# BrailleNote Touch Plus User Guide

BNT+ 2022/11/14

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### 1 Product Overview and Physical Description

#### 1.1 Product Overview

Thank you for purchasing the BrailleNote Touch Plus, the next generation of HumanWare's BrailleNote family of products. Please note that the BrailleNote Touch Plus will simply be referred to as the BrailleNote Touch throughout this guide.

The BrailleNote Touch Plus is not "just a Braille note taker": It is the first intuitive, simple to use Braille tablet. While operating as the keyboard, the built-in touchscreen also acts as a visual display for sighted teachers or assistants who will want to interact with the tablet. And for those who may want a more traditional typing experience, the BrailleNote Touch includes a physical Keyboard Cover attached to the carrying case that can be used as an alternative to the touchscreen. You can also use your own standard Bluetooth or USB keyboard if you wish to do so.

We designed the BrailleNote Touch with one thing in mind: to realign efficiency and accessibility.

#### 1.2 Unpacking your BrailleNote Touch

The package contains the following items:

BrailleNote Touch Plus Tablet Carrying Case Nylon strap with shoulder pad Power Adaptor Type-C USB Cable Printed warranty sheet Printed/Braille Getting started sheet Cleaning cloth Headphones

#### 1.3 Physical Description

#### 1.3.1 Carrying case

When you receive it, your BrailleNote Touch will already be inside its sturdy carrying case. The top side of the carrying case is made of nylon and has a small pouch with a Velcro strip that can be used to carry your cables, USB media or SD cards. The bottom side of the carrying case is made of sturdy plastic.

On the bottom side, close to the rear edge, you will notice three hollow areas. These are holes for the BrailleNote Touch's LED lights and camera. Still on the bottom side, closer to the front edge, are 2 latches used to release your BrailleNote Touch from its carrying case.

On the right and left sides of your BrailleNote Touch, close to the front edge, are two attachment rings that can be used to attach a shoulder strap.

The cover of the carrying case is kept closed with 3 magnets located on the front, left and right edges of your BrailleNote Touch. Lift the 3 magnets, and flip the cover of your carrying case to reveal your BrailleNote Touch's physical keyboard.

The physical keyboard is a traditional Braille keyboard, but is also a flap you can flip open to reveal the top face of your BrailleNote Touch. It is kept closed magnetically to prevent it from opening accidentally. On the left side of your physical keyboard, closer to the front edge, is a flat protruding area that makes it easier to reveal the touch screen.

Note: It is recommended that the BrailleNote Touch be put in standby mode prior to inserting it into or removing it from the carrying case. To do this, simply tap the power button when the device is turned on and the Braille cells will disappear. It is now safe to insert into or remove from the carrying case.

#### 1.3.2 Top Face of the BrailleNote Touch

The top face of the BrailleNote Touch can be divided into two sections:

In the upper section is a multi-touch touchscreen surface used for Braille typing and a 7-inch LCD visual display located in the center of the surface. You can identify the visual portion of this touch surface with four tactile lines on the edge of the touch surface, which also marks the area useable with your fingers on the screen when using Explore by Touch (see section <u>Explore by Touch section</u> for more details). Two of these tactile lines are located at the top of the screen, near the rear edge of your tablet, and two are at the bottom of the screen, just above the Braille display. These tactile lines mark the four corners of the visual section. Even though the visual portion does not cover the entire glass surface, the entire glass space is still touch sensitive, meaning that the entire surface can be used to type Braille when you are in TouchBraille mode.

The lower section of the top face consists of a refreshable Braille display containing 32 or 18 Braille cells and their associated cursor routing keys. Each raised round button, the cursor routing key, is connected to the cell directly below it. When you are editing text, pressing one of these cursor routing keys will move the editing cursor to its associated Braille cell. When you are not editing text, any cursor routing keys will function to activate a selected item.

On the left and right sides of the Braille cells are the Internal Stereo Speakers (2).

An internal microphone is located on the right of the Braille display, just below the right stereo speaker.

#### 1.3.3 Left Edge of the BrailleNote Touch

On the left side of your BrailleNote Touch, near the top corner, is a Type-C USB port. You may plug the Type-C USB cable to this port and the other end to a USB port on a computer to transfer content between the computer and the tablet. While connected to the computer, the battery will also recharge, but charging from the computer USB may be slower or the tablet may not charge at all depending on the amount of power supplied by the computer. The most effective way to charge your Touch is to use the USB cable connected to the included power adaptor, which is connected to the power outlet.

Below the USB port is the green LED indicator. Below the green LED indicator is the oval-shaped Power Button, used to power the tablet on and off.

Below the Power button are the Volume Up and Volume Down Buttons.

#### 1.3.4 Right Edge of the BrailleNote Touch

On the right side of BrailleNote Touch, near the top corner, is the microphone jack, which can be used to connect an external stereo or mono microphone, or line-in equipment.

Below the microphone jack is the headphone jack, which can be used to connect headphones or external speakers and audio line-out equipment.

Below the headphone jack is the Action Button, which can be used for recording, taking snapshots with the Camera and as a Play/Stop button.

#### 1.3.5 Rear Edge of the BrailleNote Touch

Near the left corner of the rear edge is a USB port. Use this port to access content on USB flash drives, hard drives and other MSC devices (Cameras, MP3 players, USB ethernet adaptors, etc.). Next to the USB port is the SD HC slot. This slot allows you to utilize storage on SD cards. To the right of the SD card slot is the High-Resolution video output port used to connect your Touch to an external monitor or TV for video output (audio and video). The rightmost port is the Keyboard port and is the connection point for the Braille keyboard cover.

#### 1.3.6 Front Edge of the BrailleNote Touch

At the Front edge of the tablet are 7 buttons. The first two buttons and the last two buttons are BrailleNote's familiar thumb keys. From left to right, the thumb keys are Previous, Left, Right, and Next. In the middle are three buttons. The left button shaped like a triangle is the Back button, and is used to return to your previous screen or step. The middle button shaped like a circle is your Home button and is used to return to your Main menu, or activate the Google Assistant when you press and hold it. The right button shaped like a square is the Recent apps button and allows you to navigate through your recently used applications. Pressing and holding this Recent apps button can be used to access BrailleNote Touch's Context menu.

#### 1.3.7 Bottom Side of the BrailleNote Touch

A camera and two LED lights are located on the back side of the BrailleNote Touch. The camera is located in the center top of the BrailleNote Touch, with the two led lights located closer to the edges on the left and right side of the camera, inside circular hollow areas.

The battery compartment is also located on the back of the BrailleNote Touch, just below the camera and led lights. You will feel it has a rectangular shape spanning almost the entire length of the tablet, with a hollow area on the bottom side. On the left and right sides of this hollow area, somewhat closer to the edges of your BrailleNote Touch, are two battery release latches. You can remove the battery of your BrailleNote Touch by simply sliding these two latches outwards simultaneously.

#### 1.3.8 Bluetooth

The BrailleNote Touch features an internal Bluetooth Interface.

#### 1.3.9 Wi-Fi

The BrailleNote Touch features an internal Wi-Fi B/G/N interface, 2.4 - 5 GHz.

### 2 Setting Up

#### 2.1 Setting Up your System

Press and hold the Power button. You will feel a quick vibration, and after 7 to 8 seconds, you will see "Starting KeySoft" on the Braille display with a progress representation. A few moments after you first boot your device, you will be welcomed with a language selection screen and an interaction Wizard that will help you get started with your BrailleNote Touch. The Wizard will help you familiarize yourself with the more common features of your BrailleNote Touch. Below are a few helpful commands you should memorize that will help you use your tablet more efficiently. For a thorough list of commands, please refer to the Command Summary located at the end of this guide.

## 2.2 Recharging your system

To recharge your system, plug in the type-C USB connector of your recharge cable into the Type-C USB port located in the rear of the left edge of your BrailleNote Touch. Since this is a type-C USB connector, you don't have to worry about plugging it upside down.

If this isn't already done, plug in the USB connector of your recharge cable into the power adaptor, then plug the power adaptor into a power outlet.

Alternatively, you can plug your USB connector into a computer, but note that this method of charging is slower than charging with a power adaptor.

#### 2.2.1 Maximizing operating efficiency

In a working situation where you need your BrailleNote Touch intermittently, you can enter Standby mode when you are not using your tablet by pressing the Power button. The screen will power off.

You can exit Standby mode by pressing the Power button again.

If you will not be using your tablet for the next few days, it is recommended that you power it off by pressing and holding the Power button and selecting Power off.

#### 2.3 Basic Commands

Enter key: DOT 8 (Activates a selected item, also used in some commands)

Backspace key: DOT 7 (Delete the letter to the left of your cursor when editing, also used in some commands)

Navigate to previous item: Previous thumb key (far left one) or BACKSPACE

Next item: Next thumb key (far right one) or SPACE

Main Menu: Home button or SPACE with DOTS 1-2-3-4-5-6

Braille panning Left: Left thumb key (Scroll Braille text left)

Braille panning Right: Right thumb key (Scroll Braille text right)

Exit current item: Back button or SPACE with E (Exits the menu/application you are currently in)

Options: SPACE with O (Opens the KeySoft options menu)

Information: SPACE with I in main menu (Displays useful information related to your device)

Context menu: Press and hold the recent apps button or SPACE with M (A dynamic options menu that changes based on your location)

Context Help screen: SPACE with H (Provides useful tips about navigating in your current app or location)

Repeat: SPACE with R (Makes the BrailleNote Touch repeat what was said last)

Turn speech on/off: SPACE with Previous thumb key (Toggles between speech on and off)

Turn visual display on/off: SPACE with Next thumb key (Turns the screen on or off)

Display current date: ENTER with D (Touch will display and say the current date)

Display current time: ENTER with T (Touch will display and say the current time)

Navigation level menu: SPACE with T (To change your current navigation level)

Navigate to previous navigation element: SPACE with DOTS 1-3 (Moves your editing cursor or focus to the previous element according to the current navigation level)

Navigate to next navigation element: SPACE with DOTS 4-6 (Moves your editing cursor or focus to the next element according to the current navigation level)

Eject external storage: ENTER with E (Safely eject an SD card or USB media from your BrailleNote Touch)

Stop Speech: Backspace with Enter (Stops the BrailleNote Touch's speech while speaking.)

Note: All commands which involve ENTER or BACKSPACE must have the SPACE BAR added to them when you are using computer Braille.

Note: The Previous, Left, Right and Next thumb keys can be configured in the Keyboard Settings under Configure Thumb Keys in the Options menu.

#### 2.4 Standby mode and powering your System On and Off

#### 2.4.1 Powering On/Off

When you know you won't be using your BrailleNote Touch for some time, it may be better to turn it off completely to preserve your battery. To do so, simply press and hold the power button for approximately 1 second. Your device will announce "Power Off", and give you the option to either power off or restart. Select power off, then press Enter or a cursor routing key to shut down your device.

Similarly, to start your device when it is powered off, press and hold the power button for approximately 3 seconds. You will feel a quick vibration and see "Starting KeySoft" on your Braille display after about 8 seconds. After some time, you will be directed to the unlock screen. Simply select Unlock with your thumb keys and unlock your device with ENTER or by pressing one of the cursor routing keys.

Note: If typing on the touchscreen, you must do a finger recognition on your virtual keyboard before unlocking your screen with ENTER. To start finger recognition, simply put your ten fingers on the screen until you feel a short vibration. A quick way to unlock your Touch is with the SPACE with U keyboard shortcut on the lock screen.

Note: On some occasions, you may feel a long vibration instead of a short vibration when completing finger recognition on your keyboard. This means that your BrailleNote Touch was unable to recognize your fingers. When this occurs, simply lift your fingers so they are no longer touching the screen and try restarting finger recognition.

#### 2.4.2 Standby mode

The BrailleNote Touch gives you the possibility to put your device in standby mode. Standby mode is a quick and easy way to preserve the battery when you only want to stop using your BrailleNote Touch for a short period. Standby mode is the most common state the BrailleNote Touch will be in on a daily basis when not being used.

To enter standby mode, simply do a short press on the Power button. You will hear "Screen Off" to confirm that the Touch has gone into standby mode, and the Braille will disappear. To "wake" your device, simply do a short press on the Power button when your device is in standby mode.

#### 2.5 Interactive Wizard

#### 2.5.1 KeySoft Wizard

When turning on your Touch for the first time, you will be presented with a language selection screen. Using the Next thumb key, cycle through the list of languages, select your language, and press Enter. You will then be presented with the KeySoft start-up wizard in your selected language. Press Back to return to the language selection screen if necessary. This interactive wizard will give you a physical description of your device, guide you through setting up your system and teach you the common gestures and commands to operate your Touch.

Note that you can skip certain parts of the wizard by pressing the Previous or Next thumb keys until you find the Next button on the screen. Once you have found it, click on a cursor routing key to activate it, or skip the wizard entirely by activating the Exit tutorial button.

Note: This wizard can be revisited at any time by going into the Miscellaneous Settings section of the KeySoft options menu, and then selecting Launch tutorial.

#### 2.5.2 Android Wizard

When the KeySoft Wizard is completed, the Android wizard should automatically start. You will be prompted to enter your Google credentials and WI-FI requirements. Once the wizard is completed, you should find yourself in the KeySoft Main Menu. Please note that a Google account is required for many functionalities on your BrailleNote Touch. Creating a Google account on the BrailleNote Touch may not be accessible to blind users and could require the assistance of a sighted person.

Note: BrailleNote Touch is an authorized Google device, so many of its functionalities depend on Google credentials, similar to standard tablets and smart phones.

By default, a compact TTS voice is installed on your Touch. After completing the Android Wizard, you will receive a notification asking you if you want to install a higher quality version of that voice. Select "Yes, download now" to download it now. Select your voice and press Enter. The BrailleNote Touch will ask you if you want to replace your compact voice by your selected voice, select Yes to confirm and press Enter. The download progress in percentage will be displayed. To skip this and be asked to download the higher quality voice the next time you restart your Touch, select "No, download later".

# 2.6 Managing language profiles and voices

You can manage your language profiles from the Options menu. To access the Options menu, press Space with O.

#### 2.6.1 Configuring, adding, and deleting language profiles

To configure your language profiles, select the option "Configure Language Profiles" in the Options menu and press Enter. You will be presented with a list containing your language profiles. Select the one you wish to configure, and press Enter. You will be able to configure its name, TTS engine, voice, speech rate. You will also be able to select your preferred Braille Grade for entry and for display. Press Enter on one of these options to see various braille tables and languages supported, including braille learning tables. Press Back to return to the profile configuration screen. Press Back again to go to the profiles list.

To create a new language profile, select the option "Add additional language profile" and press Enter. You can create up to 10 language profiles. A dialog box will prompt you to enter a name. Enter a name for the language profile, then press Enter or the Ok button to proceed. Configure your new profile as you would for an existing profile.

At the end of the profile configuration list, you will find the option "Delete profile". Select this option to delete a language profile. You can also delete a language profile from the context menu by pressing Space with M, or by using the shortcut Backspace with Dots 2-3-5-6. Press Ok to confirm deletion. Note that you must have at least one language profile available; deleting the last language profile will not be possible. Note that deleting the active language profile is not possible; activate another language profile first, and try again.

#### 2.6.2 Selecting a language profile

To select a language profile, select the option "Select Language Profile" in the Options menu and press Enter, and select one of your language profiles. To toggle between your language profiles, press Enter with L.

#### 2.6.3 Adding or replacing Acapela voices

You can add or replace Acapela voices by selecting Manage voices when configuring a language profile in the voice selection or by opening the KeyUpdater app in the All applications menu. In the KeyUpdater menu, select Manage voices and press Enter. You will be prompted to select a voice to replace, or add up to 3 additional Acapela voices. Select the voice you want to replace and press Enter.

A list of all available voice languages, sorted alphabetically, will be presented to you. Select a language and press Enter. Select the voice you want to add and press Enter. You will be prompted to replace the existing voice by the new voice. Press Yes to confirm, or No to cancel. If you select Yes, the voice will be installed on your Touch.

Note: If you want to replace the default installed voice, you will be restricted to voices in your system language. If you selected English US in the language selection list when setting up your Touch for the first time, the list of voices will be restricted to English.

To add an additional voice, select Add another voice in the Manage voices menu and press Enter. The BrailleNote Touch supports a maximum of 4 voices. A list of all available voice languages will be

presented to you; select your desired language and press Enter. Select the voice you want to add and press Enter to install it.

#### 2.6.4 Learning Tables

The BrailleNote Touch Plus includes various language braille tables, but also, includes braille learning tables. Learning tables come in sets of various levels of contracted braille integration. As students advance in their class, they progressively select the higher-level tables until they reach the full contracted braille grade.

The braille-to-text table combined with these learning tables is the full grade 2 table, so no matter what is typed (grade 1 or 2) the system understands what is written.

Here's the list of learning tables sets:

- Braille in Easy Steps
- Fingerprint
- Mangold Method
- NLS I.M.B.T. (UEB)
- NLS I.M.B.T.
- RNZFB STAR
- S.A. Syllabus
- Take Off Series
- TSBVI
- UK UEB Brl Easy Steps
- UK UEB Fingerprint
- UK UEB Take Off Series

For more details on what is included on each learning table, please refer to Appendix D.

#### 2.7 Changing the layout of a standard keyboard

If you decide to use a standard keyboard with your BrailleNote Touch, please note that the keyboard layout will be North American English by default (QWERTY).

To change this layout, please follow the steps below:

- 1. Open the Options menu by pressing Space with O.
- 2. Scroll to Android system settings, then press Enter.
- 3. Scroll to the bottom menu: System, Languages, time, backup, updates

- 4. Open Languages & input, Keysoft IME.
- 5. Select the name of your keyboard.
- 6. Select Keysoft IME: Keysoft IME.
- 7. Choose the keyboard layout of your choice to be applied.

### 3 Navigating on your BrailleNote Touch

When using the touchscreen, the BrailleNote Touch features two navigation modes: Explore by Touch, and TouchBraille. You can toggle between these two modes by simply pressing the Previous thumb key and the Next thumb key together. When using the physical keyboard, navigation and commands are the same as with TouchBraille.

Explore by touch mode allows you to use your BrailleNote touch similar to the way you would use a traditional tablet.

TouchBraille mode gives you much more control and efficiency over your BrailleNote Touch. In TouchBraille mode, navigation and actions are done through a series of keyboard shortcuts and first letter navigation, explained in the following sections.

In both modes, you can navigate through lists with the Previous, Left, Right, and Next thumb keys. Whenever you reach the end or beginning of a list with the thumb keys, you will be notified with an audio sound and will feel either "Top" or "Bottom" on your Braille display. Pressing the thumb key again will bring you back to the beginning or the end of the list, depending on which side you have reached.

### 3.1 TouchBraille Virtual Keyboard

One of the BrailleNote Touch's most exciting capabilities is the fact you can start typing directly on the touchscreen, just like you would with a traditional Braille keyboard. This is called TouchBraille. With TouchBraille, you can do anything you would with a traditional physical Braille keyboard. Unless stated otherwise, all references to keyboard actions or commands throughout this guide will therefore apply both to the TouchBraille and physical Braille keyboards.

To use the TouchBraille keyboard, rest your wrists on the front edge of your Touch, just below the Braille display, until you find a position comfortable for typing, while keeping your fingers slightly above the screen. Then, place all ten fingers on your screen until you feel a short vibration. This vibration indicates that your BrailleNote Touch has recognized your fingers' position. After feeling the finger recognition vibration, lift your fingers slightly off the screen and at this point, you can type on your screen the same way you would type with a traditional physical Braille keyboard, with the added advantage that TouchBraille is almost completely silent, and you do not need to raise your fingers much off the screen as there is barely any force required to type with TouchBraille.

Note: You will need to restart finger recognition on your BrailleNote Touch if you change your typing position. Finger recognition takes barely a second so it is better to restart finger recognition often to ensure you feel confident in your typing.

#### 3.2 TouchBraille Mode Description

The keyboard mode, also called TouchBraille mode, is the most efficient way to use your BrailleNote Touch. Every action on your BrailleNote can be done in keyboard mode, whether you are using the virtual keyboard or the physical Braille keyboard.

If you are unsure whether you are in TouchBraille mode or Explore by Touch mode, press the Previous and Next thumb keys simultaneously to toggle modes.

#### 3.2.1 Braille Keyboard Shortcuts

Many actions on your BrailleNote Touch can be completed using commands, also known as shortcuts. These shortcuts can be executed by pressing a combination of keys on your physical or virtual Braille keyboard, as long as you are in TouchBraille mode. Often, these shortcuts combine the first letter of the command (or specific dots if this letter is already taken) together with BACKSPACE, ENTER, and/or the SPACE BAR.

For example, the shortcut to open the context menu is SPACE with M, the letter M being the first letter of "Menu". Knowing this, to open the context menu, you first need to complete finger recognition on your touch screen by placing all ten fingers on your screen until you feel a short vibration. You then need to type the letter M together with the SPACE BAR. The command will only be executed when you remove your fingers from the screen, so don't worry if you're not able to place all the correct fingers on the screen at once.

Note: Commands which involve ENTER or BACKSPACE that would normally type a character must have the SPACE BAR added to them when you are using computer Braille. For example, if you wanted to use the shortcut BACKSPACE with C, you would need to add the SPACEBAR to the command, since BACKSPACE with C is the combination used to type a capital C in computer Braille. The command BACKSPACE with C would in reality be BACKSPACE with SPACEBAR and C. On the other hand, if you wanted to type the shortcut ENTER with N, you would not need to add the SPACEBAR, since ENTER with N is not a combination used to type a character in computer Braille.

You can toggle between literary and computer Braille by pressing BACKSPACE with SPACE and G together.

The following is a list of the most commonly used navigation shortcuts when using your BrailleNote Touch:

Navigate to next item: SPACE or SPACE with DOT 4 Navigate to previous item: BACKSPACE or SPACE with DOT 1 Go to Main Menu: SPACE with DOTS 1-2-3-4-5-6 Exit your current window: SPACE with E Enter or Activate selected item: DOT 8 Open the recent apps list: SPACE with DOTS 2-3-5

#### 3.2.2 Standard Keyboard Shortcuts

Unless stated otherwise, all keyboard shortcuts within this guide refer to the virtual or physical Braille keyboards. However, most Braille shortcuts also have a standard keyboard equivalent that you will find in the Standard Keyboard Shortcuts section of the Command Summary. In addition to the Command Summary, you can find a list of standard keyboard shortcuts relevant to your current screen by opening the contextual menu with the shortcut Ctrl + Alt + M.

Note that if you open the context menu using Space with M or by pressing and holding the Recent Apps button, the square button in front of your device, you will be given a list of Braille shortcuts instead of standard keyboard shortcuts.

#### 3.2.3 First letter navigation

When Using TouchBraille, you can at any time jump to an item by typing the first letter of that item. Doing so will automatically move your focus 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.

Note that KeySoft apps found on your main menu are optimized for first letter navigation. This means that regardless of whether an item is on the visual screen or not, it can be found with first letter navigation. However, when using first letter navigation in a downloaded or 3<sup>rd</sup> party app, you will be limited to the items found on the visual screen. In a 3<sup>rd</sup> party app you can scroll the visual screen down or up by pressing Enter with DOTS 3-4-5, or Enter with DOTS 1-2-6.

#### 3.3 Explore by Touch Mode Description

Explore by touch is a mode offered in your BrailleNote Touch that, with the help of audio cues, allows you to navigate through the interface using your fingers, just like you would with a traditional tablet or smartphone. Explore by touch mode can be accessed by simultaneously pressing the Previous and Next thumb keys. You can return to TouchBraille mode by pressing the Previous and Next thumb keys again. Explore by Touch gestures can only be detected when your fingers are within the visual portion of the screen, which is the area marked by the tactile markers on the front face of your device (2 in the bottom of the screen and 2 at the top).

#### 3.3.1 Gesture description

Explore by touch conveniently uses gestures that smartphone and tablet users will be familiar with.

Select item: Touch item with one finger

Activate selected item: Double tap screen with one finger

Long press an item: Double tap and hold your finger on the screen

Navigate to next item: Swipe right with one finger on the screen

Navigate to previous item: Swipe left with one finger on the screen

Scroll list: Slide up or down with two fingers on your screen

#### 3.3.2 Navigating through a list of items

To use explore by touch, simply touch anywhere on the screen with one finger. Doing so will select the item located underneath it. This item will be read out loud by your BrailleNote Touch and written on the Braille display. Slide your finger on the screen to go from one item to another until you have selected the item you are looking for. Alternatively, you can swipe your finger quickly right or left to jump to the next or previous item.

In certain cases, when there are too many items to fit on the screen, you may need to scroll the item list up and down. To do so, simply swipe two fingers upwards or downwards on your screen.

#### 3.3.3 Activating a selected item

To activate a selected item, simply double tap on your screen. Alternatively, you can press on any of the cursor routing keys.

When the item selected is an edit box, activating it will enter Edit mode and temporarily activate the TouchBraille keyboard until the edit box is unselected. You will then be using explore by touch again.

#### 3.4 Edit Mode

If you want to type information into an edit box or form, you will first need to activate edit mode. Similar to Forms mode used by many screen readers, simply press ENTER or double tap on an edit box. You will hear a rising tone to signify that edit mode is active, you will also see the Braille cursor appear between the edit box brackets on your Braille display. Note that if you are exploring the screen and double tap on an edit box, TouchBraille will automatically be activated and you can immediately begin typing. Type your information into the edit box and, when finished, you can easily leave edit mode by pressing the exit command or button (SPACE with E, or the Back button). Even easier, you can simply navigate to the next or previous item using your Next or Previous thumb keys. Edit mode will be disabled automatically and you can use first letter navigation again.

Note that if you had previously been using explore mode to double tap on an edit box, Touch Braille will be deactivated when you leave edit mode so you can continue exploring the screen with your finger.

If you have multiple edit boxes to fill, often time apps will allow you to press enter to jump directly to the next edit box in the form, keeping you efficiently editing. You can quickly check what the enter key will do in an edit box by using your contextual help command.

#### 3.5 One-Handed Mode

BrailleNote Touch features a one-handed mode for Braille input, useful for users restricted to the use of single hand. One-handed mode will only work with the HumanWare braille keyboard; the default two-handed mode will be active when using TouchBraille or a standard keyboard.

To turn on one-handed mode, hold down ENTER, followed by the Action button (the button next to the microphone jack on the right edge of your device). Keep holding down ENTER and the Action button for 5 seconds until you hear "One-handed mode activated". Note that you MUST hold down ENTER before the Action button to activate one-handed mode. This mode stays in effect until it is deliberately turned off.

If one-handed mode is activated, BrailleNote Touch will notify you each time it is powered on or unlocked and explain how to return to the standard two-handed mode.

To type a character in one-handed mode, you can press the dots at any time and in any order. When you have pressed all the required dots, press SPACE to enter the character. To write the letter J, for example, you might press dot 2 first, and then dots 4 and 5 separately or together. After releasing the keys, press SPACE to enter the letter J. To speed the input, the concluding SPACE can be performed together with the remaining dots. For example, to enter the letter J, you could press dot 2 first, and then dots 4-5 and SPACE together.

A command that includes SPACE can be obtained by pressing SPACE both before and after the other keys. For example, to return to the Main Menu, press and release SPACE, then press and release dots 1 to 6 in any combination or order, then press and release SPACE again.

To make a space between words, press SPACE twice after pressing the SPACE that was used to enter the last character typed.

The operation of the thumb keys remains the same as in two-handed mode.

To return to two-handed mode, hold down the ENTER key followed by the Action Button until KeySoft announces "One-handed mode deactivated".

#### 3.6 Visual display

Your BrailleNote Touch features a screen that displays everything you are doing on your Touch. This screen is particularly useful for sighted teachers or colleagues.

For privacy reasons however, you may wish to turn off the visual display to keep your tablet away from prying eyes. The visual display is also what uses most of the battery resources, so it can be a good idea to keep it off if no sighted person will be using your BrailleNote Touch.

To turn off the visual display, hold down the Next thumb key and press SPACE. You should receive audio confirmation that the visual display is now off. Your Touch will function normally, but nothing will be displayed.

To turn the visual display back on, hold down once again the Next thumb key and press SPACE.

#### 3.7 Text-to-speech

As you learn to use your BrailleNote Touch, you will notice that most of what you do is followed with the audio feedback of a Text-to-Speech engine (TTS) called BrailleNote Touch Acapela.

It will also inform you whenever a prompt appears on your Touch.

As you get used to using your Touch, you may want to stop the TTS while it is speaking. To do so, simply press the ENTER and BACKSPACE keys simultaneously when the TTS is speaking. Note that this is temporary and only applies to a single occurrence of speech.

You may also want the TTS to repeat what it just said. You can do so by pressing SPACE with R.

You can increase or decrease the volume of your TTS with the two volume buttons located on the left edge of your BrailleNote Touch.

Note that BrailleNote Touch has three different volume controls, the music volume, the accessibility volume which includes the TTS, navigation sounds and music playback, and the Notification volume, which is the volume of the sounds set to occur when notifications play. You can raise or lower the accessibility volume individually by pressing ENTER with DOT 4 or 1, and to raise or lower the music volume individually, you can press ENTER with DOT 5 or 2.

You can also turn off the TTS entirely by holding the Previous thumb key and pressing SPACE.

To turn the TTS back on, hold down once again the Previous thumb key and press SPACE.

Note: You will only receive audio confirmation when turning the TTS on.

#### 3.8 Navigation Level

The navigation level describes the way your cursor moves when you type the "Navigate to previous navigation element" (SPACE with DOTS 1-3) or "Navigate to next navigation element" (SPACE with DOTS 4-6) commands. Navigating through a large portion of text can sometimes be tedious, so being able to change the level of speed and precision on the fly can make navigation a lot simpler.

For example, if your navigation level is set to "word", you will scroll one word at a time each time you type SPACE with DOTS 4-6. Following the same logic, if the navigation level is set to paragraph, typing SPACE with DOTS 4-6 will have your cursor move to the next paragraph, and so on.

You can change your navigation level almost everywhere in your BrailleNote Touch's interface by pressing SPACE with T. Pressing Space with T will open the navigation menu, in which you can select your desired navigation level, either by pressing the Next or Previous thumb keys or using first letter navigation. Once you have selected your navigation level, press ENTER or a cursor routing key to confirm your choice. Note that the navigation level options vary based on what you are doing at that time. For

example, if you are editing text you may have more navigation levels than if you were browsing the web, etc.

#### 3.9 Webview and Html Content Navigation

Navigation through Webview is an easy way to browse through documents that contain Html, such as web pages and emails. You only need to learn the more important Html shortcuts in the command summary and you will be ready to go. Each shortcut allows you to scroll through a specific type of Html element, like buttons, graphics, headings, links, etc.

For example, the Html Content shortcut to navigate through Headings is H. When you are inside Html Content, press H to reach the next heading on the page. Press H again, and you will jump to the following heading, and so on.

To navigate backwards, add Backspace and Enter with the shortcut. For example, to scroll through the headings of a web page backwards, simply press Backspace, Enter and H together. This works for all Html Shortcuts.

#### 3.9.1 Webviews

Most applications and documents that display Html content are divided in what is called webviews, which are essentially blocks of HTML content. For example, in Google Chrome, there are usually 2 webviews: The top menu bar, and the main webpage content. You can scroll forward through webviews using the Right and Next thumb keys simultaneously, or backwards with the Previous and Left thumb keys simultaneously. You can immediately reach the next webview by pressing Enter with W.

#### 3.9.2 Important Html Shortcuts

You will find below a list of the most commonly used Html shortcuts. For the complete list, please refer to the following command summary links: <u>Braille Keyboard Shortcuts</u> - <u>Standard Keyboard Shortcuts</u> Or press Space with H in a webview to view available commands.

#### 3.10 Copying Spoken Content

It is possible to copy any content spoken by your BrailleNote Touch Plus and paste it into an editable field or in any application you can write in, like KeyWord.

**Important:** The TTS must be turned on in order to copy spoken content. You can toggle the TTS on and off by simply pressing Space with the Previous thumb key simultaneously.

To copy spoken content:

Make sure the TTS is turned on. Start your text selection by pressing Enter with S. Scroll down to the end of the text you wish to copy, then press Enter with S a second time to complete your selection. Press Backspace with Y to copy the selected text to the clipboard.

Activate an editable field, such as an address bar, or open KeyWord or any other application with an editable field, then press Enter with V to paste the copied text.

#### 3.11 Connecting to Wi-Fi

The quickest way to connect to a Wi-Fi network is by accessing Android Settings by pressing Enter with Q. Then, navigate to and activate the Network & Internet item. You should be on the Wi-Fi item. Press Enter or a cursor routing key to activate it. This will take you to the Wi-Fi configuration screen where you can select and connect to one of the Wi-Fi networks detected by your BrailleNote Touch.

In the Wi-Fi configuration menu, start by making sure that the Wi-Fi switch, the second item, is set to on. Otherwise, no network will be detected by your BrailleNote Touch. Navigate right using the thumb keys until you find the network you want to connect to, then activate the network using any cursor routing key or by pressing ENTER.

You will be directed to the network connection screen that gives you information about the network to which you are about to connect. Enter the network password in the password edit box. Navigate to and activate the Connect button.

Give your BrailleNote Touch some time to connect to the network.

#### 3.11.1 Connectivity information

To view your connectivity information such as Wi-Fi and Bluetooth status or your signal strength, type ENTER with DOTS 3-4.

#### 3.12 External Storage

The BrailleNote Touch allows for the use of external storage devices, such as an SD card or USB stick.

IMPORTANT: You must safely eject, your SD card or USB stick before physically removing it from your BrailleNote Touch. To safely eject your SD card or USB stick, type ENTER with E, select and activate the type of storage device you wish to remove (SD card or USB stick), then wait for the confirmation message. It is now safe to remove your external storage device.

Note: If you eject an external storage device, but decide to not physically remove it, it will no longer be detected by your BrailleNote Touch. To make your BrailleNote Touch detect an unmounted external storage device, simply remove it and then re-insert it into your BrailleNote Touch.

#### 3.12.1 Extending Internal Storage with an SD Card

When inserting an SD card, you may notice that a notification appears in the Notification Shade. If you activate this notification, you will be asked if you wish to use your SD card as portable storage or internal storage. Portable storage is the standard way of using the SD card. Internal storage should only be used when you are running out of internal space on your device, as it will render your SD card inoperable on other devices until it is reformatted. In addition, an SD card used as Internal storage will always need to

remain in your device until you decide to stop using it this way. You should only remove internal storage SD cards when your device is shut down.

# 3.13 Transferring Files with a Computer

You can transfer files between your BrailleNote Touch and computer, just like most tablets or phones. However, additional security measures with Android Oreo require you to activate USB file transfer beforehand. Otherwise, plugging your BrailleNote Touch to your computer will only recharge it, and your PC will not recognise your device.

To enable USB file transfer, start by plugging your USB-C connecter from your BrailleNote touch to the USB port of your PC. Then, open Android settings by pressing Enter with Q. Scroll down to Connected devices, and press Enter. Now, scroll down to USB, and press Enter. This will open a pop-up window with many options. Select Transfer files, then press Enter to select it.

Your BrailleNote Touch can now transfer files with your PC.

#### 3.14 Disabling and Enabling Accessibility

Although it is not recommended, it is possible to disable accessibility on your device by pressing and holding the Volume Up and Volume Down buttons simultaneously for a few seconds. This could be useful when a sighted user intends on using your device.

To re-enable accessibility, simply press and hold the Volume Up and Down buttons once more for a few seconds.

### 4 Main Menu

#### 4.1 KeySoft Main Menu Description

KeySoft is the heart of your BrailleNote Touch, supporting all applications that are built in your tablet. KeySoft's main menu gives you access to the most often used applications, such as the word processor, e-mail client, Internet browser, etc.

The Main menu contains the following items:

Contacts: KeyList

Email: KeyMail

Internet: Chrome

Word Processor: KeyWord

Play Store Planner: KeyPlan File Manager: KeyFiles Calculator: KeyCalc EasyReader + Braille Terminal All applications

### 4.2 Launching the Main Menu

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

You can at any time return to the main menu by simply pressing the Home button on your Touch (the button shaped like a circle located on the front edge of your Touch, in the middle). Alternatively, you can use the Go to Main Menu command on the keyboard by pressing SPACE with DOTS 1-2-3-4-5-6. Upon reaching the Main Menu, Touch will read "Main Menu" – this will also be written on the Braille display. If you are already in the main menu, the selected application name will be written on the braille display.

# 4.3 Navigating in the Main Menu

When using TouchBraille, you can scroll through any menu using the Previous and Next thumb keys located on the front edge of your BrailleNote Touch. Alternatively, you can press SPACE to navigate to the next item and BACKSPACE to navigate to the previous item.

To navigate in the main menu using Explore by Touch, simply move your finger over each choice. Each item will be read out loud and displayed on the Braille display as you hover over them.

Note: Visually there is a border over the selected item showing the current focus.

#### 4.4 Opening Menu Items

To launch a selected item, press on any cursor routing key, or press ENTER if you are in TouchBraille mode. Double tap the screen if you are in Explore by Touch mode.

# 4.5 Access to Running Applications

At some point, you may wish to return to an application you recently used and did not close. These applications are still running so you can quickly return to them without having to reopen them through the main menu.

To access a running application, simply press the Recent apps button, the square button in the middle of your Touch's front edge, or type SPACE with DOTS 2-3-5. Navigate to the app you wish to open with your thumb keys, then press ENTER or a cursor routing key.

If you press the Next thumb key, you will select the app info item, when you can get additional information regarding that app. You will be directed to the "App info" screen where you will find a significant amount of information about the selected application, such as the version number, memory usage, permissions, etc., as well as some additional options for your application. For apps you have downloaded, this screen is the easiest way to uninstall them from your BrailleNote.

Press next again to access the dismiss item, which allows you to close only that specific app.

To close all apps in the recent apps screen, simply navigate to the "Clear All" button and activate it with a cursor routing key or by pressing enter. Note that this will completely close any open apps and return you to the main menu.

You can quickly switch to your last used application by pressing the Recent apps button twice in rapid succession.

#### 4.6 Accessing All Applications

The "All Applications" item takes you to a new menu called "Main Menu All Apps". This menu lists every application that has been installed on your BrailleNote Touch, including those you have downloaded from the Google Play Store.

To access all applications, type the letter A or navigate to the "All applications" item by pressing SPACE or the "Next" thumb key, then activate the item with a press of a cursor routing key or ENTER.

To leave All Applications and return to the Main Menu, press the Back button or SPACE with E.

#### 4.7 Customizing your Main Menu

With the BrailleNote Touch +, you have the possibility to customize the main menu by either adding or removing Items of your choice.

#### 4.7.1 Turning On the Custom Menu

To customize your Main Menu, make sure you are already in the Main Menu, then simply press Backspace with Enter and X.

The Main menu is now called My Menu and can be customized according to your preferences.

Alternatively, you can open the Contextual menu by pressing Space with M or by pressing and holding the Recent application button.

Scroll down to Customize main menu and activate it by pressing Enter or a cursor routing key.

#### 4.7.2 Adding an Application to your Custom Menu

To add an application to your Custom Menu, scroll to All applications from the Main Menu and activate it by pressing Enter or a cursor routing key.

Scroll through the All applications menu until you find the application you wish to add to your Custom Menu.

Once you have found it, press Enter with M to immediately add it to your Custom Menu.

Alternatively, you can add it by going through the context menu by pressing Space with M, or by holding down the Recent Apps button.

#### 4.7.3 Removing an Application from your Custom Menu

To remove an application from your Custom Menu, simply reach the application you wish to remove from the Main Menu and press Enter with M.

Alternatively, you can remove it by going through the context menu by pressing Space with M, or holding down the Recent Apps button.

Note that removing an application from your custom menu does not remove it from the device; the application will still be available in the All Applications sub-menu of the Main Menu.

#### 4.7.4 Restoring the Default Main Menu

To revert to the Default Main Menu, simply press Backspace with Enter and X when your are in your Custom Main Menu.

Alternatively, you can open the Contextual menu by pressing Space with M or by pressing and holding the Recent application button.

Scroll down to Restore default menu and activate it by pressing Enter or a cursor routing key.

### 5 Other Menus and Help

#### 5.1 Contextual Menu

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

To access the Contextual Menu from most KeySoft apps, press SPACE with M, or press and hold the Recent apps button (the square button on the front edge of your Touch).

From the context menu, press the Next or Previous command or thumb keys to scroll through the available options.

To exit the context menu, simply press the Back button or SPACE with E. Note that not every screen or app has a context menu available.

Note: Accessing the Context menu from the KeySoft Main Menu will give you an easier access to the app info of the selected application. This is useful when you want to know the version number of a specific application.

#### 5.2 Contextual Help

Contextual Help is a feature designed to help you find useful information about how to use your BrailleNote Touch according to the current context. Contextual Help will provide you with a description of the context, list the commands you can do on a particular item, and explain how to execute them. If you ever find yourself stuck and aren't quite sure what to do, access contextual help and you may just find the answer you're looking for.

To access contextual help, press SPACE with H on your Braille keyboard. "Contextual help" will be read by your Touch and written on the Braille display.

From the contextual help menu, press the Next or Previous command or thumb keys to scroll through the help topics.

To exit the contextual help menu, simply press the Back button or SPACE with E.

#### 5.3 Notification Shade

The BrailleNote Touch features a notification Shade that provides you with general information such as date and time, Wi-Fi signal and battery level. It also logs events that occur on your BrailleNote Touch, such as when you complete a download or when a system update is available. You can access the notification Shade by typing ENTER with N. You can navigate through the notification pane and activate items just like you would with any menu.

The Notification Shade also includes the Settings and Quick Settings items. Activating the Settings item will take you to the Android settings menu, where you have access to all the settings of your BrailleNote Touch.

The Quick Settings item will expand the Notification Shade to include the most frequently used settings, such as Wi-fi selection, Bluetooth, Airplane Mode, etc.

# 5.4 Launching the User Guide

If you would like to read the user guide for your BrailleNote Touch on the device, this can be accessed in the options menu under User Guide. Type SPACE with O to access the Options menu then you can quickly type a U to jump to the User Guide option and press enter. Alternatively, you can manually navigate to and activate the User Guide item.

#### 5.5 Troubleshooting

#### 5.5.1 BrailleNote Touch does not power on

Press and hold the Power button. If your BrailleNote still does not turn on, your battery may need recharging.

Connect the provided USB cable with the power supply into a power outlet or just the USB cable into a running computer. If the battery was completely discharged, it may take a few minutes before the device shows any signs of activity.

Refer to Chapter 17 for additional details.

#### 5.5.2 There is no visual display

If your tablet is working but there is no image on the screen, the visual display may have been turned off. You can easily turn it back on by pressing SPACE with the Next thumb key. If the visual display was turned off, you should hear and read a message saying: visual display on.

#### 5.5.3 There is no text-to-speech

If you can hear all sounds from your BrailleNote except for the text-to-speech voice, speech may have been turned off. You can easily turn it back on by typing SPACE with the Previous thumb key. If you hear nothing at all, ensure your accessibility volume level is up higher than 0. Turn up the volume by pressing ENTER with DOT 4 repeatedly.

#### 5.5.4 Device is no longer Accessible

If for any reason you lose accessibility on your device, it is possible that KeySoft was deactivated. To reactivate KeySoft, simply press and hold the Volume Up and Volume Down buttons simultaneously for a few seconds, and accessibility should return.

#### 5.5.5 Other problems

If you find yourself with a problem you can't seem to resolve, try restarting your BrailleNote Touch normally.

If you are unable to power off normally, or if your BrailleNote Touch is frozen, press and hold the power button for 12 seconds to perform a hard reset. Once your BrailleNote Touch is shut down, power it on again to see if the problem is resolved.

If the problem is not resolved, please contact technical support at the following numbers or email addresses:

Global: support@humanware.com

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

Europe: (0044) 1933 415 800 eu.support@humanware.com

Australia / Asia: (02) 9686 2600 au.sales@humanware.com

### 6 Editing a document with KeyWord

#### 6.1 Launching KeyWord

To launch KeyWord, access the main menu, Press W or Navigate to Word Processor: KeyWord, then press ENTER or one of the cursor routing keys.

#### 6.2 Creating a document

From the KeyWord menu, navigate to and activate the Create menu item. You should see your cursor in a blank document.

#### 6.3 Opening documents

KeyWord can open the following file types: DOCX, DOC, RTF, TXT and PDF files that KeyWord can open.

From the KeyWord menu, select Open. The file manager will appear allowing you to navigate to your desired folder and file. Press SPACE with D to display the list of drives and cloud storages available on your device, from which you can open files. Using your Previous and Next thumb keys, move to the desired storage and press ENTER.

To activate the desired file or folder simply press a cursor routing key or ENTER. To go back a folder level, simply press the Back button on the front edge of your Touch or SPACE with E. After you select a file to open, you will receive a message indicating the name of the document you are opening, and the first line of text will be displayed on the Braille display.

If you are unsure which document you are reading, press SPACE with I to display document information.

#### 6.4 Editing a document

#### 6.4.1 Writing text

After creating or opening a document, you will be in edit mode by default. You can simply start writing on your Braille keyboard in the Braille grade of your choice, computer Braille or literary Braille.

Type BACKSPACE with G to change between Braille grades.

#### 6.4.2 Navigating in your document

KeyWord features many commands that will help you efficiently navigate through your documents.

Move to top of document: SPACE with DOTS 1-2-3

Move to bottom of document: SPACE with DOTS 4-5-6

Move to previous character: SPACE with DOT 3

Move to next character: SPACE with DOT 6

Move to previous word: SPACE with DOT 2

Move to next word: SPACE with DOT 5

Move to previous line: SPACE with DOT 1 or Previous thumb key

Move to next line: SPACE with DOT 4 or Next thumb key

Move to previous paragraph: SPACE with DOTS 2-3

Move to next paragraph: SPACE with DOTS 5-6

Beginning of line (Home): ENTER with DOTS 1-3

End of line (End): ENTER with DOTS 4-6

Braille panning left: Left thumb key

Braille panning right: Right thumb key

Navigation level menu: SPACE with T

Navigate to next navigation element: SPACE with DOTS 4-6

Navigate to previous navigation element: SPACE with DOTS 1-3

#### 6.4.3 Editing a text selection

When editing text, you can identify the location of your editing cursor by locating the DOTS 7 and 8 that are risen on your Braille display. Any letter you type will appear to the left of your editing cursor, and typing backspace will delete the letter located to the left of your editing cursor. When using Computer Braille, the cursor is represented by DOT 8.

To select text, place your cursor where you wish to begin your selection, then press ENTER with S. This will activate selection mode. In selection mode, the Braille display's editing cursor will "flash" repeatedly.

Move your cursor to the location you wish to end your selection, then press ENTER with S once again to finish your selection. Your next action will affect the text you have selected. Your selected text will be "underlined" on your Braille display with DOTS 7 and 8.

You can select all the text by pressing ENTER with DOTS 1-2-3-4-5-6.

There are many ways you can change text you have selected. For a thorough list of commands that can affect your text, such as alignment and font, press SPACE with M or press and hold the square Recent apps button down for the KeyWord Context menu or refer to the command summary located at the Appendix A of this guide.

#### 6.4.4 Deleting text

To delete the letter left of your cursor, type BACKSPACE.

BACKSPACE will also delete any text that is highlighted.

To delete the current character, type BACKSPACE with DOTS 3-6.

To delete the word just before your editing cursor, type BACKSPACE with DOT 2.

To delete the word on which your editing cursor is located, type BACKSPACE with DOTS 2-5.

To delete everything from your editing cursor to the end of the line, type BACKSPACE with C.

To delete everything from your editing cursor to the end of the document, type BACKSPACE with DOTS 4-5-6.

# 6.5 Reading a document continuously using speech

When you are in a document, you can ask KeyWord to read everything that follows your editing cursor with the Read all command: SPACE with G, for "Go".

You can stop your BrailleNote Touch from reading by pressing BACKSPACE with ENTER.

#### 6.5.1 Reading mode

Keyword features a "Reading mode" useful when you just want to read text and avoid modifying it by accident. When reading a document in Reading mode, editing of the text is locked, but commands can still be performed.

To toggle between Reading mode and editing mode, simply press SPACE with X in an open document, or access the Context menu with SPACE with M in an open document, select and activate File functions, then select and activate Enable reading mode.

## 6.6 Spell checking a document

To spell check a document, type SPACE with DOTS 1-6 while you are editing your document.

If you only wish to spell check a certain part of the document, select the part of the document you wish to spell check then type SPACE with DOTS 1-6.

A window will pop up displaying one by one each error found by KeySoft as well as its surrounding context.

You will be brought to an edit box containing the word KeyWord identified as an error. You can manually change this word in this edit box if you wish to correct it.

Following the edit box are 5 buttons with the possible actions for this error:

The Suggestions button will provide you with a list of words proposed by the KeySoft dictionary.

The Correct button will change the original word with what you have written in the edit box.

The Ignore button will ignore this error and move to the next one.

The Ignore All button will ignore every occurrence of this mistake in your document.

The Add Word to Dictionary button will add the word to your dictionary so that it will not be seen as a misspelled word in the future.

The Language button allows you to change the current spell check language. Press ENTER and select a language from the list to use as the current spell checking language for all documents.

# 6.7 Saving and closing a document

Save your document by typing SPACE with S. If this is the first time you are saving a newly created file, a new window will open showing the different drives and cloud storages available on your device in which you can save your document. You will be automatically prompted with a file name; you can either choose to keep the prompted name, or overwrite it with a name of your choice.

Once the drive or cloud storage in which you want to save your file is opened, you will be prompted to select in which folder you wish to save your document. If this folder contains sub-folders, these will be listed. If the folder does not contain any sub-folder, you will be asked to name the file.

You will be prompted with a text field in which you can type the name of the document you wish to save. Once you entered the name of your choice, choose the format you wish to save the document into. When you are done, use the Previous and Next thumb keys until you reach the SAVE button and press Enter. You can also press BACKSPACE + A (perform current action) to complete the saving of the file. Please note that anywhere in the saving process, pressing SPACE with S will bring you directly to the filename edit field.

If you open an existing file, SPACE with S will simply overwrite that existing document with your changes.

At any point in the save as window, you can save your document by pressing the SAVE button.

If you are working on a document that is already named, and wish to save the changes you made in a new document with a different name, use the "save as" command by typing BACKSPACE with S. This command can also be used to save a copy of your file in a different location, such as another folder, drive, or cloud storage.

To close a document and return to your document to continue editing, use the Exit command SPACE with E.

## 6.8 Working in multiple documents

#### 6.8.1 Creating a new document while editing

The Touch allows you to create a new document while editing another one. Simply access the context menu by pressing Space with M, select File functions, and select the option Create new additional document. You can also use the command Backspace with N. If your current document has not previously been saved, you will be prompted to do so before creating a new document. If it has already been saved, your current document will be saved automatically when you create a new one, and a blank document will be opened.

To open a document while editing another one, access the context menu by pressing Space with M, select File functions, and select the option Open additional document. You can also use the command Backspace with O to open an additional document. If your current document has not previously been saved, you will be prompted to do so before opening a new document. If it has already been saved, your current document will be saved automatically when you open a new one. Select the document you wish to open from the list presented to you, and the new document will open.

#### 6.8.2 Switching between documents

To switch between two or more previously opened documents, access the context menu by pressing Space with M, select File functions, and select the option Switch documents. You can also use the

command Space with Dots 1-2-5-6 to switch documents. If your current document has not previously been saved, you will be prompted to do so before switching documents. If it has already been saved, your current document will be saved automatically when you switch to another one. Use the Previous and Next thumb keys to select which drive, among those available on your device, you wish to open, then select the document you wish to switch to from the list presented to you, and the new document will open.

A message will inform you of the name of the document you have switched to. When switching from a document to another, the cursor will be at the last location in your document.

For improved performance, turning on read-only mode on documents which you are not editing, will avoid needing to save the document every time it is switched from. There is no limit to the number of documents that can be open at a time, keeping in mind that the larger the documents and more documents that are open will reduce performance.

#### 6.9 Generating Visual Preview

You may hear at times that the visual output of the KeyWord screen has black boxes or shapes on it that do not always make sense to a sighted viewer. This is because KeyWord is a Word Processor designed specifically for the Braille user. These black boxes and shapes are renderings of Braille format markers which cannot be translated into a visual representation.

This Preview feature can be useful for reading large documents, as it allows for various navigational elements. For more details, please refer to the list of webview shortcuts (section 3.9.2). There may also be times when you need to show a sighted teacher or colleague a document you have worked on with the final formatting.

When these situations occur, you can use the Generate Preview option, which generates a web preview of your document and displays it on the screen. When a document is in preview mode, you can switch to Explore by Touch mode to allow the user to pan the document.

To generate the preview of a document, simply type ENTER with V in an opened document, or type SPACE with M, then select and activate Preview.

To close the preview, press SPACE with E.

# 6.10 Converting a Word document to another format

Word documents can be saved to a .brf or .brl Braille file formats. From a Word document, use the Save As option by pressing BACKSPACE with S and select .brf or .brl format to convert your Word document into that format.

#### 6.11 Sharing documents

To quickly upload documents to various services or apps such as Dropbox, Google drive, or any other app which allows it, open the document you wish to share from the drive or cloud storage in which it is stored, and press SPACE with M to access the contextual menu. Select File functions, Share and press ENTER. You will be directed to a list of apps and services you can share your document with. Select the app you wish to use and press ENTER. Your file will be shared with your selected application. Note that KeyWord will prompt you to save your document before having access to the share function.

If you simply wish to share your file with a cloud storage, you can save the document to any cloud storage available on your device by pressing SPACE with S and selecting the cloud service you wish to share the document with from the list that will appear.

## 6.12 Embossing a document

KeyWord enables you to emboss documents with a compatible embosser such as Romeo 60, Juliet 120, and Basic-D 5, who offer direct Wi-Fi embossing, or via Bluetooth. To emboss a document, you first need to either configure the IP address of your embosser from the Settings menu of KeyWord, or pair the Embosser with the Braille Note Touch Plus device via Bluetooth.

Once the IP address is configured, select Emboss from the KeyWord menu and press ENTER. Select a word document to emboss and press ENTER.

Alternatively, if the embosser is paired via Bluetooth, open KeyFiles and navigate to the file you wish to emboss. Press SPACE with M to access the contextual menu. Select File functions, Share and press ENTER. You will be directed to a list of apps and services you can share your document with. Select Bluetooth from the app list that will appear. A menu will open; select the embosser you wish to share your document with and press ENTER. Your file will be shared with the embosser. Note that KeyWord will prompt you to save your document before having access to the share function.

Please note that embossing formatting and page size must be controlled on the embosser's menu and is not controllable at this point from KeyWord. Blank lines are currently not rendered by the embosser. To get the maximum functionality from your embosser, make sure the BrailleNote Touch software is up-to-date.

## 7 Sending an Email with KeyMail

To launch KeyMail, access the main menu, Press E or Navigate to Email: KeyMail, then press ENTER or one of the cursor routing keys.

# 7.1 Setting up an email account

Upon opening KeyMail, you will be prompted to create a new email account. If you already have an email account, enter your account information in the text fields to get started. Otherwise, you will need to create an email account with a service before proceeding.

When adding an email account to your BrailleNote Touch, all email messages, appointments and contacts associated with that email will be synchronized with your Touch and available in KeyList and KeyPlan. A Google or Exchange account is required for calendar synchronization.

# 7.2 Writing and sending emails

To compose a new email, select and activate the new message item in the KeyMail menu. You are now in the new message window, which consists of three text fields: To, Subject, and Compose mail. Your focus will be on the To text field by default, and you will already be editing in that field. You will know that you are in edit mode as you will see a cursor between the edit field brackets. In the To field, enter the email address of your email's recipients. Alternatively, you can scroll to the left until you reach the Select recipient button. Upon pressing this button, you will have the option to add an email address from your contact list. You will notice that the display and speech says that computer Braille is required when editing in the "To" field. In certain types of text fields, you must use computer Braille to enter content. Remember that computer Braille uses all 8 dots, so when using computer Braille, if you want to perform traditional commands that use backspace or enter, such as backspace with C to clear a line of text, you must add the SPACE BAR to these commands to perform them. Commands which involve ENTER or BACKSPACE that would normally write a character must have the SPACE BAR added to them when you are using computer Braille. Your BrailleNote Touch can give you recipient suggestions based on your address book and history. To get suggestions, type at least one character in the "To", "CC" or "BCC" edit box, then press BACKSPACE with E.

After the To field is the Plus CC/BCC button. Press this button to add the CC and BCC fields to your email.

Below is the subject field where you can specify a subject for your email.

Next is the Compose mail field, where you will be writing the body of your message. Press Enter or the cursor routing key to start writing your message.

Once you are done, press BACKSPACE with S to send your email. Alternatively, you can access the context menu for other shortcuts and functions by pressing SPACE with M.

#### 7.2.1 Attaching a file

To attach a file when writing a message, open the context menu by typing SPACE with M. Select and activate Attach file. You will be re-directed to your file manager with a list of your BrailleNote Touch's internal storage content. Select and activate the file you wish to attach to your email.

# 7.3 Reading and searching for emails

To read your emails, select Read from the KeyMail menu and press ENTER. All emails in your inbox will be listed. As you scroll through your emails, BrailleNote Touch will read the name of the sender, will tell you if the email has an attachment, and read the email's subject and the time it was sent. To read an email, simply select it and press ENTER.

Note: When you scroll down to the bottom of your email list, you will find the "Load more" button. Press this button to load the emails that have not been loaded yet.

You can search for a specific email using the Search command by pressing SPACE with F. Type your search keyword then press ENTER.

After opening an email, BrailleNote Touch's focus will be on the email's header information, which includes the subject, sender, send date, recipients, and attachments. This information will be collapsed however, so simply press the cursor routing key on the View detail button to expand the header information.

Scroll passed the header information to reach the main body of the email.

#### 7.3.1 Viewing attached files

If your email includes an attachment, there will be an "Open attachment view" item available in the email header, just after the "Date" field. To view the attachments, select and activate the "Open attachment view" item. Alternatively, activate the Toggle view attachments item from the Context menu by pressing SPACE with M or simply press Backspace with O.

A list of the attachments included in the email will open, with each attachment followed by the more options button. If you click directly on the attachment, BrailleNote Touch will attempt to open the file directly.

If you scroll to the more options button, you will have the Save option, which will save the file in your Download folder, and Download again options, useful if there was a problem with the download the first time.

# 7.4 Marking, highlighting, deleting, and other email options

Accessing the context menu of your KeyMail inbox will give you access to a wide variety of functions, such as marking your emails as read, marking them as unread, moving them, deleting them, and more.

Access the context menu using SPACE with M or by pressing and holding the Recent apps button.

Some keyboard shortcuts are available for the more frequently used commands:

Delete email: BACKSPACE with DOTS 2-3-5-6 (Deletes the selected email)

New message: SPACE with N (Start writing a new email)

Change email folder: ENTER with B (Lists the content of other mailbox folders (Starred, Unread, Inbox, Drafts, Sent, Trash, Junk)

Search: SPACE with F (Search for an email in your current mailbox)

Refresh: ENTER with R (Refresh the content of your mailbox to see if you have received new emails)

Mark email: BACKSPACE with L (Mark the selected email to perform commands to more than one email)

Mark/Unmark all emails: ENTER with DOTS 1-2-3-4-5-6 (Mark/Unmark all emails in a single email folder)

## 7.5 Deleting an email account

To delete an email account, you will need to do so through the Android settings by pressing ENTER with Q.

After pressing ENTER with Q, you will be in the Android Settings menu. Scroll down to Users & accounts and press Enter. Scroll down to your EMail account, then press Enter (example: <u>bob.smith@gmail.com</u>, personal (IMAP)). Scroll to the Remove account button, and press Enter. A confirmation window will appear. If you are sure you wish to remove the account, scroll to the Remove account button and press Enter. Otherwise, press back or the Cancel button.

## 8 Using KeySlides

KeySlides is an application that allows to read PowerPoint documents (.pptx extension) with the Braille Note Touch Plus device.

#### 8.1 Launching KeySlides

To launch KeySlides, access the main menu, navigate to the item All Applications, then press ENTER or one of the cursor routing keys. Once in the All Applications Menu, press K until you reach the item KeySlides or use the Previous and Next thumb key to access the KeySlides item, then press ENTER or one of the cursor routing keys.

#### 8.2 Opening a PowerPoint document

From the KeySlides menu, select Open (the only item available). The file manager will appear allowing you to navigate to your desired folder and file. Press SPACE with D to display the list of available drives. Use the Previous and Next Thumb Keys until you reach the drive from which you wish to open your presentation, and press Enter.

To activate the desired presentation, simply press a cursor routing key or ENTER. To go back a folder level, simply press the Back button on the front edge of your Touch or SPACE with E. After you select a

presentation to open, you will receive a message indicating the name of the document you are opening, and the first line of text will be displayed on the Braille display.

If you are unsure which document you are reading, press SPACE with I to display document information.

## 8.3 Navigating in your presentation document

KeySlides features many commands that will help you efficiently navigate through your presentations.

Move to next slide: ENTER with O or Right thumb key with Previous thumb key

Move to previous slide: ENTER with DOTS 2-4-6 or Left thumb key with Next thumb key

Index slide: ENTER with I

Show/Hide Notes: ENTER with N

Go to Slide: ENTER with G

### 9 Browsing the web with Google Chrome

To launch Chrome, access the main menu, Press I or Navigate to Internet: Chrome, then press ENTER or one of the cursor routing keys. BrailleNote Touch uses an accessible version of Google Chrome as its web browser. Consequently, this user guide only covers the basic functions of Chrome; for additional details on Chrome or for troubleshooting, please visit: <u>https://support.google.com/chrome</u>. At any time, you can open the Chrome contextual help menu by pressing Space with H.

## 9.1 General web page navigation

Like anywhere on your Touch, you can navigate in your web browser by either using your thumb keys and the Braille keyboard or Explore by touch mode.

The Chrome browser features many functionalities and options that can be accessed in the context menu by pressing and holding the Recent apps button, or by pressing SPACE with M. The available commands are listed below:

Open web page: Enter with O

Forward: Enter with F

Back: Space with E

Reload page: Enter with R

Add or remove a bookmark: Enter with M Open bookmarks: Enter with dots 2-3-5 Open browsing history: Enter with dots 2-3-6 Open new tab: Backspace with N Find: Space with F Find next: Space with N Find previous: Space with P Next element: Space with dots 4-6 Previous element: Space with dots 1-3 KeyWeb menu: Space with W

Alternatively, most of these functionalities can be accessed in the main page by scrolling with the thumb keys. The first element on your web browser's screen are the tabs that are currently opened. Each tab is followed with a close tab button that will close the tab it is related to upon activation.

The tabs are followed by a "New Tab" button, which you can activate to create a new Chrome tab.

Next is the "Go Back" button, which will bring you to the previous page.

It is followed by the "Go Forward" button, which is the opposite of back; meaning it will bring you to the page you were at before you pressed the back button. The forward button is only available if you have pressed back.

"Refresh Page" button: Pressing this button will force the page to reload, which is useful when pages have not properly loaded.

Site information button: Provides additional information for the website of your current tab.

Address bar: Shows the address of your current tab. If you know a URL address, you can type it in this address bar then press enter to reach the website for that address.

Alternatively, you can type in search topics into the address bar and Google will list results found for that topic.

"Bookmark" button: Click this button to bookmark the current page.

"Download page" button: Click this to download the current page and make it available for offline use.

Open tabs: Click this to manage the tabs that are currently open in your Chrome session.

More options: Click on this to open a new tab, access the settings or open the window in Incognito mode. Your browsing history won't be saved when using Chrome in Incognito mode.

The next section is the main web page window that will display the content of your current web site.

#### 9.1.1 Navigating on a website

Navigating by element is an alternate way of navigating through your web page, allowing you to select the specific HTML elements you are looking for instead of going through the entire page to find them. When the focus is on the Web page, you can search by the following HTML elements: headings, form elements, landmarks, list items, tabs, and links. When focus is located outside the webpage, standard navigation levels will apply.

Press SPACE with DOTS 1-3 to move to the previous navigation element and SPACE with DOTS 4-6 to move to the next navigation element.

To change navigation level, press SPACE with T.

For more information on navigation levels, please refer to <u>Chapter 3.7: Navigation Level</u>. Navigating through web pages can be done by choosing a navigation level and then using the thumb keys, but also using Html Navigation shortcuts. See the <u>Html Content Navigation</u> section of this user guide for more details on Html Navigation.

## 9.2 Accessing a new website

To access a new Website, press ENTER with O, or select your address bar using the thumb keys. Alternatively, you could simply touch the address bar at the top of the screen if Explore by Touch is enabled. Your Touch will say "Search or enter address" once you have the address bar selected.

This field is another computer Braille field requiring you to use computer Braille to input the address. Remember that computer Braille uses all 8 dots, so when using computer Braille, if you want to perform traditional commands that use the ENTER or BACKSPACE keys, you must add the SPACE BAR to these commands to perform them. Commands which involve ENTER or BACKSPACE that would normally write a character must have the SPACE BAR added to them when you are using computer Braille. Anytime you are typing content in Chrome, you must use Computer Braille.

Once the address bar is focused, simply type in the address you wish to visit. If you do not have an address and wish to search a specific topic, simply write a word in the address bar then press enter. You will be directed to the results of that word in your default search engine.

Press SPACE with E or the Back button to return to your previous page.

#### 9.3 Bookmarks menu

You can add a bookmark to pages you will be visiting often. To quickly add a bookmark for your current page, type ENTER with M.

Typing this shortcut again will delete the bookmark.

To enter the bookmark menu, type ENTER with DOTS 2-3-5.

Alternatively, you can open the context menu or use the Next command until you reach the Bookmarks menu, then press enter. The bookmark menu lists all your current bookmarks. To activate a bookmark,

use the Next command until you reach the Website you wish to visit then activate it by pressing enter or a cursor routing key.

# 9.4 Viewing or erasing browsing history

You can access your browsing history by typing ENTER with DOTS 2-3-6 or by simply selecting to the More options button, and then the History button in your browser. Then select Clear Browsing Data. You will see a page where you can choose what you wish to erase. Once you have made your selection, scroll down to the Clear Data button, and press Enter to erase your history.

#### 9.5 Downloading files

If you press enter on a link from a web page which activates a download, you will see a notification that the download has started. All downloads are saved in the BrailleNote Touch's internal storage under the Downloads folder. In Chrome you can access the list of downloads by accessing the downloads from the Chrome context menu. Remember that the Chrome context menu contains all functions and their associated shortcuts in Chrome.

## 10 Managing contacts with KeyList

To launch KeyList, access the main menu, Press C or Navigate to Contacts: KeyList, then press ENTER or one of the cursor routing keys.

#### 10.1 Creating, searching, editing and deleting contacts

KeyList is an application that allows you to conveniently manage your contacts on your BrailleNote Touch.

To add a new contact, press SPACE with N. You will be directed to the New contact window where you can enter the details of your new contact. When you have entered all the information, activate the Save contact button or press SPACE with S.

To find a specific contact from the list of contacts, type SPACE with F. You will be redirected to the Search contact window where you can input your search parameters.

To edit the information of one of your contacts, type BACKSPACE with E. You will be redirected to the edit window.

To delete a contact, type BACKSPACE with Dots 2-3-5-6. Confirm to delete your contact.

Access the KeyList context menu for other functionalities by pressing SPACE with M, such as Email contact and View contact. In the context menu, you can also refresh your contact list by pressing ENTER with R.

## 10.2 Viewing contact information

To view contact information, select the contact whose information you wish to display, then press ENTER or any cursor routing key.

## 11 Using the calendar: KeyPlan

To launch KeyPlan, access the main menu, Press P or Navigate to Planner: KeyPlan, then press ENTER or one of the cursor routing keys.

# 11.1 Creating appointments

KeyPlan is a fast and easy way to create, edit, and manage your appointments.

To create a new appointment, type SPACE with N. You will be directed to the New Appointment window where you can enter the details of your new appointment.

# 11.2 Viewing, editing and deleting appointments

The default viewing screen when you enter KeyPlan is the agenda view. This is an easy way for you to identify your upcoming appointments. You can also access the context menu to switch to a single day view if you prefer.

Navigate to the appointment for which you wish to view the details then press ENTER. All of the event details will be listed. Scroll to each item with the next or previous thumb keys to view its details.

To edit details of your selected appointment, scroll down to the edit button, then press ENTER. You will be redirected to the edit screen where you can select and edit all of your appointment details. Alternatively, you can edit a selected appointment by pressing BACKSPACE with E before viewing the appointment details.

To delete an appointment, press BACKSPACE with dots 2-3-5-6 or scroll down to the delete button, right after the edit button, then press ENTER.

From the context menu, you can refresh your appointment list by pressing ENTER with R.

# 11.3 Navigating the agenda

Like all other KeySoft applications, you can navigate through the agenda using the thumb keys and by sliding your finger when using Explore by Touch.

#### 11.4 Navigating Day View

Alternatively to agenda view, you can change to "Day View" to see a single day's appointments. To change to Day View, access the context menu by typing space with M, and choose the Day View option. Note that in Day View, your traditional navigation keys of SPACE or BACKSPACE to navigate forward or back by item change to allow you to quickly jump to different dates in the calendar. In agenda and all other screens, these commands have the same functions than on all of the other applications. The following commands can be used to quickly jump to a specific date in Day View:

SPACE with DOTS 3 or 6: Navigate to the previous or next day

SPACE with DOTS 2 or 5: Navigate to the previous or next week

SPACE with DOTS 1 or 4: Navigate to the previous or next month

SPACE with DOTS 2-3 or 5-6: Navigate to the previous or next year

## 12 Managing files with KeyFiles

To launch KeyFiles, access the main menu, Press F until you reach the item File Manager: KeyFiles, then press ENTER or one of the cursor routing keys. Alternatively, use the Previous and Next thumb keys until you reach the item File Manager: KeyFiles, and press ENTER.

#### 12.1 Creating folders

To create a new folder, press SPACE with N. Input the name of the new folder and press OK or ENTER to confirm.

The new folder will now be listed in the KeyFiles app, and will be available as a saving location when you wish to save a file.

# 12.2 Differences among drives, folders, and files

At the root of your BrailleNote Touch are the different storage devices of your Touch. These are internal storage (the device's internal memory), SD card, and USB drive (SD card and USB drive will only appear if

they are inserted in your device). Any available cloud-based storage will also appear in the list. Select and activate one of these drives to view its content.

## 12.3 Navigating in the file browser

Navigate through your files using the thumb keys, by touching the screen using Explore by Touch, with first letter navigation with the Braille Keyboard or by pressing SPACE or BACKSPACE.

To open a file or go inside a folder, navigate to it then press enter or press one of the cursor routing keys. If you wish to go back to the previous folder, press the back button on the front edge of your BrailleNote Touch or navigate to the first item of your list, which should be called Go to parent folder. Alternatively, you can press SPACE with E to go up as well.

You can do this until you reach the list of drives on your BrailleNote Touch Plus.

# 12.4 Moving, copying and pasting file and folders

To move a file, navigate to it and press BACKSPACE with X. You will be prompted to the documents menu and "Move to" will be displayed. Select the folder in which you wish to move the file or folder using the Previous and Next Thumb keys, and press Enter to open it. Once in the folder of your choice, press BACKSPACE with A. Your file or folder will be moved to the selected location. Alternatively, you can access to the context menu by doing a long press on the "Recent Apps" button then select the option "Perform current action".

To copy a file, navigate to it and press BACKSPACE with Y. You will be prompted to the documents menu and "Copy to" will be displayed.Select the folder in which you wish to copy the file or folder to, using the Previous and Next Thumb keys, and press Enter to open it. Once in the folder of your choice, press BACKSPACE with A. Your file or folder will be copied to the selected location. Alternatively, you can access to the context menu by doing a long press on the "Recent Apps" button then select the option "Perform current action".

## 12.5 Renaming a file or a folder

To rename a file or folder, navigate to it and press BACKSPACE with R. Type the new name in the text field that will appear, and press Ok to confirm.

#### 12.6 Sharing files

To quickly upload files to various services or apps, such as Dropbox, Google drive, or any other app which allows it, mark the file(s) you wish to share by pressing ENTER + BACKSPACE + M, and press SPACE with M to access the contextual menu. Select Share and press ENTER. You will be directed to a list of

apps and services you can share your file(s) with. Select the app you wish to use and press ENTER. Your file(s) will be shared with your selected application.

# 12.7 File and folder commands

KeyFiles offers a wide array of commands that can all be accessed in the context menu by pressing SPACE with M or the recent apps button.

These commands include:

New Folder: SPACE with N

Mark/Unmark: BACKSPACE with L

Mark/Unmark all: ENTER with DOTS 1-2-3-4-5-6

Copy to: BACKSPACE with Y

Move to: BACKSPACE with X

Search: SPACE with F

Show/Hide sort options: SPACE with V

Rename: BACKSPACE with R

Delete: BACKSPACE with DOTS 2-3-5-6

Select drive: SPACE with D

Where am I: SPACE with DOTS 1-5-6

Info: SPACE with I

Action: BACKSPACE with A

More options: BACKSPACE with ENTER with M

#### 12.7.1 Marking files

It is possible to "mark" files and folders for when you want to perform an action to more than one file or folder.

To mark a file or folder, simply navigate to it and press BACKSPACE with L. The message "Marked" will be displayed. You can also mark all files in your current folder by pressing ENTER with DOTS 1-2-3-4-5-6.

Once your files are marked, type the command for the action you wish to perform. For example: delete, copy, or cut.

All your marked files or folders should have been affected by your action.

To unmark a file or folder, select it and press BACKSPACE with L.

### 13 Reading a book with EasyReader Plus

BrailleNote Touch comes with Dolphin's EasyReader Plus application installed, a free and accessible reading application with direct access to Bookshare, NFB-Newsline, RNIB, and many other book services that was specifically tailored for the BrailleNote Touch Plus.

To launch EasyReader Plus, access the main menu, and press E twice or navigate to EasyReader Plus, then press ENTER or one of the cursor routing keys.

#### 13.1 Log into EasyReader Plus

To get started with EasyReader Plus, you first need to set up a Dolphin account or log in using your Google account. When you open the EasyReader Plus app, you will receive a welcome message. You can read it, and when you are done, press the skip button.

#### 13.1.1 Log into your Google or Dolphin Account

If you already have an account, select and activate either the Google or Dolphin button. If you choose to log in using Google, you will get the option to select the account to log in with. If you choose to log in using your dolphin account, enter the email and password of your account in the appropriate fields, then select and activate the Login button.

If you forgot your Easy Reader password, select and activate the Forgot your password? button next to the Login button, then follow the instructions.

#### 13.1.2 Sign up for a new Dolphin Account

To sign up for a new Dolphin account, select and activate the Sign Up for a new Dolphin Account button. Type in your email then press the Next button. Type in a password for your account in the first text box, retype your password in the second text box, then press the Sign Up button. There will be a pop-up icon confirming your account is set up that will ask you to validate your email in the next 7 days. Click OK.

You should now receive a confirmation email from Dolphin in your inbox. To complete your registration, you must click the activation link within the email. Click the link, and you will be directed to a webpage that says Account was successfully verified. You have now properly set up your Dolphin account and can start using EasyReader Plus.

#### 13.2 Navigating the menu

Once you are logged into your EasyReader Plus account, you will be in the My Books view by default, which lists all your available books.

To narrow down the results or to download new books from a specific library, select and activate the Side Menu button, the first button in the page or press Space with B. A submenu will open with the following items:

My Books: This is EasyReader Plus' main window that lists all your available books.

**Manage Libraries:** Choosing this opens a submenu where you can add the online libraries of your choice, such as Bookshare, Project Gutenberg, the Dolphin Library, epubBooks, and many more. Some services are subscription based and may ask you to enter your account credentials.

**My Newspapers:** Access your newspaper subscription or add new subscriptions. These services require an active subscription and will ask you to enter your account credentials.

My ClipBoard Texts: Choose this to read text copied on your clipboard using EasyReader Plus.

**About and Help:** Choose this to access more in-depth documentation for EasyReader Plus, access the forums or the Dolphin Website.

**My Dolphin Account:** Choose this to receive emails and newsletters from EasyReader Plus, view the EasyReader Plus Privacy Policy, or log out of your EasyReader Plus account.



To read a book with EasyReader Plus, make sure the My Books window is opened. If My Books is not the active window, activate the Side Menu by scrolling or pressing Space with B, then select the My Books button.

You will now be in the My Books window. From there, use the thumb keys to scroll through your available options and books. Import book, sort, search, your listed books and information for each book.

#### 13.3.1 Reading a Book

To read a book, first make sure you have books available in the My Books window. Select a book using the thumb keys and activate it by pressing ENTER or a cursor routing key. The book will open in a new window.

Press Enter with B to jump to the book's content, or press the Next thumb key to scroll over the Search, Bookmark, Audio Settings, and More options buttons until you reach the beginning of the book. From there, you can keep scrolling with the thumb keys and read the book step-by-step using the Braille display and text-to-speech. You can continue like this until you reach the end of the book.

To read the book continuously using audiobook recordings, or the TTS if no recording is available, simply press the Action button or Space with G. Press Space with G or the Action button again to pause the reading.

#### 13.3.2 Reading options

EasyReader Plus offers different options to customize your reading experience, most of these accessible by scrolling with the thumb keys inside an open book. You will find below a short description of each option offered by EasyReader Plus and their shortcuts.

**Search (Space with F):** This opens a search window where you can search for specific words within your book. Enter your keywords and EasyReader Plus will find all occurrences of these words in the book that is currently open. Scroll down to the excerpt of your choice, then press ENTER to jump to that section of the book.

**Bookmark (Enter with M):** Press this button to add a bookmark at your current position in the book. You will then have the possibility to jump to this bookmark later.

Audio settings (Backspace with A): In this submenu, you can adjust different audio settings in EasyReader.

**Book navigation (Backspace with B):** Here you have access to the book's table of content, the bookmarks you have added to your book, and have the option to reach a specific page number.

**More options Space with M**: This submenu gives you access to the sleep timer, the Where am I? function, and book information.

**Navigate previous (Space with dots 1-3):** Navigate to the previous element depending on the granularity set in your navigation settings.

Play (Action button): Play or pause the reading of books

**Navigate Next (Space with dots 4-6):** Navigate to the next element depending on the granularity set in your navigation settings.

**Navigation settings (Space with T):** Here you can select the behaviour of the Navigate Previous and Navigate Next buttons. For example, if you select 15 seconds, the navigate next button will jump 15 seconds forward when reading the book.

Increase Audio TTS speed Enter with Dot 6: Use this shortcut to increase the reading speed.

Decrease Audio TTS speed Enter with Dot 3: Use this shortcut to decrease the reading speed.

#### 13.4 Importing books

EasyReader Plus also gives you the possibility to import your own books stored on your device, whether it's a Daisy 2, Daisy 3, epub 2, or epub 3 document type. Pdf, Word and txt documents are not supported.

From the My Books Window, select and activate the Import a Book button. A new window will appear giving you different locations from where to import the file. Select one of the locations, then select and activate your book to open it in EasyReader Plus. Your book is now available in your My Books library.

### 14 Using the calculator: KeyCalc

To launch KeyCalc, from the main menu, Press C repeatedly or Navigate to Calculator: KeyCalc, then press ENTER or one of the cursor routing keys.

#### 14.1 Inputting calculations

Using the calculator is as simple as writing the operation on your touch keyboard then pressing enter to get the result. For example, if you wish to know the product of 9 times 9, you simply write 9 times 9 followed by enter. Your Touch will display and read the result of your operation. This number can now be used for another operation as it is already written in the calculation text field. Both result and calculation text will also be displayed at the bottom of the screen for those teachers that require a visual representation of the formula and answer.

KeyCalc is a full scientific calculator that can be used with the following mathematic braille codes:

- Nemeth
- UEB
- Français Mathématique
- LaTeX in computer braille
- Computer braille

# 14.2 Inserting a Math symbol in KeyCalc

To insert a symbol in KeyCalc, use the command BACKSPACE with DOTS 3-5 or select Insert symbol from the context menu to open a list of symbols according to the Braille code in use. Pick from a pre-defined list of symbols to insert in the formula field. If at any point you wish to clear the formula field, you can use the dedicated shortcut Space with DOTS 3-5-6.

# 14.3 Show results as fractions or decimals

If "Fractions" is selected, KeyCalc will approximate the result to represent it in the form of a fraction. Since the result shown is an approximation, it is not intended for complex results but rather simple fractions of the kind: 1/2 + 1/3 = 5/6. To toggle your calculated result to display either Decimal or Fractions press Enter with the letter G, or select show results as fraction or decimals from the context menu.

#### 14.4 History

The history stores all previously calculated results and formulas. To access the history, press the previous Thumb key to go through previous calculation. To clear the history, this is done by selecting "clear history" in the context menu. The context menu can be opened from pressing space with M.

## 15 Creating math objects with KeyMath

To launch KeyMath, from the main menu, press A or select All Applications and press ENTER or one of the cursor routing keys. Then, press K repeatedly or navigate to KeyMath and press ENTER.

# 15.1 Creating a math object

From the KeyMath menu, you can create visually appealing mathematical objects such as shapes, trigonometric symbols, and many others, by selecting Create and pressing ENTER or one of the cursor routing keys. By default, math objects are saved as .brl.

The BrailleNote Touch allows you to choose your preferred Braille code. From the KeyMath menu, select Settings and press ENTER. Then, press ENTER on Preferred Braille Code and select it from the list. You can choose between Nemeth, UEB, Français mathématique, Braille images, and LaTeX in Computer Braille. Braille images means that no translation occurs and your math is just left as Braille dots in the image object.

While typing in KeyMath, no speech or visual math is immediately available. When you have completed an expression, press ENTER to move to a new line and the content will be visually rendered on the screen for a sighted teacher or classmate. If you want to hear the expression you wrote, press SPACE with DOTS 1-4 to read the current line.

# 15.2 Opening a KeyMath document

To open an existing KeyMath document, select Open from the KeyMath menu, select a .brl math file that is available on your BrailleNote Touch, and press ENTER or one of the cursor routing keys.

#### 15.3 Inserting a math object in a KeyWord document

The BrailleNote Touch allows you to insert math objects while editing a KeyWord document. To do so, first position the editing cursor at the place you wish the math object to be inserted. Press BACKSPACE with M to open a KeyMath editing box, where you can enter a math expression using your preferred Braille code. Press BACKSPACE with E to export your math expression to clipboard. You will be back in your KeyWord document, where you can paste your math expression at the cursor position. It is possible to save your document as pdf or word and send it to your teacher if necessary.

Note that when viewing a pasted math expression in KeyWord, you will be viewing a pasted image. Available to the KeyWord user are the Braille dots of the math expressions that were pasted. No speech of the Braille dots is available in KeyWord as these are images of Braille dots available to the Braille display. You will know that you are reading the pasted math expression because you will see an image start symbol (\$IMS) and an image end symbol (\$IME) surrounding the Braille math expression. To make these visually available on the screen, one must perform a visual preview by pressing ENTER with V, or print the file to PDF.

If you realize that you made a mistake in the math expression you pasted in KeyWord, you can easily edit this expression by placing your cursor on the Braille math expression. You will know it is placed correctly because the cursor will be under the \$IMS symbol.

Then, press BACKSPACE with M to switch into KeyMath and you will see that your math expression has already been put into KeyMath's edit box.

Simply edit the expression to your liking and re-export it back to your clipboard with BACKSPACE with E.

Back in KeyWord, delete the old, incorrect math expression by backspacing over it, and paste the new, correct expression that you had just exported.

#### 15.4 Inserting a math symbol in a KeyMath expression

To insert a symbol in a document, use the command BACKSPACE with DOTS 3-5 or select Insert symbol from the context menu to open a list of symbols according to the Braille code in use. Using first letter navigation, type the first letter of the category of symbols you wish to type. For example, if you wish to type the symbol for "approximately equal", type the letter A, and press ENTER.

#### 15.5 Generating, reading, and modifying graphic objects in KeyMath

#### 15.5.1 Generating a graph

Thanks to a partnership with Desmos, an online graphing calculator company, it is possible to generate a graphic preview of a function in KeyMath. This is particularly useful when you need to show teachers or sighted colleagues a visual representation of your math function.

To generate a graphic in KeyMath, press ENTER with G to toggle between the Math typesetting and Graphing calculator rendering mode until you have selected Graphing calculating mode. Alternatively, you can select Graphing calculating mode in the contextual menu.

Once this is done, select the first edit box in KeyMath, type in your function and press ENTER. Your equation must be valid and use variable y as the vertical axis and variable x as the horizontal axis.

The following are examples of valid functions in KeyMath: y=x, y=3x+6, y=4x,  $x^2+y^2=4$ ,  $x^2+y^2\leq4$ , etc.

You may also define constants on different lines to generate your graph. For example, the following equations will successfully generate a graph in KeyMath:

y=ax+b –LINE BREAK a=3 –LINE BREAK b=2

Don't forget that you must write your function while respecting the syntax of your selected Braille code (Nemeth, UEB, Braille image, LaTeX, etc.) for it to be parsed properly.

You can also customize your graph by accessing the Graph settings menu in the contextual menu. Options include setting the type of graph (regular or polar), setting the lower and upper boundaries of your graph, and showing or hiding axes and grid on the tactile preview.

Note that using undefined variables other than x or y will not generate a graph, even if you change the axis name to that variable.

#### 15.5.2 Importing Graphs

Teachers can import graphs to the BrailleNote Touch to give their blind students an idea of their spatial aspect. One way this can be done is by first finding an image of the graphic on Google Images, saving it, and opening it with Windows Paint. Then, they can save the image as monochrome bitmap (.BMP) using the Save As function of Windows Paint and transfer this file on the BrailleNote Touch to be read.

#### 15.5.3 Exporting Graphs

It is possible to export KeyMath graphs to an image viewing software or gallery. When your graph is generated, simply select the export graph image item in the contextual menu or press ENTER with I, and you will be asked to select to which application you wish to export your image. Alternatively, it can be exported to an embossing app connected to the embosser, and emboss the graph directly from your BrailleNote Touch.

#### 15.5.4 Generating Tactile Preview of a Graph

To generate a tactile preview of a graph, press SPACE with T or select the option in the contextual menu.

You will be able to feel Braille characters on the display which by themselves don't have significant value; their arrangement in relation to other characters as you scroll the display down with the next or previous thumb keys, defines a shape and gradually forms a larger graphic image, such as a circle, a diagonal, etc. To comprehend the whole shape, scroll up and down to dynamically feel the whole shape. The faster you scroll the display with the next or previous thumb keys, the more you will be able to comprehend the image. Imagine that you are looking at a graph paper one line at a time. Press any cursor routing key to have the BrailleNote Touch tell you the "y" position of your cursor.

# 16 Reading and editing Braille documents with KeyBRF

# 16.1 Opening .brf and .brl files

BrailleNote Touch includes KeyBRF, a software designed to open .brf or .brl files. These common Braille file types are directly written in Braille. There are two ways to open a Braille file with KeyBRF. One way is to open KeyFiles, find your .brf or .brl file, and activate the file – the file should automatically open with KeyBRF. Alternatively, select and activate All Applications from the main menu, then select and activate KeyBRF. From the KeyBRF menu window, activate the Open option and find the file you wish to open.

KeyBRF will display the content of the .brf or .brl file in the same grade it was written in, which means that if the file was written in grade 2 Braille, it will also be displayed in grade 2 Braille regardless of your chosen Braille type. In KeyBRF, the Braille text will not be converted to visual text, and sighted users will only be able to see Braille dots on the screen. Speech feedback is limited in KeyBRF as you are working with direct Braille dots exclusively. It is also possible to toggle between Reading mode and editing mode by pressing SPACE with X as in KeyWord.

Note that when opening a .brf or .brl file in KeyBRF, it is always in read only mode first. If you want to edit an existing Braille file in KeyBRF, you need to activate edit mode via the context menu or using the command SPACE with X.

# 16.2 Creating a .brf or .brl file

To create a .brf or .brl file, from the KeyBRF menu, select the option Create and press ENTER. When creating a document, edit mode is turned on. As in KeyWord, you can use the same Save and Save As options by pressing BACKSPACE with S, and your document will be saved as a .brf or .brl file.

#### 16.3 Finding Braille Text

It's possible to search for text in a .brf or .brl file using the Find shortcut. Type SPACE with F, then enter your search parameters in the search field. Select and activate the Next button to find the text of your search parameter located after your cursor, or select the previous button to find your search parameter text located before your cursor. Alternatively, you can access the Find function through the Context menu by pressing SPACE with M.

### 17 Coding with KeyCode

KeyCode is a purpose-built programming application that allows to create and edit Python files (.py extension), with a few utilities to assist in the deployment of code to be executed on a micro:bit device.

The micro:bit is a pocket-sized computer that can be coded, customized and controlled to bring digital ideas, games and apps to life. It has a sound sensing, and playback capabilities to allow for interaction with you and your world.

To launch KeyCode, select the item in the All Applications menu using the Previous and Next thumb keys and press Enter.

## 17.1 Creating a Python File

To start coding in KeyCode, you first need to create a Python file. To do so, in the KeyCode menu, use the Previous and Next thumb keys to select the item Create and press ENTER.

You will be redirected on an empty Python file, in which you can start typing your code.

#### 17.2 Opening, Navigating and Editing a Python File

To open a Python document in KeyCode:

- 1. In the KeyCode menu, use the Previous and Next thumb keys to select the item Open and press ENTER.
- 2. You will be prompted with the KeyFiles file manager. Navigate to your Python (.py) file by using the Previous and Next thumb keys and press ENTER.

Your file will be presented with the KeyCode view. A vocal message, announcing the file name, will be heard. The editing cursor will be positioned at the same place it was when your file was last opened in a previous KeyCode session. If this is the first time you open the file, the cursor will be located at the beginning of the file. The line(s) of text following the edit cursor will be shown on the braille display.

The Python file can now be navigated and edited the same way you edit any other document in KeyWord. Use your cursors to move across the file. Use the Backspace or Delete keys to erase characters and lines of code. Press Enter to insert a new line. Use the keyboard to type code in the file.

You can toggle between Editing mode and Reading mode by pressing SPACE with X. To close a document, use the Exit command SPACE with E.

#### 17.2.1 Indentations

When typing your code, you can add, or remove, indentations within the code. Indentations are used to create a new block of code that will be identified as a logical block by the Python interpreter.

To add an indentation, press BACKSPACE with T. To remove an indentation, press BACKSPACE with U.

#### 17.3 Saving a Python File

You can save your Python file by typing SPACE with S. If this is the first time you are saving a newly created file, a new window will open showing the different drives and cloud storages available on your device in which you can save your document. You will be automatically prompted with a file name; you can either choose to keep the prompted name, or overwrite it with a name of your choice.

Once the drive or cloud storage in which you want to save your file is opened, you will be prompted to select in which folder you wish to save your document. If this folder contains sub-folders, these will be listed. If the folder does not contain any sub-folder, you will be asked to name the file.

You will be prompted with a text field in which you can type the name of the file you wish to save. Once you entered the name of your choice, choose the Python (.py) format to save the file into. When you are done, use the Previous and Next thumb keys until you reach the SAVE button and press ENTER. You can also press BACKSPACE + A (perform current action) to complete the saving of the file. Please note that anywhere in the saving process, pressing SPACE with S will bring you directly to the filename edit field.

If you open an existing file, SPACE with S will simply overwrite that existing file with your changes.

At any point in the save as window, you can save your file by pressing the SAVE button.

#### 17.4 Coding with KeyCode

#### 17.4.1 Compile a Program

Once you have entered your code and wish to compile it, press ENTER with C. Alternatively, you can select the Compile item from the Contextual menu, which you can access by pressing SPACE with M.

Upon compiling your code, the document will be automatically saved. The code will be read by the compiling tool integrated in the KeyCode app. Once the compiling is completed, a list of errors will be displayed, if any. Warnings will be displayed too if they're enabled in the settings.

Errors are mistakes found within the code by the compiler, which render the code unusable. The code cannot work until all errors are fixed. Warnings are potential problem found within the code that could present a potential problem during execution, but don't stop the code from being syntaxically correct.

If you wish to show the warnings, it is possible to enable them by selecting the item Show Warnings in the KeyCode settings menu.

You can navigate through the list of warnings and errors by using the Previous and Next thumb keys. Press ENTER on an error or a warning to review and correct the line of code that needs to be fixed.

#### 17.4.2 Flash a Program

Once you are done reviewing your code, you can execute it, or "Flash" it, on the USB connected micro:bit device. To do so, press ENTER with F. Alternatively, you can select the item Flash code on the device from the Contextual menu, which you can access by pressing SPACE with M.

Upon compiling your code, the document will be automatically saved. The code will be compiled. If there are errors detected, the KeyCode application will enter Compilation mode and the errors will need to be fixed.

If no error is detected, the Python file will be converted into an binary file (.hex format). You will be prompted with a file saving dialog in which you can select a name and a location to save your newly .hex file. If you wish to flash your file into a micro:bit device, select the item Microbit from the list of available drives and press Enter.

The micro:bit device will restart, and the code will be programmed into it. Note that this process may take up to a couple minutes. Once the flashing process is completed, your micro:bit device should be executing your code.

#### 17.5 KeyCode Commands

KeyCode offers a wide array of commands that can all be accessed in the context menu by pressing SPACE with M or the recent apps button.

These commands include:

Find: SPACE with F

Find previous: SPACE with P

Find next: SPACE with N

Indentation: BACKSPACE with T

Remove Indentation: BACKSPACE with U

Line information: SPACE with dots 1-5-6

Go to line number: ENTER with G

Compile Code: ENTER with C

Flash Code: ENTER with F

Save: SPACE with S

Save as: BACKSPACE with S

Toggle Reading/Editing Mode: SPACE with X

Exit File: SPACE with E

# 18 Using your Touch as a Braille display with Braille Terminal

With Braille Terminal, the BrailleNote Touch can be used to control, as a keyboard, and act as a Braille display for mobile devices and computers running screen readers such as JAWS. The BrailleNote Touch is compatible with all major screen readers and devices.

In short, when Braille Terminal is active, the BrailleNote Touch will show the contents of the screen reader on its display and allow you to control the mobile device or computer with its physical or TouchBraille keyboard and thumb keys by forwarding all commands and key presses to the screen reader of the connected devices.

Note that when using your Touch in the Braille Terminal app, standard KeySoft commands such as help, main menu and context menu are not active using their keyboard shortcuts. If you need to go back to the main menu from Braille Terminal, simply press the home button on the front face of your BrailleNote Touch. While the Braille Terminal app is still open in background, your pairing or connection to your secondary computer or mobile device will remain live. This allows you to switch to another app on your Touch and switch back to the Braille Terminal app when needed, without needing to repair the connection with the secondary device. If you close Braille Terminal completely from the recent apps list, then your connection to the secondary device will be terminated.

#### 18.1 Launching Braille Terminal

To launch Braille Terminal, access the main menu, Press B or navigate to Braille Terminal, then press ENTER or one of the cursor routing keys.

#### 18.2 Pairing your BrailleNote Touch with a host device

You can pair your BrailleNote Touch with a host device in two different ways: wirelessly via Bluetooth or via USB. As soon as you launch Braille Terminal, you will be asked to select how you want to connect to your device. Select and press ENTER on the option of your choice.

#### 18.2.1 Connecting via Bluetooth

To connect via Bluetooth, select Bluetooth and press ENTER. If Bluetooth was OFF in the Android settings, it will be turned ON automatically. You can now pair your BrailleNote Touch with the device you want to use with your Touch. Turn your screen reader on and connect to the BrailleNote using the Brailliant / BrailleNote Touch Bluetooth name. Once the pairing is complete, you will be ready to use your BrailleNote Touch display.

Note that often external devices will require you to either, or sometimes on both devices, confirm you want to make a pairing. Simply confirm this on either the Touch and/or external device.

#### 18.2.2 Connecting via USB

To connect via USB, connect your BrailleNote Touch to the host device using the USB cable. On your host device, turn on the screen reader of your choice. You are now ready to use your BrailleNote Touch as a Braille display.

Please visit <u>www.humanware.com</u> support section for more information and to view a tutorial on connecting with various screen readers and devices and using the screen readers.

#### 18.3 Leaving and Closing Braille Terminal

To leave Braille Terminal at any time, press the Home button on the front edge of the Touch. This will leave the connection open and allow you to go back to the Braille Terminal without having to reconnect. To go back to Braille Terminal, select it in the Recent apps screen or in the main menu and press ENTER. To deactivate the connection, simply press Back. To close the Braille Terminal app, access the Recent Apps screen, navigate to Braille Terminal, and close it by selecting the dismiss button.

## 19 Settings

#### 19.1 Settings overview

Two types of settings can be changed on your BrailleNote Touch: KeySoft settings, and Android settings.

Android settings apply to your BrailleNote Touch in general, such as Wi-Fi connection, sound, storage, battery and software version.

You can access Android settings by pressing Enter with Q, or by going in the All Applications menu from the main menu, and then selecting and activating the Settings item. You will then be redirected to the Android settings menu where you can modify your BrailleNote Touch's settings.

KeySoft settings, or more familiarly called the Options menu, allow you to personalize to your preference the way KeySoft applications behave. You can also access the Android system settings at the bottom of the options menu.

#### 19.2 KeySoft Options Menu

You can access the KeySoft options menu from anywhere by pressing SPACE with O.

The following options can be changed in the KeySoft options menu:

Configure Language Profiles (submenu): Customize your language profiles or add additional profiles.

Select which profile you would like to modify or add an additional profile.

Text To Speech Engine: Choose your preferred TTS engine.

Voice: Select an existing voice or use the Manage voices option to replace or add additional voices. You can have up to 4 different Acapela voices installed.

Speech rate: Choose the speed at which the TTS engine speaks.

Preferred Braille Grade for entry: Choose from either literary Braille or computer Braille as your preferred entry method.

Preferred Braille Grade for display: Choose from either literary Braille or computer Braille as your preferred display method.

Computer Braille Table: Select the computer Braille table of your choice.

Literary Braille Table: Select the literary Braille table of your choice.

Delete language profile.

Select Language Profile: Choose from one of 10 language profiles on your BrailleNote Touch. You can also use ENTER with L to switch profiles.

Keyboard settings (submenu):

Keyboard echo: Choose whether the TTS should repeat your typed words, characters, none, or both.

Keyboard vibrations: When checked, your BrailleNote Touch will vibrate after each keystroke.

Keyboard clicks: When checked, your BrailleNote Touch will make an audible click after each keystroke.

Configure Thumb Keys: Map the Previous Item, Next Item, Pan Left, and Pan Right commands to the thumb key of your choice.

Configure additional TTS settings (submenu)

TTS Auto-switch: Turn TTS auto-switch on or off (only available when using Arabic voices).

To access these settings, select Configure additional TTS settings, Launch engine settings button, select Settings for BrailleNote Touch Acapela, and Click to select the voice for automatic switch.

Miscellaneous settings (submenu):

Vibration feedback: When checked, your BrailleNote Touch will produce a short vibration when navigating to a new item.

Use Navigation sounds: When checked, your BrailleNote Touch will produce various sounds when navigating.

Sound Volume: Choose the volume of your BrailleNote Touch's sounds in relation to media volume.

Launch Tutorial: Restart the tutorial showing you the basics on how to use your BrailleNote Touch.

Manage gestures (submenu): Customize gestures on your BrailleNote Touch by associating them to specific commands.

Format markers settings (submenu): Choose the way the various format markers are displayed on your Braille display.

Visual display: Uncheck to turn off visual display.

Visual Braille output: When checked, Braille display is visually shown in the top of the visual display.

Eject storage: Alternative to the eject storage shortcut, ENTER with E.

Braille message display time (in seconds): Change the Braille message display time by entering a number between 1 and 30 seconds.

User Guide: Opens the BrailleNote Touch user guide.

Android System Settings: Access the Android Settings.

#### 19.3 Viewing BrailleNote Touch Software Version

The fastest way to see the version number of your BrailleNote Touch is to type SPACE with I from the main menu. This will open the Tablet Status window which gives you useful information about your tablet – status, Model Number, Android version, and so on.

An alternate way to view your version number is to press Enter with Q to open Android Settings, then scroll and activate System, then About Tablet.

With the thumb keys, scroll down to the System item located at bottom of the settings list and activate it.

Then, reach the About tablet screen which lists the version number of your tablet as well as other software information.

### 20 Using third party apps

With BrailleNote Touch, you can use third party applications from the Google Play Store, just like you would with any other Android tablet. Note that BrailleNote touch uses the same Google accessibility requirements as any other tablet, meaning that a developer of a 3<sup>rd</sup> party app needs to keep accessibility in mind when developing their app. If an app is not developed with accessibility in mind, KeySoft will not be able to access it. Many apps on the Google Play Store have been developed with accessibility in mind, but HumanWare cannot guarantee the accessibility of downloaded third party apps, and assumes no responsibility for any damage done by applications from the Google Play Store. You can visit the HumanWare web site for a link to recommended BrailleNote Touch 3<sup>rd</sup> party apps recommended by BrailleNote Touch users.

You must have a Google account to use the Play Store and most other Google features.

#### 20.1 Google Play Store overview

To launch the Google Play Store, access the main menu by pressing the Home button. Press P repeatedly until you find the Play Store. Press ENTER or a cursor routing key to activate it.

# 20.2 Obtaining third party apps

To download an app, navigate to the search bar by pressing the Right thumb key once or by typing S. Type in a topic or the name of the app you wish to download, then press ENTER. You will be directed to a page listing all apps that match your search text.

Alternatively, you can navigate through the Google Play Store through different categories using the thumb keys or Explore by Touch without having to write in search text. Simply browse through the different categories and the Play Store will offer you apps related to your selections.

Select the app you wish to download, then press enter. You will be directed to a page describing your selected app. Select the install button by pressing the Right thumb key repeatedly until you reach it, or to immediately jump to the install button you can press I. Press ENTER or a cursor routing key to activate it. You may need to accept any permissions request on a next screen to grant apps specific permissions.

# 20.3 Warning on third party accessibility

Many apps on the Google Play Store have been developed with accessibility in mind, but HumanWare cannot guarantee the accessibility of downloaded third party apps, and assumes no responsibility for any damage done by applications, or their inaccessibility from the Google Play Store. You can visit the

HumanWare web site for a link to recommended BrailleNote Touch 3<sup>rd</sup> party apps, recommended by BrailleNote Touch users.

## 21 Updating your BrailleNote Touch

HumanWare is constantly improving its products and software to provide you with the best user experience possible. For this reason, BrailleNote features an auto-updater that automatically notifies you each time new system or application updates become available online. A wi-fi connection is necessary to perform a system or application update. Note: To initiate a system update, your Touch should at least have 20% of battery charge if it is plugged to a power source and 50 % battery charge if it is unplugged.

#### 21.1 System Update

When it is time to perform system update, you will receive a notification that will be in the notification shade. You can activate it by pressing Enter with N, then scrolling down to the System update notification. Activate the item, then follow the instruction on screen. Please make sure you save all your work before performing a system update, as you may be required to restart your device.

Alternatively, you can access system updates through the Android settings menu. Press Enter with Q to open Android settings, then scroll to the System submenu, and press a cursor routing key. Then, scroll down to System update, and press a cursor routing key. From there, you will be able to update your system if necessary.

Your update should now start downloading and you will be notified of the download progress. When the download is complete, your BrailleNote Touch should automatically restart and install the update. Note that this can take several minutes. After the installation is complete, your Touch will restart a second time and you will see the "Starting KeySoft" message on your display with the rotating progress indicator. The update is now being applied and this can take another several minutes to complete. When finished you will be on your lock screen if you have one set, or the main menu.

#### 21.2 Updating your Touch Applications from a Wi-Fi network Application Update

When application updates become available, the KeySoft app updates menu will be displayed. Select "Update all apps" and activate it. The updates will be downloaded and installed on your Touch. The Touch will then tell you how many applications were installed. Note that if accessibility components need to be updated, Acapela and/or KeySoft may be temporarily suspended during the update process.

From the KeySoft app updates menu, you can also press ENTER on the app updates to read the release notes for that app.

After selecting "Update all apps", you will also be able to access the release notes for HumanWare apps by selecting the option "Latest release notes" in the KeyUpdater menu, and selecting the app in the list.

If you wish to update your apps manually, you can uncheck the option "auto-update apps" in the KeyUpdater Settings.

Alternatively, you can launch the KeyUpdater application through the "All Applications" item in the Main Menu. Activate the first item which says that an update is available online, to begin the update process. Note that after updating your device with KeyUpdater, you may have to restart the device to install other updates.

### Appendix A – Braille Keyboard Command Summary

The Command summary chapter provides a list of commands used in all applications.

#### General

Home button (Main Menu): SPACE with DOTS 1-2-3-4-5-6

Back button: SPACE with E

Enter: DOT 8

Accessibility Volume up: ENTER with DOT 4

Accessibility Volume down: ENTER with DOT 1

Music volume up: ENTER with DOT 5

Music volume down: ENTER with DOT 2

Increase speech rate: ENTER with DOT 6

Decrease speech rate: ENTER with DOT 3

Open KeySoft Options: SPACE with O

Stop speech: BACKSPACE with ENTER Repeat: SPACE with R Activate notification shade: ENTER with N Open Android Settings: ENTER with Q Jump to any item in a list or on a home screen: Type the first letter of the desired item or app Running apps: SPACE with dots 2-3-5 or press the Recent apps button Contextual help: SPACE with H Contextual menu: SPACE with M or press and hold Recent apps button System information: SPACE with I Toggle TouchBraille On/off: Previous + Next thumb keys Toggle language profile: ENTER with L Connectivity information (Wi-Fi and Bluetooth): ENTER with DOTS 3-4 Turn screen reader and accessibility on / off: Press and hold Volume up and Volume down for 3 seconds Unlock screen: SPACE with U Toggle speech on/off: SPACE with Previous thumb key Toggle visual display on/off: SPACE with Next thumb key Eject media: ENTER with E Toggle Braille grade: BACKSPACE with G Play – pause: ENTER with X **Rewind: BACKSPACE with Dots 1-3** Fast forward: BACKSPACE with Dots 4-6

#### **General Navigation**

Activate the selected item: ENTER or cursor routing key above the word on the display

Move to the previous item: BACKSPACE, Previous or SPACE with DOT 1

Move to the next item: SPACE, Next, or SPACE with DOT 4 Braille panning left and right: Left or Right thumb key Move to first element on visual screen: ENTER with DOTS 1-3 Move to last element on visual screen: ENTER with DOTS 4-6 Scroll up in a list: ENTER with DOTS 1-2-6 Scroll down in a list: ENTER with DOTS 3-4-5 Open navigation levels menu: SPACE with T Move back using selected navigation element: SPACE with DOTS 1-3 Move forward using selected navigation element: SPACE with DOTS 4-6 Next Android Window: BACKSPACE with DOTS 4-5 Previous Android Window: BACKSPACE with B Long press: BACKSPACE with L Time: ENTER with T Date: ENTER with D Battery power: ENTER with P

# Html Content Navigation (webviews)

Previous button: B with DOTS 7-8 Next button: B Previous control: C with DOTS 7-8 Next control: C Previous ARIA landmark: D with DOTS 7-8 Next ARIA landmark: D Previous editable field: E with DOTS 7-8 Next editable field: E Previous focusable item: F with DOTS 7-8 Next focusable item: F Previous graphic: G with DOTS 7-8 Next graphic: G Previous heading: H with DOTS 7-8 Next heading: H Previous heading level 1: DOTS 1-7-8 Next heading level 1: DOT 1 Previous heading level 2: DOTS 2-7-8 Next heading level 2: DOT 2 Previous heading level 3: DOTS 3-7-8 Next heading level 3: DOT 3 Previous heading level 4: DOTS 4-7-8 Next heading level 4: DOT 4 Previous heading level 5: DOTS 5-7-8 Next heading level 5: DOT 5 Previous heading level 6: DOTS 6-7-8 Next heading level 6: DOT 6 Previous list: O with DOTS 7-8 Next list: O Previous list item: I with DOTS 7-8 Next list item: I Previous link: L with DOTS 7-8 Next link: L

Previous table: T with DOTS 7-8

Next table: T Previous checkbox: X with DOTS 7-8 Next checkbox: X Previous combo box: Z with DOTS 7-8 Next combo box: Z Previous web view or section: PREVIOUS and LEFT thumb keys Next web view or Section: NEXT and RIGHT thumb keys Reach next web view content: Enter with W

#### Reading

Previous character: SPACE with DOT 3 Current character: SPACE with DOTS 3-6 Next character: SPACE with DOT 6 Previous word: SPACE with DOT 2 Current word: SPACE with DOTS 2-5 Next word: SPACE with DOT 5 Previous line: SPACE with DOT 1 Current line: SPACE with DOTS 1-4 Next line: SPACE with DOT 4 Previous paragraph: SPACE with DOTS 2-3 Current paragraph: SPACE with DOTS 2-3-5-6 Next paragraph: SPACE with DOTS 5-6 Jump to the beginning of a line or sentence (Home): ENTER with DOTS 1-3 Jump to the end of a line or sentence (End): ENTER with DOTS 4-6

Jump to the top of an area: SPACE with DOTS 1-2-3

Jump to the bottom of an area: SPACE with DOTS 4-5-6 Read all: SPACE with G Stop reading: BACKSPACE with ENTER

## Editing text

Activate edit mode: ENTER or cursor routing key

Leave edit mode: SPACE with E or Back

Move to next edit box while editing: ENTER or routing key

Move to next edit box without editing: SPACE, Next, or SPACE with DOT 4

Move to previous edit box without editing: SPACE, Previous, or SPACE with DOT 1

Move insertion point to start of text field document: SPACE with DOTS 1-2-3 (jumps to the top of the edit text field)

Move insertion point to end of text field document: SPACE with DOTS 4-5-6 (jumps to the end of the edit text field)

Delete previous character: BACKSPACE (DOT 7)

Delete previous word: BACKSPACE with DOT 2

Delete current word: BACKSPACE with DOTS 2-5

Delete from cursor to the end of the line: BACKSPACE with C

Delete from cursor to the end of the document: BACKSPACE with DOTS 4-5-6

Start and stop selection: ENTER with S

Select all: ENTER with DOTS 1-2-3-4-5-6

Cut: BACKSPACE with X

Copy: BACKSPACE with Y

Paste: BACKSPACE with V

# **KeyWord**

Save: SPACE with S Save as: BACKSPACE with S Create new additional document: BACKSPACE with N Open additional document: BACKSPACE with O Switch documents: SPACE with DOTS 1-2-5-6 File info: SPACE with I Preview: ENTER with V Spell check: SPACE with DOTS 1-6 Find: SPACE with F Find previous: SPACE with P Find next: SPACE with N Replace: BACKSPACE with F Toggle reading mode: SPACE with X Tab: BACKSPACE with T Align left: BACKSPACE with L Align center: ENTER with C Align right: ENTER with R Align justify: ENTER with J Bold: ENTER with B Italic: ENTER with I Underline: ENTER with U Formatting details: SPACE with DOTS 3-5 Insert Math, BACKSPACE with M Unicode Map: BACKSPACE with DOTS 3-5

Insert page break: BACKSPACE with P

# **KeyFiles**

New Folder: SPACE with N Mark/Unmark: BACKSPACE with L Mark/Unmark all: ENTER with DOTS 1-2-3-4-5-6 Copy to: BACKSPACE with Y Move to: BACKSPACE with X Search: SPACE with F Show/Hide sort options: SPACE with V Rename: BACKSPACE with R Delete: BACKSPACE with DOTS 2-3-5-6 Select drive: SPACE with D Where am I: SPACE with DOTS 1-5-6 Info: SPACE with I Action: BACKSPACE with A More options: BACKSPACE with ENTER with M

#### **KeySlides**

Move to next slide: ENTER with O or Right thumb key with Previous thumb key Move to previous slide: ENTER with DOTS 2-4-6 or Left thumb key with Next thumb key Index slide: ENTER with I Show/Hide Notes: ENTER with N Go to Slide: ENTER with G

#### KeyMail

Reply: BACKSPACE with R Reply all: BACKSPACE with A Forward: BACKSPACE with F New message: SPACE with N Toggle attachments view: BACKSPACE with O Spell check: SPACE with DOTS 1-6 Mark a message in the message list: BACKSPACE With L Mark/Unmark all emails: ENTER with DOTS 1-2-3-4-5-6 Send email: BACKSPACE with S Refresh to check for new mail: ENTER with R Delete email: BACKSPACE with DOTS 2-3-5-6 Save message as draft: SPACE with S Search: SPACE with F Change email folder: ENTER with B Suggest recipient: BACKSPACE with E

#### Chrome

Open Web Page: ENTER with O Back: SPACE with E Forward: ENTER with F Reload: ENTER with R Close current tab: Enter with C Bookmark Current Page: ENTER with M Bookmarks: ENTER with lower F History: ENTER with lower H New Tab: BACKSPACE with N Find: SPACE with F Find next: SPACE with N Find Previous: SPACE with P Open Html Navigation menu Levels: SPACE with T Next Html Element: SPACE with DOTS 4-6 Previous Html Element: SPACE with DOTS 1-3 Top of page: SPACE with DOTS 1-2-3 Bottom of page: SPACE with DOTS 4-5-6 Chrome menu: SPACE with W

# KeyList

New contact: SPACE with N Find contact: SPACE with F Edit contact: BACKSPACE with E Delete contact: BACKSPACE with DOTS 2-3-5-6 Save contact: SPACE with S Refresh contacts: ENTER with R

# KeyPlan

New appointment: SPACE with N Edit appointment: BACKSPACE with E Delete appointment: BACKSPACE with DOTS 2-3-5-6 Go to date: ENTER with G Today: SPACE with T Where am I: SPACE with DOTS 1-5-6 Next day: SPACE with DOT 6 Previous day: SPACE with DOT 3 Next week: SPACE with DOT 5 Previous week: SPACE with DOT 2 Next month: SPACE with DOT 4 Previous month: SPACE with DOT 1 Next year: SPACE with DOTS 5-6 Previous year: SPACE with DOTS 2-3 Refresh appointments: ENTER with R

### EasyReader Plus

Jump to book content: Enter with B Side menu: Space with B Search: Space with F Bookmark: Enter with M Sleep timer: Space with S Book navigation: Backspace with B Audio settings: Backspace with A Navigate previous: Space with Dots 1-3 Play/Pause: Space with G or Action button Navigate next: Space with Dots 4-6 Navigation settings: Space with T Where Am I: Space with dots 1-5-6 Increase Audio TTS speed: Enter with Dot 6 Decrease Audio TTS speed: Enter with Dot 3

# **KeyCalc**

Equals : ENTER Insert Symbol : BACKSPACE with DOTS 3-5 Clear : SPACE with DOTS 3-5-6 Show results as Fractions or Decimals : ENTER with G Show History : Previous Thumb Key

# KeyMath

Find: SPACE with F Find next: SPACE with N Find Previous: SPACE with P Preview: ENTER with V Export: BACKSPACE with E Save a copy: SPACE with S Insert symbol: BACKSPACE with DOTS 3-5 Insert template: ENTER with DOTS 3-5 Braille Image viewer: SPACE with G Toggle rendering mode: ENTER with G Export graph image: ENTER with I Tactile preview: Space with T Insert Math from KeyWord: BACKSPACE with M

# KeyCode

Find: SPACE with F Find previous: SPACE with P Find next: SPACE with N Indentation: BACKSPACE with T Remove Indentation: BACKSPACE + U Line infromation: SPACE with dots 1-5-6 Go to line number: ENTER with G Compile Code: ENTER with C Flash Code: ENTER with F Save: SPACE with S Save as: BACKSPACE with S Toggle Reading/Editing Mode: SPACE with X Exit File: SPACE with E

# Appendix B – Standard Keyboard Command Summary

General Home button (Main Menu): Alt+Ctrl+H Back button: Escape Enter: Enter Accessibility Volume up: Alt+= Accessibility Volume down: Alt+-Music volume up: Ctrl+= Music volume down: Ctrl+-Increase speech rate: Alt+Ctrl+= Decrease speech rate: Alt+Ctrl+= Stop speech: Ctrl Repeat: Alt+Shift+R Activate notification shade: Alt+Ctrl+N Open Android Settings: Ctrl+Alt+Q Jump to any item in a list or on a home screen: Type the first letter of the desired item or app Running apps: Alt+Ctrl+R or press the Recent apps button Contextual help: F1 or Alt+Shift+H Contextual menu: Alt+Ctrl+M or press and hold the Recent apps button System information: Ctrl+I Toggle TouchBraille On/off: Previous + Next thumb keys Toggle language profile: Alt+Ctrl+L Connectivity information (Wi-Fi and Bluetooth): Alt+Ctrl+I Turn screen reader and accessibility on / off: Press and hold volume up and volume down for 3 seconds Unlock screen: Alt+Shift+U Toggle speech on/off: Alt+Ctrl+S Toggle visual display on/off: Alt+Ctrl+V Eject media: Alt+Ctrl+E Toggle Braille grade: Alt+Ctrl+G Play – pause: Alt+P Rewind: Alt+R Fast forward: Alt+F

# **General Navigation**

Activate the selected item: Enter

Move to the previous item: Shift+Tab, Backspace or Alt+Left Arrow

Move to the next item: Tab, Space or Alt+Right Arrow Braille panning left and right: Left or Right thumb key Move to first element on visual screen: Home Move to last element on visual screen: End Scroll up in a list: Page-up Scroll down in a list: Page-Down Open navigation levels menu: Ctrl+T Move back using selected navigation element: Alt+Ctrl+Left Arrow Move forward using selected navigation element: Alt+Ctrl+Right Arrow Next Android window: Ctrl+Alt+Down Arrow Previous Android window: Ctrl+Alt+Up Arrow Long press: Alt+Shift+Enter Time: Alt+Ctrl+T Date: Alt+Ctrl+D Battery power: Alt+Ctrl+P

#### Html Content Navigation (webviews)

Previous button: Shift+B Next button: B Previous control: Shift+C Next control: C Previous ARIA landmark: Shift+D Next ARIA landmark: D Previous editable field: Shift+E Next editable field: E Previous focusable item: Shift+F Next focusable item: F

Previous graphic: Shift+G

Next graphic: G

Previous heading: Shift+H

Next heading: H

Previous heading level 1: Shift+1

Next heading level 1:1

Previous heading level 2: Shift+2

Next heading level 2: 2

Previous heading level 3: Shift+3

Next heading level 3:3

Previous heading level 4: Shift+4

Next heading level 4: 4

Previous heading level 5: Shift+5

Next heading level 5: 5

Previous heading level 6: Shift+6

Next heading level 6: 6

Previous list: Shift+O

Next list: O

Previous list item: Shift+I

Next list item: I

Previous link: Shift+L

Next link: L

Previous table: Shift+T

Next table: T Previous checkbox: Shift+X Next checkbox: X Previous combo box: Shift+Z Next combo box: Z Previous web view: Ctrl+Shift+Left Arrow Next Section: Ctrl+Shift+Right Arrow Next web view: Ctrl+Alt+W

# Reading

Previous character: Left Arrow

Current character: Alt+Ctrl+1

Next character: Right Arrow

Previous word: Ctrl+Left Arrow

Current word: Alt+Ctrl+2

Next word: Ctrl+Right Arrow

Previous line: Up Arrow

Current line: Alt+Ctrl+3

Next line: Down Arrow

Previous paragraph: Ctrl+Up Arrow

Current paragraph: Alt+Ctrl+4

Next paragraph: Ctrl+Down Arrow

Jump to the beginning of a line or sentence: Home

Jump to the end of a line or sentence: End

Jump to the top of an area: Ctrl+Home

Jump to the bottom of an area: Ctrl+End Page up, move accessibility focus one screen up: Page Up Page down, move accessibility one screen down: Page Down Read all: Alt+G Stop reading: Ctrl

# **Editing Text**

Activate edit mode: Enter Leave edit mode: Escape Move to next edit box while editing: Enter Move to next edit box without editing: Tab, Space or Alt+Right Arrow Move to previous edit box without editing: Shift+Tab, Backspace or Alt+Left Arrow Move insertion point to start of text field document: Ctrl+Home Move insertion point to end of text field document: Ctrl+End Delete previous character: Backspace Delete previous word: Ctrl+Backspace Delete current word: Ctrl+Delete Delete from cursor to the end of the line: Alt+Ctrl+C Delete from cursor to the end of the document: Alt+Ctrl+End Select all: Ctrl+A Cut: Ctrl+X Copy: Ctrl+C Paste: Ctrl+V Select previous character: Shift+Left Arrow Select next character: Shift+Right Arrow

Select previous word: Shift+Ctrl+Left Arrow Select next word: Shift+Ctrl+Right Arrow Select previous line: Shift+Up Arrow Select next line: Shift+Down Arrow Select previous paragraph: Shift+Ctrl+Up Arrow Select next paragraph: Shift+Ctrl+Down Arrow Select previous page: Shift+Page up Select next page: Shift+Page down Select next page: Shift+Page down Select from the beginning of the line: Shift+Home Select to the end of the line: Shift+End Select from top of content: Shift+Ctrl+Home Select to end of content: Shift+Ctrl+End

# **KeyWord**

Save: Ctrl+S Save as: Shift+Ctrl+S Create new additional document: Ctrl+N Open additional document: Ctrl+O Switch documents: Ctrl+Tab File info: Ctrl+I Preview: Ctrl+Q Spell check: F7 or Ctrl+7 Find: Ctrl+F Find previous: Shift+F3 or Shift+Ctrl+3 Find next: F3 or Ctrl+3 Replace: Ctrl+H

Toggle reading mode: Ctrl+R

Tab: Tab

Align left: Shift+Ctrl+L

Align center: Shift+Ctrl+C

Align right: Shift+Ctrl+R

Align justify: Shift+Ctrl+J

Bold: Shift+Ctrl+B

Italic: Shift+Ctrl+I

Underline: Shift+Ctrl+U

Normal formatting: Shift+Ctrl+D

Formatting details: Shift+Ctrl+F

Insert Math: Ctrl+M

Unicode Map: Alt+Ctrl+U

Insert page break: Ctrl+Enter

# **KeyFiles**

New Folder: Ctrl+N Mark/Unmark: Alt+Shift+Enter Mark/Unmark all: Ctrl+A Copy to: Ctrl+C Move to: Ctrl+X Search: Ctrl+F Show/Hide sort options: Shift+Ctrl+V Rename: F2 or Ctrl+2 Delete: Delete Select drive: Ctrl+D Where am I: Ctrl+W Info: Ctrl+I Action: Ctrl+Alt+A More options: Ctrl+Shift+M

#### **KeySlides**

Move to previous slide: Left arrow Move to next slide: Right arrow Index slide: Ctrl+I Show/Hide Notes: Alt+N Go to Slide: Ctrl+ G

# KeyMail

Reply: Ctrl+R Reply all: Shift+Ctrl+R Forward: Shift+Ctrl+F New message: Ctrl+N Toggle attachment: Ctrl+O Mark a message in the message list: Alt+Shift+Enter Mark/Unmark all emails: Ctrl+A Send email: Ctrl+Enter Refresh to check for new mail: F5 or Ctrl+5 Delete email: Delete Save message as draft: Ctrl+S

Search: Ctrl+F

Change email folder: Ctrl+B

Spell check: F7 or Ctrl+7

Recipient suggestions: Ctrl+E

## Chrome

Open Web Page: Ctrl+O

Back: Escape

Forward: Shift+Ctrl+F

Reload: F5 or Ctrl+5

Close current tab: Ctrl + F4

Bookmark Current Page: Ctrl+M

Bookmarks: Alt+M

History: Alt+H

New Tab: Ctrl+N

Find: Ctrl+F

Find next: F3 or Ctrl+3

Find Previous: Shift+F3 or Shift+Ctrl+3

Open Html Navigation Menu: Ctrl+T

Next Html Element: Alt+Ctrl+Right Arrow

Previous Html Element: Alt+Ctrl+Left Arrow

Top of page: Ctrl+Home

Bottom of page: Ctrl+End

Chrome menu: Ctrl+W

# KeyList

New contact: Ctrl+N Find contact: Ctrl+F Edit contact: Ctrl+E Delete contact: Delete Save contact: Ctrl+S Refresh contacts: F5 or Ctrl+5

# KeyPlan

New appointment: Ctrl+N Edit appointment: Ctrl+E Save appointment: Ctrl+S Delete appointment: Delete Go to date: Ctrl+G Today: Ctrl+T Where am I: Ctrl+W Next day: Ctrl+1 Previous day: Shift+Ctrl+1 Next week: Ctrl+2 Previous week: Shift+Ctrl+2 Next month: Ctrl+3 Previous month: Shift+Ctrl+3 Next year: Ctrl+4 Previous year: Shift+Ctrl+4 Refresh appointments: F5 or Ctrl+5

# EasyReader Plus

Play/Pause: Alt + G, Action button Side Menu: Ctrl + B Search: Ctrl + F Bookmark: Ctrl + M Sleep Timer: Ctrl + S Where Am I: Ctrl + W Audio Settings: Ctrl + Alt + A Navigate Next: Ctrl + Alt + A Navigate Previous: Ctrl + Alt + Left Arrow Navigate Previous: Ctrl + Alt + Left Arrow Increase Audio TTS speed: Ctrl + Alt + Equals Decrease Audio TTS speed: Ctrl + Alt + Minus

# KeyCalc

Plus: Plus + Minus: Minus -Multiplication: Multiplication \* Divided by: Divided by / Equals: Equals = Clear: Shift+Ctrl+C Decimal point: Period Percent: Percent % Square root: Shift+Ctrl+S Factorial: Shift+Ctrl+F Power: Ctrl+P

Pi: Ctrl+Y

# KeyMath

Find: Ctrl+F Find next: F3 or Ctrl+3 Find Previous: Shift+F3 or Shift+Ctrl+3 Preview: Ctrl+Q Export: Ctrl+E Save a copy: Ctrl+S Insert symbol: Ctrl+I Insert template: Ctrl+K Braille image viewer: Ctrl+G Toggle rendering mode: Ctrl+Shift+G Export graph image: Alt+X Tactile preview: Ctrl+T

Insert Math from KeyWord: Ctrl+M

# KeyCode

Find: Ctrl+F Find previous: Shift+F3 or Shift+Ctrl+3 Find next: F3 or Ctrl+3 Indentation: Tab Remove Indentation: Shift+Tab Line infromation: Ctrl+W Go to line number: Ctrl+G Compile Code: Ctrl+Shift+C Flash Code: Ctrl+Alt+F Save: Ctrl+S Save as: Shift+Ctrl+S Toggle Reading/Editing Mode: Ctrl+R Exit File: ESC

# Appendix C – Braille Tables

# United States 8 dot Computer Braille

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

quote: '''' 5

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

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

percent: '%' 1,4,6

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

apostrophe: " 3

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

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

asterisk: '\*' 1,6

plus sign: '+' 3,4,6

comma: ',' 6

dash: ' ' 3,6

period: '.' 4,6

forward slash: '/' 3,4

colon: ':' 1,5,6

semi colon: ';' 5,6

less than: '<' 1,2,6

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

greater than: '>' 3,4,5

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

at symbol: '@' 4,7

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

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

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

carat sign: '^' 4,5,7

underscore: '\_' 4,5,6

grave accent: '`' 4

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

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

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

tilde: '~' 4,5

'0': 3,5,6

'1': 2

'2': 2,3

'3': 2,5

'4': 2,5,6

'5': 2,6

'6': 2,3,5

'7': 2,3,5,6

'8': 2,3,6

'9': 3*,*5

Uppercase letters:

'A': 1,7

'B': 1,2,7

'C': 1,4,7

'D': 1,4,5,7

'E': 1,5,7

'F': 1,2,4,7

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

'H': 1,2,5,7

'l': 2,4,7

'J': 2,4,5,7

'K': 1,3,7

'L': 1,2,3,7

'M': 1,3,4,7

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

'0': 1,3,5,7

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

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

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

'S': 2,3,4,7

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

'U': 1,3,6,7

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

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

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

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

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

Lowercase letters:

'a': 1

'b': 1,2

'c': 1,4

'd': 1,4,5

'e': 1,5

'f': 1,2,4

'g': 1,2,4,5

'h': 1,2,5

'i': 2*,*4

'j': 2,4,5

'k': 1,3

'l': 1,2,3

'm': 1,3,4

'n': 1,3,4,5

'o': 1,3,5

'p': 1,2,3,4

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

'r': 1,2,3,5

's': 2,3,4

't': 2,3,4,5

'u': 1,3,6 'v': 1,2,3,6 'w': 2,4,5,6 'x': 1,3,4,6 'y': 1,3,4,5,6 'z': 1,3,5,6

## United Kingdom 8 dot Computer Braille

exclamation mark: '!': 2,3,4,6 quote: ""' 4 pound: '#' 5,6 dollar sign: '\$' 4,5,6 percent: '%' 4,6 ampersand: '&' 1,2,3,4,6 apostrophe: "" 3 left paren: '(' 4,5 right paren: ')' 3,4,5 asterisk: '\*' 3,5 plus sign: '+' 2,3,5 comma: ',' 2 dash: ' ' 3,6 period: '.' 2,5,6 forward slash: '/' 3,4 colon: ':' 2,5 semi colon: ';' 2,3

less than: '<' 2,3,6 equals: '=' 2,3,5,6 greater than: '>' 3,5,6 question mark: '?' 2,6 at symbol: '@' 2,3,4,6,7 left square bracket: '[' 1,2,3,5,6,7 back slash: '\' 5,7 right square bracket: ']' 2,3,4,5,6,7 carat sign: '^' 6,7 underscore: '\_' 3,4,6 grave accent: '`' 2,3,4,6 left curly bracket: '{' 1,2,3,5,6 vertical bar: '|' 5 right curly bracket: '}' 2,3,4,5,6 tilde: '~' 6 Pounds sterling: '£' 2,3,6,7,8 degree sign: '°' 1,3,4,6,8 '0': 1,2,3,4,5,6 '1': 1,6 '2': 1,2,6 '3': 1,4,6 '4': 1,4,5,6 '5': 1,5,6 '6': 1,2,4,6 '7': 1,2,4,5,6

'8': 1,2,5,6

'9': 2,4,6

Uppercase letters:

'A': 1,7

'B': 1,2,7

'C': 1,4,7

'D': 1,4,5,7

'E': 1,5,7

'F': 1,2,4,7

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

'H': 1,2,5,7

'l': 2,4,7

'J': 2,4,5,7

'K': 1,3,7

'L': 1,2,3,7

'M': 1,3,4,7

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

'0': 1,3,5,7

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

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

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

'S': 2,3,4,7

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

'U': 1,3,6,7

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

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

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

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

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

Lowercase letters:

'a': 1

'b': 1,2

'c': 1,4

'd': 1,4,5

'e': 1,5

'f': 1,2,4

'g': 1,2,4,5

'h': 1,2,5

'i': 2*,*4

'j': 2,4,5

'k': 1,3

'l': 1,2,3

'm': 1,3,4

'n': 1,3,4,5

'o': 1,3,5

'p': 1,2,3,4

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

'r': 1,2,3,5

's': 2,3,4

't': 2,3,4,5

'u': 1,3,6 'v': 1,2,3,6 'w': 2,4,5,6 'x': 1,3,4,6 'y': 1,3,4,5,6 'z': 1,3,5,6

#### Braille Table for password entry

exclamation mark: '!' 2,3,4,6 quote: "" 5 pound: '#' 3,4,5,6 dollar sign: '\$' 1,2,4,6 percent: '%' 1,4,6 ampersand: '&' 1,2,3,4,6 apostrophe: "' 3 left paren: '(' 1,2,3,5,6 right paren: ')' 2,3,4,5,6 asterisk: '\*' 1,6 plus sign: '+' 3,4,6 comma: ',' 6 dash: '-' 3,6 period: '.' 4,6 forward slash: '/' 3,4 colon: ':' 1,5,6 semi colon: ';' 5,6

less than: '<' 1,2,6

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

greater than: '>' 3,4,5

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

at symbol: '@' 4,7

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

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

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

carat sign: '^' 4,5,7

underscore: '\_' 4,5,6

grave accent: '`' 4

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

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

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

tilde: '~' 4,5

Numbers:

'0': 3,5,6

'1' : 2

'2' : 2,3

'3' : 2,5

'4': 2,5,6

'5' : 2,6

'6' : 2,3,5

'7' : 2,3,5,6

'8': 2,3,6

'9' : 3*,*5

Uppercase letters:

'A': 1,7

'B': 1,2,7

'C': 1,4,7

'D': 1,4,5,7

'E' : 1,5,7

'F':1,2,4,7

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

'H' : 1,2,5,7

'l' : 2,4,7

'J' : 2,4,5,7

'K': 1,3,7

'L': 1,2,3,7

'M': 1,3,4,7

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

'0' : 1,3,5,7

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

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

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

'S' : 2,3,4,7

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

'U': 1,3,6,7

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

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

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

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

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

Lowercase letters:

'a' : 1

'b': 1,2

'c': 1,4

'd': 1,4,5

'e' : 1,5

'f' : 1,2,4

'g' :1,2,4,5

'h' : 1,2,5

'i' : 2,4

'j' : 2,4,5

'k': 1,3

'l': 1,2,3

'm': 1,3,4

'n': 1,3,4,5

'o' :1,3,5

'p': 1,2,3,4

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

'r' : 1,2,3,5

's' : 2,3,4

't': 2,3,4,5

'u': 1,3,6

'v': 1,2,3,6 'w': 2,4,5,6 'x' : 1,3,4,6 'y': 1,3,4,5,6

'z' : 1,3,5,6

# Appendix D – Braille Learning Tables

The BrailleNote Touch Plus introduces new braille tables to which are designed to teach braille is easy steps. The learning tables are also found within Duxbury system and is great introduction to becoming proficient at contracted braille. Each learning table has a specific learning structure with several stages or series to select from. Each series or stage will introduce new word signs, contractions, punctuation, etc. and will only show the necessary braille contraction that is being learned or know.

The Learning tables can be found amongst all English braille tables. When configuring your language profile and selecting the preferred literacy braille table you can select the relevant learning table followed by the current series you are undertaken,

Details of each course can be viewed below, which is shared from Duxbury systems.

# NLS I.M.BT. (UEB 2015)

This series of "select contractions" steps is based upon the "Instruction Manual for Braille Transcribers," (UEB, 2015) published by the National Library Service for the Blind and Physically Handicapped of the Library of Congress. The lesson numbers associated with the steps correspond to that document; the contractions are introduced as follows:

#### Lesson 4.2:

as, you, it, will, very, us, that, so, rather, quite, people, not, more, like, knowledge, just, have, go, from, every, do, can, but

#### Lesson 4.3:

with, the, of, for, and

#### Lesson 5.1:

still, out, which, this, shall, child

## Lesson 5.3:

st, ou, wh, sh, ch, th

### Lesson 6.1:

ing, ow, gh, er, ed, ar

### Lesson 7.2:

be (wordsign), were, was, his

## Lesson 7.3:

enough

# Lesson 7.4:

in (wordsign)

# Lesson 7.5:

en, in (groupsign)

## Lesson 7.7: dis, con, be (groupsign)

## Lesson 7.10: said, quick, paid, little, letter, good

# Lesson 8.1:

ea, gg, ff, cc, bb

# Lesson 8.2: great, first, below, because, above, about

## Lesson 9.1:

their, world, spirit, many, had, cannot, these, whose, those, word, upon, there, ought, where, through, character, young, work, under, time, some, right, question, part, one, name, mother, lord, know, here, father, ever, day

## Lesson 9.3:

perhaps, braille, always, according, children

### Lesson 10.1:

ity, ment, ness, tion, ful, ong, ence, ount, less, sion, ance, ound

## Lesson 10.3:

necessary, must, immediate, also, almost, across

## (Full grade 2):

receiving, receive, perceiving, perceive, deceiving, deceive, conceiving, conceive, rejoicing, rejoice, declaring, declare, thyself, themselves, ourselves, oneself, myself, herself, yourselves, yourself, your, itself, its, himself, him, tomorrow, tonight, today, such, much, neither, either, would, should, could, together, friend, blind, beyond, between, beside, beneath, behind, before, altogether, although, already, against, again, afterward, afternoon, after

# **TSBVI Clusters (BANA)**

The second graduated contractions series is based upon the "Clusters" defined and used by the Texas School for the Blind and Visually Impaired.

The complete TSBVI "Clusters" sequence is listed below. Note that Cluster 1 is equivalent to grade 1, and Clusters 54 and above are equivalent to grade 2.

Those clusters that are omitted in the menu are marked with an asterisk (\*). Apart from Cluster 54, the reason that the others are omitted is that they introduce no new contractions nor the letter sign:

1: a, t, m \*2: b, g, i 3: a, that, more, but, go \*4: capital, period, I \*5: r, f, n \*6: x, l, s 7: rather, from, not 8: it, like, so 9: d, do, p, people, k, knowledge 10: y, you, c, can 11: h, have, o, question mark 12: q, quite, u, us, comma 13: w, will, e, every 14: v, very, z, as 15: j, just, and \*16: (Reading exercises) 17: mother, father, right, time, exclamation point 18: lord, some, day, part, name 19: know, young, here, one

20: question, under, work, ever, apostrophe \*21: number sign, numerals 22: hyphen, numeric dates, letter sign \*23: comma in large numbers 24: the, there, braille, ing, him 25: about, according, after, also, afternoon, afterward 26: th, this, although, through, across, already \*27: (Reading exercises) 28: almost, always, blind, either, neither, ed 29: of, by, myself, himself, itself, oneself, yourself 30: had, quick, its, these, cannot, open quote, closed quote 31: sh, shall, should, would, could, good, paid 32: tion, er, herself, perhaps 33: o'clock, was, con, cc, colon 34: ou, out, ought, today, tonight, tomorrow 35: for, ch, child, children, character, such, much 36: ar, ound, above, en, enough \*37: (Reading exercises) 38: great, together, little, ow, ance 39: be, bb, semicolon, spirit 40: because, before, behind, below, beneath, beside, between, beyond 41: sion, ble, his, your, friend, letter 42: less, their, ourselves, yourselves, themselves 43: with, st, still, first, must, again, against 44: ount, dollar sign, decimal, cent, many 45: percent, fraction bar, ity 46: ence, altogether, immediate, com \*47: (Reading exercises) 48: wh, which, where, world, ea 49: to, ff, in, into, those, said, ong 50: word, were, gg, parentheses 51: ness, ment, necessary, ally 52: dis, dd, gh, ation, ful 53: upon, whose, thyself \*54: conceive, conceiving, deceive, deceiving, declare, declaring, perceive, perceiving, receive, receiving, rejoice, rejoicing \*55: dash, ellipsis, asterisk, italics or underline

\*56: double dash, brackets, inner quotes, accent sign, termination sign, degrees

# Braille in Easy Steps (BAUK/UKAAF)

by John Lorimer (revised by Claire Wilson, 2017).

#### **Duxbury Levels**

Because three letters are not introduced until Book 7 (j, q, z), but all other letters have been learned by the end of Book 4, this would have to be the first Duxbury level, with the three missing letters taught specially if they occur. So, the Duxbury levels would look like this:

#### Book 4

#### (note: letters j, q and z may occur which are not formally taught until Book 7)

Pre-braille and tracking skills The alphabet (j, q and z not formally introduced, but may crop up) Wordsigns: but, can, do, every, from, go, have, knowledge, like, more, not, people, rather, so, that, us, very, will, it, you, and, of, the, in, into, was, in Contractions: and, of, the, ed, in Punctuation: full stop, question mark, exclamation mark, comma Other signs: capital letter sign (dot 6)

#### Book 5

Contractions: er, ing Shortforms: could, good, would Punctuation: apostrophe

#### Book 6

Contractions: st, ar, en, ea Wordsigns: still, enough Composite signs: one, time, there, had Shortforms: about, after, again Punctuation: Ellipsis

#### Book 7

Letters: j, q, z Wordsigns: which, his, just, quite, as, were Contractions: wh, ow 5. after Book 8 Wordsign: shall Contractions: gh, sh Shortforms: him, said Punctuation: quotation (speech) marks, hyphen

#### Book 9

Wordsigns: out, this Contractions: ou, th Composite signs: mother, father, some Shortforms: across, perhaps

#### Book 10

Wordsigns: child, for, with, be Contractions: ch, com, for, with, be, ble Composite signs: day, where, -ound, -less Shortforms: against, quick Other signs: numeral sign, decimal point (dot 2), mathematical comma (dot 3), pound sign (dots 1-2-3)

#### Book 11

Contractions: bb, cc, dd, ff, gg, dis Composite signs: their, word, these, -ong, -ally, -ful, -ment Shortforms: although Punctuation: dash

#### Book 12

Wordsigns: by Contraction: con, Composite signs: here, know, ought, right, ever, through, work Shortforms: friend, must, your, today, tomorrow, tonight, afternoon, much, such, herself, himself, myself, yourself, above, before, below, beneath, should

Other signs: italic sign, double italic sign, italic closure sign

#### Book 13

Composite signs: -ance, part, name, young, -tion, -ness, -ount Shortforms: because, behind, beside, between, beyond, children, great, its, little, afterwards, almost, always, first, together Punctuation: brackets

By the end of Book 14, the cmplete contracted braille code should be familiar (see exceptions below - which would have to be explained if context did not make the meanings apparent)

#### Book 14

Composite signs: many, world, those, -ation, question, under, upon, -ence, -ity, -sion

Shortforms: also, already, blind, braille, letter, paid, receive, receiving, themselves, either, neither, immediate, necessary

Other signs: braille letter sign (dots 5-6)

#### Not included in this course

The following rarely used signs have not been taught in Braille in Easy Steps. The pupil is warned at the end of Book 14 that they may encounter some of these unfamiliar signs in their braille reading, and a list is given.

Composite signs: lord, character, cannot, spirit, whose

Shortforms: according, altogether, conceive, conceiving, deceive, deceiving, declare, declaring, itself, o'clock, oneself, ourselves, perceive, perceiving, rejoice, rejoicing, thyself, yourselves

Punctuation: slash, square brackets, inner quotes

Mathematical signs: plus, minus, multiplication sign, division sign, equals, per centage sign, fractions in braille, separation sign

Other signs: bullet point sign (dots 4-5-6, dots 2-5-6), asterisk (dots 3-5 twice), ampersand (dot 4, 1-2-3-4-6), accented letter sign (dot 4), Euro sign (dot 4, e)

## Take Off Reading Scheme (UEB)

**Takeoff** - A second stage scheme for young learners to develop phonic skills, knowledge of braille contractions and word signs, in 12 stages TC21413.

**Takeoff teachers handbook** – This is currently available from RNIB. ATeachers handbook to accompany Takeoff TC21415P.

Take Off is divided into 12 levels, and a group of grade 2 braille signs is taught at each level.

From the start of the Take Off series all of the alphabet and alphabetic wordsigns with the exception of K for knowledge are used. In addition, the shortforms good and little are also used. Punctuation used from the outset are full stop, capital symbol indicator and question mark. The numeric indicator is also used as this has been previously introduced in Hands On. The following lists the signs and shortforms as they are introduced by series.

The Take off Series is available from RNIB product Code TC21413

(The above link was correct on 14th June 2017)

Series 1 And For In Ing Of Ou Out The Comma Series 2

Ar Ed Him St Still With

#### Series 3

Day En Er Ow Sh Th This Apostrophe

#### Series 4

ch child children one some there time was

#### Series 5

Ea His Under Were Wh Where Which

#### Series 6

About Again Tion Friend Letter Name Work Your

#### Series 7

Also Bb Cc Enough Father Ff Gh Great Had Herself Himself Its Know Mother Myself Perhaps Said Sion Together Yourself Nonspecific quotation marks Semi colon

#### Series 8

Afternoon Be Cannot Could Dis Ence Much Ong Ound Shall Such Today Tomorrow Tonight Would Exclamation mark

#### Series 9

After Always Ance Because Behind Here Right Should Hyphen

Grade 1 indicator (formerly the letter sign)

#### Series 10 Above

Across

Almost Already Before Beneath Beside Con Ever First Many Ment Ount Paid Part Quick Their Through

#### Series 11

Against Below Between Beyond Character Declare Declaring Ful Immediate Ity Knowledge Less Ness Ought Question Receive Receiving Spirit World

## Series 12

According Afterwards Although Altogether Blind Either Itself Must Necessary Neither Ourselves Themselves These Those Upon Whose Word Young Yourselves

# Fingerprint - Order of Sign Introduction

The "select contractions" step series is based upon the "Fingerprint" course originally developed in 1993 by the late Nigel Berry, Lecturer in Braille at the Royal National College for the Blind, Hereford, UK, and now published by the RNIB.

Please note that the tables in DBT only enable you to produce additional braille as the student progresses. They are not intended as a substitute for the actual course4 material itself. The following is RNIB's Product reference.

#### Fingerprint braille course (UEB) - Product code: TC21439

(Website link above was correct on 20th October 2017)

#### Revised edition 2015.

The following list shows the order in which signs are introduced in Fingerprint. There are 24 units in the course, but no new signs are introduced in Units 1 (pre-braille skills) or 22 (practical uses of braille). The 26 letters of the alphabet are taught in Units 2 and 3, in the order shown. For all other units, the signs taught are grouped by type.

#### Unit 1

Pre- braille skills: tracking and back-tracking; early shape discrimination; two-handed reading technique; the braille cell, and dot numbering

### Unit 2

13 letters:

a, l, d, t; e, m, y; b, h, o; c, k, s

## Unit 3

remaining 13 letters, full stop, capital indicator, numeric indicator and basic numbers:

g, i, u; j, n, v; r, x; f, p; w, z; q

Punctuation: full stop Special signs: capital sign, numeric sign and basic numbers

## Unit 4

Alphabetic Wordsigns :but, can, do, every, from, go, have, just, knowledge, like, more, not people, quite, rather, so, that, us, very, will, it, you, as

## Unit 5

Contractions: AND, ST

Wordsigns: and, still Shortforms: about, above, according, across, after, afternoon, afterwards, again, against

## Unit 6

Contractions: TH

Wordsigns: this;

Lower Wordsigns: was

Shortforms: also, almost, already, although, altogether, always

## Unit 7

Lower Contractions: BE

Lower Wordsigns: be, were

Shortforms: because, before, behind, below, beneath, beside, between, beyond

## Unit 8

Contractions: CH, SH Wordsigns: child, shall Shortforms: children, could, should, would, either, neither, first, friend, good, great, him **Unit 9** Contractions: AR, ER

Shortforms: immediate, its, letter, little, much, such, must, necessary, paid, said, perhaps

Punctuation: apostrophe

## Unit 10

Contractions: THE, ING

Wordsigns: the

Shortforms: quick, today, tomorrow, tonight, together, your, blind, braille

### Unit 11

Contractions: OF, WITH, GH, WH

Wordsigns: of, with, which

Punctuation: comma, question mark

Unit 12

Contractions: FOR, ED, OU, OW

Wordsigns: for, out

Unit 13 Lower Wordsigns: enough, his, in

## Unit 14

Composite groupsigns:

dot 4-5-6: cannot, had, many, spirit, world, their;

dot 4-5: upon, word, whose, those, these

## Unit 15

Lower Contractions: EA, BB, CC, FF, GG, EN, IN, CON, DIS

## Unit 16

Composite groupsigns (dot 5 signs):

day, ever, father, here, know, lord, mother, name, one;

part, question, right, some, time, under, work, young;

character, through, where, ought, there

### Unit 17

Composite (final) groupsigns:

dot 4-6: -ound, -ance, -sion, -less, -ount;

dot 5-6: -ence, -ong, -ful, -tion, -ness, -ment, -ity

## Unit 18

Shortforms:

deceive, deceiving, receive, receiving, conceive, conceiving, perceive, perceiving, declare, declaring, rejoice, rejoicing;

myself, yourself, herself, himself, itself, oneself, thyself, ourselves, yourselves, themselves

### Unit 19

Punctuation:

exclamation mark, colon, semi colon, speech marks;

brackets, hyphen, dash, ellipsis, oblique stroke

## Unit 20

Special signs:

accented letter signs: acute, circumflex (more in Volume 10)

grade 1 indicator (dots 5-6);

capital word indicator, capital passage indicator, capital terminator;

typeform indicators: symbol, word, passage and terminator for bold, italics and underline

## Unit 21

Mathematical signs:

mathematical comma (dot 2);

numeric space (dot 5);

operation signs (plus, minus, division, multiplication, equals);

fractions;

decimal point (dot 2-5-6);

money: pound sign, pence sign, Euro sign, Dollar sign;

unit abbreviations: metres, centimetres, millimetres, kilometres, grams, kilos, litres, millilitres, pounds (weight), ounces;

other signs: per cent; degrees (including degrees Fahrenheit and Centigrade)

## Unit 22

(No new signs)

Using signs learned for practical applications: address and phone lists, letters, appointment calendar, etc

## Unit 23

Other print signs:

Roman numerals;

long dash and ampersand;

asterisk and dagger;

bullet point sign;

copyright, trademark and registered trademark signs;

Braille Conventions: options for poetry layout Print abbreviations and indicators: new print page indicator in transcribed books

## Unit 24

Signs for email and website addresses: dot, at, hyphen, underscore; slash, colon; numbers and capital letters in email and web addresses; grade 1 terminator; line continuation sign (dot 5)

# RNZFB STAR (UEB)

The "RNZFB STAR" series is based upon the document entitled "STAR -- Order of introduction of braille signs," prepared by the Royal New Zealand Foundation of the Blind. The contractions are introduced in the following order:

Level 1.1 Alphabet letter wordsigns: like, can, but, knowledge, it, people, every Level 1.3 Alphabet letter wordsigns: very, go, more, us, you

Level 1.5 Alphabet letter wordsigns: very, go, more, us, you Level 1.5 Alphabet letter wordsigns: have, rather, do, that, so

Level 1.7 Alphabet letter wordsigns: from, just, quite, will, not, as

Level 1.8 Shortforms: about, above, according, also, again, almost, blind, little, either, immediate

Level 1.9 Shortforms: across, already, altogether, braille, could, deceive, deceiving, declare, declaring, good, great, him, its, letter, paid, said, receive, receiving, today, together, tomorrow, tonight, your, yourselves

Level 1.10 Shortforms: after, afternoon, afterward, always, friend, himself, myself, necessary, neither, quick, rejoice, rejoicing, would, yourself, itself

Level 2.1 Contractions: and, for, of

Level 2.2 Contractions: the, with

Level 2.3 Contractions: st, ar, ing, still

Level 2.4 Contractions: ed, er

Level 2.5 Contractions: ou, ow, out

Level 2.6 Contractions: ch, gh, sh, child, shall

Level 2.7 Contractions:: th, wh, this, which

Level 2.9 Shortforms: themselves, herself, against, first, must, perceive, perceiving, perhaps

Level 2.10 Shortforms: children, much, such, should, although, ourselves, thyself

Level 3.1 Contractions: en, in (groupsign)

Level 3.2 Contractions: be (wordsign) were, his, was

Level 3.3 Contractions: enough, in (wordsign)

Level 3.4 Contractions: be (groupsign) con, dis

Level 3.7 Shortforms: before, behind, below, beneath, beside, between, beyond, because, conceive, conceiving

Level 3.8 Contraction: ea

Level 3.9 Contractions: bb, cc, ff, gg

Level 4.1 Contractions (dot 5): day, ever, father, here, know, lord, mother

Level 4.2 Contractions (dot 5): name, one, part, question, right

Level 4.3 Contractions (dot 5): some, time, under, work, young

Level 4.4 Shortform: oneself

Level 4.5 Contractions (dot 5): there, where, ought

Level 4.6 Contractions (dot 5): character, through Level 4.7 Contractions (dots 4-5): upon, word, these Level 4.8 Contractions (dots 4-5): those, whose Level 4.9 Contractions (dots 4-5-6): cannot, had, many Level 4.10 Contractions (dots 4-5-6): spirit, world, their

Level 5.1 Contractions (dots 4-6): ound, ance, ount Level 5.2 Contractions (dots 4-6): sion, less Level 5.3 Contractions (dots 5-6): ence, ong, ful, ness Level 5.4 Contractions (dots 5-6) (Fully contracted UEB): tion, ment, ity

# S.A. Syllabus (UEB)

The "S.A. Syllabus" series is based upon the document entitled "Syllabus -- Order in Which Braille Contractions Are Learnt", prepared by Reinette Popplestone for the University of Cape Town Disability Unit, for teaching English Braille to students in South Africa. The contractions are introduced in the following order:

Level 1.1 Alphabetic word signs: but, people, can, quite, do, rather, every, so, from, that, go, us, have, very, just, will, knowledge, it, like, you, more, as, not

Level 1.2 Five contractions: and, for, of, the, with

Level 1.3 Initial-letter contractions with dot 5: day, part, ever, question, father, right, here, some, know, time, lord, under, mother, work, name, young, one, there

Level 1.4 Two related contractions: these, their

Level 2.1 Short forms: about, good, above, great, according, him, across, immediate, after, little, afternoon, letter, afterward, necessary, again, neither, also, paid, almost, quick, already, said, altogether, today, always, together, blind, tomorrow, braille, tonight, could, would, either, its, friend, your

Level 2.2 Group signs: gh, ed, er, ow, ar, ing

Level 2.3 Group signs which also have a word meaning: ch, child, sh, shall, th, this, wh, which, ou, out, st, still

Level 2.4 Initial-letter contractions with dots 4-5 and 4-5-6: upon, cannot, word, had, those, many, whose, spirit, world

Level 2.5 Two lower contractions: en, in (as part-word only)

Level 3.1 Lower group signs: ea, be (as part-word only), bb, con, cc, dis, ff, gg

Level 3.2 Lower word signs: be, enough, were, his, in, was

Level 3.3 The remaining initial-letter contractions: character, through, where, ought

Level 3.4 The remaining short forms: against, itself, although, yourself, declare, yourselves, declaring, themselves, deceive, children, deceiving, should, first, thyself, himself, ourselves, herself, because, myself, before, must, behind, much, below, perhaps, beneath, perceive, beside, perceiving, between, receive, beyond, receiving, conceive, rejoice, conceiving, rejoicing, oneself, such

Level 3.5 Terminal group signs: ound, ence, ance, ong, sion, ful, ness, tion, ount, ment, ity, less

Level 4.1 Contractions from pre-unified code: o'clock, ble, com, dd, to, into, by, ation, ally

Note: Level 4.1 is, naturally, not relevant when Unified English Braille is the basis of the series as level 3.5 constitutes fully contracted UEB.

## Mangold Method

There are 62 Units in the Mangold Series, each listed here.

#### Part A

A.a (can, go, like,) A.b (but, do, you) A.c (so, will, people) A.d (us, that, more) A.e (every, have, not) A.f (it, as, from) A.g (very, just) A.h (and, for of, the, with)

A.i (said, little, good)

#### Part B

B.a (in sign) B.b (your, him, could, would) B.c (w-h sign, t-h sign, which, this) B.d (about, after, again) B.e (s-t sign) B.f (one, right, here) B.g (under, day) B.h (e-d sign, i-n-g sign) B.i (mother, father, time) B.j (name, know, there)

#### Part C

C.a (letter, friend, great, also) C.b (a-r sign, e-r sign) C.c (work, where) C.d (part, ever) C.e (s-h sign)C.f (first, must, should) C.g (question, some, young) C.h (paid, quick) C.i (his, was, were) C.j (today, tomorrow, tonight) C.k (had, their) C.l (cannot, many) C.m (blind, braille, above, himself) C.n (c-h sign, child, still, shall) C.o (e-a sign) C.p (together, altogether, afternoon, afterward

#### Part D

D.a (knowledge, quite, rather) D.b (o-w sign, g-h sign) D.c (yourself, yourselves, themselves, myself, herself) D.d (enough, e-n sign) D.e (out, o-u sign) D.f (b-b sign, c-c sign, f-f sign, g-g sign) D.g (tion, ment) D.h (ity, ong) D.i (be, because, before behind, below, beneath, beside, between, beyond) D.j (children much, such) D.k (con, dis) D.l (conceive, conceiving)

#### Part E

E.a (ought) E.b (thyself, its, itself) E.c (ourselves, oneself) E.d (immediate, neither, either, necessary) E.e (ence, ful, ness) E.f (against, almost, already) E.g (according, across, although, always) E.h (these, word) E.i (ance, ound, ount) E.j (receive, receiving, rejoice, rejoicing) E.k (deceive, deceiving, declare declaring) E.l (sion, less) E.m (character, lord, through) E.n (spirit, world) E.o (whose, upon, those)

(full grade 2) (perceive, perceiving, perhaps)

# Appendix E – Reading printed documents with KNFB Reader (available for all device purchased before 2022 only)

The KNFB Reader app enables you to read a wide variety of printed documents within seconds after taking a picture. This is a great way to read printed memos, books, magazines, most restaurant menus, and virtually any other kind of document typically printed from a personal computer.

Note that character recognition accuracy depends on many things, such as lighting, text quality, text script, etc. Best results will occur with good lighting and standard black and white print outs.

WARNING: The KNFB Reader app is an app which has been optimized for use on your BrailleNote Touch, however it is also an app which is offered at a cost on the Google Play Store. Any updates to the BrailleNote Touch version of KNFB reader will be distributed from HumanWare in partnership with KNFB technologies. These updates may arrive at varying times to the Google Play Store version of the app. In addition, the full KNFB user guide found in the KNFB app is generalized for use on any device. It is for example not advised to place your BrailleNote Touch upon a stand, which was not customized for such use. This option is available for some smartphones which stands have been manufactured for this scanning purpose.

## Launching KNFB Reader

To launch KNFB Reader, from the main menu, press K or navigate to KNFB Reader and press ENTER or one of the cursor routing keys.

# Taking a picture, reading, and saving documents

When KNFB Reader is launched, you will be in the Image Capture screen. With the screen facing up, place your BrailleNote Touch down with the camera in the center of the document with your Touch in the same orientation as the document. Then, lift your Touch straight up to an appropriate distance; about 3 to 5 inches away from the document.

To take a picture, with your focus on the "Take Picture" button, simply press a cursor routing key. Alternatively you can press the Touch's Action button, located on the right side of the device. You will hear a camera shutter sound. For best results, avoid moving the BrailleNote Touch while the picture is taken.

When the text is recognized, it should appear in Braille on the display. Navigate with your left and right thumb keys or press SPACE with DOT 1 or dot 4 to move line by line through the recognized content.

You can save the document by navigating to and activating the Save Document button, or use first letter navigation by pressing S.

To access the full KNFB Reader user guide, select File Explorer and press ENTER or a cursor routing key. Select Full user guide and press ENTER or a cursor routing key to read it. To exit the user guide, simply press Back.

# Appendix F – Safety and Maintenance

## **General Care**

Keep beverages away from your BrailleNote Touch. Periodically wipe the case down with a warm damp cloth. Don't use any cleaning compounds.

# **Braille Display Care**

Each cell of the Braille display has eight pins. For each pin there is a special crystal that lifts the pin to make a dot, and allows the pin to drop when there is no dot. The pins have to be able to move freely. In normal use dirt unavoidably accumulates on the display and around the Touch cursor routing keys. To prevent the pins from jamming, the display and touch cursor should be cleaned regularly. Cleaning the Braille display is not straightforward. We recommend that you send the BrailleNote BT back to an authorized BrailleNote BT service center every twelve months to clean the Braille display.

Making sure that your hands are always clean is a good start towards minimizing problems with your Braille display. We suggest that once per week you wipe the surface of the Braille display using a soft damp cloth. The cloth should be squeezed hard to ensure that all excess moisture has been removed. Use only warm water on the cloth.

# FCC / Industry Canada Two Part Statement:

This device complies with FCC Part 15 and Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Industry Canada French Warning / Avertissement d'Industrie Canada

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

# Per Industry Canada RSS rules:

This device complies with Health Canada's Safety Code. The installer of this device should ensure that RF radiation is not emitted in excess of the Health Canada's requirement. Changes or modifications not

expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the space between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult your dealer or an experienced radio/TV technician for help.

# **Battery Safety Precautions:**

#### CAUTION:

- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions below.
- Do not disassemble or modify the battery.
- Use only the specified HumanWare charger.
- There is a risk of overheating, fire or explosion if the battery is put in a fire, heated, subjected to impact, put in contact with water, or if its terminals are shorted.
- Do not attempt to charge or use the battery outside of the unit.

## **Disposal Instructions:**

At the end of BrailleNote Touch operational lifetime, its internal components must be disposed in compliance with local authorities.

BrailleNote contains no hazardous materials. For disposal, return to HumanWare or follow local governing ordinances or hospital procedure.

# Appendix G – Technical Specifications

Height: 2.06 cm (0.8") Width: 24.4 cm (9.5") Depth: 16.2 cm (6.3") Weight: 920 g (2.03 lbs.)

Processor: Snapdragon 820, quad-core Kryo 2.2 Ghz 64-bit Memory: 4GB Internal Storage memory: 64GB Display size: 7" Resolution: 1024 x 600 Touch screen: capacitive, 9" x 3.8", multi-touch capable (10 fingers) Wi-Fi, 802.11 b/g/n/ac, 2.4GHz and 5GHz Bluetooth 4.2 GNSS receiver (GPS and Glonass) Audio Codec with volume control Built in stereo 1W speaker Internal microphone, MEMS type, omni directional. 21 MP rear facing camera with two LED flashes 9 axis inertial sensor 3D accelerometer 3D magnetometer 3D gyroscope Braille display (18 or 32 cells) with routing cursors Integrated Battery Charger Real Time Clock with battery backup Vibration device

High-Resolution video output High Speed USB 3.0 type C for connectivity to computer and battery charging. High Speed USB 2.0 host port. SD card Stereo Headphone output Stereo/mono microphone input

Power requirement: +5VDC@2.4A or +12VDC@1.5A Battery: Li-Polymer 3.7V nominal, 5100mAh, charge time under 4 hours (unit OFF) Environmental Conditions This product meets EMC standards of all targeted countries. EMC consists of the limitation of radiated electromagnetic emissions from the unit and immunity of the product against external electromagnetic field and electrostatic discharge. Operating temperature range: 5 to 40 degrees Celsius Battery charging temperature range: 5 to 40 degrees Celsius Storage temperature: -20 to 60 degrees Celsius

Operating humidity: 5% to 90% (non-condensing)

Storage humidity: 5% to 95% (non-condensing)

# Appendix H – End User License Agreement

By using this product (BrailleNote Touch) you agree to the following minimum terms.

- 1. <u>License Grant</u>. HumanWare grants to End User a non-exclusive, non-transferable right and license to use the Software on this product.
- <u>Ownership of Software</u>. End User acknowledges that HumanWare retain all right, title and interest in and to the original, and any copies, of software which is incorporated into this product. End User agrees not to: modify, port, translate, decompile, disassemble, reverse engineer, or make public in any way the software of this Product.

# Appendix I – Customer Support

For customer support, please contact the HumanWare office nearest you or visit our Website at: www.humanware.com/support

Global: support@humanware.com

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

Europe: (0044) 1933 415 800 eu.support@humanware.com

Australia / Asia: (02) 9686 2600 au.sales@humanware.com

# Appendix J – Warranty

#### Manufacturer Warranty

This device is a high-quality product, built and packaged with care. All units and components are guaranteed against any operational defects as follows:

US and Canada: One (1) year Continental Europe and UK: Two (2) years Australia and New Zealand: One (1) year Other countries: One (1) year Warranty covers all parts (except battery) and labor. If any defect should occur, please contact your local distributor or the manufacturer technical assistance line.

Note: Warranty terms may periodically change, please consult our website for the latest information.

Conditions and Limitations:

No replacement or repair covered by the warranty will be carried out unless the unit is accompanied by a copy of the original bill of purchase. Please retain your original. If the unit must be returned, please use the original packaging. This warranty applies to all cases where the damage is not a result of improper use, mistreatment, negligence or acts of God.