# RELAY TIMER MODULE WITH DISPLAY COUNT UP/DOWN

# Product specification:

- 1. Working voltage: Micro USB 5.0V power-up and 6--30V supported.
- **2.** Triggering signal: High level trigger signal (3.0V—24V) and systematically common ground improve the capability of anti-interference. (Short circuit common ground is also acceptable)
- **3.** Output ability: Capable of controlling the direct current that within 30v 5A or alternating current within 220v5A.
- 4. Quiescent current: Working current is 20mA; 50mA.
- 5. Working life: Over a hundred thousand times; Working temperature: -40—85°C; Size:

6.2\*3.8\*1.7cm

6. Photocoupled isolation can intensify the ability of anti-interference. Circuit board of industrial grade. Setup parameter and cut off the power will be memorized permanently. Attention: Relay output is passive contact. Uncharged output. One line controls power off and on.





By shorting the two pads can signal'GND and systems'GND to link

## Timing range:

0.1 second (minimum) ~ 999 minutes (maximum) continuously adjustable How to select the timing range:

In the mode selection interface set the parameter value by short press the "STOP" button, select the timing range;

XXX. Decimal point at units digit; Timing range: 1 second ~ 999 second.

XX.X, Decimal point at tens digit. Timing range: 0.1 second~99.9second

X.X.X. All the decimal points are lighted up. Timing range: 1 minute ~ 999 minutes.

For instance, if you want to set the OP to 3.2 seconds, you should move the decimal point to the tens digit. Digital display tube: 03.2

**Parameter:** OP Ton, CL off time, LOP circuit times (1~999 times, "---" represents limitless circuit.) These parameters are mutually independent, but each mode shares these parameters together. For instance, the customers set the OP Ton to 5 seconds at P1.1, but they want to shift to P1.2.

When the main interface shows "000", short press "SET" button, and it will shows OP (CL, LOP) and

its corresponding time XXX.

If the mode has OP time (Eg. P1.1, P1.2, P1.3) only, please short press "SET button" and it would show its corresponding OP time.

If the mode has OP, CL and LOP for you to choose (Eg. P3.1, P3.2), please short press the "SET" button and it would show the corresponding time of OP, CL and LOP.

When the setting is down, you could check all the setting parameter of the current modes by short pressing the "SET" button of the main interface with little efforts. It's very convenient!

#### How to set the parameter:

1. Firstly, please check the working mode of the relay.

2. According to the working mode of relay, long pressing the "SET" button for 2 seconds and release in the main interface, you will enter into the mode selecting interface (Tacit mode P1.1). Select the

setting mode by short pressing "UP" and "DOWN" button ( P1.1~P-4 ) .

3. Select a setting mode you want (Eg. P3.2) and short press the "SET" button to set the parameter. At that time, the parameter you set will flash (OP Ton, CL off time, LOP circuit). You could adjust the parameter by pressing "UP" and "DOWN" button. Long pressing (Increase or reduce rapidly) and short pressing (increase or reduce 1 unit) are supported. After setting the parameter, select the position of units point by short pressing "STOP" button to choose a timing range (Corresponding time 0.1 second ~999 minutes). Short press "SET" button to set the next parameter of current mode. The progress is as what have mentioned above.

4. After selecting the mode's parameter, long press the "SET" button for 2 seconds and release. The current setting mode will flash and return to the main interface, and the parameter setting is finished. It's very simple!

**Main interface:** It will appear "000" without decimal points when at "OFF" status, while appears decimal points clearly at "ON" status.

Mode selecting interface: Long press "SET" button to set parameter while long press "SET" button to return back to the main interface. It's very simple!

Wiring diagram with shared power source, DC controle



## Relay using mode:

1. **ON:** Relay is allowed to conduct within OP ton time.

2. OFF: Relay is banned conducting and it is always at closing status.

Short pressing "STOP" button in the main interface, you will realize the shift between "ON" and "OFF". It will flash and return to the main interface. (This is acute stop function. One-button turn on and off the relay.)

#### Sleep mode:

1. C-P sleeping mode: When not using the relay for 5 minutes, the digital tube will turn off the display automatically, and the program will keep working.

2. O-d normal mode: Display of digital tube always on.

Long press "STOP" button for 2 seconds and release to shift the status of C-P and O-d. It will flash and return to the main interface.