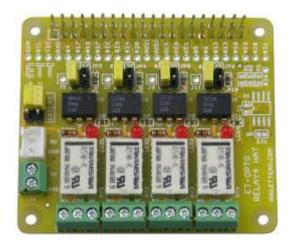


# ET-OPTO RELAY4 HAT

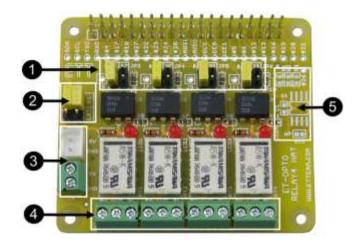


 ${\tt ET-OPTO}$  RELAY  ${\tt HAT}$  is mini Board RELAY 4-CH that is designed for use with Board Raspberry Pi.

## Specifications of Board ET-OPTO RELAY4 HAT

- Be compatible with Board Raspberry Pi Model A+, Raspberry Pi Model B+, Raspberry Pi 2 Model B
- Have connectible area of Circuit ID-EEPROM (OPTION)
- Use Circuit OPTO-ISOLATE to control operation of RELAY
- Use RELAY 5VDC as 0.5A 125VAC Contact or 1A 30VDC Contact; it has both Connector NO and NC.
- Use Connector as long leg type, it piles boards up as required
- PCB Size: 6.5 x 5.6 cm.

## Composition of Board ET-OPTO RELAY4 HAT





No.1: This Jumper (JP3, JP4, JP5, JP6) chooses PIN GPIO that controls RELAY; RELAY is activated by Logic "1". No.2: This Jumper (JP1, JP2) chooses POWER SUPPLY for RELAY either from Board Raspberry Pi or external device It is Connector POWER SUPPLY of RELAY 5VDC (J3, J4) from No.3: external; it has to set JP3 and JP4 to the position of EXT. No.4: It is Connector Contact Relay that has both Connector NO and NC.

it is connectible area of Circuit ID-EEPROM (OPTION). No.5:

### How to connect Board ET-OPTO RELAY4 HAT

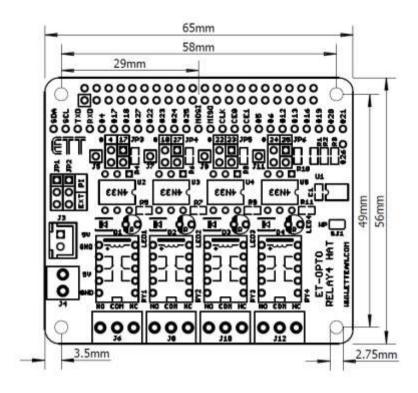


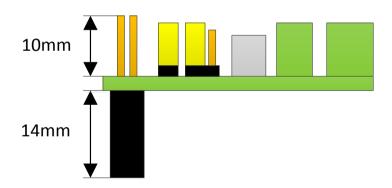
#### Example Program is written by Python Language

```
import RPi.GPIO as GPIO
import time
# Use GPIO references
GPIO.setmode(GPIO.BCM)
# Disable warnings
GPIO.setwarnings(False)
relays = [4,18,22,24]
for i in relays:
  GPIO.setup(i, GPIO.OUT)
                                   # Set up all gpio as output
  GPIO.output(i, False)
                                   # All gpio off
print "Test ET-OPTO RELAY4 HAT"
print "Press CTRL-C to exit"
try:
  while True:
    for i in relays:
       GPIO.output(i, True)
      time.sleep(1)
       GPIO.output(i, False)
      time.sleep(1)
except KeyboardInterrupt:
  # Reset GPIO settings
  GPIO.cleanup()
```



## Dimensions of Board ET-OPTO RELAY4 HAT







# Circuit of Board ET-OPTO RELAY4 HAT

