DC 12V Relay Module Voltage Detection Charging Discharge Monitoring with Delay Timer

Model: RL-V2.3 / 190210

Features:

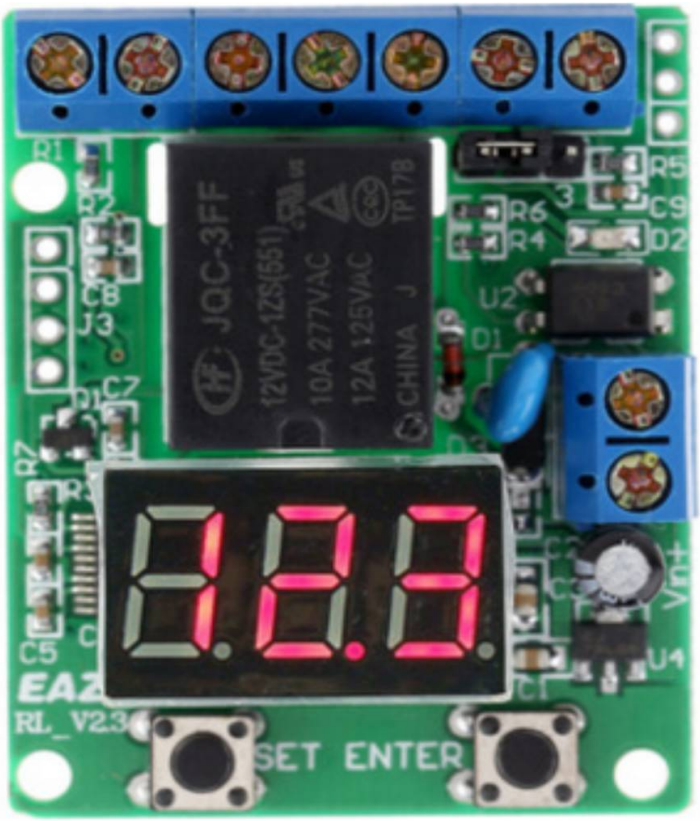
Digital display DC voltage detection, control the relay output.
Adjustable voltage limit: 0-99.9V.
When the measured voltage is lower than the lower limit or higher than upper limit value, the relay works.
Can be used for voltage detection switch, battery over/under voltage protector or discharge meter.

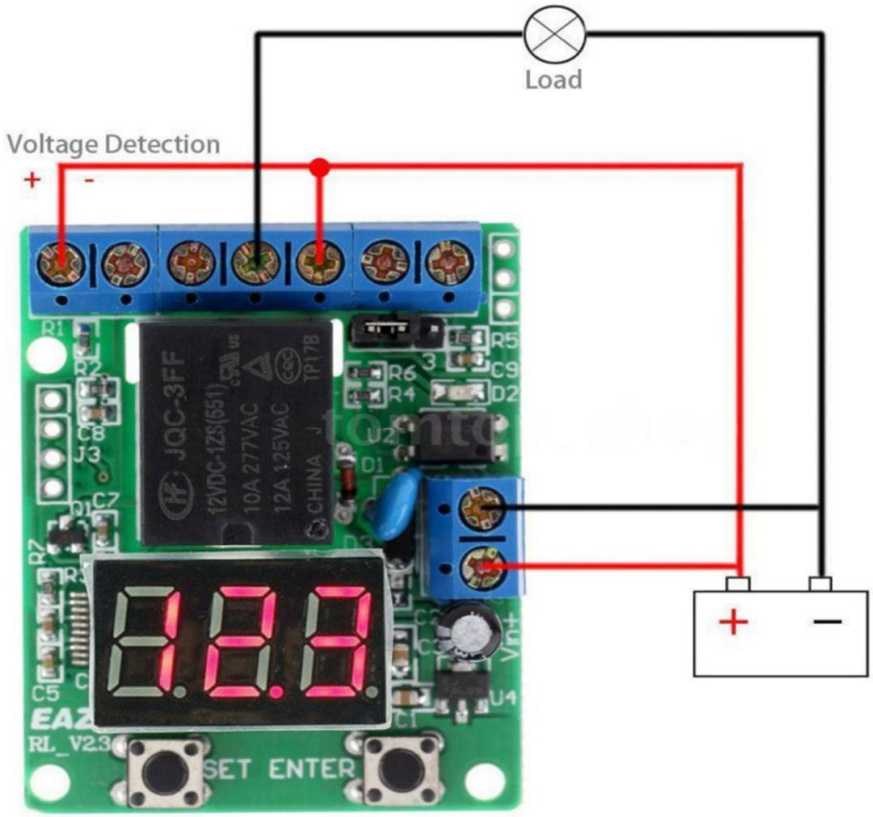
Notice:

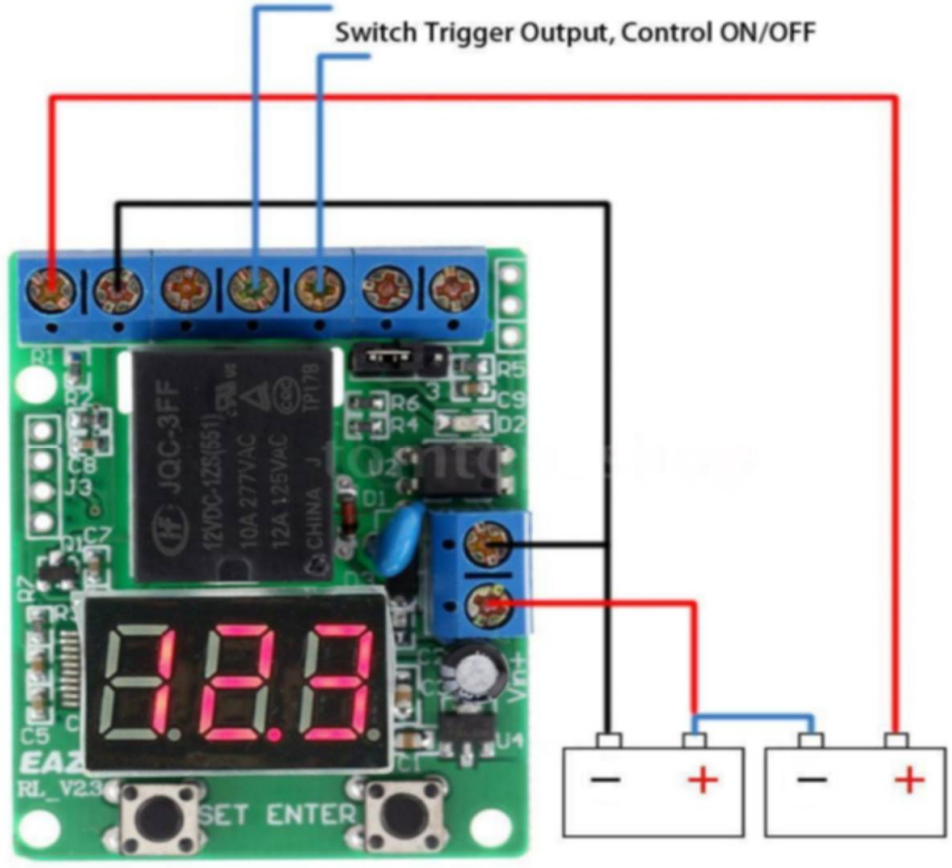
The relay control panel features single mode voltage detection function.
Max. trigger current is 10A(AC 277V, DC 30V), please don\'t connect it with load over DC 30V.
This relay module is not suitable for lithium battery discharge.
Polarity for voltage detection can\'t be connected reversely, user should connect the wire after power off.

Specifications:

Relay Voltage: DC 12V
Working Power: DC 10-16V
Voltage Detection Range: DC 0-99.9V
Error: +/-0.1V
Timing Range: 0-999 minutes cycle
A set of transformations(normally open/normally closes)
Contract Load: 10A/277V AC, 10A/30V DC
Contract Resistance: ≤100mΩ(1A-6V DC)
Mechanical Durability: >10 million times
Electrical Durability: >100,000 times (10A-250V AC)
Standby Current: 16mA 12V, Digital Display Closed Smallest 6mA/12V, Relay Timely 45mA/12V
Working Temperature: -40-85°C
Dimension: 50 * 40 * 20mm
Weight: 27g




Load
Voltage Detection
+
-
JQC-3FF
SET
ENTER


Switch Trigger Output, Control ON/OFF
JQC-3FF
SET
ENTER

Programming Menu:

P1	Time relay, ON/OFF (0.1~999min) 0~999 Cycles (relay closes first)	relay closes first	must do this to automatically set P4 to P7- functions
P2	Time relay, OFF/ON (0.1~999min) 0~999 Cycles (relay opens first)		
P3	Voltage detect. (0-99.9VDC) High, LOW limit (relay is ON between the settings)		must do this to automatically set P4 to P7- functions
P4	Voltage detect with timer OFF P3- & P1-		
P5	Voltage detect with timer ON P3- & P1-		
P6	Voltage detect. (P3- & P1-) OFF between values no time & Cycle		
P7	Voltage detect. (P3- & P1-) OFF between values With T1 and T2.		
P8	Timed delay for display to switch OFF		

Setting the functions:

P1- Delay ON with T1 and delay OFF with T2, Cycle number of times for this loop.

1 Press and hold Enter to select "P-" mode
2 Press Set for the mode required.
3 Press Enter to select value and press select to T1 value
4 Digit 100's will blink press Enter to change value
5 Press Set for Digit 10's will blink press Enter to change value
6 Press Set for Digit 1's will blink press Enter to change value
7 If min is required hold Set +- 5sec the decimal point on the decimal 1's will display a dot.
8 After the digit 1's is set press Set now T2 is selected. Refer to step 3-7
9 After the T2 is set press Set the Cycles, the amount of times to run this function. Refer to step 3-7

Press Set to exit the programming mode the relay will switch ON starting the T1 timing.

Note: If T2 is set to zero the timer will only run one.

P2- Delay OFF with T1 and delay ON with T2, Cycle number of times for this loop.

This mode is the same as P1- only the timer starts first OFF and then ON.

Setting refer to steps 1-9 of mode P1-.

P3- Relay will be ON between the high and low voltages. Will only re-trigger when the High voltage is reached.

1 Press and hold Enter to select "P-" mode
2 Press Set for the mode required.
3 Press Enter to select value and press select to change value
4 Digit 100's will blink press Enter to change value (HIGH value)
5 Press Set for Digit 10's will blink press Enter to change value
6 Press Set for Digit 1's will blink press Enter to change value
7 After the digit 1's is set press Set (LOW value) is selected. Refer to step P3-, 3-7
8 After the (LOW value) is set. Press Set to enter the Offset voltage difference to match your meters voltage.
9 Press enter to change, 100mV to 300mV and -300mV to -100mV in steps of 100mV

Press set to exit.

If Set is held down for +- 5sec. The relay action will be opposite.

P4- Detection voltage control relay is closed or released

After voltage value is reached the timer will start.

If voltage is outside the value the timer will start.

1 Press and hold Enter to select "P-" mode
2 Settings from P1- and P3- are combined.

P5-

This mode is the same as P4- only the relay starts inside the value the timer will start.

P6-

Voltage detection OFF between values set

Uses values from P1- with out the Cycles.

P7-

Voltage detection OFF between values set

Uses values from P1- with the relay T1 and T2, no Cycle

P8- Display shutdown display

Turn OFF the Display

d-0 = ON

d-1 to 9 is timing in minutes to switch OFF the display

press enter for ON.

Note:

1. While the program is running and in any programme that uses the timing function of T1 and T2.
   You can press the enter key to see the timer counting.
2. To use the external trigger the jumper must be placed over pins 2 and 3.