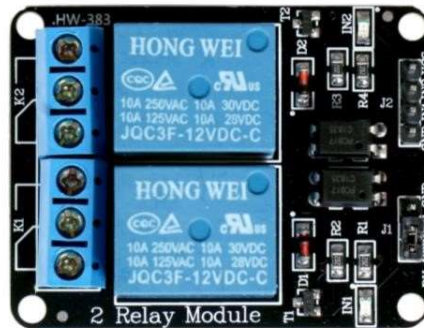


الحمادي للإلكترونيات  
ALHAMMADI FOR ELECTRONICS

## 2 Channel Relay Board 12V



This 2 Road/Channel Relay Module (with light coupling) 12V module meets the safety standard as control areas and load area have the isolation groove. Optical coupling isolation module.

The triggering of the 2 Road/Channel Relay Module is reliable, more stable. The double FR – 4 circuit board design, high-end SMT process. It has power and relay operation instructions. Relays terminals (C, NC, NO) are accessible through screw terminals which makes wiring up the board very easy.

The inputs of the 2 Channel 12V Relay Module are isolated to protect any delicate control circuitry. A wide range of microcontrollers such as Arduino, AVR, PIC, ARM and so on can control it.

The use of such high-voltage relay eliminates the risk of heating up of the relay as electromechanical relay limit the current consumption in accordance with a voltage rating.

## **FEATURES:**

- Equipped with high-current relay 10A@250VAC / 10A@30VDC
- It can control both AC and DC appliances such as Solenoids, Motors, lights, fans, etc
- High-quality screw terminals (Terminal Block) provided (C, NC, NO) for quick and easy connection
- A freewheeling diode to protect your microcontroller
- Input Signal Pin connected to Burg stick for easy accessibility
- LED status indicators to indicate the relay ON/OFF status
- Mounting holes provided
- Signal input with a high-level signal, the common and often start conduction;
- The relay can directly control all kinds of equipment and load;
- One often opened a normally closed contact;
- Blue KF301 terminal line more convenient.

## **SPECIFICATIONS:**

- Channel:2
  - Trigger Voltage (VDC): 12
  - Trigger Current (mA): 20
  - Switching Voltage (VAC): 250@10A
  - Switching Voltage (VDC): 30@10A
  - Length (mm): 50
  - Width (mm): 40
  - Height (mm): 20
  - Weight (gm): 30
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## **FUNCTIONAL DESCRIPTION:**

- A relay is an electrically operated device. It has a control system and (also called input circuit or input contactor) and controlled system (also called output circuit or output contactor). It is frequently used in an automatic control circuit. To put it simply, it is an automatic switch to controlling a high-current circuit with a lowcurrent signal.
- The advantages of a relay lie in its lower inertia of the moving, stability, long-term reliability and small volume. It is widely adopted in devices of power protection, automation technology, sport, remote control, reconnaissance, and communication, as well as in devices of electromechanics and power electronics. Generally speaking, a relay contains an induction part which can reflect input variable like current, voltage, power, resistance, frequency, temperature, pressure, speed and light etc. It also contains an actuator module (output) which can energize or de-energize the connection of controlled circuit. There is an intermediary part between input part and an output part that is used to coupling and isolate input current, as well as actuate the output. When the rated value of the input (voltage, current and temperature etc.) is above the critical value, the controlled output circuit of the relay will be energized or de-energized.

## **Meaning of High level and Low-level:**

- High-level trigger refers to using the anode voltage at the VCC connection way of a trigger and triggers the end when the trigger side has a positive voltage or to trigger voltage when the relay is off.
  - Low-level trigger refers to using the negative voltage at the GND connection way of a trigger and triggers the end when the trigger side has 0 v low voltage or voltage to can trigger, the relay is off.
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**PIN FUNCTION:**

- The positive (according to the relay voltage VCC: connect power supply)
- GND: connect power negative
- IN1: relay module (effective) high-level trigger signal trigger end
- IN2: relay module (effective) high-level trigger signal trigger end

**PACKAGE INCLUDES:**

1x 2 Channel Relay Board 12V

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