Yanmis YYC-2S

Yanmis YYC-2S Timer Relay Automation Control Switch Module User Manual

Model: YYC-2S

1. Introduction

The Yanmis YYC-2S Timer Relay is a versatile automation control switch module designed for various applications. It features a digital display and offers 24 common functions, making it suitable for controlling devices such as solenoid valves, motors, and light belts. This manual provides essential information for the safe and effective use of the YYC-2S module.

2. Key Features

- High-quality construction for durability.
- 24 common functions to meet diverse application requirements.
- Low power consumption and superior performance.
- Wide application range, including control of solenoid valves, water pumps, motors, and light belts.
- Available in 5V, 12V, and 24V voltage options.
- Capable of controlling DC or AC loads up to 5A.
- Adjustable time range from 0.01 seconds to 9999 minutes.

3. Specifications

Model	YYC-2S
Material	Plastic
Operating Voltage	5V, 12V, 24V (*User selectable option*)
Output Power	DC or AC load within 5A

Time Range	0.01 seconds to 9999 minutes (*Adjustable*)
Product Dimensions	2.56 x 1.57 x 0.79 inches (6.5 x 4.0 x 2.0 cm)
Item Weight	1.06 ounces (30g)

4. Product Overview

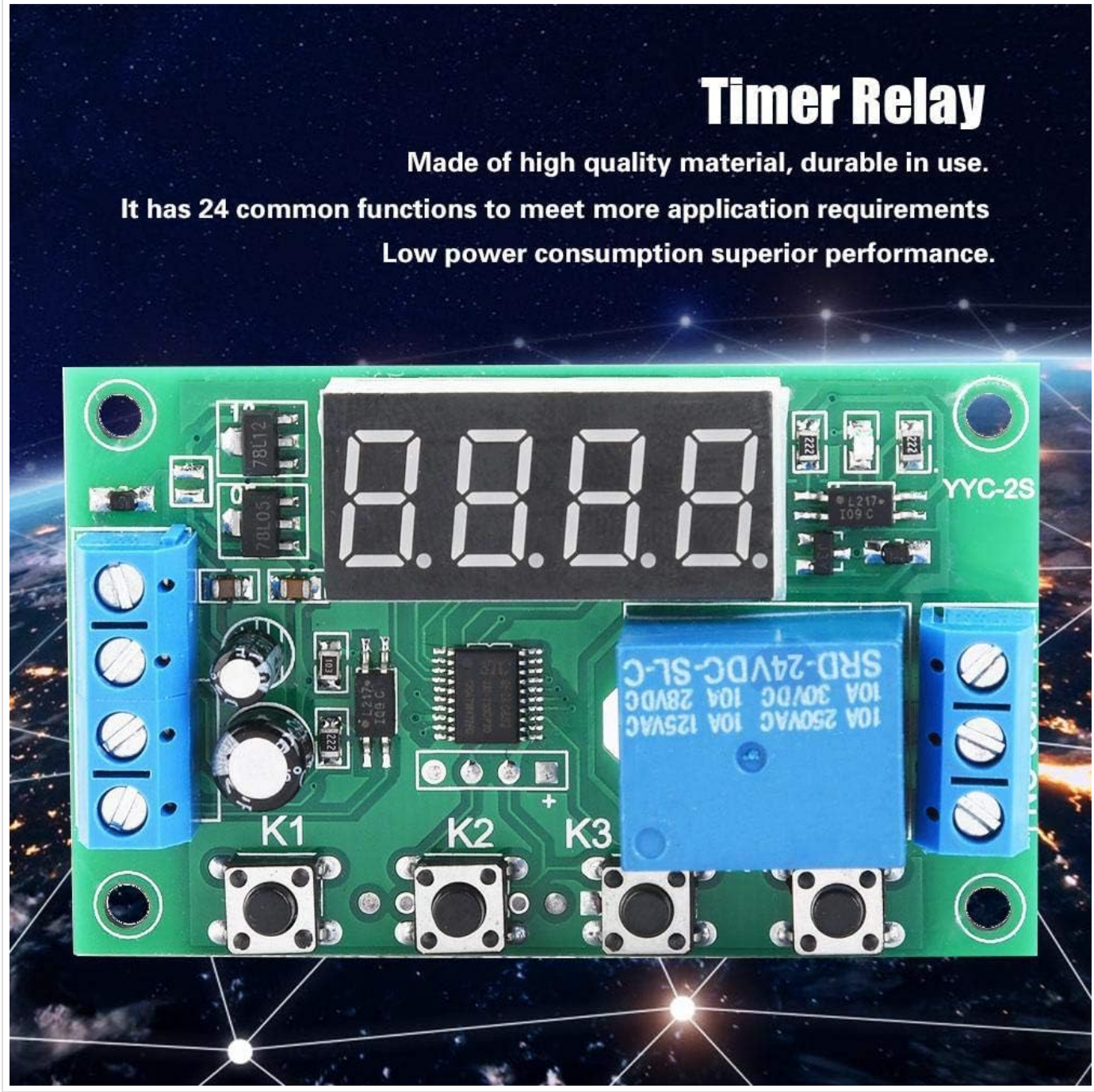

Figure 1: Top view of the YYC-2S Timer Relay module, showing the 4-digit LED display, three control buttons (K1, K2, K3), and two blue terminal blocks for power input and relay output connections.

Figure 2: Angled view of the YYC-2S module, providing a clearer perspective of the blue relay component, the LED display, and the input/output terminal blocks.

5. Setup and Installation

5.1 Safety Precautions

- Ensure all power is disconnected before making any wiring connections.
- Verify the correct voltage (5V, 12V, or 24V) for your module before applying power. Applying incorrect voltage can damage the device.
- Do not exceed the maximum load current of 5A for either DC or AC loads.
- Installation should be performed by qualified personnel if you are unfamiliar with electrical wiring.

5.2 Wiring Connections

Refer to the wiring diagram below for proper connection of the power supply, input trigger, and load.

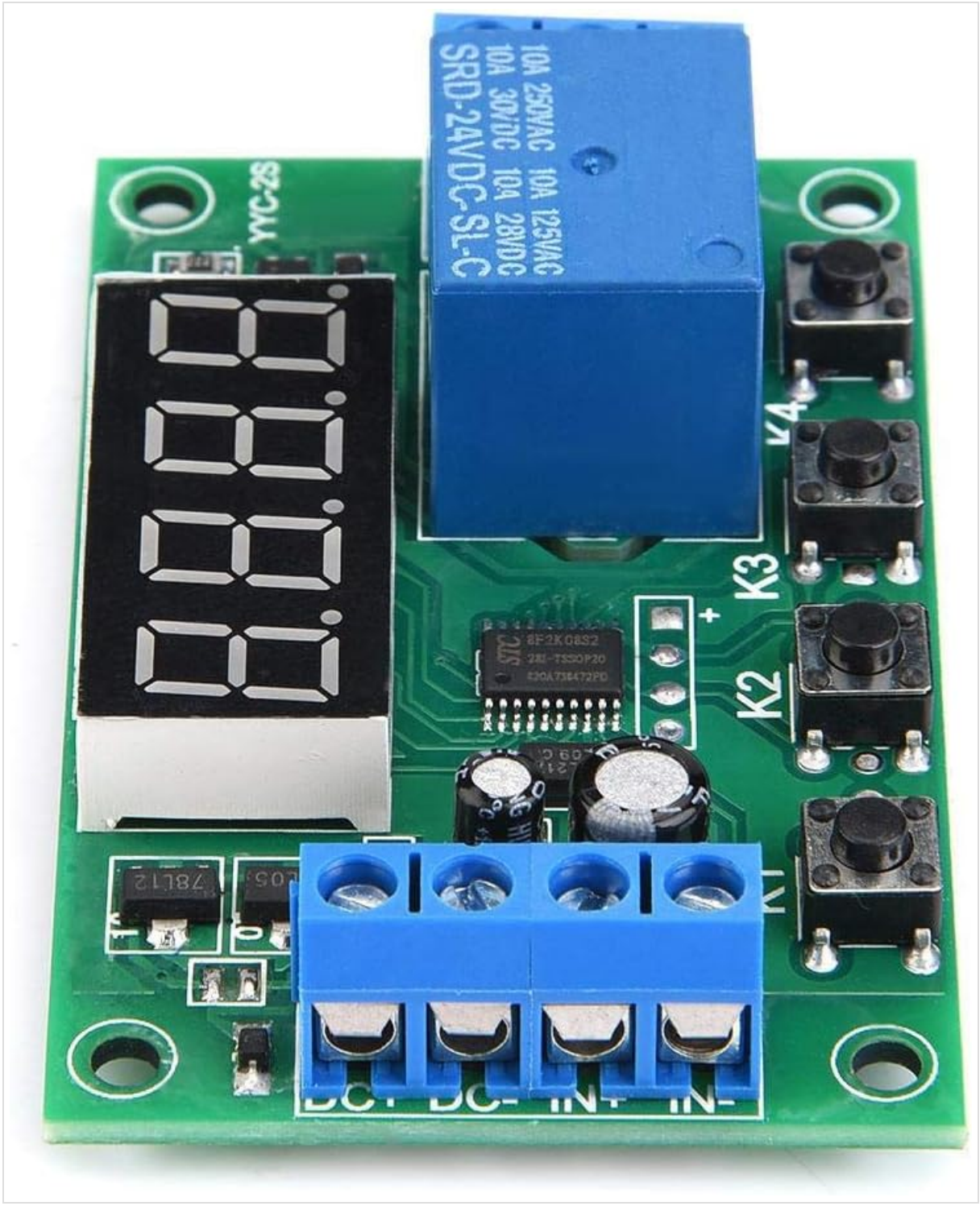

Figure 3: Top view of the YYC-2S module, clearly showing the labels for the input and output terminals, as well as the three control buttons (K1, K2, K3) used for configuration.

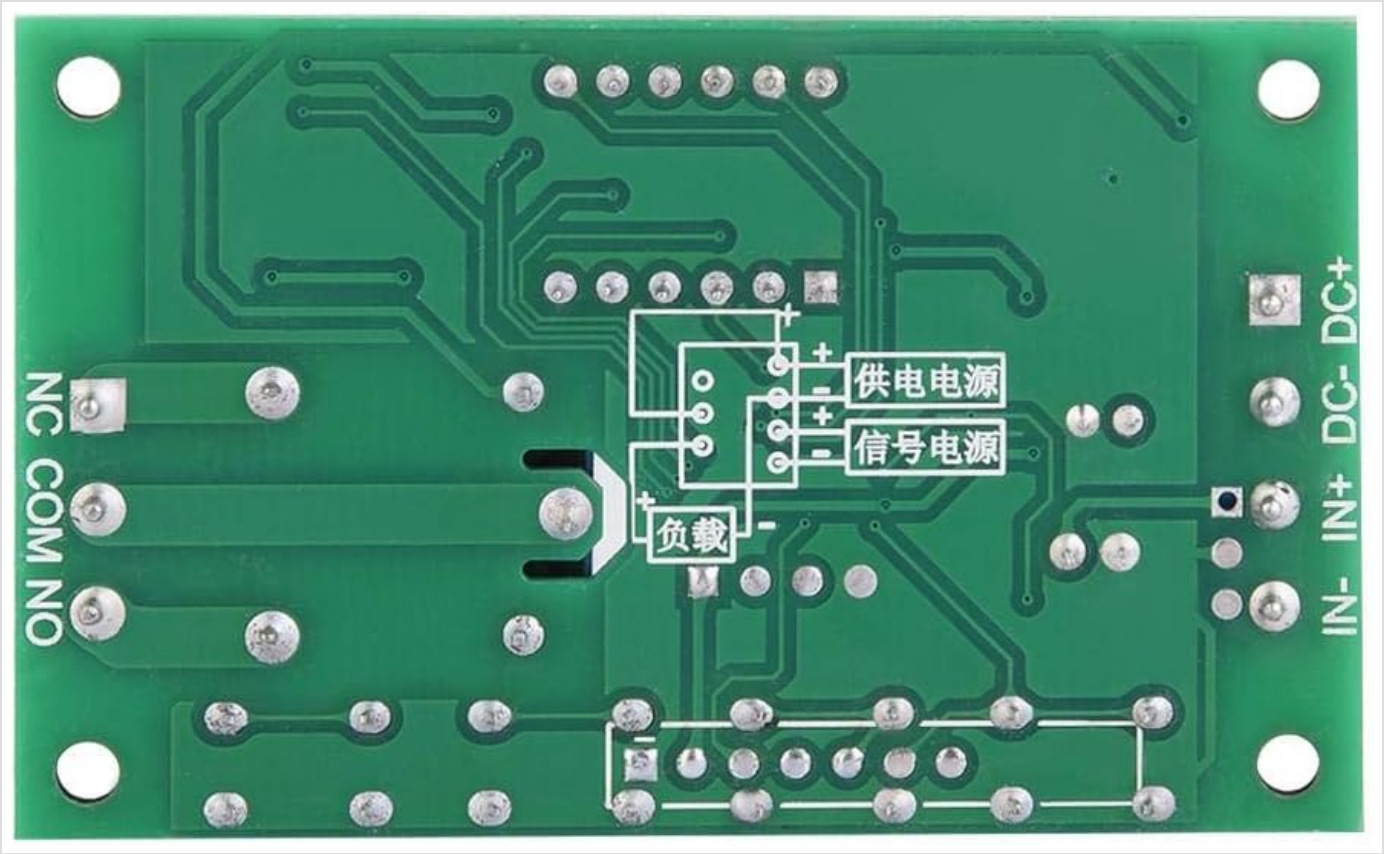

Figure 4: Back view of the YYC-2S module, featuring a simplified wiring diagram printed directly on the circuit board. This diagram illustrates connections for power supply, signal input, and load.

Wiring Port Description:

- **DC+**: Input for the positive pole of the DC power supply.
- **DC-**: Input for the negative pole of the DC power supply.
- **IN+**: Input for the positive terminal of the trigger signal.
- **IN-**: Input for the negative terminal of the trigger signal.
- **NO**: Normally Open relay interface. The relay is open (disconnected from COM) before activation and connects to COM after activation.
- **COM**: Common relay interface.
- **NC**: Normally Closed relay interface. The relay is closed (connected to COM) before activation and disconnects from COM after activation.

Connect your load to the COM and NO terminals for a normally open configuration, or to COM and NC for a normally closed configuration, depending on your application requirements.

6. Operating Instructions

The YYC-2S module offers 24 common functions, which are typically configured using the onboard buttons (K1, K2, K3) and displayed on the 4-digit LED. While specific details for all 24 functions are not provided, the general operation involves selecting a mode and setting time parameters.

6.1 Button Functions

- **K1 (SET/Mode)**: Typically used to enter the setting mode or cycle through different operating modes. A short press might change parameters, while a long press might save settings or enter a different menu.
- **K2 (UP/Increase)**: Used to increase numerical values (e.g., time duration) or navigate upwards through menu options.

- **K3 (DOWN/Decrease)**: Used to decrease numerical values or navigate downwards through menu options.

6.2 General Operation Steps (Example)

1. **Power On**: Apply the correct DC voltage (5V, 12V, or 24V) to the DC+ and DC- terminals. The LED display will illuminate.
2. **Select Mode**: Press and hold K1 to enter the mode selection menu. Use K2 and K3 to cycle through the available 24 functions (e.g., P-1, P-2, ..., P-24). Short press K1 to confirm the desired mode.
3. **Set Time Parameters**: After selecting a mode, the display will show time parameters (e.g., "0.0.0.0" for 0.01 seconds, "0.0.0.1" for 0.1 seconds, "0.0.1.0" for 1 second, "0.1.0.0" for 10 seconds, "1.0.0.0" for 100 seconds, "0.0.0.1" for 1 minute, etc. The decimal point position usually indicates the time unit). Use K2 and K3 to adjust the values. Short press K1 to move between digits or parameters.
4. **Save Settings**: Once all parameters are set, a long press of K1 typically saves the configuration and exits the setting mode, returning the module to operational status.
5. **Trigger Operation**: Depending on the selected mode, the relay will activate or deactivate based on the input signal (IN+ / IN-) and the configured time delays.

Note: For detailed instructions on each of the 24 functions, please refer to the specific documentation provided by the manufacturer, as these functions can vary significantly.

7. Maintenance

- **Cleaning**: Keep the module clean and free from dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners.
- **Environmental Conditions**: Operate the module within its specified temperature and humidity ranges. Avoid exposure to extreme temperatures, moisture, or corrosive environments.
- **Connections**: Periodically check all wiring connections to ensure they are secure and free from corrosion.
- **Inspection**: Visually inspect the module for any signs of damage, such as cracked components or burnt traces.

8. Troubleshooting

Problem	Possible Cause	Solution
Module does not power on.	Incorrect power supply voltage or polarity; loose power connections; faulty power supply.	Verify power supply voltage matches module (5V/12V/24V); check DC+ and DC- connections for correct polarity; ensure connections are secure; test power supply.
Relay does not activate/deactivate.	Incorrect wiring of load; incorrect operating mode selected; trigger signal issue; faulty relay.	Check load connections to COM/NO/NC terminals; review operating mode settings; verify trigger signal (IN+/IN-); if all else fails, the relay may be faulty.
Time settings are incorrect.	Incorrect time unit selected; improper setting procedure.	Ensure the correct time unit (seconds, minutes) is selected during configuration; follow the operating instructions carefully for setting time parameters.
Module behaves erratically.	Electrical interference; unstable power supply; damaged module.	Ensure proper grounding; use a stable and regulated power supply; if damage is suspected, replace the module.

9. Warranty and Support

Specific warranty information for the Yanmis YYC-2S Timer Relay is not provided in the product details. For warranty claims or technical support, please contact your retailer or the manufacturer directly with your purchase details.

10. Disposal Information

This product contains electronic components and should not be disposed of with general household waste. Please dispose of it according to local regulations for electronic waste. Proper disposal helps prevent potential negative consequences for the environment and human health.