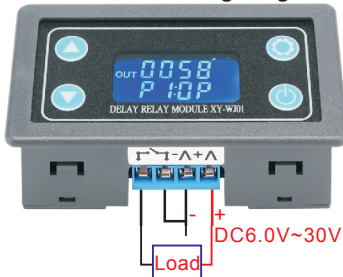
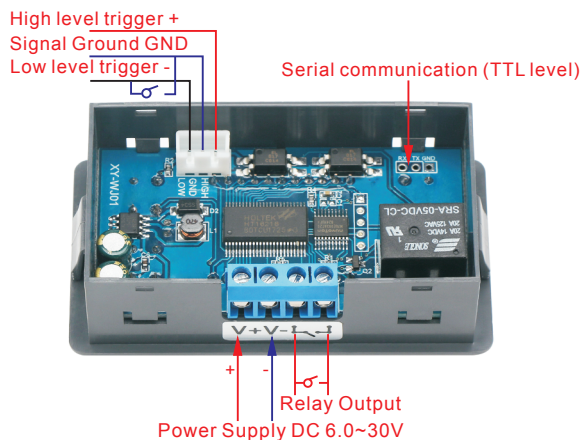
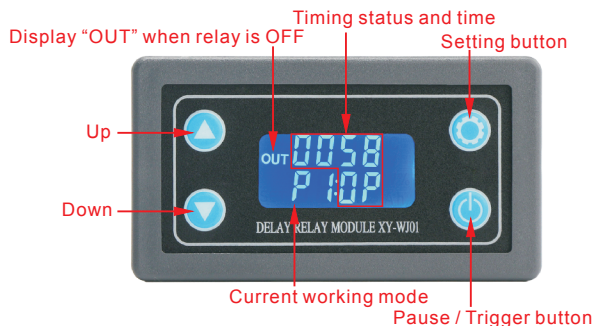


## DROK Delay Relay Module

### DC 6.0 ~ 30V Wiring Diagram



### AC 220V Wiring Diagram



### Product Features:

1. Adopts LCD display, can long term display current working mode and timed time. All the parameters will be clear at a glance.
2. Trigger mode: Support button trigger control, high and low level control, switching value control. Meet most of the needs.
3. Wide input voltage of 6~30v.
4. Support UART data upload and parameter setting.
5. With one-button pause function, with reverse connection protection, won't burn when connected reversely.
6. With sleep mode. After enabling, the LCD backlight will automatically turn off after no operation for about 5 minutes; press any button to wake up.
7. Different OP, CL, LOP parameters can be set. All these parameters are independent and saved separately.
8. All set parameters are automatically saved after power-off.

### Parameters:

1. Working voltage: 6-30V
2. Trigger signal source: High level (3.0-24V), low level (0.0V~0.2V), switching value control (passive switch).
3. Output capacity: can control devices within DC 30v 10A or within AC 220v 5A.
4. Quiescent current: 15mA; working current: 50mA
5. Service life: more than 100,000 times;
6. With Opto-couplers isolation, strong anti-interference ability, industrial grade circuit board, setting parameters will be stored after power off.
7. Working temperature: - 40-85 °C;
8. Size: 7.1\*3.9\*2.5cm
9. Weight: 45g

### Working Mode:

- P0: Relay will keep ON for time OP after getting a trigger signal and then turn relay OFF.  
The input signal is invalid if it gets a trigger signal again during delay time OP.
- P1: Relay will keep ON for time OP after getting a trigger signal and then turn relay OFF.  
Module will restart delay if it gets a trigger signal again during delay time OP.
- P2: Relay will keep ON for time OP after getting a trigger signal and then turn relay OFF.  
Module will reset and stop timing if gets a trigger signal again during delay time OP.
- P3: Relay will keep OFF for time CL after getting a trigger signal and then relay will stay ON.
- P4: Relay will keep ON for time OP after getting a trigger signal and then relay will turn OFF for time CL and then loops the above action. Module will reset and stop timing and relay will keep initial state if it gets a trigger signal again during loops. The number of cycles (LOP) can be set. Relay will turn OFF at end of loop.

P5: Relay will keep OFF for time CL after getting a trigger signal and then relay will turn ON for time OP and then loops the above action. Module will reset and stop timing and relay will keep initial state if it gets a trigger signal again during loops. The number of cycles (LOP) can be set. Relay will turn ON at end of 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. Relay will turn OFF at end of loop.

P7: Relay will turn OFF for time CL after power on without getting a trigger signal and then relay will turn ON for time OP and then loops the above action. The number of cycles (LOP) can be set. Relay will turn ON at end of loop.

P8: Signal holding function. If the relay gets a trigger signal, the timing will be cleared, the relay remains ON; when the signal disappears, the relay will be OFF after timing OP; during the timing, if the relay gets a trigger signal again, the timing will be cleared.

P9: Signal holding function. If the relay gets a trigger signal, the timing will be cleared, the relay remains OFF. When the signal disappears, the relay will be ON after timing CL; during the timing, if the relay gets a trigger signal again, the timing will be cleared.

(P0~P7) Mode: Short press pause button, if the system has not being timing, the system will start timing; if the system has already being timing, it will stop timing, relay turn OFF, "OUT" flashes as a reminder.

P8 P9 Mode: In the running interface, the pause button is as a trigger signal, the button function of short press/long press is invalid.

### Timing range:

0.01 seconds (min) to 9999 minutes (max) continuously adjustable

### How to choose the timing range:

In the OP/CL parameter setting interface, press the pause button to select the timing range;

XXXX: No decimal point, the timing range is 1 second ~ 9999 seconds.

XXX.X: The decimal point is in ten digits, and the timing range is 0.1 second ~ 999.9 seconds.

XX.XX: The decimal point is in the hundred digits, and the timing range is 0.01 second ~ 99.99 seconds.

X.X.X.X: Full decimal points, and the timing range is 1 minute ~ 9999 minutes.

For example, if you want to set the OP to 3.2 seconds, move the decimal point to ten digits and the LCD displays "003.2".

### Parameter description:

OP: conduction time

CL: disconnection time

LOP: loop time (1-9999 times, "----" stands for infinite loop)

### Parameter Setting:

- Hold press set button, enter setting interface.
- Set working mode, working mode flashes as a reminder. Switch working mode by pressing up / down button.

c) Short press set button to select the working mode and enter the system parameter setting.

d) In the system parameter setting interface, short press set button to switch the system parameters to be changed, short / long press the up/down button to change the parameter.

(Note: In mode P0~P3/P8/P9, it is invalid to short press the set button)

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

f) After all parameters are complete, hold press the set button, save the set parameters and exit the setting interface.

### Remote data upload and parameter setting function:

The system supports UART data upload and parameter setting functions.

UART: 9600, 8, 1

Instruction	Function
read	Read the system parameters
OP: xxxx	1s
OP: xxx.x	0.1s
OP: xx.xx	0.01s
OP: x.x.x.x	1 min
CL: xxxx	1s
CL: xxx.x	0.1s
CL: xx.xx	0.01s
CL: x.x.x.x	1 min
LP: xxxx	Loop time
Start	Trigger / Start (valid on mode P0 ~P7)
Stop	Pause (valid on mode P0 ~ P7)
PX	Mode P1, P2, etc

### Other Functions:

a) Auto Sleep Function: In the running interface (mode P0~P7), hold press the pause button to turn on / turn off the auto sleep function (L-P select on to turn on the sleep function and off to turn off the sleep function. When it is turned on, the LCD backlight will automatically turn off after no operation for about 5 minutes, and the system will run normally. Press any button to wake up).

b) Parameter View: In the operation interface, press the SET button to display the current parameter setting without affecting the normal operation of the system.

c) Display Data Switching: In P4 ~P7 mode, short press DOWN button to switch the display data (running time/cycle number).

Recommend product on Amazon:



Time Delay Relay with Micro USB Port



Any questions please contact us through Amazon