

The BraillePen with Desktop Solutions

The BraillePens with Windows and Mac computers

Making the Bluetooth Connection



The BraillePens support Bluetooth connections with the main types of Bluetooth providers. These may be built in to a device, or they may be a USB-based add-on for a PC or netbook.

On phones and similar devices, the BraillePens connect automatically with Apple devices running iPhoneOS4, manually with Nokia phones running SymbianOS and automatically with our own software BraillePen Mobile running on a Windows Mobile PDA or Smartphone.

The BraillePens With Screen Readers

Window-Eyes 7.5.2 or higher

To set up the BraillePen 12 as a keyboard and display for Window-Eyes:

First of all you need to pair your BraillePen with your computer using the default Bluetooth connection set up. Remember to assign the lowest possible COM port number. Note down the number because you will need it later when configuring Window-Eyes.

Turn your BraillePen on and connect your newly added Bluetooth device.

Once your BraillePen has been paired with and connected to your computer follow these steps to configure your Window-Eyes:

1. Run Window-Eyes on your computer.
2. Open the WE Control Panel.
3. In Help Menu find Show Advanced Options item and select it.

4. You will now have access to all the Window-Eyes options.
5. From the Settings List on the left hand side choose Devices. Press the Right Arrow key to expand it and arrow down to select Braille Displays. Tab to the main window where you will select your device under Displays. Arrow down or keep pressing b until you hear "BraillePen 12".
6. Then press Tab to jump to the list of ports and choose the COM port you assigned when pairing your BraillePen.
7. Tab to Activate button and push the space bar to activate it. The BraillePen will keep confirming the connection.
8. A dialog prompting you to confirm the changes will pop up.
9. If you want to keep these changes, tab further to Save Settings button and press the spacebar.
10. Finally, make sure you have selected the correct translation table selected. You can do it by going to Braille - Translation Tables.

BraillePen12 and BraillePen 12 Touch keystrokes for Window-Eyes

When your BraillePen 12 (T) is connected and Window-Eyes is set to interface with it, you can use the following keystrokes to navigate your PC. BraillePen 12 (T) allows you now to write in any word processing program, email clients, or any other applications used for entering text.

Letters of the alphabet			
A	dot 1	b	dot 2
C	dots 1 4	d	dots 1 4 5
E	dots 1 5	f	dots 1 2 4
G	dots 1 2 4 5	h	dots 1 2 5
I	dots 2 4	j	dots 2 4 5
K	dots 1 3	l	dots 1 2 3
m	dots 1 3 4	n	dots 1 3 4 5
o	dots 1 3 5	p	dots 1 2 3 4
q	dots 1 2 3 4 5	r	dots 1 2 3 5
s	dots 2 3 4	t	dots 2 3 4 5
u	dots 1 3 6	v	dots 1 2 3 6
w	dots 2 4 5 6	x	dots 1 3 4 6

y	dots 1 3 4 5 6	z	dots 1 3 5 6
Special characters			
'	dot 4	!	dots 2 3 4 6
@	shift dot 4	#	dots 3 4 5 6
\$	dots 1 2 4 6	%	dots 1 4 6
^	shift dots 4 5	&	dots 1 2 3 4 6
*	dots 1 6	(dots 1 2 3 5 6
)	dots 2 3 4 5 6	-	dots 3 6
_	shift dots 4 5 6	=	dots 1 2 3 4 5 6
+	dots 3 4 6	\	dots 1 2 5 6
	dots 1 2 5 6	[shift dots 2 4 6
{	dots 2 4 6]	shift dots 1 2 4 5 6
}	dots 1 2 4 5 6	;	dots 2 3
:	dots 1 5 6	'	dot 3
"	dot 5	,	dots 6
<	dots 1 2 6	.	dots 4 6
>	dots 3 4 5	/	dots 3 4
?	dots 1 4 5 6		
Caps and Numbers			
Capital letters	with shift	Numbers	dropped letters a-j with shift control
Hot Keys			
Pan Left	Left Braille Nav Key	Pan Right	Right Braille Nav Key
Up Arrow	Joystick Up or Space	Down Arrow	Joystick Down or

	dot 2		Space dot 5
Left Arrow	Joystick Left or Space dot 3	Right Arrow	Joystick Right or Space dot 6
Enter	Joystick Action or space control	Tab	Shift
Ctrl	Control	Escape	Shift Space
Shift Tab	Shift Control	Alt Tab	Shift Space dot 1
Alt Shift Tab	Shift Space Control dot 1	Backspace	Space dots 1 2
Delete	Space dots 1 4 5	Alt	Space dot 1
App Key	Space dots 1 4	Windows Key	Space dots 2 4 5 6
Home	Space dots 1 2 5	End	Space dots 1 5
Ctrl A	Control dot 1	Ctrl C	Control dots 1 3
Ctrl S	Control dots 2 3 4	Ctrl Z	Control dots 1 3 5 6
Ctrl X	Control dots 1 3 5 6	Ctrl Y	Control dots 1 3 4 5 6
Ctrl V	Control dots 1 2 3 6	Ctrl F	Control dots 1 2 4
Ctrl N	Control dots 1 3 4 5	Ctrl P	Control dots 1 2 3 4

BraillePen12 with Dolphin Supernova and the Dolphin Pen

To set up the BraillePen12 as a keyboard and display for Supernova:

- In Supernova, Select control Panel, Popup Menu, Configuration, SAM Setup.
- Select EasyLink 12 from the list box
- Press the Configure button
- Select the Manual Configuration radio button
- Turn on your BraillePen12 using space + dots 1, 3.
- Press the Bluetooth Find button in the SAM dialog and wait for a minute.
- When your BraillePen has been detected, press the OK button.
- In the SAM dialog, press the Detect All Devices Now button.
- Click OK to accept the hardware change dialogs.
- Your SAM dialog should now show Easylink 12 Braille Display 1

- Tab using space and dots 5 and 6, or use the BraillePen12 joystick to move to the close button and press Joystick Enter to select.

For questions about the Dolphin Pen, please contact support@dolphinuk.co.uk

For questions about BraillePen12 please contact your distributor.

BraillePen12 keystrokes for use with Supernova

Action	BraillePen12 Braille Keystroke
Open control Panel	space + dots 1, 3, 5 (o)
Popup Menu	space + dots 1, 2, 3, 4 (p)
Mute Speech	control
List System Tray	shift, space + dots 2 3 4 5 (t)
Application Hotkey Information	space + dots 1, 2, 5 (h)
Toggle Key Describe Mode on/off	space + dots 1, 4, 5, 6
Speak Keys	
Speak PDA Battery Status	space + Dots 2 3 4 (s)
Speak current time/date	space + Dots 1 4 5 (d)
Speak Status Bar	shift, space + Dots 2 3 (2)
Speak Selection	shift, space + Dot 2 (1)
Speak Focus	shift, space + Dots 3 5 6 (0)
Speak Headings	shift, space + Dots 2 5 (3)
Speak control	shift, space + Dots 4 6
Speak Window	shift, space + Dots 3 5 (9)
Where am I? (Application, file and focus)	space + Dots 2 4 (i)
Describe Focus position	shift, space + Dots 2 3 6 (8)
Navigation	
Press Ok/Close Icon	shift, space + control
Enter	space + dots 4, 6 or Joystick Enter
space	space
Page Up	space + Dots 1 2 6
Page Down	space + Dots 3 4 5
Tab	space + Dots 5 6
shift Tab	space + Dots 2 3
Escape	space + Dots 1 5 (e)
Backspace	space + Dots 1 2 (b)
Delete	space + Dots 1 3 4 6 (x)
Start Menu (Windows Key)	space + Dots 2 4 5 6 (w)

Cursor Up	space + Dot 1 or Joystick Up
Cursor Down	space + Dot 4 or Joystick Down
Cursor Left	space + Dot 3 or Joystick Left
Cursor Right	space + Dot 6 or Joystick Right
Home	shift + space + dots 1, 2, 3
End	shift + space + dots 4, 5, 6
control Home	space + dots 1, 2, 3
control End	space + dots 4, 5, 6
Alt	control + space
Alt tab	shift + space
Virtual Focus (VF)	
Choose Virtual Focus (VF)	control + dots 3, 6
VF Activate	space
VF Interact with control	space + dots 4, 6
VF Interact with control	space + control
VF Next Line	space + dot 4
VF Previous Line	space + dot 1
VF Right	space + dot 6
VF Left	space + dot 3
VF Right Word	space + dot 5
VF Left Word	space + dot 2
VF Choose Live Focus	control + dots 3 6
VF Next Object	space + dots 5 6
VF Previous Object	space, shift + dots 5 6

System Access

Action	BraillePen12 Braille Keystroke
m-chord	menu bar
st-chord	start menu
ou-chord	recent applications menu; alt + tab
t-chord	read title
s-chord	read status
Joystick Up, Down, Left, Right	up, down, left, and right arrow
dot 8 or e-chord	enter
dot 7 or 2 3-chord	backspace

dots 4 5-chord	tab
b-chord	shift + tab
dots 1,2,3,4,5,6	say all
for-chord	
dot 1-chord	read previous line
dots 1,4-chord	read current line
dot 4-chord	read next line
dot 2-chord	read previous word
dots 2 5-chord	read current word
dot 5-chord	read next word
dot 3-chord	read previous character
dots 3 6-chord	read current character
dot 6-chord	read next character
dots 1,2,3-chord	top of document
dots 4,5,6-chord	bottom of document
k-chord	home or beginning of line
dots 4,6-chord	end or end of line
control	stop speech
z-chord	close or esc

BraillePen Write



The BraillePens can act as fully-functioning Windows keyboards, with all the capabilities of a standard PC keyboard. BraillePen Write software, which enables this, is supplied with every BraillePen and BraillePen 12. You can also configure special keymaps, so that they can be used for 6-key entry into specialist programs such as Braille Translation software.

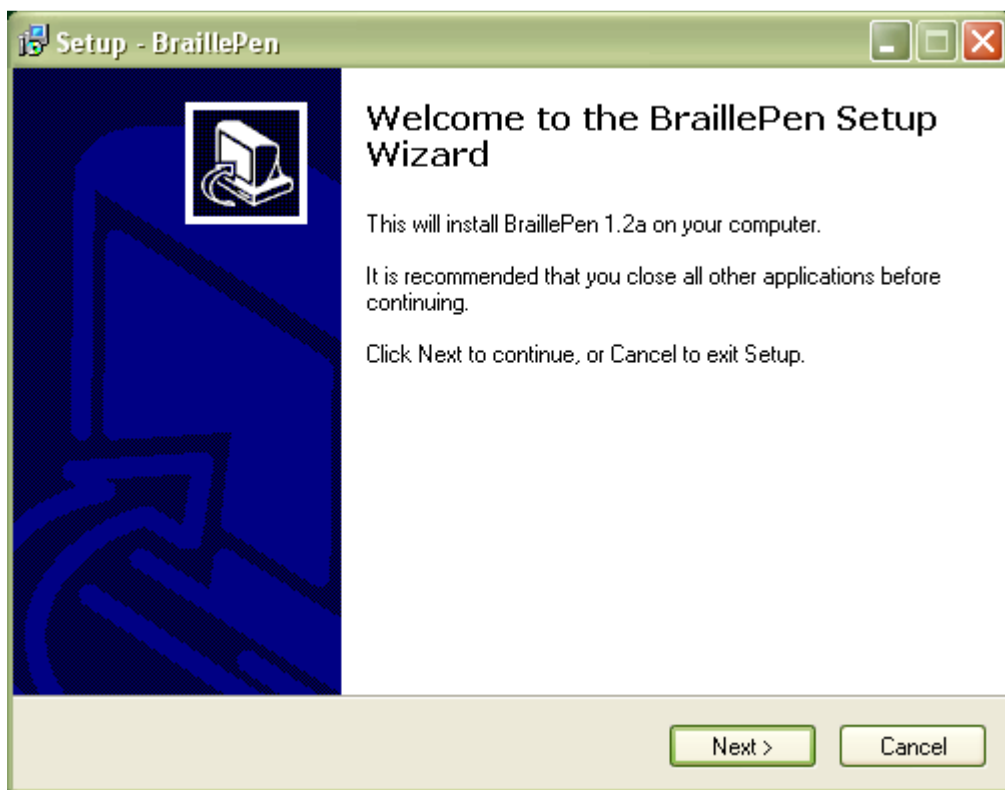
We have included this part of the User Guide, so you can see how BraillePen Write works.

To use either of the BraillePens as an external keyboard, your computer must be Bluetooth-capable, either with integrated Bluetooth or using a USB Bluetooth adaptor. BraillePen Write is compatible with all Windows versions from XP.

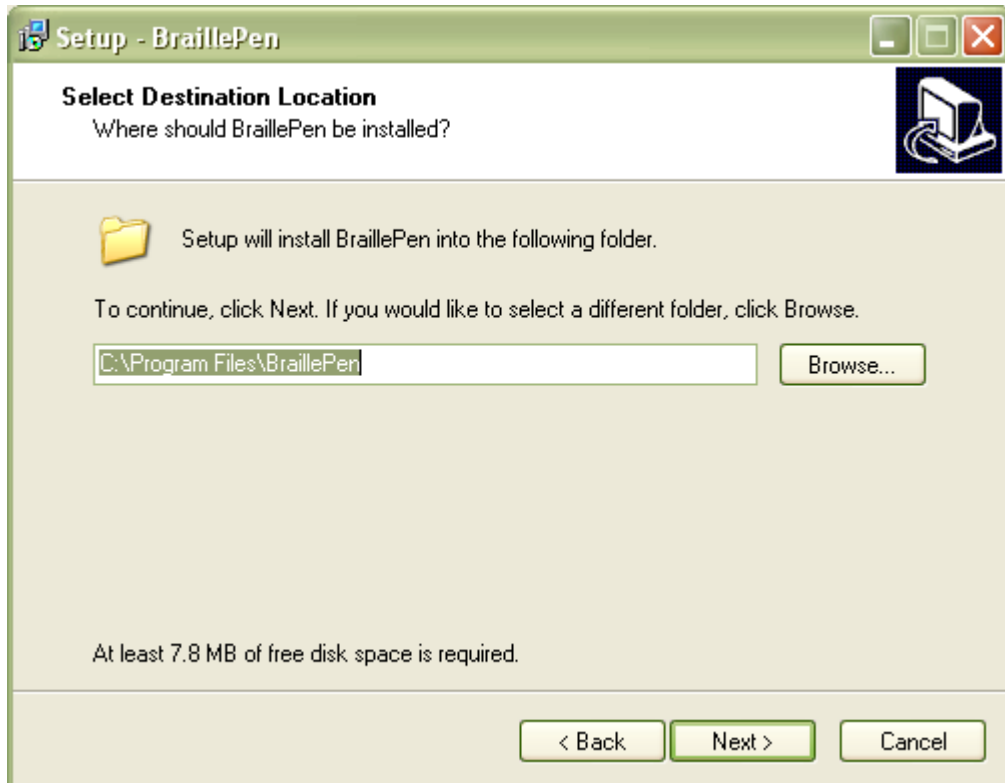
Installing BraillePen Write

The BraillePen Write installer is supplied to you on a CD. When you insert the CD, either allow it to auto-run, which will bring up the installer automatically, or navigate to the CD and double-click on the file called BP-setup.exe or similar. The filename of the installer may contain other information such as language and version number.

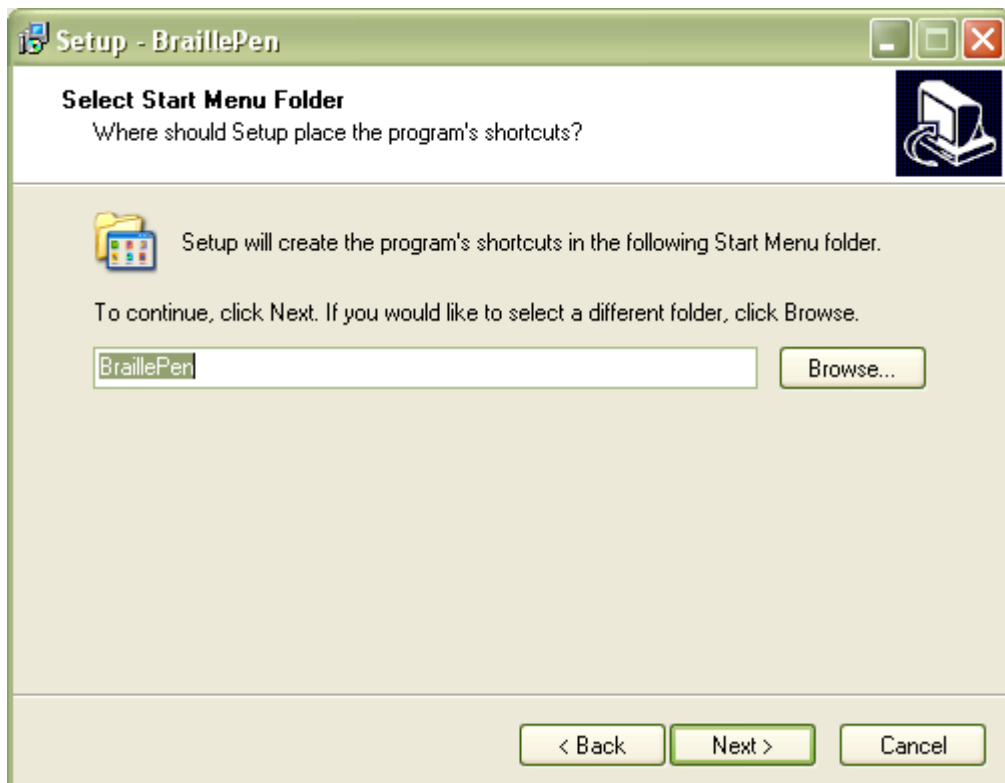
The first dialog of the installation process tells you the version of the software you are installing.



The next dialog offers you the chance to change the installation location, although the standard location usually works well.

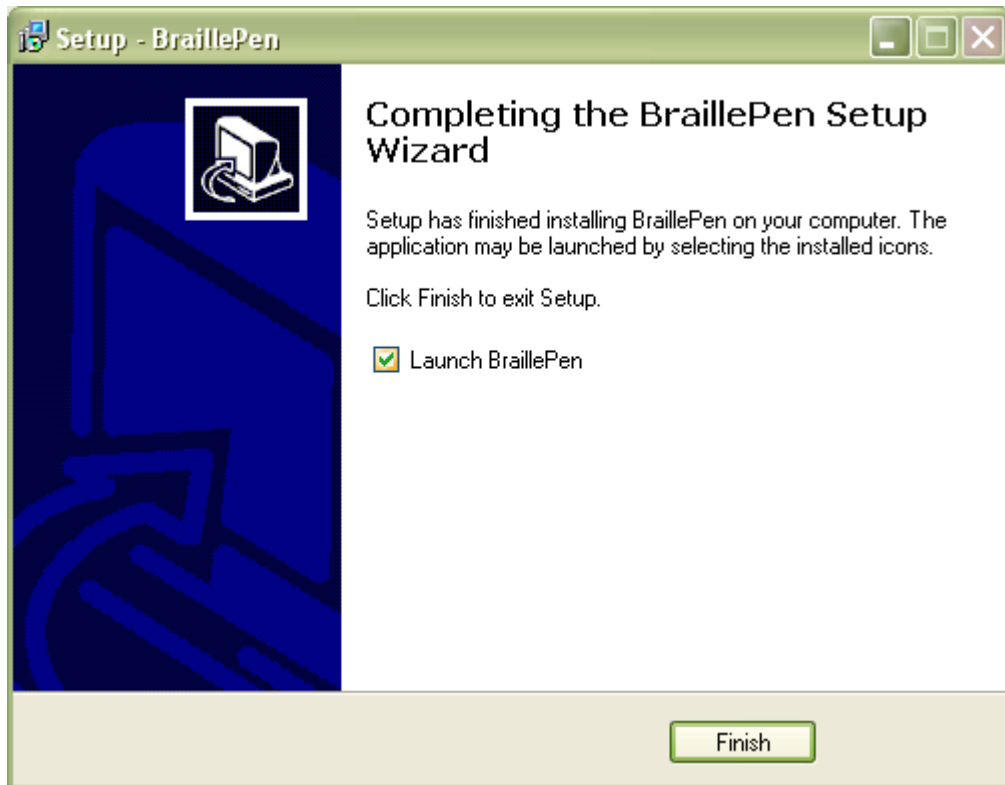


The third dialog offers you the chance to nominate the program's shortcut location in your Programs menu.



The fourth dialog asks if you would like a desktop icon or a quick launch icon or both; and the fifth dialog gives you the chance to review your choices and go back to change them.

The sixth step is the actual installation, where you can monitor the installation progress.



The final dialog of the installation asks whether you want to launch the software when you click Finish to exit the installation process.

If you leave "Launch BraillePen" checked, then once you click Finish, the software will run.

Running BraillePen Write

The Main Window

When you launch BraillePen Write, the main window appears:



If you don't have a Bluetooth adapter installed, instead of this window you will see the following error message:



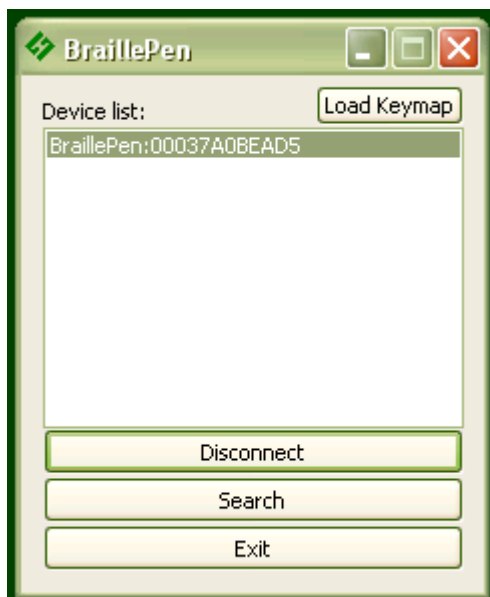
If you see this message, you need to add a Bluetooth adapter to your computer. Consult your distributor about a suitable adapter.

The main window has three buttons: Connect, Search and Exit. If your BraillePen is on and Bluetooth is active, the MAC address will appear in the window; if you have not yet turned on your BraillePen, turn it on now, and once you hear the triple-beep, click Search.

When the address appears in the window, select it and click Connect.



Once connection is established between your BraillePen and the computer, the Connect button changes to Disconnect.



You can now minimise the window and use your BraillePen as a Bluetooth keyboard in any Windows application.

If you want to load a different keymap, for instance for Braille entry into a translation program, click the Load Keymap button and browse to the new keymap file and click OK. The new keymap will load, and you are again ready to use the BraillePen.

Keyboard Emulation

The BraillePen Write can emulate any kind of PC keyboard. We have made several keymaps ready for you to use; you can make others, and we will make new ones available as they are made. You might like to share yours with other users, too!

When you first use the BraillePen Write, it loads the default keymap for your location. The table for this keymap is published in each location's User Guide.

Special behaviour for Alt

Each keymap contains two keystrokes representing the Alt key on the Windows keyboard.

The first, Shift-dot 3, activates Alt for use with menus, and behaves as though Alt has been pressed and released; the next keystroke is expected to be a letter from a menu item, an arrow key or Enter.

The second, Shift-dot2, activates Alt for use with a second key, and behaves as though Alt has been pressed and held down. Use this for such combinations as Alt-F4 to close a program, or Alt-Tab to cycle through open applications.

Configuring A New Keyboard Map

It is now possible to add new keyboard maps to the BraillePen Write, or edit existing maps so that they suit your needs.

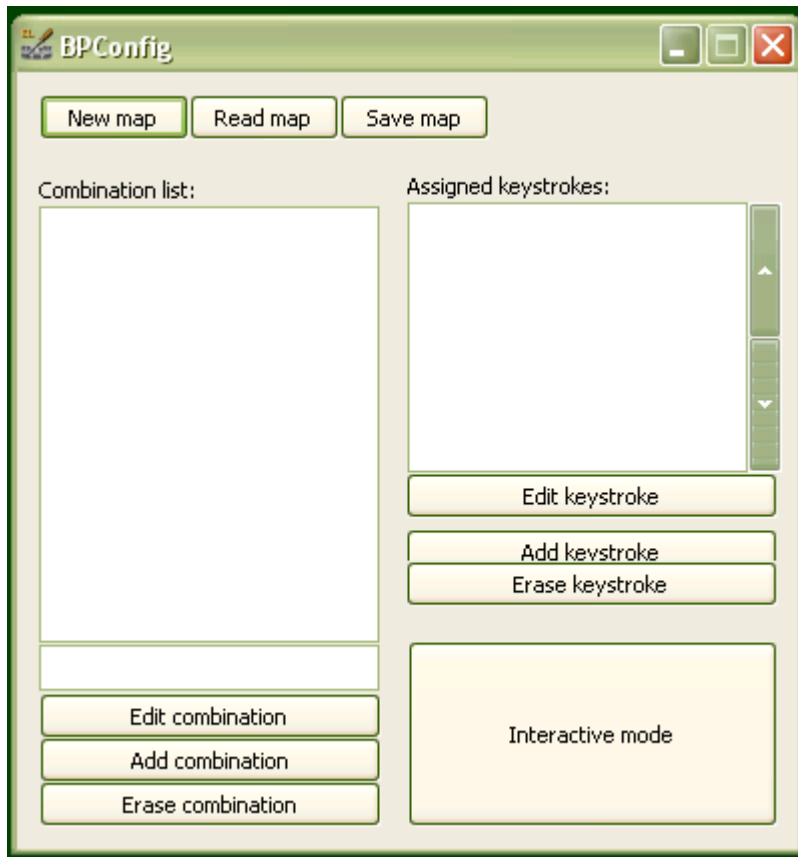
The keyboard map, or keymap, is a file stored in the BraillePen folder, containing information about keystrokes on the BraillePen and their corresponding keystroke combinations on the keyboard. When you build a new map file, or edit an existing one, you can save the map to a file so that you can choose it any time you use BraillePen; you can save it either to the BraillePen program folder or to another folder.

The program is called BPCConfig. It can be found on the Programs menu under BraillePen.

You cannot run both the BraillePen Write and BPCConfig together. If you should try, you will see an error dialog telling you that another instance of either BraillePen or BPCConfig is running.

The Main BPCConfig Window

When you run BPCConfig, the main window opens with a number of choices.



There are three buttons across the top of the window, giving you the choice of starting a new keymap, reading in an existing keymap from a file, or saving a keymap you have been editing.

Below these buttons are two display spaces; on the left is the Space which displays the existing key mappings for a file you have loaded, and on the right is the Space where the keymap you are editing is displayed.

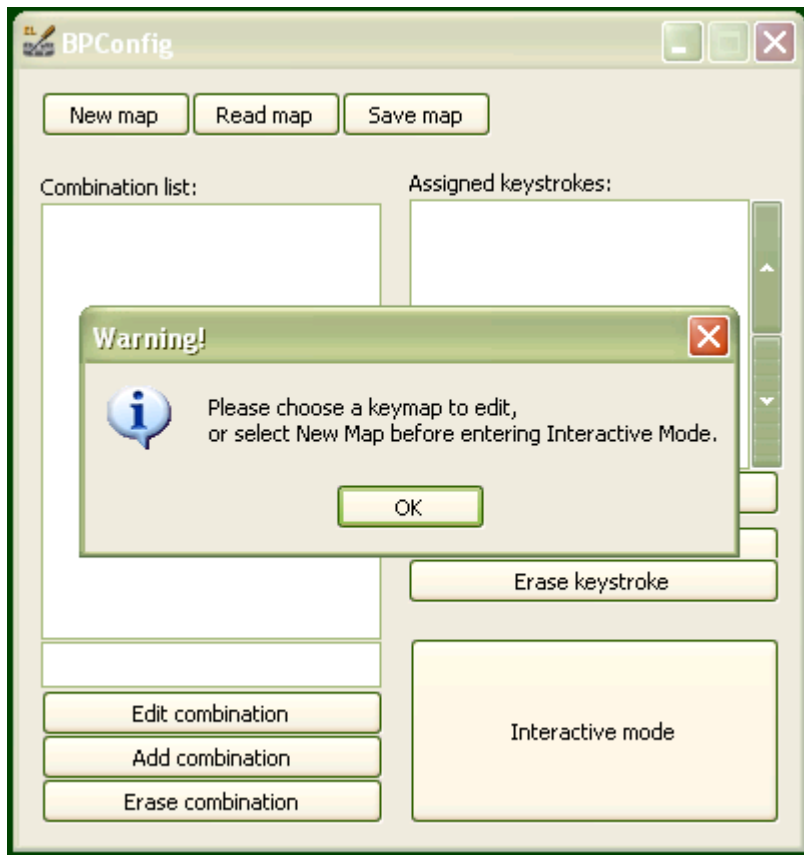
Below each of the display spaces there are three buttons, each of which acts on the Space above it. The buttons for the left Space are Edit combination, Add combination and Erase combination; for the right Space, Edit keystroke, Add keystroke and Erase keystroke. In either case, before you can edit or erase, you must select the relevant combination inside the Space.

If you begin a new keymap, nothing appears in either of these Spaces; if you load a keymap, the contents of that keymap are loaded in the left display space, and then any combination you select in the left Space is displayed in the right display space.

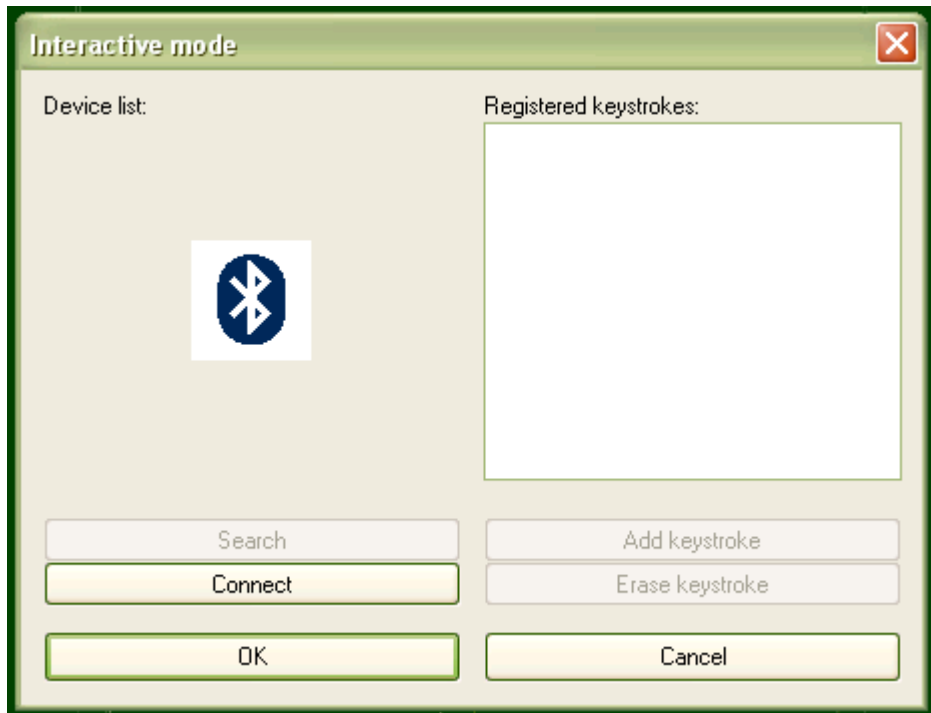
When you are editing, either in Interactive Mode or in the editing window, if you enter a new key combination for an existing keymap, the previous keymap is overwritten with the new one.

The last button on the main window is Interactive mode. This allows you to build a new keymap, or edit an existing keymap, by using the BraillePen keyboard and the PC keyboard to type the BraillePen keystrokes and their corresponding PC keyboard keystrokes.

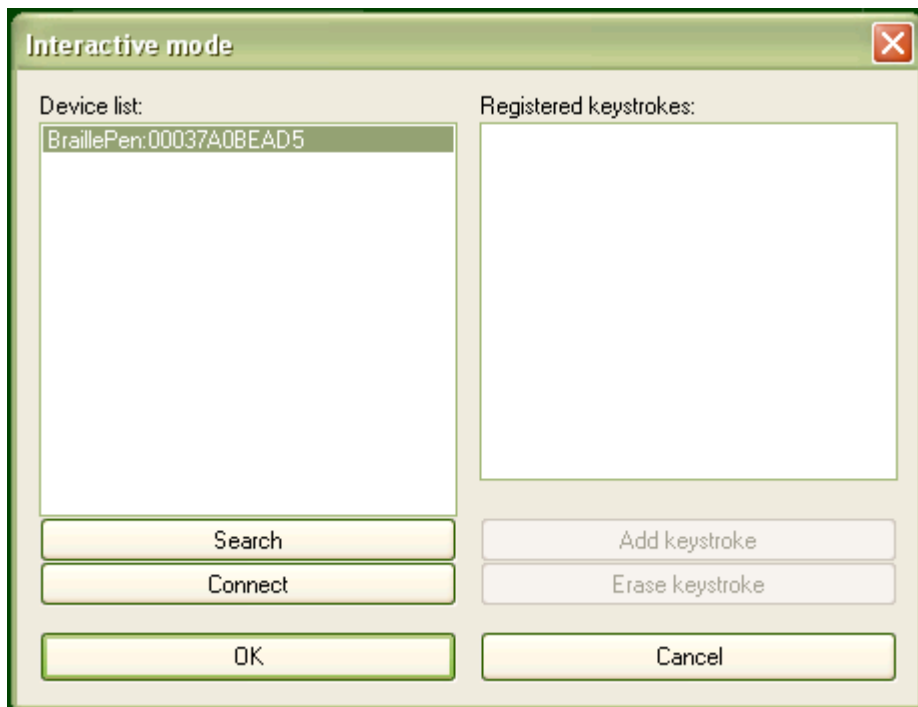
Before you can use the Interactive mode, you have to either choose to start a new keymap or load an existing keymap; if you don't remember to do that, you will see an error message reminding you:



Once you have loaded a keymap or chosen to begin a new keymap, the Interactive window will appear, and BPCConfig will begin searching for your BraillePen - make sure it is turned on and Bluetooth is active.



First there is a flashing Bluetooth icon in the centre of the left panel, and then when BPCConfig has discovered your BraillePen, it will put the MAC address in the left-hand side of the window, and you can then click Connect.



On the right side of the window is a display space to list the key mappings as you build them up. Under that display space is a pair of buttons: Add keystroke and Erase keystroke.

When you click Add keystroke, a new window appears inviting you first to press the keystroke on one or other of the keyboards - it doesn't matter whether you begin with the BraillePen or the PC keyboard.

When you have pressed that keystroke, the message then invites you to press the corresponding keystroke on the other keyboard. When you have done that, the new window disappears, and your new combination is displayed in the right-hand display space.

If you should enter a combination in error, you can use the Erase keystroke button to delete that keymap from the list, and then use Add Keystroke to do it afresh.

The two buttons at the bottom of the Interactive Mode window are OK and Cancel. Cancel takes you back to the main BPCConfig window, without making any changes to the keymap you have loaded; OK takes you back to the main window and writes your changes into the file you have loaded - you can check the display space for your changes and additions, which will appear at the bottom of the list.

Remember to save the keymap file from the main window to write it to the disk as a file; use the Save keymap button in the main window to do this.