

LATCHING (BISTABLE) RELAY DRIVER: "LRD"

Installation instructions



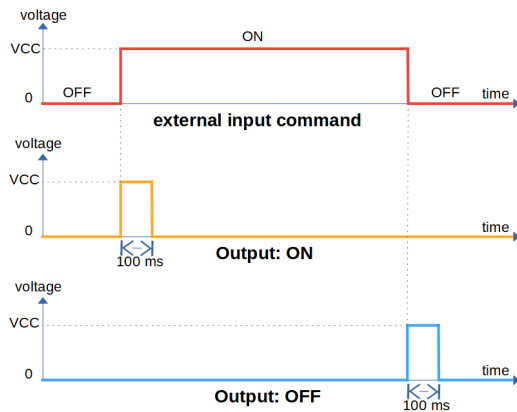
The TAO LRD is designed to drive any latching (bistable) relays with two coils that are commanded by 100 ms pulses: one coil to open the relay and one coil to close it. Its input command can be a simple switch, the output of a BMS, or a voltage source.

- the close command (ON) is sent when the input is closed or a voltage is applied
- the open command (OFF) is sent when the input is opened or disconnected from a voltage source

SPECIFICATIONS

- external command from a BMS, a switch or a voltage source
- two outputs to drive dual-coil bi-stable relays with 100 ms pulses
- terminals for an external override switch (BMS — OFF — ON)
- disconnection of input sends the OFF command
- power supply 9 - 30 volt (reverse polarity protection)
- low consumption (0.1 - 1.4 mA @ 12 V)
- output up to 5 A
- high side drive (compatible with most latching relays / contactors)
- safe discreet components design (does not rely on a micro-controller)
- spring clamp terminals for 22-14 AWG wires (1.5 mm²)
- conformal coating / resin potting
- size 51 x 52 x 20 mm (LxWxH)

OPERATION



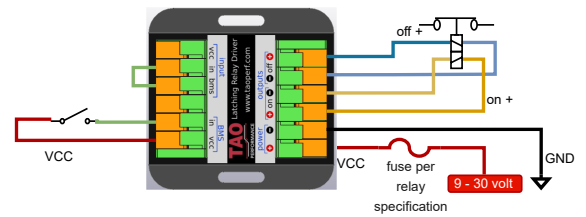
TERMINALS



[BMS - in] and [input - bms] terminals are internally connected

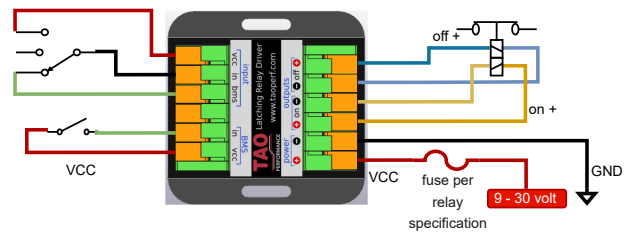
CONNECTIONS

Connection without override switch



connect a wire between [input - in] and [input - bms] terminals

Connection with override switch



connect a SPDT switch to the input terminals

CAUTION

- These instructions are intended to provide assistance with the installation of this product, and are not a substitute for a more comprehensive understanding of electrical systems. We strongly recommend that a competent electrical professional perform the installation of this product.
- The illustrated wiring diagram represents a common installation and is not meant to be a guide for wiring a specific installation.
- Use minimum 17 AWG (or 1 mm²) wires for all the connections.
- To protect the latching relay a fuse must be installed on the power supply (VCC). The size of the fuse depends on the relay being commanded - refer to the specifications given by the relay manufacturer. Typical fuse values are between 2A and 5A.