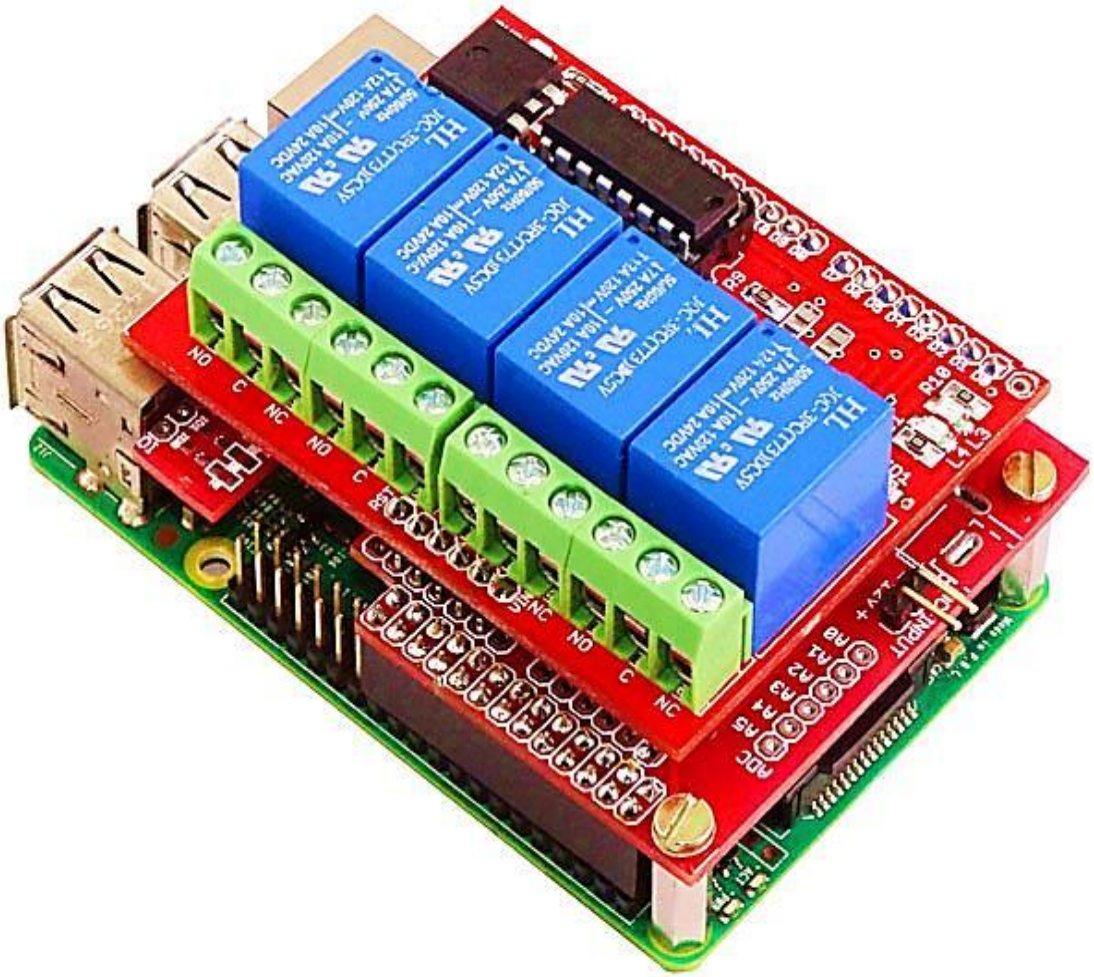
Research
Design Lab



RDL 12V RELAY SHEILD FOR RASPBERRY-PI

Contents:

Introduction:

The Relay shield is capable of controlling 4 relays. The max switching power could be 7A/250VAC. It could be directly controlled by Raspberry Pi through digital IOs.

Features:

- 4 channel Relay.
- Raspberry Pi compatible.
- **4 SPDT Relay channels (7A 250VAC).**
- Power supply:12VDC 1AMP
- Current consumption: 400 mA.
- LED indication for relay & power supply.
- Design based on highly proven IC ULN2003 as driver.
- High quality PCB FR4 Grade with FPT Certified.

Compatibility:

- Raspberry Pi
- Raspberry Pi 2
- Raspberry Pi Model B+
- Raspberry Pi zero

Package contains:

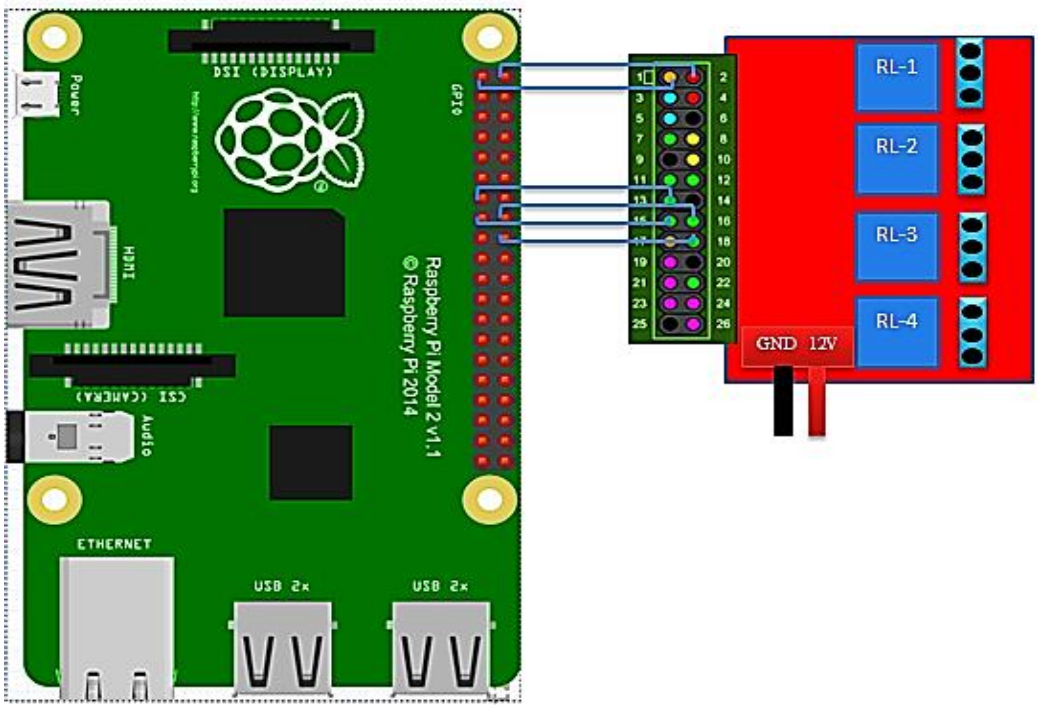
- 4 Channel Relay Board 12V.

Note1 : The Raspberry Pi in the picture above is just for reference , it does not include in the package.

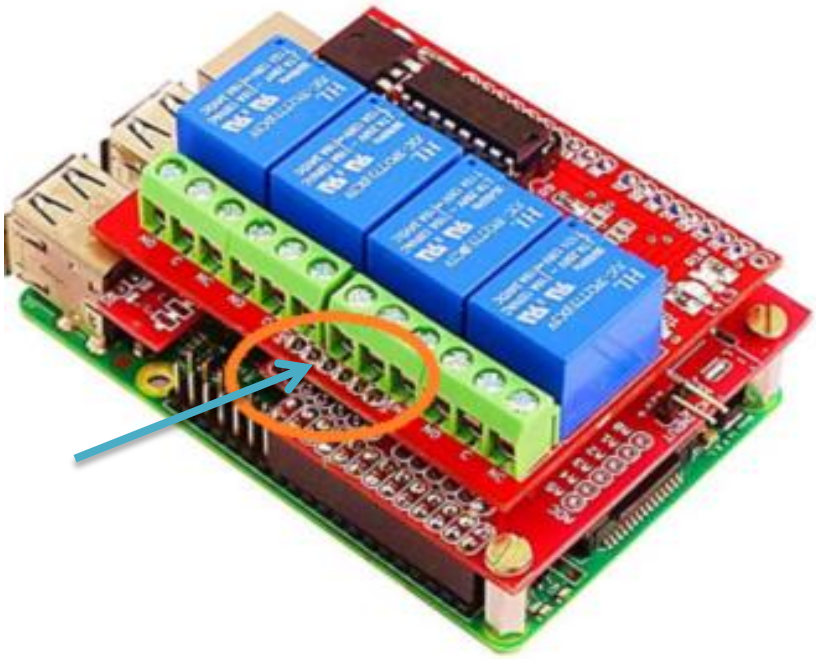
Note2: Base board is only used for soldering the relay shield and establishing the respective connectivity with Raspberry Pi I/O pins.

Internal Block Connections:

Here relay shield is connected to pin no 18,16,15,13 of the raspberry pi which is gpio mode 5,4,3,2,1. This is shown in below figure.



Important note:

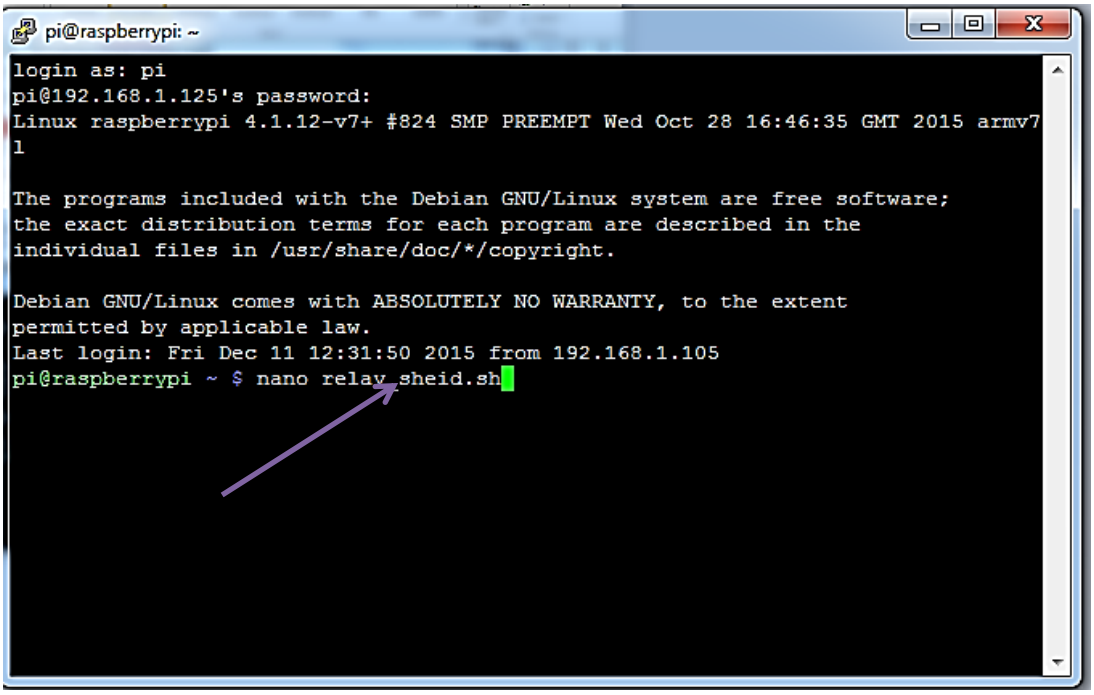


Note 1: Care should be taken while connecting AC voltages at the marked end.
Note 2: Make sure that wires are not broken or wire skins are not out at the marked end.

Sample LINUX script:

In raspberry pi open nano editor by typing following command

nano filename.sh



Inside nano editor enter the following command

gpio mode 5 out

gpio write 5 1

gpio mode 4 out

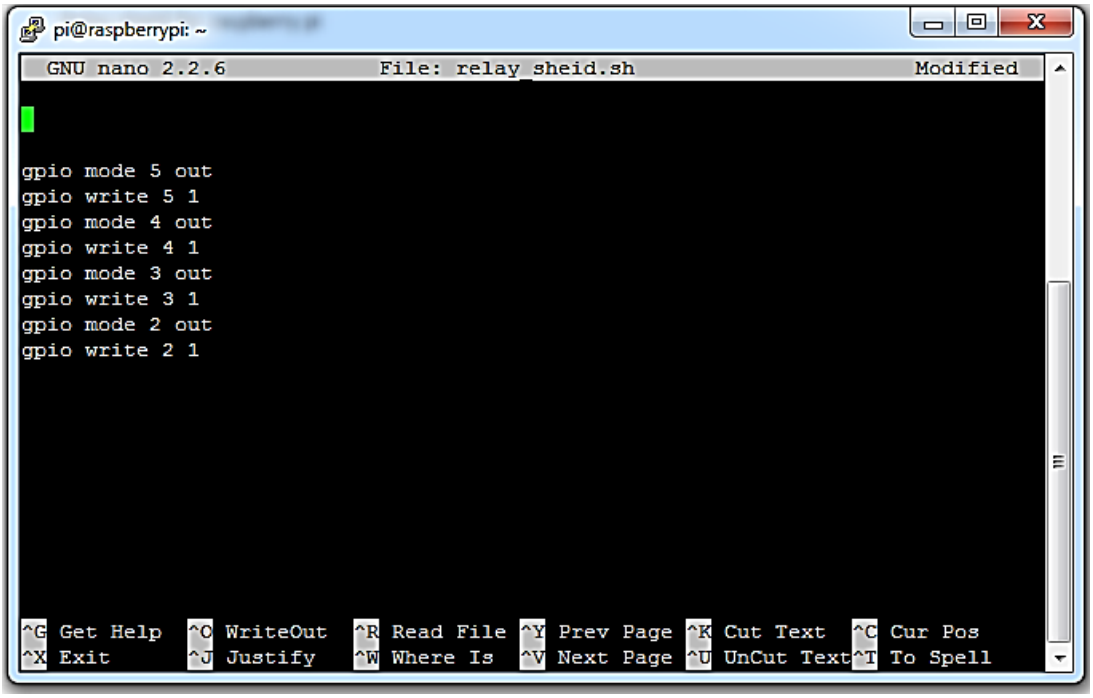
gpio write 4 1

gpio mode 3 out

gpio write 3 1

gpio mode 2 out

gpio write 2 1



Here gpio mode X out will sets particular pin as output mode. And g3pio mode X 1 will writes 1 to the particular pin which will turns on the relay connected to the particular mode.

Run the above code by following command

sh filename.sh