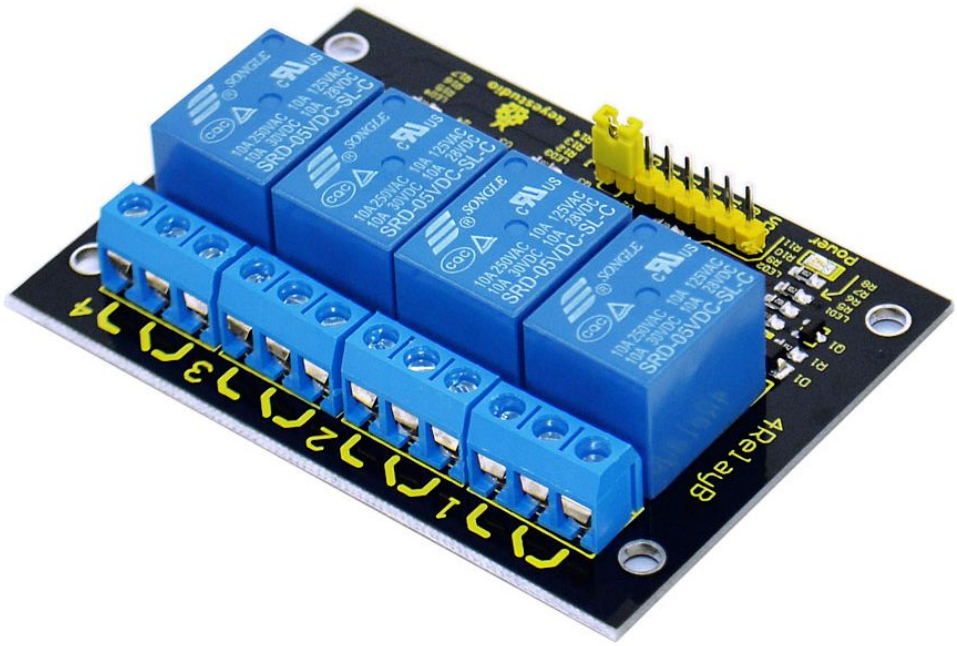
keyestudio 4-channel Relay Module



Introduction

keyestudio Relay Shield employs high quality relay with four channels input and four channels output. It can be connected to 250V/10A AC element or 24V/10A DC element to the maximum, therefore, it can be used to control lights, motors and etc. The modularized design makes it easy to connect to Arduino expansion board. The output state of the relay is shown by a LED for the convenience of actual application.

Specification

Control signal: TTL voltage

Rated load:

10A 250VAC

10A 125VAC

10A 30DC

10A 28VDC

Rated Through-current: 10A(NO) 5A(NC)

Max Switching Voltage: 250VAC 30VDC

Contact actuation time: ﹤10ms

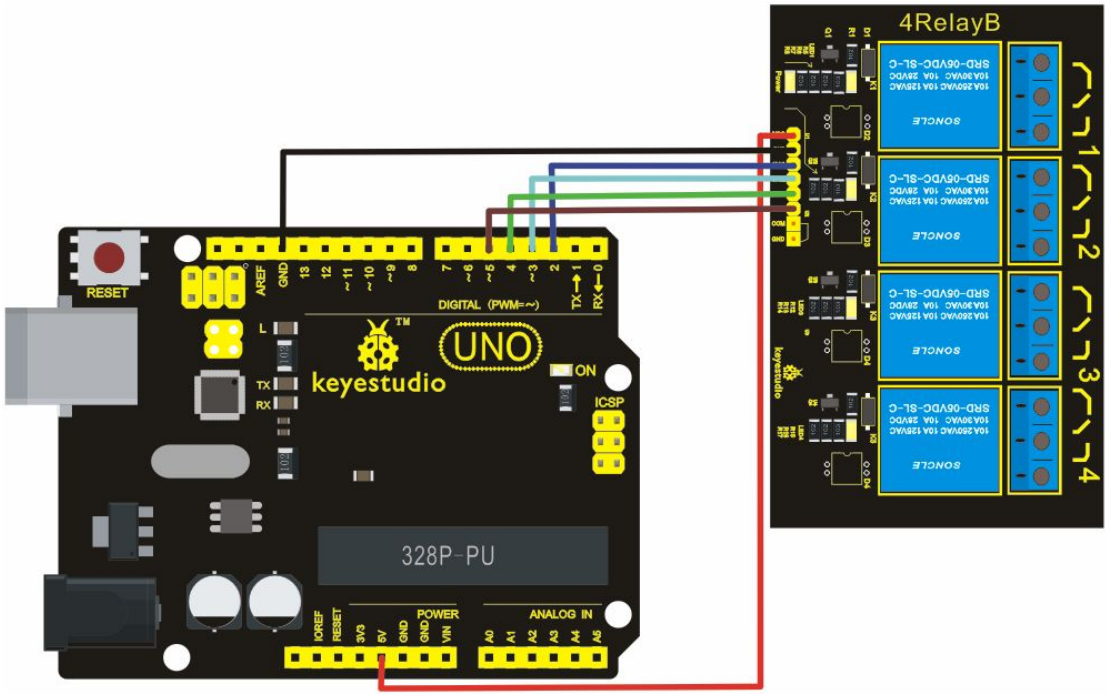
Definition of module pins:

i) Pin 1- Pin 4----Controlling end

ii) Power supply (VCC)

iii) Ground (GND)

Connection Diagram



Sample code

```
int BASE = 2 ;   // I/O pin connected to the first relay
int NUM = 4;     //total number of all relays
void setup()
{
  for (int i = BASE; i < BASE + NUM; i ++)
  {
    pinMode(i, OUTPUT);     //set digital I/O pin as output
  }
}
void loop()
{
  for (int i = BASE; i < BASE + NUM; i ++)
  {
    digitalWrite(i, LOW);      //set digital I/O pin as ‘low’, i.e. turning off the relay
gradually
 delay(200);           //delay
  }
```

```
  for (int i = BASE; i < BASE + NUM; i ++)
  {
    digitalWrite(i, HIGH);      // set digital I/O pin as ‘low’，i.e. turning on the relay
gradually
delay(200);           //delay
  }
}
```