How to Update the Firmware

Hardware is the physical part of a micro:bit.

Software is made up of the programs you write and run on your micro:bit.

Firmware is in the middle: a special kind of software that makes devices

function properly. It's physically stored in the micro:bit's interface chip

and doesn't change when you write programs or turn your micro:bit off,

but it can be updated.

The micro:bit will work with the firmware it came with, but there may be

times when you may want to update the firmware to use new features like

WebUSB.

Checking your firmware version

To find out what version of the firmware you have on your micro:bit, Plug

it in via USB, open up the DETAILS.TXT file from the MICROBIT drive and

look for the number on the line that begins 'Interface Version'. In this

example, the firmware version is 0250:

DAPLink Firmware - see https://mbed.com/daplink Unique ID:

990000031634e4500624014000000320000000097969901

HIC ID: 97969901

Auto Reset: 1

1



Automation allowed: 0

Overflow detection: 0

Daplink Mode: Interface

Interface Version: 0250

Git SHA: 682d8303e37355532402b8d93c4f240a3cec02a9

Local Mods: 0

USB Interfaces: MSD, CDC, HID, WebUSB

Interface CRC: 0x3f2b7e12

Remount count: 0URL: https://microbit.org/device/?id=9900&v=0250

How to update the firmware

Disconnect the USB cable and battery pack from the micro:bit.

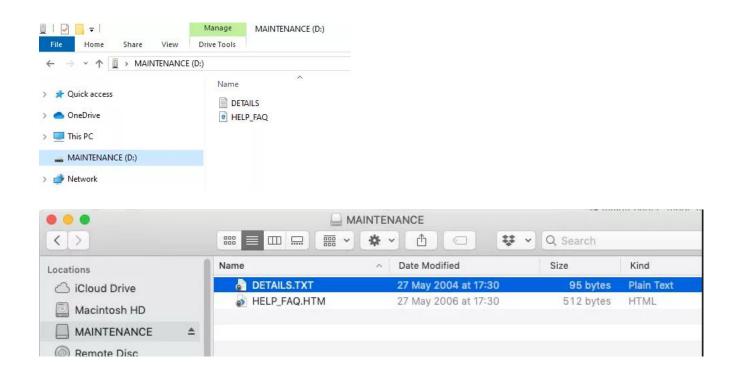
Hold the reset button at the back of the micro:bit and plug the USB lead into the device. You should see a drive appear in your file manager called **MAINTENANCE** (instead of MICROBIT).





The **MAINTENANCE** drive will look like this, depending on your computer:

Windows



• Download the hex file from this page to your computer.

Downland the latest firmware-0253

• Drag and drop the new firmware .HEX file you downloaded from this page onto the MAINTENANCE drive and wait for the yellow LED on the back of the device to stop flashing. When the upgrade is completed, the micro:bit will reset, ejecting itself from the computer and re-appear in normal MICROBIT drive mode.



 Finally, check the **DETAILS.TXT** file that is on the **MICROBIT** drive and make sure that it has the same version number as the .HEX firmware that you just downloaded and flashed to the interface chip.