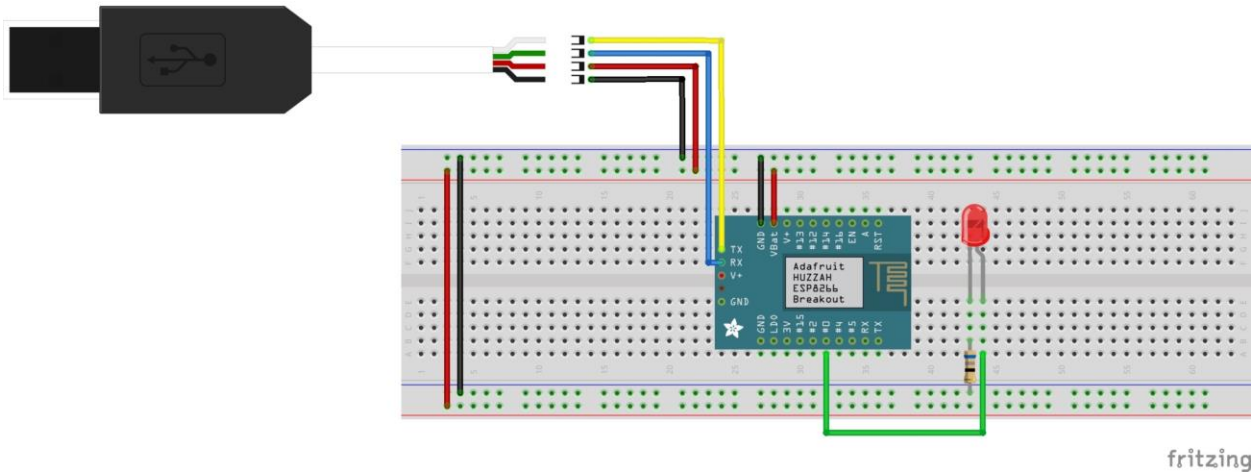
ESP8266 Hook-up Guide



Materials needed:

- ESP8266 HUZZAH Breakout Board or any ESP8266
- USB to TTL converter (for programming and debugging)
- 1x 68 ohm resistor
- 1x Red LED

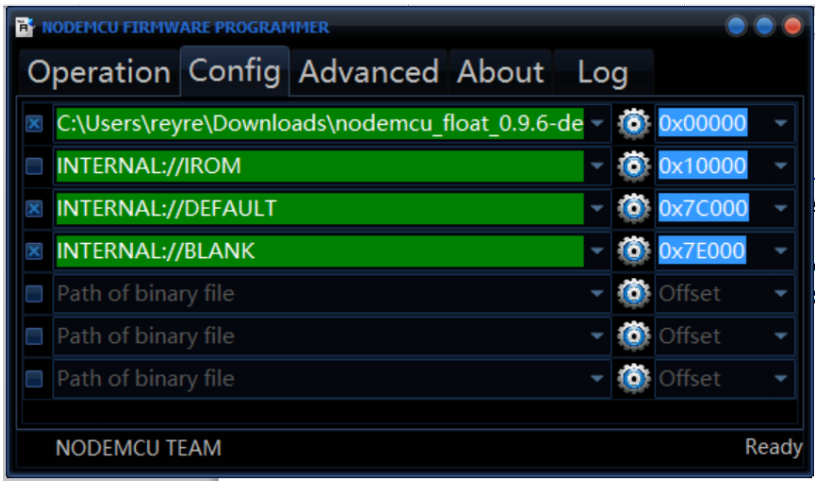
NodeMCU firmware:

Is a firmware that is powered by Lua. Please see readme.txt for more details.

Flashing NodeMCU firmware:

- Download the flasher here: https://github.com/nodemcu/nodemcu-flasher. Depending on your system, go to **Win32/Release** or **Win64/Release**, then download ESP8266Flasher.exe
- Download the firmware: https://github.com/nodemcu/nodemcu-firmware/releases
- Connect your USB to TTL converter with your ESP8266. Connect Tx of your USB to TTL converter to the Rx of your ESP8266, and Rx of your USB to TTL converter to the Tx of your ESP8266
- Connect GPIO 0 to GND
- Power the board
- Open ESP8266Flasher.exe
- Choose your COM port where your USB to TTL converter is connected
- Go to “Config” tab

- Copy the configuration below. For the first row, click on the little gear button besides 0x00000 and select the NodeMCU firmware that you want to upload to your ESP8266 board.



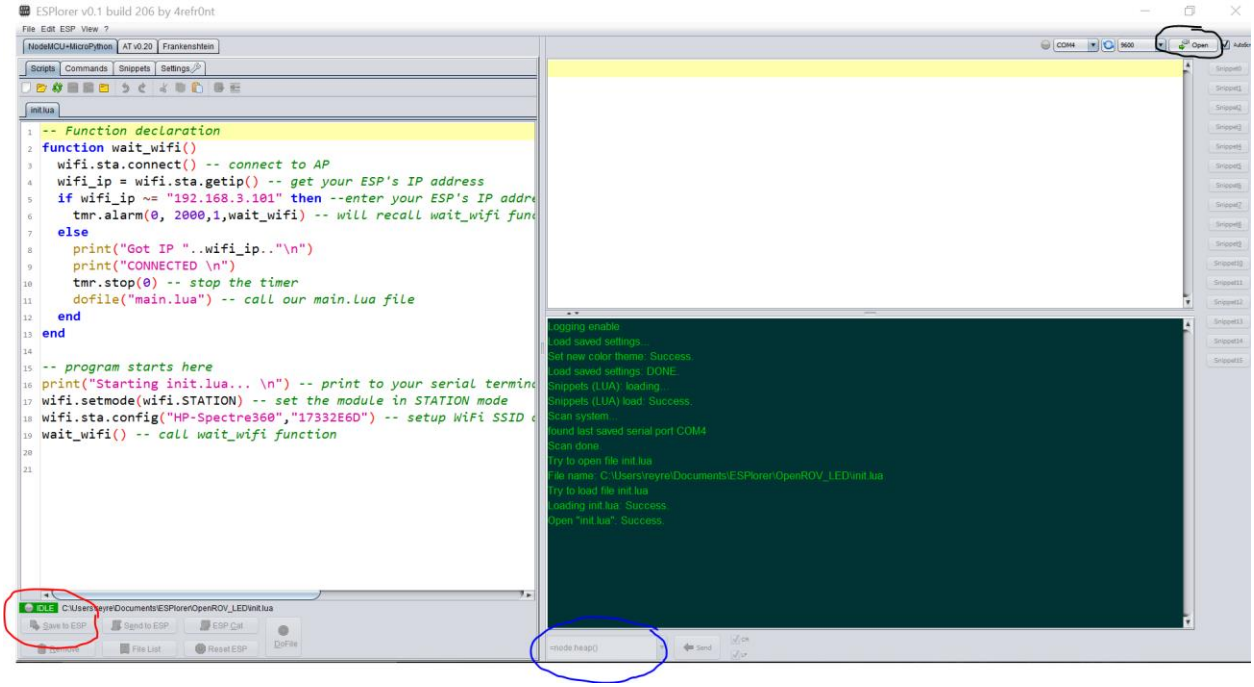
- Go back to the “Operation” tab, click on Flash(F), and wait until finish

Important notes about ESP8266:

- Can draw current up to 250 mA, so make sure your power supply can supply that
- ESP8266 HUZZAH Breakout Board requires 3.5V-16VDC.
  WARNING: This board is different with the regular ESP8266 that operates at 3.3VDC. If you are using the regular ESP8266, make sure you use 3.3V power supply or add a 3.3V regulator circuit.
- 9x GPIO with 3.3V logic
- Press reset button to reset, or connect RST pin to GND
- To flash firmware, connect GPIO 0 to GND

Programming your ESP8266:

- Download ESPlorer: http://esp8266.ru/esplorer/#download



- Click on “Save to ESP” (mark in red) if you want to upload your code to your ESP8266
- Make sure your USB to TTL converter is connected and click on “Open” (mark in black), on the top right corner of your ESPlorer window