

How to Use the Board?

1. Download the Arduino IDE, the latest version.
2. Install the Arduino IDE
3. Set up your Arduino IDE as: Go to File->Preferences and copy the URL below to get the ESP board manager extensions:
http://arduino.esp8266.com/stable/package_esp8266com_index.json Placing the http:// before the URL lets the Arduino IDE use it...otherwise it gives you a protocol error.
4. Go to Tools > Board > Board Manager> Type "esp8266" and download the Community esp8266 and install.
5. Set up your chip as:
Tools -> Board -> NodeMCU 1.0 (ESP-12E Module)
Tools -> Flash Size -> 4M (3M SPIFFS)
Tools -> CPU Frequency -> 80 Mhz
Tools -> Upload Speed -> 921600
Tools-->Port--> (whatever it is)
6. Download and run the 32 bit flasher exe at Github(Search for nodemcu/nodemcu-flasher/tree/master/ at Github)
github.com/nodemcu/nodemcu-flasher/tree/master/Win32/Release Or download and run the 64 bit flasher exe at:
github.com/nodemcu/nodemcu-flasher/tree/master/Win64/Release
7. In Arduino IDE, look for the old fashioned Blink program. Load, compile and upload.
8. Go to FILE> EXAMPLES> ESP8266> BLINK, it will start blinking.

The command you need to use:

```
esptool.py --baud 115200 --port /dev/tty.SLAB_USBtoUART write_flash -fs 32m -ff 80m  
--flash_mode dio 0x00000 boot_v1.7.bin 0x1000 user1.bin 0x37c000 esp_init_data_default.bin  
0x37e000 blank.bin
```

The important part is "-flash mode dio"

<https://github.com/espressif/esptool/wiki/SPI-Flash-Modes>.