Pi Supply Switch Assembly Instructions

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Please find below the assembly instructions for the Pi Supply Switch v1.1. We will soon have a full picture guide here, but until then the following are the positions.

The PCB is labelled with the component positions. We recommend you assemble them in this order:

- R1 and R2: Resistor 22k
- R3 and R4: Resistor 10k
- R5 and R6: Resistor 1k
- D1 and D2: Diode 1N4001
- Q1 and Q2: Transistor BC548
- D3: Red LED 635nm 3v (hole with circular hole is positive, long leg of LED goes here)
- C1: Capacitor 220uF (hole closest to R3 is for positive leg)
- RL1: G5V-1 5DC Relay
- On, Soft_Off and Off switches: 3x6mm tactile switch (9.5mm button length)
- Header: 2 pin header
- Power out: USB A receptacle

For connecting the two pin header to the Pi, they are labelled 7 and 8. Pin 8 has to go to pin 8 on the GPIO header on the Pi. Pin 7 can go to any other Pi GPIO port, but since 7 is next to 8 we thought that would be easier.

Raspberry Pi 3 Users

If you use the Pi Supply Switch with the Raspberry Pi3 you may experience under-voltage issues and unexpected power off.

Under-Voltage

In order to solve the under voltage problem it is advisable to use shorter USB cable. 15-30 cm with a thickness of 22 AWG should solve the issue. These types of cable are generally the ones used for phone charging and should be easily found in various shops.

Alternatively you could modify the Pi Switch as indicated in the picture and use some dupont link

cables to attach the Pi Switch directly to the Raspberry Pi header.

Power Off

The Raspberry Pi3 has also changed the way the on board UART works. Because of that you may find that the Raspberry Pi could switch off within two minutes of it powering up. To solve this please refer to our GitHub repository for the new Jessie compatible software and an updated connection scheme as shown in the picture below.
Please install the code before you connect the switch.
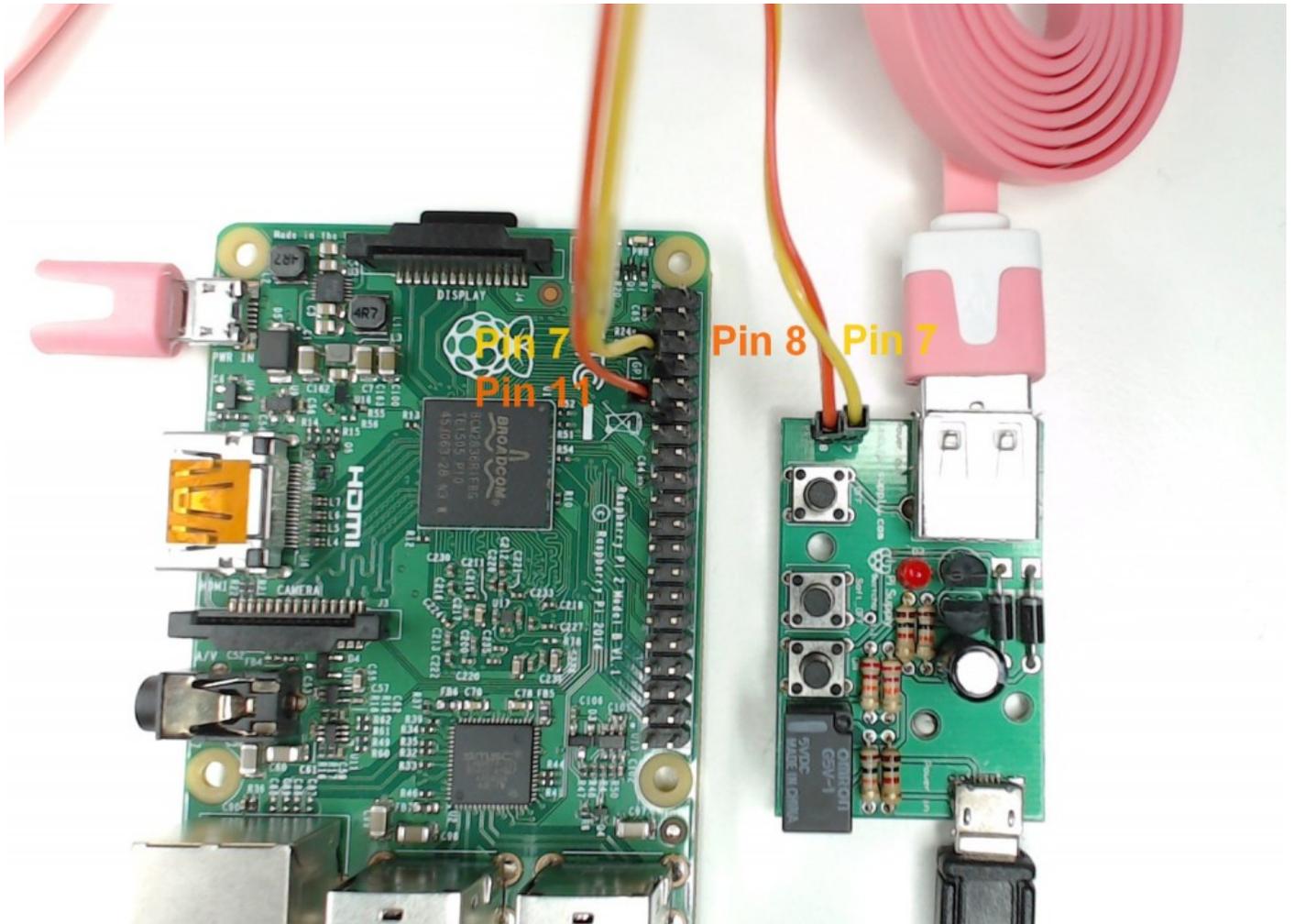
Below is a video on how to assemble the Pi Supply Switch.