12V LED Display Digital Programmable Timer Timing Relay Module Self-lock Switch

Features:

- 1. Type: Latching / self-lock
- 2. Power input protect
- 3. 12V relay supported
- 4. Maximum load: AC 250V/10A, DC 30V/10A.
- 5. Multifunction integrated
- 6. Flexible work time range: 0-999 seconds
- 7. Precise time delay: up to 0.1%
- 8. High and low trigger level supported
- 9. 3-bit digital tube display
- 10. 1 power indicator LED
- 11. 1 relay indicator LED
- 12. Can be controlled by Arduino, 8051, AVR, PIC, DSP, ARM
- 13. Module size: Approx. 55.8mm × 33mm × 12mm

INSTRUCTIONS FOR USE OF THIS MODULE

THE BUTTONS

K1: The program/option select button. Press for 2 seconds to enter mode select. Choose P-1 to P-4. Press to activate various options of each program. See below.

K2: The ok/select button. Press to select which digit should be edited. The digit will blink. Edit the blinking digit with K3.

Press K2 again to edit the next digit. After editing the 3rd digit, press K2 to ok the edit mode.

K3: The edit/range button. Press to change the digits in edit mode. When not in edit mode, use K3 to select where the decimal point is. Selectable ranges:

0 – 999. minutes: when decimal point is at far right (XXX.)

- 0 999 seconds: when there is no decimal point (XXX)
- 0-99.9 seconds: when decimal point is between 2rd and 3rd digit (XX.X)

THE PROGRAMS

P-1: A single positive trigger turns the relay on. The time runs to zero and the relay turns off. (single shot). Option 1: press K1. After a single positive trigger, the countdown cannot be interrupted. (default) Option 2: press K1 again. After a positive trigger, any additional trigger pulse cause a restart of the countdown. The relay remains on until no more triggers are detected. The countdown runs to zero and the relay turns off. Option 3: press K1 again. After a positive trigger, another trigger pulse turns off the relay immediately.

P-2: A positive trigger causes a delay (X). Then the relay turns on for time (Y).

Option 1: press K1. The sequence cannot be interrupted. (default)

Option 2: press K1 again. After a positive trigger, any additional trigger pulse causes a restart of the XY sequence.

P-3: As soon as P-3 is selected, the sequence starts immediately. No trigger necessary. Use K2 and K3 to select the time of X and Y. A continuous loop is running, where X is time on and Y is time off. Option 1: press K1. Now X time is off and Y time is on.

P-4: A single positive trigger turns the relay on. The time runs to zero and the relay turns off. (single shot). Holding the trigger will reset the sequence but only start the countdown when trigger is released.