<u>**Description**</u>:

6-30V Relay Module Specifications:

1: Working voltage: 6-30V support micro USB 5.0V power supply
2: Trigger signal source: high-level trigger (3.0V-24V) The signal ground and the system ground are not in the same ground to improve the anti-interference ability of the system (you can also short-circuit the common ground by yourself)
3: Output capacity: can control equipment within DC 30v 5A or AC 220v5A
4: Quiescent current: 20mA Working current: 50mA
5: Service life: more than 100,000 times; working temperature: -40—85°C; size: 6.2×3.8×1.7cm
6: With optocoupler isolation, enhanced anti-interference ability, industrial-grade circuit board, set parameters forever after power off
memory.
7: Package Includes: 1 x Timer Switch Module
Special attention: The relay output is a passive contact, uncharged output, which controls the on-off function of a line.
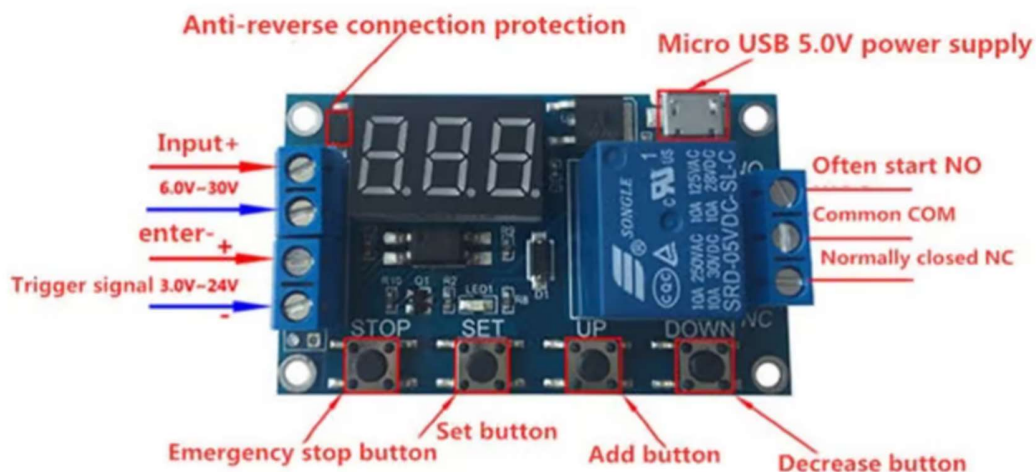
Features 6-30V Relay Module Switch:

1. Wide voltage power supply (6~30V) supports micro USB 5.0V power supply, which is very convenient to use;
2. The interface is clear and simple, powerful, easy to understand, and almost meets all your needs;
3. There is a key emergency stop function (STOP key), with reverse connection

protection, reverse connection does not burn;
4. Added sleep mode. After enabling, if there is no operation within 5 minutes, the display will be turned off automatically; any key to wake up;
5. Different OP, CL, LOP parameters can be set, these parameters are independent of each other and saved separately;
6. All setting parameters are automatically saved after power-off.

Weak current control strong current wiring diagram
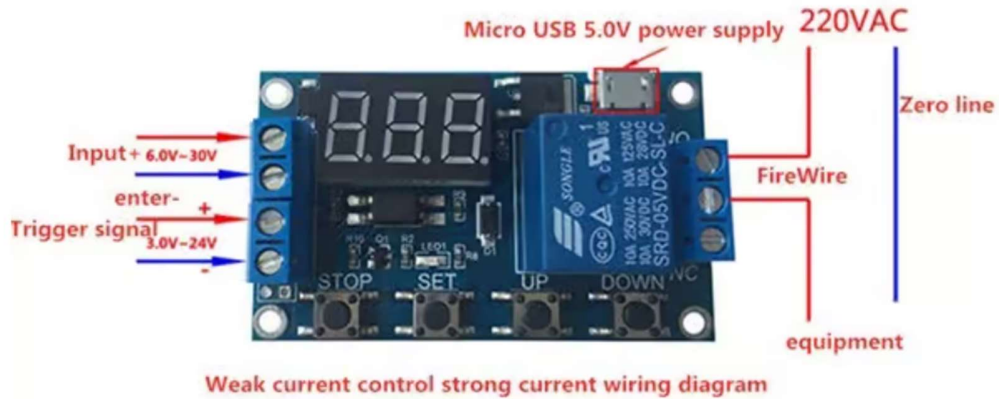
2.

How to operate the Relay Module Time Delay Circuit:

P1 mode: After the signal is triggered, the relay is turned on for OP time, and then turned off; in OP time, the following operations
P1.1: The signal is invalid when triggered again
P1.2: The signal triggers again to re-timing
P1.3: The signal triggers the reset again, the relay is disconnected, and the timing stops;
P1.4 Count down the op time, it will be executed once at boot without triggering;
P-2.1: Give the trigger signal, after the relay is turned off for CL time, the relay is turned on for OP time, after the timing is completed, the relay is turned off;
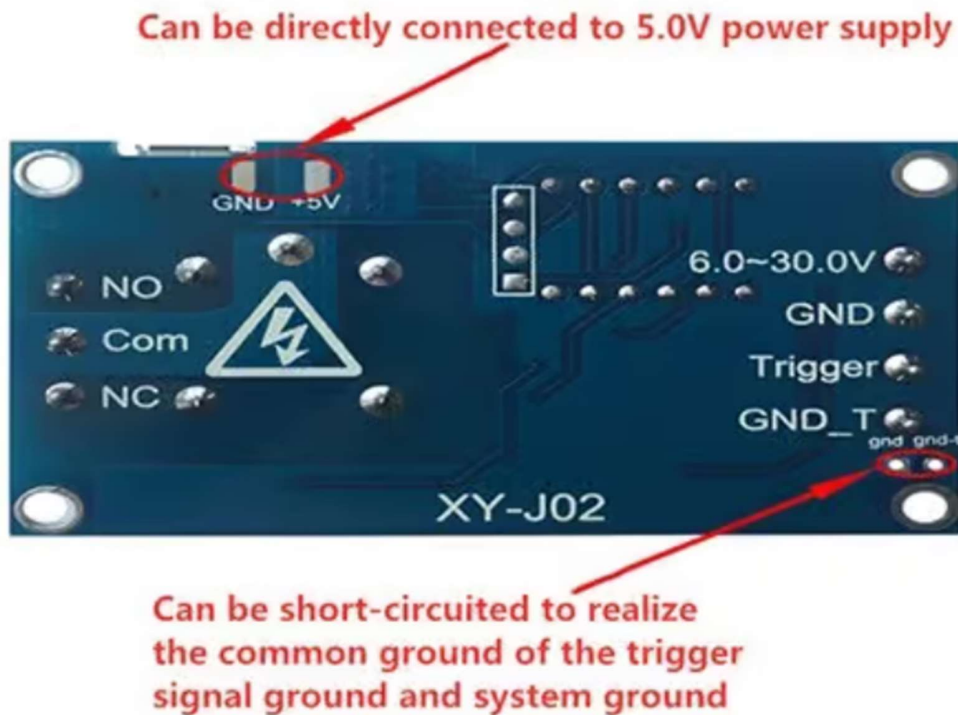P2.2 P2 function distinguishes trigger re-timing
P3.1: Give the trigger signal, after the relay is turned on for the OP time, the relay will disconnect CL time, and then cycle the above actions, give the signal again in the cycle, the relay will disconnect, and stop timing; the number of cycles (LOP) can be set;
P3.2: There is no need to trigger signal after power-on, the OP time of relay conduction, and CL time of relay disconnection, cycle the above actions; the number of cycles

(LOP) can be set;

P-4: Signal holding function. If there is a trigger signal, the timer is cleared and the relay remains on; when the signal disappears, the relay is disconnected after timing the OP; during the timing, there is another signal, and the timer is cleared;

Can be directly connected to 5.0V power supply

Can be short-circuited to realize the common ground of the trigger signal ground and system ground

STOP Button Function Expansion:

Relay enable mode:

1. ON: the relay is allowed to conduct during OP conduction;

2. OFF: The relay is forbidden to conduct and is always off;

Short press the STOP button on the main interface to switch between ON and OFF, the current state will flash, and then return to the main interface. (This function is an emergency stop function, one key to open the closed relay)

Sleep mode:

1. C-P sleep mode: within five minutes, without any operation, the digital tube automatically turns off the display, and the program runs normally;

2. O-d normal mode: the digital tube is always on for display;

Long press the STOP button for 2 seconds and then release it to realize the switch between C-P and O-d states. The current state will flash and then return to the main interface.

How to Set Parameters:
1. First determine the working mode of the relay;
2. According to the working mode of the relay, in the main interface (when the module is powered on, it will flash the current working mode (default P1.1 mode), and then enter the main interface,) "Long press the SET button for 2 seconds and then release "Enter the mode selection interface, select the mode to be set by short pressing the UP and DOWN buttons (P1.1~P-4);
3. After selecting the mode to be set (for example, P3.2), short press the SET button to set the corresponding parameters, then the parameters to be set will flash (OP on time, CL off time, LOP cycle times ("– -" represents an infinite cycle)), adjust the parameter value through UP and DOWN, support long press (rapid increase or decrease) and short press (increase or decrease by 1 unit); after setting the parameter value, short press the STOP button To select the position of the decimal point, select the timing range (corresponding time 0.1 second to 999 minutes); short press the SET key to set the next parameter of the current mode, the process is the same as above;
4. After setting the parameters of the selected mode, press and hold the SET button for 2 seconds and then release, the currently set mode will flash, and then return to the main interface. The parameter setting is successful, very simple!
Main interface: "000" (no decimal point) is displayed when the relay is not working, and there is a decimal point when the relay is working, which is very clear!
Mode selection interface: Long press the SET button to enter, after the setting is completed, long press the SET button to exit and return to the main interface.
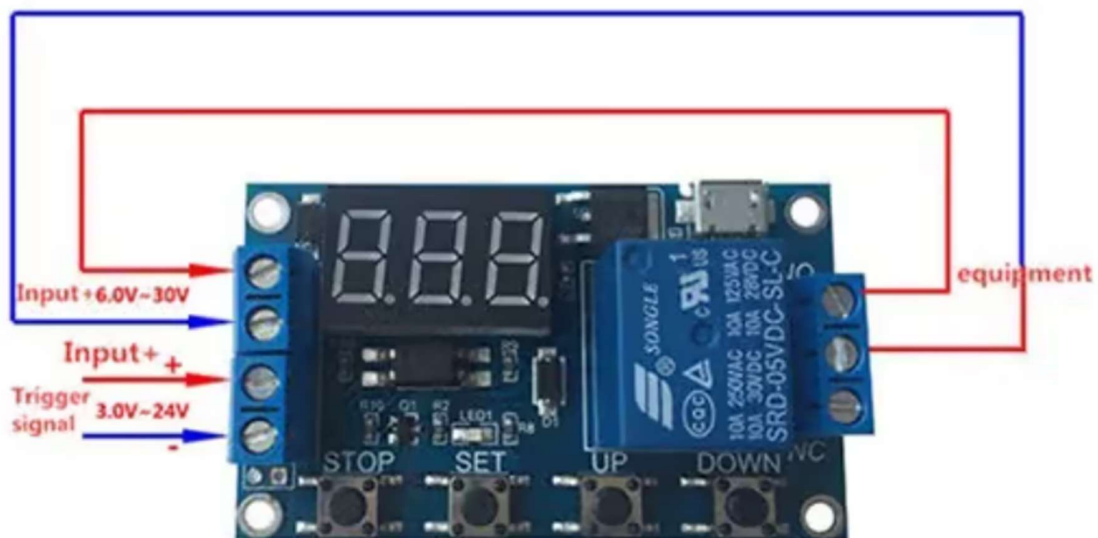
Wiring diagram for sharing one power supply