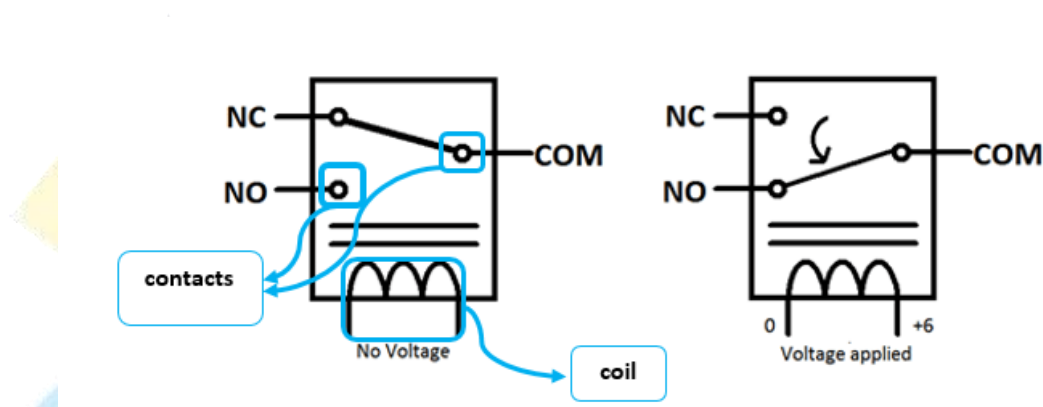# RELAY MODULES

RELAY WORKING IDEA

Relays consist of three pins normaly open pin , normaly closed pin, common pin and coil. When coil powerd on magntic field is generated the contacts connected to each other.


Relay modules 1-channel features

- Contact current 10A and 250V AC or 30V DC.
- Each channel has indication LED.
- Coil voltage 12V per channel.
- Kit operating voltage 5-12 V
- Input signal 3-5 V for each channel.
- Three pins for normally open and closed for each channel.

How to connect relay module with Arduino

As shown in relay working idea it depends on magnetic field generated from the coil so there is power isolation between the coil and the switching pins so coils can be easily powered from Arduino by connecting VCC and GND bins from Arduino kit to the relay module kit after that we choose Arduino output pins depending on the number of relays needed in project designed and set these pins to output and make it out high (5 V) to control the coil that allow controlling of switching process.
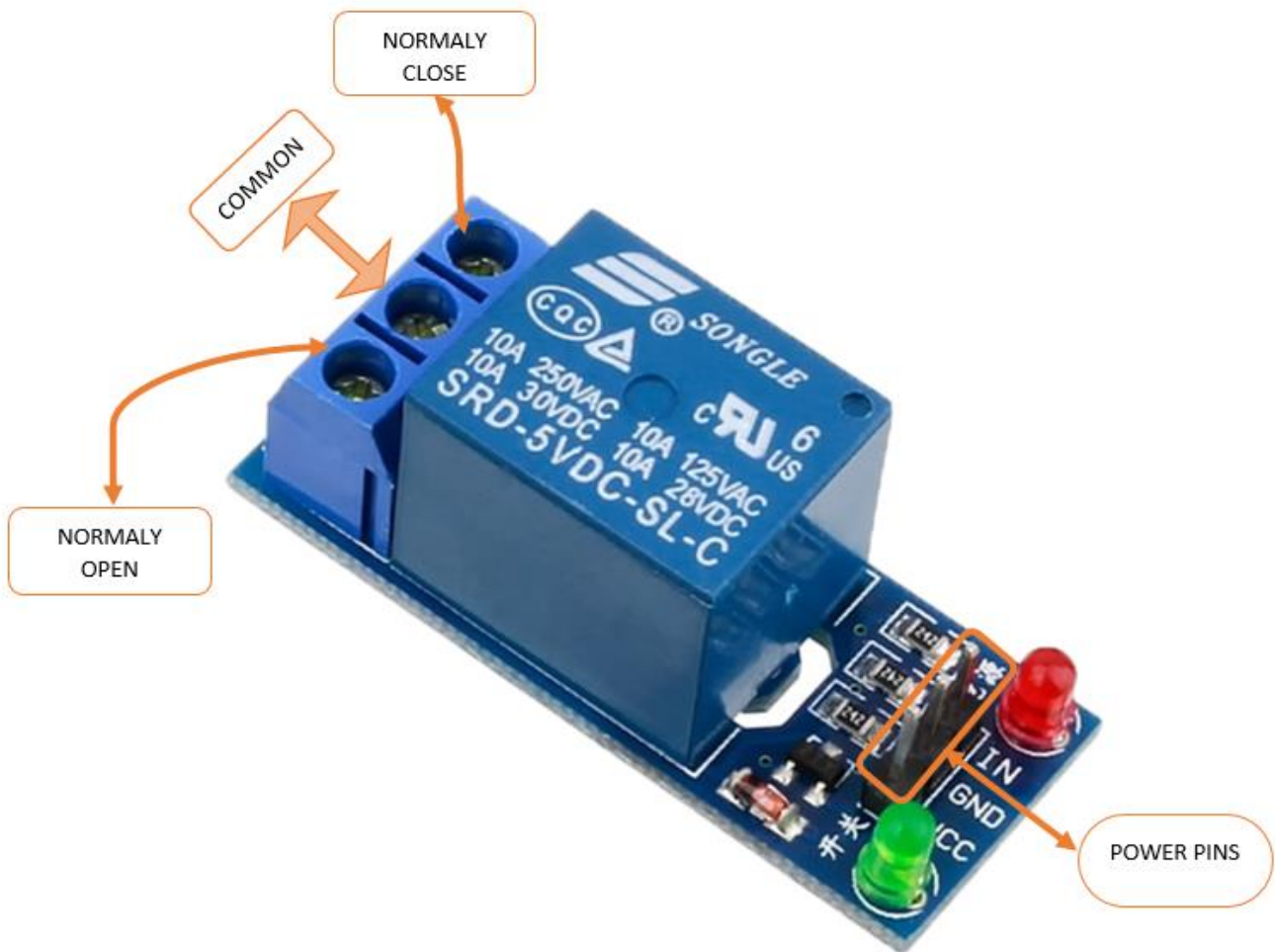
NOTE : whatever was the relay channels number the pinconfiguration is the same for every channel except the power pins (VCC and GND) are for the board itself. The input signal (IN) pin for every relay.