ElBraille 14

User's Guide

Freedom Scientific Inc.

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Safety and Maintenance

Do not attempt to repair ElBraille or open its case. This product contains no user serviceable parts. Any unauthorized attempt to service or replace internal components will void the product warranty.

Keep ElBraille away from wet areas, rain, and other sources of liquids. Do not submerge ElBraille.

Always operate ElBraille in a place where the temperature is between 5° and 35° C (41° and 95° F).

Do not store in places subject to temperature extremes such as a parked car.

Use only the power adapter that came with ElBraille to charge its internal battery pack. Other adapters may damage the unit.

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Introduction

Welcome to your ElBraille, the twenty-first century, take anywhere replacement for the dedicated notetaker. Running Windows 10 with JAWS, and a full-featured braille display with a full Braille keyboard, your ElBraille 14 is a fully accessible compact computer.

The ElBraille includes the following key features:

- Runs Windows 10 and JAWS
- Focus 14 Blue Braille display
- Intel® Atom™ x5-Z8300, Quad-Core 1.84 GHZ processor
- 2 GB RAM
- 160 GB of internal storage
- 2 stereo speakers, built-in microphone, and 1/8" (3.5 mm) headphone jack

- An additional system speaker with sound and vibration feedback
- SD card slot supporting SD, SDHC, SDXC up to 256 GB
- USB 3.0 port
- Mini HDMI port
- Wireless WLAN802.11 A/B/G/N/AC networks support (2.4 and 5 GHz)
- Bluetooth V4.2
- A built-in 4G LTE modem supporting FDD LTE: B2/B4/B12 and WCDMA: B2/B4/B5
- Rechargeable 10,400 mAh battery (Approximately 17 to 20 hours on battery, even with wireless networking turned on)
- Specially designed apps for performing popular actions such as the creation of voice or text notes, listening to audio content, and more
- Supports Microsoft Office 2016 (Office 365), Office 2013, and Office 2010

What's in the Box?

- ElBraille dock station
- ElBraille eco-leather carrying case with a shoulder strap
- ElBraille AC adapter
- ElBraille manual in print and braille
- SD card with system backup

Physical Layout

Position the ElBraille on a flat surface so that the section that contains the braille display is directly in front of you.

On the left side, going from front to back, you will find an Extractor button (used to remove the Focus 14 Blue display from the unit), a mini HDMI port, and a Micro-SIM slot. The HDMI port enables you to connect an external display such as a projector for running a PowerPoint presentation, or to a monitor so a sighted teacher or parent can also view the output from ElBraille. The Micro-SIM slot allows you to insert a SIM card from a cellular provider and use the built-in 4G LTE modem.

Note: The ElBraille has been confirmed to work with AT&T. Other GSM and CDMA networks may work as well.

On the right side, going from front to back, you will find another Extractor button (used to remove the Focus 14 Blue display from the unit), a headphone jack, SD card slot, USB port, and the connector for the AC adapter.

The front part of the unit contains the braille display. Above the display are six buttons. Going from left to right, they are; E1, E2, Volume Down, Volume Up, E3, and E4. Above these buttons is the ElBraille inscription in braille. The speakers are located to the left and right of this inscription.

In the bottom left corner there is a recessed Power button. The LED indicator and the built-in microphone are located near this button. A magnetic cover near the left edge of the device covers the USB port connecting the braille display to the main unit.

Connecting and Disconnecting the Braille Display

To connect the Focus 14 Blue to the ElBraille, do the following:

1. Remove the magnetic cover, located to your left when the open front section of the unit is facing you, and lift the USB connector until it is perpendicular to the main unit.

2. Insert the USB connector into the USB port on the Focus.

3. Lower the display onto the main unit and make sure the rear of the display fits under the section that contains the ElBraille buttons.

4. Gently pull the front of the display down until it clicks.

5. Close the magnetic cover so it covers the USB connector.

In most cases, you should not need to disconnect the display as you can use the Focus over Bluetooth with another device while continuing to use it over USB with ElBraille. If you need to remove the Focus 14 Blue braille display from the main unit, do the following:

1. Remove the ElBraille from the leather carrying case.

2. Remove the magnetic cover and disconnect the USB cable from the display.

3. Simultaneously press the extractor buttons located on the left and right sides of the unit toward the front.

4. Gently lift and slide the display out of the unit.

LED Indication Types

The following table lists the available LED indicator types.

Color	Meaning
Green	The unit is turned on and running on battery
Yellow	The unit is turned on and plugged into an outlet using the AC adapter
Red	The unit is turned off and charging
No indication	The device is turned off and is not charging. If the unit is plugged in, it can also mean the battery is fully charged.

Overview of the Focus Braille Display and JAWS BrailleIn

The refreshable braille cells are located toward the front of the unit. There is a cursor router button above each braille cell. At each end of the display's surface are NAV Rockers used for easy navigation. Positioned above each NAV Rocker is a NAV mode button which cycles through different navigation modes.

Positioned directly above the cursor router buttons is an 8-dot Perkins-style braille keyboard. Going from the center, the left-hand keys contain the following: Dot 1 under the index finger, Dot 2 under the middle finger, dot 3 under the ring finger, and dot 7 under the little finger, while the right-hand contains: Dot 4 under the index finger, Dot 5 under the middle finger, Dot 6 under the ring finger, and Dot 8 under the little finger. These keys are used to enter text or perform commands.

On the front edge, directly under and in the center of the display is a SPACEBAR. This key is used together with the braille keys when entering commands. A command that includes the SPACEBAR is commonly referred to as a chorded command. For example, **L CHORD** or **DOTS 1-2-3 CHORD**.

On the front edge of the display are the following controls, located from left to right: L**eft** Selector button, Left Rocker bar, Left Panning button, Left SHIFT key, Right SHIFT key, Right Panning button, Right Rocker bar, and Right Selector button. For more information about the Focus Blue controls, refer to your Focus Blue User's Guide.

The JAWS BrailleIn feature allows you to use the Perkins-style braille keyboard on the braille display to control ElBraille. Using the keyboard along with other Focus controls, you can perform all Windows and JAWS commands that you can do from a regular QWERTY keyboard. In addition, you can also enter text using contracted or uncontracted braille. For more information about BrailleIn, refer to the JAWS Help.

Modifier Keys

Use the keys on the braille display to simulate key combinations (keystrokes) that include **CTRL**, **ALT**, **WINDOWS Key**, **SHIFT**, or the JAWS Key (**INSERT**). To use these modifiers when typing a keystroke, do the following:

1. Hold down **DOT 8 CHORD** and then press the corresponding modifier keys in the keystroke. Modifier keystrokes are listed below.

2. After you create the modifier portion of the keystroke, release the keys and press the remaining part of the keystroke. For example, to perform the keystroke CTRL+SHIFT+V, you press DOTS 3-7-8 CHORD, release the keys, and then press V (DOTS 1-2-3-6).

- **Function Keys** (F1 through F12): **DOT 1**
- **INSERT: DOT 2**
- **CTRL: DOT 3**
- **WINDOWS Key: DOT 4**
- **JAWS Key: DOT 5**
- **ALT: DOT 6**
- **SHIFT: DOT 7**

Function Keys

To simulate the function keys (**F1** through **F12**), press **DOTS 1-8 CHORD** followed by **A** through **L** (which correspond to 1 through 12). For example, to simulate the **F6** key, press **DOTS 1-8 CHORD**, then **F** (**DOTS 1-2-4**). If the function key is part of a key combination, add the appropriate modifiers while holding down **DOTS 1-8 CHORD**. For example, to simulate the keystroke **INSERT+F2**, press **DOTS 1-2-8 CHORD**, then **B** (**DOTS 1-2**).

Note: Before turning ElBraille on for the first time, fully charge the battery using the supplied AC adapter. When the battery is charging, the LED indicator lights up red. It takes approximately five to seven hours to fully charge the unit.

Turning On ElBraille

To turn on the ElBraille, press and hold the recessed Power button in the bottom left corner of the main unit until the unit beeps and vibrates. During the startup process, you will hear a series of short beeps and feel a vibration. Once the device has booted, you will hear JAWS speaking and the display will show some text. Finally, you will be placed on the Windows Desktop.

Shutting Down or Restarting ElBraille

To shut down or restart, do the following:

1. Press **DOTS 4-8 CHORD** followed by **D** (**DOTS 1-4-5**) to move focus to the Desktop.

2. Press **DOTS 1-6-8 CHORD** followed by **D** (**DOTS 1-4-5**) to open the Shut Down Windows dialog box.

3. In the combo box, use one of the Rocker bars to select Restart or Shut Down and then press **DOT 8**. If you do not want to shut down or restart, press **Z CHORD** (**DOTS 1-3-5-6+SPACEBAR**) to cancel.

Note: Shutting down or restarting can take some time. Please wait for the beeps and vibration alerts indicating the device is turned on or turned off.

ElBraille Emergency Menu

Sometimes, it may be necessary to shut down or restart if the device is not working correctly. For example, you unexpectedly lost speech or braille output from JAWS. You can easily do this using the ElBraille Emergency menu. This menu provides speech and braille output even if JAWS is not currently working correctly.

To open the Emergency menu, press and hold the **E1** button. You will hear a beep followed by a menu containing three items: Restart JAWS, Shut Down, and System Reboot. Use the **NAV Rockers** to navigate the menu and press a **NAV Mode** button to activate the selected item. To close the menu, press **RIGHT SHIFT+DOT 1**. Alternatively, you can use the **Volume Up** and **Volume Down** buttons to navigate, the **E4** button to activate an item, or **E1** to close the menu.

Note: Use the Emergency menu only when absolutely necessary as shutting down or restarting from this menu will not guarantee anything you are currently working on is saved. In addition, if JAWS speech is currently working, you will hear double speaking as the speech in this menu is independent from JAWS.

Viewing Device Status Information

Use the ElBraille buttons at any time to check the battery status, network connection, or the time and date.

- To check the battery status, press **E2**.

- To view wireless network status information, press **E2** twice quickly.

- To view the current time, press **E3**.

- To view the current date, press **E3** twice quickly.

Default ElBraille Key Assignments

The following table lists the default assignments for the ElBraille buttons.

Command	Keystroke
Open ElBraille Main menu	**E1**
Open ElBraille Emergency menu	Press and hold **E1**
Report battery status	**E2**
Report wireless network connection status	**E2** twice quickly
Report current time	**E3**

Report current date	**E3** twice quickly
Start ElNotes or create a text note	**E4**
Record a voice note	Press and hold **E4**

ElBraille Main Menu

The ElBraille turns your device into a convenient notetaker. From this menu, you can quickly accomplish many useful daily tasks, such as writing notes or using the calculator.

To open the ElBraille main menu, press **E1**. This menu contains a number of items including:

- **My Files** — opens Windows Explorer.
- **Text Editor** — opens Windows Notepad.

- **Office Apps submenu** — if you have purchased and installed Microsoft Office, opens a submenu listing the installed Microsoft Office applications (Word, Excel, Outlook, PowerPoint).

- **Calculator** — opens Windows Calculator.

- **Keyboard Editor** — located in the ElBraille Utilities submenu, the ElBraille Keyboard editor is a specially designed application for adding, modifying, and deleting ElBraille keystroke assignments.

Use the **Rocker** bars to navigate through the menu and press **DOT 8** to activate an item. Each menu item also offers a corresponding access key you can press to quickly select it. These access keys are announced by JAWS as you navigate.

For example, you can use this menu to create a text file by doing the following:

1. Press **E1**, and then press **E** (**DOTS 1-5**). The text editor opens.

2. Type in your text.

3. To save the file, press **DOTS 3-8 CHORD**, followed by **S** (DOTS 2-3-4). The Save File dialog box opens.

4. Type in the file name and navigate to the Save button by using Dots 4+5 Chord, and then press Dot 8.

5. To close the text editor, press **DOTS 1-6-8** Chord, followed by **D** (DOTS 1-4-5).

For more information on working in an application, refer to the help for the specific application.

Basics of Working with JAWS and Windows on ElBraille

Windows Basics

Using Windows with JAWS on the ElBraille is basically the same as using a regular Windows PC. The only difference is that with ElBraille, commands are performed using the ElBraille buttons and the Focus Blue controls. The following describes how to access some of the more frequently used Windows features. For more information, see the help for Windows as well as the JAWS Help.

The Start Menu

To open the Start menu, press **RIGHT SHIFT+DOT 4**. You will be focused in the Search edit box where you can begin typing the name of an app or setting you want to find. Press a **Rocker** bar to navigate the list of search results and press **DOT 8** to select one.

To view the list of frequently used apps, configure your account, view all apps, or turn off the device, press **DOTS 4-5 CHORD** or **DOTS 1-2 CHORD** to navigate through the Start menu. Use a **Rocker** bar to move through list boxes and dropdown menus. Press **DOT 8 to activate the selected item or to activate a button.**

To close the Start menu, press **DOTS 1-3-5-6 CHORD.**

Working With Windows and Dialog Boxes

Windows dialog boxes can contain text information as well as various controls including check boxes, radio buttons, buttons, sliders, edit fields, and so on.

To read the window title, press **DOTS 2-8 CHORD** followed by **T** (DOTS 2-3-4-5). To read the status bar, simultaneously press the bottom of the **Left** and **Right Rocker** bars. To read the contents of the dialog box, press **RIGHT SHIFT+DOTS 1-2**.

To move between dialog box controls, press **DOTS 4-5 CHORD** or **DOTS 1-2 CHORD**. You can select a radio button, or select or clear a check box by using the **SPACEBAR** or a **Cursor Router** button. To activate a button, press the **SPACEBAR**, **DOT 8**, or a **Cursor Router** button. When focused in an edit field, enter text using the Perkins-style braille keys. To adjust the value in a slider, press a **Rocker** bar to move by small increments or press a **Rocker** bar in conjunction with a **Selector** button to move by larger increments. If the dialog box contains multiple pages (tabs), press **DOTS 5-6 CHORD** or **DOTS 2-3 CHORD** to move between the tabs.

You can have several applications open at once. The JAWS Window List dialog box enables you to switch quickly between running apps. To open the Window List dialog box, press **RIGHT SHIFT+DOT 5**. Use the **Rocker** bars to move through the list of running applications and press **DOT 8** to switch to the selected app.

For more information, please refer to the JAWS help system.

Entering Data

Use the Perkins-style braille keyboard to type text on ElBraille. You can enter text in computer braille, or contracted or uncontracted braille. If you choose to type in contracted braille, your input is immediately translated back as normal text in the current email, document, or form. If an application or specific edit box does not support contracted braille, JAWS announces "Computer Braille." In addition, the computer braille start symbol, dots 4-5-6 followed by dots 3-4-6, is shown on the braille display to indicate when computer braille is required. For more information, refer to the JAWS Help.

You can write and edit text not only in text editing applications, but also in edit fields in Windows dialog boxes as well as forms on web pages. In all cases, the commands for editing text are the same. To start a new line, use **DOT 8**. To backspace and remove the previous character, use **DOT 7**. To delete the character under the cursor, use **LEFT SHIFT+D** (**DOTS 1-4-5**) or **DOTS 1-2-3-4-5-6 CHORD**.

Basic Reading and Navigation Commands

Description	Keystroke
Say Current Line	**C CHORD (DOTS 1-4 CHORD)**
Say Previous Line	**DOT 1 CHORD**
Say Next Line	**DOT 4 CHORD**
Say Current Word	**DOTS 2-5 CHORD**
Say Previous Word	**DOT 2 CHORD**
Say Next Word	**DOT 5 CHORD**
Say Current Character	**DOTS 3-6 CHORD**
Say Previous character	**DOT 3 CHORD**

Description	Keystroke
Say Next Character	**DOT 6 CHORD**
Say All	**DOTS 1-2-4-5-6 CHORD**

Windows Explorer

To open Windows Explorer, press **E1**, and then select My Files or press the letter **F** (**DOTS 1-2-4**). Use the **Rocker** bars to navigate the list of files and folders and press **DOT 8** to open the selected item. To go back to the previous folder, press **DOT 7**.

Other Common Commands

Description	Command
Copy to Clipboard	**LEFT SHIFT+C (DOTS 1-4)**

Cut to Clipboard	**LEFT SHIFT+X (DOTS 1-3-4-6)**
Paste from Clipboard	**LEFT SHIFT+V (DOTS 1-2-3-6)**
Undo	**LEFT SHIFT+Z (DOTS 1-3-5-6)**
Delete	**LEFT SHIFT+D (DOTS 1-4-5)**

Common QWERTY Keyboard keys Simulated on the Braille Display

QWERTY Keystroke	Braille Keystroke
ESC	**Z CHORD (DOTS 1-3-5-6 CHORD)**
ALT	**RIGHT SHIFT+DOT 2**

QWERTY Keystroke	Braille Keystroke
APPLICATIONS Key	**RIGHT SHIFT+DOT 2 CHORD**
WINDOWS Key	**RIGHT SHIFT+DOT 4**
CAPS LOCK	**RIGHT SHIFT+DOT 7 CHORD**
BACKSPACE	**DOT 7**
ENTER	**DOT 8**
TAB	**DOTS 4-5 CHORD**
SHIFT+TAB	**DOTS 1-2 CHORD**
HOME	**DOTS 1-3 CHORD**

QWERTY Keystroke	Braille Keystroke
END	**DOTS 4-6 CHORD**
PAGE UP	**Selector Button+Rocker Bar Up**
PAGE DOWN	**Selector Button+Rocker Bar Down**
DELETE	**DOTS 1-2-3-4-5-6 CHORD**

Basic JAWS Setup

ElBraille users have access to all JAWS features, just like on a standard Windows PC. This section covers some basic information to help you get started. For more information about working with JAWS, refer to the JAWS help system.

JAWS Startup Wizard

The JAWS Startup Wizard allows you to customize some of the more commonly used JAWS settings. These include speech rate and verbosity, typing echo, braille translation settings, and more. The Startup Wizard can be accessed at any time by doing the following:

1. Press **RIGHT SHIFT+DOTS 2-4-5** to open the JAWS main window.

2. Use a **Rocker** bar to navigate to the Help menu and press **DOT 8**.

3. When the Help menu opens, press **Z** (**DOTS 1-3-5-6**) to open the Startup Wizard.

The Startup Wizard consists of several pages of options. After making your changes on each page, choose the Next button to move to the next page in the wizard. On the last page, choose the Finish button to save your changes.

Turning off Speech

If you prefer, you can turn off speech and only use the braille display. To turn off speech, press **RIGHT SHIFT+M** (**DOTS 1-3-4**). Perform this command again to turn speech back on.

Connecting to a Network

ElBraille can connect to wireless networks. You can also connect the unit to mobile networks using the built-in LTE modem. The following sections describe how to connect to these networks.

Connecting to a Wi-Fi Network

1. Press **RIGHT SHIFT+DOT 4** to open the Start menu.

2. Type Wi-Fi into the Search edit box.

3. In the search results, select Wi-Fi Settings and press **DOT 8**.

4. Press **DOTS 4-5 CHORD** to navigate to the list of available networks.

5. Use the **Rocker** bars to select the network you want to connect to and press **DOT 8**. The Connect Automatically check box and the Connect button will appear. The check box is selected by default. If you want to connect to the network only once, clear this check box.

6. Press **DOTS 4-5 CHORD** to navigate to the Connect button and press **DOT 8** again. If the network is secure, you are prompted to enter a password.

7. Type in the password and press **DOT 8**. If the connection is successful, you will see "Connected" near the selected network in the networks list.

Connecting to a Mobile Network

Note: In order to connect to a mobile network, you must have a micro-SIM card from your cell provider. Please note that the Internet connection is rated according to your provider's prices. Please consult your provider's web site and documentation before connecting to a mobile network.

1. Make sure the ElBraille is turned off. Hold the micro-SIM card, with the cut corner facing away from you and to the right, and insert it into the slot on the left side of the device until it clicks into place.

2. Turn the ElBraille on and wait for the operating system to boot.

3. Make sure the modem is turned on. You can check this in the ElBraille settings available from the Utilities submenu in The ElBraille Main menu. If the modem is turned off, select the Modem check box to turn it on.

4. Press **RIGHT SHIFT+DOT 4** to open the Start menu and begin typing Control Panel in the Search edit box. Press **DOT 8** to open the Windows Control Panel.

5. In the Control Panel Search edit box, type dialup.

6. Press **DOTS 4-5 CHORD** to move to the Setup a New Dial-up Connection link and press **DOT 8** to activate it.

7. In the dialog box that appears, fill in all of the fields. In the Phone Number field, type *99#. The user name and password are only needed if specifically required by your cell provider. You can also specify a connection name in the corresponding field. When done, activate the Connect button.

8. If the connection was successful, a dialog box opens containing three buttons: Back, Close, and Browse Internet Now.

9. Your Internet connection is now available in the list of connections. To connect in the future, navigate to Control Panel, Network and Internet, and then Dial-up. Select your connection from the list, press **DOTS 4-5 CHORD** several times to the Connect button and press **DOT 8** to activate it.

10. In the dialog box that appears, confirm that your credentials are correct and activate Call.

Problem	Solution
The device will not turn on.	Charge the battery using the supplied AC adapter. If the battery is too low, the unit may not boot even when connected to the charger. Wait several minutes and then try turning the unit on again.
The battery is not charging or is taking longer to charge than expected.	Make sure you are using the charger supplied with the device. If the battery is charging, the LED indicator glows red.
Extra dots are appearing on the display and dots are sticking.	Clean the display as described in the Focus 14 Blue user guide.

Problem	Solution
The Focus 14 Blue does not appear to be connected to the main unit.	If you had previously disconnected the display, make sure it is connected correctly.

Service and Support

You can contact Technical Support to receive technical assistance.

To contact by web, visit www.FreedomScientific.com/Forms/TechSupport, and complete the form to submit questions.

To contact by email, send questions to support@vfogroup.com.

To contact by telephone, U.S. customers can call (727) 803-8600, Monday through Friday, from 8:30 AM to 7:00 PM (Eastern Time).

When you call, please provide the following information:

- Product name
- What you were doing when the problem occurred

- Product serial number
- How you tried to solve the problem

Warranty and Registration

Congratulations on your purchase of the ElBraille.

The unit and its accessories come with a two-year warranty against manufacturing defects.

Note: These devices have no user-serviceable components. Any unauthorized attempt to service or replace internal components by opening the case will void the product warranty.

Please call VFO Technical Support at (727) 803-8600 for assistance in troubleshooting any problems. If necessary, the technical support specialist will issue a Return Materials Authorization (RMA) number that must be referenced on the outside of the package containing your returned unit. The unit or its accessory will then be exchanged or repaired as needed.