# **KEYES 5V Relay Module** KY-019



## **Description**

The new KEYES 5V Relay Module is perfectly made for Arduino application. It has three pins, the VCC, GND and Signal. It can act as switch if the circuit and the load circuit have different supply voltage. It is commonly use if the load circuit is AC. It is a switch used to connect isolated connection from the circuit using a circuit signal. It has red LED that turns on every time the coil is energized or the signal pin has a high input.

#### **Specifications**

- 5V 12 V TTL control signal
- Maximum AC current and voltage: 10A 250VAC
- Maximum DC current and voltage: 10A 30VDC
- The control signal DC or AC, 220V AC load can be controlled
- There is a normally open and one normally closed contact
- To make the coil of relay energized you must need to have an input of 1 in the signal pin.

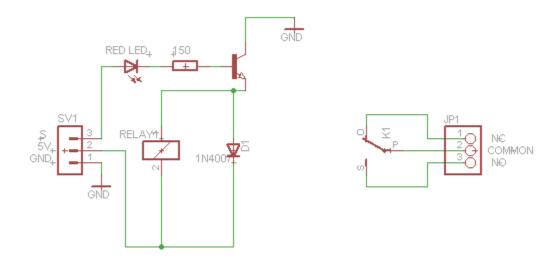
## **Pin Configuration**

- +:5V power supply
- -: Ground
- S : Signal from the Arduino
- NC : normally closed
- NO : normally open
- COMMON : common





# **Schematic Diagram**



#### **Sample Program**

```
// Keyes 5V Relay Module Sample Program

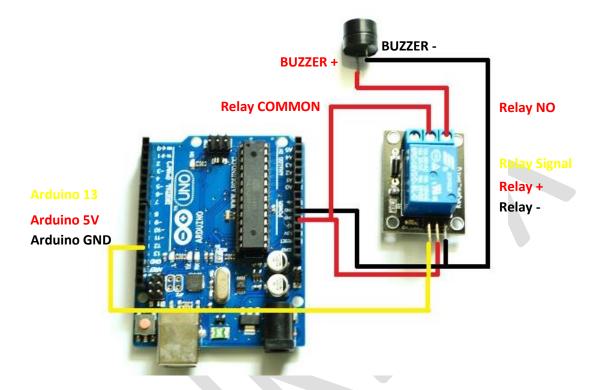
void setup() {
    // initialize digital pin 13 as an output.
    pinMode(13, OUTPUT);
}

// the loop function runs over and over again forever
void loop() {
    digitalWrite(13, HIGH); // turn the 5V buzzer on
    delay(2000); // on for two seconds
    digitalWrite(13, LOW); // turn the 5V buzzer off
    delay(2000); // off for two seconds
}
```





### **Wiring Diagram**



# **Testing**

- 1. Please check all the connections from the given wiring diagram.
- 2. Type the sample program in your Arduino sketch then upload.
- 3. The buzzer will turn on every two seconds.
  - \* You can also hear the tick of relay every two seconds.