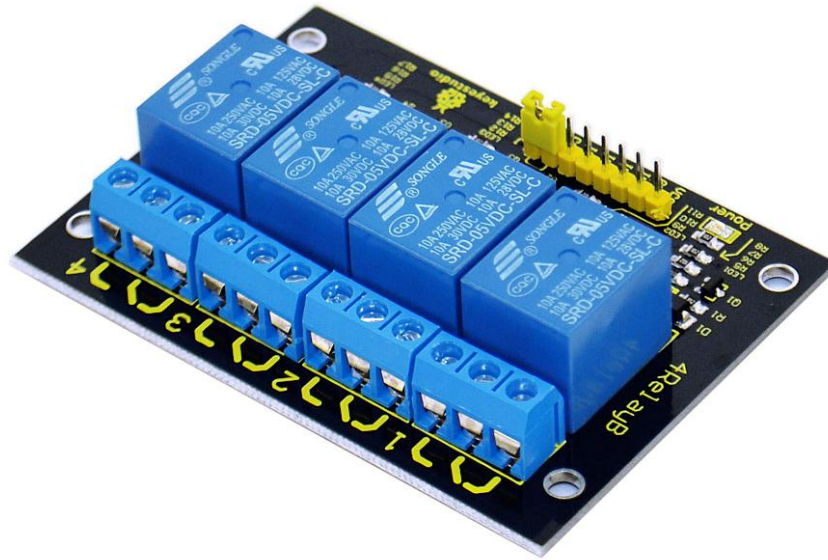# keyestudio

**keyestudio 4-channel Relay Module**



## Introduction

keyestudio Relay Shield employs high quality relay with four channels input and 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, 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.
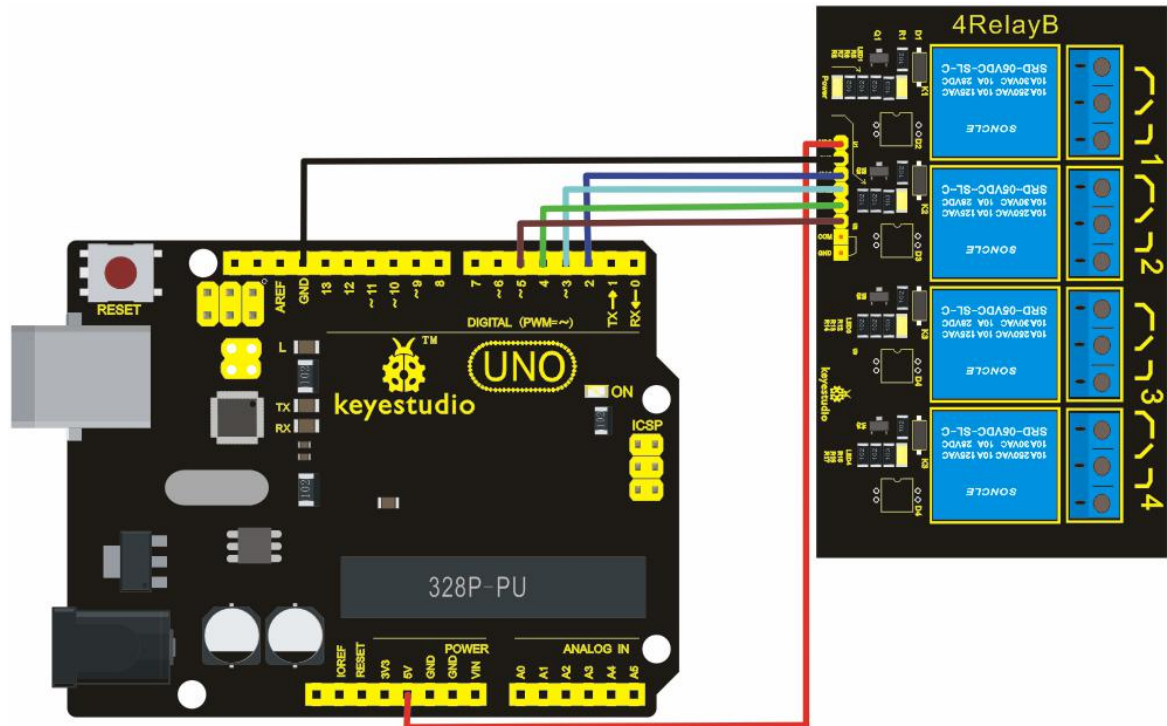
# keyestudio

**Specification**

- Control signal: TTL voltage

- Active at HIGH level

- 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 'high'，i.e. turning

on the relay gradually

delay(200);           //delay

  }

}
```

**********************************************

Resource:

https://fs.keyestudio.com/KS0058