# BT Speak User's Manual

Version 1.0, October 22, 2024

# Welcome

## Notes on This Manual

This is the first version of the BT Speak user's manual. While our goal is to provide a thorough and comprehensive document, this version may not yet cover all features. Rest assured, it will be updated as new features are introduced and existing ones are refined.

Your feedback is always appreciated. We encourage you to report any issues or gaps to info@blazie.net, and please don't hesitate to reach out to support@blazie.net if you need further assistance.

## Introduction

Congratulations on your purchase of the BT Speak from Blazie Technologies, LLC. BT Speak is a powerful, yet compact pocket computer designed for the visually impaired. It provides a standard eight-dot Braille keyboard for input and synthetic speech output. BT Speak features a collection of exclusive applications including an editor, scientific calculator, appointment calendar, contacts manager, media player, a radio tuner containing over 50,000 Internet radio stations, dictionary, weather app and more. It also includes a full desktop mode with access to powerful mainstream applications such as Chromium, Firefox, Thunderbird and the LibreOffice suite.

Your BT Speak has a USB C port, a microSD card slot and a Mini HDMI port. Bluetooth and Wi-Fi are also included.

The BT Speak has a rechargeable battery that lasts for approximately ten hours, depending on how you use the device.

## What's in the Box?

Your package should contain the following items:

- Your BT Speak device
- A USB C wall charger (for North American orders only)
- A USB Type-C to 3.5mm (1/8 inch) headphone adapter

# Getting Acquainted With Your BT Speak

## Proper Orientation

The BT Speak is an extremely compact device. Its length and width are comparable to newer smartphones such as the iPhone 14 and 15, and its depth is roughly the equivalent of two phones stacked on top of one another.

Its dimensions are 6.1 inches (15.5 cm) from left to right, 2.8 inches (7.1 cm) from front to back and only 0.75 inches (1.9 cm) thick. It weighs only 8.5 ounces (240.9 g).

For proper orientation, place the unit on a flat surface and ensure the side with the ports is facing away from you. The bottom row containing three keys on the face of the unit should be closest to you. With proper placement out of the way, we will now explore the BT Speak in more detail.

## Physical Description

### The Back Edge

Along the back edge of the device are three ports. From left to right the first port is a mini-HDMI connector. This is used to connect the BT Speak to a TV, computer monitor, or another video device. It may also be used to connect to some audio output devices.

Moving to the right, the next port is a standard USB C connector. It allows you to connect the device to a power supply, USB headphones, external storage and other compatible accessories.

The next port is a micro-SD card slot.

### The Keyboard

The top surface of BT Speak is mostly occupied by the 8-dot Braille keyboard. On the top row of keys, from left to right, you will find Dot 3, Dot 2, Dot 1, Dot 4, Dot 5, and Dot 6. The bottom row, from left to right, are Dot 7, the spacebar, and Dot 8. You might notice that the space bar is slightly larger than the dot 7 and dot 8 keys. Dot 7 is used as the backspace key and dot 8 is used for the enter key.

Above the Braille keyboard, you will feel the words "BT Speak" which are raised, embossed print letters.

The remaining space on the top of the device features a pair of small stereo speakers positioned on each side and a microphone located near the dot six key.

## Basic Operation

### The Power Button

The power button is recessed between two bumps located on the right side of the unit near the front. Note that even though the bumps might feel like buttons, they are not. Rather, they guard against accidental presses of the power button. You'll want to move your finger between those two bumps to press and activate the power button.

### Powering On

If the BT Speak is powered off, briefly pressing and releasing the power button will cause it to activate and start the boot process.

You can release the power button as soon as you feel a short vibration. You should feel this vibration almost immediately as you press the power button. If you don't feel or hear anything, this likely means that the battery needs to be charged.

After you feel the initial quick vibration, there will be approximately 20 seconds of silence, followed by around ten more vibration pulses. Following this sequence, you should hear the BT Speak say, "BT Speak Ready" followed by the name of the file you were working with when you last shut down the device. When powering on the BT Speak for the first time, you will be in a short file called "Welcome Screen" which contains some introductory material.

## *Putting the Device to Sleep*

If your BT Speak is powered on, you can put it into sleep mode by briefly pressing the power button. You'll feel a short vibration and your BT Speak will say "sleeping." This puts the device in a low power mode, very similar to locking a cell phone. Briefly press the power button again to wake up the device. You'll feel a short vibration and your BT Speak will say "awake."

## Powering Off

If you continue to press the power button for three seconds, you'll feel a longer vibration and BT Speak will shut down. The device will say "shutting down."

## About the Battery

Your BT Speak comes preinstalled with a rechargeable lithium polymer battery. We estimate that it will provide your BT Speak with approximately 10 hours of use on a charge when working in traditional mode (see Modes of Operation for more information). Using your BT Speak in desktop mode or having desktop mode running in the background generally consumes more battery power.

If you connect your BT Speak to a charger which has a USB C connector on the charger itself, the BT Speak should be fully charged in approximately nine hours if it is turned off while charging. If the BT Speak is powered on while charging, it could take approximately twelve hours depending on how empty the battery was when it started charging.

If you're using a charger which has a USB A connector, your device could take twice as long to charge because USB A chargers may only put out half as much power.

Your BT Speak is designed to protect the battery by preventing overcharging and avoiding levels that could cause damage.

## Using Chord Commands

Many BT Speak commands use what are called "chords". A chord is a command where you press a letter or another group of keys along with the space bar. For example, when you want to press an O-Chord to open the Options menu, you would press the letter O (dots 1-3-5) along with the space bar.

Some chords make use of the dot 7 or dot 8 keys. For example, Z-7-Chord means that you would press the letter Z (dots 1-3-5-6) combined with dot 7 and the space bar.

## Modes of Operation

BT Speak's user interface offers two modes of operation: Traditional Mode (dots 1-2-3-4-5-6-7 chord) and Desktop Mode (dots 1-2-3-4-5-6-8 chord).  Each mode provides a unique environment with its own set of applications, features, and advantages. The primary differences between these modes, along with the key combinations used to switch between them, are outlined below.

## Traditional Mode

BT Speak starts in Traditional Mode by default when powered on. This mode features a simple, menu-driven environment that resembles the classic interface found on notetakers like the Braille 'n Speak. BT Speak's editor, media player, calendar, phonebook, BT Learn, and many other tools are found in Traditional Mode. If you happen to be in Desktop mode, you may switch to Traditional Mode by pressing dots 1-2-3-4-5-6-7-chord.

## Desktop Mode

Desktop mode provides a graphical user interface environment, allowing you to run modern applications that require a visual interface. These include the Chromium and Firefox web browsers, Thunderbird email client, and the LibreOffice Suite. Switch to Desktop Mode by pressing dots 1-2-3-4-5-6-8 chord. See Desktop Mode for more detail about booting, navigating, and operating applications in the Desktop.

## The Welcome Screen

BT Speak will start in Traditional Mode, landing on the Welcome Screen when powered on for the first time. The Welcome Screen is a text file containing introductory information about BT Speak for first time users. Follow the editor's navigation commands to read the file. For example, press dot 4-chord to move to the next line, dot 1-chord to move to the previous line, etc. The Welcome Screen is read-only, meaning that any key stroke except for O-chord, deep escape, or navigation commands will result in BT Speak announcing "file is write-protected". Once you open a new file in the editor, the Welcome Screen will be replaced by that file.

## Menu Navigation

### Overview

Navigating menus is a key part of using your BT Speak device. Menus help you access applications, tools, utilities, and settings. Think of each menu as a simple vertical list of options. Some menus will lead to more detailed submenus that offer additional options, such as Applications, Settings, or other features.

### Browsing the Menu

 Navigate through the list of menu choices using dot 4-chord (arrow down) and dot 1-chord (arrow up). BT Speak will announce the option when your cursor lands on it. Pressing C-chord (read line) on any option repeats the option. You can then select the desired menu option using enter (dot 8). To immediately move your cursor to the bottom of the list, press dots 4-5-6 chord. Likewise, using dots 1-2-3 chord will move your cursor to the top of the menu.

### Shortcuts

Many menu options have shortcuts. When your cursor lands on an option, BT Speak will announce its shortcut. For example, when you hear "File Browser: shortcut is F," you know you can press **F** (Dots 1-2-4) to select the File Browser, without scrolling through the entire list.
Shortcuts save time by letting you select a menu item directly, regardless of where you are in the list.

### Going Back

To go back to a previous menu, press **Z-chord** (see Escape). For instance, if you're in the Applications menu and press **Z-chord**, you'll return to the Options Menu.

### Return to the top of the menu hierarchy (Welcome screen):
If you want to go all the way back to the Welcome Screen, press **Z-chord with Dot 7** (see Deep Escape). Note that using deep escape will also exit any open applications and will stop playing any media you were listening to.

## Useful Key Commands

## Adjusting Speech

### The Speech Controls Menu

You can easily adjust the volume, speed and pitch of the voice, and toggle key or word echo in the Speech Controls menu. Press S-chord to open the Speech Controls menu. Your BT Speak will say "Speech Controls." Once inside this menu, press the following keys to adjust the voice:

- Volume 10% Softer: dot 1
- Volume 10% Louder: dot 4
- Speed Slower: dot 2
- Speed Faster: dot 5
- Pitch Lower: dot 3
- Pitch Higher: dot 6

The following keys toggle the state of key echo or word echo:

- E: toggles key echo on or off.
- W: Toggles word echo on or off.
- E with dot 7: key echo off
- E with dot 8: key echo on
- W with dot 7: word echo off
- W with dot 8: word echo on

A series of ascending tones indicates that key echo or word echo is enabled. Descending tones indicates that it has been disabled. Warning: in the current update, the volume of these tones may start out quite loud. Lowering the master volume by pressing dots 2-3-5-6-7-chord will compensate for this.

You can also change the level of punctuation you hear by pressing the letter P from the Speech Controls page. Each time you press the letter P, you will cycle between four levels of punctuation: none, some, most and all.

Press Z-chord to exit the Speech Controls menu.

### Changing the Speech Engine

BT Speak has several speech engines, including Vocalizer, RH Voice, DEC-Talk from Human Voice, LLC, eSpeak, Pico and Festival Lite. Use the following steps to switch between speech engines:

1. Press O-chord for the Options menu.
2. Press S for the Settings menu.
3. Press S for the Speech Settings menu.
4. Press T for TTS Engine.
5. From this menu, use dot 1-chord or dot 4-chord to move through the list of available text to speech engines. Press enter (dot 8) to select the desired speech engine.

Note: The speech settings menu also contains options to adjust the voice and language for each speech engine. Feel free to explore these menus and experiment with their settings to find the voice setting that's right for you.

## Getting Help

BT Speak offers context-sensitive help from anywhere in the system. Simply press H-chord to access the help files. The opened file will display a list of commands relevant to your current location in the system. For example, if you're in the editor, pressing H-chord will provide help specific to the editor's features and functions.

If you'd like to browse a list of all available help files, press O-chord followed by the letter H. You will be presented with a menu of topics. You can navigate through the list of help topics by pressing dot 4-chord to move to the next title and dot 1-chord to move to the previous title. When you locate the help topic you want to read, press dot 8. Press Z-chord to close the help file and return to where you were when you opened it.

## Accessing the Getting Started Guide and the Audio Tutorial

When you access the list of help topics by pressing O-chord followed by the letter H, the first option in the list is entitled "Getting Started." It consists of the following options, along with their corresponding shortcut keys:

- Read the Getting Started Guide: G
- Listen to the Getting Started Tutorial, 2 Hours, 3 Minutes: T
- What's New in This Release: N

The Getting Started guide is a standard text document. You can read it using the same commands that are used to read any other document or help file.

The Getting Started tutorial is an audio presentation that runs just over 2 hours and offers more in-depth guidance than the Getting Started guide. It is designed to be user friendly and is very easy to understand. You can listen to this audio tutorial directly from your BT Speak without needing an internet connection.

When listening to the audio tutorial, you can use the global media commands to control playback::

- Pause or Resume the tutorial: dots 1-2-5-6-chord
- Lower the volume of the tutorial: dots 1-2-3-5-6-chord
- Raise the volume of the tutorial: dots 2-3-4-5-6-chord
- Restart the Tutorial From the Beginning: dots 1-2-5-6-7-8-chord.

## Read About What's New in This Update From the BT Speak Help Menu

After you install a new update, you'll want to know about new features or changes that are included with the update. If you type O-chord followed by the letter H for the Help menu and type G for Getting Started, one of the new options you will find is "What's New in This Release", with N being its shortcut.

This opens a help file containing information about everything which has been added in this update.

## The Options Menu

While in the editor or the welcome screen, press O-chord to open the Options menu. Think of this as the gateway for accessing all of the applications and other services available on your BT Speak. Press dot 4-chord to move down to the next choice in the menu. Press dot 1-chord to move to the previous choice.

You can also press the space key to move forward through the menu instead of pressing dot 4-chord. Pressing the dot 7 key moves back to the previous menu option. Dots 1-2-3-chord moves to the first menu item and dots 4-5-6-chord moves to the last menu item. Pressing dot 8 activates the selected choice.

Some items, such as "Settings", will open an additional menu containing more choices if you press enter. This is called a submenu.

All of the options in the menu system have a shortcut key to open them. These shortcut keys are automatically announced, such as "Settings, Shortcut is S." This means that you could press that particular shortcut to open the Settings menu, if you wish. You can also press dots 3-6 chord to hear the shortcut key for the option you're pointing to. For example, if you're pointing to "Time" pressing 3-6 chord will announce the letter T. If you're pointing to "date", pressing dots 3-6-chord announces the letter D. This means that you can press O-chord followed by the letter T to hear the time or D to hear the date.

When you're in a menu, typing a lowercase letter searches for an item by its shortcut. However, typing an uppercase letter searches for an item based on the first character of its label.

For example, from the Options menu, typing the number sign key (dots 3-4-5-6) is a shortcut to open the stopwatch. However, you are also able to type an uppercase S to locate any items that begin with that letter, including Stopwatch. You can do this by pressing dot 7 along with the letter. Alternatively, you can also type a U-chord followed by the letter S. This method will not open the option but will just move to it.

This capability also works in the file browser. As an example, suppose that you want to open a file which is named "Journal." From the file browser, typing the letter J along with dot 7 moves to the first file that begins with that letter. If the file that you have moved to is not the file that you wanted to open, you can keep pressing the letter J with dot 7 until you locate the file that you want to open. You can also type U-chord (for upper case) followed by the letter J.

When you navigate through a menu, you will now hear the shortcut key spoken for each item after the item's name is announced. For example, when navigating through the Options menu you will hear "Applications, shortcut is A", "Time, Shortcut is T", etc. This may help you to eventually remember shortcut keys for menu items that you frequently access, which will help you to get to those items quickly.

## Escaping Out of a Menu: Z-chord

Z-chord serves as the Escape key. Press Z-chord in any menu to move back to the previous screen. If you are in a submenu, pressing this chord will take you one level back to the previous menu. For example, if you are in the applications menu, Z-chord will return to the options menu. You can use Z-chord to move back through each menu level, all the way up to the first level, the Welcome Screen.

## Deep Escape: Z-chord With dot 7

The deep Escape closes the entire menu system and returns to the last open document or the Welcome Screen, regardless of where you are in traditional mode. Issue the deep escape command by pressing Z-chord with dot 7. t

# Entering Literary Braille in Traditional Mode

Literary (grade two) braille may be used throughout applications and utilities, such as the calendar or phonebook, in traditional mode. The following rules and exceptions apply:

- Passwords should always be entered in computer braille
- Use of literary braille in the traditional mode editor requires that the file name be given a .brl extension see Editor for details).
- Literary braille may not be used in desktop mode at this time. However, any desktop documents composed in literary braille will be compatible in the traditional mode editor if the document name is assigned a .brl extension (see Editor for details).

## How to Change Braille Input Mode

When you're at a prompt where input is needed, you can press dots 2-3 chord to switch Braille input to Computer Braille. Pressing dots 5-6 chord switches the Braille input to Literary Braille.

You can also set the default Braille code for prompt input that you want to use. To do this:

1. Press O-chord for the Options menu.
2. Press S for the Settings menu.
3. Press B for Braille settings.
4. Press I for Prompt Input.

You will be provided with two choices: Literary Braille and Computer Braille. Choose the setting that you want as your default for input and press enter.

As an example, if you choose Literary Braille, creating a new file will allow you to type your file name using the literary Braille code which has been set in the Braille Table settings.

# Connecting to Wi-Fi and Upgrading Your Device

## Connecting to a Wi-Fi Network

One of the first things you'll want to do is to connect your BT Speak to your Wi-Fi network. This is important for several reasons, not the least of which is to install the latest software update.

To connect to your Wi-Fi network, do the following:

1. Press O-chord to enter the Options menu.
2. Press dot 4-chord (dot 4 with the space bar) until you move to the Wi-Fi menu and press dot 8 which is the enter key. You can also press the letter W, which is a shortcut to enter the Wi-Fi menu.
3. Press the letter A. This is a shortcut to add a network. Your BT Speak will say "discovering visible Wi-Fi Networks." Your device may issue a few short vibrations while it searches for available networks.
4. You will now be in a list of available Wi-Fi networks that you can connect to. Your BT Speak will announce the first network in the list. You can press dot 4-chord to move forward through the list of networks. Dot 1-chord moves backward through the list. Pressing dots 1-4-chord speaks the current item (network name) that you're pointing to. When you find the network that you want to join, press dot 8 by itself. Remember, we use dot 8 as the enter key.
5. Once you select the network you wish to join, BT Speak will say "password." You will feel short vibration pulses while it waits for you to enter your password. Type your password followed by the enter key (dot 8.) While entering your password, you will not hear the characters as you type them. This is a standard practice and is done to ensure security so that others who may be nearby won't know what you're typing. After pressing enter, BT Speak will say "password". Wait a few moments for BT Speak to attempt to connect.
6. If you've entered your password correctly, your device will confirm this by telling you that you are now connected to your network.

## A Note About Entering Passwords

Passwords must be entered using Computer Braille symbols and not in contracted Braille. Uppercase letters are prefixed by pressing U-chord. Press U-chord once to capitalize the next letter only. Press U-chord twice to "lock" the keyboard in upper case mode. This is helpful if your password contains a series of capital letters. Pressing U-

chord a third time unlocks uppercase mode. Alternatively, you can press and hold dot 7 while you type each character ito capitalize it. As an example, to type an uppercase J, type dots 2-4-5 along with dot 7.

## Upgrading Your Device

Blazie Technologies regularly provides updates for your BT Speak. These updates improve existing features and add new capabilities to your device.

Before upgrading, ensure that your battery capacity is over 40%. We also recommend charging your device during the upgrade process.

To upgrade your device, perform the following steps.

1. Press O-chord for the Options menu
2. Press O for the Operating System menu
3. Press S for the System Administration menu
4. Press U for "Upgrade the System". If an update is available, BT Speak will announce that an upgrade is available and ask if you want to install the new update. Note: if no new updates are available, you will be told that no new updates are available, and BT Speak will ask if you are retrying to install a failed update.
5. If a new update is available and you want to install it, press the letter Y for yes
6. Press dot 8 for enter.

The upgrade will begin. Your unit will issue a short vibration about once every second and you'll also hear status messages during this process, such as "installing audio drivers." During this process, you don't need to do anything; just sit back and let your BT Speak install what it needs for the update.

After the upgrade has completed, your BT Speak will say, "Rebooting System" and your device will power down and then restart. Wait until you hear the BT Speak Ready message followed by the name of the currently open file and you will be ready to continue using your device.

# The Settings Menu

The Settings menu contains various options which allow you to control a variety of settings, such as the speech engine and voice being used, adjusting options in the clock, Braille table and more.

Press O-chord, followed by the letter S as a shortcut to open the Settings menu. You will find the following submenus, along with their respective shortcut keys:Braille: B

Speech: S

Audio: A

Clock: C

Google: G

## Braille Settings

The Braille settings submenu contains the following options:

Change the Input Prompt Mode: I

Change the Literary Braille Table: L

## Changing the Input Prompt Mode

This setting provides two options: Expect Literary Braille and Expect Computer Braille. These options are do not affect what you type while you're in a file using the editor. Instead, input prompt mode is for writing Braille when you're being prompted to type something, such as when you enter the name of a file to create or when you are entering an equation in the calculator.

## Change the Literary Braille Table

The literary Braille table is used when entering literary Braille in a file using our editor. This option includes several Braille languages, including the newer UEB code as well as the older EBAE code, which is referred to as U.S. English. If there is a Braille table or code which you need to use and which is currently not in the list, please let us know as many Braille tables can be easily added.

# Speech Settings

The Speech settings submenu contains the following options, along with their respective shortcut keys:

Change the TTS Engine: T

TTS Manager: M

eSpeak NG Settings: E

Dectalk Settings: D

Vocalizer Settings: V

## Change the TTS Engine: T

This option allows you to switch to another TTS engine. The list will vary, depending on which TTS engines have been installed onto your device.

## TTS (Text to Speech) Manager

The TTS Manager is used to install or remove speech engines.

This menu provides options to install or remove Vocalizer, RH Voice, Pico, and Festival Lite TTS engines.

Other Options in the Speech Settings MenuThe other options in the Speech Settings menu allow you to choose which voices or languages you'd like to use for the Dec-talk, eSpeak and Vocalizer voices. Feel free to experiment with these settings to find the voice that best suits your needs.

## The Audio Menu

The Audio menu contains the following options.
- Master Volume Down: < (dots 1-2-6)
- Master Volume Up: > (dots 3-4-5)
- Change Output Device: C
- Reset Volume: V
- Reset Output Device: O
- Microphone Volume Down: ( (dots 1-2-3-5-6)
- Microphone Volume Up: ) (dots 2-3-4-5-6)
- Change Recording Format: F

## Changing the Master Volume

- When changing the master volume from the Audio menu,  with each key pressn addition to these settings, there are four new chord commands for adjusting the master volume level. These chords are available anywhere; they work in both Traditional and in Desktop mode. You don't have to be in a specific menu to use these commands, which makes adjusting the master volume level quick and convenient. The base chord for all four is dots 2-3-5-6-Chordwhich is a chorded low G. When typed as is, i.e. without adding dot 7 and/or dot 8, the current level is announced. Here are the new commands.
- Dots 2-3-5-6-chord: announce the current master volume level
- Dots 2-3-5-6-7-chord: Decrease master volume level by 5%.
- Dots 2-3-5-6-8-chord: increase master volume level by 5%
- Dots 2-3-5-6-7-8-chord: Reset master volume level to 90% and reset audio output to the internal speakers
- Your current audio settings are retained after a device reboot as well as after performing a deep escape (Z-7-Chord).

## Clock Settings

The Clock Settings submenu contains the following options, along with their respective shortcut keys.

- Say Seconds: S
- Time Format: F
- Set the Time Zone Based on Your Internet Address: I
- Change the Time Zone: Z
- Change the Date: D
- Change the Time: T

### Say Seconds: S

The Say Seconds option has two choices: Just Say Minutes and Say Minutes and Seconds. If you set this option to Just Say Minutes, the time will be spoken in a way that you might be more accustomed to. As an example: customers in the U.S. might hear something like "12:30 PM."

### Time Format: F

This option offers the following choices.

- Local Format
- 24-hour Mode

12-hour ModeGoogle Settings## The Google settings menu contains the following options:

- Link the calendar to Google Calendar: C
- Link the phone book to Google Contacts: P

### Linking Your Calendar With Google Calendar or Your Phonebook With Google Contacts

Note: The following feature is not supported on the BT Speak basic model.

If you have a Google account, you can now synchronize its calendar and contacts to your BT Speak's calendar and phonebook. This means that you can link your BT Speak's calendar with the Google Calendar service. You can also link your BT Speak's Phonebook to Google Contacts. Wi-fi is required in order to keep your data synchronized

between your BT Speak and Google. You'll find the option to enable or disable synchronizing your data with Google in the options menu for the PhoneBook and the Calendar applications (shortcut is G). Brief instructions for using this feature follow. Consult the application help files for full details on its usage.

First, from your BT Speak, enable the Link Google option and sign in to Google using the following procedure. Linking Google Contacts to the BT Speak's Phonebook app is used in this document as an example.

1. Press O-chord for the Options menu.
2. Press A for the Applications menu.
3. Press P for the Personal category.
4. Press P for the Phonebook application.
5. Press O for Phonebook Options.
6. Press G for Link Google Contacts. This presents two options, Off and On.  Navigate to "On" and press enter to enable it. If you want to link your BT Speak's agenda calendar to Google Calendar, do the same procedure from the Calendar Options menu.

Next, return to the Phonebook main menu and select any of these functions: Add Contact, View Contacts, or Search Contacts.

Your BT Speak will say, "Desktop mode browser will now load for Google login. Press enter and wait a few moments for the web page to load". Press enter(dot 8) and Desktop mode will load. Wait a few moments for the Chromium browser to load the Google sign-in page. Follow the web page instructions to login to your Google account and grant permission to your BT Speak to access your Google Contacts data.

If authentication is successful, you will automatically return to traditional mode. Your BT Speak will announce "Login successful. Returning to application." After pressing enter (dot 8), Phonebook will load the feature that you selected before you signed in with Google. Your Phonebook is now linked to your Google account and will update your Google Contacts as changes to your Phonebook are made. See Synchronization for more details on how your data is synchronized between devices. Further logins are not routinely required.

## Enable or Disable Linking to Google Contacts and Google Calendar From the Settings Menu

You can also choose to enable or disable linking your calendar or your phonebook to Google from within the Settings menu. Once the Settings menu has been opened, there is a new submenu called Google, with G being the shortcut. This submenu has options for enabling or disabling linking your BT Speak's calendar and contacts to your Google account.

# Introducing the Editor

The editor is the heart of the BT Speak. This fully featured text editor allows you to create, open and edit documents. It accepts plain text, HTML, Markdown, and Braille files.

Note: When you power-on your BT Speak for the first time, you will be placed in a welcome screen which is a file containing introductory material. This welcome screen is a protected file and so it cannot be edited or deleted. Once you begin working in the editor, your BT Speak will open the editor to the last file you were working in when you power on.

## Creating a File

To create a file:

1. Press O-chord to open the Options menu.
2. Navigate with dot 4-chord until you get to "File Browser" and press dot 8 (for enter.) As a shortcut, you can also press the letter F and you will immediately be in the file browser.
3. Press the letter C which tells your BT Speak that you want to create a new file. The BT Speak announces "enter name"
4. Type the title of the file that you wish to create. By default, titles must be written using Computer Braille. If you want to type the name of your new file using literary Braille, press dots 5-6-chord and your BT Speak will say "literary Braille." If you add a .brl extension to your title, you will be able to write in your file using contracted (or literary) Braille. For example, to write a file entitled 'journal' in literary braille, name the file journal.brl.
5. Press enter (dot 8.) The file browser will close and you will be in the new file that you created.

## Navigating Text in a File

The following commands allow you to navigate in a file.

- Move to the previous line: dot 1-chord
- Move to the next line: dot 4-chord
- Speak the current line: dots 1-4 chord
- Move to the previous word: dot 2-chord
- Move to the next word: dot 5-chord
- Speak the current word: dots 2-5 chord
- Move to the previous character: dot 3-chord
- Move to the next character: dot 6-chord
- Speak the current character: dots 3-6-chord
- Move to the first character of the current line: dots 1-3-chord
- Move to the last character of the current line: dots 4-6-chord
- Move to the beginning of the current (or previous) paragraph: dots 1-3-7-chord
- Move to the end of the current (or next) paragraph: dots 4-6-8-chord
- Go to the top of the file: Dots 1-2-3-chord
- Go to the end of the file: Dots 4-5-6-chord
- Read continuously from the cursor position to the end of the file: dots 1-2-4-5-6-chord (press dots 7-8 to stop reading)

A full set of commands can be found by pressing H-chord to bring up the editor's context-sensitive help.

## Finding Text

The editor offers several commands to easily search for text in any direction. Typing F-chord will allow you to search for text in a forward direction, meaning that it will search from the point at which your cursor is located to the end of the document. To conduct reverse searches from the cursor position to the beginning of the document, type f-chord along with dots 7 and 8. Regardless of the initial direction of your find, you can use F-7-chord and F-8-chord to find the previous or next occurrence of the text, respectively.

## Manipulating Text

The editor offers Braille keyboard equivalents to the standard text editing commands that are found on most pc-based text editors. Every action must begin with selecting text. Text selection works in the following manner:

1. Start at the point at which you wish to begin your selection
2. Press M-chord to mark the beginning of your selection. BT Speak will say "mark set"

3. Use <u>text navigation chords</u>, such as dot 4-chord for moving to the next line or dot 5-chord for moving to the next word, to navigate where you would like to end the selection

- At this point, you may use X-8-chord to cut, or C-8-chord to copy your text

- V-8-chord will paste the text that has been cut or copied to the editor's clipboard. Alternatively, pressing P-chord will enter the paste menu which will allow you to paste text from the clipboard as well as additional choices, including the date, time, and more.

## Printing a File

To print the open file:

1. Open the Options menu (O-chord)
2. Select "Print Current File", with P being the shortcut
3. BT Speak will present a list of printers found on your local network
4. BT Speak will ask you which printer you want to use to print the file. Navigate down the list with dot-4 chord and select the desired printer with enter (dot 8)
5. BT Speak will then send the file to the printer

# File Management

## The File Browser

Pressing O-chord followed by the letter F opens the file browser. The file browser provides a list of all the files and directories (also known as folders) on your BT Speak. It will also display files and directories located on currently connected external drives (egs. a microSD card).

A directory, often referred to as a folder, is a place where you can store files. As an example, you might have a directory on your BT Speak called Documents, which you could use to keep all your documents in one place. You might also want to create a directory called Books for storing your electronic books. You can even create directories inside of directories, often referred to as subdirectories or subfolders. For example, you might want to create a directory called Books with two subdirectories inside of it- one called Reference for your various reference books and another called Science Fiction for storing your Doctor Who novels.

To move through the list of files and directories which are on your device, make sure that you are in the file browser. Pressing O-chord followed by the letter F is the fastest way to get to the file browser. Press dot 4-chord   and dot 1-chord to move forward and backward through the list, respectively. Alternatively, you can press the space key to move forward through the list or the backspace key (dot 7) to move backward. Remember, the dot 7 key is located to the left of the space key.

When you are pointing to a directory, you can press enter (dot 8) to open that directory and explore any files which may be contained within it. You can also press dot 8 with the space bar to open a directory. To move back to the previous directory, press dot 7 with the space key.

## Quickly Locate Files in the File Browser

From the File Browser, you can quickly locate a file by typing the first character of the file's name in uppercase. This capability only supports letters (A through Z) and numbers (zero through nine). The letter needs to be entered in uppercase by either adding dot 7 to it or by first typing U-Chord before entering the letter. This is because lowercase letters are already being used as shortcuts for file browser commands, such as the letter C for creating a file.

Each time you enter a character, you will be moved to the next file that starts with that character. The search wraps from the end back to the start of the file list. If BT Speak fails to find a name that starts with the character you entered, you will hear a beep.

## Creating a File

To create a file:

1. From the file browser, press the letter C, which tells your BT Speak that you want to create a new file. The BT Speak announces "enter name"
2. Type the title of the file that you wish to create. By default, titles must be written using Computer Braille. If you want to type the name of your new file using literary Braille, press dots 5-6-chord and your BT Speak will say "literary Braille." If you add a .brl extension to your title, you will be able to write in your file using contracted (or literary) Braille. An example might be journal.brl.
3. Press enter (dot 8.) The file browser will close and you will be in the new file that you created.

Note: If you do want to add an extension to your file name, we recommend that you do not switch your input to literary Braille.

## Creating a Directory (or Folder)

The process of creating a directory is very similar to the steps for creating a file.

1. From the file browser, press the letter N, which tells BT Speak that you want to create a new directory. The BT Speak announces "enter name"
2. Type the directory's name, followed by the enter key (dot 8.)
3. The new directory will now appear in the file browser

## Renaming a File or Directory

To rename a file that you've already created:

1. Press O-chord, followed by the letter F to open the file browser
2. Press dot 4-chord or the space key to move forward through the list of the files and directories   until you locate the file or directory that you want to rename. Pressing dot 1-chord or dot 7 will move backward through the list
3. Press the letter R to rename the item that you are pointing to. Your BT Speak will say "enter new name."
4. Type the new name followed by the enter key (dot 8)
5. Your BT Speak will confirm the change by telling you that the file has been renamed. Press dot 8 to dismiss the message

## Opening a File

### *Open a File By Locating it in the File List*

1. Press O-chord, followed by the letter F to open the file browser
2. Press dot 4-chord or the space key to move forward through the list of files and directories

3. Press dot 1-chord or dot 7 to move backward through the list
4. When you locate the file or directory that you want to open, press enter (dot 8)

*Open a File by Typing its Name*

You can also open a file by typing its name.

1. Press O-chord, followed by the letter F to open the file browser.
2. Press the letter O (for open) and BT Speak will say "enter name"
3. Type the exact name of the file that you want to open, followed by the enter key (dot 8)

Whatever method you choose to open a file, once you have completed this action, you will be taken out of the file browser and into the file that you wanted to open.

## Deleting a File

To delete a file:

1. Press O-chord, followed by the letter F to open the file browser.
2. Press dot 4-chord or the space key to move forward through the list of files and directories on your device until you locate the item that you wish to delete. Press dot 1-chord or dot 7 to move backward through the list of files and directories on your device.
3. When you locate the file that you want to delete, press the letter D. BT Speak will ask if the file should be deleted.
4. Press the letter Y (for yes) if you want to delete the file. Press N (for no) if you don't want to delete the file.

Warning: Once you delete a file or directory, it cannot be undeleted. Copying and Moving Files

Files can be copied or moved from one directory to another, including to and from removable storage devices like thumb drives or SD cards. To copy or move a file to another location:

1. From the file browser, locate the file or directory that you want to copy.
2. Type the letter X to select (or deselect) the file or directory. You may repeat this action for as many files as you want to select, but they all need to be in the same directory
3. Next, open the directory where you want to copy or move the items that you selected
4. Once inside the destination directory, type a plus sign (dots 3-4-6) to paste them
5. You'll be asked if the original files should be deleted. Typing the letter N for No means that they will be copied to the destination directory. Typing Y for Yes means that they'll be moved.
6. Press enter. If there are any name conflicts, such as a file being copied or moved having the same name as one that is already in the target directory, you will be asked about this and you will be given the following choices:
   - Replace: The new file will replace the old file
   - Rename Old: The old file will be renamed by appending the word -original to its name
   - Rename New: The new file will be renamed by appending the word -pasted to its name
   - Skip: Files with conflicting names won't be copied or moved
   - Cancel: The entire operation will be cancelled. No files will be copied or moved
7. Press enter to select your choice

You will know if the file has been selected because you will hear the word "selected" when you are pointing to a file in the file browser. Additionally, a new directory listing filter - S (for Selected) - has been added so that you can easily review which files have been selected.

## Translating and Converting Files

Files may be translated or converted from one file format to another. For example, you can translate a plain text file into a contracted Braille file or you can convert a contracted Braille file to a Microsoft Word document. This can be done by typing the letter T from within either the File Browser or the File Management menu. If you perform this action from the File Management menu, you will be asked to enter the file's name. A file with any of these extensions can be translated or converted:

- .brf: Formatted Braille
- .brl: Braille
- .csv: Comma Separated Values
- .docx: Word Document
- .epub: Electronic Publication
- .html: Hypertext Markup
- .odt: Open Document
- .txt: Plain Text

A file can be translated or converted to any of the following formats:

- B: Braille (.brl)
- E: Electronic Publication (.epub)
- H: Hypertext Markup (.html)
- O: Open Document (.odt)
- P: Portable Document (.pdf)
- R: Rich Text (.rtf)
- T: Plain Text (.txt)
- W: Word Document (.docx)

## Playing WAV or MP3 Files From the File Browser

From the File Browser, if you open a file that has an audio extension, such as .mp3 or .wav, that file will begin to play in the background. This means that you can not only listen to an audio track but you can continue to work on other tasks with your BT Speak while that track is playing. You can control the player via the Media Player submenu of the Applications menu which we'll describe later in this manual.

## Opening Word and LibreOffice documents from the File Browser

If you open a file with a .docx (Microsoft Word) or .odt (LibreOffice) extension from the File Browser, the file will automatically convert to text and display as a read-only document. This both lets you read those documents without going into desktop mode and allows you to copy and paste text from those files into other files.

## Unpacking an Archive or Compressed File

Pressing enter (dot 8) to open an archive file in the file browser results in BT Speak asking  if you would like to unpack the file. If you press Y for "yes", the file is unpacked into a directory with the same name as the original name of the archive file with "-unpacked" appended to its name. This feature currently supports the following file extensions: .zip, .tar, and .tgz.

## Speak Information About a File

Typing the letter A from the file browser opens the "About This File" dialog. When used within the File Browser, it provides information about the file you are pointing to in the file list. When used within the File Management menu, it prompts for the name of the file to describe. The description or file properties includes:

- File name
- Directory location
- File type
- File size,
- Link count
- The date the file was last modified
- The date the file was last accessed
- User permissions (such as is the file write-protected)

## The File Management Menu

The File Management Menu displays all of the commands available in the File Browser, so you don't need to remember individual file action commands. The menu includes many of the options we have already covered in this manual, such as commands for creating a file, deleting a file, opening a file, etc.  Once arriving to this menu, pressing dot 1-chord or dot 4-chord to move through the list. When you are pointing to the desired command, press enter (dot 8) to execute it.

### Getting to the File Management Menu

There are two ways to get to the File Management Menu:

- If you are already in the file browser, type the letter M to open the File Management menu.
- If you are working in a file, press O-chord to enter the options menu. Press the space key or dot 4-chord until you are pointing to "Manage Files" and press enter (dot 8). Since the letter M is a shortcut key to open the File Management menu, you can also press O-chord, followed by M to quickly open this menu.

# The Applications Menu

Your BT Speak includes a large collection of productivity and entertainment applications aside from the editor. To access these applications, press O-chord to enter the Options menu. You can move down through the menu by pressing dot 4-chord or the space key until you point to Applications and press enter. Alternatively, after pressing O-chord, you can press the letter A as a shortcut to immediately open the Applications menu.

The Applications are organized into the submenus: Personal, Media, Reference, Web, Specialized, and Games. The following sections cover some of the applications found in these submenus.

## Personal Menu

The Personal Menu (Applications) options, along with their shortcut letters are:

- Voice Notes: V
- Calendar: C
- Phonebook: P

## Media Menu

The Media Menu (Applications) options, along with their shortcut letters are:

- Media Controls: M
- Media Files: F
- Radio Tuner: R
- Pandora (U.S. only): P

*The Media Controls Menu*

The media controls menu is a list of master controls for all media streams playing on your BT Speak (except for Pandora Radio).

### Navigating to the Media Controls Menu

1. Press O-chord for the Options Menu.
2. Press letter A for the Applications Menu.
3. Press letter M for the Media Applications Menu.
4. Press letter C for the Media Controls Menu

### Media Controls Menu Options

The Media Controls Menu contains the following options, along with their corresponding shortcut keys:

- Pause or Resume the Media Player: P
- Previous Track: < (dots 1-2-6)
- Next Track: > (dots 3-4-5)
- Back Ten Seconds: { (dots 2-4-6)
- Forward Ten Seconds: } (dots 1-2-4-5-6)
- Restart the Current Track: R
- Metadata for the Current Track: M
- Description of the Current Stream: D
- Decrease the Media Volume: ( (dots 1-2-3-5-6)
- Increase the Media Volume: ) (dots 2-3-4-5-6)
- Decrease the Media Rate: - (dots 3-6)
- Increase the Media Rate: + (dots 3-4-6)
- Reset the Media Rate: = (dots 1-2-3-4-5-6)

*Global Hotkeys for Controlling Media Playback*

Keyboard shortcuts may also be used to control media playback from anywhere in the BT Speak system. The following keystrokes will work globally, meaning that you don't need to be in the Media menu for them to work:

- Decrease the Media Volume: Dots 1-2-3-5-6 chord
- Increase the Media Volume: Dots 2-3-4-5-6 chord
- Pause or Resume the Media Player: Dots 1-2-5-6 chord
- Go to the Previous Track: Dots 1-2-5-6-7 chord
- Go to the Next Track: Dots 1-2-5-6-8 chord
- Restart the Current Track: Dots 1-2-5-6-7-8 chord

If you press any of these keys and no media is playing, you will hear the familiar error tone indicating that the keystroke was rejected.

*Media Files Menu*

This menu allows you to browse media files that you might have on your BT Speak or on an external device, such as a thumb drive or an SD card. The Media Files menu contains the following options, along with their corresponding shortcut keys.

- Home Directory: H
- Current Directory: C
- Public Directory: P
- SD Card: S
- USB Storage: U
- National Anthems: N

Press enter (dot 8) to select an option and you will land in a list of If media files in the selected directory. Note that media files are defined by having a media compatible file extension. We support MP3 and Wav audio files as well as MP4 video files.

Selecting the option National Anthems will present a list of national anthems preloaded in your BT Speak. The list also includes the options to play all of the media files as sorted (in the order they appear in the list) or shuffled (in random order).

*Radio Tuner (shortcut is R)*

The radio tuner contains over 50,000 radio stations from all around the world. You can locate radio stations by searching for them or you can browse the list of stations by their location.

The Radio Tuner Menu

To access the Radio Tuner menu, press O-chord to enter the options menu, then press the letter A for Applications, followed by M to open the Media menu, and finally press R to open the Radio Tuner Menu.

The Radio Menu options and their corresponding shortcut keys are:

- Listen to a Station: L
- Browse Stations by Location: B
- Favorite Stations: F
- Blindness Community Stations: C
- Refresh the Station Database: R

*Listen to a Station (Shortcut is L)*

When choosing the option to listen to a station, BT Speak will say "enter the station's name.", prompting you for a keyword search. In other words, you don't need to enter the full name of the station that you want to listen to- simply enter a partial name or keyword, such as BBC, followed by the enter key (dot 8). After entering a full or partial station name, your BT Speak says, "Radio Station Index, (your search term) Open.". This announcement indicates that BT Speak has opened a listing of radio stations matching your search term.

Navigate through the station list using dot 4-chord (forward) or dot 1-chord (backward) . Don't forget that in any of these menus you can also press the space key to move forward or the dot 7 key to move backward. When you hear the name of a station that you want to listen to, press enter (dot 8) to begin listening. The station should begin playing in just a few seconds.

The Stream Actions Menu

Once the station begins playing, you will land the Stream Actions menu, which contains the following options to control the radio stream

Decrease the Media Volume: ( (dots 1-2-3-5-6)

Increase the Media Volume: ) (dots 2-3-4-5-6)

Pause or Resume This Stream: P

Metadata For this Stream: M

Description of this Stream: D

Add to Favorites: A

Remove From Favorites: R

Vote For This Station: V (this option informs the database provider that you like the station you're listening to)

As a reminder, any of these menu options, including specific radio stations, can be brought into your own personalized user menu.

- Browse Stations by Location: B

You will find "Browse Stations by Location" option in the Radio Tuner Menu. Pressing dot 8 while pointing to this option takes you to a listing index of countries, which you can navigate by pressing dot 4-chord ( forward) or dot 1-chord (backward). If you know the country you're interested in selecting, you can also press the first letter of the country to select it. For example, to locate stations from the United States, you can repeatedly press the letter U until you hear "United States." Press enter (dot 8) to open the desired country. Next, you will be in a listing index of states. Find and select the state using the same navigation commands used to select the country.. Continue through the subsequent menus until you find the desired station and press enter (dot 8) to play it.

Once the station begins playing, you will land in the Stream Actions menu enabling control over the media stream and station options.

*Favorite Stations: F*
Once you've added a station as a favorite using the option in the Stream Actions Menu, you can access your favorite stations. From the Radio Tuner Menu, enter the shortcut (letter F) or arrow down to "Favorite Stations" and press enter (dot 8) to open the list.

To remove a station from your Favorite Stations, select the station to begin playing it, and then navigate to "Remove From Favorites" in the Stream Actions Menu.

*Blindness Community Stations: C*
In the Radio Tuner menu, you will find the option "Blindness Community Stations" (shortcut is letter C). This option lists radio stations and subcategories that are specifically curated for blind listeners, such as the ACB Media streams, radio reading services, and more.

*Refresh the Station Database: R*
New stations are constantly being added to the database on a regular basis. This option redownloads the entire database of radio stations to your BT Speak so that you'll have access to the newest stations that have been added.  It may take 25-30 seconds for this process to complete, perhaps a bit longer. It might be helpful to perform this process at least once a month to stay current.

## Voice Notes

 The Voice Notes application allows you to record audio notes using BT Speak's microphone. Although the notes may be accessed and played through BT Speak's media player, the Voice Notes application also includes the option to play your saved notes. All other actions on voice note files, such as renaming or removing a note, need to be performed using the File Browser or the File Manager.

The Voice Notes menu contains the following options, along with their shortcut key:

Record a Note: R

Play Note: P

Set Recording Format: F

Microphone Volume Down: (

Microphone Volume Up: )

## Recording a Voice Note

To record a Voice Note, select Record a Note (shortcut is R) from the Voice Notes Menu. Recording will begin after you hear two ascending tones and BT Speak says "Recording". Press enter (dot 8) or Z-chord to stop recording when you are finished recording your voice note. BT Speak will announce that your recording has been saved in your Voice Notes directory along with the name of the file.

To find your recording from the File Browser, navigate to and select the BTSpeak directory, then select the Voice Notes Directory. The name of the file containing the recording consists of the date and time the recording was saved. For example, the title of a recording might be 2024-04-17_10-29-43.mp3. In this example, this means that the voice note was saved on April 17 at 10:29.

Note: if any media was playing before you began recording, it will be stopped.

## Playing a Voice Note

To play a voice note select "Play Note" from the Voice Notes menu. This action will display a list of all voice notes saved in your Voice Notes Directory. You can navigate this list just as you navigate other menus. Press enter (dot 8) to play the desired voice note.

The Play menu also leverages audio controls available through Global Hot Keys and the Media Controls Menu.

## Set Recording Format

This option enables you to set the recording format to either MP3, Free Lossless Audio Codec, or WAV, depending on your preference. Generally, you may choose MP3 for smaller file sizes and easier sharing, WAV for superior audio quality and better editing flexibility, or Lossless Audio Codec for the highest audio quality with no compression loss.

To set the recording format, select "Set Recording Format" from the Voice Notes menu. Press enter to select an audio format among the choices in the resulting list.

## The Appointment Calendar

BT Speak offers a full-featured agenda calendar that lets you create, manage, browse, and search for events or appointments (here, collectively called events). The calendar also includes a Gregorian Date Calculator, which will identify the day of the week on which a certain date occurs. You can also link your BT Speak calendar to Google Calendar, keeping your events synchronized across all devices.

## The Calendar Menu

The Calendar Menu options and their corresponding shortcut keys are:

Today: T

Week: W

Month: M

Search by Event: E

Search by Date: D

Add an Entry: A

Gregorian Date Calculator: G

Options: O

## Today (browse Today's events)

Selecting the Today option (shortcut: T) displays a chronological list of events occurring on the current day (today). If there are no events assigned to the current day, BT Speak will say "Nothing in your calendar" followed by today's date.

## Week (browse events by week)

Selecting the Week option (shortcut: W) displays a chronological list of events for the current week. In BT Speak's calendar, the week starts with today's date and runs through the following six days. For instance, if today is Wednesday, October 2nd, the calendar will show events from October 2nd to Tuesday, October 8th. If there are no events scheduled for the week, BT Speak will announce "no events." Additionally, "Next" and "Previous" options at the beginning and end of the list allow you to navigate to the week's events seven days forward or backward. Selecting an event opens the Edit Menu.

## Month (browse events by month)

Selecting the Month option (shortcut: M) displays a chronological list of events in the current month. If there are no events scheduled in the month, BT Speak will announce "no events". Additionally, "Next" and "Previous" options at the beginning and end of the list allow you to view next or last month's events.

Note: When browsing events by week or month, you may use the top of list (dots 1-2-3 chord) or end of list (dots 3-4-5 chord) commands to immediately move the cursor to the previous or next date range to efficiently navigate to a desired date.

## Search by Event

Selecting the Search by Event option (shortcut: E) initiates a keyword search for an event scheduled on any date (past, present, or future) in your calendar. Type any text appearing within the event you would like to find with this tool. BT Speak will display a chronological list of events matching your search term. If no events match your search, BT Speak will say "No events matching" followed by your search term.

## Search by Date

The Search by Date option (shortcut: D) allows you to list events for a specific day (past, present, or future) in your calendar. After selecting this option, BT Speak will say "Date?". Type the date you would like to search (Note: see

Date entry for instructions on entering valid dates) and press enter (dot 8). BT Speak will display a list of events scheduled on the date searched. If no events are assigned to the date, BT Speak will say "No events on" followed by the date searched.

## Add (a new event to the Calendar)

Adding new events to your calendar is accomplished with the Add option (shortcut: A). After selecting this option, BT Speak will respond with a series of prompts that we will discuss in more detail below: Date, Time, and Event. After completing these prompts, BT Speak will announce that the event has been added to your calendar.

### Date

BT Speak will say "Date?", prompting you to enter a date on which to assign the event. For example, enter 10-02-24 to schedule an event for October 2nd, 2024. The date can be entered in several ways (see Date Entry), however, we highly recommend dates be entered in Computer Braille.

### Time

Enter a time (for example, 1pm) for the event, followed by enter (dot 8). Event times can be written in a few different ways (see Time Entry for details). To schedule an all-day event, leave the time field empty and press enter (dot 8). Note that if the time is entered incorrectly, the calendar will treat the event as an all day event by default, however, this can be corrected using the Edit Time option in the Edit Menu.

### Event

BT Speak will say "Event?", prompting you to enter an event title or description. You may enter the event in Computer or Literary Braille, depending on your selected braille input mode. The event has no length limit.

## Date Entry

- BT Speak will prompt you to enter a date when adding a new event, when editing the date of an existing event, or when searching the calendar by date. The date defaults to the current year if a year is not specified. For example, to enter January 20, 2024, the following date formats may be entered:
- 1-20
- 01-20-24
- 1/20
- 1/20/24
- 1/20/24
- Jan 20
- Jan 20, 2024
- January 20
- January 20, 2024

## Time Entry

BT Speak will prompt you to enter a time when adding a new event or when editing the time of an existing event. The following illustratevalid formats for entering the time:

- 1pm
- 1:30pm
- 1 am
- 1:30am
- 0200 pm

## Event Edit Menu

Pressing dot 8 while pointing to an appointment opens the Edit Menu with following options:

- Edit Event: allows you to edit the text for the event describing the appointment.
- Edit Time: allows you to edit the time for the selected appointment.
- Edit Date: allows you to edit the date for the selected appointment.
- Delete Event: allows you to delete the selected appointment

### *Edit Event*

Use this option to edit the event description or title. After selecting this option, BT Speak will say "Edit the event", which is a prompt to enter a new event. Type a new event description if you would like to change the old one and press enter. To cancel the operation and keep the old event description, press Z-chord at the prompt. You will return to the list of events.

### *Edit Time*

Use this option to edit the time assigned to the selected event. After selecting this option, BT Speak will say "Edit the time for" your event. Enter a new time (see Time Entry for details) and press enter (dot 8) to change the event time. To cancel the operation and keep the old time, press Z-chord at the prompt. You will return to the list of events.

### *Edit Date*

Use this option to edit the date assigned to the selected event. After selecting this option, BT Speak will say "Edit the date". Enter a new date (see Date Entry for details) and press enter (dot 8) to change the date for the event. To cancel the operation and keep the old date, press Z-chord at the prompt. You will return to the list of events.

### *Delete Event*

Use this option to delete the selected event from your calendar. BT Speak will say "Remove" followed by the event date and description (default is No). To confirm and delete the event, enter the letter Y and press enter. Alternatively, enter any other key (or Z-chord) to cancel the operation and return to the list of events. Note: the action to delete an event cannot be reversed once confirmed.

## Gregorian Date Calculator

The Gregorian date calculator will calculate the day of the week of a past or future date in three ways:

1. By entering the number of days (starting from the current date). To search forward in time, precede the number of days with a plus sign (dots 3-4-6). To search backward, precede the number with a minus sign (dots 3-6).

2. By entering a specific date either in the form MMDDYY or MMDDYYYY, where MM represents the month, DD the day, and YY or YYYY the year.

3. By entering either nothing or a number-sign (Dots 3-4-5-6) to hear how many days have elapsed since the beginning of the current year.

All numbers should be entered using Computer Braille.  In other words, enter numbers using dropped numbers with no number sign.

When you have entered your calculation, press Enter (Dot 8) to hear the result.

If the date calculator was not able to understand what you entered, the BT Speak will say "invalid input."

Some examples:

- To find the date 30 days from now, enter 30 or +30.
- To find the date 500 days ago, enter -500.
- To learn which day of the week occurred on July 4, 1776, type 07041776.
- To learn when January 1, 1995 occurred, enter either 010195 or 01011995.
- To find the number of days since the current year began, enter the number-sign. January 1 is day 1, while December 31 is day 365.

## The Calendar Options Menu

From the Calendar menu, you will find an item called "Options", with O being the shortcut. Pressing dot 8 to open this menu provides the following options.

- Save as Text: S
- Export Backup Calendar: E
- Import Backup Calendar: I
- Link Google Calendar: L

### *Save as Text (shortcut is S)*

Selecting this option will save a copy of your calendar entries as a plain text file to your home directory. Press enter (dot 8) to select this option and BT Speak will announce that the Calendar has been saved to your Home Directory. The text file will be named "calendar-[date].txt", where [date] is the current day in the format YYMMDD. You may access the calendar text file from BT Speak's File Browser.

### *Export Backup Calendar (shortcut is E)*

Use this option to export a backup copy of your calendar. Unlike the "Save as Text" option, an exported calendar can be used to restore your calendar in the event your BT Speak needs replacement or you opt for a hardware upgrade. We recommend periodically employing this option to hedge against the possibility of data loss. After selecting this option, BT Speak will say "Name?". Enter a name for the backup calendar and press enter (dot 8). BT Speak will confirm the export with the message, "Calendar exported as [name]". Press enter (dot 8) to dismiss the message. The backup calendar will be saved to your home directory as a read-only JSON (the file is not available for editing) with a .btcal extension.

### *Import Backup Calendar (shortcut is I)*

Use this option to restore your calendar with a backup copy saved with the Export Backup Calendar option. Note: Be careful, as using this option will permanently overwrite your current calendar with the imported calendar. After selecting this option, BT Speak will display a list of calendars in your home directory available for import. Navigate this list and press enter (dot 8) to select the calendar you would like to import. BT Speak will next ask you to confirm the calendar import as this action permanently replaces your calendar with the imported version. To confirm, enter the letter Y and press enter. To cancel the import, press enter (dot 8) or Z-chord to return to the Calendar Menu.

### *Link Google Calendar (shortcut is L)*

Note: The following feature is not supported on the BT Speak basic model.

Use this option to sync your Google Calendar with BT Speak's Calendar (see Google Calendar and Contacts Synchronization for details). When linked, all events from your Google Calendar will be imported into BT Speak's

Calendar, allowing you to view and manage your events. Additionally, any new events or edits made on BT Speak will be updated in your Google Calendar.

Selecting this option will present two choices: ON or OFF. By default, it is set to OFF, which means your calendar is not linked to Google Calendar. To enable the link, choose ON and press Enter (dot 8). BT Speak will confirm the change. To use this feature for the first time, you will need to authorize BT Speak to access your Google Calendar (see Google Authentication for details). Once enabled, the next time you access your calendar, BT Speak will sync with Google Calendar, importing all events. Any new or updated events will also be saved to your Google Calendar account.

## Google Calendar and Contacts Synchronization

BT Speak's Calendar and Phonebook applications offer the option to link with your Google Calendar and Google Contacts accounts. When you first access either service on your BT Speak, you will be prompted to log in and authorize BT Speak to access your Google account (see the section on Google Authentication). If there is no Wi-Fi connection or Google's server is unavailable during this process, BT Speak will notify you that the Google service is not available.

Once your Google account is linked to BT Speak, all your Google Calendar events or Google Contacts will be imported to the corresponding BT Speak application. During synchronization, BT Speak will announce "Synchronizing Google Calendar…" and issue short haptic pulses.

## The following synchronization rules apply:

*Initial Import:* BT Speak's Calendar and Phonebook data are imported into your Google account the first time you use the "Link Google" feature. This import occurs only once during the initial application load after booting. It will not repeat unless you toggle the "Link Google" option to "OFF" and then back to "ON" while using the application.

*Periodic Import:* Any updates made to your Google Calendar or Contacts from another device will be imported to your BT Speak the first time you use the application after a reboot. Alternatively, you can force an import by toggling the "Link Google" option for Contacts or Calendar to 'OFF,' using the application, and then switching the option back to 'ON.'

*Continuous Updates:* When the "Link Google" option is 'ON,' any new or updated entries in your BT Speak Phonebook or Calendar will also be reflected in your Google account. However, if the "Link Google" option is 'OFF' when changes are made, those updates will not be sent to your Google account.Google Authentication

To connect your Google account to an application on BT Speak, you need to complete Google Authentication. The first time you use an application that integrates with Google services, and occasionally when Google requests it, you will be prompted to log in to your Google account. For the Calendar and Phonebook applications, you must first enable the "Link Google" setting in the options menu. If a login is needed, BT Speak will automatically guide you through the process when selecting an option from the application's menu. Follow these steps to authorize Google services:

1. A message will appear saying, "You will now be directed to Desktop Mode for Google login. Press Enter and wait a few moments for Chromium web browser to load." Press Enter and wait approximately 2 minutes for Desktop Mode to activate. Chromium will automatically open to the Google sign-in page, where you'll be asked to grant BT Speak access to your Google account.
2. Enter your Google login details as instructed. Follow the prompts on the subsequent pages to grant permission to link your Google account with BT Speak. Confirm by selecting the Continue button on the page.

3. Once authentication is successful, BT Speak will announce, "Authentication completed. Returning to application." Press Enter and you'll be redirected back to Traditional Mode.
4. Your Google account is now linked, and the application will load the function you initially selected.

## Phonebook

Phonebook manages all your contacts on BT Speak, functioning like a digital address book. It stores contact names, phone numbers, email addresses, mailing addresses, and other notes.

To access Phonebook:

1. Press O-chord for the Options menu.
2. Press A for the Applications menu.
3. Press P for the Personal submenu.
4. You'll find the new Phonebook application in this menu, along with the Calendar and Voice Notes applications.

## Phonebook Menu

 The Phonebook Menu options, and their corresponding shortcut keys are:

Add a Contact: A
View Contacts: V
Search Contacts: S
Options: O

### Add a Contact (shortcut is A)

Select Add a Contact (shortcut is A) to add a new contact to your Phonebook. BT Speak will respond with a series of prompts that we will discuss in more detail below: Name, Phone Number, Email, and Notes. Only the Contact Name is required- all other fields can be skipped by pressing enter (dot 8) to move to the next prompt. You may answer the prompts using Computer or Literary Braille, depending on your selected braille input mode. If you wish to cancel the addition of a new contact, press Z-chord at any time. After completing the prompts, BT Speak will announce that the new contact has been added to your Phonebook.

#### Name
BT Speak will say "Name?". Enter a name for your contact and press enter (dot 8).

#### Phone Number

BT Speak will say "Phone number?" Enter a phone number to assign to your contact. If you wish to enter more than one phone number, you may do so using the Contact Edit menu after you add the contact. Note that the phone number prompt will accept any characters or other notes in addition to the phone number itself. This means, for example, you could write: "Cell phone: (443) 202-1800".

#### Email
BT Speak will say "Email?". Enter an email address to store in your new contact. If you wish to enter more than one email, you may do so using the Contact Edit menu after you add the contact.

#### Notes
BT Speak will say "Notes?". Enter any additional notes you would like to add for this contact. This field could be used for birthdays, biographies, company, or other important information to assign to the contact.

*Tips*

- Any field can be skipped by pressing the enter key if you don't have any information for that particular field. The one exception is the "name" field, which cannot be skipped.
- Only one entry can be added for each data field. To add more than one, use the edit menu in the View Contacts function described below.
- The data for each field may be entered in any format. Names and addresses must be entered in one line. In other words, phonebook will not prompt you for items such as first name, last name, city, state, zip, etc.
- View Contacts (shortcut is V):

Selecting this option displays a list of all contacts in your phonebook, listed alphabetically by name. Navigate through the list of contacts by pressing dot 1-chord or dot 4-chord. Select a contact by pressing enter (dot 8) to view a list of its phone, email, address, and notes data. From here, selecting the contact name will display the Name Menu and selecting any other field will display the Edit Menu. These menus may be used to edit data for the selected contact and their options are described in detail below.

*Name Menu*

Selecting the contact name opens the Name Menu with the following options:

View Contact Name

The View option will place the cursor over the contact name so that you can read its value. Press dot-6 chord to step through the contact name by character. To return to the Name Menu, press Z-chord.

Change Contact Name

Use the Change Contact Name option to edit the name of the selected contact. After selecting this option, BT Speak will say "Name?", prompting you for the new name. Type the new name and press enter (dot 8) to confirm. BT Speak will display a message confirming the contact name has been changed. Press enter (dot 8) to dismiss this message and return to the list of contacts. To abort the name change at the prompt, press Z-chord.

Delete Contact

Use the Delete Contact option to permanently delete the selected contact and all of its data values (name, phone number, email, address, and notes) from your phonebook. After selecting this option, BT Speak will ask you to confirm the removal of the selected contact from your phonebook. To confirm, enter letter Y and press enter (dot 8). BT Speak will display a message confirming the contact has been removed from your phonebook. To abort the action, press Z-chord or enter (dot 8) at the confirmation prompt and BT Speak will return to the contacts list without removing the contact.

## Edit Menu

While viewing a contact, selecting its Phone, Email, Address or Notes will open the Edit Menu for the selected data field. The Edit Menu contains the following options:

*View*

The View option will place the cursor over the selected contact data field (for example, a phone number) so that you can read its value. Press dot-6 chord to read the data field character by character or press C-chord to read the entire line. Press Z-chord to exit, returning to the Edit Menu.

*Edit*

The Edit option allows you to replace the selected Phone, Email, Address, or Notes with a new value. When this option is selected, BT Speak will speak the name of the data field (for example "phone number?"). Type the new

value you would like to replace the old one and press enter (dot 8). BT Speak will display a message confirming the data field has been edited. Press enter (dot 8) to dismiss the message and return to the Edit Menu.

### Add

The Add option will append another value to the selected data field. For example, if you selected a contact's phone number, this option allows you to add another phone number for the same contact. After selecting this option, BT Speak will speak the name of the data field (for example, "phone number?", prompting you for the new value to append. Type the new value and press enter (dot 8). BT Speak will display a message confirming the new data has been added. Press enter (dot 8) to dismiss the message and return to the Edit Menu. To abort this option, press Z-chord at the prompt.

### Delete

The Delete option will permanently remove the selected data field from the phonebook, while keeping all other information for the contact intact. After selecting this option, BT Speak will display a message confirming the selected data has been removed from your phonebook. Press enter (dot 8) to dismiss the message.

## Search Contacts: S

Use the Search Contacts option to search all contact names in your phonebook by keyword. After pressing enter (dot 8) while pointing to "Search Contacts" you will hear "name to search." Type a full name or part of a name that you would like to find and press enter (dot 8). If at least one contact is found, you will be in a list of the contacts matching your keyword search. Selecting the contact name with enter (dot 8) will open the list of its phone, email, address, and notes data (see View Contacts for more details).

## Phonebook Options Menu

From the Phonebook Menu, you will find an item called "Options", with O being the shortcut. Pressing dot 8 to open this menu provides the following options.

- Export Backup Phonebook: E
- Import Backup Phonebook: I
- Link Google Contacts: L

### Export Backup Phonebook (shortcut is E)

Use this option to export a backup copy of your phonebook, which can be used to restore your phonebook in the event your BT Speak needs replacement or if your phonebook is lost. We recommend periodically backing up your Phonebook to hedge against the possibility of data loss. After selecting this option, BT Speak will say "Name to save backup file?". Enter a name for the backup phonebook and press enter (dot 8). BT Speak will confirm the export with the message, "Phonebook exported as [name]". Press enter (dot 8) to dismiss the message. The backup phonebook will be saved to your home directory as a read-only JSON (the file is not available for editing) with a .btphone extension.

### Import Backup Phonebook (shortcut is I)

Use this option to restore or replace your existing phonebook with a backup copy.. Note: Be careful, as using this option will permanently overwrite your current phonebook with the imported version. After selecting this option, BT Speak will display a list of phonebooks in your home directory available for import (any file with .btphone extension). Press enter (dot 8) to select the phonebook you would like to import. BT Speak will next ask you to confirm the import as this action permanently replaces your phonebook with the imported version. To confirm, enter the letter Y and press enter. To cancel the import, press enter (dot 8) or Z-chord to return to the Phonebook Menu.

*Link Google Contacts (shortcut is L)*

Note: The following feature is not supported on the BT Speak basic model.

Use this option to sync your Google Contacts with BT Speak's Phonebook. When linked, all your Google Contacts will be imported into BT Speak's Phonebook, and any contacts you add or edit on BT Speak will be updated in your Google Contacts (see Google Calendar and Contacts Synchronization for details).

Selecting this option will show two choices: **ON** or **OFF**. By default, it is set to **OFF**, which means your phonebook is not linked to Google Contacts. To enable the link, choose **ON** and press Enter (dot 8). BT Speak will confirm the change. To use this feature for the first time, you will need to authorize BT Speak to access your Google Contacts (see Google Authentication for details). The next time you access your contacts, BT Speak will sync with Google Contacts, importing them into the phonebook. Any new or updated contacts will also be saved to your Google Contacts account.

## New AI Chat App (Uses ChatGPT)

AI Chat is BT Speak's custom application for ChatGPT, designed with unique accessibility features tailored for blind users on a speech-only device. AI Chat is a self-voicing application, which means that after you submit your question to ChatGPT, it will automatically read the response aloud. You can stop the speech at any time by pressing dots 7 and 8 together.

## Obtaining an OpenAI Key (required)

To use our AI Chat application, you'll need to generate an OpenAI key and then fund it with at least $5. OpenAI no longer provides a free tier of access for newly-generated keys. This key is essential for accessing ChatGPT.

For details on obtaining and installing your key on the BT Speak, see the OpenAI Key help topic.

If you place your OpenAI key in a text file on external media or in the Public directory, with the word "key" anywhere in its file name, running AI Chat will look for this file and automatically move the key to the correct location in your home directory.

## Recommended speech engine

Though AI Chat is compatible with any speech engine offered on BT Speak, AI Chat was originally designed for DECtalk and supports a variety of unique DECtalk features when reading information. For example, italics and headings are spoken in a slightly elevated pitch and bold is pronounced slightly louder than regular text . Specific information is spelled-out and programming code is read with a higher punctuation level. If you are using DECtalk when you run AI Chat, it will auto-detect DECtalk and utilize the DECtalk enhancements. However, if you would prefer to use a different text to speech engine, AI Chat adapts and still announces headings, quotes, bullet points and more.

## AI Engine

AI Chat offers two AI engine choices:  gpt-4-turbo-2024-04-09  and GPT-4o . The engines differ slightly in response times, knowledge, accuracy, and price. AI Chat defaults to gpt-4-turbo-2024-04-09. You can use the FlipModel command to flip the current model from one to the other. This should update your model responses immediately, though sometimes you may need to restart AI Chat for the new setting to take effect.

## Games

This menu presents a collection of games, including Hangman, Blackjack and others.

The Home and End keys (dots 1-3-Chord and dots 4-6-Chord) navigate to the first line and last line in the output history of the game. The Page-Up and Page-Down keys (dots 2-3-Chord and dots 5-6-Chord) move through the output history of the game by paragraph.

## Adding Your Own User-Customizable Menu

The Options menu has a submenu called the User menu, with the letter U being its shortcut. This new menu allows you to make a collection of your favorite items. To copy an item from another menu into the User menu, navigate to it and type Control+C (either by typing the letter C along with dots 7 and 8 or X-Chord followed by the letter C). As an example, from the Applications menu you could add Voice Notes or the Bible to the User menu for quick access.

You can also use the User menu to define your own shortcuts, although you will need to have a working knowledge of a menu file's syntax (see the Menu Files help topic). The file containing the information from your customized User menu can be accessed from the file browser. This file is named "user.menu". It is located in the "BTSpeak/" subdirectory of the home directory.

# BT Learn

## Introduction

BT Learn is an application designed to help students learn the Unified English Braille (UEB) code and provide tools for UEB teachers. It offers various learning activities, such as flashcard-style question prompts, to introduce the UEB code and quiz students (see Learn option). BT Learn also includes a utility for teachers to create tests, quizzes, or assignments that can be administered directly on BT Speak (see Teach option). Additionally, it features flashcard-style games to reinforce lesson material and challenge students to type in UEB with speed and accuracy (see Braille Challenge Game).

## Accessing the BT Learn Application

1. Press O-chord to open the Options menu.
2. Press A for the Applications menu.
3. Press S to open the Specialized submenu.
4. Press L to open BT Learn.

## The BT Learn Menu

Upon opening BT Learn, you will be placed in the BT Learn menu. Themenu options and its corresponding shortcut keys are:

- Teach: T
- Learn: L
- Braille Challenge Game: B

The function of each option is described below.

## Teach: (Shortcut is T)

The Teach menu includes options to Make a Test (shortcut is M) or Take a Test (shortcut is T).

*Make a Test: M*

You can make a test, compatible with BT Speak's Take a Test feature in two ways: 1) using BT Speak's Make a Test option, or 2) writing your own test in the editor, or on another device's editor or word processor. Proper use of these two approaches are explained below.

*Using the Make a Test feature*

Use the Make a Test option to generate a question and answer test file and save it to your home directory. The test can subsequently be provided to students via the Take a Test menu option. Upon selecting the menu option to make a test, you'll be prompted to enter a file name for the test.

What follows is a series of prompts asking you to enter the question and its answer. Enter as many question and answers as desired and press Z-chord to complete the test. The test is saved to your home directory with the .qzq extension, which is registered by BT Learn's Take a Test feature.

*Making a test in a text editor*

You can create a test compatible with BT Speak's "Take a Test" feature using any text editor or standard word processor. The question and answers must be written in a specific format to be accepted by the Take a Test feature. To do this, write each question on a single line in plain text. Directly below each question, write its corresponding answer enclosed in braces {}. Leave an empty line between each question-and-answer pair before writing the next question. Repeat this process for as many questions as you like.

For example:

What is the capital of France?
{Paris}

Who invented the Model T automobile?
{Henry Ford}

Name the text file with a .qzq file extension and save it to your Home, Public or Media directory so that it can be recognized by BT Speak's Take a Test feature.

*Take a Test: T*

Use this option to choose and take a test from your Public, Media, or home directories. Only BT Learn compatible files ending with a .qzq file extension are supported. If you select a file without proper formatting (see Making a test in a Text Editor), BT Learn will display an error message with information about the formatting issue that it encountered.

Selecting a test will prompt you with each question in a top-down order as the questions appear in the test file. The score is displayed once all questions have been answered. Press Z-chord to abort the test at any time. However, if you choose to exit during a test, the test results will not be displayed.

## Learn: (Shortcut is L)

The learn menu offers a primer in UEB braille divided into twelve lessons. Each lesson has two parts: lesson and practice game.

When you open the Learn menu, the BT Speak will announce, "Select a lesson to learn Braille, or a game to practice."

The resulting menu provides a list of lessons and games.

*Selecting a Lesson*

Selecting a lesson will begin with a brief description of the lesson concept. Use dot 4 chord to read each line of the description.

Press dot 8 to begin the lesson. Prompts will instruct how to type braille characters or contractions and ask the user to type it. Follow the instructions to type to proceed to the next question.

When all lesson material has been answered correctly, a message will appear indicating the lesson is completed. Press Z-chord to exit or press enter to repeat the lesson.

*Practice Games*

A practice game is provided for each lesson as well as two review games to reinforce lesson material. Selecting the game will begin with a message telling you the game is about to begin. Press enter (dot 8) to start the game.

The game will prompt with a letter, word, or phrase and ask you to type it in UEB braille. A sequence of two high or low tones indicates a correct or incorrect answer, respectively.

A message will be spoken indicating when a new high score is achieved. Press enter to proceed. Use z-chord to end the game at any time. Ending the game will speak session scores as well as all time high scores for the selected lesson or review.

## Braille Challenge Game:

The Braille Challenge Game will prompt you with randomly generated words. Type each word in UEB contracted braille as quickly as you can.

Two ascending high tones indicate a correct response, while incorrect responses are denoted by two identical low tones. The game will continue until the user presses Z-chord to end the game. When the game ends, a message will be presented with your all-time high scores.

# Getting Started With Desktop Mode

Note: Desktop mode is only available on the BT Speak Pro models. Users of the BT Speak basic model only have access to traditional mode. If you own a BT Speak basic model and wish to upgrade to a Pro model, please call Blazie Technologies at (772) 214-1616 to ask about upgrade options.

## Introduction

Your BT Speak offers two modes of operation: traditional mode and desktop mode.

When you power on your BT Speak, you will always begin in traditional mode. In this mode, you have probably worked with our editor for creating, editing and copying files. Traditional mode is also where we provide a large amount of custom applications, such as the radio tuner, phonebook, agenda calendar, scientific calculator, Bible reading app, etc. Up to this point, it's quite possible that you've spent most of the time using your BT Speak while in traditional mode. In fact, up until now, this user's guide has only covered features which are found in your device's traditional mode. While traditional mode might very well meet your needs, our desktop mode offers even more features and applications, allowing your BT Speak to unlock an even greater amount of power and capabilities.

Desktop mode is a full graphical desktop environment called Mate (which is pronounced Muh-tay).
If you're curious about what software is running under the hood of desktop mode, the BT Speak is running the
Raspberry fork of Debian, whose latest edition is called Bookworm.

The BT Speak's desktop mode gives access to applications which are unavailable in traditional mode. Examples include:

- Mozilla Thunderbird, a full-featured email program for managing multiple email accounts.
- Chromium and Firefox, two mainstream Web browsers for accessing Web pages using a completely modern and familiar interface
- LibreOffice, a full-featured and powerful Office suite, including Writer for word processing and Calc for composing and managing spreadsheets. These programs are also compatible with Microsoft Office
- Gedit: a simple text editor

Although the BT Speak's desktop runs the Linux operating system, please don't let this concern you or stop you from learning how to use desktop mode. You don't need to be a Linux geek or a power user of Linux to become an expert in how to use desktop mode. If your previous knowledge is with Windows or the Mac, that's not a problem. You might be surprised at how similar the desktop mode is to those operating systems. On the other hand, you may not even be familiar with using other computers up until you began using your BT Speak. If you're in this particular camp, don't worry. This guide will walk you through the basics and will give you a good introduction to using desktop mode, even if you've never used another computer.

## Switching to Desktop Mode

When you're in traditional mode, you can switch to desktop mode by typing dots 1-2-3-4-5-6-8-chord (that's all of the keys except for dot 7). If this is the first time you've pressed this key since powering on, you'll hear your BT Speak say "starting desktop mode." There will be about ten seconds of silence while the desktop mode loads for the first time.

Next, you'll hear two short, ascending tones. After a few more seconds, your BT Speak will announce "screen reader on." You're now ready to use desktop mode.

Please note: specific commands are available between Desktop Mode and Traditional Mode (see Global Keys)

## Switching Back to Traditional Mode

When you're in desktop mode, you can switch back to traditional mode by pressing dots 1-2-3-4-5-6-7-chord (all of the keys except for dot 8.) Your BT Speak will say "traditional mode." In traditional mode, you'll be able to use the editor, along with all of the other applications that you're familiar with.

## Returning to Desktop Mode

When you return to desktop mode by pressing all of the keys except for dot 7, your BT Speak immediately says "desktop mode" and there is no additional wait time. This is because the desktop mode has already loaded and so switching from one mode to another will be instantaneous.

Please note: once you power your BT Speak off and then power back on again, there will be an initial delay when first loading the desktop mode. This delay only occurs when going to desktop mode for the first time after powering on your BT Speak.

## Terminating Desktop Mode

Once you return to traditional mode, there are times when you may want to terminate the desktop mode so that it is no longer running. This might be helpful if you plan on working in traditional mode for a while and you wish to save battery power. To do this, press dots 1-2-3-4-5-6-7-chord when you are in traditional mode. Your BT Speak will

ask, "do you really want to stop desktop mode?" If you do want to stop desktop mode from running, press the letter Y, followed by dot 8.

Note: Before terminating desktop mode, ensure that all of the desktop mode applications that you were working with are closed and that you have saved all of your work.

## Global Keys

In desktop mode, only a few commands that you're familiar with in traditional mode will be available until you return to traditional mode. For example, pressing O-chord for the Options menu or H-chord for context-sensitive help won't be available to you in desktop mode. If you want to use any of these commands, you can switch back to traditional mode by pressing all of the keys except for dot 8 (including the space key.) To switch back to desktop mode, press all of the keys at the same time (except for dot 7.)

There are a few global hotkeys that are available in both desktop mode and in traditional mode. These keys are:

- Speak the Time: T-chord with Dot 8
- Speak the Date: D-chord with Dot 8
- Speak Battery Status: dots 3-4 chord (ST sign) with Dot 8
- Speak the Current Master Volume Setting: Dots 2-3-5-6-chord
- Lower or Decrease the Master Volume: Dots 2-3-5-6-7-chord
- Raise or Increase the Master Volume: Dots 2-3-5-6-8-chord
- Reset the Master Volume to 60% and Change the Traditional Mode Voice to eSpeak: Dots 2-3-5-6-7-8-chord
- Lower or Decrease the Media Volume: Dots 1-2-3-5-6-chord
- Raise or Increase the Media Volume: Dots 2-3-4-5-6-chord
- Pause or Resume Media Playback: Dots 1-2-5-6-chord
- Skip to Previous Track: Dots 1-2-5-6-7-chord
- Skip to Next Track: Dots 1-2-5-6-8-chord
- Restart Media Track: Dots 1-2-5-6-7-8-chord

## The Orca Screen Reader

If you've had any previous experience using another computer, such as a PC running Windows, a Mac, an iPhone, etc., you know that the computer needs a screen reader to be running in the background. The screen reader is necessary because it speaks what you type as well as everything that's on the screen. This makes the computer totally accessible to a blind person. The BT Speak is no different.

In traditional mode, you've been using a screen reader called BRLTTY, which we've modified to work well with the BT Speak. In desktop mode, you're working directly with the Mate desktop in the Linux operating system. Since every operating system needs a screen reader to be running in order for it to be accessible, we need to be running a screen reader to ensure that the Mate desktop is also fully accessible for us as blind computer users. The name of this screen reader is Orca.

The Orca screen reader is already installed and set up for optimal use on your BT Speak. It's ready to use, with no additional activation or registration required.

As we said earlier, please don't worry if you have never used the Linux operating system. This guide assumes that you may have absolutely no prior experience using Linux. It is not necessary to know anything about Linux in order to use your BT Speak in desktop mode.

# Basic Keyboard Navigation

When we use a QWERTY keyboard, we usually have some additional keys beside the letters and numbers. For example, we have shift keys, one or two control keys, function keys, etc. Since these keys are very important and quite necessary to have, we need to ensure that you can press any of these keys using commands from your BT Speak's keyboard. This section will outline how to access these keys from your BT Speak.

## Arrow Keys

- Up arrow: dot 1 chord
- Down arrow: dot 4 chord
- Control+left arrow: dot 2 chord
- Control+right arrow: dot 5 chord
- Left arrow: dot 3 chord
- Right arrow: dot 6 chord

## Other Navigation Keys

- Enter: dot 8
- Backspace: dot 7
- Page-up: dots 2-3 chord
- Page-down: dots 5-6 chord
- Home: dots 1-3 chord
- End: dots 4-6 chord
- Control+home: dots 1-2-3 chord
- Control+End: dots 4-5-6 chord
- Tab: dots 4-5 chord
- Shift+tab: dots 1-2 chord
- Insert: dots 3-5 chord (low I or the IN-sign)
- Delete: dots 2-5-6 chord (low d)
- Escape: dots 2-6 chord (low E)
- Function Key: 2-3-5-chord (low F) followed by a letter (A for F1 through Z for F26)

If you've been using the BT Speak in traditional mode for even a short time, many of these chord commands will be very familiar to you. This is because we use them to navigate in our editor and, to an extent, in menus.

# Desktop Menus

There are three useful Menus in Desktop Mode: Applications, Places, and System. To access these menus, press O-chord and use dot-6 (right arrow) to move between the three menus.

## Applications Menu

The Applications Menu serves as the main gateway to the programs, settings and features of Desktop Mode, akin to the Options Menu in Traditional Mode. As its name suggests, the Applications menu displays a list of different desktop applications and options for adjusting hardware preferences. If you're familiar with the Windows operating system, the Applications menu will feel like the start menu. If you're a Mac user, the Applications menu will resemble the Applications folder that you can access from the Finder.

*Opening the Applications Menu*

Press O-chord and your BT Speak will say "Applications menu". Press dot 4-chord to move down through the menu; this is the same as pressing the down-arrow key on a QWERTY keyboard. Pressing dot 1 chord moves up through the menu and is the equivalent of the up-arrow key on a QWERTY keyboard.

*Applications Menu Contents*

Similar to the Applications menu in traditional mode, the Applications menu in desktop mode is organized into a series of submenus. The Internet submenu contains several Internet applications, the Office menu contains several office applications, etc. You may recognize these submenus as categories, with each category containing one or more relevant applications. To open a menu or an application to begin using it, press enter (dot 8).

## Places Menu

Once in Desktop Mode, pressing O-chord, then dot 6-chord (right arrow) moves to the Places menu.

The Places menu provides quick access to common locations, such as your home directory, recent documents, a network folder, etc.

## System Menu

Once in Desktop Mode, pressing O-chord, then dot 6-chord (right arrow) moves to the System menu. The System menu contains global options, such as accessing preferences, system administration, shutdown and suspend, etc.

## Keystrokes While Working in a Desktop Application

Aside from the basic keyboard navigation commands we've already listed, there are some additional chords that are useful while work in applications. The keystrokes described below follow with their QWERTY keyboard equivalents.

## Close a Dialog or Cancel an Action: Z-chord (Escape)

If you're in a menu or dialog box and you want to close it, you can press Z-chord to do this. This is the equivalent of using the escape key to close dialogs and menus when working in Windows or on the Mac.

## Close a Program: Z-chord with dot 7 (aAlt+F4)

Pressing Z-chord along with dot 7 closes the program you're in. This is identical to pressing Alt+F4 in Windows or Command+Q on the Mac.

## Navigating to an Application's Menu Bar: M-chord (F10)

If you've previously worked with Windows, you may recall that many programs allow you to press the Alt key to move focus to the program's menu bar, and from there you can press right arrow or left arrow to move across the top level menu items, with enter or down arrow opening the menu. Using VoiceOver on the Mac provides similar capabilities with the VoiceOver key with the letter M.

Similar functionality exists for desktop mode applications that possess a menu bar. The menu bar contains multiple items, which are expandable menus with options. Press M-chord to move the cursor to the menu bar and the first menu item will be spoken. You may then move across the different menu bar options with dot 3-chord or dot 6-chord (left arrow or right arrow, respectively). To open a menu bar option, press dot 4-chord (down arrow) or dot 8 (enter). The menu will open and you can then move down through the menu with dot 4-chord (down arrow) or

up through the menu with dot 1-chord (up arrow). When you get to the option that you want to open, press enter (dot 8).

## The Context Menu: M-chord With Dot 7 (Shift+F10)

The context menu is a pop-up menu that provides quick access to commands and actions that are relevant to the item you have selected or the area where your cursor lies. It offers a set of options that vary depending on the application or the part of the desktop you're interacting with. This menu will be different, depending on what you're currently pointing to. For example, if your cursor is focused on a misspelled word in LibreOffice Writer, pressing this key might bring up a list of possible correct words. If you're pointing to an application in the Applications menu, this menu will provide a list of options that are available for the application, such as copying it to the desktop. For Windows users, this functionality is similar to what happens when you press the Applications key or Shift+F10. If you're a Mac user, this is similar to pressing VO+Shift+M to open the context menu.

To open the context menu, press M-chord with dot 7.Adjusting Orca Preferences

As we stated earlier, when you're working in desktop mode, you're using the Orca screen reader. There may be times when you will want to adjust how Orca speaks particular items on the screen. You may also want to change Orca's speech preferences, such as adjusting the volume, speed and pitch of the voice, or switch to another text to speech engine or voice. The following sections will describe how to do this.

## Opening the Orca Preferences Dialog

Press O-chord with dot 7 to open the Orca Preferences dialog. In other words, press the letter O with the space key and dot 7 at the same time. This command is available from anywhere when you're in desktop mode, even from within an application.

Note: Sometimes, pressing O-chord with dot 7 may not always open the preferences dialog. If you encounter this problem, it may help to first move to another window or application before trying to open the Orca Preferences dialog. One quick solution is to move to the desktop by typing D-chord with dots 7 and 8. In other words, press the letter D with dot 7, the space key and dot 8. Once you move to the desktop, pressing O-chord with dot 7 should open the Orca Preferences dialog.

When pressing this key, you will hear your BT Speak say, "Screen Reader Preferences Dialog, General Page tab." This means that you are in the General Page or the General tab of this dialog. Your focus will be on the title of this page.

The Orca Preferences dialog consists of several pages. Each page of this dialog has its own title followed by specific options. When you are focused on the title of the page, you can press dot 6-chord (right arrow) to move from one page of options to another. You will hear the title of each page of options as you navigate with dot 6-chord, such as "Voice Page Tab", "Speech Page Tab", "Braille Page Tab", etc. Pressing dot 3-chord (left arrow) moves across the page titles in the opposite direction.

The page title gives you an idea of the type of options you'll encounter on that page. For example, the General page presents a list of general options, the Speech page gives you options for adjusting Orca's speech settings, and so forth.

Once you move to the page title that you want to explore, press dots 4-5-chord (the tab key) to navigate through the dialog options. Each press of dots 4-5-chord moves forward from one option to the next. Pressing dots 1-2-chord (the shift+tab key) moves backward through the list of options. If you are a Windows veteran, this type of dialog may be very familiar to you as many Windows programs use similar dialog boxes.

While we won't be documenting all of the options in the Orca Preferences dialog, we will focus on the Voice page in the following section. You may want to explore this page first, since its options allow you to adjust Orca's settings such as volume, pitch and speed of Orca's voice.

## Adjusting Orca's Voice Settings

Orca's voice settings may be adjusted by opening the Voice Page in the Orca Preferences dialog. To do this:

Press O-chord along with dot 7 to open the Screen Reader Preferences dialog.

Press dot 6-chord to move to the Voice page.

Press dots 4-5 chord to move to the first control. You should hear "voice type, combo box, default." Orca will also read some additional hint text, which announces "Press space to expand and use up and down to select an item."

A combo box gives you a list of items that you can navigate. To open or expand the combo box, press the space key. To move down the list of items, press dot 4-chord. To move up through the list of items, press dot 1-chord. When you hear the item that you want to select, press dot 8.

With this combo box, you can choose which Orca voice you'd like to adjust, such as the uppercase voice that you hear when speaking capital letters, the hyperlink voice that you hear when reading the names of links on a Web page, etc.

Press dots 4-5-chord to move to the next control. This is the Speech System combo box. This combo box only has one setting, which is Speech Dispatcher.

Press dots 4-5-chord to move to the speech synthesizer combo box. Press space to open or expand this combo box to choose what synthesizer or text to speech engine you'd like to use. This list will vary, depending on what text to speech engines you might have installed or removed using the text to speech manager in traditional mode. At the very least, you'll see options for eSpeak Eng for eSpeak and DTK Generic for Dec-talk. You can press dot 4-chord to move down through the list of choices and dot 1-chord to move up through the list of choices. Press dot 8 (enter) to select the option that you want.

Pressing dots 4-5-chord takes you to a combo box for changing the language of the voice. Depending on what has already been installed, you may only have one choice or you may have a choice of several languages.

Press dots 4-5-chord for the Person combo box. The choices in this combo box will vary, depending on what text to speech engine you are using and what voices were installed.

Press dots 4-5-chord for the Capitalization Style combo box.

Press dots 4-5 chord Instead of a combo box, you should be focused on what Orca calls a "horizontal slider" for changing the rate (or speed) of Orca's voice. With a slider, you can press dot 6-chord to adjust the slider to the right and dot 3-chord to move it to the left. With this particular slider, pressing dot 6-chord increases the rate or speed of the voice by one increment. As an example, if the speech rate is set for 55, pressing dot 6-chord moves the speech rate to 56, pressing dot 6-chord again adjusts the speech rate to 57, etc. Pressing dot 3-chord moves the slider in the opposite direction, incrementally reducing the speech rate with each key press.

If you'd like to move the slider by larger increments, there are two ways to do this. You can press dot 5-chord to increase or dot 2-chord to decrease the speech rate by 10%. For example, if your speech rate is set to 56, pressing dot 5-chord will increase the speech rate to 66, and another press of dot 5-chord will increase it to 76. In the same manner, dot 2-chord will reduce the speech rate by ten increments , moving from 56, 46, 36, etc.

You can also adjust the speech rate in 10% increments by pressing dots 5-6-chord (page-down) to move the slider to the right every ten steps. Pressing dots 2-3-chord (page-up) moves the slider to the left in increments of 10, thereby making the speech rate slower.

Pressing dots 4-5-chord moves to another slider to control the pitch of the voice. Use the same commands we just mentioned  to adjust this slider, making the pitch of the voice higher or lower, according to your preference.

Pressing dots 4-5-chord moves to the volume slider, where the same commands for the other sliders can be used to make Orca's voice softer or louder.

Press dots 4-5 chord and you should hear, "break speech into chunks between pauses." This control is known as a check box. Pressing the space key toggles this check box, announcing that the check box is "not checked" or "checked." If a check box is not checked, this means that the option is turned off or disabled. If the check box is checked, this means that the option is enabled.

As a reminder, if you want to move back to a previous option in this dialog box, you can press dots 1-2-chord, which is the mirror image opposite of dots 4-5-chord.

Eventually, you will find several items which are identified as buttons, such as an OK button, an Apply button, and a Cancel button.

If you press dot 8(enter) or the space key while you are focused on the OK button, any changes that you have made in this dialog box will be saved and the dialog box will close.

If you press dot 8 (enter) or the space key while you're focused on the Apply button, any changes that you have made to this dialog box will be saved but the dialog box will remain open, allowing you to continue working in it and even making more changes.

Pressing dot 8(enter) or the space key while you are focused on the Cancel button will close the dialog box and will not save any changes you may have made. Pressing Z-chord at any time, even if you're not pointing to the Cancel button, also activates the Cancel button. In other words, pressing Z-chord at any time is a quick way to close the dialog box without saving any changes.

Note: Although we are explaining how these navigation commands can be used in Orca's Preferences dialog, many of them will also work in other dialog boxes that you might encounter. In other words, pressing dots 4-5 chord (the tab key) moves from one control, such as a combo box or edit field, to the next control. Pressing dots 1-2-chord (shift+tab) moves in a backward direction to previous controls in a dialog box. Most dialog boxes will also have an OK button for closing the dialog and saving changes, and  a Cancel button for closing the dialog without saving changes. Dialogs that contain more than one page of options will also have an Apply button for saving your changes but keeping the dialog open.

## Switching Windows in Desktop Mode

The Window Switcher tool makes it easy to switch windows in desktop mode with just a couple keystrokes.  To use the Window Switcher, press dots 4-5-8-chord  and wait a few moments for the Window Switcher tool to open. Window Switcher presents a list of currently open windows and announces the currently active window Your cursor will be placed on the currently active window. Use dot-4 chord to scroll through the list of windows and press enter (dot 8) or space to select the window you would like to move your focus. This will immediately move your focus to the selected window, closing the Window Switcher tool. Mozilla Firefox (web browser)

# Introduction to the Mozilla Thunderbird (email client)

## Introduction

Thunderbird is a free and powerful email program that allows you to read, send and forward email messages and supports multiple email accounts. This guide will show you how to configure your email account, access your inbox, compose a new email message and how to work with attachments. We will also teach you some basic keyboard commands that will help get the most out of Thunderbird on your BT Speak. We recommend that you read the section on Getting Started with Desktop Mode before proceeding with learning the Thunderbird program.

Please note: contracted Braille input is not available within Thunderbird at this time. You will need to use computer Braille for entering your account information, email addresses, and for composing or replying to messages.

## Opening Thunderbird

From the desktop mode, press O- Chord (dots 1-3-5 plus the space key) to access the Applications Menu. Use dot 4 chord to navigate to the "Internet" menu and press enter (dot 8)to open the menu.

Press dot 4-chord to navigate through the list of internet applications until you find Thunderbird. Alternatively, you can press the letter T from the Internet menu to directly open Thunderbird without needing to use dot 4 chord to navigate through all of the options in the Internet menu.

Wait a few moments for Thunderbird to open.

Once you open Thunderbird for the first time, you will be in the account setup screen, which we will discuss in the next section.

## Adding an Account

On the account setup screen, you will be in an edit field where you can type your name that you want others to see in your email messages. Remember that you must use Computer Braille in this as well as all other fields.

Press Tab (dots 4-5-chord) to move to the "Email Address" field and type in your email address. Since you must type your email address in Computer Braille, to type the at (@) symbol, press dot 4 plus dot 7. Press dots 4-6 for the period.

Pressing tab again brings you to the password field. In this field, enter the password that you chose for your email account. For security, your password is not spoken as you type it, so you will hear "circle," also referred to as bullets or asterisks, with each character that you type in this field. After entering your password, press tab until you reach the continue button and press the space key to activate it. If you are using a Google account, such as Gmail, a Web page will load that will ask you to sign into your Google account. On this page, you will need to type your email address and then tab (dots 4-5 chord) to the button labeled Next and press space. Type in your Google password again and tab to the Next button or press enter (dot 8) after typing in your password. A Web page will load asking you to grant Thunderbird permission to access your Gmail account. This page may be silent upon loading, so press Tab (dots 4-5-chord)until you hear the Allow push button and press space or enter to activate it.

Note: If you accidentally press the Cancel button, you might be taken to a Web page containing documentation for the Thunderbird program. If this happens, close the Web page (M-8-chord, then letter X), reopen Thunderbird and repeat the above steps.

You will then be returned to Thunderbird, and you can press tab until you move to the Done button and press space or enter. Congratulations! Your account has now been successfully set up.

## Accessing the inbox and composing a new message

From anywhere within Thunderbird, you can press control one (X-chord followed by dot 2) to get to the inbox.

To navigate to the message list, press tab (dots 4-5-chord) until you hear "Table with X rows and X columns (where X refers to the number of messages being displayed), Inbox, tree, name of person." Press dot 4 chord or dot 1 chord to move up or down through the list of messages. To open a message, press enter.

Use dot 4 chord or dot 1 chord to navigate line by line through the message. To close a message and return to the inbox, press X chord followed by W to close the message window.

To compose a new message, press X-chord followed by N. You will be in the "To:" edit box. Type in an email address or a name from your contacts and press tab to move to the subject field.

Type the subject that you want for your message and press tab to move to the "message body" text box. When you are done writing your message, press X chord to emulate the control key followed by enter to send your message.

## Some Useful Keyboard Shortcuts

Go directly to the inbox: CTRL+1 (X chord followed by dot 2)

Delete the selected message: dots 2-5-6 chord

Reply to a message: from a message, press X chord followed by R.

Forward the selected message, X chord followed by L

Access the context menu for the selected message to move, delete, etc.: M chord with dot 8

## Downloading and Saving Attachments

1. From a message with an attachment, press M Chord to open the thunderbird menu bar. This is equivalent to pressing the alt key on a qwerty keyboard. Your focus will be on the file menu.
2. Press dot 3 chord to navigate left until you get to the Message menu.
3. Press dot 4 chord to go into the Message menu.
4. Press dot 4 chord until you get to the attachments menu.
5. Press enter (or dot eight) to open the list of attachments. If you press dot four chord, you will hear the name of the attachment, as well as options to open or save. Choose the Save All Attachments option.
6. Press dot four chord until you get to Save All Attachments and press enter. You will be placed in a file browser where you can select the folder where you want to save the attachments.
7. To go to the home folder, press shift tab (dots 1-2 chord) from the file browser until you find the button that says "Home, open your personal folder", and press enter. Focus will not return to the file browser, so press tab (dots 4-5-chord) until you get to the file browser. You will hear something like, "files, table with eleven rows, BT Speak, 1 of 13."
8. Use dot 4 chord to navigate down through the list of files and folders, and dot 1 chord to navigate up through the list of files. Once you have found the folder you want to save the attachment to, press enter on the folder name to open it. Tab (dots 4-5 chord) to the open button and press space or enter to save the attachment. You will be returned to the message you were in previously.
9. Press x chord followed by W to close the message and return to the inbox, or the folder you have selected.

You can access the attachments you have saved in both the traditional mode via the file browser, as well as on the desktop side.

## Sending an Attachment

1. Press X chord followed by N to open the new message window. Fill out the to, subject, and body fields (if applicable,) and press X chord followed by dot 7 plus a to open the attach a file window. You will have to do this process rather quickly, as the modifiers will reset after a few seconds.
2. Just like with saving attachments, you will be placed in a file browser. Select the file you want to attach. If you need to go to the home folder, Shift tab (dots 1-2 chord) until you hear "Home, open your personal folder",and press enter. Just like with saving attachments, focus will not automatically go back to the files list, so press tab (dots 4-5 chord) until you hear, "Files, table with 11 rows, name of folder," where name of folder is the current highlighted folder or file."
3. Find the file you want to attach by using dot 1-chord to move up or dot 4-chord to move down, and press enter on the file. You will be placed back in your message and focus will be on the attachments list.

If you want to get to the subject or the body of the message, press shift tab (dots 1-2 chord) to get to the subject field from the attachments list, or tab (dots 4-5 chord) to get to the body of the message. When you are ready to send your message, press X chord followed by enter. You may get a confirmation screen asking if you are sure you want to send your message. Focus will move to the Send button. Press space or enter to send the message.

# Introduction to Web Browsing

Your BT Speak includes the Chromium and Firefox web browsers, which are available from desktop mode. These are standard, mainstream web browsers that will perform similarly to those on other devices. The following sections will provide you with basic instructions on how to get started using your BT Speak to surf the web using Chromium or Firefox. It's worth pointing out that the two browsers use almost identical commands for opening and navigating Web pages. Therefore, the following sections will combine operating instructions for both browsers and we'll point out any differences, where applicable.

## How to Open Chromium or Firefox

1. From desktop mode, press O-chord for the Applications menu.
2. Press dot 4-chord until you move to the Internet submenu. Press dot 8 to open this submenu.
3. In the Internet submenu, you will find both the Chromium and the Firefox browsers. Select the desired browser and press enter (dot 8) to open it.

## Opening a Web Page

If you open Chromium, you will be prompted to enter a password for what is known as a keyring, which is where Chromium stores passwords for Web sites that you might want to save. Enter a password of your choosing in Computer Braille and press dot 8 to save it. You will then be placed on the address bar, where you can enter the address of a Web page that you want to read. Firefox will not ask you for a password and should instead place you on the address bar.

If you're not focused on the address bar, there are two ways to get to it. You can either press the letter D with dot 8 (alt+D) or the letter L combined with dots 7 and 8 (ctrl+L.) You should hear the address of whatever Web page is currently open. At this point, you are free to type the address of the Web site that you want to open. For example, if you want to open the Web site for Blazie Technologies, you would type blazietech.com, followed by dot 8. You don't need to delete the address which is already there. Just type the address of the site that you want to open and the currently displayed Web site address will be replaced by the address that you type.

# Navigating a Web Page

Both Chromium and Firefox have two navigation modes, known as browse mode and focus mode. Generally, you will choose Browse Mode when you want to read and navigate a web page and choose Focus Mode when you need to interact with an edit field or a list of items.

In most cases, Orca is able to determine when browse mode or focus mode is required and it will switch to these modes automatically, depending on where you move to on the Web page. However, if you need to manually switch to either of these modes, you can do so by pressing the letter N with dots 7, the space key and dot 8 at the same time. Orca will either say "focus mode" or "browse mode."

## Browse Mode

Browse mode allows you to read and navigate a Web page using the same commands that you use for other documents, such as files that you open when you're in traditional mode. For example, you are free to read the Web page moving by lines, words and characters. You can press dots 1-2-3-chord to move to the top of the page and dots 4-5-6-chord to move to the bottom of the page.

In browse mode, you can also quickly move to specific elements which are on the page, such as moving to the next or previous link, heading, edit field for entering text, etc. This is done by typing single letters or numbers. Here are some examples:

Move to the next button: B

Move to the next combo box: C

Move to the next edit field: E

Move to the next image (graphic): G

Move to the next heading: H

Move to the next item in a list: I

Move to the next link: k

Move to the next list: l

Move to the next radio button: r

Move to the next table: t

Move to the next unvisited link: u

Move to the next visited link: V

Move to the next check box: x

Move to a specific heading level: enter a number from 1-6. For example, typing the number 1 moves to the next level 1 heading level on that page.

If you want to move to any of these elements in reverse, such as moving to the previous heading, you would use the same keystrokes in uppercase. For example, to move to the previous heading on the page, press shift+H (H along with dot 7.)

If you attempt to move to an element and if that element does not exist on the page, you will be told this when you issue the command. If no more elements are found in a forward direction, Orca will move or wrap back to the top of

the Web page. For example, suppose that you are located at the bottom of a Web page and you press the letter H to move to the next heading. Since you're at the bottom of the page, there are no headings that you can move to. In that instance, Orca will say "wrapping to top" and will search for any headings from the top of the page. If the page contains headings, you will be placed at the beginning of that heading.

## Focus Mode

What if you want to move to an edit field to write something, such as entering a search term on Google, or if you need to move through a list of items? This is when you will want to activate Orca's focus mode. Focus mode is necessary when you want to enter text in an edit field or when you need to choose items that are contained in a list.

# Conclusion

We hope that this user guide has helped you to get up and running with your BT Speak. If you need assistance or have an idea for a feature, please don't hesitate to reach out to us.

You can contact us by phone at (772) 214-1616.

Our support email address is support@blazie.net.

We also have a public support group where you can ask questions about your BT Speak as well as interact with other users. This list is monitored by staff members of Blazie Technologies. To join the list, send an email to btspeak+subscribe@groups.io.

We hope you enjoy working with your BT Speak and that it provides you with years of excellent service.

# Appendix A: Command Quick Reference

## Commands Summary

*General*

Interrupt speech: Dots 7-8.

Exit the current menu level. Z-Chord:

Exit directly to the editor. (Deep Escape) Z-7-Chord:

Say where you are, i.e. the name of the current menu or command: 1-5-6-Chord (wh).

Say the current date: D-8-Chord:

Say the current time: T-8-Chord:

Say the current battery status: 3-4-8-Chord (st).

Enter Review mode: R-Chord.

Enter the Speech Controls menu: S-Chord:.

Say the master volume level: 2-3-5-6-Chord:

Lower the master volume level by 5%: 2-3-5-6-7-Chord:

Raise the master volume level by 5%: 2-3-5-6-8-Chord:

Reset the audio output device to the internal speakers and the master volume level to 90%: 2-3-5-6-7-8-Chord:

*Editor commands:*

Open the Editor Menu: E-chord

Open the Delete Menu: D-Chord

Open the Navigation Menu: N-Chord

Open the Options Menu: O-Chord

Open the Paste menu: P-Chord

The editor has two types of commands: control letters and meta characters.

To enter a Control character (usually a letter - case is ignored), either add both dots 7 and 8 to it or prefix it with X-Chord.

For example, to enter Control-P type either dots 1-2-3-4-7-8 or type X-Chord followed by p.

To enter a Meta character (case is significant), add dot 8 to it.

For example, to enter Meta-p type dots 1-2-3-4-8.

*Editor Help*

Both the File Management menu (O-Chord M) and the File Browser (O-Chord F) provide these file editing functions:

Create a New File (prompts for a file name): C

Open an Existing File (prompts for a file name): O

Leave the Current File Without Saving Any Changes: L

Quit the Current File Without Saving Changes: Q

Another way to open an existing file is to press Enter while pointing to it when on it in the File Browser.

An editor command is assigned to either a Control character or to a Meta character.

These chords provide easier and more intuitive ways to perform useful editing functions.

toggle the showing of line numbers (editor command is Meta N 3-4-5-6-Chord (number sign)

type a "newline" character (editor command is Control M): 8-Chord

delete the character to the left of the cursor (editor command is Control H): 7-Chord

delete the character that the cursor is on (editor command is Control D): 2-5-6-Chord (low d)

say the current line (editor command is Control Y): 1-4-Chord

say the current word (editor command is Control V): 2-5-Chord

say the current character (editor command is Control J): 3-6-Chord

go to the previous line (editor command is Arrow-Up): 1-Chord

go to the next line (editor command is Arrow-Down): 4-Chord

go to the previous word (editor command is Control B): 2-Chord

go to the next word (editor command is Control F): 5-Chord

go to the previous character (editor command is Arrow-Left): 3-Chord

go to the next character (editor command is Arrow-Right): 6-Chord

go to the first character of the current line (editor command is Control A): 1-3-Chord

go to the last character of the current line (editor command is Control E): 4-6-Chord

go to the first line of the file (editor command is Meta Backslash): 1-2-3-Chord

go to the last line of the file (editor command is Meta Slash): 4-5-6-Chord

go to the beginning of the previous (or current) block of text (editor command is Meta 7): 2-3-Chord

go to the beginning of the next block of text (editor command is Meta 8): 5-6-Chord

Place/remove an anchor (editor command is Meta X): G-Chord

go to the previous anchor (editor command is Control P): 1-2-7-Chord

go to the next anchor (editor command is Control N): 4-5-8-Chord

go to the beginning of the current (or previous) paragraph (editor command is Meta Left Parenthesis): 1-3-7-Chord

go to the end of the current (or next) paragraph (editor command is Meta Right Parenthesis): 4-6-8-Chord

switch to the previous open file (editor command is Meta Less Than): 2-3-7-Chord

switch to the next open file (editor command is Meta Greater Than): 5-6-8-Chord

find forward (editor command is Control W): F-Chord (prompts for text)

find backward (editor command is Control Q): F-7-8-Chord (prompts for text)

find previous (editor command is Meta Q): F-7-Chord

find next (editor command is Meta W): F-8-Chord

set/remove the mark (editor command is Meta A)M-Chord

copy to the clipboard (editor command is Meta 6): 1-2-6-Chord

paste from the clipboard (editor command is Control U): 3-4-6-Chord


Cutting and copying to, and pasting from, the clipboard can also be performed via the Delete menu (D-chord)

These operations use the "from to" (rather than the "from through") paradigm, i.e. they're exclusive rather than inclusive.

This means that the first character is included but that the last character isn't.

If the cursor is before the mark then the marked character isn't included.

If the cursor is after the mark then the character under the cursor isn't included.

Clipboard commands have also been defined for those who are accustomed to using the traditional Control+X, Control+C and Control+V conventions.

These are formed by adding 8-Chord to the letter.

Set the mark: M-8-Chord

Cut text to the clipboard: X-8-Chord

Copy text to the clipboard: C-8-Chord

Paste text from the clipboard: V-8-Chord


The full list of the editor's QWERTY keyboard commands is:

Insert a new line at the cursor position: Enter

Insert a tab at the cursor position: Tab

Go back one character: left arrow

Go forward one character: right arrow

Move up one line: up arrow

Move down one line: down arrow

Move up to the previous screen: Page Up

Move down to the next screen: Page Down

Move to the beginning of the current line: Home

Move to the end of the current line: End

Paste another file into the current (or a new) file: Insert

delete the current character: Delete

delete the character to the left of the cursor: Backspace

Move to the beginning of the current line: Control A

Move to the previous word: Control B

Show the cursor's position: Control C

Delete the current character at the cursor position: Control D

Move to the end of the current line: Control E

Move to the next word: Control F

display help (Control X to exit): Control G

delete the character to the left of the cursor: Control H

Insert a tab at the cursor position: Control I

Say current character: Control J

Cut the current line or marked region: Control K

Refresh/redraw the screen: Control L

Insert a new line at the cursor position: Control M

Go to the next anchor (wraps from last to first): Control N

Save the current file or marked region: Control O:

Quit the current file without saving changes: Control O twice

Move to the previous anchor (wraps from first to last): Control P

search backward for a string (or regular expression): Control Q

paste another file into the current (or a new) file: Control R

Save the current file without closing it: Control S

insert the output of an editor function or an external command into the current (or a new) file: Control T

paste the contents of the clipboard at the cursor position: Control U

Say the current word: Control V

Search forward for text or for a regular expression: Control W

Close the current file or exit the editor: Control X

Say the current line: Control Y

Delete (zap) the current line or marked region: Control Z

Attempt to complete the current word: Control Right Bracket


set the mark at the cursor's position: Meta A

invoke the linter: Meta B

enable/disable always show cursor position: Meta C

Count the number of words, lines and characters: Meta D

redo the last undone operation: Meta E

invoke the formatter: Meta F

Go to the specified line and column (prompts for line, column numbers): Meta G

Enable/disable smart home key: Meta H

Enable/disable auto indent: Meta I

justify the entire file: Meta J

Enable/disable cut from cursor: Meta K

Enable/disable hard wrapping of over-long lines: Meta L

Enable/disable mouse support: Meta M

Enable/disable the showing of line numbers: Meta N

Enable/disable convert typed tabs to spaces: Meta O

Enable/disable show whitespace: Meta P

Search backward for the next occurrence: Meta Q

Replace a text string or a regular expression: Meta R

Enable/disable soft wrapping of over-long lines: Meta S

Cut from the cursor position to the end of the file: Meta T

Undo the last operation: Meta U

Insert the next keystroke (verbatim): Meta V

Search forward for the next occurrence: Meta W

Place/remove an anchor at the current line: Meta X

Enable/disable color syntax highlighting: Meta Y

Invoke the spell checker: Meta Z (Note: the spell checker is currently not accessible. This is a known issue.)

Meta 1: delete backward to the start of the current word

Meta 2: delete forward to the start of the next word

Meta 3: comment/uncomment the current line (or marked lines)

Meta 6: copy the current line (or marked region)

Meta 7: go to the beginning of the current (or previous) block of text

Meta 8: go to the beginning of the next block of text

Meta Left Parenthesis: go to the beginning of the current (or previous) paragraph

Meta Right Parenthesis: go to the end of the current (or next) paragraph

Meta Equal: scroll the line with the cursor to the middle of the screen

Meta Plus: scroll down one line

Meta Minus: scroll up one line

Meta Less Than: switch to the previous open file

Meta Greater Than: switch to the next open file

Meta Left Brace: unindent the current line (or marked lines)

Meta Right Brace: indent the current line (or marked lines)

Meta Right Bracket: go forward/backward to the matching bracket

Meta Backslash: go to the first line of the file

Meta Slash: go to the last line of the file

Meta Colon: start/stop recording a macro

Meta Semicolon: run the last recorded macro

Control B: go back one word

Control F: go forward one word

Control J: say the current character

Control N: go to the next anchor

Control P: go to the previous anchor

Control V: say the current word

Control Y: say the current line

Control Z: zap (discard) the current line (or marked region)

Meta X: place/remove an anchor at the current line

Meta Z: invoke the spell checker

*Using the Delete Menu*
D-Chord enters the Delete menu - Z-Chord exits it.


The following key combinations can be used to navigate the menu:

select the first item: 1-2-3-Chord

select the last item: 4-5-6-Chord

select the previous item (wraps from first to last): 1-Chord or Backspace

select the next item (wraps from last to first): 4-Chord or Space

activate the selected item: Enter (Dot 8)

copy the selected item to the User menu: Control C


Each item in the menu has a single-character shortcut.

When you select a menu item, the cursor is initially placed on it such that 3-6-Chord will tell you what its shortcut is.

Typing the shortcut for an item will both select and activate it.

If the shortcut isn't unique then the next item with it will be selected but, rather than also activating that item, you'll hear a beep.


The Delete menu provides the following shortcuts:

b: delete backward to the start of the current word

c: delete the current character

k: copy the current line (or the marked region)

l: cut the current line (or the marked region)

m: set or remove the mark

r: redo the last undone operation

u: undo the last operation

w: delete forward to the start of the next word

z: cut to the end of the file

*Using the Paste Menu*
P-Chord enters the Paste menu - Z-Chord exits it.

The following key combinations can be used to navigate the menu:

select the first item: 1-2-3-Chord

select the last item: 4-5-6-Chord

select the previous item (wraps from first to last): 1-Chord or Backspace

select the next item (wraps from last to first): 4-Chord or Space

activate the selected item: Enter (Dot 8)

copy the selected item to the User menu: Control C

Each item in the menu has a single-character shortcut.

When you select a menu item, the cursor is initially placed on it such that 3-6-Chord will tell you what its shortcut is.

Typing the shortcut for an item will both select and activate it.

If the shortcut isn't unique then the next item with it will be selected but, rather than also activating that item, you'll hear a beep.

The Paste menu provides the following shortcuts:

c: paste the last calculator result

d: paste the current date

e: paste the content of the editor's clipboard

g: paste the last Gregorian date result

s: paste the last stopwatch reading

t: paste the current time

*Using the Navigation Menu*
N-Chord enters the Navigation menu - Z-Chord exits it.

The following key combinations can be used to navigate the menu:

select the first item: 1-2-3-Chord

select the last item: 4-5-6-Chord

select the previous item (wraps from first to last): 1-Chord or Backspace

select the next item (wraps from last to first): 4-Chord or Space

activate the selected item: Enter (Dot 8)

copy the selected item to the User menu: Control C

Each item in the menu has a single-character shortcut.

When you select a menu item, the cursor is initially placed on it such that 3-6-Chord will tell you what its shortcut is.

Typing the shortcut for an item will both select and activate it.

If the shortcut isn't unique then the next item with it will be selected but, rather than also activating that item, you'll hear a beep.

The Navigation menu provides the following shortcuts:

Less Than (dots 1-2-6): switch to the previous file (editor command is Meta Less Than)

(BT Speak command is 2-3-7-Chord)

Greater Than (dots 3-4-5): switch to the next file

(editor command is Meta Greater Than)

(BT Speak command is 5-6-8-Chord)

Left Parenthesis (dots 1-2-3-5-6): go to the beginning of the current (or previous) paragraph

(editor command is Meta Left Parenthesis)

(BT Speak command is 1-3-7-Chord)

Right Parenthesis (dots 2-3-4-5-6): go to the end of the current (or next) paragraph

(editor command is Meta Right Parenthesis)

(BT Speak command is 4-6-8-Chord)


Left Brace (dots 2-4-6): go to the start of the current (or previous) block

(editor command is Meta 7)

(BT Speak command is 1-2-7-Chord)


Right Brace (dots 1-2-4-5-6): go to the start of the next block

(editor command is Meta 8)

(BT Speak command is 4-5-8-Chord)


Right Bracket (dots 1-2-4-5-6-7): go to the matching bracket

(editor command is Meta Right Bracket)


Equals (dots 1-2-3-4-5-6): place/remove an anchor

(editor command is Meta X)


Minus (dots 3-6): go to the previous anchor

(editor command is Control P)

(BT Speak command is 1-2-3-7-Chord)


Plus (dots 3-4-6): go to the next anchor

(editor command is Control N)

(BT Speak command is 4-5-6-8-Chord)


## *Using the Calendar*
Calendar Menu Help


This adgenda-style calendar lets you assign events, appointments, and activities to dates in your calendar. The command to exit is q.

The following menu options are available:

Today's Events- Displays a list of events, ordered by time of day. Events with no time is assignment will appear first.

Browse Weekly Events- Displays a list of events for today's date and the following six days. The options 'previous week' and 'next week' are displayed at the top and bottom of the list, respectively. Selecting 'previous week' shows a list of events occurring on the six previous days, including the earliest date on the currently displayed list. Select next week to view events occurring over the next six days, including the last day of the currently displayed list.

Search Date- Prompts for a date to search. Refer to the date formats listed below for accepted date entry formats.

Search Event- Prompts user to search for an event by keyword. Displays a list of chronologically ordered events matching the search keyword

Add an entry- Prompts user for a new event to add to the calendar. The entry should adhere to the following format: Date, Time, Event name/description. See Date formats and Time formats below for a list of date and time entry formats supported. A message will display indicating if a date is not recognized. If the time is improperly entered, it may cause its data to appear with the event name/description.


Selecting an event from a list will display the following options to act on the event:

Edit date- shows the current date assignment and prompts user for a new date assignment. Enter key saves the new date if it is entered in the correct format (see date formats below)

Edit time- shows the current time assignment for an event (if a time is assigned) and prompts user for a new time to assign to the event. Enter key saves the new time (see time formats below)

Edit event- shows the current event name/description and prompts user for a new event name assignment. Enter saves the new entry description.

Delete event- permanently removes the selected event from your calendar. User is prompted to confirm whether or not to delete the entry as the change is permanent.


Supported entry formats:

Date formats (example January 01, 2024): 01-01 (defaults to the current year when year is not specified), 1-1, 01-01-24, 1/1, 1/1/24, 1/01/24, Jan 01, Jan 1, Jan 1, 2024, January 01, January 1, 2024

Time formats: 1pm, 1:30pm, 1 am, 1:30am


*Options Found in The Calendar Menu*


Calendar Menu Help

BT

The calendar lets you record events, appointments, and activities to dates. Exit with Z-chord.

The following menu options are available:

Today- Displays a list of events, ordered by time of day. Events with no time is assignment will appear first.

Week- Displays a list of events for today's date and the following six days. The options 'previous' and 'next' are displayed at the top of list (dots 1, 2, 3, space) and bottom of the list (dots 4, 5, 6, space), respectively. Selecting 'previous week' shows a list of events occurring on the six previous days, including the earliest date on the currently displayed list. Select next week to view events occurring over the next six days, including the last day of the currently displayed list.

Month- Displays a list of events in the month of today's date. Select 'previous' (top of list) or 'next' (bottom of list) to view entries in a different month.

Search Date- Prompts for a date to search. Refer to the date formats listed below for accepted date entry formats.

Search Event- Prompts user to search for an event by keyword. Displays a list of chronologically ordered events matching the search keyword

Add an entry- Prompts user for a date, time, and event to add to the calendar. If a time is not entered, the event time defaults to 'all day'. See 'Date formats' and 'Time formats' below for a list of date and time entry formats supported. A message will display indicating if a date is not recognized. If the time is improperly entered, it may cause its data to appear with the event name/description.

Gregorian Date Calculator- allows you to calculate the day of the week of a past or future date (see 'date calculator' section below)

Calendar options- toggle calendar preferences or save your calendar to a .txt (explained below)

Selecting an event from a list will display the following options to act on the event:

Edit date- shows the current date assignment and prompts user for a new date assignment. Enter key saves the new date if it is entered in the correct format (see date formats below)

Edit time- shows the current time assignment for an event (if a time is assigned) and prompts user for a new time to assign to the event. Enter key saves the new time (see time formats below). If no time is assigned, the event defaults to 'All day'

Edit event- shows the current event name/description and prompts user for a new event name assignment. Enter saves the new entry description.

Delete event- permanently removes the selected event from your calendar. User is prompted to confirm whether or not to delete the entry as the change is permanent.

Calendar options menu:

Braille input- Select 'on' to create and edit entries in contracted braille. Select 'off' for standard text entries.

Default date- Selecting 'on' pre-fills the date entry field with today's date when adding a new entry to your calendar

Save calendar as text- Select this option to save your calendar as a chronologically line-ordered list of events in plain text. The resulting file saves to your home directory named with the current date in the format YYMMDD-calendar.txt

Supported entry formats:

Date formats (example January 01, 2024): 01-01 (defaults to the current year when year is not specified), 1-1, 01-01-24, 1/1, 1/1/24, 1/01/24, Jan 01, Jan 1, Jan 1, 2024, January 01, January 1, 2024

Time formats: 1pm, 1:30pm, 1 am, 1:30am

## Gregorian Date Calculator

The date calculator allows you to calculate the day of the week of a past or future date in three ways:

1. By entering the number of days (starting from the current date). An optional plus sign (Dots 3-4-6) at the beginning means you want to look forward, while a minus (Dots 3-6) means you want to look back.

2. By entering a specific date either in the form MMDDYY or MMDDYYYY, where MM represents the month, DD the day, and YY or YYYY the year.

3. By entering a number-sign (Dots 3-4-5-6) to hear the day number of the current year.

All numbers should be entered using Computer Braille (that is, dropped numbers with no number-sign).

When finished, press 8 to hear the date.

If the date calculator was not able to understand what you entered, it responds with "invalid input."

Some examples:

1. To find the date 30 days from now, enter 30 or +30.

2. To find the date 500 days ago, enter -500.

3. To learn which day of the week occurred on July 4, 1776, type 07041776.

4. To learn when January 1, 1995 occurred, enter either 010195 or 01011995.

5. To find the number of days since the current year began, enter the number-sign. January 1 is day 1, while December 31 is day 365.

## Desktop Navigation

The chords used to navigate the BT Speak Desktop are listed below.

These keystrokes assume that the Mate session manager is being used.

The PC keyboard key combination for each binding is also listed (within parentheses) for those who are familiar with them.

The Super key, used in some of the bindings, might not be familiar to some - it's commonly also known by other names such as the Windows or Command key.

### Switching between Desktop and Basic/Traditional mode:

Switch to Traditional mode: 1-2-3-4-5-6-7-Chord (Control + Alt + F1)

Switch to Desktop mode: 1-2-3-4-5-6-8-Chord (Control + Alt + F7)

### Opening commonly-used windows:

Open the Main (or Start) menu: O-Chord (Alt + F1)

Open the Run prompt: R-Chord (Alt + F2)

Open a new terminal: T-Chord (Control + Alt + T)

Open the menu bar of the current application: M-Chord (F10)

Open the context menu of the current application: M-7-Chord (Shift + F10)

Open the context menu of the current window: M-8-Chord (Alt + Space)

### Moving the screen cursor:

Move left one character: 3-Chord (Left-Arrow)

Move right one character: 6-Chord (Right-Arrow)

Move left one word: 2-Chord (Control + Left-Arrow)

Move right one word: 5-Chord  (Control + Right-Arrow)

Move up one line: 1-Chord (Up-Arrow)

Move down one line: 4-Chord (Down-Arrow)

Move to beginning of the current line: 1-3-Chord  (Home)

Move to end of the current line: 4-6-Chord (End)

Move to the top of the document: 1-2-3-Chord (Control + Home)

Move to the end of the document: 4-5-6-Chord  (Control + End)

Move up one screen: 2-3-Chord (Page-Up)

Move down one screen: 5-6-Chord (Page-Down)

### Extending the current text selection (dot 7 added to the corresponding screen cursor movement keys):

Select the previous character: 3-7-Chord (Shift + Left-Arrow)

Select the next character: 6-7-Chord (Shift + Right-Arrow)

Select the previous word: 2-7-Chord  (Shift + Control + Left-Arrow)

Select the next word: 5-7-Chord (Shift + Control + Right-Arrow)

Select the previous line: 1-7-Chord (Shift + Up-Arrow)

Select the next line: 4-7-Chord  (Shift + Down-Arrow)

Select to the beginning of the current line: 1-3-7-Chord  (Shift + Home)

Select to the end of the current line: 4-6-7-Chord (Shift + End)

Select to the top of the document: 1-2-3-7-Chord  (Shift + Control + Home)

Select to the end of the document: 4-5-6-7-Chord (Shift + Control + End)

Select the previous screen: 2-3-7-Chord (Shift + Page-Up)

Select the next screen: 5-6-7-Chord  (Shift + Page-Down)

## Moving between controls, windows, and panels (Tab key bindings):

Go to the previous control within the current window: 1-2-Chord  (Shift + Tab)

Go to the next control within the current window: 4-5-Chord (Tab)

Go to the previous document within the current application: 1-2-7-Chord  (Shift + Control + Tab)

Go to the next document within the current application: 4-5-7-Chord  (Control + Tab)

Go to the top-level window of the previous application: 1-2-8-Chord  (Shift + Alt + Tab)

Go to the top-level window of the next application: 4-5-8-Chord (Alt + Tab)

Go to the previous panel on the desktop: 1-2-7-8-Chord  (Shift + Control + Alt + Tab)

Go to the next panel on the desktop: 4-5-7-8-Chord (Control + Alt + Tab)

## Closing windows:

Cancel an action or close a dialog Z-Chord: (Escape)

Close the current application: Z-7-Chord  (Alt + F4)

Close the active child window of the current application: Z-8-Chord  (Control + W)

## *Desktop Review*

Orca is the screen reader used by the BT Speak to review what's on its desktop.

These bindings assume that Orca's laptop layout is being used and that the Orca Modifier key is Caps Lock.

Please do NOT change these settings.

## Reviewing by character:

Speak the current character: 3-6-Chord

Speak the current character phonetically: Press 3-6-Chord twice

Speak the current character's hexadecimal Unicode value: Press 3-6-Chord three times

Speak the character's attributes (color, etc): Long press 3-6-Chord

move the review cursor to the previous character: 3-6-7-Chord

move the review cursor to the next character: 3-6-8-Chord

moves the review cursor to the last character of the current line: Long press 3-6-8-Chord

### Reviewing by word:

Speak the current word: 2-5-Chord

Spell the current word: Press 2-5-Chord twice

Spell the current word phonetically: Press 2-5-Chord three times

Move the review cursor to the previous word: 2-5-7-Chord

Moves the review cursor to the word above the current word: Long press 2-5-7-Chord

Move the review cursor to the next word: 2-5-8-Chord

Moves the review cursor to the word below the current word: Long press 2-5-8-Chord

### Reviewing by line:

Speak the current line:1-4-Chord

Spell the current line: Press 1-4-Chord twice

Spell the current line phonetically: Press 1-4-Chord three times

Speak the currently selected text or item(s): Long press 1-4-Chord

Move the review cursor to the previous line: 1-4-7-Chord

Moves the review cursor to the first line: Long press 1-4-7-Chord

Move the review cursor to the next line: 1-4-8-Chord

Moves the review cursor to the last line: Long press 1-4-8-Chord

### Where Am I:

Speak basic Where Am I information: 1-5-6-7-Chord (wh)

Speak detailed Where Am I information: Press 1-5-6-7-Chord (wh) twice

Speak the title bar: 1-5-6-8-Chord (wh)

Speak the status bar: Press 1-5-6-8-Chord (wh) twice

Describe the current item or widget: 1-5-6-7-8-Chord (wh)

### Continuous reading:

Say below - speak the rest of the text: 1-2-4-5-6-Chord (er)

Reviews the current dialog or window: Press 1-2-4-5-6-Chord (er) twice

### Finding text:

Open Orca's find dialog - prompts for new search text: F-Chord

Find the previous occurrence of the current search text: F-7-Chord

Find the next occurrence of the current search text: F-8-Chord

## Changing Orca settings:

Open the general Orca preferences dialog: O-7-Chord

Open the Orca preferences dialog for the focused application: O-8-Chord

## Pointer (mouse) emulation:

Route the pointer to the current item: P-Chord

Perform a left mouse click on the current item: P-7-Chord

Perform a right mouse click on the current item: P-8-Chord

Move the focus into or away from the current mouse-over (web only): P-7-8-Chord

## Current time and date:

Speak the current time: T-7-Chord

Speak the current date: Press T-7-Chord twice

## Toggling review settings (dots 7 and 8 added to easy-to-remember letters):

Toggle flat review mode on/off: F-7-8-Chord

Toggle the navigation mode between browse and focus: N-7-8-Chord

Enable sticky focus mode: Press N-7-8-Chord twice

Enable sticky browse mode: Press N-7-8-Chord three times

Toggle structural navigation mode on/off: S-7-8-Chord

Toggle the table reading mode between cell and row: T-7-8-Chord

Toggle the verbosity between brief and full: V-7-8-Chord