arendst / **Sonoff-MQTT-OTA-Arduino**

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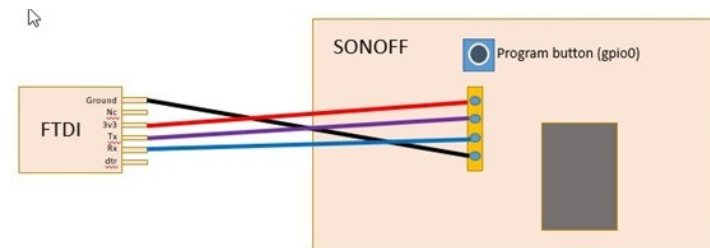<> Code   ⊙ Issues **19**   Pull requests **1**   Projects **0**   📖 Wiki   ⊶ Pulse   Graphs

Compile and Upload

Theo Arends edited this page a day ago · 25 revisions

In the Arduino IDE for sonoff select from `Tools Board Generic ESP8266 Module` and set the
following options:

- Flash Mode: DIO
- Flash Frequency: 40MHz
- Upload Using: Serial
- CPU Frequency: 80MHz
- Flash Size: 1M (64K SPIFFS)
- Debug Port: Disabled
- Debug Level: None
- Reset Method: ck
- Upload Speed: 115200
- Port: Your COM port connected to sonoff

Update `user_config.h` with your specific MODULE (SONOFF, SONOFF_POW or
ELECTRO_DRAGON), Wifi and MQTT parameters.

Use FTDI at 3v3 – hold program button – THEN
power up FTDI. Do NOT connect mains power
while doing this – you will FRY. Test connectivity,
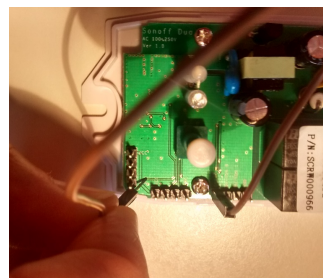disconnect, put back in the box, use.

Verify source and upload once to sonoff using the serial connection as shown in Peter Scargill's
blog.

Do not connect AC power during the flash cable connection.

Sonoff Dual

Programming the Sonoff Dual is more difficult as the button is
not connected to GPIO0 which is needed to put the ESP8266
in programming mode during power up.

I suggest to solder a 4 pin header for the serial interface as
shown in the image on the right (the vertical connector) and
use the small inter layer VIA to ground GPIO0 using the GND
pin from the button 0 and button 1 header.

The 4 pin header in the middle, which is normally not present, is not needed but might be used in
programming the ESP8266 as there must be a better way for itead to get the initial code loaded ...

S20 Smart Socket

The picture on the right, provided by ThomDietrich, shows how to program the S20 Smart Socket
powered by the FTDI USB converter.

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Usage

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- **Tips**
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User Experience

- **Remote Button**

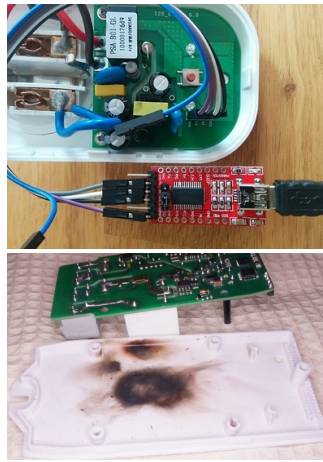**Clone this wiki locally**

https://github.com/arends

Remember that during programming the Smart Socket is **NOT** connected to mains.

Sonoff Pow - WARNING

Trying to program the Sonoff Pow comrade MySKU learned the hard way how to brick it.

As the Sonoff Pow power monitoring hardware connects AC power to the logic ground of the ESP8266 it is utterly mandatory to **NOT CONNECT AC POWER WHILE SERIAL CONNECTION IS BEING USED**.

During both AC connection and Serial connection you may connect the life AC wire with your PC's DC ground leading to a power short, broken Sonoff Pow and laptop Power Supply as MySKU has experienced.

Upload image

Verify and upload an OTA image to your web server with option `Upload Using: OTA_upload`.

Since version 1.0.26 you may also use sonoffs web server and upload the file directly.

Enable debug messages by selecting option Tools Debug Port: Serial.