

zbit:PiDapter for the BBC micro:bit

'Early Adopters' Assembly Instructions

zbit:PiDapter and other zbit:connect boards are currently on sale only at shows and exhibitions.

Thank you to everyone who has bought one or more of these zbit:connect boards!

To support you, in advance of a full set of assembly instructions with full graphics, etc being available, please use these 'Early Adopters Assembly Instructions'.

When the **Fully Released Assembly Instructions** are added to the web site we will send a **Tweet**.

So, follow [@ZbitConnect](#) to be informed about the latest updates.

Tools required

Pozidrive Screwdriver

Pliers

Small File

Soldering Iron

Solder

Assembly Instructions

Break off all of the smaller boards (**spacer**, **clip board**, **xspacer** and **zbit:pi:fix** boards) from the main **zbit:PiDapter PCB**. Snap off both ends of the connecting 'break-off' tabs. This will require a pair of pliers.

Files off any rough edges from where the break-off tabs were attached

Solder the 40 way connector to the **underside** of the main **zbit:PiDapter PCB**.

Ensure the connector is fitted to the underside of zbit:PiDapter.

The underside of zbit:PiDapter is the side without the logos and text

If the connector is **soldered flush** with the PCB, when the **micro:bit** is fitted to the **Raspberry Pi** the micro:bit's battery connector will rest on the Raspberry Pi's audio jack. This will mean that the micro:bit will be **not quite horizontal**, but will still work. If you would like the micro:bit to sit **horizontally**, solder the **zbit:PiDapter** connector so the pins are flush with the **top** of the PCB which will mean the connector is lifted about 1.5mm off the PCB.

It is recommended you first solder two opposite corner pins. Then check that the connector is **vertical** and is on the **underside** of the PCB before soldering the remaining pins.

Attached the **zbit:connector**, **spacer** and **clip boards** with the **M3 pan head screws** as shown in the "**zbit:connector Assembly Diagram**" which can be downloaded from the www.zbit-connect.co.uk

Insert your micro:bit into the slot at the top of **zbit:PiDapter** between the main **zbit:PiDapter PCB** and the **clip board PCB**. Use the **M3 countersunk head screws** **inserted from the back of the micro:bit** as shown in the "**zbit:connector Assembly Diagram**" to secure your **micro:bit** to **zbit:PiDapter**.

Tighten, but **don't over tighten** all screws.

Plug **zbit:PiDapter** into the 40 way header of your **Raspberry Pi** with the **micro:bit** covering the top of the **Raspberry Pi** as shown in the "**zbit:PiDapter Data Sheet**" photo - being careful to **ensure pins are correctly aligned**.

Optionally use the **zbit:pi:fix** and **xspacer** boards to bolt **zbit:PiDapter** onto the fixing holes on your **Raspberry Pi**. This will require additional M3 and M2.5 nuts, bolts and spacers (not supplied)

zbit:PiDapter is now ready to use !

Download the "**zbit:PiDapter Raspberry Pi to micro:bit GPIO mapping**" spreadsheet from www.zbit-connect.co.uk

zbit:PiDapter is compatible with Raspberry Pi Models that have a 40 pin GPIO Header, including Raspberry Pi-Zero. It can also be used with earlier Raspberry Pi Models with a 26 pin GPIO Header by using a 26 way adapter (not supplied). zbit:pi:fix boards are *not* however compatible with the fixing holes on these earlier Raspberry Pi boards.

Visit www.zbit-connect.co.uk for **examples of what you can do with zbit:PiDapter!**