Drock Timer Delay Relay User Manual

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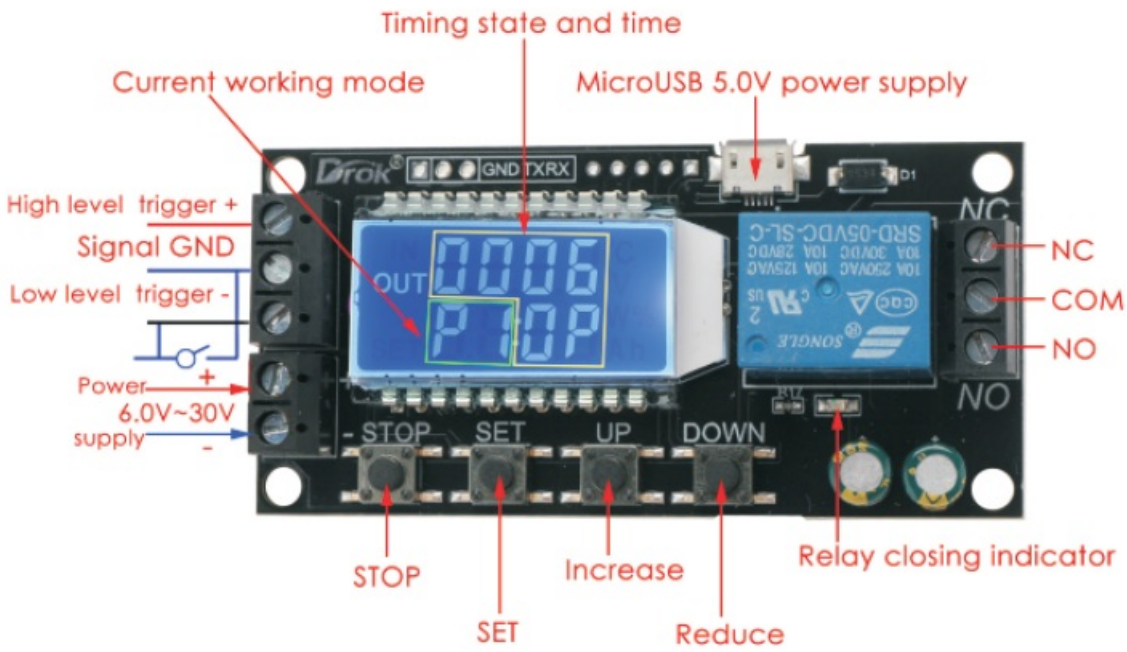
Timer Delay Relay

DROK Timer Relay

Module Description:



Parameters:

- Operating voltage:DC 6-30V,support micro USB 5.0V.
- Trigger source:High-level trigger(3.0-24V); low-level trigger(0.0-0.2V);switching quantity control (passive switch).
- Output capacity: can control devices within DC 30V/5A or within AC 220V/5A.
- Working current: 50mA
- Quiescent current: 15mA
- Working temperature: 40~85C°
- Service life: more than 100,000 times;
- Input reverse connection protection: Yes
- Dimension: 80*39*20mm

Features:

- Display: clear LCD displays current working mode and parameter.
- With sleep mode: After enabling sleep mode, if there is no operation for 5 minutes, backlight will turn off automatically.
- Press any key to wake up.
- With STOP key, support one-button stop.
- All set parameter will be automatically saved when power off.

Parameter instruction:

OP: operate time
CL: close time

LOP: loop times (1~9999 times; “—”represents infinite loop)

Working Mode::

P1: Relay will turn ON for time OP after getting a trigger signal and then turn relay OFF. The input sighal is invalid if it gets a trigger signal again during delay time OP.

P2: Relay will turn ON for time OP after getting a trigger signal and then turn relay OFF.The module will restart timing if it gets a trigger signal again during delay time OP.

P3: Relay will turn ON for time OP after getting a trigger signal and then turn relay OFF.Module will reset and stop timing if it gets a trigger signal again during delay time OP.

P4: Relay will turn OFF for time CL after getting a trigger sighal and then relay will turn ON for time OP.Relay will turn OFF after finish timing.

P5: Relay will turn ON for time OP after getting a trigger sighnal and then relay will turn OFF for time CL and then loops the above action.Relay will turn OFF and stop timing if it gets a trigger signal again during the loop.

P6: Relay will turn ON for time OP after power on without getting a trigger signal and then relay will turn OFF for time CL and then loops the above action. The number of cycles (LOP) can be set.

P7: Signal hold function
If there is a trigger signal, the timing will reset, and the relay keeps ON. When the signal disappears, after timing time OP, relay will turn OFF. During timing, if the relay gets a sighnal again, timing will reset.

How to select timing range:

- Timing range: 0.01 second (min.)~9999 minute (max.) continuously adjustable.
- In the OP/CL parameter setting interface,short press
- STOP key to select the timing range.
- XXXX No decimal point; timing range: 1sec~9999 sec
- XXX.X Decimal point is after tens;timing range:0.01sec ~999.9sec
- XX.XX Decimal point is after hundreds; timing range:0.01 sec~99.99sec
- X.X.X.X All decimal points light up; timing range: 1min ~9999min

e.g. If you want to set the OP to 3.2 seconds. Move the decimal point after tens, and the LCD will display 003.2

Wiring Diagram:

Weak current control strong current wiring diagram

Wiring diagram for sharing one power supply

Remote data uploading and parameter setting functions:

The system supports UART data uploading and parameter setting function (TTL);

UART: 9600,8,1

CMD	Function
read	Read system parameters
OP: XXXX OP: XXX.X OP: XX.XX OP: X.X.X.X	1s 0.1s 0.01s 1 min
CL: XXXX CL: XXX.X CL: XX.XX CL: X.X.X.X	1s 0.1s 0.01s 1 min
LP: XXXX	Cycle times
on	Relay enable
off	Relay disable
PX	Set the working mode (P1~P7)

Additional Functions

- Auto sleep function/Low power function: In the running interface, long pressing STOP key can enable or disable auto sleep function (L-P selects ON to enable hibernation function, and OFF to disable hibernation

function).

- Relay enable/disable function:In the running interface, short pressing STOP key can enable or disable relay. “ON” means that when meets the conduction condition, the function of the relay will be enabled; “OFF” means that even when meets the conduction condition, the function of the relay will NOT be enabled. In the “OFF” state, the system will flash “OUT”.
- Parameter viewing: In the running interface, short pressing SET key can display the current parameter set in the system without affecting the system normal operation.
- Display content switching function: In mode P5 & P6, short pressing DOWN key can switch the displaying content (running time/loop times).

Parameter setting

a. Hold press SET key to enter setting interface.

b. Set the working mode.Working mode flashes to remind.
Set the working mode by pressing UP/DOWN key.

c. Short press SET key to select working mode and enter system parameter setting interface.

d. In the system parameter setting interface, short press SET key to switch the system parameter to be changed. Short press/long press UP/DOWN key to change.
(Short pressing SET key is invalid in mode P1~P3 & P7.)

e. In OP/CL parameter setting interface, short press STOP to switch timing unit (1s/0.1s/0.01s/1min).

f. After finishing setting all parameters,long press SET key to save the set parameter and exit setting interface.

Documents / Resources

	Drock Timer Delay Relay [pdf] User Manual Timer Delay Relay

References

- DROK - Experienced in Developing and Manufacturering Buck Boost Module, Digital Meter, Audio Amplifier Module, Professional Electric Module Manufacturer & Supplier