading Unit	Space + Dots 2-4-6	

Adjust Reading Units Alternative

Step	Action	Keystroke
Within the Word Processor, open the "Settings" dialog box	Enter + E	Enter + Dots 1-5
Navigate to "Read unit"	Shortcut Key: M	Dots 1-3-4
Toggle to desired setting	Space	
Save your settings	Enter	

Read with Scroll Keys

Read by Scroll Keys

Step	Action
Move to previous item	Up scroll key
Move to next item	Down scroll key

Adjust Scroll Keys

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to "left scroll buttons"	L until reached	Dots 1-2-3
Toggle to desired setting	Space	
Navigate to "right scroll buttons"	R until reached	Dots 1-2-3-5
Toggle to desired setting	Space	
Save settings	Enter	

Speech Reading

It may be useful for a person to have a character, word, sentence, or other set of text simply read aloud without changing the braille. For example, if a student wished to confirm the spelling of an email address, she could have the BrailleSense read aloud each character.

Read Single Character Aloud

Step	Action
Read next single character	Space + Dot 6
Read previous single character	Space + Dot 3
Read current character	Space + Dots 3-6
Read character phonetic name	Space + Dots 3-6 (Twice)

Read Single Word Aloud

Step	Action
Read word in focus	Space + Dots 2-5
Read next single word	Space + Dot 5
Read previous single word	Space + Dot 2
Spell word aloud	Space + Dots 2-5 (Twice)

Read by Line Aloud

Step	Action	Keystroke
Read reading unit aloud	Space + D	Space + Dots 1-4

Read by Sentence Aloud

Step	Action
Read a Sentence aloud	Space + Dots 1-4-5-6

Read Paragraph Aloud

Step	Action	Keystroke
Reads current paragraph	Space + Dots 2-3-5-6	Space + Dots 1-4

Reading Based on Cursor Position

You can read a document aloud from the beginning of the document to the cursor and from the cursor to the end of the document. Reading this way requires you place the cursor based on what you want to read. A common example of this would be to place your cursor at the top of a document then read to the end of the document. This is speech only and is different from auto scroll which automatically pans the braille display.

Step	Action	Keystroke
Place the cursor using the cursor routing keys.	The Cursor Routing Keys are small buttons immediately above the braille cells.	
Read from Beginning of document to Cursor	Backspace + G	Backspace + Dots 1-2-4-5
Read from Cursor to End of document	Enter + G	Enter + Dots 1-2-4-5
Stop reading	Backspace + Enter	

Reading Selected Text

You can have a selected set of text read aloud. This only reads the selection with speech and does not auto scroll the braille cells.

Step	Action	Keystroke
Within a document, place the cursor at the location where you wish the begin your selection	Press the cursor routing key above the first letter of the corresponding word	
Start Selection	Enter + B	Enter + Dots 1-2
Move your cursor to the end of the section you wish to select	Press the cursor routing key above the first letter of the corresponding word	
Read Selected Text	Backspace + B	Backspace + Dots 1-2
Stop reading	Backspace + Enter	

Stop Reading

Step	Action
Stop braille panning and audio when reading within a document	Backspace + Enter

Auto-scroll the braille display

In some situations, you may want the braille display to automatically advance through a document. The display will automatically refresh without needing to press a scroll key. Note that this command will only scroll the braille display and will not speak.

Step	Action
Begin or stop auto-scroll	Up Scroll + Down Scroll
Scroll display faster	Space + Dot 6
Scroll display slower	Space + Dot 3

Move by Sentence, Heading, and Page

Move by Sentence

Navigating by sentence moves you to the next sentence and reads it aloud. Therefore, you will find that the speech begins at the beginning of a sentence, but the braille displayed shows the end of the prior sentence. Unlike Speech Reading, these keystrokes will move the cursor.

Step	Action
Go to Previous Sentence	Space + Dots 2-3-6
Go to Next Sentence	Space + Dots 3-5-6

Move by Heading

Step	Action
Go to Previous Heading	Space + Dots 2-3-5
Go to Next Heading	Space + Dots 2-5-6

Move by Page

Step	Action
Go to Previous Page	Space + Dots 1-2-6
Go to Next Page	Space + Dots 3-4-5

Basic Editing and Common Tasks

Writing Documents

To begin writing in a new blank document you simply begin by opening the Word Processor. Once the Word Processor is open you will be placed at the top of an empty document, and you can begin typing immediately.

Step	Action	Keystroke
From the main menu, open the Word Processor	First Letter Navigation: W	Dots 2-4-5-6

Braille Grade, Braille Code, and Math Code

The Braille Grade and Braille Code used to read and write in the Word Processor is handled by the settings found in the notetaker's Global Options while the math code is set in the Word Processor. To adjust Braille Grade and Braille Code, please refer to the Braille Settings section beginning on page 15.

Change Math Code using hotkeys and shortcut keys:

Step	Action	Keystroke
Open the Settings Dialog	Enter + E	Enter + Dots 1-5
Navigate to Math code	Shortcut key: T	Dots 2-3-4-5
Toggle between Nemeth and UEB	Space	
Save Settings	Enter	

Change Math Code through Menu:

Step	Action	Keystroke
Open the program menu	F2 or Space + M	Space + Dots 1-3-4
Open the File pulldown menu	Enter	
Navigate to Settings	Scroll	
Open Settings Dialog	Enter	
Navigate to Math Code	Scroll	
Toggle between Nemeth and UEB	Space	
Save Settings	Enter	

Writing Math Equations

To write equations in the Word Processor you will want to begin on a blank line. Math in the Word Processor is meant to include one equation per line with no text or other characters on the same line as the equation.

Step	Action	Keystroke
Move to a blank line	Enter	
Begin Math Mode	Backspace + M	Backspace + Dots 1-3-4
Type equation		
Move to next line	Enter	
Type another equation (if desired)		
Move to next line	Enter	
End Math Mode	Backspace + M	Backspace + Dots 1-3-4

After typing your math equation then moving to the next line you will still be in math mode. If you want to write more lines of math you can continue typing one equation per line until you are done, then end math mode on the next line. Dots 7 and 8 are used for the cursor placement in text mode, while just dot 8 is used when in math mode.

Insert and Overwrite Text

Cursor placement is very important when inserting and deleting text. For example, if you wish to change the character in the middle of a word, the easiest way is to move your cursor to that character, delete it, and add a new character. To move your cursor, press on the cursor routing button found just above the braille cell.

Change Cursor Settings

Step	Action	Keystroke
Open Global Options	Hotkey: Space + O	Space + Dots 1-3-5
Navigate to Braille Cursor	Shortcut key: C	Dots 1-3
Toggle between Always, Blinking, and Off	Space	
Save Settings	Enter	

Inserting Text

When you insert text into a word or sentence the characters you type will begin where your cursor is located. As you type, the text that is already present will be pushed to the right and you will have both the new text just written along with the text that already was there.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Type text		

Overwrite Text

In some instances, you may want to overwrite text. Unlike when you insert text, whatever you type will replace what was already written, and the existing text will not be pushed to the right.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Toggle from Insert to Overwrite	Space + I	Space + Dots 2-4
Type		
Toggle from Overwrite to Insert	Space + I	

Deleting Text

You can delete text by character, word, line, blank line, and paragraph. What you are deleting is determined by the cursor placement.

Deleting Character

To delete a character, place your cursor underneath the character you wish to delete.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Delete character	Space + D	Space + Dots 1-4-5

Delete Current Word

When you delete a word, place your cursor under any character in that word. If your cursor is on a space, that space will be deleted instead.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Delete word	Backspace + Dots 2-5	

Delete Current Line

When deleting a line of text, the cursor placement does not matter, and the text being deleted will be just the text shown on the braille display.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Delete Current Line	Backspace + C	Backspace + Dots 1-4

Delete Current Paragraph

When deleting a paragraph, the entire paragraph associated with the text being shown on the braille display will be deleted.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Delete Current Paragraph	Backspace + Dots 2-3-5-6	

Delete Blank Line

When deleting blank lines, you must first select the text area that you wish to have blank lines deleted. The selected area is begun by choosing a Start Selection point and ends where the cursor is located when you execute your command.

Step	Action	Keystroke
Navigate to beginning of text desired text area		
Start Selection	Enter + B	Enter + Dots 1-2
Move cursor to end of selection	Cursor routing key	
Delete Blank Lines	Backspace + E	Backspace + Dots 1-5

Cut, Copy, and Paste

When working in a document you can choose to cut, copy, and paste with the same commands used across all BrailleSense applications. Furthermore, it is possible to copy text from another app, including the web browser and Android apps, and paste that text into the Word Processor.

It is important to note that when you cut text that after it has been pasted it will be removed from the original location. If you copy text, the original text will remain after pasting.

You will need to select the text to wish to cut or copy. You do this by moving to the start of what you want to cut or copy and Start Selection. The end of the selection will be where your cursor is located when you execute the cut or copy commands.

Cut and Copy Text

Step	Action	Keystroke
Navigate to beginning of text desired text area		
Start Selection	Enter + B	Enter + Dots 1-2
Move cursor to end of selection	Cursor routing key	
Cut Text	Enter + X	Enter + Dots 1-3-4-6
Copy Text	Enter + C	Enter + Dots 1-4

Pasting Text

Pasting text simply requires placing your cursor where you want the text to be placed then hitting the Place command.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Paste text	Enter + V	Enter + Dots 1-2-3-6

Word Count, Character Count, Paragraph Count

Character Count

If you wish to find the character count of a document or the paragraph you are in, use the Character Count command.

Step	Action	Keystroke
Read Character and Count	Backspace + I	Backspace + Dots 2-4

Page, Line in Page, Word, and Paragraph Count

Using the Cursor Position command, you can get information on where you are at in a document. It includes information about which page you are on, which line in that page, how many words are in the document, and how many paragraphs are in the document.

Step	Action	Keystroke
Read Cursor Position	Space + Dots 1-5-6	

Spell Checking

Spelling of Current Word

You can check the spelling of a single word by moving the cursor under any character of that word, then check the spelling. If the spelling is correct, then you will hear a tone and you will not get any suggestions.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Check spelling of current word	Backspace + K	Backspace + Dots 1-3
Choose correct suggested spelling	Scroll	
Confirm spelling replacement	Enter	
Cancel replacement	F4	

Spelling of Entire Document

You can check the spelling within a document, paragraph, from cursor to bottom, or the current word. If you want to check spelling from the cursor to the bottom of the page, it will be necessary to place your cursor in the correct position.

Step	Action	Keystroke
Place Cursor (if applicable)	Cursor routing key	
Check spelling in document	Enter + K	Enter + Dots 1-3
Toggle the Range to check spelling	Space	
Begin to check spelling	Enter	

After beginning a spell check, if there are any spelling issues, a dialog box will be displayed with the first spelling recommendation listed. You can navigate to suggestions and read those and make the changes you deem necessary.

Step	Action	Keystroke
Consider first spelling option		
Navigate to Change Word	F3	
Type to replace word, if desired		
Navigate to Suggestions	F3	
Read the provided suggestions	Scroll	
Replace the word with a suggestion	Enter	
Skip spelling error once	Backspace + S	Backspace + Dots 2-3-4
Skip All of that spelling error	Backspace + I	Backspace + Dots 2-4
Modify that spelling error once	Backspace + C	Backspace + Dots 1-4
Modify All of that spelling error	Backspace + M	Backspace + Dots 1-3-4
Cancel	F4	

As you go through each spelling error you can choose to Skip Once, Skip All, Modify Once, Modify All, Add to Custom Dictionary, and Cancel. All of these can be found by pressing F3 until each selection is reached.

Once you choose which action to take for a spelling error you will be presented with the same options for the next error. After working through all the spelling checks you will be presented with a summary of what was checked and what changes were made.

Using the Dictionary and Thesaurus

The Dictionary and Thesaurus is now included for free along with the BrailleSense 6 notetaker with the English firmware and works directly within the Word Processor to check the meaning of words. Place the cursor under a character of that word and execute the command.

Step	Action	Keystroke
Place Cursor	Cursor routing key	
Check Dictionary / Thesaurus	Backspace + Enter + D	Backspace + Enter + Dots 1-4-5

When the Dictionary / Thesaurus is open, the word will be placed in the Dictionary Key Word field automatically. If you wish to check the meaning of the word, then navigate to the dictionary entry.

Step	Action	Keystroke
Navigate to Dictionary Entry	F3	

If you wish to check the Thesaurus instead of the Dictionary then instead of navigating to the dictionary entry, scroll to the Thesaurus key word then navigate to the Thesaurus Entry.

Step	Action
Scroll to Thesaurus Key Word	Scroll
Navigate to Thesaurus Entry	F3

Insert Time, Date, Page Breaks, and Tabs

Before inserting the time and date, make sure that the time and date is set properly on your device. You can check the time and date by using the Global Hotkey Space + t (space + dots 2-3-4-5).

Step	Action	Keystroke
Insert Time	Backspace + W	Backspace + Dots 2-4-5-6
Insert Date	Enter + W	Enter + Dots 2-4-5-6
Insert Page Break	Space + Backspace + Enter + P	Space + Backspace + Enter + Dots 1-2-3-4
Insert Tab	Space + Backspace + Enter + I	Space + Backspace + Enter + Dots 2-4

Finding and Jumping to Items in Documents

Finding a Word or Characters

Use the following steps to find specific words or characters in a document.

Step	Action	Keystroke
Within a document, open the "Find" dialog box	Hotkey: Space + F	Space + Dots 1-2-4
Type the word or characters you are searching for		
Navigate to Search Direction	F3	
If applicable, toggle between "Forward" and "Backward" to search for the item after or before your cursor, respectively. Default is set to Forward or the previously used setting if a search has already occurred without closing the document.	Toggle: Space	
Navigate to Match case	Scroll	Space + Dot 4
If applicable, toggle between match case on and match case off. By default, match case is set to off.	Toggle: Space	
Navigate to Case Sensitive	Scroll	Space + Dot 4
If applicable, toggle between case sensitive on and case sensitive off. By default, case sensitivity is set to off.	Toggle: Space	
Navigate to Ignore Spaces	Scroll	Space + Dot 4
If applicable, toggle between ignore spaces on and ignore spaces off. By default, ignore spaces is set to off.	Toggle: Space	
Begin Search	Enter	
Note: If you do not need to change search options, simply press Enter after typing your search term to begin the search		

Repeating a Search

After using the Find function to search for a word, you can repeat the search again with simple keystrokes.

Step	Action	Keystroke
Complete an initial search using the Find function		
Find next instance of your search moving forward through the document.	Enter + F	Enter + Dots 1-2-4
Find previous instance of your search moving backwards through the document.	Backspace + F	Backspace + Dots 1-2-4

Find and Replace

Use the following steps to search for a word and replace it with a different word.

Step	Action	Keystroke
Open Find and Replace Dialog	Enter + R	Enter + Dots 1-2-3-5
Type the text you want to replace		
Navigate to "Replace with"	F3	
Type the new text you want to replace the old text		
Navigate to Search Direction	F3	
If applicable, toggle between "Forward" and "Backward" to search for the item after or before your cursor, respectively. Default is set to Forward.	Toggle: Space	
Navigate to Match case	Scroll	Space + Dot 4
If applicable, toggle between match case on and match case off. By default, match case is set to off.	Toggle: Space	
Navigate to Case Sensitive	Scroll	Space + Dot 4
If applicable, toggle between case sensitive on and case sensitive off. By default, case sensitivity is set to off.	Toggle: Space	
Navigate to Replace	Scroll	Space + Dot 4
Toggle between Once and All. Once will replace the first instance while All will replace all instances in the entire document.	Toggle: Space	
Begin Find and Replace	Enter	

Find and Jump to Location

It may be useful to find your location or jump to a location in a document by page, paragraph, line, or percentage. When typing a value, please type the number as if a number indicator had already been typed. Also note that blank lines and characters apply.

Cursor Position: Page, Line in Page, Word, and Paragraph Count

Using the Cursor Position command, you can get information on where you are at in a document. It includes information about which page you are on, which line in that page, how many words are in the document, and how many paragraphs are in the document.

Step	Action	Keystroke
Read Cursor Position	Space + Dots 1-5-6	

Jump to Location

Step	Action	Keystroke
Open "Go To Location" dialog box	Enter + L	Enter + Dots 1-2-3
Scroll to the item you wish to search by, including page, paragraph, line, & percent.	Scroll	
Type the value you wish to jump to	Type	
Jump to location	Enter	Enter

Using Marks

If you wish to quickly jump to certain areas in a document you may find using marks helpful. After creating a mark and giving it a label you can quickly jump back to that mark again, making navigating long documents easy.

Create a Mark

Step	Action	Keystroke
Set Mark	Enter + M	Enter + Dots 1-3-4
Type a single character as the label. After typing one character the dialog box will close automatically.		

Jump to Mark

Once a mark has been set then you can jump to that mark. If there is no mark, or you type a character that does not exist as a label, you will get the message "the mark does not exist".

Step	Action	Keystroke
Jump to Mark	Enter + J	Enter + Dots 2-4-5
Type the character label. After typing the character, the cursor will be moved to that mark immediately, if it exists		

Delete a Mark

If there is no mark, or you type a character that does not exist as a label, you will get the message "the mark does not exist".

Step	Action	Keystroke
Delete a Mark	Backspace + D	Backspace + dots 1-4-5
Type the character label. After typing the character, you will get a message saying "delete mark" to confirm.		

Document and Text Formatting

Commonly Used Word Formatting

The following steps are quick steps for the most commonly used formatting in documents.

Step	Action	Keystroke
If you wish to format more than one word, start selection, otherwise skip this and the next step	Enter + B	Enter + Dots 1-2
Navigate to end of selection		
Bold On/Off	Control + B	Control + Dots 1-2
Italics On/Off	Control + I	Control + Dots 2-4
Underline On/Off	Control + U	Control + Dots 1-3-6
After formatting the selected text, the selection goes away immediately.		

Page Margins, Headers, and Footers

The Print Document Layout dialog box allows you to change the margins of a single document and add a Header and Footer. Pressing Enter at any point will save your settings. Please note the margins are in millimeters, with 1 inch being 25.4 mm.

Step	Action	Keystroke
Begin with the Word Processor open		
Open the Print Document Layout dialog box	Backspace + T	Backspace + Dots 2-3-4-5
Type the value for top margin.		
Navigate to bottom margin	F3	
Type the value for bottom margin		
Navigate to left margin	F3	
Type the value for left margin		
Navigate to right margin	F3	
Type the value for right margin		
Navigate to the Header	F3	
Type what you want included in the header		
Navigate to the Footer	F3	
Type what you want included in the Footer		
Save Settings	Enter	

Adjusting Font and Character Formatting

There are many font and character formatting options found in the font dialog box. The following steps provided will allow you to change any of these options for select text. Formatting options include:

1. Font
2. Font Style
3. Font Size
4. Font Color
5. Underline
6. Underline Color
7. Strikethrough
8. Subscript
9. Character Width
10. Space Between Characters
11. Space Between Characters Value

Selecting Text to Format

To change the formatting of select text within an existing document you will first need to select the text you wish to format. You can choose to select all with the following command.

Step	Action	Keystroke
Select All	Enter + A	Enter + Dot 1

You can also choose a set of text to format with the following instructions.

Step	Action	Keystroke
Navigate to beginning of text desired text area		
Start Selection	Enter + B	Enter + Dots 1-2
Move cursor to end of selection	Cursor routing key	

If you are only formatting a single word, then placing the cursor under that word using the cursor routing key will apply the formatting changes to just that word.

Adjusting Formatting of Select Text

Once you have selected the text to format, follow these steps.

Step	Action	Keystroke
Open the Font dialog box	Backspace + Enter + F	Backspace + Enter + Dots 1-2-4
Navigate to next option	F3	
Navigate to previous option	Space + F3	
Adjust setting	Scroll Up / Scroll Down	Space + Dot 1 / Space + Dot 4
Save Settings	Enter	

Adjusting Formatting of New Documents

If you wish to adjust the normal font and character formatting for all new documents the process is very similar, however, you will want to choose "Set Current As Default". Once set, all new documents will use the updated formatting.

Step	Action	Keystroke
Open a blank Word Processor document		
Open the Font dialog box	Backspace + Enter + F	Backspace + Enter + Dots 1-2-4
Adjust all desired settings	Scroll Up / Scroll Down	Space + Dot 1 / Space + Dot 4
After all settings are changed, navigate to the "Set Current As Default" button	F3	
Save Settings	Enter	

Adding Headings

Headings are a common way to organize a document and provide a great method for navigation. When using the Heading style, it will apply the style to the entire block of text. For example, if your cursor is in the middle of a paragraph, the entire paragraph will be a heading. If you apply the style to a blank line, all of the text you type will be a heading until you press Enter. All text after pressing Enter will go back to normal styling.

Step	Action	Keystroke
Navigate to the text you wish to change into a heading. If you wish to write a new heading, move to a blank line.		
Open Paragraph Style Dialog	Backspace + Space + Enter + S	Backspace + Space + Enter + Dots 2-3-4
Scroll to Heading or other desired style	Space + Dot 4	
Save Setting	Enter	

As a note, you can navigate by heading with the following keystrokes.

Move by Heading

Step	Action
Go to Previous Heading	Space + Dots 2-3-5
Go to Next Heading	Space + Dots 2-5-6

Paragraph / Line Alignment

Step	Action	Keystroke
Center current line	Backspace + Space + Enter + C	Backspace + Space + Enter + Dots 1-3
Left justify	Backspace + Space + Enter + J	Backspace + Space + Enter + Dots 2-4-5
Right justify	Backspace + Space + Enter + R	Backspace + Space + Enter + Dots 1-2-3-5

Printing over Wi-Fi from the Word Processor

Overview

When printing over Wi-Fi you must first have the printer setup on the BrailleSense. Refer to the instructions on setting up a Wi-Fi printer beginning on page 24..

NOTE: It is important to understand that in the BrailleSense 6 notetakers that printing is handled in the Word Processor, while embossing is handled from the Notepad.

Printing to a Wi-Fi Connected Printer

Printing a document to a Wi-Fi Connected Printer requires that you are on the same internet connection as the printer and the printer is turned on.

Step	Action	Keystroke
From within the Word Processor, open the Print Dialog box	Space + P	Space + Dots 1-2-3-4
If desired, adjust the start page by typing it in	Type	
Navigate to the End page number, then type it in, if desired	F3, then type	
Confirm page range to print	Enter	
If the print dialog reads "Select a printer", then open the printer dropdown	Enter	
Move to desired printer	Space + Dot 4 / Space + Dot 1	
Choose desired printer	Enter	
Once desired printer is shown, move to the Print button	First letter: P	Dots 1-2-3-4
Begin the print	Enter	

NOTE: If this is the first time using the print service in Android you may get a notification that reads "Use Default Print Service? Your document may pass through one or more servers on its way to the printer." If this is the case, then use the following steps.

Step	Action	Keystroke
Navigate to "OK" button	First letter: O	Dots 1-3-5
Confirm choice	Enter	

You will only need to confirm this one time.

File Manager Overview and Navigation

Overview

The File Manager is where you will find files, folders, and different drives. By default, you will have a drive called "flashdisk" which is the internal storage of the BrailleSense. In addition, you may have cloud storage options that include Google Drive, OneDrive, and Dropbox depending on your model and firmware version.

Other drives shown in the File Manager will depend on what devices you have connected. For example, if you have an SD Card inserted into the card slot on the BrailleSense then you will have an "SD" option, and if you have a USB inserted into the BrailleSense then "USB" will be an option. If you do not have an SD Card or a USB drive in your device these will not show in the File Manager.

Opening the File Manager

The File Manager is the first item in the main menu of the BrailleSense 6. This is why pressing F1 will announce File Manager, as this keystroke takes you to the top of the main menu.

Step	Action	Keystroke
Navigate to the main menu	F1	
Open File Manager	Shortcut Key: F	Dots 1-2-4

Additionally, you can use the Global Hotkey from anywhere on the BrailleSense to open the File Manager.

Step	Action	Keystroke
File Manager Global Hotkey	F1-F	F1 + Dots 1-2-4

Contextual Help

If you ever find that you need help finding a keystroke you can always use the contextual help found on the BrailleSense notetakers. This help utility will give you a list of key commands you can perform based on your situation.

Step	Action	Keystroke
Open Contextual Help	Space + H	Space + Dots 1-2-5

Navigate to and Open a Drive

Once the File Manager is open, you can move to and open your drives such as Flashdisk, USB, SD, or the cloud sharing drives. Each drive is like its own separate container to hold files. Use the common navigation keystrokes to get to the drive you wish to open then press Enter to open the drive.

Step	Action
First letter navigation	Braille Character
Pan Braille display forward	Down Scroll Key
Pan Braille display back	Up Scroll Key
Move to Next Item	Space + Dot 4
Move to Previous Item	Space + Dot 1
Move to first item in a list	Space + Dots 1-2-3
Move to last item in a list	Space + Dots 4-5-6
Enter a Drive	Enter

Navigating Folders and Files

Now that you are in a drive, you can open or move to a folder or a file **using the navigation keystrokes previously listed**. There are several additional navigation keystrokes that make moving to folders and files easy.

Move to Parent Folder

The parent folder is one level up from the current directory. For example, if you have a folder called Level 2 inside a folder called Level 1, then Level 1 is the parent folder of Level 2.

Step	Action
Move to Parent Folder	Backspace

Move to Top Level Folder

The top-level folder is the folder or drive that contains all other items. For the BrailleSense notetakers, the top-level folder is the Flashdisk which contains the available drives.

Step	Action
Move to Top Level Folder	Space + Dots 1-2-5-6

Jump to first Folder or File in a List

When presented with a list of items you will find that, by default, folders are listed first in alphabetical order and will include the word "folder" after the name with speech. In braille, folders appear in quotation marks, while file names are not surrounded by quotation marks. After the folders comes the list of files in alphabetical order. If you have many folders and files in one spot you may want to jump to the beginning of the folders list or the files list. This will reduce the number of keystrokes when using first letter navigation.

Step	Action
Jump to first Folder or File in a list	Space + Dots 5-6

Move by 32 Items

You can choose to jump by 32 items at a time. This is often helpful if you find you have many files or folders that begin with the same letter.

Step	Action
Move up 32 items at a time	Space + Dots 1-2-6
Move down 32 items at a time	Space + Dots 3-4-5

Using the Menus

All actions within the File Manager can be done using key commands found in contextual help, the onboard help app found in the main menu of the BrailleSense, and at the end of the User Manual. While getting to know your BrailleSense it may take time to learn these key commands, so instead of using key commands you can complete these actions using the program menu.

Step	Action	Keystroke
Open the Program Menu	F2 or Space + M	Space + Dots 1-3-4
Navigate to desired sub-menu	Scroll or Shortcut Key	
Open desired sub-menu	Enter	
Navigate to desired command	Scroll or Shortcut Key	
Execute command	Enter	

Menu Shortcuts

The program menu includes a File, Edit, and View sub-menu, each with a list of commands. Each command includes a shortcut key which, when pressed, performs that command. For example, the first item in the menu is "File (f) pulldown". In this instance, the letter (f) is the shortcut key and pressing f will open the menu.

Hotkeys

While in the menu you can learn the hotkeys to perform actions. For example, in the File Menu there is an option to "Rename" which includes the hotkey "r" found in parenthesis, and the hotkey of "Enter-r". Using the hotkey Enter-r will open the Rename Dialog in this instance.

Folder and File Handling

Creating Folders

Within the File Manager you can create new folders in the Flashdisk, Google Drive, and Dropbox drives. You cannot create a new folder in OneDrive from the BrailleSense notetaker at this time.

Option 1: Using Hotkeys

Step	Action	Keystroke
Open the New Folder dialog	Hotkey: Enter - F	Enter + Dots 1-2-4
Type the Folder name		
Confirm folder creation	Enter	

Option 2: Using Menus

Step	Action	Keystroke
Open the menu	F2 or Space + M	Space + Dots 1-3-4
Open the File pulldown menu	Enter	
Navigate to "New Folder"	Scroll	Space + Dot 4
Open the New Folder dialog	Enter	
Type the Folder name		
Confirm folder creation	Enter	

Renaming Folders and Files

If you already have a folder or file created but wish to rename it then use the following steps, but please note that this will not work in OneDrive as their names cannot be changed.

Step	Action	Keystroke
Open the Rename dialog	Hotkey: Enter - R	Enter + Dots 1-2-3-5
Type the new Folder or File name		
Confirm name	Enter	

Alternatively, you can rename the folder or file from the menu using the following steps.

Step	Action	Keystroke
Open the menu	F2 or Space + M	Space + Dots 1-3-4
Open the File pulldown menu	Enter	
Navigate to "Rename"	Scroll	Space + Dot 4
Open the Rename dialog	Enter	
Type the Folder name		
Confirm name	Enter	

Selecting and Moving Files and Folders

Moving files and folders to different locations can be done using cut, copy, and paste commands. If you choose to "cut" a file, it will disappear from its original location once pasted. Alternatively, a "copy" command will create a separate copy of the file in the location you paste, leaving the original in place.

Please note, it is not possible to "cut" a file from one cloud drive to another. Instead, use the "copy" command then delete the original, if desired.

Cut, Copy, and Paste individual items

Step	Action	Keystroke
Navigate to item		
Copy item	Enter + C	Enter + Dots 1-3
Cut item	Enter + X	Enter + Dots 1-3-4-6
Paste item	Enter + V	Enter + Dots 1-2-3-6

When an item is being shown on the braille display and you wish to cut or copy that item then you can simply use the key command without having to select it. Once you choose the copy or cut command, navigate to the location you wish to move the file to and use the Paste command.

Selecting multiple items

There are several ways to select multiple items. You can choose multiple individual items, all items, or items in a multi-selection. When selecting multiple items, press Space then move to the next item you wish to select and press Space again. Repeat until all desired items are selected. The continuous selection choice allows you to start your selection and selects all items as you navigate to throughout the list.

Step	Action	Keystroke
Select multiple items	Space	
Select all items	Enter + A	Enter + Dot 1
Continuous Selection	Enter + B	Enter + Dots 1-2

Once the items have been selected you can use the standard Cut, Copy, and Paste commands.

Deleting Files and Folders

Delete a Single File or Folder

When acting on a single file or folder, placing that item in focus will allow you to perform that command without having to select that item using Space.

Step	Action	Keystroke
Navigate to item		
Delete item	Space + D	Space + Dots 1-4-5
To confirm deletion, press Enter or Y for Yes	Y	Dots 1-3-4-5-6
To cancel deletion press n, or press Space to change selection to No, then press Enter.	N	Dots 1-3-4-5

Delete Multiple Files or Folders

To delete multiple items, you will need to select these items then choose the delete command. Refer to the earlier section titled "Selecting multiple items" then use the Delete item command (Space – d).

Moving a File to USB Drive – Practice Exercise

Using the information in this training document we will practice moving a file from the BrailleSense Flashdisk (internal storage) to a USB.

Step 1: Insert a USB Drive

The first step is to insert a USB Drive into the BrailleSense notetaker. Depending on the model, you will have a USB Type-A port on the left and back panel of the notetaker, or you will only have two USB Type-C ports on the right panel. For this practice exercise it will not matter which type of USB drive you use, only that you have one and it is inserted into the device.

Step 2: Choose a file to move

Step	Action	Keystroke
From the main menu, open the File Manager	Shortcut key: F	Dots 1-2-4
Open Flashdisk	Enter	
Navigate to the Documents Folder	First Letter Navigation: D	Dots 1-4-5

Note: The first time you press a letter for first letter navigation it will take you to the first item beginning with that letter. Pressing that letter again will take you to the next item beginning with that letter, and so on. After jumping to items using first letter navigation, you can choose to continue using first letter navigation or you can scroll with the scroll keys located next to the braille cells, or you can use Space + Dot 4 to move to the next item and Space + Dot 1 to move to the previous item.

Step	Action	Keystroke
Open the Documents Folder	Enter	
Navigate to the file you wish to move	First Letter Navigation	
Once at the file you wish to move, copy the file	Copy: Enter + C	Enter + Dots 1-4

Note: At this point you can also choose to Cut a file using Space + X which places the file in the clipboard to paste later but will remove the file from its original location. The BrailleSense will announce in speech and braille when the Copy or Cut command has been pressed. If the file is particularly large you may get a status that gives you the progress.

Step 3: Navigate to where you will move the file and paste it

Step	Action
Navigate back to the flashdisk folder	Backspace

Note: Pressing Backspace will move you to the parent folder, or the folder that contains the one you were just in. At this point the braille will read "Documents folder" because you are back in the flashdisk but focused on the Documents folder.

Step	Action	Keystroke
Navigate to File Manager folder	Backspace	
Navigate to USB	First Letter Navigation: u	Dots 1-3-6
Open the USB Folder	Enter	
Paste the file	Enter + V	Enter + Dots 1-2-3-6

Note: Once you paste the file you will get a notification that the file has finished pasting and the file will be in the location you pasted it.

One other thing to consider is that instead of pressing the Backspace key to move to the parent folder you can simply jump to the File Manager folder using a hotkey and continue from there. This saves some keystrokes if you are multiple levels deep in the file manager and want to quickly get to all the available drives.

Step	Action	Keystroke
Navigate to File Manager folder	Hot key: Space + Dots 1-2-5-6	
Navigate to USB	First Letter Navigation: U	Dots 1-3-6
Open the USB Folder	Enter	
Paste the file	Enter + V	Enter + Dots 1-2-3-6

Disconnecting USB drives and SD cards

Before removing a USB drive or SD card, it is necessary to unmount the drive to prevent data corruption. This is like the "safely remove" or "eject" commands found on personal computers. If this step is not followed, the drive may not show all files when connected to the BrailleSense in the future. To unmount a USB drive or SD card:

Step	Action	Keystroke
Open "unmount" dialog	Backspace + Enter + U	Backspace + Enter + Dots 1-3-6
Select drive to unmount	Up / Down Scroll Key	
Unmount drive	Enter	

Using Cloud Storage in the File Manager

Overview

Documents contained in your connected Google Drive, OneDrive, and Dropbox accounts are accessible from within File Manager. The way you handle files and folders will be the same as they would on the flashdisk, with some exceptions, but the files are stored in the cloud rather than on the Flashdisk.

Before accessing your cloud storage drives you will need to first connect your account and be connected to the internet.

Opening a Cloud Storage Drive

Step	Action	Keystroke
From the main menu, open File Manager	F	Dots 1-2-4
Move to your desired Cloud Storage drive	Space + Dot 4	
Open the drive	Enter	

Locating Content

Using Google Drive:

After choosing "Google Drive" from the drive list, you will be presented with 3 options
1. My Drive: Contains the files and folders that you have created in your own Google Drive account
2. Shared Drives: For organizations with G Suite accounts, this will show entire drives that have been shared. For many users, this folder may not contain any files.
3. Shared with Me: This folder contains any files that have been shared by others on Google Drive.
4. Use the scroll keys to navigate this list, then press Enter to open the desired directory.

Using OneDrive:

After choosing "OneDrive" from the drive list, you will be presented with 2 options
1. My Drive: Contains the files and folders that you have created in your own OneDrive account
2. Shared with Me: This folder contains any files that have been shared by others in OneDrive.
3. Use the scroll keys to navigate this list, then press Enter to open the desired directory.

Using Dropbox:

After choosing "Dropbox" from the drive list, you will be placed into Dropbox with a list of your available files and folders.

Reading Google files on the BrailleSense

Although Google apps including Docs, Slides and Sheets are accessible, they are not designed for braille users. It is often easier to read these files in the BrailleSense Word Processor so that simple navigation and familiar keystrokes are available. You can identify these Google formats within the BrailleSense Google Drive app as they are not folders but also do not have a file extension.

When you press "Enter" to open a Google Docs, Sheets, or Slides file, it will be converted and opened within the BrailleSense Word Processor. This means it can be read and navigated like all other standard documents. However, since you are not working in Google applications, changes made to these documents do not show up in real time for others who may be viewing the document. A new version of the document will be uploaded when the save command (Enter + S) is used.

Sharing a File

Creating a Share Link

There will be times when a BrailleSense user will want to share a file. There are multiple ways of doing this, including creating a share link from Google Drive and Dropbox, just as you would from a computer. This link can then be sent using a chat app, email, or some other method.

One Drive does not currently support creation of a share link.

Step	Action	Keystroke
Navigate to the desired file		
Create Share Link	Backspace + L	Backspace + Dots 1-2-3
Copy the link	Enter + C	Enter + Dots 1-4

Please note that if you select multiple files before creating a share link that only one file will be available through the share link.

Share through Email

In addition to sharing through a download link, you can also easily share documents by sending them as email attachments. This is made easy through the "Send to" dialog. Unlike the share link, you can select multiple files to share. To attach cloud storage files to an email, use the following steps.

Step	Action	Keystroke
Navigate to the desired file or files	Space to select multiple	
Open "Send to" dialog	Enter + S	Enter + Dots 2-3-4
Confirm Email as Target	Enter	

Once the files are attached, complete the email as regular.

Uploading Files to Cloud Storage

You can upload copies of existing files to your cloud storage drives directly from the file manager by using Copy and Paste. Please note that you cannot use Cut and Paste between cloud storage drives and the Flashdisk, and OneDrive does not support pasting files from the internal BrailleSense File Manager.

Step	Action	Keystroke
Find desired file(s) to copy. Select files if needed.		
Copy	Enter + C	Enter + Dots 1-4
Move back to drive list (contains Flashdisk, Google Drive, etc.)	Backspace (may need to press several times)	
Navigate to desired drive	Scroll Keys	
Open Drive	Enter	
Navigate to the folder where you want to place the selected files		
Paste files	Enter + V	Enter + Dots 1-2-3-6

Email Overview and Navigation

Overview

The Email application on the BrailleSense allows a user to read, write, reply to, and forward emails from several accounts. Files can be attached and saved. This document will provide a basic overview of navigating and using the application.

Opening Email

Step	Action	Keystroke
Move to main menu	F1	
Open Email	E	Dots 1-5
Or use Email hotkey from anywhere on the BrailleSense	F1 + E	F1 + Dots 1-5

If an email account has already been created, the BrailleSense will say "Getting new message list." After a few seconds, the list of emails in the inbox will be displayed. If an email account has not already been created refer to the Email Setup documentation beginning on page 20.

Navigation

Navigating the Inbox

The list of emails appears as a vertical list, similar to the list of applications on the main menu. The BrailleSense will announce the message's subject, sender, date, time and recipient. Unread emails will show a hyphen, dots 3-6, at the beginning of the braille display and BrailleSense will say "unread."

Step	Action
Move to previous email	Space + Dot 4
Move to next email	Space + Dot 1

Navigating between Accounts

The BrailleSense email application can accommodate multiple email accounts. If you have added more than one account, you will be given a list of Accounts you can switch between.

Step	Action
Navigate to Account Name	F3
Move to desired account	Space + Dot 1 or Space + Dot 4
Move to chosen Account Inbox	F3

Additionally, you can use hotkeys to quickly move between accounts.

Step	Action
Move to previous account	Backspace + Dots 1-2-6
Move to next account	Backspace + Dots 3-4-5

Navigating to other folders

The inbox is the location of emails that have recently been received and that have not been moved to other folders. Other folders may include sent messages, archived messages, spam, trash, etc. Use the following steps to locate messages in a different folder. This will be useful if a message was accidentally deleted, or if you wish to reread a message that has already been sent.

Step	Action
From the inbox, move to the list of folders	Space + F3
Move through the list of folders to find the desired folder	Move or Scroll, or first letter navigation
Open the folder to view the list of messages inside	F3
Scroll through messages	Scroll keys or Space + Dot 1 and Space + Dot 4

Reading Messages

Automatic Speech Reading

If you have speech enabled, the email will automatically be read out loud and the braille will advance to match the speech. If speech is not enabled there will be no speech and the braille will not automatically advance.

Step	Action
Open currently selected message	Enter
Stop Reading	Backspace + Enter
Close message	F4

If speech is not enabled, opening an email will place you at the beginning of the email and you will use keystrokes to navigate the email.

Navigating an Email with Keystrokes

Navigation in an email uses the same keystrokes as the Word Processor. If you have speech turned on, then speech will read the entire section. For example, moving by paragraph will read aloud the entire paragraph with speech turned on, but the braille will advance directly to the next paragraph.

Step	Action
Move to next line	Space + Dot 4
Move to previous line	Space + Dot 1
Move to next paragraph	Space + Dots 5-6
Move to previous paragraph	Space + Dots 2-3
Move to next word	Space + Dot 5
Move to previous word	Space + Dot 2
Move to next letter	Space + Dot 6
Move to previous letter	Space + Dot 3
Jump to top	Space + Dots 1-2-3
Jump to bottom	Space + Dots 4-5-6

Using the scroll keys, found on the left and right of the braille cells, will move as defined by the Left scroll buttons and Right scroll buttons settings in Global options. For example, the left scroll keys could move by sentence while the right scroll keys can simply scroll the display to show the next text.

Navigating an Email with Scroll Keys

You can navigate an email using the scroll keys found to the left and right of the braille cells. By default, the scroll keys on both sides of the device will simply pan the braille display. In other words, pressing the down scroll key on the left or right side will move to the next set of braille characters. If you have chosen a different setting for the left and right scroll keys in the Global Options, then you will move by those respective set of text.

Opening Links within an Email

Email messages frequently contain links. Before activating a link, use the cursor routing key to move the cursor near the beginning of the link.

Open link in Web Browser

Step	Action	Keystroke
Open link in Web Browser	Enter + L	Enter + Dots 1-2-3

Open link in Android App

If you are given a link that is associated with an app, then you can use a different keystroke to directly open the app and go to that information. For example, if you receive a link to a Zoom meeting you can directly open the Zoom app and go to that meeting.

Step	Action	Keystroke
Open link in Android app (for example, a link to a Zoom meeting)	Backspace + L	Backspace + Dots 1-2-3

Deleting Emails

Delete Single Email

Step	Action	Keystroke
From inbox, navigate to desired email	Space + Dot 4 / Space + Dot 1	
Delete message	Space + D	Space + Dots 1-4-5
Braille Sense asks, "Delete Message?" Choose yes or no	Y for Yes, or N for No	Dots 1-3-4-5-6 for Yes or Dots 1-3-4-5 for No

Delete Multiple Emails

You can choose to delete multiple emails at one from the inbox. You will need to first select the emails you wish to delete, then perform the same Delete command used for single emails.

Step	Action	Keystroke
Navigate to first desired email	Space + dot 4 / Space + dot 1	
Select first email	Space	
Repeat as desired		
Delete message	Space + D	Space + Dots 1-4-5
Braille Sense asks, "Delete Message?" Choose yes or no	Y for Yes, or N for No	Dots 1-3-4-5-6 for Yes or Dots 1-3-4-5 for No

When choosing which emails to select you can also use the "Select all" command: Enter + A (Enter + Dot 1).

Receiving, Writing, Replies, and Attachments

Receiving New Message

Load New Emails

The BrailleSense will check for new messages when you navigate between folders or accounts but does not automatically check to see if new emails have arrived otherwise. For example, if you stay within your inbox then you will not automatically receive new emails.

Step	Action	Keystroke
Navigate to the Inbox or other desired folder		
Get new messages	Enter + N	Enter + Dots 1-3-4-5

Load More Emails

By default, the BrailleSense will load the first 32 most recent emails. You can load additional emails with the following keystroke:

Step	Action	Keystroke
Load more emails	Backspace + P	Backspace + Dots 1-2-3-4

Saving Received Attachments

Use the following steps to save an attachment from an email you have received. To easily know if an email has an attachment, BrailleSense will speak the number of attachments from the message list. The letter "A" for attachment will also be shown on the braille display.

Step	Action
Open a message containing attachments.	Scroll, then Enter
Move to attachment list	F3 until you hear "attach"
Optional: select several attachments	Space on each file you want to save
Save attachment	Enter
Save to "download" folder on flashdisk	Enter

Step	Action
Save to another folder	Space to change to "Yes," then Enter.
Find desired folder to save	File manager navigation (Backspace, Scroll and Enter)
Note: DO NOT open the folder you want to save in. You must find the folder and leave your cursor on it, but not open the folder	
Select folder for saving	Enter
Save file	Enter

Save attachments directly from message list

If you know what is attached and you are sure you wish to save it, you can save attachments directly from the message list without opening the email.

Step	Action	Keystroke
When focused on a message with attachments, save all attachments	Backspace + F	Backspace + Dots 1-2-4
Save to downloads folder	Enter	
Change folder for saving	Space, then Enter	
If needed, find the folder where you wish to save	File manager navigation commands	
Select folder for saving	Space	
Save	Enter	

Writing an Email

Use the following steps to write a new email message. If specific steps, such as adding someone to the "BCC" field or attaching a file, are not needed, those steps can be skipped.

Step	Action	Keystroke
From message list, write a new message	Enter + W	Enter + Dots 2-4-5-6
BrailleSense announces "To:". Type email address of the recipient		
Move to CC field	F3	
Enter email address if needed		
Move to BCC field	F3	
Enter email address if needed		
Move to Subject	F3	
Type subject line		
Move to message body	F3	
Write message. Editing commands can be used.		
Steps to attach file(s) are shown in the below table		
Send message	Enter + S	Enter + Dots 2-3-4

Editing and Navigating the Message

The following options are available while writing an email and work the same as in the Word Processor.
- Navigate by Word, character, line, sentence, and paragraph
- Selecting text
- Cut, copy and paste
- Spell check

Attaching Files to an Email

Adding One or More Attachments

While writing a message, use the following steps to attach a file:

Step	Action
Open attachment dialog	Enter + F
By default, you are placed in the "upload" folder. Use File Manager navigation techniques to find files to attach	Backspace moves up a folder, Enter opens a folder
Place cursor on desired file. Multiple files can be selected using space	
Attach file to email	Enter

Removing Attachments

If you accidentally select the wrong file to attach in an email, these steps will delete the attachment from the email.

Step	Action	Keystroke
Navigate to the "Attach" field, if necessary	F3	
Move to the attachment you wish to remove	Space + Dot 1 / Space + Dot 4	
Delete the attachment	Space + D	Space + Dots 1-4-5
Confirm Deletion	Y for Yes or N for No	Dots 1-3-4-5-6 for Yes or Dots 1-3-4-5 for No

Replying to Emails

Use the following steps to reply to an email:

Step	Action	Keystroke
Navigate to a message	Scroll keys	
Reply to message	Enter + R	Enter + Dots 1-2-3-5
Or Reply All, to send the reply to everyone who received a copy of the original message	Backspace + R	Backspace + Dots 1-2-3-5
Write message		
Send message	Enter + S	Enter + Dots 2-3-5

When replying, the cursor is placed at the top of the email. Below this, a copy of the original message is included. Normal editing commands, such as those available when writing a new email or writing a document, can also be used when creating a reply. Attachments can be added. If other fields, including subject, to, and CC need to be changed, use Space + F3 until focus moves to the correct field.

Forwarding an Email

Forwarding a message allows a message to be forwarded to another person so that they can read the entire message. The message can be edited, and files can be attached. To forward an email:

Step	Action	Keystroke
Locate email to forward using scroll keys or other navigation commands		
Forward a message	Enter + F	Enter + dots 1-2-4
Move between to, CC, BCC, subject, and the message body. Enter text as needed	F3	
Send message	Enter + S	Enter + dots 2-3-4

If the original message contained attachments, they will be included in the forwarded email. Additional attachments can be added with Enter + F (dots 1-2-4).

Working with Contacts

Send an email to someone in your address list

Follow these steps to create an email and select the recipient from your contacts list.

Step	Action	Keystroke
Write new message	Enter + W from message list	Enter + Dots 2-4-5-6
From "to" field, look up address from contacts	Enter + L	Enter + Dots 1-2-3
BrailleSense says "Search for address."	Type all or part of the person's name, then press Enter.	
Or show all contacts	Enter (without typing text)	
Navigate contact list	Scroll	
Select contact and add their address to the "to" field	Enter	
Or select multiple contacts before pressing Enter	Space on each contact you want to email	
If needed, repeat steps 3-7 from CC or BCC fields	F3 to move between To, CC, and BCC	

Add someone to your contact list from the inbox

You may want to add someone new to your contacts. If you have received an email from that person, use the following steps to add them to your address list. This will make emailing them much easier in the future.

Step	Action	Keystroke
Find email from the person you wish to add	Scroll	
Add address to contacts (Note: message should not be open. You should be in the inbox or other message list)	Enter + I	Enter + Dots 2-4
BrailleSense tries to fill in known contact information, including person's name and email address		
Choose if this is the person's home or work email	F3 to desired choice	
Add to contacts	Enter	

The new contact can now easily be added when writing a new message.

Modifying and deleting an email account

Modifying an email account

Sometimes, it is necessary to modify the settings for an email account. This is necessary, for example, when the account password has changed. Please note: you cannot modify an IMAP or POP3 account into an OAuth account. If you wish to change your account to OAuth, you will need to delete your existing account and recreate the account. If you are moving from POP3 to OAuth it is recommended that you backup your emails as deleting the POP3 account will delete all emails and they cannot be recovered.

The modify dialog is very similar to the dialog shown when creating a new email account, except that the values are already filled in. To modify an existing email account:

Step	Action	Keystroke
Open email	F1 + E	F1 + Dots 1-5
Open the Accounts Manager	Enter + M	Enter + Dots 1-3-4
Select the account to modify	Scroll	
Activate the "modify" button	Enter + M	Enter + Dots 1-3-4
Find the setting to modify, E.G., password	F3	
Enter/change setting value		
Confirm new settings	Enter	
Close Accounts Manager	F4	

Delete an Email Account

The button to delete an email account is located within the Accounts Manager dialog.

Please Note: POP3 email delivers an email to your device and removes it from the server. Therefore, if you delete your POP3 account you will also delete all your emails. We recommend you create a backup before deleting POP3 email accounts. This does not apply to IMAP and OAuth.

Step	Action	Keystroke
Open the Accounts Manager	Enter-M from message list	Enter + Dots 1-3-4
Select account to delete	Scroll	
Delete account	Space + D	Space + Dots 1-4-5
You will be asked if you are sure you wish to delete the account.	Press Y for yes or N for No	Dots 1-3-4-5-6 for Yes or Dots 1-3-4-5 for No
Close Accounts Manager	F4	

Using the Bookshare Download App for books

Overview

The Bookshare Download application on BrailleSense makes it very easy to locate and download books. Before using this app, you must already have an active Bookshare.org account. Please refer to the setup instructions on page 23 if you have not already signed into your Bookshare account on the BrailleSense.

Opening Bookshare Download

Step	Action	Keystroke
Move to main menu	F1	
Books shortcut key: k	K	Dots 1-3
Move to Bookshare Download	Space + Dot 4 until reached, then Enter to open	

Alternative: Global Hotkey

You can also use the global hotkey to open the Bookshare Download app from anywhere on your device.

Step	Action	Keystroke
Global Hotkey	F1 + K	F1 + Dots 1-3

Navigation

Interface

The interface of Bookshare download contains two parts: the search dialog and the menu. The search dialog is the default interface and contains fields for Search Content, Search Type, and Title among other options. The menus contain the ability to adjust the app options, sign out, and includes actions for reading lists.

Navigating Search Dialog

Navigating between the options in the search dialog is relatively simple.

Step	Action
Move to next item	F3
Move to previous item	Space + F3

Navigating Menus

Navigating the menus in the BrailleSense is consistent across all apps.

Step	Action
Open Menu	F2
Navigate to next item	Space + Dot 4
Navigate to previous item	Space + Dot 1
Enter a pulldown menu, or choose an action	Enter
Move to previous menu / exit menu	F4

Searching for Content

By default, you will begin in search area when you first open the application and will be placed directly into the "Search Content" field. This field allows you to choose between the following options:

1. Books
2. Periodicals
3. Reading List
4. Download History

Use the following keystrokes to navigate between these options:

Step	Action
Move to next item	Space + Dot 4
Move to previous item	Space + Dot 1

Searching for Books

"Books" is the first option in the Search Content field by default. If you wish to search for a book then continue on, otherwise jump to the Search Content instructions you desire.

Search Type

In the search type field, you will be given the option to choose between the following options:

1. Title
2. Author
3. ISBN
4. Keyword
5. Category

Step	Action
Navigate to Search Type	F3
Move to next Search Type option	Space + Dot 4
Move to previous Search Type option	Space + Dot 1

Search by Title, Author, ISBN, and Keyword

After choosing Search Type, then you can they type the search term you desire. If you wish to search by Title, Author, ISBN, or Keyword then the following steps are identical.

	Action
With your desired Search Type selected, Navigate to the search edit box	F3
Type the search query	
Begin search	Enter

Search by Category

If you have chosen a Search Type of category instead of the other options, then use the following instructions to select a category.

Step	Action
Navigate to category list	F3
Move to next category option	Space + Dot 4
Move to previous category option	Space + Dot 1
Jump with first letter navigation	Type character

Once your find your desired category, begin the search, and locate your desired book. The app will show the first 50 results by default. You can load more books with the following instructions

Step	Action
Jump to bottom	Space + Dots 4-5-6
Load more books	Space + Dot 4

Navigating Search Results

Once you begin your search you will be given a list of book titles based on your search criteria.

Step	Action
Move to next book	Space + Dot 4
Move to previous book	Space + Dot 1
Jump with first letter navigation	Type character
Jump to top	Space + Dots 1-2-3
Jump to bottom	Space + Dots 4-5-6

Book Details

If you wish to get more details about the book, including the Title, Author, ISBN, Synopsis, Category, Language, Publisher, Publish Date, and Format, then use the following instructions.

Step	Action	Keystroke
Navigate to desired book		
Open Book detail dialog	Enter + I	Enter + Dots 2-4
Move to next detail	Space + Dot 4	
Move to previous detail	Space + Dot 1	
Jump to top of details	Space + Dots 1-2-3	
Jump to bottom of details	Space + Dots 4-5-6	
Close details dialog	F4	

Downloading a Book

Once you have found the book you wish to download, simply press Enter on it to begin the download. By default, books will be downloaded and unzipped to the Bookshare folder in the Flashdisk of the BrailleSense. You can change this option, as well as the Format of the file and the download location.

Download a Book

Step	Action
Download book	Enter

Changing Download Options and Format

You can change what happens once you download a book, as well as the Format of the file. The options for the Download setting includes "Download Only", "Download and Unzip", and "Download, unzip, and open". The Format settings will change the default format of the title you wish to download.

Step	Action	Keystroke
Open Options dialog	Enter + O	Enter + Dots 1-3-5
Change Download setting	Space + Dot 4 / Space + Dot 1	
Navigate to Format	F3	
Change Format	Space + Dot 4 / Space + Dot 1	
Save Settings	Enter	

Change Download Location

You can change the download location from the Bookshare folder with the following steps.

Step	Action	Keystroke
Open Options dialog	Enter + O	Enter + Dots 1-3-5
Navigate to Download Path	F3	
Open Folder dialog	Enter	
Move to parent folder	Backspace	
Navigate to desired folder using standard File Manager navigation		
Select the desired folder that downloads will be placed in	Space	
Save settings	Enter	

Reading Books

The Bookshare Download app is an app specifically for downloading books. Reading books is handled by other applications that depend on the type of file. For example, if the book is in DAISY format it can be read with our DAISY player while a Word format book will be read by our Word Processor.

Please refer to instructions on reading with the appropriate application, based on the type of book you have downloaded.

Reading Lists, Periodicals, and Download History

Accessing Books in Reading Lists

Reading lists allow a teacher or student to create a list of books they are interested in. This might include novels for a semester, or a list of textbooks. These instructions assume that at least one reading list has already been created and explains how to locate the reading list and download a book from that list.

Step	Action	Keystroke
Open Bookshare Download app		
From "Search content" list, choose reading list	R	Dots 1-2-3-5
Navigate to Reading List	F3	
Find desired reading list	Space + Dot 1 and Space + Dot 4	
Open reading list	F3	
Navigate Reading list	Scroll, or Space + Dot 1 and Space + Dot 4	
Download book	Enter	

Other commands, such as the book detail dialog, are available from the reading list, just as they would be when searching the entire Bookshare collection.

Creating Reading Lists

Depending on the type of account, you may be able to create additional reading lists from the Bookshare Download app. You can follow these instructions to create your own reading list.

Step	Action	Keystroke
Open Create Reading List dialog	Enter + R	Enter + Dots 1-2-3-5
Type the desired list name		
Navigate to Description	F3	
Type description, if desired		
Navigate to Access	F3	
Cycle through Access options	Space	
Save Settings	Enter	

Add Books to Reading Lists

If your account supports it, you can add and remove books to your reading lists.

Step	Action	Keystroke
Navigate to book, if necessary		
Open Add Title To Reading List dialog	Enter + A	Enter + Dot 1
Navigate to desired list	Space + Dot 1 / Space + Dot 4	
Confirm Selection	Enter	

Delete Book from Reading List

You can remove books from your reading lists if your account supports it.

Step	Action	Keystroke
Open the Reading List		
Navigate to desired book		
Delete book from list	Space + D	Space + Dots 1-4-5

Finding and downloading Periodicals

The Bookshare collection contains up-to-date editions of many common and regional newspapers and magazines. They can be downloaded easily on the BrailleSense, making it easy for students to do research or keep up with current events. To locate a periodical:

Step	Action
Choose "periodicals" as the search content	Space + Dot 1 / Space + Dot 4
Move to search box	F3
Type name of periodical, or leave blank to see all periodicals on Bookshare	
Begin search	Enter
Navigate search results	Scroll or first letter navigation
Open desired periodical	F3
Download issue	Enter

By default, the newest issue of the periodical is displayed at the bottom of the results list. So, in most cases, it is best to press space + dots 4-5-6 to move the cursor to the bottom of the list of issues to find the most recent issue. If you would like to discover more information about the periodical, including its publication and revision date, use the book detail command, Enter + I (Enter + dots 2-4).

Download History

If you have multiple devices that allow you to download Bookshare books, then an easy way to find books on other devices is to use the Download History to find previously downloaded books.

Step	Action
Open Bookshare Download app	
In Search Content, move to Download History	Space + Dot 4
Navigate to Download History results	F3
Navigate results	Scroll or first letter navigation
Download Book	Enter

Using the DAISY Player

Overview

The DAISY Player application on the BrailleSense 6 allows easy navigation of books in DAISY format, such as books from Bookshare.org. The advantage of DAISY format is that it makes moving between sections, chapters, pages, and other elements extremely easy. The DAISY Player can play both text and audio DAISY books. Note that this application cannot play protected content, such as books from NLS BARD or Learning Ally.
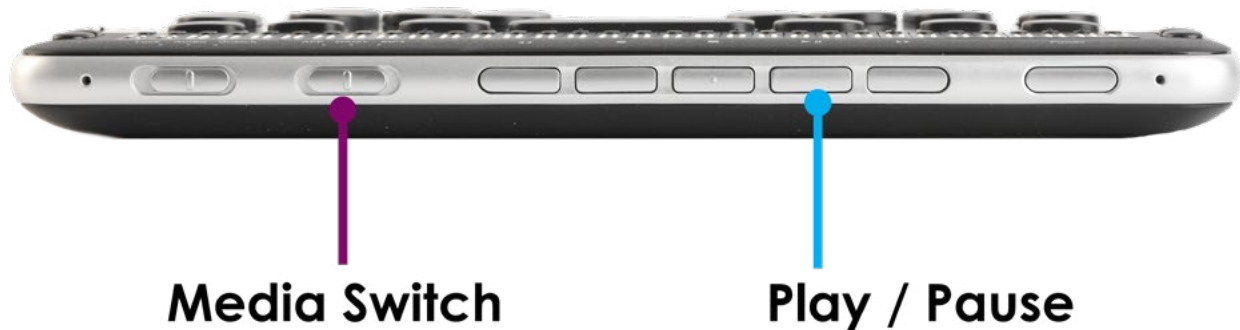
Opening DAISY Player

Open DAISY Player through the main menu

Step	Action	Keystroke
Ensure the main menu is in focus	F1	
Open the books menu	K	Dots 1-3
Open DAISY Player	Enter	

Alternative 1: Media Switch

Media Switch   Play / Pause

You can open the DAISY Player by moving the media switch to the center position, labeled "DAISY", then pressing the Play button on the front panel.

Alternative 2: Global Hotkey

Additionally, you can open the DAISY Player from anywhere in the BrailleSense using the global hotkey.

Step	Action	Keystroke
Global Hotkey	F1 + D	F1 + Dots 1-4-5

Opening a DAISY Book

Opening a DAISY book is different than opening a file in other programs because DAISY books are comprised of many files contained within a single folder. Instead of selecting a file, you will need to select a folder.

Before following these steps, the book should be "unzipped". If you downloaded the book through the Bookshare Download application and have not changed the download settings this will already be done for you.

When DAISY Player opens, it places you in the "open dialog", similar to the dialog used in the Word Processor. It places you in the DAISY folder on the flashdisk, as this is an easy place to keep DAISY books.

Step	Action
Open the DAISY Player	
Navigate to the folder containing DAISY files using normal File Manager navigation commands. This folder will usually be the name of the book.	
Select DAISY folder (tells BrailleSense that all files in that folder are part of the book)	Space
Open book	Enter

Note: Do NOT open the folder containing the book. The space key should when the name of the folder is spoken and shown.

Reading with Scroll Keys

The simplest way to read a DAISY book in the DAISY Player is using the scroll keys to the left and right of the braille cells. Depending on your Global Settings, you may or may not have speech when using the scroll keys.

Scroll Voice On/Off

The Scroll Voice setting determines if speech is turned on or off when using the scroll keys throughout the device, including the DAISY Player.

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to Scroll Voice	Shortcut key: S	Dots 2-3-4
Toggle On/Off	Space	
Save Settings	Enter	

Speech On/Off

Additionally, you can turn speech on and off. If the Scroll Voice is set to on, but Speech is turned off there will be no speech output.

Step	Action
Toggle Speech On/Off	Backspace + F2

Adjust Scroll Increments

You can adjust how far you will move when using the scroll keys, and the left and right keys can behave differently. For example, the left scroll keys can move by paragraph while the right scroll keys can simply scroll the display.

Step	Action	Keystroke
Open Global Options	Space + O	Space + Dots 1-3-5
Navigate to "left scroll buttons"	L until reached	Dots 1-2-3
Toggle to desired setting	Space	
Navigate to "right scroll buttons"	R until reached	Dots 1-2-3-5
Toggle to desired setting	Space	
Save settings	Enter	

Reading a DAISY book with Media Keys

The BrailleSense makes it easy to navigate by chapter, section, page, and other elements within a DAISY book. The options available will vary by book, as different types of markups are used.

Automatic Reading

When a DAISY book opens, it automatically begins reading if you have Speech turned on. If Speech is turned off automatic reading does not immediately begin. Use Space to play and pause audio.

Step	Action
Play / Pause Speech Reading	Space

Using Media Keys to Read a Book

The media buttons on the front panel of the BrailleSense can be used to play and navigate a book in the DAISY Player. To enable this feature, the "media mode switch" should be in the middle position. This is the second switch from left on the front panel of the BrailleSense. When placed in this position, BrailleSense will announce "DAISY mode".

There are five media buttons on BrailleSense. The one in the center has a bump on it for easy identification. Using these keys, rather than some of the navigation commands, may be easier to remember.
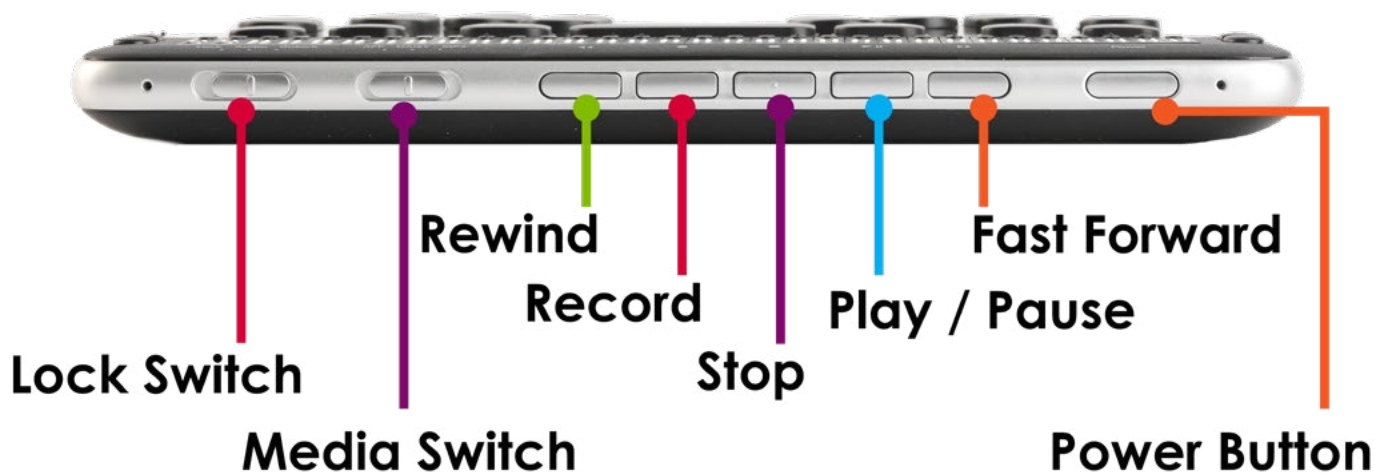
Play / Pause Button

The directly button to the right of the button with a bump is the "play/pause" key. Press this button to begin playing a book with speech. If speech is not turned on, then pressing this button will do nothing. Press it again to pause.

Selecting how far to move

DAISY elements can be selected by pressing the Record button, found immediately to the left of the center button. It will cycle through available DAISY levels, such as page, heading 1, etc.

Move forward and backward by desired element

To move by the selected element, use the Rewind and Fast Forward keys to move to the previous element and next element, respectively. The Rewind key is furthest to the left, and the Fast Forward button is furthest to the right.

Navigating with Keystrokes

Choose how to navigate

To discover the possible navigation types within a DAISY book:

Step	Action
Move to next navigation level	Dots 5-6
Move to previous navigation level	Dots 2-3

Note: navigation level refers to how far you will move. The higher the number, such as level 1, the further you will move in a book. Level 1 may be parts or sections of a longer book. Heading 2 could be chapters and heading 3 could be subsections within a chapter. If you want to move forward through smaller sections of a book, use the lowest available heading option. Page and phrase will typically appear in this list in addition to heading levels.

Navigate by Chosen Level

Step	Action	Keystroke
Move forward by selected amount	Dot 6	
Move back by selected amount	Dot 3	
Announce current location in book, including heading level and name of section/chapter	Enter + W	Enter + Dots 2-4-5-6

Move by page

Note: Page will appear in the navigation elements discussed previously, but specific page movement commands are optional and may be easier.

Step	Action
Previous page	Space + Dots 1-2-6
Next page	Space + Dots 3-4-5

Go to Page

Use this function to navigate directly to a specific page by typing its number.

Step	Action	Keystroke
Open "Go to page" dialog	Enter + G	Enter + Dots 1-2-4-5
Type page number		
Move to page	Enter	

Find

In a text-based DAISY book, you can search for a particular word or phrase, similar to searching in the Word Processor.

Step	Action	Keystroke
Open find dialog	Space + F	Space + Dots 1-2-4
Type search term		
Begin search. Cursor moves to the location of the search result	Enter	
Find next instance of term	Enter + F	Enter + Dots 1-2-4

Other navigation commands

It is possible to move by word, character, sentence, paragraph, or to move to the top or bottom of a DAISY book in text format. These commands are the same as reading other files in the Word Processor, Email, etc. Please refer to these commands in Reading and Listening in the Word Processor beginning on page 29.

Auto Scroll

The auto scroll feature enables the braille display to automatically move to the next line of braille without the need to press a scroll key.

Step	Action
Start or stop auto scroll	Up Scroll + Down Scroll buttons
Increase speed of auto scroll	Space + Dot 6
Decrease speed of auto scroll	Space + Dot 3

Other functions

It is possible to copy/paste text from the DAISY Player to other programs on the BrailleSense using select, copy, and paste commands. This makes it easy to refer to specific pieces of information later.

Exiting DAISY Player

Step	Action	Keystroke
Close DAISY Player	Space + Z	Space + Dots 1-3-5-6
BrailleSense asks "Exit DAISY Player, are you sure?"	Y for Yes or N for No	Dots 1-3-4-5-6 for Yes or Dots 1-3-4-5 for No

When exiting, your place in the book is remembered. Next time you open that book, it will begin playing from where you left off.

Changing DAISY Player Voice Settings

The DAISY Player uses different voice settings from the rest of the BrailleSense. This is useful, for example, for people who might typically use a fast speech rate, but who want a slower voice to help them concentrate on a book while reading. The voice settings are in the "voice settings" dialog.

To adjust voice options:

Step	Action
Move to program menu	F2
Open file menu	Enter
Open voice settings	Space + Dot 4, then Enter
Adjust option	Space + Dot 1 and Space + Dot 4
Move between options	F3
Save options	Enter
Close settings without saving changes	F4

A few notes about settings within this dialog:
- Changing settings in this dialog only changes the voice heard when reading a DAISY book
- The "auto play" setting determines if a book automatically begins to play when it is opened. If you would like to press play to begin content, change this option to no.
- The "mark alert" determines how you are notified when you reach a bookmark that you have set previously.
- The "no" option ignores marks when playing. "Message" will interrupt reading to tell you that you have reached a marked location. The "beep" option will sound a beep but continue to read.

Setting and Moving to Bookmarks

Bookmarks allow you to mark specific locations while reading that you may wish to return to later. They are saved when books are closed, so you can always find your marks within a book.

Setting a mark

Step	Action	Keystroke
Create a mark at current cursor position	Enter + M	Enter + Dots 1-3-4
BrailleSense says "enter mark name". Type a number for the mark. Begin with 1 if this is your first mark.		
Insert mark	Enter	

Moving between marks

Marks will appear in the list of DAISY elements. To move to the previous or next mark:

Step	Action
Select "mark" as the movement unit	Space + dots 5-6 until "mark" is spoken
Move to next mark	Dot 6
Move to previous mark	Dot 3

Jumping to a specific mark

If you know the number of a mark that you would like to jump to, you can move quickly to that specific mark.

Step	Action	Keystroke
Open "jump to mark" dialog	Enter + J	Enter + Dots 2-4-5
Type number of mark		
Move cursor to mark location	Enter	

Address Manager

The Address Manager on the BrailleSense is similar to the contacts app on other phones and tablets. It allows you to collect and look up information for contacts and easily email them.

Opening Address Manager

Step	Action	Keystroke
Open Address Manager from anywhere on BrailleSense	F1 + A	F1 + Dot 1

The Address Manager is located within the Organizer menu. It can be launched by opening the organizer menu and pressing Enter on Address Manager as well.

Adding a contact

To add a new contact to your BrailleSense:

Step	Action	Keystroke
Add new contact	Enter + I	Enter + Dots 2-4
Select account (if unsure, leave at current setting)	Space + Dot 1 & Space + Dot 4	
Move to contact information	F3	
Type last name		
Scroll through fields	Space + Dot 1 and Space + Dot 4	
Save contact	Enter	
Optional: Add memo	F3, then type	
Optional: If memo was added, save contact	F3 to "add button", then Enter	

Notes:
- The "select account" step is necessary for syncing with Google Contacts. You may have several options in this list, or only one.
- It is not necessary to fill in each field. Skip fields that you do not wish to complete
- The "Memo" field lets you add additional notes on a contact. It is a multi-line edit box, so you can press Enter to create a new line. Enter text as in Word Processor. This field can be skipped

Searching for a contact

When the Address Manager first opens, you are placed in the Search Address form. To view all contacts on BrailleSense, press Enter without adding any additional information and all contacts will be displayed. To search for a contact:

Step	Action	Keystroke
Search for address	Enter + S	Enter + Dots 2-3-4
Optional: Enter all or part of last name		
Scroll between fields	Space + Dot 1 and Space + Dot 4	
Enter information into any field		
Begin search	Enter	

Notes:
A. You can enter a full name, or a part of a name
B. You can fill in as many or as few fields as you prefer

Navigating search results

Step	Action
Next result	Space + Dot 4
Previous result	Space + Dot 1
View contact information	Enter
Read contact information	Scroll keys
Return to list of search results	Space + F3

Emailing a contact

From the contact information:

Step	Action
Navigate to email address	Down scroll button
Send email	Enter
Email app opens, with the contact's email address in the "to" field	

Modifying a contact

It is sometimes necessary to modify a contact. For example, if someone's email address changes, you will want the new one to be their default address. Follow these steps from the list of search results.

Step	Action	Keystroke
Find contact to modify	Space + Dot 1 & Space + Dot 4	
Modify contact	Enter + M	Enter + Dots 1-3-4
Navigate and input information as you did when creating a new contact		
Save changes	Enter	

Deleting a contact

From the search results list:

Step	Action	Keystroke
Navigate to contact to delete	Space + Dot 1 & Space + Dot 4	
Delete contact	Space + D	Space + Dots 1-4-5
BrailleSense asks if you are sure you want to delete.	Enter for yes, or Space then Enter for No	

Color Reader

The color reader app on BrailleSense makes it easy to identify the color of an object or piece of clothing using the camera on the back of BrailleSense.

Opening Color Reader

When the app opens, the first item you are placed on is the "Capture Image" button.

Step	Action	Keystroke
Open Color Reader from anywhere on BrailleSense	F3 + R	F3 + Dots 1-2-3-5

Alternative: Open through Menus

The Color Reader can also be opened from the Extras menu.

Step	Action	Keystroke
From the Main Menu, Open Extras	Shortcut Key: X	Dots 1-3-4-6
Open Color Reader	Shortcut Key: C	Dots 1-4

Identifying a color

When the Color Reader opens, you are placed on the "Capture Image" button. This will take a picture and say the color in the picture. Press Enter to take the photo and hear the color. To take another picture, press F3 until you find the "Capture Image" button again, then press Enter.

Turning on flash

In low light situations, you may want to have the flash on to allow more light in the picture.

Step	Action
Move to flash button. You will be told if flash is on or off	F3
Turn flash on or off	Enter
Move back to the capture image button	Space + F3
Take new picture for recognition	Enter

Picture tips

1. Hold the BrailleSense about 12 inches from the object to recognize
2. If using the 32 cell BrailleSense, hold it to the left, as the camera is near the right edge
3. If results seem inaccurate, try to add more light

Document Reader

The Document Reader application on the BrailleSense makes it easy to read and navigate text-based files in many formats. It supports EPUB, PDF, DOCX, and many other common file types. Files are opened in a "read-only" mode so they cannot accidentally be edited. This application makes it extremely easy to read and navigate textbooks in electronic formats.

Opening the Document Reader

From the Main Menu

Step	Action	Keystroke
From the main menu, open the Books submenu	Shortcut key: K	Dots 1-3
Open Document Reader	Shortcut key: K	Dots 1-3

Using the Global Hotkey

Step	Action	Keystroke
Global Hotkey	F1 + O	F1 + Dots 1-3-5

Opening a file

When Document Reader opens, it places you in the open dialog to browse for a file. This operates in the same way as describedin the "Open Existing Document from within the Word Processor" found on page 27. Below is a reminder of helpful shortcut keys.

Command	Description
Open a folder	Enter
Close a folder/move back	Backspace
Open a file	Enter

Navigating a file

Normal document navigation commands work in Document Reader as well. For a reminder on these commands, refer to Reading and Listening in the Word Processor beginning on page 29.

Continuous Reading

Document Reader allows you to toggle between continuous reading and manual reading. In manual reading, BrailleSense only reads when you issue a command. Manual reading mode is useful if you want to read word by word. To begin or stop continuous reading, simply press Enter.

Voice settings

The Document Reader uses different voice settings from the rest of the BrailleSense. This is useful, for example, for people who might typically use a fast speech rate, but who want a slower voice to help them concentrate on a book while reading. The voice settings are located in the "voice settings" dialog.

To adjust voice options:

Step	Action
Move to program menu	F2
Open file menu	Enter
Open voice settings	Space + Dot 4, then Enter on "voice settings"
Adjust option	Space + Dot 1 and Space + dot 4
Move between options	F3
Save options	Enter
Close settings without saving changes	F4

A few notes about settings within this dialog:
- Changing settings in this dialog only changes the voice heard when reading a file in Document Reader.
- The "Default reading mode" setting determines if a file automatically begins to play when it is opened. If you would like the program to read automatically when a file opens, change this option to "continuous".

Where am I?

The information dialog tells you about your current location within a file. This includes the current page, total pages, file name, and other info.

Step	Action	Keystroke
Open information dialog	Enter + I	Enter + Dots 2-4
Read status	Scroll Keys	
Close information dialog	F4	

Selecting and Copying Text

Text can be copied from a file in Document Reader to new documents in the Word Processor. This makes it easy to refer back to this information later.

Add additional text to the clipboard

While reading, it may be helpful to place several chunks of text on the clipboard. This could include a series of definitions that do not appear next to each other in a file, but that a student wishes to paste into their own reference document. To add additional text to the clipboard before pasting:

Step	Action	Keystroke
Select text	(see pg 42)	
Add selected text to clipboard	Enter + P	Enter + Dots 1-2-3-4

Finding Text

It is helpful to search for specific words or phrases within a document. The find process is identical to that of Word Processor and other applications. Refer back to "Finding and Jumping to Items in Documents" beginning on page 38 for more details.

Setting Bookmarks

Bookmarks allow you to mark specific locations while reading that you may wish to return to later. They are saved when files are closed, so you can always find your marks within a book. Also note that note when closing the Document Reader, your position is saved, and you will be placed there next time you open the document.

Set a new bookmark

Step	Action	Keystroke
Create a mark at current cursor position	Enter + M	Enter + Dots 1-3-4
BrailleSense says "enter mark name". Type a number for the mark. Begin with 1 if this is your first mark.		
Insert mark	Enter	

Moving between marks

Step	Action	Keystroke
Move to next mark	Enter + N	Enter + Dots 1-3-4-5
Move to previous mark	Backspace + M	Backspace + Dots 1-3-4

Jumping to a specific mark

If you know the number of a mark that you would like to jump to, you can move quickly to that specific mark.

Step	Action	Keystroke
Open "jump to mark" dialog	Enter + J	Enter + Dots 2-4-5
Type number of mark		
Move cursor to mark location	Enter	

Mark List

The mark list shows all marks that you have created, including the page on which they are located.

Step	Action	Keystroke
Open mark list	Enter + L	Enter + Dots 1-2-3
Move through mark list		
Go to mark	Enter	

Moving to a specific location within a document

Use the "go to" dialog to jump to a specific location within a document. Options available include page, paragraph, line, or percent. Enter the page, paragraph, or line number. The percent function will move you to a specific percentage of a file. For example, entering "50" would move you to the exact middle of the file.

Step	Action	Keystroke
Open "go to" dialog	Enter + G	Enter + Dots 1-2-4-5
Move between page, paragraph, line, and percent	F3	
Enter value		
Go to selected location	Enter	

Additional reading commands

Command	Description
Read current page	Backspace
Read current paragraph	Backspace + Dots 2-3-5-6
Read current sentence	Dots 2-3-5-6

Headings

Some documents contain headings that make it easy to jump between sections, such as chapters. Not all file types can do this, and not all documents have been marked with headings by the author. If a document contains headings, you can move between them:

Step	Action
Go to previous heading	Backspace + Space + Dots 2-3-5
Go to next heading	Backspace + Space + Dots 2-5-6

It is also possible to open a list of all headings in the current document:

Step	Action	Keystroke
Open headings list	Enter + T	Enter + Dots 2-3-4-5
Navigate heading list	Space + Dot 1 and Space + Dot 4	
Go to heading	Enter	

Google Search

The BrailleSense contains a Google Search app that makes searching Google extremely easy. Though Google searches can also be performed on the web, this app increases the accessibility of the search process by placing everything in a list and making content more readable to screen readers.

Launching Google Search

Launch From the Main Menu

Step	Action	Keystroke
Move to main menu	F1	
Move to Internet menu	Shortcut Key: B	Dots 1-2
Open Google Search	Shortcut Key: G	Dots 1-2-4-5

Launch with Global Hotkey

Step	Action	Keystroke
Open with Global Hotkey	F1 + G	F1 + Dots 1-2-4-5

Performing a search

When the Google Search app opens you will be placed directly into the "Search Term" edit box. Type your search term here, then press Enter to begin a search.

Step	Action
Type Search Term	
Begin Search	Enter

Note: It may take a few seconds to display the list in the more accessible format.

Navigating search results

After your search terms load you will automatically be place at the first result. From there, you can navigate across the different search results.

Step	Action
Move to next search result	Space + Dot 4
Move to previous search result	Space + Dot 1

Previewing a search result

Sometimes, it may be useful to read a few sentences of a website to know if the information is helpful before navigating away from your search and to that website. The preview window of the Google Search app does this.

Step	Action
Move to preview	F3
Read text	Scroll keys, or other reading commands
Move back to search result list	Space + F3

Opening a search result

To open a search result, simply move to that result and press Enter. The Web Browser will open that website.

Step	Action
Move to desired search result	
Open search result web page	Enter

Schedule Manager

The Schedule Manager on BrailleSense allows you to manage your calendar including creating, editing, and searching for appointments.

Opening Schedule Manager

The Schedule Manager is located within the organizer submenu.

Step	Action	Keystroke
Go to main menu	F1	
Open organizer submenu	Shortcut key: O	Dots 1-3-5
Open Schedule Manager	Shortcut key: S	Dots 2-3-4

Open with Global Hotkey

Step	Action	Keystroke
Open with Global Hotkey	F1 + S	F1 + Dots 2-3-4

Important calendar navigation keystrokes

There are several places in schedule Manager where shortcut keys make it easy to move within date and time fields in the calendar. Refer back to this list when creating appointments, or when exploring your schedule.

Date shortcuts:

Step	Action
Next day	Space + Dot 6
Previous day	Space + Dot 3
Next week	Space + Dot 5
Previous week	Space + Dot 2
Next month	Space + Dot 4
Previous month	Space + Dot 1

Time shortcuts:

Step	Action	Keystroke
Next minute	Space + Dot 6	
Previous minute	Space + Dot 3	
Forward 10 minutes	Space + Dot 5	
Back 10 minutes	Space + Dot 2	
Forward one hour	Space + Dot 4	
Back one hour	Space + Dot 1	
Switch between AM and PM	Space + X	Space + Dots 1-3-4-6

Exploring the calendar

When the schedule manager first opens, you are placed on the calendar. Use the date shortcuts above to navigate the calendar. This is useful, for example, if you want to check the date a week from today. Schedule Manager opens with your focus on today.

Creating a new appointment on your calendar

Step	Action	Keystroke
Create new appointment	Enter + I	Enter + Dots 2-4
Move between fields	F3 and Space + F3	
Save appointment	Enter	

When creating a new appointment, there are several fields:
1. Calendar: Navigate with Space + dot 1 and Space + dot 4. Allows you to select which calendar to use. You may have several options depending if you have setup Google Calendar.
2. Start date. Use the above date shortcut keys, or type in a date in hh/mm/yyyy format, such as 09/01/2022.
3. All day event. If the event lasts the entire day, press Space to check this box.
4. Start time. Use the time hotkeys shown above, or type the date in hh:mm format such as 11:30.
5. End date: By default, this will be the same as the start date. Change it as in step #2, or move to the next control.

6. End time. Set this as you did in step #4, or move to the next control if the end time is correct.
7. Subject. This is the title of your appointment that will show on your calendar.
    a. Note that all fields after this are optional. If you do not want to change more settings, press Enter to save the appointment.
    b. Enter will save the appointment when it is pressed. You can be on any control.
8. Location. Type a location, or paste a link to a virtual meeting, such as Zoom.
9. Memo. This is a multi-line box to write notes for an appointment, such as a description of an assignment that needs to be completed.
10. Alarm time. If you want BrailleSense to wake up and sound an alarm to remind you of your appointment, change this setting with Space + dot 4. The alarm can sound when the appointment begins, an hour before, among other options.

Setting Recurring appointments

The next control in the "add appointment dialog" lets you schedule recurring appointments. For example, if a student wishes to add a weekly science club meeting to their calendar, they can do so without needing to type in the information every week. The controls will change depending on your settings. Follow the below steps to add the science club to our calendar every Thursday. Begin with your cursor on "alarm time", where we left off in our last task.

Step	Action
Move to recurring checkbox	F3
Check the box, so this appointment repeats	Space
Move to the "occurrence" control. It is already set to weekly. If we needed to change it, use Space + dot 4.	F3
Move to "interval"	F3
"1 week" means the appointment happens every week. If you want it to happen every 3 weeks, type "3"	
Move to "days of week" control	F3
Move through days of week	Space + Dot 4
Select or un-select a day of the week	Space
Move to "end date"	F3
If you want this appointment to repeat consistently, leave unchecked. Check to pick a date when the repetition ends.	Space (if needed)
Optional: move to end date	F3
Type end date, or use date hotkeys	
Save appointment	Enter

Remember, you can skip any of these steps or you can set appointments to repeat monthly or yearly.

Alarms

If you set an alarm for an appointment, BrailleSense will sound an alarm to remind you, even if it is in sleep mode. To stop an alarm, press Backspace + Enter.

Searching for appointments

Searching by Date

Step	Action	Keystroke
Open "search appointments" dialog	Enter + S	Enter + dots 2-3-4
Type date, or use date shortcuts		
Begin search	Enter	
Navigate search results	Space + Dot 1 and Space + Dot 4	
View details of an appointment	Enter, then scroll keys to read details	
Close search results	F4	

Searching appointments by subject

Searching by subject allows you to enter the name of an appointment. For example, typing "science" would show us all the science club meetings on our calendar.

Step	Action	Keystroke
Open search dialog	Enter + S	Enter + Dots 2-3-4
Switch to search by subject	Enter + F	Enter + Dots 2-3-4
Enter search term		
Begin search	Enter	
Navigate search results	Space + Dot 1 and Space + Dot 4	
View details of an appointment	Enter	
Close search results	F4	

Modifying an appointment

It is easy to modify an appointment to change details. When focused on an appointment in the search results list:

Step	Action	Keystroke
Modify appointment	Enter + M	Enter + Dots 1-3-4
The modify form is identical to the "add appointment" form, with your details already filled in		
Move through appointment details	F3	
Save changes	Enter	

Deleting an appointment

When focused on an appointment:

Step	Action	Keystroke
Delete appointment	Space + D	Space + Dots 1-4-5

Following links

If you have a link to a Zoom or Teams meeting in your calendar, you can activate that link. If the correct app is installed, it will launch that app or meeting. View appointment details as described previously, then follow these steps:

Step	Action	Keystroke
Move to the field containing the link (memo or location)	F3	
Activate link and open appropriate app	Backspace + L	Backspace + Dots 1-2-3

Searching Wikipedia and Wiktionary

Wikipedia and Wiktionary are freely accessible and editable reference websites. Though they are not considered scholarly sources, they can provide a good overview of a topic. The Wikipedia website is very accessible, but the BrailleSense Wiki Search app makes obtaining this information even easier.

Opening Wiki Search

Step	Action	Keystroke
Move to main menu	F1	
Move to internet submenu	Shortcut Key: B	Dots 1-2
Open Wiki Search	Shortcut Key: W	Dots 2-4-5-6

Open with Global Hotkey

Step	Action	Keystroke
Global Hotkey: Open Wiki Search from anywhere on the BrailleSense	F1 + I	F1 + Dots 2-4

Searching for an article

When the Wiki Search app opens, you can immediately begin to search. **Note**: Search Wiktionary for specific words, like in a dictionary. Search Wikipedia for articles about topics, like an encyclopedia.

Step	Action
Select Wikipedia or Wiktionary to search	Scroll keys
Move to search box	F3
Type search term	
Begin search	F3

Search results

Search results appear in a vertical list. Navigate this list with normal list navigation.

Step	Action
Move to next search result	Space + Dot 4
Move to previous search result	Space + Dot 1
Begin reading article	Enter

Navigating sections

Results on Wikipedia and Wiktionary are split into sections. For example, an article on George Washington might include sections about his early life, education, military service, presidency, family, etc. The last section of a Wikipedia article is typically the references used. This is essentially a list of citations, which can be useful for further research.

Step	Action
Move to next section	F3
Move to previous section	Space + F3
Read section	Scroll keys and normal reading commands
Close article and return to search results	F4

Open article in Web Browser

While reading, you may wish to open the article on the Wikipedia website. This enables you to follow links in the article and interact with it in other ways.

Step	Action	Keystroke
Open article in Web Browser	Backspace + O	Backspace + Dots 1-3-5
Close Browser and return to Wiki Search app	Space + Z	Space + Dots 1-3-5-6

Saving an article

An article can be saved so it is easy to find later. It is saved as a text file (.txt).

Step	Action	Keystroke
Open save dialog	Enter + S	Enter + Dots 2-3-4
Change file name or folder location	Same commands as Word Processor save dialog	
Save	Enter	

Sense Dictionary

The Sense Dictionary app allows you to look up dictionary definitions. It also contains a thesaurus, and foreign language dictionaries can be installed and used.

Using the Sense Dictionary

Open Sense Dictionary Through Menus

Step	Action	Keystroke
From main menu, move to Extras	Shortcut Key: X	Dots 1-3-4-6
Open Sense Dictionary	Shortcut Key: D	Dots 1-4-5

Open Sense Dictionary with Global Hotkey

Step	Action	Keystroke
Open Dictionary Global Hotkey	Enter + Backspace + D	Enter + Backspace + Dots 1-4-5

Choosing a reference source

By default, you can search the Webster's English Dictionary, Collins English Thesaurus, or the Collins English to Spanish Dictionary.

Step	Action
Move to next reference source	Space + Dot 4
Move to previous reference source	Space + Dot 1

Performing a search

After you have chosen your reference source:

Step	Action
Enter search term	
Begin search	Enter
Navigate search results	Space + Dot 1 & Space + Dot 4
Select word to view definition	Enter
Read definitions	Scroll keys
Return to search box	F3

Note: It is possible to search by parts of words. For example, you could enter "comp" to receive results including computer, computing, computerize, computation, etc.

Defining a word included in a definition

Sometimes, unfamiliar words are included in a definition, or you may find a new word in the thesaurus. It is easy to define this word:

Step	Action
From the definition, move cursor to the word in question	Cursor routing key
Define word	Enter

You will be placed in the text box containing the definitions of and information about the word for which you just searched.

Shortcut keys while reading definitions

Standard reading commands work within the Sense Dictionary. Additional useful commands include:

Step	Action
Move to next definition	Space + Dots 5-6
Move to previous definition	Space + Dots 2-3

Installing foreign language dictionaries

If a student is studying a foreign language, they might wish to have access to a dictionary for that language. Available languages are French, Spanish, and Italian.

Step	Action	Keystroke
Select dictionary to install	Enter + I	Enter + Dots 2-4
Navigate possible languages	Space + dot 1 & Space + dot 4	
Install dictionary	Enter	

When the dictionary is installed, it appears below English in the list of reference sources. It will include both an option to translate to and from English. For example, if I install the Italian dictionary, I can search for Italian to English or English to Italian. The search results operate the same as they do for English.

Stopwatch and Countdown Timer

The BrailleSense can act both as a timer and as a stopwatch. These functions are both located within the Stopwatch app.

Open Stopwatch

Step	Action	Keystroke
From main menu, open Utilities	Shortcut Key: U	Dots 1-3-6
Open Stopwatch	Shortcut Key: W	Dots 2-4-5-6
Open Stopwatch from anywhere on BrailleSense	F3 + W	F3 + Dots 2-4-5-6

Working with the Stopwatch

Step	Action
Start stopwatch	Enter
Speak current time on stopwatch	Space (always shown on braille display)
Pause/resume stopwatch	Enter
Stop and clear stopwatch	Backspace

Countdown Timer

Step	Action
Switch from stopwatch to timer	F3
Type time hh:mm:ss	(e.g. 10 minutes would be 00:10:00)
Move forward by Hour	Space + Dot 4
Move back by Hour	Space + Dot 1
Move forward by Minute	Space + Dot 5
Move back by Minute	Space + Dot 2
Move forward by 10 seconds	Space + Dot 6
Move back by 10 seconds	Space + Dot 3
Move forward by 1 second	Space + Dots 5-6
Move back by 1 second	Space + Dots 2-3
Begin timer	Enter
Speak time left on timer	Space
Pause/resume timer	Enter
Cancel timer	Backspace
When timer sounds, stop timer	F4

Using the Voice Recorder app

The Voice Recorder app on the BrailleSense allows you to create high-quality recordings and refer back to them later. This is extremely useful for students wanting to record lectures or other class materials.

Opening the Voice Recorder

Step	Action	Keystroke
From the main menu, open the Media menu	Shortcut Key: M	Dots 1-3-4
Open Voice Recorder	Shortcut Key: V	Dots 1-2-3-6

Open Voice Recorder with Global Hotkey

Step	Action	Keystroke
Open with Global Hotkey	F1 + V	F1 + Dots 1-2-3-6

The Voice Recorder app interface

The Voice Recorder app is very simple. All controls can be reached by pressing F3. The following controls appear:
- Record button: starts a new recording
- Record settings: Adjusts settings including the file names of a recording, quality, and format
  - Note: The default settings work well for most recording situations and produce very high-quality recordings. It is likely not necessary to explore this dialog to make recordings.
- Recordings: Opens a list of recordings that have been made on the BrailleSense so they can be quickly played
- Exit: Closes the Voice Recorder

Start, Pause, and Stop Recordings

Step	Action	Keystroke
Start Recording from "Mic Record" button	Enter	
Pause while recording	Space	
Stop recording and save the file	Backspace + S	Backspace + Dots 2-3-4

Start Recording

When the Voice recorder app first opens, the focus is placed on a button called "mic record." This means if the button is pressed, a recording will begin, using the internal microphones. Press Enter to begin recording.

Pausing while recording

To pause and resume recording, press the Space key.

Stop recording and save the file

When you have finished recording, press Backspace + S (Backspace + dots 2-3-4) to stop recording and to save the file. Recordings are saved as MP3 files. They can be emailed to others or placed in Google Drive for easy sharing.

After recording stops, the unit says and displays the word "play." If you press Enter, the recording you just made will begin to play.

Listening to recordings

If you would like to listen to a recording that you have made previously, follow these steps:

Step	Action
Open Voice Recorder	
Move to "recordings" button	Press F3 twice
Open list of recordings	Enter
Navigate list of recordings	Space + dot 1 and Space + dot 4
Play a recording	Enter
Pause or resume playback	Space
Move to other recorder controls	F3

Using other microphones

If you have microphones that connect through USB or through a headphone-shaped plug, the BrailleSense can record with that microphone as well. This enables even higher recording. Simply connect the microphone to the BrailleSense. When opening Voice Recorder, you would see a button labeled "USB record" if a USB microphone is used, or "external mic record" if a microphone is plugged into the microphone jack. This just tells you which device is used to capture the sound, but the recording process is the same.

Wake Up Alarm

Opening Wake Up Alarm

Open Wake Up Alarm Using Menus

Step	Action	Keystroke
From the main menu, open the Utilities menu	Shortcut Key: U	Dots 1-3-6
Open Wake Up Alarm	Shortcut Key: A	Dot 1

Open Wake Up Alarm with Global Hotkey

Step	Action	Keystroke
Open Wake Up Alarm	F3 + A	F3 + Dot 1

Adding an alarm

To set a new alarm:

Step	Action	Keystroke
Move to and press "add" button	F3, then enter	
Use Time Shortcuts, or type time as hh:mm (e.g. 06:30)		
Switch between AM and PM	Space + X	Space + Dots 1-3-4-6
Move to "echo" to select alarm sound	F3	
Select alarm sound	Space + Dot 1 & Space + Dot 4	
Move to "term"	F3	
Select between the alarm set to off, once, weekdays, or every day	Space + Dot 1 & Space + Dot 4	
Select how long the alarm will sound	F3, then scroll keys	
Select "repeat interval" (how often the alarm repeats if it is not stopped)	F3, then scroll keys	
Select "alarm times" (how many times the alarm will sound before it stops on its own)	F3, then scroll keys	
Save and set alarm	Enter	

Note: If you do not wish to change some settings, you can press Enter on any option to save the alarm.

Modifying an alarm

Perhaps you don't want a wake-up alarm tomorrow, so you want to turn that alarm off for now.

Step	Action	Keystroke
Move to alarm list	F3	
Select alarm	Space + Dot 1 & Space + Dot 4	
Modify alarm	Enter + M	Enter + Dots 1-3-4
Change settings as you did when setting the alarm		
Save settings	Enter	

Silencing the alarm

The alarm will sound, even if the BrailleSense is asleep. To stop the alarm, press F4.

Step	Action
Stop Alarm	F4

BrailleSense 6 Bluetooth Terminal with JAWS

This document covers your initial connection of your BrailleSense 6 to a Windows 10 computer with JAWS using a Bluetooth connection. Although these instructions are for Windows 10 and JAWS 2019, these instructions may also work with different versions of Windows and JAWS.

Note: When connecting your braille device with Bluetooth a driver is not required. Drivers are required when connecting with USB.

Step 1 – Connect BrailleSense 6 to Computer

Put BrailleSense 6 in Terminal Mode. From you BrailleSense 6:

Step	Action	Keystroke
From Main Menu, open Utilities menu	Shortcut Key: U	Dots 1-3-6
Open "Terminal for Screen Reader"	Shortcut Key: S	Dots 2-3-4
Press Enter on "Bluetooth serial port"	Enter	
Your device is now in terminal mode		

Pair your BrailleSense 6. From your Computer:

Step	Description
On your computer, navigate to "Bluetooth & Other devices"	
Ensure Bluetooth is set to "On"	
Click "Add Bluetooth or other device"	
Click "Bluetooth..."	
From the list of discoverable items, scroll down to "BrailleSense6"	
Press Enter on "Pair"	Windows will notify you during the setup process and when your device is "ready to go"

Step 2 – Setup JAWS

Setup JAWS from the Computer:

Step	Description
Open JAWS	
Open the Braille dialog box, found under "Options"	JAWS Shortcut keys: Alt, O, L
Move to "Add Braille Display" button	Tab to move to the button
From the list of braille displays, choose "HIMS Braille" by placing a checkbox next to this option.	Use arrows to move down the list, and the space bar to place a check in the checkbox
Press Enter to move to the next screen	
Set the "output port" to USB	Use arrows to change the selection in the dropdown
Press Enter to move to the next screen	
Set the "Primary device" as "HIMS Braille"	Use arrows to change the selection in the dropdown
Press Enter to save your settings	
Press Enter to close the dialog box stating you must restart JAWS.	
Restart JAWS	

Confirm the Bluetooth Com Port from your Computer:

This step is for when your connection does not establish and is meant to ensure you have your JAWS com port setting properly set. If your connection is working, then this step is not necessary.

Step	Description
Open Control Panel	
In the search field, type "Bluetooth"	
From the results, click on "Change Bluetooth settings"	Opens the Bluetooth settings dialog box
Click on the tab for "COM Ports"	
Take note of which Outgoing COM Port is being used for the "BrailleSense6...". It will also say "Bluetooth Serial Port" as part of the name.	If the Com Port listed matches the setting listed in JAWS, then no further steps are necessary.
Open JAWS if not already open	
Open the Braille dialog box, found under "Options"	JAWS Shortcut keys: Alt, O, L
Click on "Modify Settings..."	
Use the dropdown to choose the proper output port.	
Click on OK	
Click on OK to close the Braille Settings dialog box	
Close JAWS	
Open JAWS	

Step 3 – Connecting after Setup

After successfully connecting your BrailleSense 6 to JAWS with Bluetooth, connecting again in the future is easy. Simply place your BrailleSense 6 in terminal mode with Bluetooth then launch JAWS, in that order. Launching JAWS first is not recommended because of Bluetooth standards and protocols.

IMPORTANT NOTE: Once you are connected with JAWS you must enable typing mode in JAWS by pressing Backspace + Space + T.

Ending Terminal Mode

Once you are done with Terminal Mode you will want to exit this feature.

Step	Action	Keystroke
End Terminal Mode	Backspace + Space + Z	Backspace + Space + Dots 1-3-5-6

Menu Manager

The Menu Manager provides you with the option to hide and show the applications you want. This is particularly useful with people new to a braille notetaker and who want or need less options to reduce complexity.

Hide Menu Items

Use the following steps to hide select applications on the BrailleSense.

Step	Action	Keystroke
From the main menu, open the Menu Manager dialog box	Enter + H	Enter + Dots 1-2-5
Navigate to the item you wish to hide	Scroll	
Toggle the item you wish to hide to "selected"	Space	
Repeat previous steps for all apps you wish to hide		
Save settings	Enter	

Show Menu Items

Use the following steps to show select applications on the BrailleSense that have been previously hidden through the Menu Manager.

Step	Action	Keystroke
From the main menu, open the Menu Manager dialog box	Enter + H	Enter + Dots 1-2-5
Navigate to the item you wish to show	Scroll	
Toggle the item you wish to show to "Selection Canceled"	Space	
Repeat previous steps for all apps you wish to show		
Save settings	Enter	

Locking Menu Items

It is possible to lock the menu items that are shown and hidden so that changes cannot be made unless a password is provided. These instructions are not publicly available as this feature is often used by teachers and administrators for their students. If you wish to get these instructions, please request them by sending an email to support@hims-inc.com or calling 512-837-2000.

Connecting to Bluetooth Headphones, speakers, and keyboards

The BrailleSense can connect to Bluetooth headphones or speakers for audio output. In addition, Bluetooth keyboards can be connected and used for text input.

Step	Action	Keystroke
Open main menu	F1	
Open settings submenu	Shortcut Key: S	Dots 2-3-4
Open Bluetooth Manager	Shortcut Key: B	Dots 1-2
Activate "rescan" button	F3, then Enter	
Wait for scanning to complete		
Navigate list of Bluetooth devices that were found	Scroll keys	
Select device	Enter	
Navigate list of services	Scroll keys	
Select service to connect	Enter	

The BrailleSense will automatically create the profile and connect to the selected device. If connecting an audio device, the correct service is "speaker" or "headset." If connecting a keyboard, select "keyboard."

Creating and Switching Language Profiles

Language profiles that let users quickly change several language settings at once. To properly use language profiles, you must first set up your language profile settings. This guide provides instructions on setting up the language profile and switching between profiles.

Download a Voice that matches your Profile Language

Step	Action	Keystroke
Open Voice Options dialog	F3 + V	F3 + Dots 1-2-3-6
Navigate to the Download button	F3	
Press Enter to open the Download dialog box	Enter	
Navigate to the voice or voices you wish to download by scrolling or using first letter navigation		
To download multiple voices, press Space on each voice you wish to download, then press Enter		
Begin downloading by pressing Enter	Enter	

Add Language Profile

		Keystroke
From the main menu, open Settings	S	Dots 2-3-4
Open Language Profiles	L	Dots 1-2-3
Open "Add dialog" box	Enter + A	Enter + Dot 1
Name the profile		
Navigate to the Language list	F3	
Select a language by scrolling or first letter navigation		
Navigate to the Braille Code list	F3	
Select a braille code by scrolling or first letter navigation		
Navigate to the Braille Grade list	F3	
Select a braille grade by scrolling		
Navigate to Eight Dot Mode	F3	
Select "on" or "off" by scrolling		
Navigate to the Voice Type	F3	
Select a Voice type by scrolling		
Navigate to Voice Name	F3	
Select a voice name by scrolling or first letter navigation		
Navigate to "Use secondary voice" by scrolling	F3	
If desired, you can turn the secondary voice on or off by scrolling		
Navigate to Voice Rate	F3	
Adjust the Voice Rate by scrolling		
Navigate to Voice Pitch	F3	
Adjust Voice Pitch by scrolling		
Navigate to the Confirm button	F3	
Confirm the profile by pressing Enter	Enter	

Change Language Profile

To switch between language profiles, you must have a second language profile created. When first setting up the BrailleSense 6 a default language profile will be generated, and this will be the default language profile.

Step	Action	Keystroke
Open Select Language Profile dialog	F1 + L	F1 + Dots 1-2-3
Navigate to your desired language profile	Scroll	
Change to that profile by pressing Enter	Enter	

Installing Certificates on the BrailleSense 6

Prerequisites

Before installation on the BrailleSense it is recommended that you download the certificate to a USB Drive or SD Card. While it is possible to Once you have the certificate on the root of the USB Drive or SD Card then proceed with the next steps.

Helpful Hints for Non-Braille Users

The BrailleSense 6 and BrailleSense 6 mini include two USB-C ports on the right panel of the device. The USB-C port closest to the front of the device is display port compatible and provides video output, and can be connected to a TV, Monitor, or USB-C monitor. If using a USB-C monitor which receives video AND power from the BrailleSense then you may need to provide supplemental power to the monitor, depending on power requirements.

In addition to the video output, you may find it helpful to utilize a mouse and keyboard. The BrailleSense 6 supports off-the-shelf keyboards and monitors, including USB, Bluetooth, and RF dongles. The use of a keyboard and mouse should make installation of certificates much faster if you are not familiar with braille or notetakers in general.

Install Certificate

Step	Action	Keystroke
From the main menu, open Settings	Shortcut key: S	Dots 2-3-4
Open Android System Settings	Shortcut key: E	Dots 1-5
Navigate to "Security", then open	F3 until reached, then Enter	
Navigate to "Encryption & credentials", then open	F3 until reached, then Enter	
Navigate to "Install from SD card", then open	F3 until reached, then Enter	
Navigate to the certificate, then open	F3 until reached, then Enter	
Navigate to the Certificate name edit box	F3 until reached	
Begin typing mode	Enter	
Type the certificate name, as desired		
Navigate to the "Credential use" dropdown which reads "VPN and apps" by default	F3	
If you wish to change the "Credential use" from "VPN and apps" to Wi-Fi, then press Enter on the dropdown	Enter	
Navigate to "Wi-Fi" to change Credential use, if desired	F3 until reached	
Confirm "Wi-Fi" choice	Enter	
Navigate to "OK" button	F3 until reached	
Add certificate	Enter	

Once you have added the certificate you will be back in the "Encryption & credentials" screen. You can confirm the certificate has been added by navigating to and opening "User credentials" on this screen. In the User credentials screen, you should find the installed certificate. You can also delete certificates from this screen by pressing Enter on the credential, navigating to "Remove", then pressing Enter.

Multitasking

Switching between applications

This command will move you from one running program to another, similar to pressing alt+tab or command+tab on a computer.

Step	Action
Switch to next running program	F2+ F3
Switch to previous running program	Space + F2 + F3
Note: Either command can be pressed multiple times	

Viewing all running programs

When running multiple applications, it can be time consuming to use the above commands to find the program you are looking for. Follow these steps to use the Task List to quickly jump to the program you need.

Step	Action	Keystroke
Open task list	F1 + F4	
Move through list of running apps	Space + Dot 1 & Space + Dot 4	
Open selected app and return to your last location	Enter	
Close single running app	Space + D	Space + Dots 1-4-5
Close all running apps on BrailleSense	Space + Enter + D	Space + Enter + Dots 1-4-5

Resets

Soft Resets

A soft reset should be used if your device locks up and your keys don't work. To do a soft reset, press 1-2-3-4-5-6-F2-F3 together. Additionally, you can also hold in the Power button for about 15 seconds and the device will soft reset. Once a soft reset has happened, you should expect the device to reboot and start up as normal.

Hard Reset

A hard reset should be used when your device is having issues that you cannot seem to address. In addition, the hard reset can be used to reset the Bluetooth settings if you are having issues with terminal mode

To do a hard reset, press and hold the Fast Forward button and the Power button together for about 5 seconds. This can be done with the device powered on or off. The Fast Forward button is the media button furthest to the right. Another way to do a hard reset is to follow these steps: Setting, then Initialize BrailleSense Options, then choose Yes.

Once a hard reset has happened, you should expect changes to the voice volume, speed, pitch, and TTS voice. In addition, a hard reset will initialize the BrailleSense Options, and the main option settings for each program are initialized to the default values. In addition, all data in the Address Manager, Schedule Manager, and Database Manager will be lost but is easily restored if you have done a backup.

BrailleSense Launcher Reset

A Launcher Reset should be done when you are being confronted with the Google Launcher often. To do a Launcher reset, press 1-2-3-4-5-6-7-8-F2-F3. Next, press F1. Once done you should find yourself back in the main menu.

Factory Reset / Android Backup and Reset

A factory reset should be done only after consulting with HIMS Technical support unless you absolutely know what you are doing. The Factory Reset will erase all data and all settings and will place you back at the Android Setup Wizard.

Please request this keystroke from HIMS technical support by sending an email to support@hims-inc.com.

Format

This will erase all your data which can no longer be retrieved. This is good for when you sell your device. This does not change any settings and you should still remove any accounts found in Android System Settings.

To Format your device press F3 + F then select the disk you wish to format. Press Enter to begin the formatting process. Once started, you will be given a status of your files being deleted, then you will go back to the format list. Once done perform a soft reset by pressing 1-2-3-4-5-6-F2-F3.

Backup / Restore BrailleSense Settings

The Backup / Restore BrailleSense Settings utility is a way to save your settings if you perform a hard reset of your BrailleSense which initializes all settings.

To run the Backup / Restore BrailleSense Settings utility press F3 + K. You will be presented with a list of options with checkboxes. You can select all options by pressing Enter + A, otherwise you can scroll using Space + Dot 4 to move to the next item, or Space + Dot 1 to move to the previous item. Pressing Space will toggle your selection between "Selected" and "Unselected".

Once your options are selected, press Enter-b or press F3 to move to "Backup" and press Enter to start the backup process. You will be given a Default path which is the location where the backup will be saved. If you are happy with the default location, then press Enter to create the backup.

If you want to change the page press Space until you get to "Change path" then press Enter. Navigate to the folder or drive you wish to save your backup to. Once you get to the desired folder, press Space to select that folder, then press Enter to start the backup.

Backup / Restore Flashdisk

This will backup everything including settings, documents, and accounts. This requires an external drive such as an SD Card, USB drive, or external hard drive connected with USB.

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 100 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".

BrailleSense 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 "BrailleSense Backup" appears on the root of the backup drive, containing a zip file with the BrailleSense 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.

Tips for using Google Classroom with the BrailleSense 6

Google Classroom is an electronic learning platform used by many schools. It allows students to find course materials, submit assignments, collaborate with peers, and communicate with teachers.

Please note that the Google Classroom application is NOT shipped with the BrailleSense. It will be necessary to install Google Classroom through the Play Store, Google's platform for distributing apps. Some student Google Accounts will not be able to download apps. You may need to sign into Google with a teacher account to install this app. This is, however, a one-time process.

The Google Classroom app is the same app used on other tablets. It is not an application developed by HIMS. For this reason, it is necessary to use "Mobile Screen Reader commands", which are different than standard BrailleSense navigation.

Finally, Google makes frequent updates to Google Classroom that significantly change the way the application operates. The following tips are meant to help you and your students get started. It is not a step-by-step tutorial, but a series of tips that can help work with any version of Classroom.

First Use

The first time you open Classroom, you may be asked to "Choose an account." Use F3 to find your Google account (email address), then press Enter to choose it.

Navigating the interface

The main screen of Classroom contains a list of all classes in which an individual is enrolled. Use F3 to explore the screen and move between controls. To activate any item, press Enter. To go back to the previous screen, press "f4". This is especially useful if you clicked on the wrong element, or if you lose track of your location in the app. F4 will always move backward, one screen at a time.

Finding a class

The quickest way to navigate to a particular class is to use first letter navigation. If a student is looking for a class called "English 8, 4th period," press the letter "e". The cursor will move to the first element on the screen that begins with that letter. If this is not the English class, continue to press "e" until you find the correct class. Press Enter to open the class.

The stream

When a class gains focus, the window that displays is known as the "course stream." This will vary from class to class, as teachers can control what is displayed here. Again, Use F3 to move through the content. Items on this screen may include recent announcements, assignments with due dates this week, or course materials that are frequently needed, such as a syllabus. There is also a series of tabs that allow different views of course content. This can include "classwork," containing assignments; "about", containing course information and documents, and "people", allowing students and teachers to communicate with others in the class. If you know you are looking for an assignment, it is likely easiest to press "c" until you hear "classwork," then press Enter.

Interacting with course material

Frequently, assignments and other course material contain attachments. These appear as a file name below the description of the assignment. For example, you may press F3 a few times to find "Chapter 7 vocabulary words, Google Docs". This tells the name of the file, and also tells us that this is a Google Doc. Press Enter to open the file. A preview of the file is shown, but this is not always fully accessible. Jump to the "edit" button by pressing "e", then press Enter to open the document in its respective application. A Google Docs file will open in the Docs app, enabling easier editing. Once an assignment is complete, use "t" to jump to the "turn in" button, then press Enter to submit work.

Attaching files

It is possible to attach a file to an assignment that was created on the BrailleSense. To do this, open the assignment screen as described previously. Jump to the button called "your work." Press the "add work" button, then the "upload" button. Again, press the first letter of each button to quickly jump to it. Locating a file will depend on where it is saved. It may be easiest to jump to and activate the "recents" button to see the files that were most recently activated.

Answering questions and leaving comments

It is frequently important to enter text in text boxes directly in a Classroom. When an assignment or question is on the screen, an edit box will be proceeded with "eb" on the braille display to tell you that text can be typed. In contrast to other BrailleSense applications, however, it is necessary to enter edit mode. Press Enter to open the text box, then begin typing. Pressing F3 will allow you to leave the edit box and start navigating the app again.

Google Classroom in the BrailleSense File Manager

It is possible for a student to share files with a teacher in Google Classroom through the BrailleSense File Manager. To do this:

1. Open the File Manager
2. Open Google Drive
3. Open My Drive
4. Open Classroom
5. Locate the folder with the name of the class
6. Within that folder, a subfolder is created for each assignment a teacher has created in Classroom.
7. Use normal copy/paste commands to copy an assignment from elsewhere on the BrailleSense to this class folder.

Note: Pasting a file here does not "turn in" the assignment or mark it as done on Google Classroom. However, the teacher of the class can view anything a student pastes here in their own Google Drive. This may be an easier way to submit work for students less familiar with the Android app interface. For more help on moving files to this area, see the Folder and File Handling training material starting pg 96.

Conclusion

Though it is difficult to provide exact steps for using Google Classroom, the app is very accessible. If a student is familiar with using Google Classroom via the website on a computer, the structure of the Android app on BrailleSense is nearly identical. Remember to explore the screen with F3, press Enter to type in an edit box, and use F4 to move back if you get stuck.

Upgrading the BrailleSense

HIMS frequently releases updates to the BrailleSense to add new features and fix bugs that have been reported by our users. To know when updates are released, please sign up for our announcements list on our website at hims-inc.com.

Backup Device

It is recommended that you create a backup of the files on the device before performing an upgrade in the rare case where the upgrade fails.

Step	Action	Keystroke
Open the Backup and Restore app	Hotkey: F3 + K	F3 + Dots 1-3
To select specific options, first navigate to the desired item	Space + Dot 4 / Space + Dot 1	
Pres Space to select desired item	Space	
To select all options	Enter + A	Enter + Dot 1
Once options selected, begin backup	Enter + B	Enter + Dots 1-2

Save to Default Location

If you wish to save to the default backup location (Database folder) then begin your backup.

Step	Action
Begin Backup	Enter

Change Backup Location

If you wish to save the backup to a different location, such as a USB or SD card, then you will need to change the file path.

Step	Action
Cycle to "Change Path"	Space
Press Enter	Enter
If desired, move to parent folder	Backspace
If desired, move into sub folder	Enter (on folder)
To select location, place the folder or drive in focus, then press Space to select	Space
Begin Backup	Enter

Updating the BrailleSense Firmware Online

Step	Action	Keystroke
Ensure the BrailleSense is connected to a charger		
From the Main Menu, Close all running programs	Space + Enter + D	Space + Enter + Dots 1-4-5
Open Utilities menu	Shortcut Key: U	Dots 1-3-6
Open the Upgrade application	Shortcut Key: U	Dots 1-3-6
Select "Upgrade: online"	Enter	
BrailleSense will download and install the update. No further action is necessary		

Note:
- A. It may take 15 minutes or more to download and install the software, depending on your internet speed
- B. Do not press any keys or unplug the BrailleSense while it is updating
- C. The BrailleSense will restart several times
- D. After the upgrade is complete release notes will be displayed, describing the new features and changes. Press F3, then use the scroll keys or other reading commands to read about the changes. Close the release note with F4 and use the BrailleSense normally.

Updating the BrailleSense Firmware Offline

From a computer

1. Download the upgrade file from the HIMS website to a computer.
   a. 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.
2. Copy the file to the root of an external storage device such as an SD card or USB thumb drive. This means the .bin file should not be in any folders.

From the BrailleSense

Step	Action	Keystroke
Connect the BrailleSense to AC Power		
Insert the SD Card or USB Drive		
Open the Utilities Menu	Hotkey: U	Dots 1-3-6
Open the Upgrade Menu	Hotkey: U	Dots 1-3-6
Cycle the Upgrade choice to "Offline"	Space	
Begin upgrade	Enter	

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

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

Using the BrailleSense with a Mac using VoiceOver

The BrailleSense can act as a Braille display for the VoiceOver screen reader on an Apple Mac computer. You can connect either via USB or Bluetooth.

Activating Terminal Mode

To use the BrailleSense as a braille display with your computer, you must be in terminal mode.

Step	Action	Keystroke
Activate "Terminal for Screen Reader"	F3 + S	F3 + Dots 2-3-4
Choose USB or Bluetooth, depending on your preference	Scroll Keys	
Enter terminal mode	Enter	
Exit terminal mode and return to normal BrailleSense operation	Backspace + Space + Z	Backspace + Space + Dots 1-3-5-6

Connecting via USB

Once you have chosen "USB" in the list of connection types, your braille display will say "Terminal mode". Ensure VoiceOver is running on your Mac. Simply connect the BrailleSense to your Mac via a USB cable, and braille output instantly begins.

Connecting via Bluetooth

Ensure you chose "Bluetooth serial port" when opening Terminal for Screen Reader. With VoiceOver running on your Mac, follow these instructions.

Step	Command
Open VoiceOver Utility	VO + F8
Move to the "Braille" option in the table	Down arrow until you hear "Braille"
Move to the "displays" tab	VO + right arrow until you hear "displays"
Activate "Displays" tab	VO + Space
Navigate to and click "Add" button	VO + Right arrow, then VO + Space
Move through the table to find your BraillleSense	Arrow keys
Select your BrailleSense	VO + Space
Navigate to and click "Select" button	Vo + right arrow, then VO + Space

You should hear a chime from your computer, and braille output should begin. Note: If using a BrailleSense mini, your device will be named "BrailleEdge" in the device list. 32-cell BrailleSense devices will be named "BrailleSense".

Using the BrailleSense as a braille display for an iPhone or iPad

The BrailleSense can act as a braille display for an iPad or iPhone over Bluetooth. This is very useful for students who may need to use a specific iPad app for an assignment but wish to continue to read and write in braille.

Step 1: Terminal Mode

Terminal mode means the BrailleSense is acting as a display for another device. To enter terminal mode:

Step	Action	Keystroke
Open "Terminal for Screen Reader"	F3 + S	F3 + Dots 2-3-4
Choose "Bluetooth serial port"	Enter	
"Terminal mode" is displayed in braille, showing that the BrailleSense is ready to connect		

Step 2: on the iPhone or iPad:

Note: Ensure VoiceOver is running
1. Launch the Settings app from the home screen
2. Choose Accessibility, then choose VoiceOver
3. Choose Braille
4. Under the heading "Choose a braille display", find your device and double tap on it.
   a. BrailleSense 6 mini devices are labeled as "Braille Edge" in this list
5. After a few seconds the devices will connect, and braille output should be shown on the BrailleSense

Using other BrailleSense application

Sometimes, you may wish to stay connected but switch temporarily to using an application on the BrailleSense.

Step	Action	Keystroke
Move to main menu to access other BrailleSense functions	F1	
Return to Terminal for Screen Reader to view braille from iPad or iPhone	F3 + S	F3 + Dots 2-3-4

Terminal Clipboard

Sometimes, iPhone and iPad braille input can be confusing and result in errors. It is possible to type text on the BrailleSense using normal editing commands, then send that text to the iPhone or iPad to avoid translation issues. Use these steps to activate this function, known as the Terminal Clipboard.

Step	Action	Keystroke
Open clipboard edit box	Space + Enter + I	Space + Enter + Dots 2-4
Type text		
Note: you can also copy/paste text to this edit box from another BrailleSense application		
Send the text to the connected Apple device	Enter + S	Enter + Dots 2-3-4

Exiting Terminal Mode

When using your BrailleSense as a braille display, its keyboard can also be used to control the Apple device. For this reason, normal exit commands do not close the Terminal for Screen Reader.

Step	Action	Keystroke
Exit Terminal Mode	Backspace + Space + Z	Backspace + Space + Dots 1-3-5-6

HIMS
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Contact HIMS for more information about the BrailleSense 6 or other great HIMS braille products.

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