Power Button For RPi SKU: EP-0077





Description

As everyone at some point will recognize the Raspberry Pi doesn't include any kind of shutdown button.

So the only way to power it off is by unplugging it from the power supply.

To make sure you get no corruption of your data files on the SD card you should shutdown the Raspberry before powering it off.

So the whole procedure can be a bit annoying especially if you want to use the Raspberry as some kind of embedded PC .

e.g. a media server or an internet radio.

NOTE: There is new version: V2.02, using this method to setup the driver, Link is under below: Driver installation for Version 2.02

New Version V2.02





Features

Power Button provides a small circuit that includes the features:

- Sending a shutdown signal to the Raspberry if the Shutdown Button is pressed
- Waiting for the Raspberry to shut down
- Powering off the Raspberry after save shutdown
- Powering on the Raspberry after the Button is pressed again
- LED light indicating the current state: On / Shutdown / Off
- Easy to setup

ChangeLog

- Updated MCU
- Changed Layout
- Changed Button
- Optimized code

Dimension

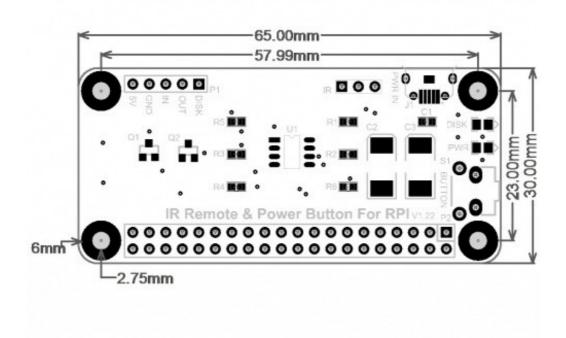
Parameter	Value
Dimension	65mm x 30 mm x 20mm
Weight	22.72g

Package Includes

- Power Button For RPi Module x1
- IR Remote controller (without battery) x1

Mechanical Drawing

• V1.22 and V2.02 has the same Mechanical Drawing, means that they has the same size.



Parameters

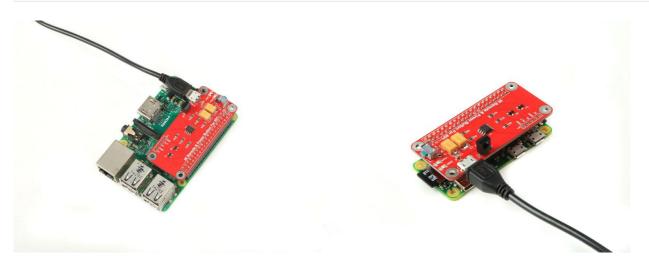
There is a chart which can show you the function of the GPIO Pin definition of this board:

Function	BCM	RPi
Disk Status	21	Pin 40
Shut Down	24	Pin 18
PWR Status	26	Pin 37
GND	N/A	Pin 6/9/14/20/25/30/34/39
5V	5V	Pin 2/4

NOTE: Please make sure that your Raspberry Pi have 5V/2.5A power supply with this module!!!

How to wire it up

Do NOT connect your power supply to Raspberry Pi, Please connect it to Power Button directly.



How to set it up

NOTE: This method is only for Old version 1.04

- 1. Remove your TF card and connect it to your PC or laptop with TF card adapter.
- 2. Modify /boot/config.txt file as following, for example, my pi is Raspberry Pi 3 model B:

```
device_tree=bcm2710-rpi-3-b.dtb
dtoverlay=power-off,gpiopin=26
dtoverlay=pi3-act-led,gpio=21
```

NOTE: device_tree = PARAMETER is depends on your Raspberry Pi's model. more info please access this link:

https://www.raspberrypi.org/documentation/configuration/device-tree.md

Raspberry Pi model	Device_Tree Info
Raspberry Pi B	device_tree=bcm2708-rpi-b.dtb
Raspberry Pi 2B	device_tree=bcm2709-rpi-2-b.dtb
Raspberry Pi B+	device_tree=bcm2708-rpi-b-plus.dtb
Raspberry Pi 3 B	device_tree=bcm2710-rpi-3-b.dtb

3. Install the library of wiringPi and Download shell script to check the GPIO pin's status:

```
sudo apt-get install -y wiringPi
cd ~
git clone https://github.com/yoyojacky/powerbutton.git
cd ~/powerbutton
sudo mv ~/powerbutton/gpioshutdown /etc/init.d/
sudo chmod +x /etc/init.d/gpioshutdown
```

4. Edit the initialized file in /etc/rc.local:

```
sudo nano /etc/rc.local
```

Add those three lines before exit 0

sudo /etc/init.d/gpioshutdown & #Thanks for Steven Porter's kindly
advise. (update the "&" mark at the end of command)

```
gpio mode 25 out
gpio write 25 1
```

After edit this file, Press "Ctrl + X" to save this file and Press "Y" to save it.

5. Reboot your Raspberry Pi and plug power button on your RPi, press the button to test. Have fun.

How to install driver for Version 2.02

- · open a terminal.
- Just download driver from https://github.com/geeekpi/RPB-HAT.git by:

```
cd ~
git clone https://github.com/geeekpi/RPB-HAT.git
cd RPB-HAT/
sudo bash setup.sh
```

Reboot your raspberry and try to press the power button, reboot button and test it.

Video Tutorial

Please follow the link: Raspberry Pi 3B with Ir remote power button and pi supply & USB HUB https://youtu.be/BhEoGZshiPM