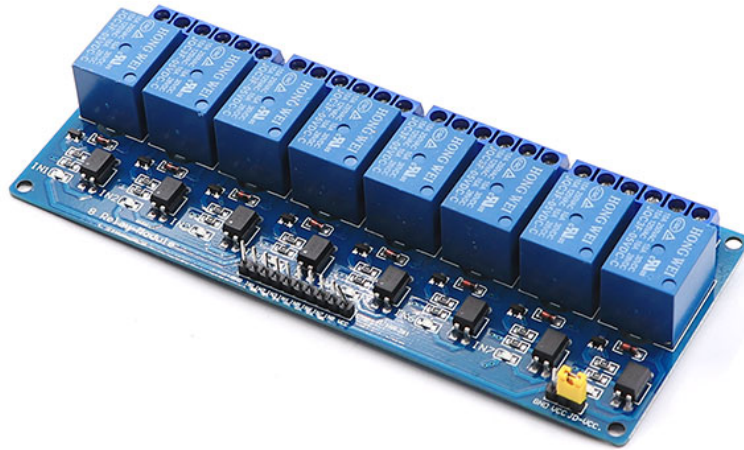




Arduino Module Relay 5V 8CH User Manual



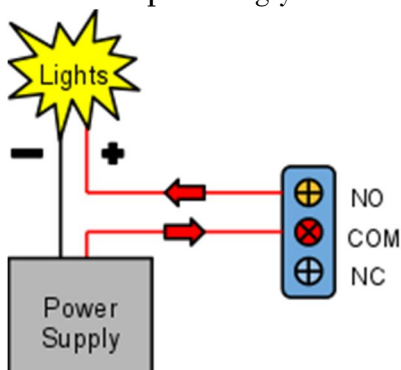
Overview:

To connect 412 ARDUINO MODULE RELAY 5V 8CH to an Arduino is very easy and allows you to turn on and off a wide range of devices, both AC and DC. The first to connections are the ground and power pins, you need to connect the Arduino +5v to the 412 ARDUINO MODULE RELAY 5V 8CH's VCC pin and the Arduino ground to the 412 ARDUINO MODULE RELAY 5V 8CH's GND pin. Then it's only a matter of connecting the communication pins, labeled from 1 till 8 to 8 data pins on the Arduino.

In the example code below, we used Arduino pins 6, 7, 8, 9, 10,11,12,13. We avoided using Data pins 0 and 1 as they are used by the Arduino for serial communication and can cause problems when uploading code to the Arduino.

The default state of the relay when the power is off for COMM (power) to be connected to NC (normally closed).this is the equivalent of setting the 4 Relay boards IN pin to HIGH (has +5v sent to it). It is a safety feature to not use the NC connector in-case you Arduino loses power it will automatically turns off all the devices connected to the relay.

When you have something connected to the relays NO (Normally Open) connector and you set the corresponding IN pin to LOW (0v), power will flow in from the COMM connector and out of the NO connector powering your device.



Example of connecting power and lights to a relays COM and NO connectors.

Pin Configuration:

Arduino	412 ARDUINO MODULE RELAY 5V 8CH
5v	Vcc
Gnd	Gnd
Pin 6	Int1
Pin 7	Int2
Pin 8	Int3
Pin 9	Int4
Pin 10	Int5
Pin 11	Int6
Pin 12	Int7
Pin 13	Int8

Example Code:

```
// Basic 8 Relay board connection
// Each relay is turned on for 2 seconds and then off.
// You can hear them tick as their state changes from off to on and reverse
// You will also see the corresponding Red LED on the 8 Relay board
// light up when the relay is on.

// define names for the 8 Digital pins On the Arduino 7,8,9,10,11,12
// These data pins link to 8 Relay board pins IN1, IN2, IN3, IN4, IN5, IN6, IN7,
IN8

#define RELAY1 6
#define RELAY2 7
#define RELAY3 8
#define RELAY4 9
#define RELAY5 10
#define RELAY6 11
#define RELAY7 12
#define RELAY8 13

void setup()
{
// Initialize the Arduino data pins for OUTPUT
pinMode(RELAY1, OUTPUT);
pinMode(RELAY2, OUTPUT);
pinMode(RELAY3, OUTPUT);
pinMode(RELAY4, OUTPUT);
pinMode(RELAY5, OUTPUT);
pinMode(RELAY6, OUTPUT);
pinMode(RELAY7, OUTPUT);
pinMode(RELAY8, OUTPUT);
}
```

```
void loop()
{
  digitalWrite(RELAY1,LOW);    // Turns ON Relays 1
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY1,HIGH);   // Turns Relay Off

  digitalWrite(RELAY2,LOW);    // Turns ON Relays 2
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY2,HIGH);   // Turns Relay Off

  digitalWrite(RELAY3,LOW);    // Turns ON Relays 3
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY3,HIGH);   // Turns Relay Off

  digitalWrite(RELAY4,LOW);    // Turns ON Relays 4
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY4,HIGH);   // Turns Relay Off

  digitalWrite(RELAY5,LOW);    // Turns ON Relays 5
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY5,HIGH);   // Turns Relay Off

  digitalWrite(RELAY6,LOW);    // Turns ON Relays 6
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY6,HIGH);   // Turns Relay Off

  digitalWrite(RELAY7,LOW);    // Turns ON Relays 7
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY7,HIGH);   // Turns Relay Off

  digitalWrite(RELAY8,LOW);    // Turns ON Relays 8
  delay(2000);                // Wait 2 seconds
  digitalWrite(RELAY8,HIGH);   // Turns Relay Off

}
```