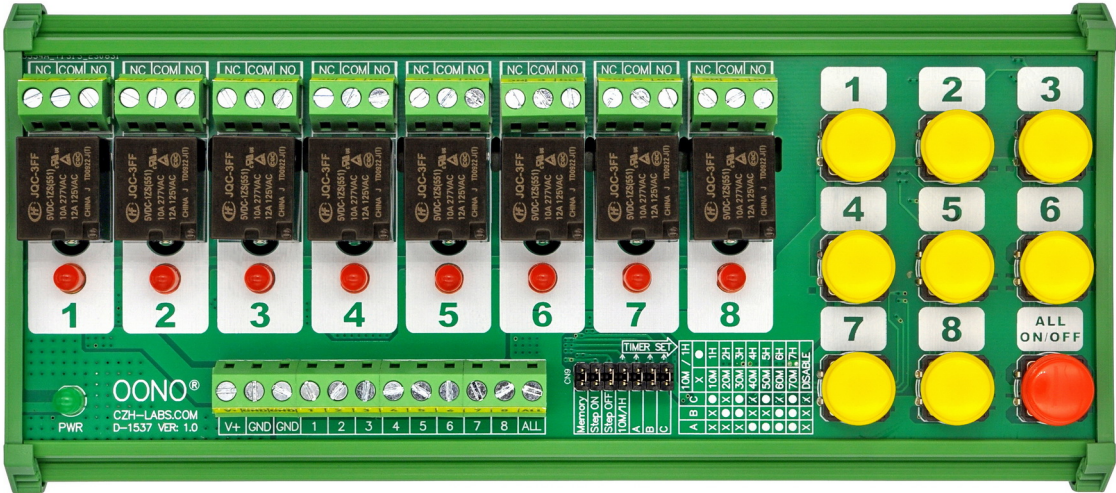


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DIN Rail Mounting 8-Channel Multifunctional Bistable Relay Module

Model: D-1537T



Features:

- This is an easy-to-use DIN rail mounting 8-channel SPDT relay control module that can realize the application of general relay ON/OFF control functions without mastering programming technology.
- The module comes with a keyboard that can directly control the corresponding relay channels, and can also control all relays to be closed or connected with one button.
- Support external control for momentary switch.
- Support external control for NPN/Sink type controller ports.
- Support pin-jumper to enable/disable power-off memory function.
- Support pin-jumper to enable/disable Step-on and Step-off function.
- Support pin-jumper to enable/disable all relay timer-off function.
- Support pin-jumper to selection time-off delay 10 to 70 minutes or 1 to 7 hours.
- High quality fireproof nylon material DIN rail mount carrier, can support width 35mm 32mm 15mm rail. UL CE certified nylon material mount carrier. FR-4 fiberglass material UL 94-V0 certified PCB. UL CE CQC certified terminal blocks.

Specifications:

Operating Voltage (V+): DC 7 to 32V

Operating Current (V+):

530mA (at DC 7V, all relay on)

300mA (at DC 12V, all relay on)

150mA (at DC 24V, all relay on)

120mA (at DC 32V, all relay on)

11mA (at DC 7V, all relay off)

9mA (at DC 12V, all relay off)

6mA (at DC 24V, all relay off)

5mA (at DC 32V, all relay off)

External Control Ports to GND short current (1 to 8, and ALL): 3.8mA (for each port)

External Control Ports to GND open voltage (1 to 8, and ALL): 5V (for each port)

Relay output switch type: SPDT (for each relay)

Relay output rating (Res. load, for each relay):

10Amp / 277VAC (COM to NO)

12Amp / 125VAC (COM to NO)

10Amp / 28VDC (COM to NO)

5Amp / 277VAC (COM to NC)

5Amp / 125VAC (COM to NC)

5Amp / 28VDC (COM to NC)

Terminal Block:

Pin pitch - 5.0mm / 0.197"

Wire size - 26 to 12 AWG / 2.5mm square

Stripping length - 7mm / 0.28"

Screw - Metric M2.5 slotted

Function details:

- **LED status description:**

PWR LED, when the module V+ / GND terminal is powered, the green LED lights up. When the power is off, the LED goes off.

Relay status LED 1 to 8. When the red LED lights up, the corresponding relay to ON (COM – NO connected, COM – NC disconnect). When the LED goes off, the corresponding relay to OFF (COM – NO disconnect, COM – NC connected).
- **Keyboard directly control relays:**

The digital buttons can directly control the corresponding relay channels. Press to ON, press again to OFF, continue pressing to repeat the above steps.

Supports concurrent operation, pressing multiple digital keys at the same time, and their respective actions will not be affected.

ALL ON/OFF button, when one or more relays are in the ON state, click this button and all relays will return to the OFF state. When all relays are in the OFF state, click this button and all relays will be in the ON state.
- **External control for momentary switch:**

Can support external connect 9 switches, 1 to 8 and ALL. All switch connection interfaces are isolated by optocouplers. See Figure 1 for switch connection method.
- **External control for NPN/Sink type controller ports:**

Can support external connect NPN/Sink type controller ports, 1 to 8 and ALL. All ports connection interfaces are isolated by optocouplers. See Figure 2 for controller connection method.
- **Pin-jumper to enable/disable power-off memory function:**

Short the MEMORY pin-jumper function enabled, remove the pin-jumper cap function disable.

Enable the function, the module MCU will remember the status of each relay before power failure and will restore the status of each relay after the next power-on.

Disable the function, the module MCU will not remember the status of each relay before power failure, and the status of each relay will be OFF after the next power-on.

Note: Regardless of whether this function is enabled or disabled, all relay states will return to OFF during module power failure.
- **Pin-jumper to enable/disable Step-ON function.**

Short the Step-ON pin-jumper function enabled, remove the pin-jumper cap function disable.

When multiple loads are connected at the same time, the load power is large and may cause the mains to trip, so we designed this function to reduce or even avoid mains trip. When the module is powered on to restore the relay memory state, or when the ALL ON button is clicked, the relays will be activated one by one at intervals of 0.5 seconds.
- **Pin-jumper to enable/disable Step-OFF function.**

Short the Step-OFF pin-jumper function enabled, remove the pin-jumper cap function disable.

When the ALL OFF button is clicked, the relays will be closed one by one at intervals of 0.5 seconds.
- **Pin-jumper to enable/disable all relay timer-off function, and set timer-off time.**

This timing function starts from the last time a button is clicked. If no button is clicked after power-on, the timing starts from the time of power-on. If any button is clicked during the timing, the timing will restart.

In real applications, many applications require timing functions. Many electronic product designs make the timing function operation very cumbersome. We designed this function to free up the cumbersome setting steps. Of course, there are also disadvantages. It is too simple and cannot realize complex timing applications.

This function involves 4 pin-jumpers, 10M/1H, A B C. See the table below:

A	B	C	10M/1H X	10M/1H ●
X	X	●	10 Minutes	1 Hour
X	●	X	20 Minutes	2 Hours
X	●	●	30 Minutes	3 Hours
●	X	X	40 Minutes	4 Hours
●	X	●	50 Minutes	5 Hours
●	●	X	60 Minutes	6 Hours
●	●	●	70 Minutes	7 Hours
X	X	X	Timing disabled	Timing disabled

● Pin jumper installed. X Pin jumper removed.

Dimensions.

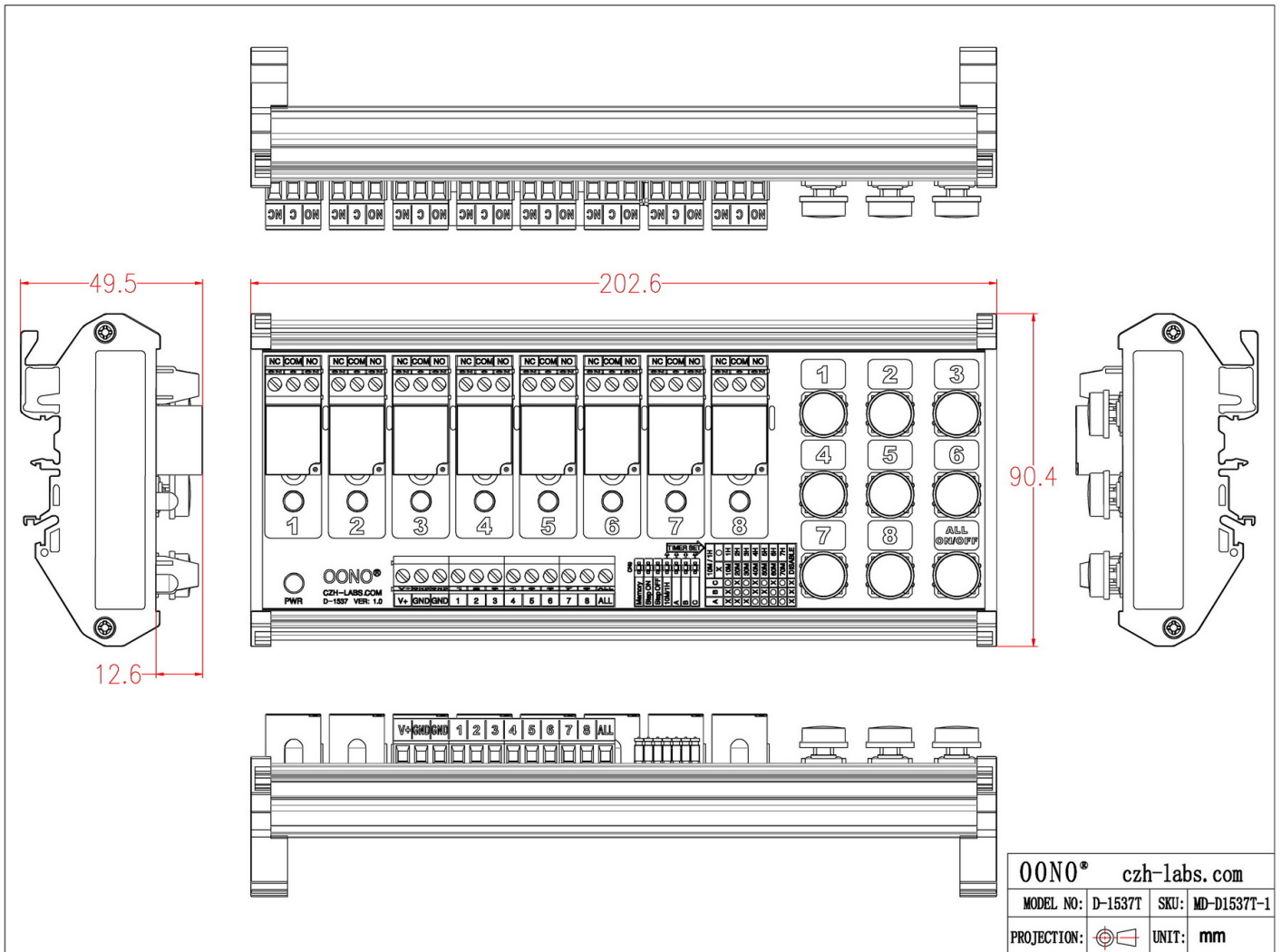


Figure 2, Simple schematic with momentary switch external control.

