

INTERMITTENT / LOOP TIMER RELAY MODULE EXT TRG

Description:

- 1) support frequent, high-frequency on / off of circuit.
- 2) no noise / spark during operation.
- 3) no electromagnetic interference during operation.
- 4) Can be used to power motor, light bulb, LED lights and strips, small pumps, solenoid valves, etc.

Function of the board:

- 1) signal triggers output, board starts to work. When pre-set delay time is reached, work stops.
- 2) during the delay time: there are three modes for setting:
 - A: re-trigger invalid
 - B: once reactivated, delay time restarts
 - C: once reactivated, board resets, time count stops.
- 3) T1 and T2: on / off time as repeat cycles. Both T1 and T2 are adjustable.
- 4) Board works when there is signal. When signal is off, time count starts and after reaching pre-set time, output stops.

Specifications:

- 1) size: 64.2 * 39.5 * 13mm
- 2) Output capacity: DC5-30V, Max current 20A (if current higher than 5A is required an extra heat sink is required).
- 3) working volt: DC 5-30V
- 4) signal volt: DC4-27V (can use positive to trigger, or one button switch, PNP sensor, PLC signal, etc)
- 5) temperature range: -40 ~ 85°C
- 6) time setting saved after power off. Adjustable time setting with three time ranges (0-999seconds with 1 second step; 0-99.9 seconds with 0.1 second step; 1-999seconds with 1 minute step)

Time setting and Working mode details:

Select work mode: turn on the board to power. Long Press K2 for two seconds to select mode.

There are four modes to choose from P1-1 to P1-4.

Mode P1-1: Signal triggers to start output work. When pre-set time is reached, work stops.

We can set the output time T: Press K2 once, first digit of LED start to shine. Press K3, number on the first digit changes; Press K2 again, second digit shines. Press K3 to change number on the second digit ... And in this way we change numbers on the LED. Press K2 again, LED stop shining. Press K3 again, comma starts to move on the LED. When comma is behind third digit, time setting **0-999 minutes**. When it is behind the second digit, **0-99.9 seconds**. When no comma, the time range is **0-999 seconds**.

After the time setting, short press K1 and we can make small changes: default setting, trigger is invalid during the set delay time. When we press K1 once, the trigger becomes valid (time count restart). Press K1 again, the board resets during set delay time (time count stops, output resets). Press K1 again, repeat this change cycle ...

Working mode P1-2: signal triggers time count. When T1 is reached, output starts. When T2 is reached, circuit breaks. We can set the waiting time T1 and working time T2: time setting is as per setting in mode P1-1. The only difference is that when LED is blue on, we are setting T2. When Blue LED is off, we are setting waiting time T1.

Working mode P1-3: Circuit on for T1 seconds, and off for T2 seconds, this goes for infinite circles. We can set T1 and T2 as per in mode P1-1.

Working mode P1-4: When signal triggers, output starts to work but time count does not start. When trigger signal is off, time count starts. When the set time is reached, output is off. During the delay time, when we display signal, the delay time is canceled and board continues to work. When the signal is off, time count restarts. We can set the time as per in mode P1-1.

