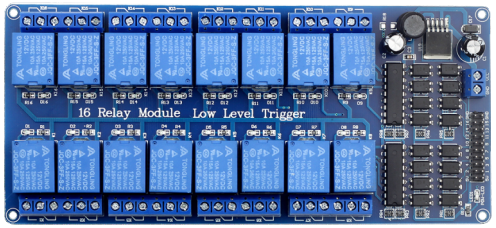
16-Channel Relay Module Board

Rev 1.0, July 2018



UCTRONICS TEAM

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INTRODUCTION

- In order to meet the customer's demand for the control of the switching device, the UCTRONICS team now releases a 16-channel relay module which allows a small level signal to control any normal outlet or high voltage product.
- This is a 12V 16-Channel Relay interface board, be able to control any electric appliances rated at under 2000 Watts. It supports all MCU control, PLC control, smart home control.
- The common end COM of each relay is independent, which makes it convenient for users to access different signals. Each relay is equipped with indicator light, which is on and off. The working status indicator light is good for safe use.

SPECIFICATION

- Product Name: 16-Channel Relay Module
- Number of Channels: 16
- Control Signal voltage: 5V, active low
- Load Voltage: AC 250V/10A, AC 125V/15A DC 30V 10A
- Input power: 12V
- Each board needs 15-20mA Driver Current
- I / O port driver is active in low level.
- 1-16 channel optionally fully open/closed, or any channel.
- Standard interface that can be controlled directly by microcontroller
- Indication LED's for Relay output status.
- Independent common end COM makes the relay convenient for users to access different signals.
- Use optocoupler protection with high safety performance
- Widely used for all MCU control, industrial sector, PLC control, smart home control.
- Size: 8 x 5.7 x 1.2 inches
- Weight: 8.8 ounces

CONNECTION DIAGRAM

- The input power needs to meet the range, DC12V.

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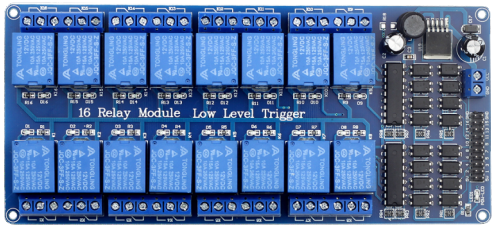

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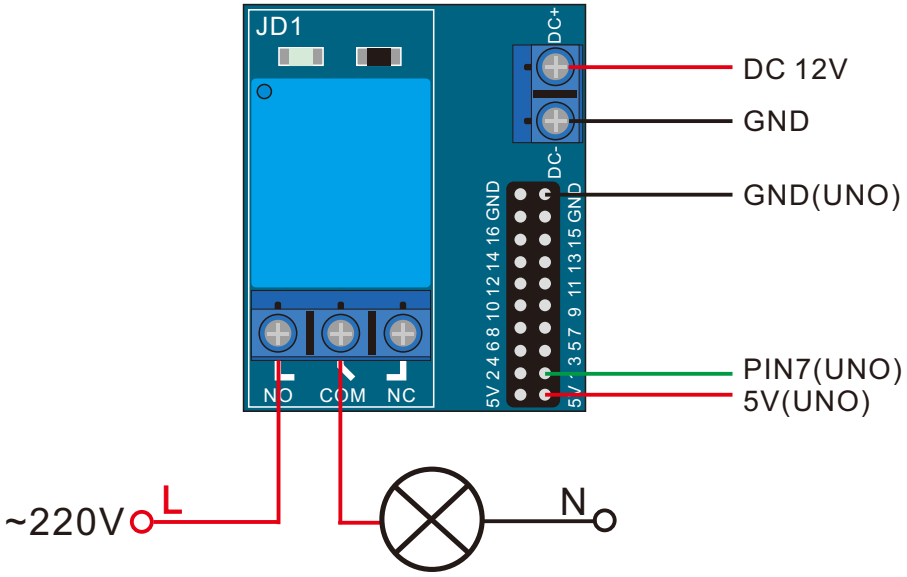


QUICK START GUIDE

Let's take control of the light bulb for example. The connection is shown above

- Step1: Connect the light bulb to the relay module.
- Step2: Connect the control pin to the Controller (we use UNO).
- Step3: Power on the module.
- Step4: Set the control signal HIGH or LOW, you will control the light bulb turn on and off.

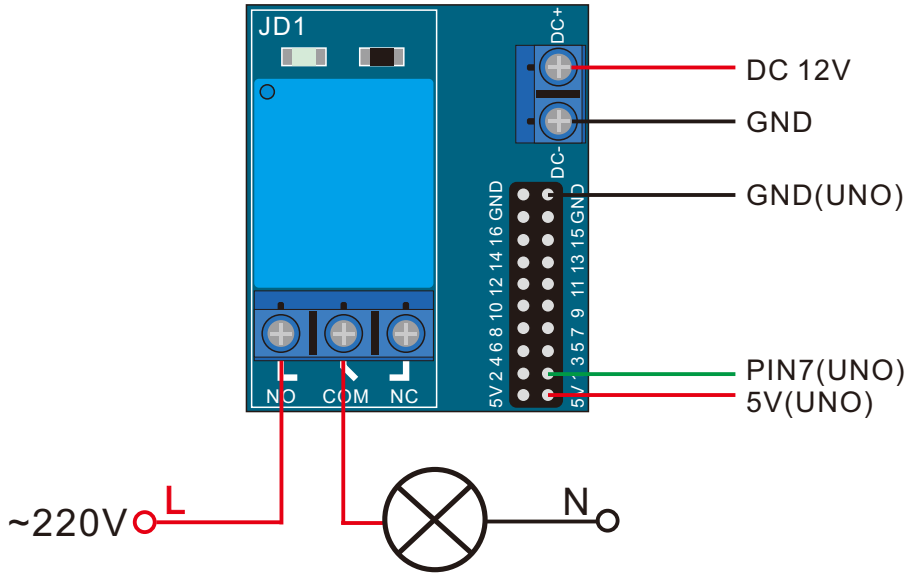
NOTE

- Please exercise utmost caution while working with electrical mains or other high voltages.

TEST CODE

- You can check the product function by referring to the code we have provided you. Code show as below:

```
int8_t relayControl = 7;
// the setup function runs once when you press reset or power the board
void setup() {
// initialize relayControl pin as an output.
pinMode(relayControl, OUTPUT);
}
void loop() {
digitalWrite(relayControl, HIGH); // Turn off
delay(5000); // wait for 5 second
digitalWrite(relayControl, LOW); // Turn on
delay(5000); // wait for 5 second
}
```



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