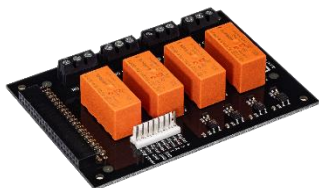# Q.E.C

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EAS-REL-4

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4 CHANNEL RELAY MODULE

USER MANUAL

CE

Safety & environment

⚠ Not following instructions can lead to serious damages and voids all warranty

⚠ Not for use by children; use under adult supervision at your own risk

⚡ When connecting high voltage equipment use insulating gloves always

⚠ For indoor use only; keep away from rain, liquids and moisture of any kind

To all residents of the European Union
Important environmental information about this product:

This symbol on the device or package indicates that disposal of the product after its lifecycle could harm the environment. Do not dispose of the unit as unsorted municipal waste; it should be returned to your distributor or to a specialized local recycling service. Respect the local environmental rules.

Relay basics

Each relay has three corresponding terminals: NO, COM, NC. This means Normally Open, Common, Normally Closed. When the input signal corresponding to the relay is low the COM terminal will be connected with the NC terminal. When the input signal corresponding to the relay is high the COM terminal will be connected with the NO terminal.


The board is equipped with 4 high quality Schrack general purpose relays from TE Connectivity. These are rated 250V AC 16A and tested 25V DC 10A (non-inductive; operating DC loads may shorten lifespan of the relays and is not advised for prolonged periods).

⚡ Never touch the relay module when connected to high voltage! Potential damage by electric shock depends on the human body resistance. Generally up to 36V is considered to be safe for the human body. A voltage of 50V and above is considered hazardous and can already be life-threatening!

Connect Raspberry Pi Zero or compatible board
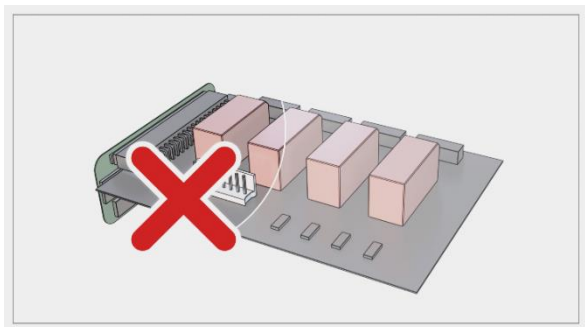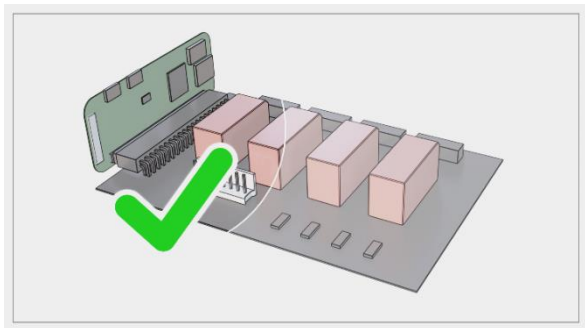
ⓘ Raspberry Pi Zero should be connected pointing upwards, not downwards
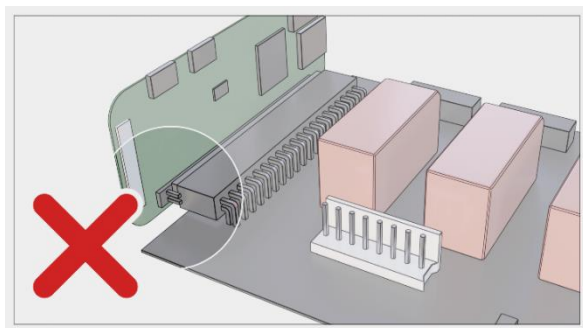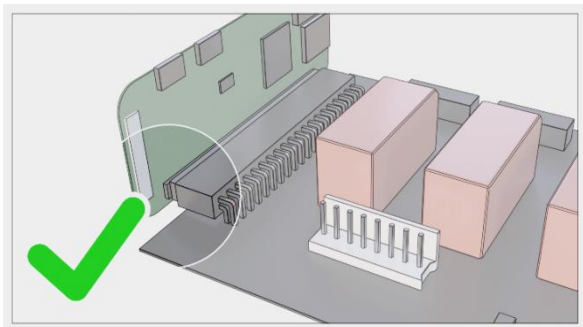
ⓘ Make sure pins are properly aligned when connecting

When attached directly to your Raspberry Pi Zero (or compatible board) the GPIO pin numbers corresponding to relays 1–4 are: 16, 17, 22, 23. You must configure these GPIO's for output in order to control the relays.

For code examples and more info please visit
https://qec.company/products/eas-rel-4

Raspberry Pi is a trademark of Raspberry Pi Trading

Connect Raspberry Pi or compatible via flat cable
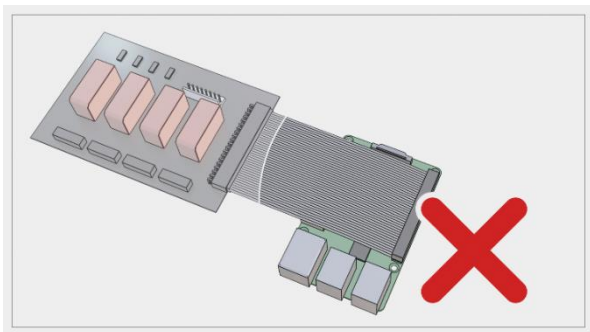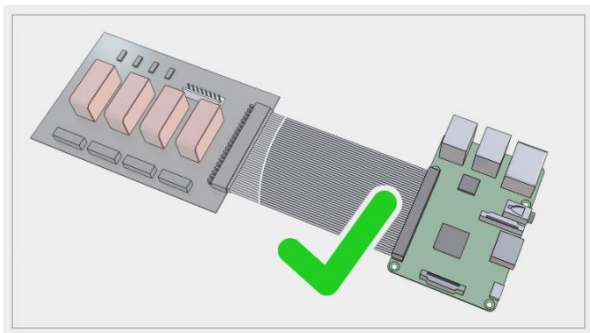
ⓘ When using flat/ribbon cable connect to Raspberry Pi as shown above

When connected to your Raspberry Pi (or compatible board) via flat/ribbon cable the GPIO pin numbers corresponding to relays 1–4 are: 16, 17, 22, 23. You must configure these GPIO's for output in order to control the relays.

For code examples and more info please visit
https://qec.company/products/eas-rel-4

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Connect any controller via low-level header

The relay board is also equipped with an 8-pin locking header as shown below. You can use this header to connect any controller to the relay board using custom wiring.
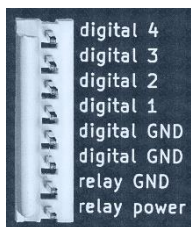
relay power = Relay power
relay GND = Relay ground
digital GND = Control ground
digital 1 = Control input relay 1
digital 2 = Control input relay 2
digital 3 = Control input relay 3
digital 4 = Control input relay 4

The relays require a 5V DC power source to operate, this should be connected to the Relay power and Relay ground terminals. To switch the relays use a 1.8V-5V DC control input signal connected to the corresponding terminals.

For code examples and more info please visit
https://qec.company/products/eas-rel-4

Product overview

4-channel relay module controlled by 4 opto isolated digital lines. Used to control various appliances and other high current equipment. Use with Raspberry Pi Zero or compatible to turn into programmable wireless/network relay module.

control input current: 5 mA
control input voltage: 1.8–5 V DC
relay rated: 250V AC 16A / tested 25V DC 10A
relay coil voltage: 5 V DC
board dimensions: 76 x 107 x 18 mm
operating voltage: 5 V
manufactured in: PRC

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