## NLS Braille eReader HumanWare User Guide Version 1.1.1

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# 1 Physical Description

The NLS eReader has a 20-cell braille display; an eight-key, Perkins-style keyboard; two Space keys; a round Select key; and four rectangular thumb keys for navigation.

## 1.1 Top

The top of the device contains the braille cells and the braille keyboard. The eight-key, Perkinsstyle keyboard extends from left to right along the back half of the top. From the center to the left, the dots are numbered 1, 2, 3, and 7; from the center to the right, the dots are numbered 4, 5, 6, and 8. Dot 7 is also the Backspace key and dot 8 is also the Enter key.

The front section of the top face consists of a refreshable braille display containing 20 braille cells and their associated cursor routing buttons. Each cursor routing button is connected to the cell directly in front of it. When you are editing text, pressing one of the cursor routing buttons will move the editing cursor to its associated braille cell. When you are not editing text, any cursor routing button will activate the selected item in a menu or list. In almost all cases, you can press a cursor routing button instead of the Enter key to accomplish the same thing.

Along the front edge of the top, there are two Space keys. These keys are exactly the same and perform identical functions.

## 1.2 Front Edge

The front edge of the device contains the navigation keys. The rectangular keys provide directional movement. Each rectangular key has a small tactile ridge on one edge to indicate its direction. The round key in the center is the Select key. It can be used to activate items, or exit Braille Display mode. It is not used in commands that include an Enter key.

These keys are often referred to as thumb keys. From left to right, the five keys are Up, Left, Select, Right, and Down.

#### 1.3 Left Side

The left side of the device contains five elements. At the back, is a USB-C port, which is used for charging the unit or connecting it to a computer. Moving forward, the next item is a small depression where there is a green LED that visually indicates the power status of the device. Next, coming forward, is the oval Power button with a small dot on it. Press and hold this button for two seconds to turn the device on or off. Next to the Power button is a USB-A port for connecting a flash drive. At the front left corner is a small hole for attaching the lanyard.

## 1.4 Right Side

The right side of the device has four elements. At the back is an audio jack with a rubber plug in it. Moving forward are two volume control buttons. These three elements will not be used on the NLS eReader. At the front right corner is another small hole for attaching the lanyard.

#### 1.5 Back Edge

The back edge contains only one element, an SD card slot located near the left end of the device. This port allows you to insert an SD card for external storage.

#### 1.6 Bottom

On the bottom of the device are four rubber feet, one in each corner; a sticker with print information about the device; and a braille serial number.

Next to each of the two front rubber feet is a small hole for attaching the lanyard. Its matching hole is on the outside edge near the front corner.

## 2 Getting Started

## 2.1 Unpacking

The package contains the following items:

- eReader 20-cell braille display
- USB-A to USB-C cable
- USB to AC adapter
- Braille getting started guide
- Print getting started guide
- Braille User Guide
- NLS cartridge USB cable
- Lanyard

## 2.2 Charging the Battery

Prior to using your eReader, make sure it is charged completely. The charging cable is the longer cable included with the eReader. To charge the battery, connect the smaller end of the charging cable (the USB-C connector) into the USB-C port located on the left side of the eReader, near the back. It doesn't matter which direction the cable is oriented when you plug it in. This port will accept it either way.

Connect the larger end of the charging cable (USB-A connector) to the included AC adapter. Plug the AC adapter into a power outlet. The unit takes three hours to fully charge. You can use the unit for about 15 hours before it will need to be charged. If at any time you would like to know how much battery power is available, navigate to the Battery Info item on the Main Menu or press the braille letter p, dots 1-2-3-4 together with Enter (dot 8).

## 2.3 Powering On and Off

On the left side of the eReader, between the USB ports, you will find the oval-shaped Power button with a raised dot in its center. If your device is charged, press and hold the Power button for approximately two seconds to turn on your eReader. You will feel a quick vibration and the

word "starting" will appear on the braille display with a tactile loading animation that circles during start-up. At the completion of start-up, the words "book reader" will appear on the braille display. Your eReader is ready for use.

To power off your eReader, press and hold the Power button for two seconds. A confirmation message will appear. Navigate to Ok by pressing the Up or Down thumb key, then press Enter.

Alternatively, from the Main Menu, press p to reach the Power off menu item, then press Enter. Use the Right or Down thumb keys to move to Ok, then press Enter.

## 2.4 Sleep Mode

To preserve your battery, your eReader will go into Sleep mode after five minutes of inactivity. This length of time can be modified in the settings. See section 7.1 User Settings for details on modifying Sleep mode time. You can also manually put your eReader into Sleep mode by quickly tapping the Power button. To wake your device, quickly tap the Power button. From a full charge, the battery will last approximately four days in Sleep mode.

## 2.5 Braille Keyboard

The braille keyboard is used to write text in a search box or to enter text such as BARD login credentials or a Wi-Fi password. There are two Space keys that have identical functions.

There are also numerous shortcuts that are composed of a braille character on the keyboard together with either Space key, the Backspace key (dot 7), or the Enter key (dot 8). The shortcuts that are paired with a Space key are often referred to as "chords." So, on this device, for example, the letter m with a Space key, a keyboard shortcut that will take you to the Main Menu, may be referred to as an m-chord.

Some of the keyboard shortcuts, such as Space with j (dots 2-4-5), to set the navigation level while reading a book, are specific to the current activity. While others, such as Space with h (dots 1-2-5), which brings up the Context Menu, can be used from almost anywhere on the device.

## 2.6 Keyboard Lock

It is possible to lock all of the keys of the device to prevent accidental key presses. This can be convenient when carrying the eReader in a purse or backpack.

To lock the keys, press the Up and Down thumb keys at the same time. These are the two outermost thumb keys on the front of the device. The message "keyboard locked" will be displayed. If you have reconfigured the thumb keys in Settings, then the keyboard will be locked with the Up and Down keys, no matter their new location.

To unlock the keys, press the Up and Down thumb keys at the same time again. The message "keyboard unlocked" will be displayed. Note that if the device goes into Sleep mode while the keys are locked, the keys will not be locked when the device is awakened.

#### 2.7 Main Menu

The Main Menu contains the following nine items:

- Book Reader
- File Manager
- Date and Time
- Braille Display
- Settings
- Online Services
- Battery Info
- User Guide
- Power Off

Press the Up or Down thumb key to move to the menu item of your choice, then press Enter to activate it. You can return to the Main Menu at any time by pressing a Space key with the letter m (dots 1-3-4).

#### 2.8 Panning Text

When a line of text is longer than 20 characters, you will need to move the display left or right to read the rest of the text. This movement is called panning, and it is accomplished by pressing the Left or Right thumb keys of your eReader.

The Left and Right thumb keys are respectively the second and fourth buttons on the front edge of your device. There is a vertical tactile line on the left side of the Left thumb key and a vertical tactile line on the right side of the Right thumb key, making these keys easily recognizable.

#### 2.9 Context Menu

The Context Menu is a special menu that can be accessed from almost everywhere in your device. It offers useful contextual functions that are relevant to what you're currently doing on your eReader. It is similar to a context menu on a PC. If you're looking for a specific action, or you just forgot the command, chances are you will find it in the Context Menu.

To activate the Context Menu, press Space with h (dots 1-2-5). A menu will open and offer you a list of actions you can perform at that particular moment. Use the Up or Down thumb keys to move through this menu until you find what you are looking for, then press Enter. Otherwise, press Space with e (dots 1-5) to close the Context Menu.

## 2.10 First Letter Navigation

Most of the time, you can jump to an item in a menu or list by typing the first letter of that item. Doing so will automatically move the display to the first item starting with that letter. Typing the same letter twice will bring you to the second item starting with that letter, and so on. For example, if you are in the Main Menu and you wish to reach Settings, type the letter s on the keyboard.

## 2.11 Common Keyboard Commands

Below is a list of the most commonly used commands on the eReader:

Escape or Back: Space with e (dots 1-5)

Previous element: Space with dot 1 or Up

Next element: Space with dot 4 or Down

Go to top: Space with dots 1-2-3

Go to bottom: Space with dots 4-5-6

Switch braille grade: Space with g (dots 1-2-4-5)

Battery level: Enter with p (dots 1-2-3-4)

Context Menu: Space with h (dots 1-2-5)

Main Menu: Space with m (dots 1-3-4)

System information: Space with i (dots 2-4)

## 3 Book Reader

The first item on the Main Menu is Book Reader. This application is used to read books and magazines. It supports the following file formats: .brf, .pef, .txt, .html, .docx, .rtf, .pdf, and DAISY text files. It is compatible with .zip files if the zip file contains material in supported file types.

From the Main Menu, press the Up or Down thumb keys until you reach Book Reader or press b until you reach Book Reader, then press Enter to open it.

#### 3.1 Book Reader Menu

The Book Reader Menu contains four items:

- Book List
- Recently Read
- Search
- Close App

#### 3.1.1 Book List

All available books and magazines on your device are listed alphabetically in the Book List of the Book Reader. Each title is followed by a location indicator in parentheses. Books that are currently on removable media are indicated with "(sd card)" and "(usb)." Books that have been downloaded from BARD and are stored on the internal drive in the online-books/nlsbard folder are indicated with "(online)."

To select a book from the Book List, use the Up or Down thumb keys, then press Enter to open it. When a book is open, press Space with e (dots 1-5) or Space with b (dots 1-2) to close it and return to the Book List.

#### 3.1.2 Recently Read

To open a list of the last five books you've read, press Enter with r (dots 1-2-3-5) from within a book, or select Recently Read from the Book Reader Menu. Move through your five most recently opened books using the Up and Down thumb keys, then press Enter to open the book you wish to read.

#### 3.1.3 Search

You can search for a specific book stored on your device. To search for a book, navigate to Search from the Book Reader Menu or press Space with f (dots 1-2-4). Type part or all of the title you wish to search for, then press Enter. Your eReader will display a list of books matching your search query. To reach the book you are looking for, use the Up and Down thumb keys, then press Enter to open it.

#### 3.1.4 Close App

The final item on the Book Reader Menu is Close App. You can select this item to close the Book Reader and return to the Main Menu. If you prefer, at any time, you can press Space with the letter m (dots 1-3-4) to return to the Main Menu.

### 3.2 Book Management

When browsing the Book List, you can copy, move, or delete the current book from the Book Reader application. Access the Book List by pressing Space with b (dots 1-2). Select a book using the Up or Down thumb keys, then press Backspace with m (dots 1-3-4) to open the Book Management Menu. Select Copy to, Move to, or Delete. After selecting Copy to or Move to, choose the desired location from the list and press Enter. The device will confirm your action.

## 3.3 Book Navigation

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

#### 3.3.1 Navigation Level

The Book Reader includes multiple navigation levels to make navigating through a book easier.

To change the navigation level, access the Navigation Menu by pressing Space with j (dots 2-4-5). The menu contains items such as page, paragraph, volume, and so forth. Choose your desired navigation level using the Up and Down thumb keys and press Enter.

Once you have selected your navigation level, use the Up and Down thumb keys to navigate at the selected level. For example, if you selected the "page" navigation level, pressing the Down thumb key would move you forward from page to page through your book. The Up thumb key will move you back page by page.

When navigating by line, you can choose whether your display moves straight down or goes back to the left margin. So, for example, if your display is currently showing cells 21-40 of a line and you move down by line, if "straight down" is in effect, then you will move to cells 21-40 of the next line. If "left margin" is in effect, you will move to cells 1-20 of the next line. You can toggle this setting by pressing Enter with I (dots 1-2-3).

There are also keyboard commands to navigate by paragraph, page, and volume. Previous Paragraph is Space with dot 1, Previous Page is Space with dot 2, and Previous Volume is Space with dot 3. Next Paragraph is Space with dot 4, Next Page is Space with dot 5, and Next Volume is Space with dot 6.

### 3.3.2 Go to

To reach a specific page, heading, book percentage, or bookmark, press Enter with o (dots 1-3-5). Then, using the Up and Down thumb keys, move through the available navigation options. Choose the desired option and press Enter. Type in a value, then press Enter.

#### 3.3.3 Auto-scroll

The eReader's auto-scroll feature allows you to read a book without having to continuously press keys. The braille display will advance automatically at a rate that you control. To turn on this feature, press Space with dots 3-4 when inside a book. Press any key to stop auto-scroll and return to manual panning.

You can change the auto-scroll speed while auto-scrolling inside a book. To slow down the auto-scroll speed, press Backspace with dots 1-3. To make auto-scroll go faster, press Backspace with dots 4-6. If you like, you can save your preferred auto-scroll speed by going into User Settings and setting Save Auto-scroll Speed to On. If you prefer not to use auto-scroll, you can deactivate it in User Settings by setting Auto-scroll Active to Disabled.

#### 3.3.4 Get Current Position

You can use the Where am I command whenever you want to know your current position within a book. To activate the Where am I command, press Space with the braille wh-sign (dots 1-5-6).

Alternatively, access the Context Menu by pressing Space with h (dots 1-2-5). Reach Where am I using the Up and Down thumb keys, then press Enter to activate the command.

Once in the list of Where am I items, use the Up and Down thumb keys to move through the available elements (heading, percent, page, line). Use the Left and Right thumb keys to pan through the text as needed.

### 3.3.5 Go to the Beginning or End of a Book

You can easily go to the beginning or end of a book using keyboard commands. To go to the beginning of a book, press Space with dots 1-2-3. To go to the end of a book, press Space with dots 4-5-6.

#### 3.3.6 Search for Text

To search for text within a book, press Space with f (dots 1-2-4). You will be prompted to enter the text you wish to find. Enter the text, then press Enter. The cursor will be placed at the beginning of the found text. If the text of the book is being displayed in contracted braille, you can type your search text in either contracted or uncontracted braille. If text of your book is uncontracted, then your search string can be in contracted braille, if braille translation is turned on. See section 7.2 Braille Profile for braille translation settings. Otherwise, it will need to be in uncontracted braille. If your search string is not found, the words "no result" will display. You can use Space with n (dots 1-3-4-5) to find next and Space with p (dots 1-2-3-4) to find previous.

#### 3.4 Book Information

You can display additional information about the book you are currently reading by pressing Space with i (dots 2-4). Alternatively, you can open the Context Menu with Space with h (dots 1-2-5), and use the Up and Down thumb keys to choose the Book Information menu item. Press Enter to activate it. Once there, use the Up and Down thumb keys to move through the list of available book information elements. This information varies somewhat depending on the type of file. Book information may include items such as title, author, description, number of pages, number of volumes, and book number. Use the Left and Right thumb keys to pan through the text of each item on the list as needed.

#### 3.5 Bookmarks

The eReader allows you to place bookmarks in reading material for quick return to a particular position.

#### 3.5.1 Bookmark Menu

To open the Bookmark Menu, use Enter with m (dots 1-3-4), or press Space with h (dots 1-2-5) to open the Context Menu and navigate to Bookmark Menu.

#### 3.5.2 Insert Bookmark

To add a bookmark, press Enter with m (dots 1-3-4) to open the Bookmark Menu. Select Insert Bookmark using the Up and Down thumb keys, then press Enter. Type in a specific unused bookmark number for that book, then press Enter. If you do not enter a number, your eReader will select the first available number and assign it to the bookmark. Alternatively, you can insert a quick bookmark by pressing Enter with b (dots 1-2).

#### 3.5.3 Go to Bookmark

While reading a book, you can jump to one of your bookmarks by pressing Enter with j (dots 2-4-5) to access your bookmark list. You will be prompted to enter a bookmark number. Enter the bookmark number you wish to jump to, then press Enter. Bookmark is also on the Navigation Menu, accessed with Space with j (dots 2-4-5).

## 3.5.4 Highlight Bookmark

The eReader has a Highlight Bookmark feature that allows you to define the Start and the End positions of a passage. To select Highlight Bookmark Start from the Bookmark Menu press Enter

with m (dots 1-3-4). Enter a specific unused bookmark number, then press Enter. If you do not enter a number, your eReader will select the first available number and assign it to the bookmark. After setting the starting position, navigate to the point where you wish to mark the end of the highlight. Select Highlight Bookmark End from the Bookmark Menu. The current position is set as the ending position. Note, if you insert a quick bookmark, by pressing Enter with b (dots 1-2), it will be used to mark the end of the highlight bookmark. Press Enter with h (dots 1-2-5) to open the Highlight Bookmark List. Choose a highlight bookmark number and press Enter. The content of the selected highlight bookmark will be displayed. Use the thumb keys to navigate the text of the highlight bookmark. Press Space with e (dots 1-5) to close the highlight bookmark and return to your previous position in the book.

#### 3.5.5 Remove Bookmark

To remove a saved bookmark, press Enter with m (dots 1-3-4) to open the Bookmark Menu. Navigate to Remove Bookmark using the Up and Down thumb keys, then press Enter. Type in the bookmark number you wish to remove, then press Enter again.

#### 3.6 Book Reader Commands

Here is a list of the commands used in the Book Reader:

Book List: Space with b (dots 1-2)

Manage Books: Backspace with m (dots 1-3-4)

Go to Option Menu: Enter with o (dots 1-3-5)

Bookmark Menu: Enter with m (dots 1-3-4)

Jump to Bookmark: Enter with j (dots 2-4-5)

Insert Quick Bookmark: Enter with b (dots 1-2)

Show Highlight Bookmarks: Enter with h (dots 1-2-5)

Select Navigation Level: Space with j (dots 2-4-5)

Previous Element: Up thumb key

Next Element: Down thumb key

Previous Paragraph: Space with dot 1

Next Paragraph: Space with dot 4

Previous Page: Space with dot 2

Next Page: Space with dot 5

Previous Volume: Space with dot 3

Next Volume: Space with dot 6

Previous Nonblank Line: Enter with dot 1

Next Nonblank Line: Enter with dot 4

Start Auto-scroll: Space with dots 3-4

Increase Auto-scroll Speed: Backspace with dots 4-6

Decrease Auto-scroll Speed: Backspace with dots 1-3

Stop Auto-scroll: Press any key

Where am I: Space with braille wh-sign (dots 1-5-6)

Book Information: Space with i (dots 2-4)

Go to Beginning of Book: Space with dots 1-2-3

Go to End of Book: Space with dots 4-5-6

Recently Read Books: Enter with r (dots 1-2-3-5) Search for Books or Text: Space with f (dots 1-2-4)

Find Previous: Space with p (dots 1-2-3-4)

Find Next: Space with n (dots 1-3-4-5)

Toggle between Left Margin and Straight down when Moving by Line: Enter with I (dots 1-2-3)

## 4 File Manager

The second item on the Main Menu is File Manager. The File Manager allows you to browse, delete, rename, copy, or move the various books and magazines on your device. From the Main Menu, open the File Manager by pressing the Down thumb key until you reach File Manager or press f (dots 1-2-4). When File Manager is displayed, press Enter to open it.

## 4.1 File Browsing

You can browse through your files and folders using the Up and Down thumb keys.

You will see the folder and file names. Folder names have an 8-dot symbol before them for easy identification. Press Enter on a folder to open it. Press Space with e (dots 1-5) or move to the item Back and press Enter to return to the parent folder.

#### 4.1.1 Select Drive

Once in the File Manager, you can choose which drive you wish to access: the internal memory, an SD card, or a USB flash drive. To display a list of available drives, press Space with d (dots 1-4-5). Move through the list using the Up or Down thumb keys and press Enter to confirm your choice. You will now be at the root of your selected drive. Press Space with d (dots 1-4-5) at any time to return to the drive selection list.

#### 4.1.2 Get File or Folder Information

To get additional information on a file or folder, navigate to it using the Up or Down thumb keys, then press Space with i (dots 2-4). Move through the list of information on the file or folder using the Up and Down thumb keys. Use the Left and Right thumb keys to pan through the text as needed.

## 4.1.3 Display Current File Path

The Where Am I function allows you to display the path of your current location on your eReader's braille display. To display your current file path, press Space with the braille wh-sign (dots 1-5-6).

## 4.1.4 Searching for Files and Folders

You can perform a search of your files and folders in the File Manager. To search for a file or folder, press Space with f (dots 1-2-4), then type in the name of a file or folder. Press Enter. A list of files and folders matching your search will appear on your braille display.

Press Space with e (dots 1-5) to close the search results.

#### 4.1.5 Sort Files or Folders

By default, file and folder names are sorted alphabetically. You can sort them using different parameters. To change the sort order of your files and folders, press Backspace with s (dots 2-3-4). Your eReader will display a list of sorting options available: Name, Date, Size, and Type. Scroll through the list using the Up or Down thumb keys, then press Enter to activate the sorting option of your choice. Selecting the current sorting option again will invert the results.

## 4.2 Modifying Files and Folders

The File Manager on your eReader lets you work with files much like you would on a computer or tablet.

#### 4.2.1 Create New Folder

To create a new folder, press Space with n (dots 1-3-4-5), and type in the name of the new folder. When you finish typing the name, press Enter to create it.

## 4.2.2 Rename a File or Folder

To rename a file or folder, navigate to the file or folder you wish to rename using the Up and Down thumb keys. Press Backspace with r (dots 1-2-3-5); you will be prompted to enter a new name. Type in the new name of the file or folder, then press Enter. Note that the file name must be unique in your current directory, and only one file or folder can be renamed at a time.

#### 4.2.3 Mark Files or Folders

You can mark multiple files and folders you want to perform an action on, like cut or copy.

To mark a file or folder, navigate to the file using the Up or Down thumb keys, then press Backspace with dots 1-6. To unmark a file, navigate to it and press Backspace with dots 1-6 again.

To mark all files and folders in the current directory, press Backspace with dots 1-2-3-4-5-6.

#### 4.2.4 Delete Files or Folders

To delete a single file or folder, navigate to the file using the Up or Down thumb keys, then press Backspace with d (dots 1-4-5). To delete multiple files or folders, navigate to each file or folder you wish to delete using the Up or Down thumb keys. Press Backspace with dots 1-6 to mark the file or folder. Once all files or folders you wish to delete are marked, press Backspace with d (dots 1-4-5) to delete. The eReader will ask you if you are sure you want to delete the files and/or folders. Navigate to Yes using the Up or Down keys and press Enter to confirm deletion.

#### 4.2.5 Copy Files or Folders

To copy a single file or folder, navigate to the file using the Up or Down thumb keys, then press Backspace with c (dots 1-4). To copy multiple files or folders, navigate to each file or folder you wish to copy using the Up or Down thumb keys. Press Backspace with dots 1-6 to mark each file or folder. Once all files or folders are marked, press Backspace with c (dots 1-4) to copy them to the clipboard. To paste the copied files or folders, navigate to the desired location, then press Backspace with v (dots 1-2-3-6).

#### 4.2.6 Cut Files or Folders

To cut a single file or folder, navigate to the file using the Up or Down thumb keys, then press Backspace with x (dots 1-3-4-6). To cut multiple files or folders, navigate to each file or folder you wish to cut using the Up or Down thumb keys. Press Backspace with dots 1-6 to mark each file or folder. Once all files or folders you wish to cut are marked, press Backspace with x (dots 1-3-4-6) to cut and copy to the clipboard. To paste the cut files or folders, navigate to the desired location, then press Backspace with v (dots 1-2-3-6).

## 4.3 Auto Copy from Cartridge

When you receive a cartridge containing braille books from your library, your eReader will be able to copy books from it automatically. Connect the cartridge to the included cartridge cable. Then, connect the cable to the USB-A port on the left side of the unit.

After a few seconds, you will see the message "usb inserted," letting you know that the cartridge has been recognized. Then you will see the message "auto copy completed." The copied books will now be in your Book List and stored in the internal files of the eReader.

If you wish to have the auto copy function work for your own cartridges or USB flash drives, put the label "u-s-loc" on the cartridge. You can rename a volume by locating it in Windows Explorer on a PC and pressing F2, or in Finder on a Mac and pressing Return.

## 4.4 File Manager Commands

Below is a list of keyboard commands used in the File Manager.

Create New Folder: Space with n (dots 1-3-4-5)

File Info: Space with i (dots 2-4) Mark: Backspace with dots 1-6

Mark All: Backspace with dots 1-2-3-4-5-6

Rename File: Backspace with r (dots 1-2-3-5)

Delete File: Backspace with d (dots 1-4-5)

Copy File: Backspace with c (dots 1-4)

Cut File: Backspace with x (dots 1-3-4-6)

Paste: Backspace with v (dots 1-2-3-6)

Search File: Space with f (dots 1-2-4)

Sort Files: Backspace with s (dots 2-3-4)

Where am I: Space with braille wh-sign (dots 1-5-6)

Select Drive: Space with d (dots 1-4-5)

Go to Parent Folder: Space with e (dots 1-5)

Eject Media: Enter with e (dots 1-5)

## 5 Date and Time

The third item on the Main Menu is Date and Time. This is a simple application that gives you the current date and time. From the Main Menu, press the Up or Down thumb keys until you reach the menu item Date and Time, then press Enter to open it.

## 5.1 Display Date and Time

When you open the Date and Time application, your eReader will display the current time. Pan right once using the Right thumb key to display the date. Pan left using the Left thumb key to return to the time.

To quickly access the date and time, press Enter with t (dots 2-3-4-5) for the time and Enter with d (dots 1-4-5) for date from anywhere on the eReader.

## 5.2 Setting Date and Time

To change the date and time, press Space with h (dots 1-2-5) from within the Date and Time application.

This will open a submenu with the following options:

Change time: Type in the current hour inside the edit box, press Enter, then type in the minutes and press Enter again.

Change date: Type in the current year inside the edit box and press Enter. Type in the month, press Enter, then type in the day and press Enter again.

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

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

Date format: Select your preferred date format from among the following:

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

Press Enter to save your preferred date format.

## 6 Braille Display Mode

The fourth item on the Main Menu is Braille Display. The Braille Display Menu contains items that relate to connecting the eReader to a device such as a computer or smartphone. When connected to a computer or smartphone running a screen reader, Braille Display mode will display the text from the connected device. The eReader is compatible with the following screen readers: JAWS, NVDA, and VoiceOver, and works with any Windows, Mac, or iOS device. You can connect to a compatible device either through Bluetooth, or by connecting the USB-C cable included with your eReader to the host device. Up to five Bluetooth devices and one USB device can be connected simultaneously to your eReader.

## 6.1 Using Braille Display Mode

To activate Braille Display mode from the Main Menu, use the Up and Down thumb keys, then press Enter on Braille Display. Alternatively, you can type the letter b (dots 1-2) until Braille Display appears, then press Enter to open it. You can also get to Braille Display mode from anywhere with Enter and # (dots 3-4-5-6).

#### 6.1.1 USB Connection

Connect the eReader to a Windows or Mac computer using the included charging cable connected to the USB-C port located on the left side of the eReader, near the back. From the Braille Display Menu, select Connected devices, the first item in the Braille Display Menu, and press Enter. Select USB connection and press Enter. Select the eReader device in the braille settings of your screen reader. If using JAWS, go into Braille Options, choose Add a Display, and select NLS eReader Humanware and add the display. Your JAWS version must be April 2020 or later.

Once connected, the content of your host device will be shown on your braille display.

You will also be able to use your eReader as an external keyboard to write on your host device.

#### 6.1.2 Bluetooth Connection

To pair a new Bluetooth device, select Add Bluetooth Device from the Braille Display Menu. The display may read "activating Bluetooth" for a few seconds and then it will read: Activate your device in your host device's settings: NLS eReader followed by your device's serial number.

To pair with an iPhone or iPad, select Settings > Accessibility > VoiceOver > Braille from your iOS device. At the very bottom of the screen, after the text "Choose a Braille Display," you will find "NLS eReader" followed by your device's serial number with the indication "not paired." Double tap this and VoiceOver will say the name of the device followed by "pairing...." If you do not see

NLS eReader on your iPhone or iPad, power off both devices, turn the eReader back on, and then turn your iOS device back on.

Once the connection is complete, return to your eReader. The connected device will appear in the list. Use the Up or Down thumb keys to select it and press Enter to connect to your device. Wait for the connection to be established. When the connection is successful, the content of your host device will show on your braille display.

If you wish to connect your eReader to another Bluetooth device, press the Select key to return to the Braille Display Menu. Navigate to another connected device using the Up and Down thumb keys, then press Enter. When you are in the list of connected devices, there is an eight-dot symbol after any device to which you are connected. When you select a connected device, you may see a message saying, "Please wait." Press a cursor routing button or the Right thumb key to get out of the message and start interacting with your connected device. You will also be able to use your eReader as an external keyboard to write on your host device.

## 6.2 Leaving Braille Display Mode

To leave your connection and return to the Braille Display Menu, press the Select key once.

## 7 Settings

The fifth item on the Main Menu is Settings. Here you will find numerous settings that let you customize your device according to your personal preferences. From the Main Menu, press the Up or Down thumb key until you reach Settings or press s (dots 2-3-4), then press Enter to open it.

The Settings Menu has seven items:

- User Settings
- Braille Profile
- Wi-fi
- Bluetooth
- Software Update
- About
- Close

To change the value of a setting, press Enter.

# 7.1 User Settings

Airplane mode: On or off. When turned on, all wireless functionalities will be disabled.
Format Markers: Show or hide.
Cursor Visible: On or off.
Message Display Time: Set how long you would like a message displayed (1 to 30 seconds).
Sleep Time: Number in minutes or 0 to disable Sleep mode.
Word Wrap: On or off.
Move by Line: Left margin or straight down. Set how you want the cursor to move when moving by line. Move to first cell of next line or move straight down from current position.
Condense Blank Lines: Condensed or not condensed.
Confirm Delete: On or off. When turned on, your eReader will ask you to confirm file or folder deletion.
Vibration: On or off. When on, your eReader will vibrate to indicate certain events.
Beep: On or off. When on, your eReader will beep to indicate certain events.
Thumb Keys Configuration: Map the Up, Down, Left, and Right commands to the thumb key of your choice.
Wireless Notifications: On or off. Enable or disable wireless and Bluetooth connection feedback.
Auto-scroll Active: Enabled or disabled.

Save Auto-scroll Speed: On or off.

Discard Trailing Spaces: On or off.

### 7.2 Braille Profile

You can select the following braille profile settings. For each setting, press Enter to see a list of options and press Enter again to confirm your selection.

Braille Grade: Choose among Uncontracted, Contracted, and Computer braille.

Computer Braille Table: Select your preferred computer braille table.

Uncontracted Braille Table: Select your preferred uncontracted braille table.

Contracted Braille Table: Select your preferred contracted braille table.

Save Configuration: Press Enter here to save your configuration.

For both the computer and contracted braille tables, one of the choices is None. If you select this option, pressing Space with G no longer switches to that grade of braille.

#### 7.3 Wi-Fi

This eReader has 2.4 GHz Wi-Fi capability.

### 7.3.1 Wi-Fi settings

Wi-Fi: Press Enter to turn Wi-Fi on or off.

Status: Provides information about your current Wi-Fi connection.

New Connection: Press Enter to create a new Wi-Fi connection.

Launch Connection: Connect to a previously connected Wi-Fi network.

Delete Connection: Make your device forget a known Wi-Fi network.

Network Settings: Change advanced network settings, such as Mode, IP, Subnet mask, Gateway, and DNS.

Import Wi-Fi: Allows you to import Wi-Fi network information from a file.

## 7.3.2 Connecting to a Wi-Fi Network

From the Settings Menu, select Wi-fi. If you see the words "Wi-fi off," press the Enter key to turn it on. If you see "Wi-fi on," then all is well.

From "Wi-fi on," press the Down thumb key until you see the words "New Connection." Press Enter.

You have three connection options:

Scan for SSID: Select this option to discover the available networks in your vicinity. The process of connecting to a network is described in detail below.

WPS Connection: Select this option to establish a Wi-Fi Connection using WPS. Your eReader will display "loading..." for about 30 seconds. Press the WPS button on your network's router to turn on discovery of new devices. After a few seconds, you will be automatically connected to your network.

Manually Connect: Select this option to manually enter the SSID of your network and the password. Once you are done, press Enter to connect.

In most cases, you will want to select Scan for SSID. After selecting this option, you will briefly see "loading...," then you will be presented with a list of one or more wireless networks nearby. Use the Down thumb key to move through the list until you see the network you want. Press Enter. You will be prompted for the network password. On the display, you will see two characters with a space between them that form a kind of box. This is where you will type the password. You may need to press a cursor routing button above the box to bring the cursor to the right place. The cursor is represented by dots 7 and 8, and will remind you of a hyphen. Be sure it is centered in the box before entering text.

Enter the password in uncontracted Unified English Braille. This means that single uppercase characters should be preceded by dot 6; consecutive uppercase characters should be preceded by dot 6, dot 6; and digits should be written in the upper part of the cell and preceded by a number sign. If letters a-j immediately follow a number, then a grade 1 indicator (dots 5-6) is needed before the letter.

After entering the network password, press the Down thumb key to reach OK and press Enter. When connected, you will hear several beeps and see the words "Connection successful."

#### 7.4 Bluetooth

This section is for activating or deactivating bluetooth and deleting paired devices. To connect to a device, go to Braille Display on the Main Menu.

Bluetooth Mode: On or off.

Connect Device: Connect your eReader with a paired Bluetooth device.

Disconnect Device: Disconnect the active Bluetooth connection.

Delete Paired Device: Makes your eReader forget a Bluetooth device.

## 7.5 Software Update

Automatic Check: On or off.

This is where you can manually check for an update to the device's software.

### 7.6 About

The About Menu provides various pieces of information about your device, such as version number, model number, serial number, licenses, and copyright.

## 8 Online Services

The sixth item on the Main Menu is Online Services. From here, you can access BARD, NLS's online service for accessing books and magazines, and NFB Newsline, a service for accessing national and local newspapers, as well as magazines and TV listings.

## 8.1 NLS BARD

The eReader can access BARD directly. You can view and download books from the most popular books list, the most recent books and magazines list, and your previous downloads. You can browse subject categories and search the collection. You can also download braille books and magazines from your wish list as well as add and remove items from it. Before you can access

BARD, you must connect your device to a Wi-Fi network (see section 7.3.2 Connecting to a Wi-Fi Network for detailed instructions) and login to your BARD account.

## 8.1.1 Connecting to BARD for the First Time

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

The username and password should both be entered in uncontracted Unified English Braille. This means that the at sign in an e-mail address is written as dot 4 then dot 1, and the period is written as dots 2-5-6.

On the display, you will see two characters with a space between them that form a kind of box. This is where you will type your username. As you type, if you cannot see the characters you are entering, press the cursor routing button just above the edit box. The cursor is represented by dots 7 and 8, and will remind you of a hyphen. When the cursor appears, the edit box will be ready to accept typed characters.

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

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

### 8.1.2 Downloading Books and Magazines from BARD

The NLS BARD menu contains eight items:

- Most Popular
- Most Recent Books
- Most Recent Magazines
- Browse Categories
- Search Collection
- Wishlist
- Previous Downloads
- Remove Account

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

To search for books, press Enter on Search Collection. Enter your search text in the edit box and press Enter. If you are searching for a particular phrase, put the words of the phrase in quotes. To search for an author, type the author's last name, followed by a comma, a space, and the author's first name.

To delete an item from your Wish List, press Enter on the title. Then press Enter on Remove from Wishlist, which is the second item on the details page.

#### 8.1.3 Reading a Book you have Downloaded

After you have downloaded a book or magazine, you can download additional items, or you can read one of them. To read an item, return to the Main Menu by pressing Space with m (dots 1-3-4). Press Enter on Book Reader. Then, press Enter on Book List. Here you will find your downloaded items. Press Enter on the title you wish to read and you will be at the beginning of the book.

#### 8.2 NFB Newsline

If you have an NFB Newsline account, the eReader allows you to connect to your account and download Newsline material for reading. Before you can access NFB Newsline, you must connect your device to a Wi-Fi network (see section 7.3.2 Connecting to a Wi-Fi Network for detailed instructions) and login to your NFB Newsline account.

## 8.2.1 Connecting to NFB Newsline for the First Time

The first time you open NFB Newsline, select Configure Account which is the first item on the menu. Here you will find three items:

- Add Account: Enter your NFB Newsline credentials
- Update Frequency: Select how often you would like your subscriptions updated
- Keep Outdated Issues: Determine whether your eReader should keep or delete outdated issues.

When you open Add Account, you will be prompted to enter your NFB Newsline username and password. After entering your username, press Enter and you will be prompted for the password. Once typed, press the Enter key. You will briefly see the word "loading..." followed by "login successful." Add Account will change to Remove Account.

On this same menu, you can set your preference for update frequency. The options are manually, always, or daily. You can also choose whether to keep outdated issues. If you turn this setting off, publication issues will be automatically deleted when the next issue is received.

#### 8.2.2 Downloading NFB Newsline Publications

The Main NFB Newsline menu has four items:

- Configure Account
- Manage Publications
- Sync Content Now
- Back

Manage publications lets you subscribe and unsubscribe to your preferred publications. This menu first contains subject categories, which are followed by states. Pressing Enter on a menu item will bring up a list of available publications. Pressing Enter on a publication will subscribe you to that publication and its name will be underlined to indicate that you are actively subscribed.

Sync Content Now will immediately download the latest issues of your subscribed material. The number of issues downloaded will be displayed.

## 8.2.3 Reading your Downloaded NFB Newsline Publications

Once your Newsline publications have been downloaded, they will be available for reading in the Book List of the Book Reader application. When reading Newsline content, the articles are usually at level 3, and the sections are usually at level 2. While reading, press Space with J (dots 2-4-5) to select the navigation level.

# 9 Updating the eReader's Software

## 9.1 Automatic Check for Update Feature

By default, an Automatic Check for Update feature is enabled. When connected to the Internet, the eReader regularly checks if a new update is available for download. If an update is available, the eReader will prompt you to download it.

To disable/enable the Automatic Check for Update feature, follow these steps:

- 1. Go to the Main Menu.
- 2. Select Settings and press Enter.
- 3. Go to Software Update and press Enter.

- 4. Select Automatic Check for Updates.
- 5. Press Enter to enable/disable the feature.

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

## 9.2 Updating the eReader manually

When connected to the Internet with the eReader, you can manually check if a software update is available.

To check for an update manually:

- 1. Go to the Main Menu.
- 2. Select Settings and press Enter.
- 3. Select Software Update and press Enter.
- 4. Select Check for Update and press Enter.

If prompted with a new update, select Download by pressing the Up or Down thumb key to download the update now or choose Remind Me Later to update it later. You can continue to use the eReader while the update is downloading.

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

After a few minutes, the eReader will ask you to install the downloaded update. Select OK to install it. The eReader will restart automatically and a progress indicator line will be shown on the braille display.

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

## 9.3 Updating the eReader via USB or SD Card

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

- 1. Insert the USB flash drive or SD card containing the update file into your eReader. Note that the update file must be placed at the root of the USB drive/SD card.
- 2. When the eReader detects an update file on the USB drive or SD card, the braille display will notify you that an update is available for installation.

3. Press the Down thumb key until you reach OK, then press Enter to activate the update. The device will shut down and restart to process the update.

## 10 Command Summary

Here is a list of all commands on your eReader.

#### 10.1 General

Main Menu: Space with m (dots 1-3-4) Escape or Back: Space with e (dots 1-5)

Enter: dot 8

Jump to any Item in a List: Type the first letter of the desired item

Context Menu: Space with h (dots 1-2-5) System Information: Space with i (dots 2-4) Battery Level: Enter with p (dots 1-2-3-4)

Time: Enter with t (dots 2-3-4-5)

Date: Enter with d (dots 1-4-5)

Eject Media: Enter with e (dots 1-5)

Toggle Braille Grade: Space with g (dots 1-2-4-5)
Open Wi-Fi Settings: Space with # (dots 3-4-5-6)

Enter Braille Display mode: Enter with # (dots 3-4-5-6)

Exit Braille Display mode: Select key

### 10.2 Navigation

Activate the Selected Item: Enter or cursor routing button above the word on the display

Move to the Previous Item: Up or Backspace

Move to the Next Item: Down or Space

Braille Panning Left and Right: Left or Right thumb key

#### 10.3 Editing Text

Activate Edit Mode: Enter or a cursor routing button

Leave Edit Mode: Space with e (dots 1-5)

Move to Next Edit Box while Editing: Enter

Move to Next Edit Box without Editing: Space with dot 4 or Down thumb key

Move to Previous Edit Box without Editing: Space with dot 1 or Up thumb key

Move Cursor to Start of Text Field: Space with dots 1-2-3

Move Cursor to End of Text Field: Space with dots 4-5-6

Delete Previous Character: Backspace

Select All: Enter with dots 1-2-3-4-5-6

Cut: Backspace with x (dots 1-3-4-6)

Copy: Backspace with c (dots 1-4)

Paste: Backspace with v (dots 1-2-3-6)

#### 10.4 Book Reader

Go to Option Menu: Enter with o (dots 1-3-5)

Bookmark Menu: Enter with m (dots 1-3-4)

Jump to Bookmark: Enter with j (dots 2-4-5)

Insert Quick Bookmark: Enter with b (dots 1-2)

Show Highlight Bookmarks: Enter with h (dots 1-2-5)

Select Navigation Level: space with j (dots 2-4-5)

Previous Element: Up thumb key

Next Element: Down thumb key

Previous Paragraph: Space with dot 1

Next Paragraph: Space with dot 4

Previous Page: Space with dot 2

Next Page: Space with dot 5

Previous Volume: Space with dot 3

Next Volume: Space with dot 6

Previous Non-blank Line: Enter with dot 1

Next Non-blank Line: Enter with dot 4

Start Auto-scroll: Space with dots 3-4

Increase Auto-scroll Speed: Backspace with dots 4-6

Decrease Auto-scroll Speed: Backspace with dots 1-3

Stop auto-scroll: Press any key

Where am I: Space with braille wh-sign (dots 1-5-6)

Info: Space with i (dots 2-4)

Go to Beginning of Book: Space with dots 1-2-3

Go to End of Book: Space with dots 4-5-6

Book List: Space with b (dots 1-2)

Recently Read Books: Enter with r (dots 1-2-3-5)

Search for Books or Text: Space with f (dots 1-2-4)

Find Previous: Space with p (dots 1-2-3-4)

Find Next: Space with n (dots 1-3-4-5)

Toggle between Left Margin and Straight Down when Moving by Line: Enter with dots 1-2-3

## 10.5 File Manager

Mark/Unmark: Backspace with dots 1-6

Mark/Unmark All: Backspace with dots 1-2-3-4-5-6

Info: Space with i (dots 2-4)

Rename: Backspace with r (dots 1-2-3-5)

Delete: Backspace with d (dots 1-4-5)

Copy: Backspace with c (dots 1-4)

Cut: Backspace with x (dots 1-3-4-6)

Paste: Backspace with v (dots 1-2-3-6)

New Folder: Space with n (dots 1-3-4-5)

Search: Space with f (dots 1-2-4)

Sort: Backspace with s (dots 2-3-4)

Where am I: Space with braille wh-sign (dots 1-5-6)

Select Drive: Space with d (dots 1-4-5)