DollaTek B07L2K4B7K

DollaTek Delay Switching Relay Module B07L2K4B7K Instruction Manual

Model: B07L2K4B7K

1. Introduction

This manual provides detailed instructions for the DollaTek Delay Switching Relay Module, Model B07L2K4B7K. This versatile module is designed for various timing control applications, offering multiple operating modes and configurable parameters. Please read this manual thoroughly before operation to ensure correct usage and optimal performance.

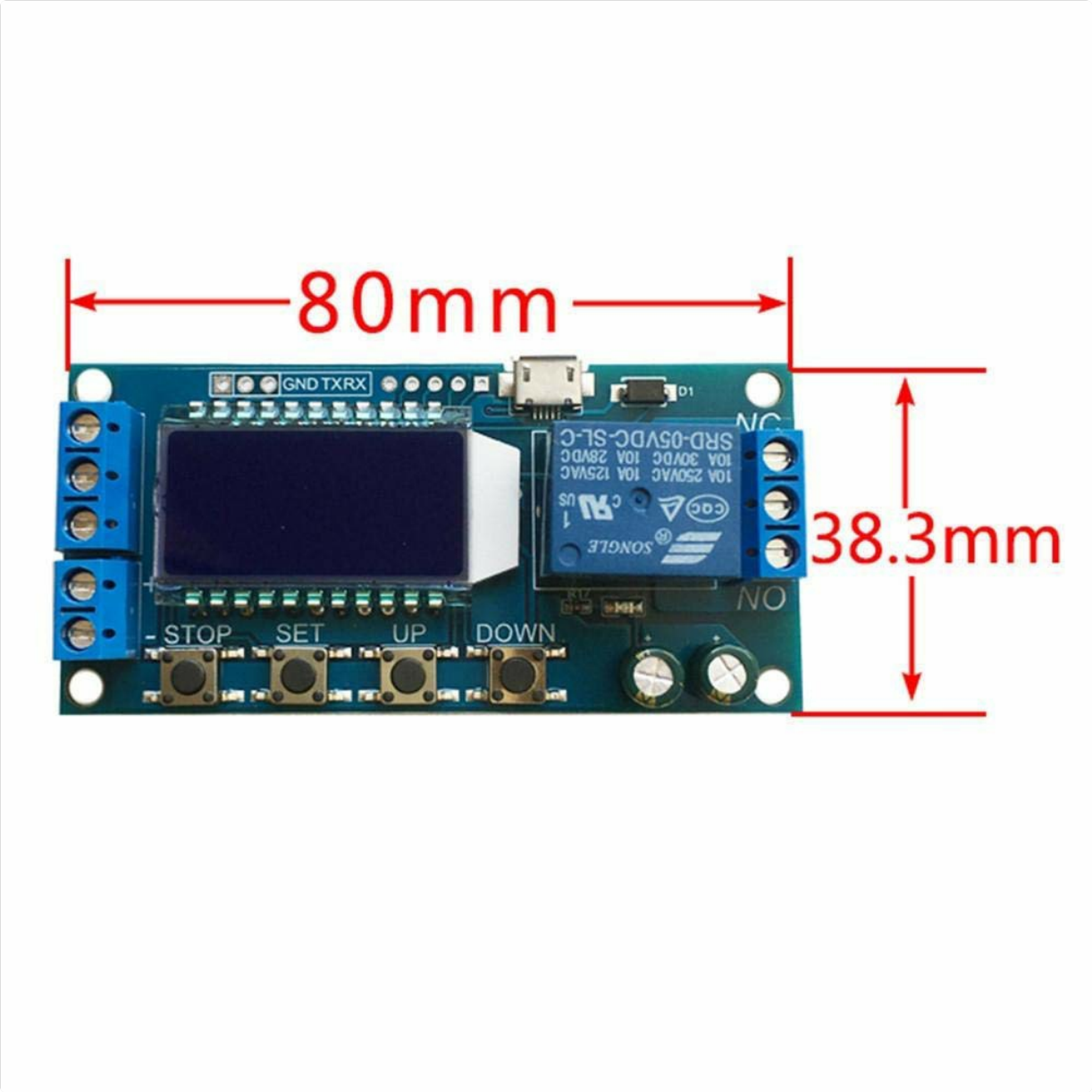
2. Key Features

- **Operating Voltage:** Micro USB 5.0V power supply from 6V to 30V.
- **Trigger Signal Source:** Supports high-level trigger (3.0V ~ 24V), low-level trigger (0.0V ~ 0.2V), and switching quantity control (passive switch).
- **Output Capacity:** Capable of controlling equipment at 30V 5A DC or 220V 5A AC.
- **Current Consumption:** Static current 15mA, working current 50mA.
- **Durability:** Lifespan of more than 100,000 operations.
- **Operating Temperature:** -40°C to 85°C.
- **Compact Size:** 8.0 x 3.8 x 1.9 cm.

3. Technical Specifications

Parameter	Value
Manufacturer	DollaTek
Package Dimensions	10 x 10 x 5 cm
Item Weight	200 grams
Number of Items in Package	1
Electrical Plug Type	Socket Mount
Batteries Included	No
Batteries Required	No
ASIN	B07L2K4B7K
Contact Type	Normally Closed
Mounting Type	Socket Mount
Operating Mode	Automatic
UPC	725835034760

3.1 Module Dimensions

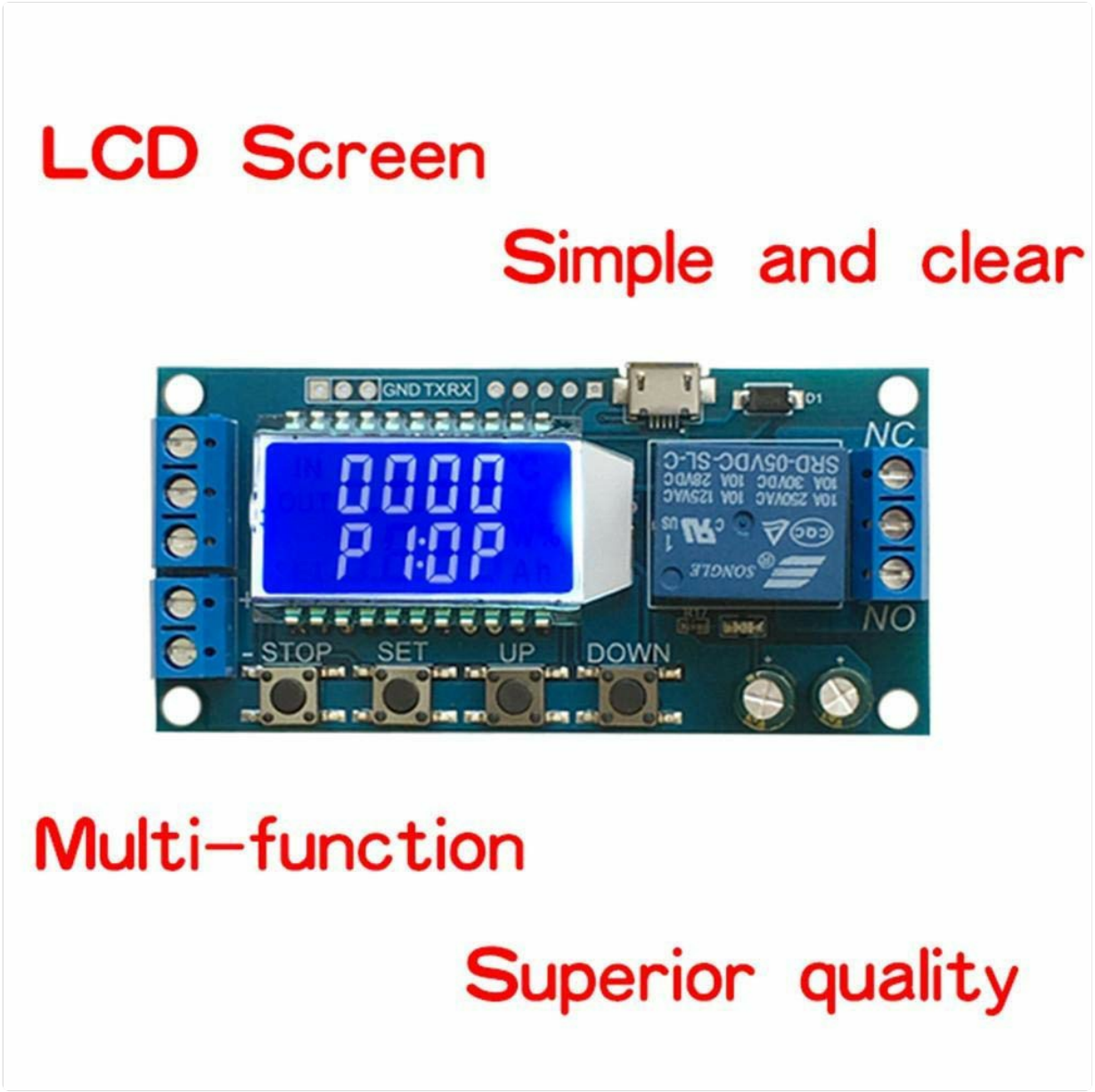


This image shows the physical dimensions of the DollaTek Delay Switching Relay Module, indicating a length of 80mm and a width of 38.3mm.

4. Setup and Connections

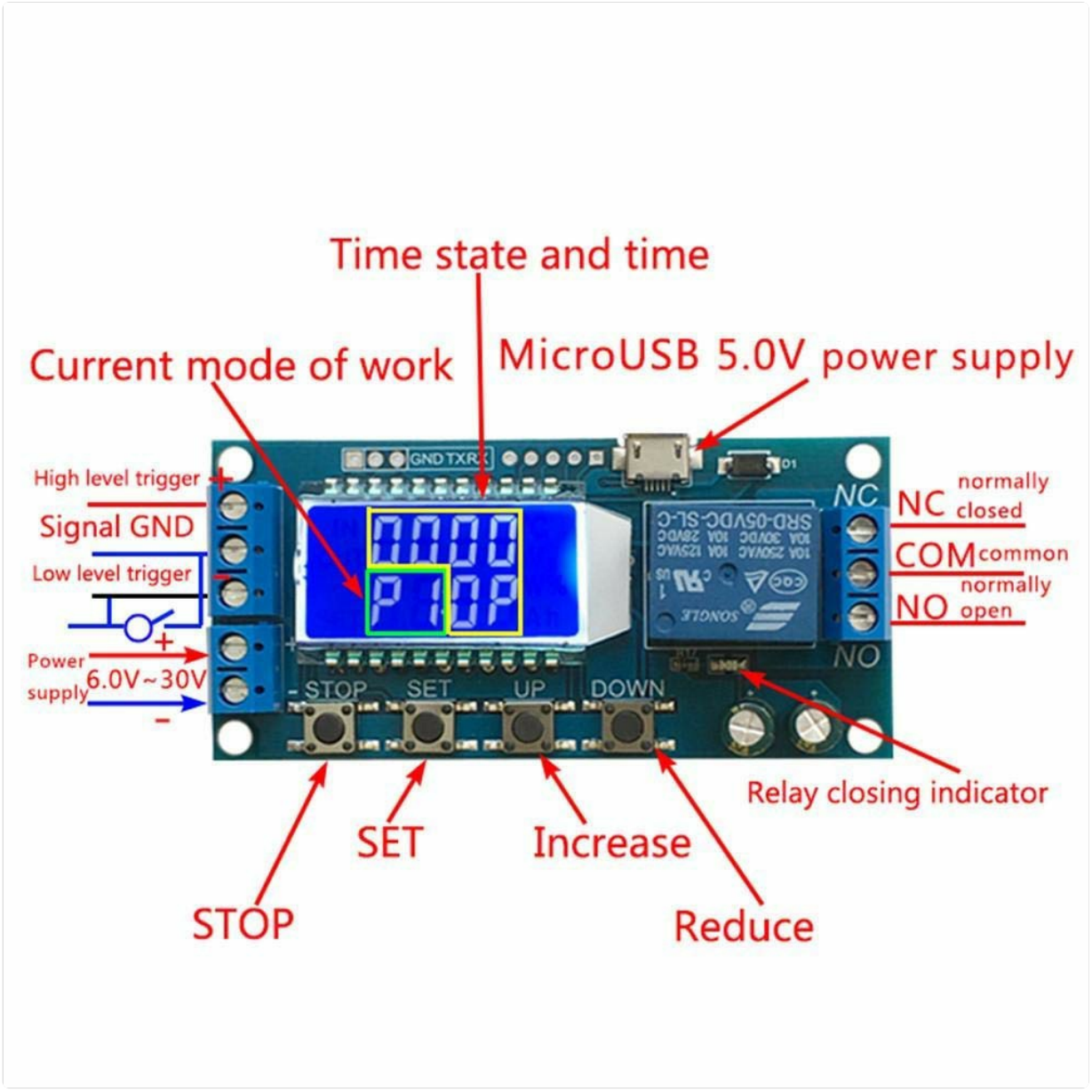
Before connecting the module, ensure all power sources are disconnected. Refer to the diagrams below for proper wiring.

4.1 Product Overview



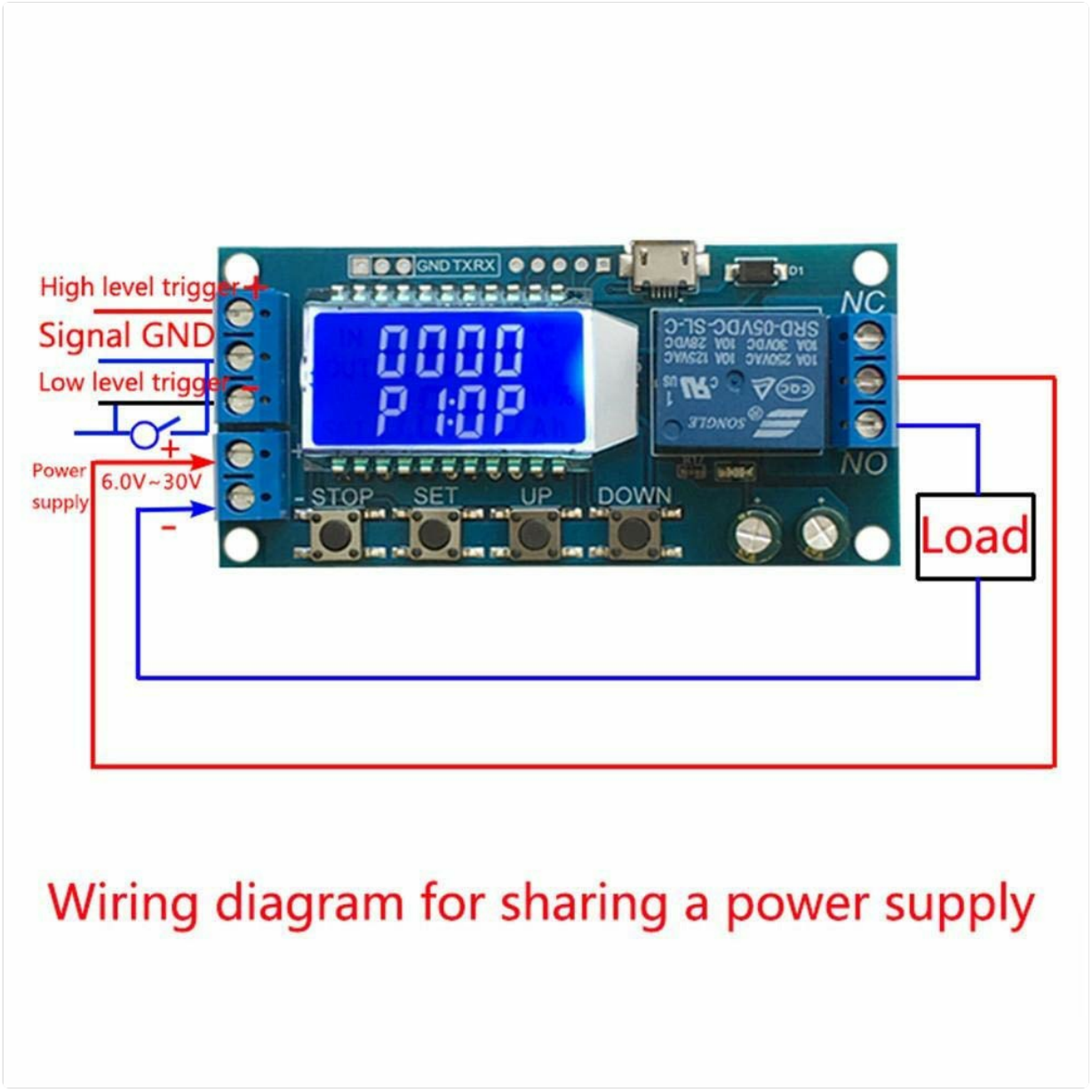
A general view of the DollaTek Delay Switching Relay Module, highlighting its LCD screen, multi-functionality, and overall quality.

4.2 Module Component Identification



This image displays the DollaTek Delay Switching Relay Module with its key components labeled. It shows the MicroUSB 5.0V power supply input, 6.0V~30V power supply input, high-level trigger, low-level trigger, signal GND, STOP, SET, UP, DOWN buttons, LCD screen displaying time state and current mode, relay closing indicator, and the NC (Normally Closed), COM (Common), and NO (Normally Open) relay terminals.

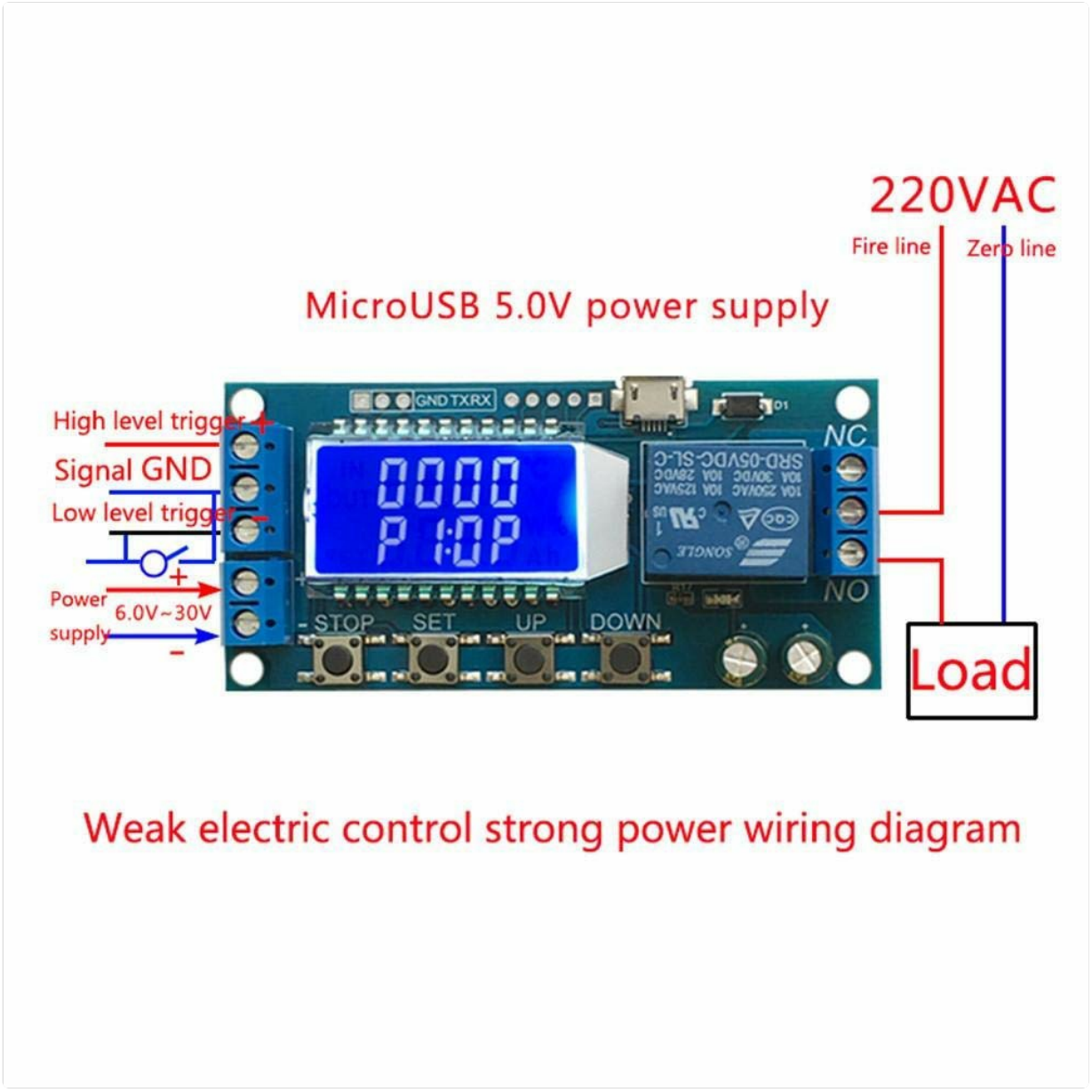
4.3 Wiring Diagram for Shared Power Supply



Wiring diagram for sharing a power supply

This diagram illustrates how to wire the module when sharing a power supply with the load. The 6.0V~30V power supply is connected to the module's power input, and the same power supply is used to power the load through the relay's COM and NO terminals. The load is connected between the positive power supply and the NO terminal, with the COM terminal connected to the negative power supply.

4.4 Wiring Diagram for Weak Electric Control Strong Power



This diagram shows the wiring for controlling a high-power AC load (220VAC) using the module's relay. The module is powered by a MicroUSB 5.0V or 6.0V~30V DC supply. The 220VAC load is connected to the relay's COM and NO terminals, with the COM terminal connected to the 220VAC Fire line and the NO terminal connected to one side of the load. The other side of the load is connected to the 220VAC Zero line.

5. Operating Modes (P1-P7)

The module supports seven distinct operating modes, each designed for specific timing control scenarios. "OP" refers to the relay's operating time, and "CL" refers to the relay's closing (off) time. "LOP" refers to the number of cycles.

1. **P1:** After a signal is triggered, the relay closes for the "OP" time. The signal is ineffective during this timing period.
2. **P2:** After a signal is triggered, the relay closes for the "OP" time. If a new signal is triggered during this time, the timer resets and restarts.
3. **P3:** After a signal is triggered, the relay closes for the "OP" time. If a new signal is triggered during this time, the relay opens, and the timing stops.
4. **P4:** When triggered, the relay opens. After a delay, it closes for the "OP" time, then opens again once the time expires.

5. **P5:** The relay operates for "OP" time, then opens for "CL" time, and repeats this cycle "LOP" times. If a signal is received during the cycle, the relay opens, and the timing stops.
6. **P6:** Similar to P5, the relay operates for "OP" time, then opens for "CL" time, and repeats "LOP" times. The signal is ignored during the cycle.
7. **P7 (Signal Hold Function):** The signal is maintained, the timer is canceled, and the relay is driven. When the signal disappears, the relay closes for "OP" time. If another signal is received during this period, the timer is canceled.

6. Parameter Settings

To configure the module's operating parameters:

1. **Select Working Mode:** First, define the desired working mode (P1-P7).
2. **Enter Setting Interface:** Press the **SET** button to select the working mode and enter the system parameter definition interface.
3. **Modify Parameters:** In the system parameter setting interface, press the **SET** button to cycle through the parameters (OP, CL, LOP).
4. **Adjust Values:** Use the **UP** and **DOWN** buttons to adjust the values of the selected parameter. A long press on UP/DOWN allows for faster adjustment.
5. **Save Settings:** After setting all parameters, press and hold the **SET** button to save the settings and exit the parameter setting interface.

Note: *Modes P1 to P3 are quickly set and may not require all parameters. Mode P7 is invalid for quick setting and requires specific configuration.*

7. Troubleshooting

- **Module not powering on:**
  - Check power supply connections (Micro USB or 6-30V terminals).
  - Ensure the power supply voltage is within the specified range.
- **Relay not activating:**
  - Verify the trigger signal source and its voltage level.
  - Confirm the selected operating mode (P1-P7) and its conditions for relay activation.
  - Check the "OP" time setting; it might be set to 0.
- **Incorrect timing:**
  - Review the "OP" and "CL" parameter settings for the chosen mode.
  - Ensure the module is receiving a stable power supply.
- **Display issues:**
  - Ensure the module is powered correctly.
  - If the display is damaged, contact support.

8. Maintenance

The DollaTek Delay Switching Relay Module is designed for reliable operation with minimal maintenance. Follow these guidelines:

- **Cleaning:** Use a dry, soft cloth to clean the module. Do not use liquids or abrasive cleaners.
- **Environment:** Operate the module within the specified temperature range (-40°C to 85°C) and avoid excessive humidity or dusty environments.
- **Connections:** Periodically check all wiring connections to ensure they are secure and free from corrosion.
- **Storage:** When not in use, store the module in a dry, cool place, away from direct sunlight and static electricity.

9. Warranty and Support

For warranty information or technical support, please refer to the retailer's return policy or contact DollaTek customer service directly. Keep your purchase receipt for any warranty claims.
While specific warranty details are not provided in this manual, DollaTek products typically come with standard manufacturer support. For assistance, please visit the official DollaTek website or contact your point of purchase.