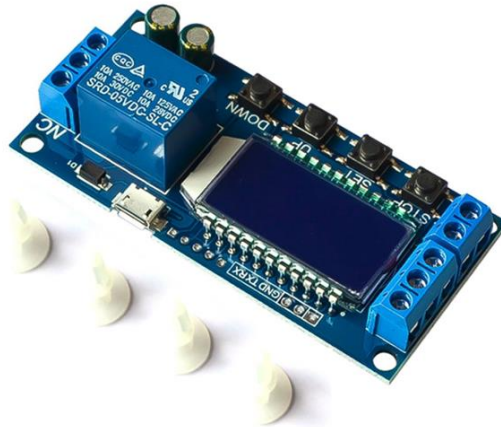


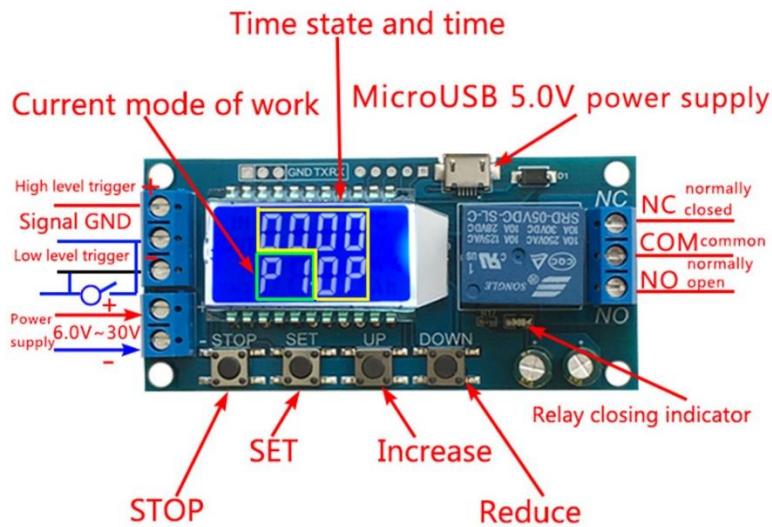
# Circulation Timing Circuit Switch Relay Module

Model: HW-751

## User Manual



### Interface Description:



### Wiring Diagram for Sharing a Power Supply:



## Weak Electric Control Strong Power Wiring Diagram:



### Introduction to Working Mode (P1~P7):

**P1:** After the signal is triggered, the relay turns on the OP time, then turns off; in the OP time, the signal is triggered again.

**P2:** After the signal is triggered, the relay turns on the OP time and then turns off; in the OP time, the signal triggers the re-clocking again.

**P3:** After the signal is triggered, the relay turns on the OP time and then turns off; in the OP time, the signal triggers the reset again, the relay is disconnected, and the timing is stopped.

**P4:** Give the trigger signal, after the relay turns off the CL time, the relay turns on the OP time, after the timing is completed, the relay is turned off.

**P5:** Give the trigger signal, after the relay turns on the OP time, the relay turns off the CL time, then loops the above action, the signal is given again in the cycle, the relay is disconnected, the timing is stopped; the number of cycles (LOP) can be set.

**P6:** No trigger signal is required after power-on, the relay turns on OP time, the relay turns off CL time, and the above action is cycled; the number of cycles (LOP) can be set.

**P7:** Signal hold function If there is a trigger signal, the timing is cleared, the relay remains on; when the signal disappears, the relay is turned off after timing the OP; during the timing, there is a signal and the timing is cleared.

### Timing Range:

0.01 second (minimum) ~999 9 minutes (maximum) continuously adjustable

### How to choose the timing range:

In the OP/CL parameter modification interface, short press the STOP button to select the timing range:

- XXXX has no decimal point, the timing range is from 1 second to 9999 seconds.
- XXX.X decimal point in ten, timing range from 0.1 second to 999.9 seconds.
- XX.XX decimal point in hundred, timing range 0.01 seconds to 99.99 seconds.
- XXXX decimal point is fully lit, the timing range is 1 minute ~ 9999 minutes.

For example, if you want to set the OP to 3.2 seconds, then move the decimal point to ten, LCD display 003.2

Parameter description: OP on time, CL off time, LOP cycle number (1 - 9999 times," --- - " stands for infinite loop)

### Parameter Setting:

- Enter the setting interface by long pressing the SET button;
  - First, set the working mode, the working mode flashes reminder, set the working mode by short pressing the UP/DOWN button;
  - Short press the SET button to select the working mode and enter the system parameter setting;
  - In the system parameter setting interface, short press the SET button to switch the system parameters to be modified, short press / long press the UP / DOWN button to modify;
- (Note: In the P-P-~. 3. 1, P. 7- press mode SET inactive);
- In the OP/CL parameter modification interface, short press STOP to switch the timing unit (1s/0.1s/0.01s/1min);
  - All parameters are set, press and hold the SET button to save the parameter settings and exit the setting interface.

### Remote Data Upload and Parameter Setting Function:

The system supports UART data upload and parameter setting function (TTL level);

UART: 9600, 8, 1

Command	Features
Read	Read system parameters
OP: xxxx	1s
OP: xxx.x	0.1s
OP: xx.xx	0.01s
OP: xxxx	1 min
CL: xxxx	1s
CL:xxx.x	0.1s
CL: xx.xx	0.01s
CL: xxxx	1 min
LP: xxxx	Cycles
On	Turn on the relay function
Off	Turn off the relay function
PX	Set mode P1 , P2, etc.

### Additional Functions:

- a) **Automatic sleep function:** In the running interface, by pressing and holding the STOP button, the automatic sleep function is activated or deactivated (LP selects on to start the sleep function, off off the sleep function);
- b) **Relay function selection:** In the operation interface, the relay function is activated or deactivated by short pressing the STOP button, 'on' satisfies the conduction condition relay normally conducting, 'OFF' meets the conduction condition relay is not conducting; 'OFF' In the state, the system flashes 'OUT';
- c) **Parameter view:** In the running interface, short press the SET button to display the current parameter settings of the system, which does not affect the normal operation of the system;
- d) **Display content switching:** In P-5 P-6 mode, switch the display content (run time / cycle number) by short pressing the DOWN button.