**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: -40~85°C
  - 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.

**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 relay OFF. The input signal 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. The 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 signal 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 signal 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 signal 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–99.9sec
  - XX.XX Decimal point is after hundreds; timing range: 0.01sec–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:

Remote data uploading and parameter setting functions:

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

<table>
<thead>
<tr>
<th>CMD</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>read</td>
<td>Read system parameters</td>
</tr>
<tr>
<td>OP: XXXX</td>
<td>1s</td>
</tr>
<tr>
<td>OP: XXXX</td>
<td>0.1s</td>
</tr>
<tr>
<td>OP: XX:XX</td>
<td>0.01s</td>
</tr>
<tr>
<td>OP: XXXX</td>
<td>1 min</td>
</tr>
<tr>
<td>CL: XXXX</td>
<td>1s</td>
</tr>
<tr>
<td>CL: XXXX</td>
<td>0.1s</td>
</tr>
<tr>
<td>CL: XX:XX</td>
<td>0.01s</td>
</tr>
<tr>
<td>CL: XXXX</td>
<td>1 min</td>
</tr>
<tr>
<td>LP: XXXX</td>
<td>Cycle times</td>
</tr>
<tr>
<td>on</td>
<td>Relay enable</td>
</tr>
<tr>
<td>off</td>
<td>Relay disable</td>
</tr>
<tr>
<td>PX</td>
<td>Set the working mode (P1~P7)</td>
</tr>
</tbody>
</table>

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.

Recommend Product on Amazon: Any questions please contact us through Amazon:

- DROK 0.1s to 999min Timer Relay