RELAY TIMER MODULE WITH DISPLAY COUNT UP/DOWN

Operating mode:
P1: After the signal is triggered, the relay turns on OP time and then disconnects. In OP time, as the following operating:
P1.1: Signal triggers again invalid
P1.2: Signal triggers again and re-timing
P1.3: Signal triggers again and reset, the relay disconnected, and then timing stops;
P-2: The trigger signal is given. After the relay disconnects CL time, the relay turns on OP time. After the timing is completed, the relay is disconnected.
P3.1: The trigger signal is given, and after the relay turns on OP time, the relay disconnected CL time. Then the above action is cycled, and the signal is given again within the cycle, and the relay is disconnected and stops timing. The number of cycles (LOP) can be set;
P3.2: No trigger signal is required after power-on, the relay turns on OP time, the relay disconnect CL time, and the above action is repeated; The number of cycles (LOP) can be set;
P-4: Signal holding function. If there is a trigger signal, the timing is cleared in zero and the relay remains on; When the signal disappears, disconnect the relay after timing OP; During timing, if there is a signal, the time is cleared in zero;

How to set parameters
1. Determine the working mode of the relay;
2. According to the working mode of the relay, 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 key for 2 seconds and then release" to enter the mode selection interface, and select the mode to be set by short pressing the up and down keys (P1.1 ~ P-4);
3. After selecting the mode to be set (e.g.: p3.2), briefly press the set key to set the corresponding parameters. At this time, the parameters to be set will flash (OP on time, CL off time, Loop cycle times ("---" represents infinite cycles)). Adjust the parameter values through up and down, and support long press (rapid increase or decrease) and short press (increase or decrease by 1 unit); After setting the parameter value, press the stop key to select the decimal point position and select the timing range (corresponding time: 0.1s

~ 999 minutes); Short press the set key to set the next parameter of the current mode. The process is the same as above;

4. After setting the parameters of the selected mode, press and hold the set key for 2 seconds and release it. The currently set mode will flash, and then return to the main interface. Setting the parameters is successful, which is very simple!

Main interface: "000" (no decimal point) is displayed when the relay is not working, and there is a decimal point when the relay is working, which is very clear!

Mode selection interface: long press the set key to enter. After setting, long press the set key to exit and return to the main interface. It's very simple!

Relay enable mode:
1. On: the relay is allowed to conduct during the op conduction time;
2. Off: the relay is prohibited from conducting and is always closed;
3.Short press the stop button in 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, which opens and closes the relay with one key)

Sleep mode:
1. C-P sleep mode: operate within five minutes, the nixie tube automatically turns off the display, and the program runs normally;
2. O-D normal mode: the nixie tube is always on for display;
Press and hold the stop button for 2 seconds and release it to switch between 3.C-P and O-D states. The current state will flash, and then return to the main interface.