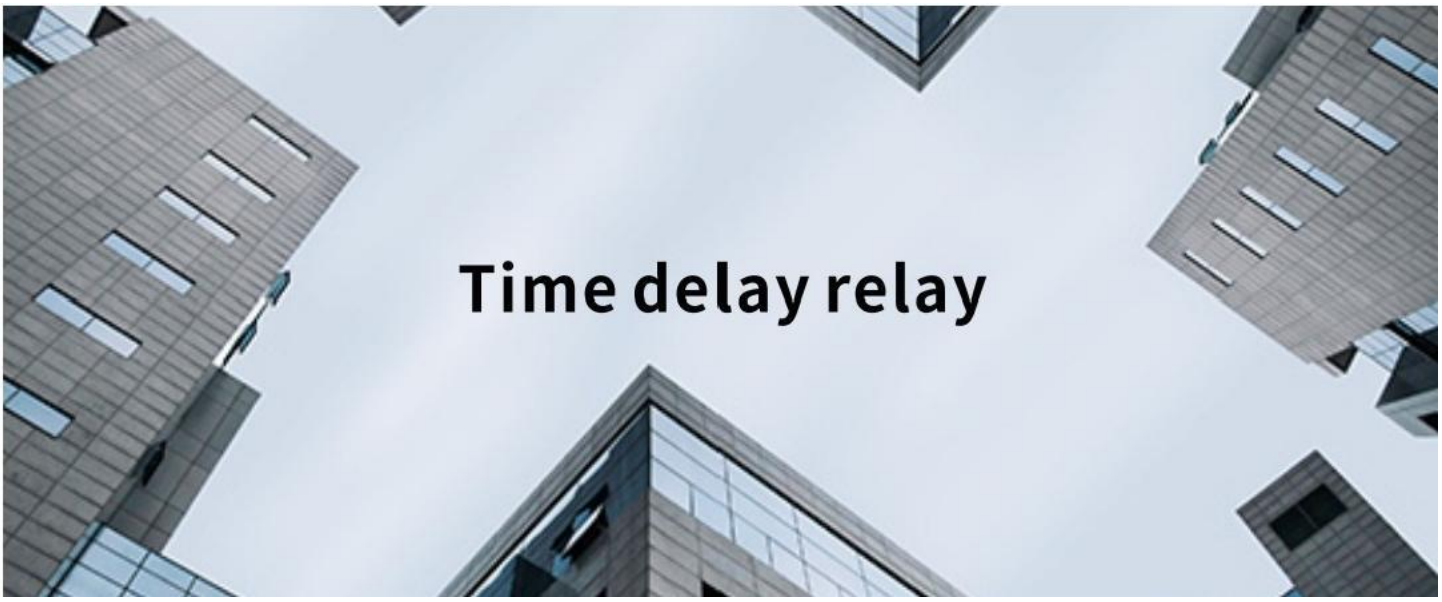


First of all, thank you for choosing our company's relay delay control board. The powerful interface is clear and simple, powerful, with a key emergency stop function (STOP key), with reverse connection protection, reverse connection does not burn, power off memory. Added sleep mode, After enabling, no operation within 5 minutes, automatically turn off the display, any key to wake up! You can set different OP,CL, LOP parameters, these parameters are independent of each other, save the settings separately, automatic power-off preservation and other functions, almost meet all demand!

Product manual

Working voltage: DC6V-DC30V(wide voltage anti-reverse protection)

Trigger signal source: high-level trigger DC 3.0V-24V signal ground is not common with the system ground to improve the anti-interference ability of the system can also be shorted to common ground

Output capacity: controllable DC30V/10A or AC equipment within 250V/10A

Product size:64mm*35mm*19.3mm

Mounting hole: diameter 3mm

Working temperature:-40℃-85℃

Operating mode

P1 mode: After the signal triggered, the MOS tube is turned on for the OP time and then turned off; during the OP time, the following operations

P1.1:The signal triggers invalid again

P1.2: The signal is triggered again to retime

P1.3:The signal triggers a reset again, the MOS tube is disconnected, and the timing is stopped

P2: Give trigger signal

After the MOS tube is turned off for the CL time, the MOS tube is turned on for the OP time, and after the timing is completed, the MOS tube is turned off

P3: Working mode

P3.1: Give the trigger signal, after the MOS tube is turned on for the OP time, the MOS tube is turned off for the CL time, and then the above action is cycled. The signal given again in the cycle, the MOS tube is turned off, and the timing is stopped; the number of cycles (LOP) can be set

P3.2: No trigger signal required after power-on, MOS tube turns on OP time, MOS tube turns off CL time, cycle the above actions; cycle number (LOP) can be set

P4:Signal hold function

If there is a trigger signal, the timing is cleared, and the MOS tube remains on; when the signal disappears, the MOS tube is disconnected after the timing OP; during the timing, there is another signal, the timing is cleared

Relay enable mode

ON: The MOS tube is allowed to be turned on during the ON time of the OP

OFF: The MOS tube is forbidden to conduct, and it 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 opens the closed MOS tube

Sleep mode (long press the stop button to view the current mode)

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

O-d normal mode: the digital tube is always on and displayed

Press and hold the STOP button for 2 seconds and 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

Timing range

How to choose the timing range

After setting the parameter value in the mode selection interface, short press the STOP button to select the timing range

XXX. Decimal point is in single digits, timing range: 1 second to 999 seconds

XX.X Decimal point is in ten digits, timing range: 0.1 second～99.9 seconds

X.X.X. The decimal point is all bright, the timing range:1 minute~999 minutes

For example, if you want to set the OP to 3.2 seconds, then move the decimal point to the tenth digit, the digital tube displays 03.2

Parameter Description

OP turn-on time, CL turn-off time, LOP cycle number 1-999 times,"—" stands for infinite cycles, these parameters are independent of each other, but these parameters are shared by each mode. For example, the turn-on time is set in P1.1 OP is 5 seconds, the user wants to switch to P1.2 mode, then when entering P1.2 to set the corresponding parameters, OP will also be 5 seconds

On the main interface,display 000, short press SET, it will display OPCL, LOP and the corresponding time XXX

If there are only OPs in the mode such as mode P1.1,P1.2,P1.3 time, then short press the SET button will only display the OP and the corresponding time

If there are OP, CL, LOP in the mode,such as mode P3.1,P3.2, short press SET button will display OP and corresponding time, CL and corresponding time, LOP and corresponding times

After setting the mode, you can easily view the parameters set in the current mode by pressing the SET button on the main interface, which is very convenient

How to set parameters

First determine the working mode of the MOS tube

According to the working mode of the MOS tube, 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 release" to enter the mode Select the interface, select the mode to be set by short pressing the UP and DOWN buttons. P1.1～P4 After selecting the mode to be set (for example, P3.2), short press the SET button to set the corresponding parameters. The parameter will flash OP on time, CL off time, LOP cycle number"---" means unlimited cycles, adjust the parameter value through UP and DOWN, support long press (fast increase or decrease) and short press (increase or decrease)1unit)

After setting the parameter value, select the decimal point position by short pressing the STOP key, and select the timing range (the corresponding time is 0.1 seconds to 999 minutes)

Press the SET button shortly to set the next parameter of the current mode. The process is the same as above. After setting the parameters of the selected mode, press and hold the SET button for 2 seconds and then release. The current setting is good.

The mode will flash, and then return to the main interface, set the parameters successfully

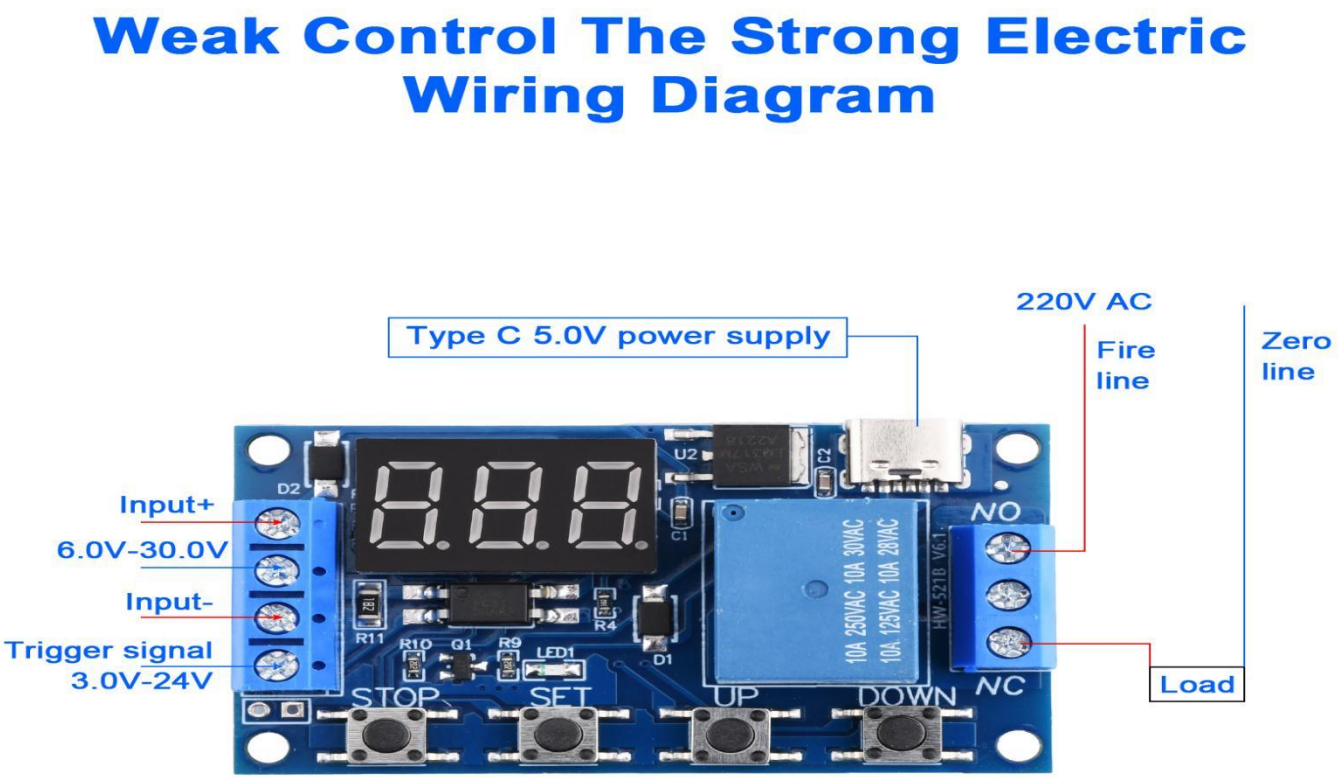
Main interface

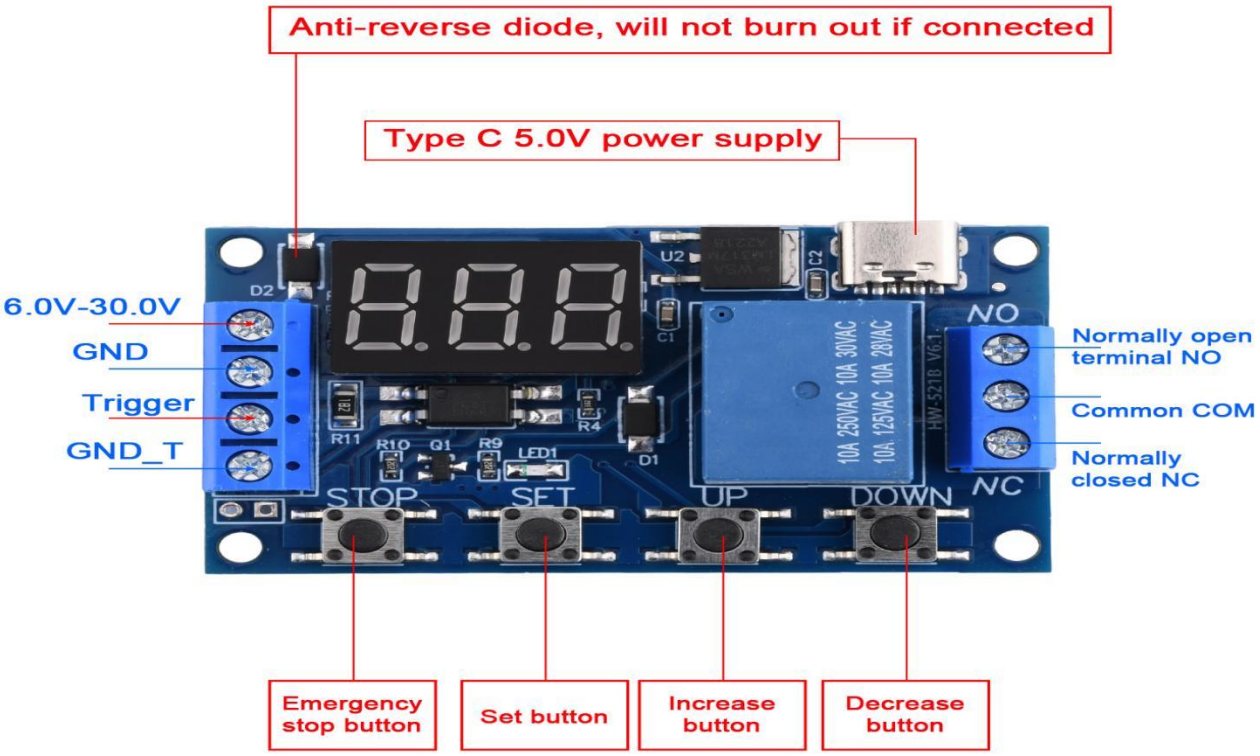
"000" is displayed when the MOS tube is not in operation (no decimal point), and the decimal point is clear when the MOS tube is in working state

Mode selection interface

Long press SET button to enter, after setting is completed, long press SET button to exit and return to the main interface

Wiring diagram




Anti-reverse diode, will not burn out if connected
Type C 5.0V power supply
6.0V-30.0V
GND
Trigger
GND_T
Normally open terminal NO
Common COM
Normally closed NC
Emergency stop button
Set button
Increase button
Decrease button
STOP
SET
UP
DOWN
NO
NC
D2
U2
C2
C1
R11
R10
Q1
R9
LED1
R4
D1
10A 250VAC 10A 30VAC
10A 125VAC 10A 28VAC
HW-521B V6.1