Qwiic Quad Relay

SPX-15032 ROHS

The Qwiic Quad Relay is a product designed for switching not one but **four high powered devices** from your Arduino or other low powered microcontroller using I²C. It's rocking four relays rated up to 5 Amps per channel at 250VAC or 30VDC. Each channel is sporting its own uniquely colored LED and silk for easy identification, and screw terminals for easy connection.

The board is made to integrate easily into the Qwiic environment with Qwiic connectors on each side for daisy chaining. At the heart of the product is an ATtiny84 that takes various commands to toggle the four relays. The I²C address of the ATtiny84A is software configurable so if you had the desire and power, you could daisy chain up to 127 Qwiic Quad Relays and power 508 devices (please don't). The four I²C lines are broken out for those of you not taking advantage of the Qwiic connector.

The barrel jack is rated for wall adapters in the range 7-15V but there is a jumper on the underside if your wall adapter is 5V.

Messing with such high voltage can be dangerous! We've included many safety precautions onto the PCB including, wide traces designed for high amperage, ground isolation between the relay and other circuitry, and a milled out area around the common pin of the relay.

HOWEVER, with all the safety precautions included in the product, this is *still* a product for people experienced around, and knowledgeable about **HIGH** AC voltage. If that's not quite your jam, then take a look at our IoT Power Relay!

Heads up! You can only use up to three relays when using our 9V/650mA Wall Adapterbecause of heat of the onboard regulator. If you close the jumper on the underside and pair it with our 5V/2A Wall Adapter than you sidestep the voltage regulator and the heating issue which allows you to use all four.

Experimental Product: SparkX products are rapidly produced to bring you the most cutting edge technology as it becomes available. These products are tested but come with no guarantees. Live technical support is not available for SparkX products. Head on over to our forum for support or to ask a question.

FEATURES

- Four JZC-11F Relays
    - 5A at 250VAC, 30VDC
    - Each relay has its own colored LED and silk labels for easy identification.
- Safey Features
    - Ground pour isolated from relays.
    - Air gap around common pin on the relays.
    - Large trace width on relay pins far exceeding the peak 5A current.
- ATtiny84A
    - I^2C commands for toggling individual relays or all the relays at once.
    - I^2C commands for turning all relays off or on.
    - I^2C address is software configurable.
    - All commands are listed in the example code.
- Screw Terminals
    - 26-14 Gauge AWG wire
- Power
    - Max Current Draw ~500mA
    - Dropout Voltage is ~7.4V