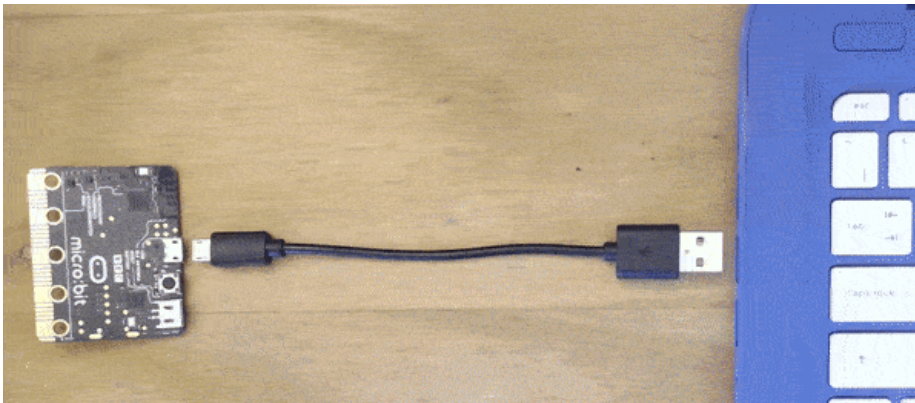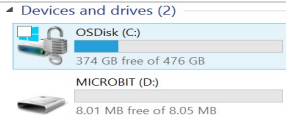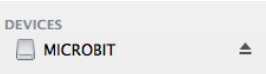# Troubleshooting the BBC micro:bit

Modified on: Wed, 26 Oct, 2022 at 5:53 PM

If your micro:bit appears to have developed a fault, this article works through some potential problems and provides steps to try to bring the device back to life.

Test on USB

Plug the micro:bit into your computer with a ***USB lead capable of transferring power and data.** It should appear as a MICROBIT drive and the yellow system LED on the back should light up.

On computers running **Windows**, MICROBIT appears as a drive under Devices and drives.	On a **Mac** it appears as a new drive under Devices.

* Some USB leads are 'power only' leads (especially poor quality leads or those designed to charge mobile phones). You will need to use a USB lead that transfers data for example a lead used for smartphones or a digital cameras.

If the yellow LED does not light up, it is likely that either your USB lead has developed a fault, or your computer might have powered down the USB port. This can happen if you short out your micro:bit when running from USB and plugging in electronic components. Some Mac's (when they power down their USB port) require a restart for the USB port to recover, in this case, please try:

- **another lead**
- **another USB port on your computer**

- **restarting your computer**

Also, try your micro:bit in a different computer, just in case your computer has powered down its USB ports for some reason.

Older computers can take a few seconds for the MICROBIT drive to register when you first plug the micro:bit into a new USB port, so wait for about 20 seconds to see if it appears in your file manager. If it does not appear, then **press the reset button on the back and wait another 20 seconds**.

Antivirus and Device Management software

Ensure that any antivirus software or school device management policies you are using **exclude the MICROBIT drive from being scanned automatically.** Automatic scanning can prevent the micro:bit from mounting as a drive. For more information please read **(https://support.microbit.org/support/solutions/articles/19000073369-why-doesn-t-my-computer-detect-my-micro-bit-)Why doesn't my computer detect the micro:bit? (https://support.microbit.org/support/solutions/articles/19000073369-why-doesn-t-my-computer-detect-my-micro-bit-)**

MBED Driver (Windows)

If you have upgraded from a previous version of Windows to Windows 10 or already have the MBED driver installed, Windows may not detect the micro:bit. In this case, you will need to **remove the old driver to allow Windows to automatically install it. (https://support.microbit.org/support/solutions/articles/19000089574-beta-testing-mbed-driver-doesn-t-work-with-windows)**

Hardware Faults

If you see the yellow system LED lit but no MICROBIT drive after the tests above, it is possible that your micro:bit has developed a fault. You should **contact the supplier that you purchased your micro:bit from and ask them about their returns process.**

However, if you can now see the MICROBIT drive on your computer, test it with our **smile test program (https://makecode.microbit.org/_V0y75a8sh18s)** by **flashing the .hex file to your MICROBIT drive (https://support.microbit.org/solution/articles/19000013986-how-do-i-transfer-my-code-onto-the-micro-bit-via-usb)**. Wait for the yellow LED on the back to stop flashing and you should get a smiley face on your micro:bit.

Motion Sensor

If you find your compass or accelerometer isn't working the way you expect it to, it may be a result of recent software updated to support the micro:bit **motion sensor revision (https://support.microbit.org/solution/articles/19000087020-micro-bit-motion-sensor-hardware-change/en)**. Modifications have been made to the underlying software that supports the

compass and accelerometer, so you may need to **update your hex file.**
(https://support.microbit.org/en/support/solutions/articles/19000090748-updating-your-hex-file-)

If you're still having compass troubles, **check out our tips for calibration.**
(https://support.microbit.org/en/support/solutions/articles/19000008874-calibrating-the-micro-bit-compass).

Bluetooth

If you have been using your micro:bit with Bluetooth and flashing programs over the Bluetooth from your phone or tablet, there is a chance that you might have interrupted the code transfer process while this was happening.

Our article **micro:bit shows \`+\` symbol or is unresponsive after flashing with Bluetooth**
(https://support.microbit.org/support/solutions/articles/19000116497-micro-bit-shows-symbol-or-is-unresponsive-after-flashing-with-bluetooth) explains how to reset your micro:bit if the code transfer isn't working.

Bluetooth pairing mode will not work if the micro:bit has previously been flashed with a MicroPython hex file. In this case r**einstate Bluetooth** **(https://support.microbit.org/a/solutions/articles/19000026073-how-to-re-instate-bluetooth-after-previously-using-micropython/en)** by flashing a MakeCode program.

Maintenance Mode

If you were accidentally holding the reset button at the back at the time you copied the program onto the micro:bit, this would have put the micro:bit into **maintenance mode**
(https://support.microbit.org/en/support/solutions/articles/19000082598-maintenance-mode). As a result, a new MAINTENANCE drive will appear in your file manager. If the reset button is pressed while powering up the micro:bit (even after you loaded the .hex file), the micro:bit will go into maintenance mode and will not accept your user code.

To resolve this issue, power down the micro:bit and reconnect the power source, being sure not to press the reset button at the back as you are doing this. The MICROBIT drive should re-appear.

If you are still experiencing issues, please try **upgrading the firmware** (https://microbit.org/get-started/user-guide/firmware/)

Keywords for search: not working, faulty, Bluetooth, not responding, problem, fault, broken, maintenance
(https://support.microbit.org/a/solutions/articles/19000026073-how-to-re-instate-bluetooth-after-previously-using-micropython/en)