

Upgrading MaxDuino firmware to the latest version (Currently 3.x)

To upgrade to the latest firmware you will need the following tools:

- avrdude software (<https://github.com/avrdudes/avrdude>)
- USB to Serial programmer like the USBASP or usbtiny

Optional:

- Arduino IDE (If you want to compile your own version and set custom options – read through the MaxDuino GitHub page on how to do this)
- MaxDuino code (<https://github.com/rcmolina/MaxDuino>)

I've compiled a HEX file (Config option 3) which you can use with avrdude so you can either use this or compile your own version.

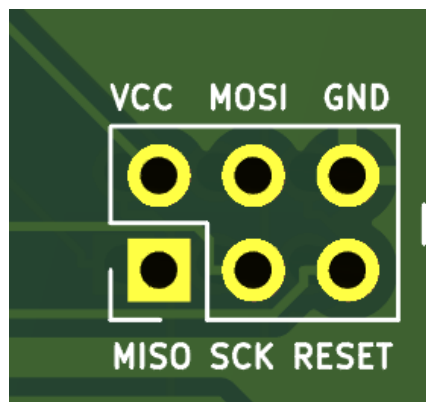
My compile HEX file can be downloaded here:

<https://myretrostore.co.uk/wp-content/uploads/2026/01/MaxDuino.ino.hex>

Connecting the USB to Serial Programmer:

The programmer will need to be connected to the ISP header on the right. If you use a 2x3 pin header you can temporarily connect it to the PCB while programming.

Take note of the pins and make sure you connect them up to the corresponding pins on your programmer.



Prrogramming:

Before you program the firmware it's a good idea to test the connection:

```
avrdude -c usbasp -p m328p
```

If you are using a different programmer then adjust the -c option. You should see avrdude connecting without any errors.

To upload the latest firmware run:

```
avrdude -c usbasp -p m328p -Uflash:w:MaxDuino.ino.hex:i
```