

It can also be directly connected to 5V power supply



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

## Anti-static bag, perfect package







Weak control the strong electric wiring diagram



Share a power supply wiring diagram

0.1 seconds (min) to 999 minutes (max) continuously adjustable.

This product is easy to use, many functions, but all buyers need to carefully read the instructions, very useful product.

#### **Highlights:**

- 1. Wide voltage power supply (6 ~ 30V), supports microUSB 5.0V power supply, easy to use;
- 2. The interface is clear and simple, powerful, easy to understand, meet almost all your needs;
- 3. The emergency stop function ("STOP" key); With reverse polarity protection, reverse polarity will not burn the product.
- 4. Increase the sleep mode, if this mode is enabled, without any operation within 5 minutes, then automatically turn off the monitor, any key wake-up;
- 5. You can set a different OP, CL, LOP parameters, which are independent of each other, and are automatically saved;
- 6. After the module is powered down, all parameter settings are not lost.

#### **Operating mode:**

- **P1:** trigger signal, the relay is on "OP" time, and then disconnect; in the "OP" time, as follows:
- P1.1: signal is triggered again, invalid
- P1.2: signal is triggered again, the clock is reset
- **P1.3:** Signal trigger again, relay off, stop the clock;
- **P-2:** trigger signal, the relay off "CL" of time, the relay on "OP" time, and then disconnect relay;
- **P3.1:** trigger signal, the relay is turned on after the "OP" time, the relay off "CL" time, then the operation cycle, if the trigger signal period, the relay off, stop the clock; the number of cycles ("LOP") can be set.
- **P3.2:** without triggering signal, the relay is on "OP" time, the relay off "CL" time, and has been cycling; frequency ("LOP") cycle can be set;
- **P-4:** signal holding function. If there is a trigger signal timing is cleared, the relay remains on; when the signal disappears, after the timing "OP" time, the relay is; if another signal during timing, timing is cleared;

#### **Product parameters:**

- 1: Operating voltage: 6--30V, support microUSB 5.0V power supply
- 2: Trigger Source: Active-high (3.0V-24V), have optocoupler isolation, can improve the system's anti-jamming capability (customers can also shorting common ground).
- 3: Output capability: You can control the DC 30VDC 5A or 220VAC 5A device.
- 4: Quiescent Current: 20mA; Operating Current: 50mA

- 5: Life: more than 10 million times; Working temperature: -40-85 %, Size: 6.2\*3.8\*1.7cm.
- 6: With optocoupler isolation, enhanced anti-jamming capability, industrial grade board.

Special Note: The relay outputs are passive contact, just a switch.

### Timing range

# 0.1 seconds (min) to 999 minutes (max) continuously adjustable How to choose the time range?

After setting the mode selection screen parameter value by a short press "STOP" button to select the time range;

XXX. decimal point in the unit place, time range: 1 second to 999 seconds XX. X decimal point in decade place, Timing range: 0.1 seconds to 99.9 seconds

X. X. X. decimal full brightness, Timing range: 1 minute to 999 minutes. For example, you want to set "OP" is 3.2 seconds, then move the decimal point to decade place, the digital display 03.2

Parameter description: "OP" - conduction time, "CL" - off time, "LOP" - the number of cycles (1-999 times, "---" represents infinite loop).

These parameters are independent of each other, but is shared by each mode. For example, in P1.1 mode, set the on-time "OP" is 5 seconds, if you switch to P1.2 mode, it's "OP" will be 5 seconds too.

In the main interface (display 000), short press "SET" button will display "OP" ( "CL", "LOP") and the corresponding time XXX;

Some parameters only mode "OP" (such as the mode P1.1, P1.2, P1.3), short press the "SET" key to display only the "OP" and the corresponding time;

Some models have parameters "OP", "CL", "LOP" (such as the mode P3.1, P3.2), short press "SET" button will display "OP" and the corresponding time, "CL" and the corresponding time, "LOP" and the corresponding number of times;

In the main interface by short press "SET" key to see information about the parameters of the current mode, very convenient!

### How to set parameters?

- 1. First, read the instructions to determine the required operating mode.
- 2. The module is powered up, the display at the current work mode (P1.1 default mode), then enter the main interface; press "SET" button for 2 seconds after release to enter mode selection interface; a short time by pressing "UP", "DOWN" key to select the mode (P1.1 ~ P-4).
- 3. Select the mode (such as P3.2), short press the "SET" button, then the parameter to be set flashes ( "OP" on-time, "CL" off time, "LOP" cycles ( "---

- "represents infinite loop)), by "UP", "DOWN" keys to adjust the parameter value, support long press (rapid increase or decrease) and short press (increase or decrease one unit); then short press the "STOP" key to select the decimal point position, select the time range (0.1 seconds to 999 minutes); short press the "SET" button to set the next parameters of the current mode of procedure is as above.
- 4. After the parameters are set, long press "SET" button for 2 seconds then release, the name of the current mode will flash once, and then return to the main screen, set the parameters of success!

The main interface: In the relay does not work status display "000" (no decimal point), with a decimal point under relay state.

Mode selection screen: Long press the "SET" key to enter, after setting is completed, long press the "SET" key to exit back to the main screen.

#### "STOP" button extensions:

Relays enable mode:

- 1. ON: Relay allows conduction in the "OP" on-time;
- 2. OFF: relay prohibit conduction is always closed; In the main interface, short press the "STOP" button to switch between ON and OFF, the current in which the state will flash, and then return to the main screen. (This feature is an emergency stop function, click off the relay) Sleep mode:
- 1. "C-P" Sleep mode: five minutes without any operation, the digital display automatically turns off, the program running as usual;
- 2. "O-d" normal mode: digital display always open; Press the "STOP" button for two seconds and then release to switch "C-P" and "O-d" state, in which the current state of flashes and then return to the main screen.