# XY-WJ01

## Description:

Material: ABS + electronic components
Working voltage: 6-30 V power supply
Trigger signal source: High-level touch (3.0V~24V), low-level trigger (0.0V~0.2V), switching quantity control (passive switch). 3: Output capacity: can control devices within 30v 10A or within 220v5A
Quiescent current: 15 mA
Working current: 50 mA
Service life: More than 100,000 times
Working temperature: -40~85 ° C
Weight: 45 g
Size: 7.1*3.9*2.5 cm (length, width and height)
Package list: 1*1pcs
Principle: Time relay
Protective features: Sealed
Liaison load: Low power
Power mode: DC

## Features:

1. With liquid crystal display, the current mode and parameters are clear at a glance, very clear, simple and practical;
2. Support button trigger control, high and low-level trigger, switch quantity control, suitable for most occasions;
3. Wide voltage supply (6~30V), very convenient to use;
4. Support UART data upload and parameter setting;
5. One-button pause function with reverse connection protection, the reverse connection does not burn;
6. Added sleep mode. After enabling, there is no operation for about 5 minutes, and the LCD backlight is automatically turned off; any button wakes up;
7. Different OP, CL, LOP parameters can be set. These parameters are independent of each other and saved separately.
8. All setting parameters are automatically saved after power-off. Product parameters:
9. With optocoupler isolation, enhance anti-interference ability, industrial grade circuit board, set parameters to remember forever after power off. Scope of application: small appliance control, MCU development and so on.


Relay closed display OUT
Calculate status and time
Add button
Set button
OUT
0079
P0.0P
DELAY RELAY MODULE XY-WJ01
Reduce button
Pause/trigger button
Current working mode

## Working Mode Introduction(P1~P7)

P0: After the signal is triggered, the relay conduction in OP time then disconnects; In the OP time, the signal is invalid.

P1: After the signal is triggered, the relay conduction in OP time then disconnects; In the OP time, the signal triggers a new timer.

P2: After the signal is triggered, the relay conduction in OP time then disconnects; In the OP time, signal trigger reset timer, relay disconnected and stop timing.

P3: After the signal is triggered, the relay disconnects the CL time, and then the relay conduction.

P4: After the signal is triggered, the relay conduction the OP time, and then the relay disconnects the CL time, and then loops the above action, gives the signal again in the loop, relays disconnect, stops the timer; and the number of cycles (LOP) can be set; End of cycle, keep relay disconnected;

P5: After the signal is triggered, the relay disconnects the CL time , and then the relay conduction the OP time, and then loops the above action, gives the signal again in the loop, relays conduction, stops the timer; and the number of cycles (LOP) can be set; End of cycle, keep relay conduction;

P6: No trigger signal after power-on, After the relay conduction OP time, the relay disconnects the CL time, and then loops the above action, signal is invalid in the loop, the number of cycles (LOP) can be set; End of cycle, keep relay disconnected;

P6: No trigger signal after power-on, After the relay disconnects the CL time, the relay conduction OP time, and then loops the above action, signal is invalid in the loop, the number of cycles (LOP) can be set; End of cycle, keep relay conduction;

P8: Signal hold function: The signal is maintained, the timing is cleared, and the relay conduction; when the signal disappears, the relay disconnects after the timing OP; during the timing, there is another signal and the timing is cleared;

P9: Signal hold function: The signal is maintained, the timing is cleared, and the relay disconnected; when the signal disappears, the relay conduction after the timing CL; during the timing, there is another signal and the timing is cleared;

(P0~P7) mode, short press the pause button, Start timing if the system is not timed; If the system is already timed, the system pauses the timer, the relay disconnected, flashing "out" to indicate a reminder;

P8/P9 mode, The pause button as a trigger signal in the Run interface, Short / Long press fail;

Timing Range:

0.01 sec~9999 min

l How to choose the timing range:

In the OP/CL parameter modification interface, press the pause button shortly to select the timing range.

XXXX Timing range:1sec~9999sec

XXX.X Timing range:0.1sec~999.9sec

XX.XX Timing range:0.01sec~99.99sec

X.X.X.X Timing range:1min~999.9min

For example, if you want to set the OP to 3.2 seconds, move the decimal point to ten digits.

LCD display 003.2

Parameter Description: OP on-time, CL off time, LOP cycle times (1 - 9999 times, "----" represents an infinite number of cycles)

Parameter Settings:

a) Press and hold the SET key to enter the setting interface;

b) First set the working mode, work mode flashes reminder, set the working mode by pressing the UP / DOWN keys;

c) Short press the SET button to select the working mode and enter the system parameter settings.

d) In the system parameter setting interface, press SET key to switch the system parameters to be modified, and press / long press UP/DOWN key to modify. (Note: Short press SET in P0~P3/ P8/P9 mode is invalid);

e) In the OP/CL parameter modification interface, short press STOP to switch the timer unit (1s/0.1s/0.01s/1min);

f) After all parameters are set, press and hold the SET button for more than 2 seconds to release the hand, save the parameter settings and exit the setting interface

## Remote data upload and parameter setting functions:

The system supports UART parameter reading and writing functions;

UART： 9600,8,1

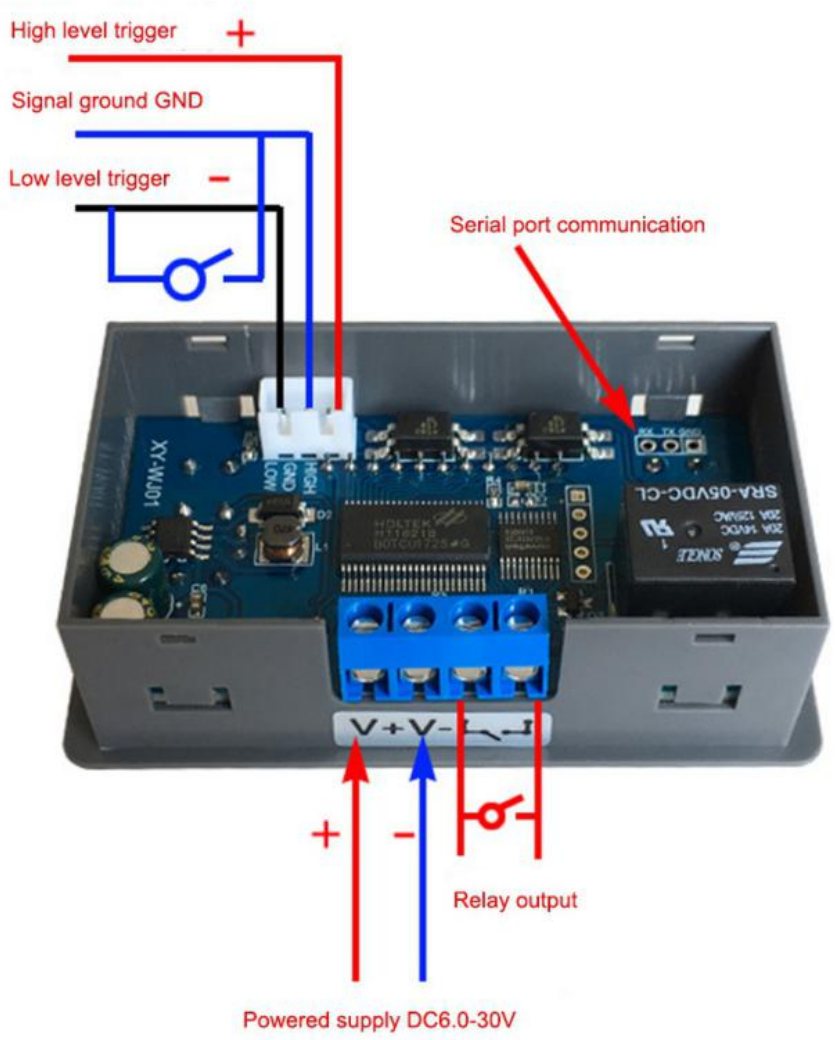
| CMD | Function |
|---|---|
| read | Read system parameters |
| OP:xxxx<br>OP:xxx.x<br>OP:xx.xx<br>OP:x.x.x.x | 1s<br>0.1s<br>0.01s<br>1 min |
| CL:xxxx<br>CL:xxx.x<br>CL:xx.xx<br>CL:x.x.x.x | 1s<br>0.1s<br>0.01s<br>1 min |
| LP:xxxx | Settings Cycles |
| start | Trigger/Start (P0~P7 Active) |
| stop | Pause (P0~P7 Active) |
| px | Set the working mode<br>(P0~P9) |

Additional features:

a) Low-power state: In the running interface(only P0~P7 mode), by pressing the pause button for a long time, the Low-power function is started or closed (L-P selects on to start the hibernation function, Five minutes or so, no operation, LCD backlight auto-off, System normal operation, any key to wake up; off turns off the hibernation function);

b) Parameter view: In the operation interface, short press the SET key to display the current parameter setting of the system, without affecting the normal operation of the system;

c) Display content switching: In P4~P7 mode, switch display content (run time/cycle number) by pressing DOWN key momentarily;


High level trigger
+
Signal ground GND
Low level trigger
−
Serial port communication
XY-WJ01
HIGH
GND
LOW
SRA-05VDC-CL
V+
V-
+
−
Relay output
Powered supply DC6.0-30V

# DC6.0-30V Wiring

# 220V Wiring


OUT
DELAY RELAY MODULE XY-WJ01


Load
Neutral line
AC 220V
Fire line
-
+
DC6.0-30V Wiring