

1 Channel Relay Board with Optocoupler 5V



This 1 channel 5V 10A relay control board module with optocoupler modules is compliant with international safety standards, control and load areas isolation trenches it has a single relay a genuine. The inputs of 1 Channel 5V 10A Relay Module are isolated to protect any delicate control circuitry.

The power supply and relay instructions, lit, a disconnect are off. The input signal, signal, common Terminal and start conducting. It can be used as a single chip module for appliance control and work with both DC or AC signals where you can control the 220V AC load.

FEATURES:

- High impedance controller pin
- Pull-down circuit for the avoidance of malfunction
- One normally closed contact and one normally open contact
- Triode drive, increasing relay coil
- Power supply indicator lamp
- Control indicator lamp
- With 4 fixed screw holes, hole diameter 3.1mm, convenient installation, and fixation

SPECIFICATIONS:

- Channel: 1
- Trigger Voltage (VDC): 5
- Switching Voltage (VAC): 250@10A
- Switching Voltage (VDC): 30@10A
- Length (mm): 57
- Width (mm): 18
- Height (mm): 18
- Weight (gm): 16

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 low-current 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.

About high level and low level-triggered mode:

- High-level trigger refers to the signal voltage between input and trigger, can be understood as a signal input with VCC cathode short-circuit triggered a way;
- Low-level trigger refers to the signal voltage between the input terminal and Earth OV trigger, can be understood as the signal input terminal and the GND negative electrode short circuit triggered away 1-channel relay module connection.
- Jumper Instruction = It can be turned on when we connect 5v to one end and the other to -5v / Gnd, while talking about the jumper, if we short the VCC and the middle pin, then the module will act as high level-triggered relay means that when we will apply + 5V input on its input pin it will be turned on and when the jumper will be set to “middle and GND”, it will act as a low-level triggered relay, It means that the module will be triggered when we implement the 5V / GND on its input pin.

PIN FUNCTION:

- GND – Connect 0V to this pin.
 - IN1 – Controls relay 1, active Low will turn on when this input goes below about 2.0V
 - VCC – Connect 5V to this pin. Is used to power the optocouplers
- Note : This 5V single Channel Module is for low level trigger only.

APPLICATIONS:

- Raspberry Pi, Arduino, 8051, AVR, PIC, DSP, ARM, ARM, MSP430, TTL logic can drive the module
- PLC control & Smart home control
- Industrial sector

PACKAGE INCLUDES:

1 x 1 channel 5V 10A relay control board module with an optocoupler