

# Hobbyking U-blox NEO-6M module configuration manual

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Hello everyone! A few weeks ago, I received this module and started to play with it. I looked for some Arduino code (parser) to view the gps data. I've found a one that should work at [www.doctormonk.com](http://www.doctormonk.com) (site at the time of writing temporarily down), uploaded it to my Uno wired the circuit up (pay great attention on 3.3 V!) but unfortunately it generated just some snarl of characters. This way I found out that it needs to be reconfigured to output just pure NMEA protocol, not NMEA + ublox as it does out of the box.

So if you want to reach every setting of this module:

- 1) obtain a ftdi or similar usb-uart adapter **with** a capability of 3.3V voltage levels – there are many ftdi based for example on ebay with a jumper setting of 5V vs. 3.3V
- 2) get a 3.3V power source to power the gps, ftdi has a regulator onboard, but its insufficient in terms of power, It **may** be possible to wire up the module VCC pin to 5V (it seems that there is a small 3.3V regulator on the pcb of the hobbyking module) but I'm not sure, so we'll suppose that there isn't any
- 3) download and install the u-center – listed here in the files tab
- 4) install drivers for ftdi to establish the virtual com port to communicate with gps
- 5) run the u-center
- 6) select Receiver-port – select virtual ftdi port to communicate with module
- 7) select Receiver – Autobauding – ensures the communication at any speed set
- 8) select View-Configuration view
- 9) change the settings as you wish – under **Ports** you'll find output protocol, output hardware and baudrate, if you intend to use the module with a Arduino code parser – select Protocol out – 1 – NMEA – pure gps data will be sent out, without ublox protocol codes, at **Rates** you can change the baudrate
- 10) after confirming changes of all desired settings, go to **CFG – configuration** and select just I2C eeprom, then go to another setting group – you'll be asked to confirm to write the configuration to the gps like in other setting groups – confirm
- 11) Now are your setting permanently saved in the external eeprom onboard and will be automatically loaded to gps from it at the power-up