

*PAC Mate*  
*Portable Braille Display*

Quick Start Guide

May, 2005

Part # 440116-001 Rev. D

PUBLISHED BY

Freedom Scientific  
11800 31<sup>st</sup> Court North  
St. Petersburg, Florida 33716-1805  
USA

<http://www.FreedomScientific.com>

Information in this document is subject to change without notice. No part of this publication may be reproduced or transmitted in any form or any means electronic or mechanical, for any purpose, without the express written permission of Freedom Scientific.

Copyright © 2005 Freedom Scientific BLV Group, LLC. All Rights Reserved.

JAWS is a registered trademark of Freedom Scientific BLV Group, LLC in the United States and other countries. Microsoft, Windows NT, Windows 2000, Windows 95, Windows 98, Windows Me, Windows XP Home and Professional are registered trademarks of Microsoft Corporation in the U.S. and/or other countries.

# Congratulations!

The PAC Mate Portable Braille Display provides an impressive range of flexibility and functionality. This first-of-its-kind braille display connects via a USB cable directly to a PAC Mate, desktop, or laptop computer.

## What's in the Box?

This package includes the following items. If you find that you are missing any of the components listed below, please call Customer Service at (800) 444-4443.

### Item Checklist

- 20- or 40-cell braille display
- 3-foot USB A - Mini B cable
- 6-foot USB A - Mini B cable
- Carrying case with shoulder strap
- Quick Start Guide in braille
- Companion CD (includes documentation and device drivers)
- Foam Keyboard Stand

## Warranty Information

Congratulations on your purchase of PAC Mate BX/QX and/or the PAC Mate Portable Braille Display.

The PAC Mate BX/QX and the PAC Mate Portable Braille Display comes with a 12-month 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 Freedom Scientific 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. Your PAC Mate will then be exchanged or repaired as needed.

Return your unit to:

Freedom Scientific Inc.  
Blind/Low Vision Group  
13000 Automobile Blvd  
Bldg 1 unit 103  
Clearwater, FL 33762

## **PAC Mate Braille Display Features**

- 20-cell and 40-cell Models
- Mini B USB Port
- Cursor Routing Buttons
- Whiz Wheels®
- Right and Left Advance Buttons
- Braille Display Hot Keys
- VariBraille Dot Firmness
- Compatible with JAWS®

## **Connecting the Braille Display**

### **PAC Mate QX and BX**

To connect the braille display to your X-Series PAC Mate, do the following:

1. Locate the latch on the underside of the PAC Mate with your right hand and pull it toward the right side of the unit. This releases a catch allowing the bottom cover piece to be removed.
2. Grasp the middle of the top cover of the PAC Mate braille display in the indent just above the braille cells. This will release its top cover and you can remove it from the display.
3. Align the newly exposed portion of the braille display with the opening in the BX or QX and push them together until you hear the latch click into place. You now have an integrated braille display unit.

Once you connect your PAC Mate to your braille display, follow the directions in Using the Braille Display. If you would like to configure PAC Mate's braille options, go to the Start Menu, Settings, Personal Page and select Braille Settings. For configuration information, open Help from within the Braille Settings dialog.

In certain situations while using the braille display you may find it necessary to mute the synthesizer on PAC Mate. To do this, press **S CHORD, M** on the BX or **INSERT+S, M** on the QX.

## **PAC Mate TNS and BNS**

Connect the mini B end of the USB cable to the mini B port on the left side of the braille display, and follow the directions below that apply to you.

You must set your PAC Mate to USB Host Mode.

Once you connect your PAC Mate to your braille display, go to the section on Using the Braille Display. If you would like to configure PAC Mate's braille options, go to the Start Menu, Settings, Personal Page and select Braille Settings. For configuration information, open Help from within the Braille Settings dialog.

In certain situations while using the braille display you may find it necessary to mute the synthesizer on PAC Mate. To do this, press **S CHORD, M** on the BX or **INSERT+S, M** on the QX.

### ***TNS***

Press **WINDOWS Key, S** to open the Settings dialog, move to the System page with **CTRL+TAB**, then press the letter **U** to select USB Mode Settings and press **ENTER**. In the USB Mode combo box use the arrow keys to select Host.

With your PAC Mate set to USB Host Mode, connect the other end of the cable to the USB port on your PAC Mate. On the TNS, the USB port is just to the right of the battery on the rear of the unit.

### ***BNS***

Press **F3, S** to open the Settings dialog, move to the System page with **DOTS 5-6 CHORD**, then press **DOTS 1-3-6** to select USB Mode Settings and press **DOT 8**. In the USB Mode combo box use the cursor cross to select Host.

With your PAC Mate set to USB Host Mode, connect the other end of the cable to the USB port on your PAC Mate. On the BNS, the USB port is on the left side immediately behind the nine-pin serial port.

## **Desktop or Laptop Computer**

If you are using JAWS 4.51 or earlier please follow the instructions below to update JAWS to the newest braille driver. If you are using a version of JAWS that is earlier than 4.02, you are not able to use the PAC Mate braille display.

### ***Updating the Braille Driver***

1. Insert your Companion CD into your CD ROM drive. In Windows Explorer navigate to and open the FS Braille Display Driver folder, then open the Driver folder. In this folder select and press **ENTER** on Setup.exe.
2. After Setup finishes, run JAWS and open the Braille Basic Settings dialog.
3. Select PAC Mate 20, or 40 Cells in the Default Braille Display combo box.
4. Restart JAWS.
5. Connect your PAC Mate braille display to the USB port.
6. A Found New Hardware dialog appears when you connect your PAC Mate braille display.

For the Windows XP Operating System, choose the Install the software automatically (Recommended) radio button. Then press **ENTER**. Wait for the system to locate the new software and when it is done, press **ENTER** again to close the dialog.

For Windows 98, ME, and 2000, you do not have to do anything except wait for this process to finish.

## ***Adding Support during JAWS 5.0 and Later Installation***

To add support for the PAC Mate braille displays during installation of JAWS 5.0 or later, select either the Guided or Advanced setup option. On the Select Components page of setup, check the PAC Mate Display or PAC Mate 20, or 40 Cells check box, depending on the version of JAWS you have installed. On all other pages of setup, select the options you need and/or desire. With JAWS 5.0 or later, your PAC Mate braille display is ready to use once the setup is complete.

## ***Adding Support after JAWS 5.0 and Later Installation***

To add support for a PAC Mate braille display after JAWS 5.0 or later is already installed:

1. Press **INSERT+J** to make the JAWS application window active.
2. Press **ALT+O, L** to open the Braille Basic Settings dialog.
3. Move to the Add Braille Display button and press **SPACEBAR**.
4. Once JAWS setup is open to the Select Braille Components dialog, use the **SPACEBAR** to check the Pac Mate Display or PAC Mate 20, or 40 Cells check box, depending on the version of JAWS you have installed, and then press **ENTER**.

Once setup has installed support for the PAC Mate display and JAWS has restarted, you are ready to use your PAC Mate braille display.

To learn the function of each hot key on the display, press **INSERT+1** on your computer's keyboard, then press each hot key.

## ***Using the Keyboard/Laptop Stand***

The foam keyboard stand positions your keyboard or laptop computer for easy use with the PAC Mate braille display.

To arrange each device, place the foam stand on a table or desk with the cut away area near and facing you. Make sure the cut out for the USB connector is on the left. Slide the braille display into the cut away area. Then place the keyboard or laptop on the foam stand at a comfortable distance for you to read and work.

# Using the Braille Display

Braille display settings are quickly accessed with hot keys and navigation is provided via Whiz Wheels, cursor routing buttons and right and left advance buttons.

With JAWS as your desktop screen reader, you can customize the hot keys. To learn more about customizing the hot keys on your braille display, please refer to JAWS Keyboard Manager in the JAWS Help.

## Hot Keys

Hot keys allow for quick access to various braille display options. The 14 hot keys are in the top row of buttons and consist of seven buttons on either side of the center mark. To help you locate and distinguish each hot key, there are markers on the display's surface furthest away from you. The buttons to the left of center are numbered from left to right as 1, 2, 3, 4, 5, 6, and 7 and the buttons to the right of center are numbered as 8, 9, 10, 11, 12, 13, and 14. The remaining buttons to the left and right of the hot keys are the advance buttons.

**Note:** When used with versions of JAWS earlier than 6.0 on a desktop computer, there are 10 hot keys arranged in groups of 5 each to the left and right of the center mark.

The PAC Mate braille display uses one- and two-layer command sequences to set braille display options. You must toggle into the second layer with hot key 12 before and each time you execute a second layer command. The hot keys are described in the table below.

**Note:** With JAWS as your desktop screen reader, you can customize the hot keys. To learn more about customizing the hot keys on your braille display, please refer to JAWS Keyboard Manager in the JAWS Help.

Hot Key	First Layer Command	Second Layer Command
1	Turn On Braille Auto Advance Mode  (Press any cursor routing button to turn	

	off)	
2	Repeat Last Flash Message(*)	
3	Route braille cursor to active cursor	Change Cursor Shape
4	Active follows braille	Toggle Cursor On/Off
5	Braille follows active	Toggle compressed spacing (8 - Unlimited Pixels per Space)
6	Show top of active window or beginning of structured line	Route JAWS Cursor to PC Cursor
7	SHIFT + TAB	
8	TAB	
9	Show bottom of active window or end of structured line	Toggle 6 / 8 cell braille
10	Grade 2 (contracted braille)	Toggle Line, Structured, and Speech Box Modes
11	Translate word (Expand Grade 2 symbol to edit word)	
12	Toggle between layers 1 and 2	Display braille layer help
13	Decrease Auto Advance rate	
14	Increase Auto Advance	

rate

(\*) When used with JAWS 6.0 or later

**Note:** When used with versions of JAWS earlier than 6.0 on a desktop computer, the hot keys numbered 1, 2, 13, and 14 in this table are not available. Beginning with hot key 3 in this table, you should renumber the hot keys from 1 to 10.

## Whiz Wheels

The braille display Whiz Wheels are used to quickly move through files, dialogs, and menus. In addition, each wheel can be set independently for added functionality.

### *Files*

In text files, the Whiz Wheels are used to move by line, sentence, or paragraph. Pressing down on either Whiz Wheel toggles it between line, sentence, paragraph, and focus panning modes. Rolling the Whiz Wheel towards you moves downward in the text, while rolling the Whiz Wheel away from you moves upward in the text. With panning mode, rolling the Whiz Wheel one “click” towards you pans right one display length, while rolling the Whiz Wheel one “click” away from you pans left one display length.

### *Menus*

In menus, roll a Whiz Wheel toward you to move down through the menu or roll it away from you to move up through the menu. Press down on the Whiz Wheel to select a menu item.

### *Dialogs*

In dialogs, rolling the wheel towards you moves you forward through the controls, while rolling the wheel away from you moves you backward through the controls. Depending on the control, the Whiz Wheels function differently when pressed.

- For list views, combo boxes, radio buttons, tree views and check box control groups: pressing the Whiz Wheel down puts it in List Mode. In this mode, rolling the Whiz Wheel lets you scroll through the items. To exit List Mode, press down on the Whiz Wheel again.

- For individual check boxes or buttons, pressing the Whiz Wheel down toggles the check box state or activates the button.

## **Cursor Routing Buttons**

Immediately above each braille cell is a button. These are the cursor routing buttons. Press a cursor routing button to move the cursor to that point or to select a link in a Web page or e-mail message. To help you locate and route your cursor there are markers at every fifth cell along the display surface nearest you.

## **Right and Left Advance Buttons**

The right and left advance buttons allow you to move through your files one display length at a time. To advance right, press any of the buttons to the right of the hot key area. To advance left, press any of the buttons to the left of the hot key area.

## **For More Information:**

For detailed information on your PAC Mate Portable Braille Display, consult the user's manual on the Companion CD that shipped with your device.

Up-to-date information on PAC Mate and accessories:

[http://www.freedomscientific.com/fs\\_products/PAC\\_Mate\\_HQ.asp](http://www.freedomscientific.com/fs_products/PAC_Mate_HQ.asp)

## **Contacting Freedom Scientific**

### ***Corporate Offices***

11800 31st Court North  
St. Petersburg, FL 33716-1805

Sales & Information Phone: 1-800-444-4443 (within US)

Sales & Information Phone: (727) 803-8000 (worldwide)

Fax: (727) 803-8001

Technical Support

All Products: (727) 803-8600, Monday - Friday, 8:30 AM - 7 PM, EST

## ***Service & Repair***

To schedule a repair or service:

Phone: (727) 803-8600

Fax: (727) 803-8001

To check on a repair or service:

Phone: (727) 803-8000

## ***European Support Center***

Freedom Scientific GmbH

Steintorweg 8

D - 20099 Hamburg

Phone: +49 40 280954-0

Fax: +49 40 280954-29