

## FTVOGUE FTVOGUErxcag3y2up

# FTVOGUE Multifunction Time Delay Relay Module User Manual

Model: FTVOGUErxcag3y2up

## 1. INTRODUCTION

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This manual provides detailed instructions for the installation, operation, and maintenance of the FTVOGUE Multifunction Time Delay Relay Module. This module is designed for industrial automation control, offering 20 programmable functions per channel and a wide operating voltage range of DC 8V to 36V. Please read this manual thoroughly before use to ensure proper functionality and safety.

# RELAY MODULE

WITH 4 CHANNELS OF INPUT AND OUTPUT CONTROL, EACH CHANNEL CAN BE SET TO 20 KINDS OF FUNCTIONS TO MEET MORE APPLICATION REQUIREMENTS.

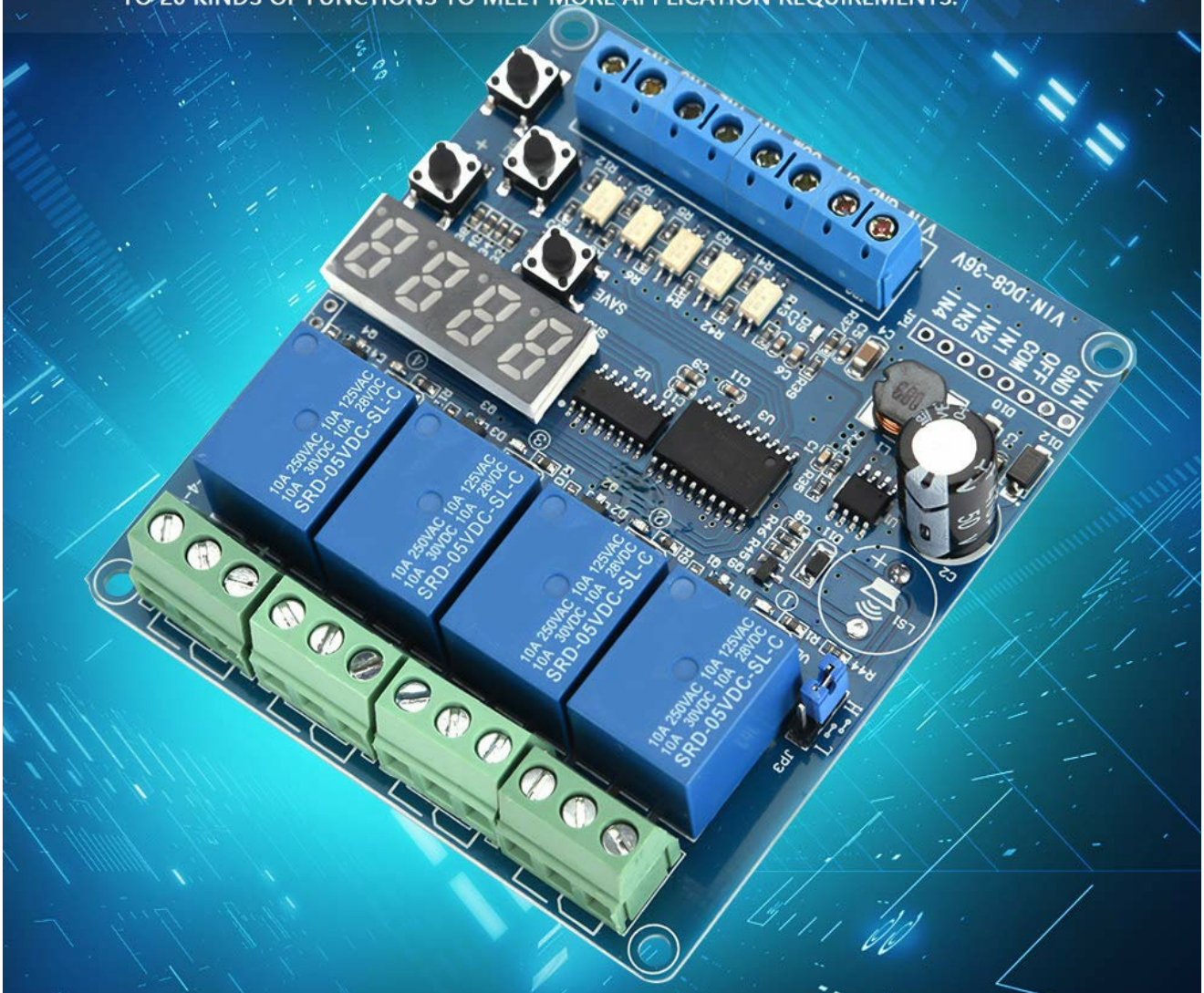


Figure 1.1: FTVOGUE Multifunction Time Delay Relay Module. This image shows the top view of the relay module, highlighting its compact design and various components including the digital display and control buttons.

## 2. SAFETY INFORMATION

- Ensure the power supply voltage is within the specified range (DC 8V to 36V) to prevent damage to the module.
- Always disconnect power before making any wiring connections or disconnections.
- Wiring should be performed by qualified personnel to avoid electrical hazards.
- Do not expose the module to moisture, extreme temperatures, or corrosive environments.
- The module features power anti-reverse connection protection, but always double-check polarity during installation.

## 3. PRODUCT FEATURES

- **Versatile Control:** Offers 4 channels with 20 programmable functions per channel for complex automation tasks.
- **Wide Voltage Range & Safety:** Operates on 8-36V DC power with built-in power anti-reverse connection protection.
- **Precise Timing Control:** Programmable timing functions down to 1-second intervals with less than 1% error.
- **Enhanced Visual Feedback:** Clear power and relay status indicators via bright LED lights.
- **Energy Efficient Design:** Automatic power-saving technology and memory retention for settings during power cycles.

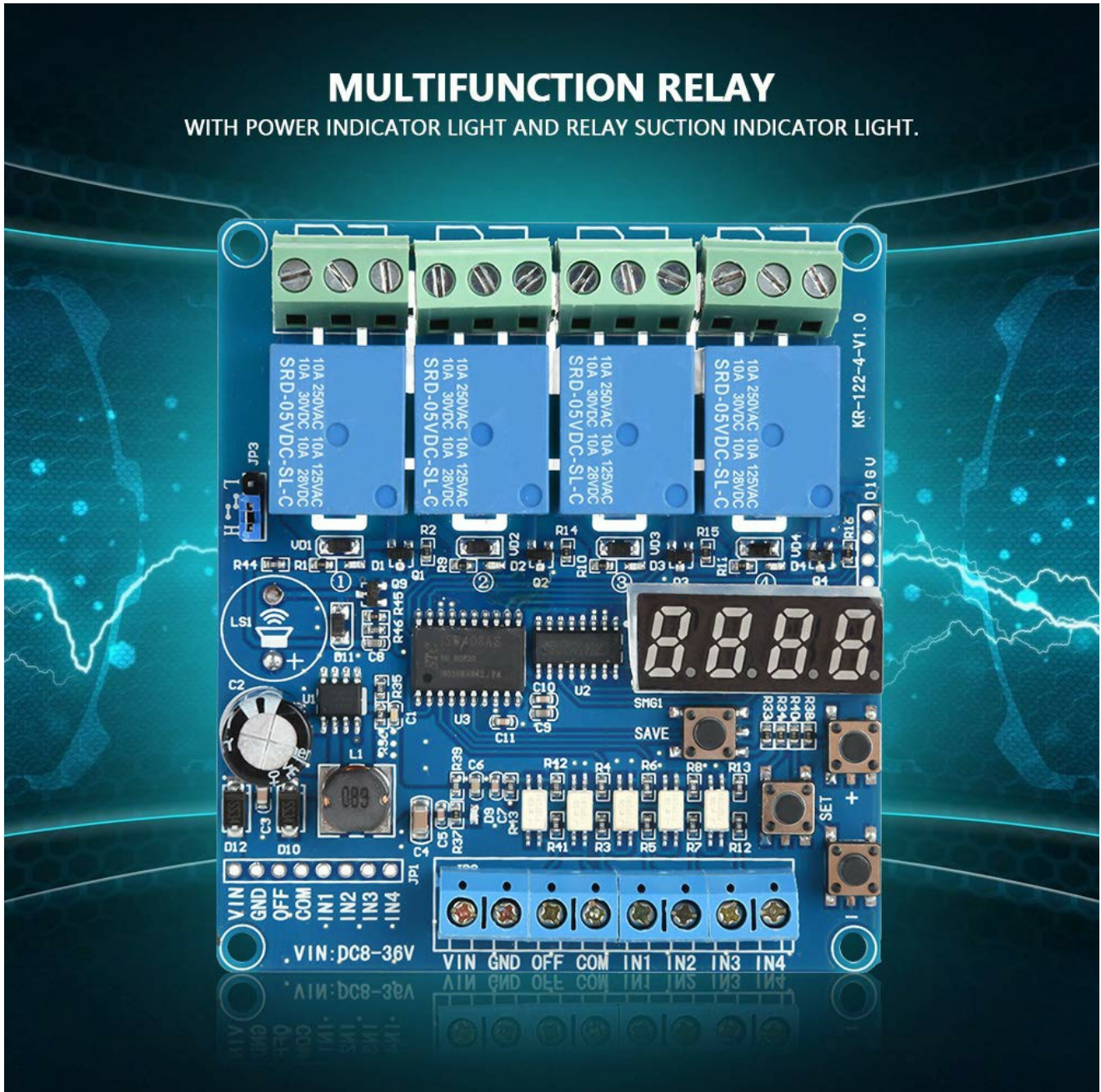


Figure 3.1: Multifunction Relay Module. This image highlights the module's power indicator light and relay suction indicator lights, providing visual feedback on its operational status.

## 4. PACKAGE CONTENTS

- 1 x FTVOGUE Multifunction Time Delay Relay Module

## 5. MODULE OVERVIEW AND PORT DESCRIPTION

The module features various ports for power input, signal input, and relay load output. Understanding these connections is crucial for proper setup.

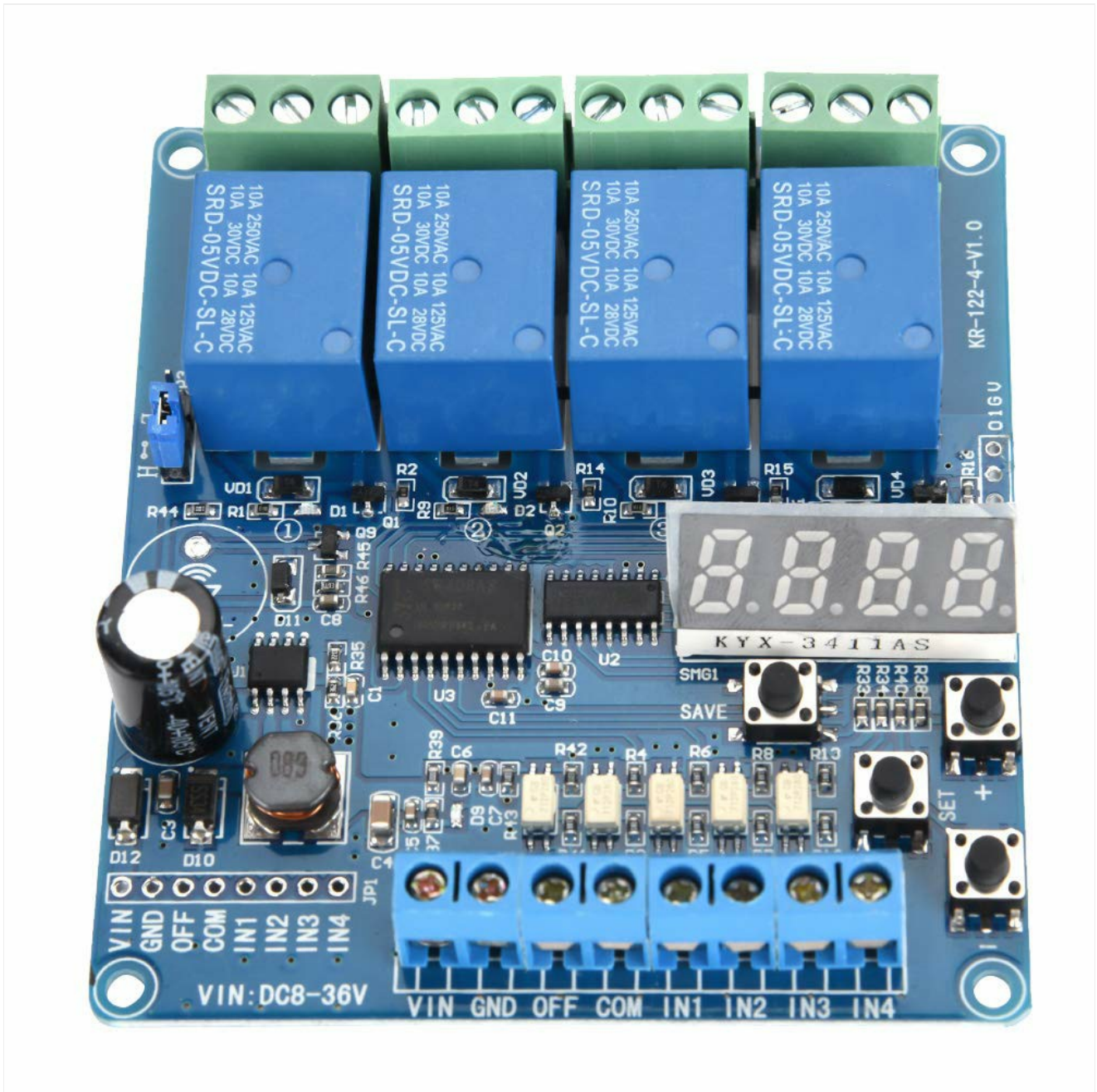


Figure 5.1: Module Port Layout. This image provides a clear top-down view of the relay module, detailing the VIN, GND, OFF, COM, IN1-IN4 terminals, and the relay load output connections.

### Module Voltage/Signal Input Terminal (8-line interfaces):

- **VIN:** DC positive pole for power input.
- **GND:** DC negative pole for power input.
- **OFF:** Power control terminal.
- **COM:** Common end of photoelectric isolation signal input.
- **IN1-IN4:** Input signal detection interfaces.

**Note:** The input signal detection interfaces (IN1-IN4) can be configured for either active-high or active-low operation. This selection is made via the COM port. If COM is connected to 'H' (High), IN1-IN4 will be active high. If COM is

connected to 'L' (Low), IN1-IN4 will be active low.

## Relay Load Output Terminal (12-wire interface):

These terminals are used to connect the devices or circuits that the relays will control. Each relay has normally open (NO), normally closed (NC), and common (COM) contacts.

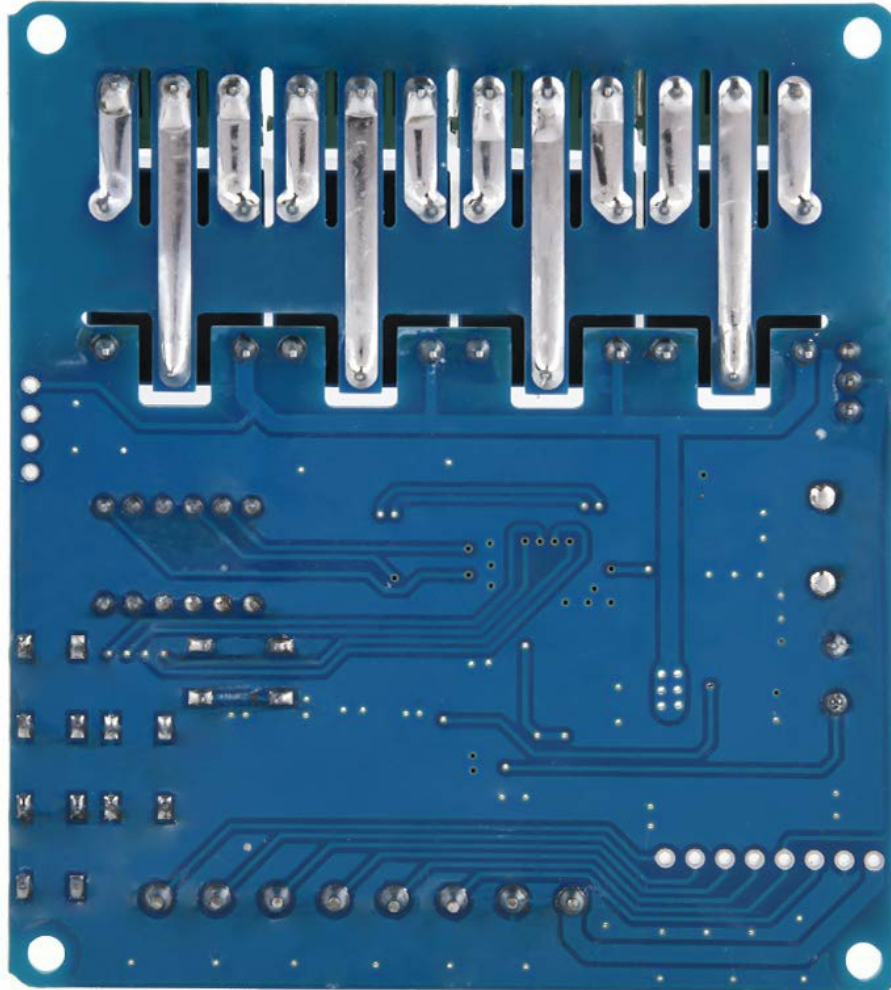


Figure 5.2: Module Bottom View. This image displays the underside of the relay module, showing the solder points and circuit board traces, which can be useful for understanding the internal layout.

## 6. SETUP

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### 6.1 Power Connection

1. Connect the positive terminal of your DC 8V-36V power supply to the **VIN** terminal on the module.
2. Connect the negative terminal of your DC power supply to the **GND** terminal on the module.
3. Ensure all power connections are secure and correct polarity is observed, despite the anti-reverse protection.

## 6.2 Signal Input Connection

1. Determine if your input signals are active-high or active-low.
2. For active-high signals, connect the **COM** terminal to a high logic level (e.g., VCC).
3. For active-low signals, connect the **COM** terminal to a low logic level (e.g., GND).
4. Connect your control signals to the respective **IN1**, **IN2**, **IN3**, and **IN4** terminals.

## 6.3 Relay Load Connection

1. Identify the common (COM), normally open (NO), and normally closed (NC) contacts for each relay.
2. Connect your load device according to your application requirements (e.g., connect one side of the load to the relay's COM and the other side to NO for normally open operation).
3. Ensure that the current and voltage ratings of your loads do not exceed the relay's specifications (e.g., 10A 250VAC / 10A 30VDC).

## 7. OPERATING INSTRUCTIONS

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The FTVOGUE Multifunction Time Delay Relay Module offers 20 distinct operating functions, configurable via the onboard buttons and displayed on the 4-digit LED segment display.

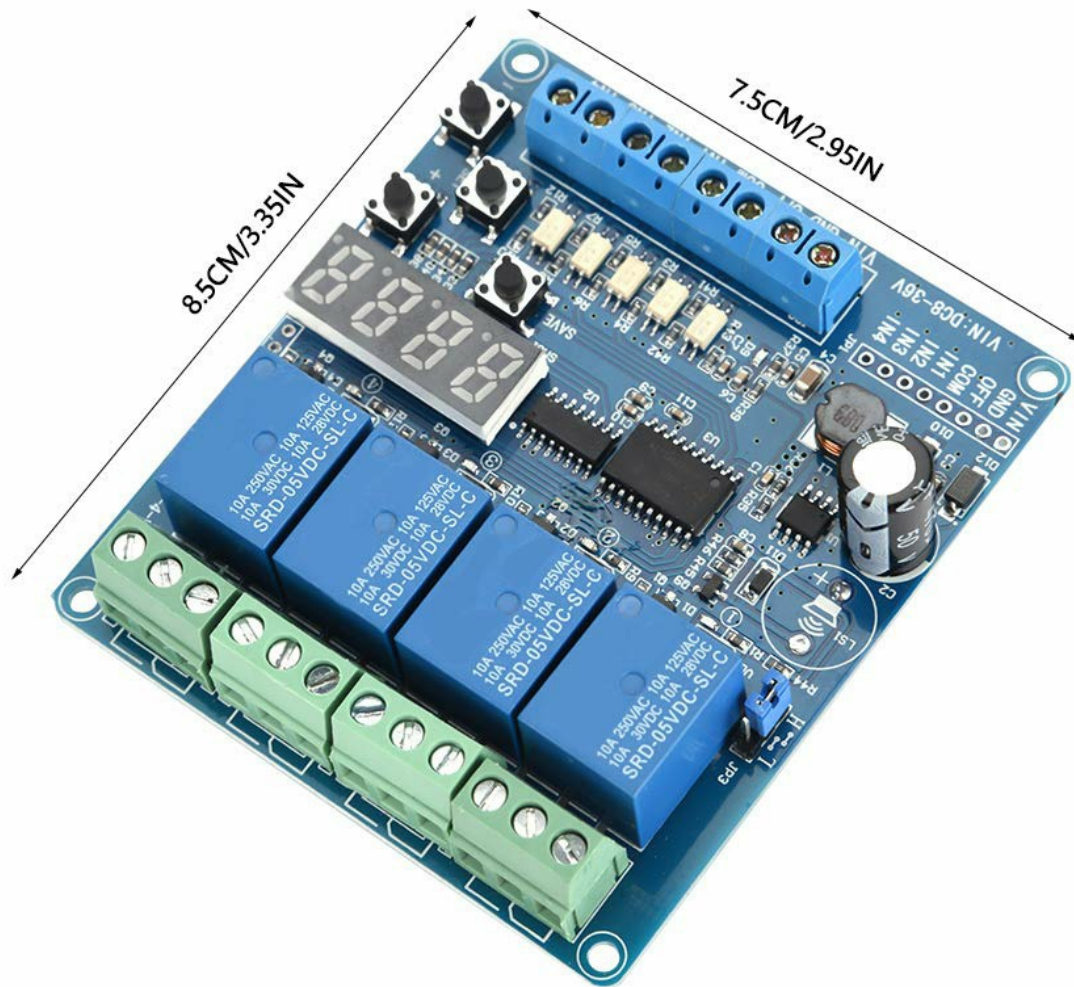


Figure 7.1: Relay Module with Dimensions. This image shows the physical dimensions of the module (8.5cm x 7.5cm), which is helpful for installation planning.

## 7.1 Function Selection and Parameter Setting

- The module typically features buttons labeled 'SET', '+', '-', and 'SAVE' (or similar) for navigation and parameter adjustment.
- Press the 'SET' button to enter the function selection mode. The LED display will show the current function number.
- Use the '+' and '-' buttons to cycle through the 20 available functions. Each function corresponds to a specific timing or control logic.
- Once a function is selected, press 'SET' again to enter parameter adjustment mode for that function.
- Use '+' and '-' to adjust timing values (e.g., delay time, pulse width) or other function-specific parameters. The timing can be set with 1-second precision.
- After setting all parameters, press the 'SAVE' button to store the configuration. The module will retain these settings even after power cycles.

## 7.2 LED Indicators

- **Power LED:** Illuminates when the module is powered on.
- **Relay Status LEDs:** Individual LEDs for each relay indicate its current state (e.g., ON when the relay is activated, OFF when deactivated). These provide immediate visual confirmation of relay operation.

## 8. MAINTENANCE

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- Keep the module clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Regularly inspect wiring connections for looseness or corrosion.
- Store the module in a dry, cool environment when not in use.
- Avoid applying excessive force to the terminals or buttons.

## 9. TROUBLESHOOTING

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- **Module not powering on:** Check power supply voltage and polarity (VIN/GND connections). Ensure the power control terminal (OFF) is correctly configured if used.
- **Relay not activating:** Verify input signal (IN1-IN4) is correct and COM port is set for active-high/low accordingly. Check the selected function and its parameters. Ensure the load is correctly wired to the relay contacts.
- **Incorrect timing:** Re-enter parameter adjustment mode and verify the set timing values. Ensure the correct function is selected.
- **Settings not saving:** Ensure the 'SAVE' button (or equivalent) is pressed after making changes.

## 10. SPECIFICATIONS

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Specification	Value
Brand Name	FTVOGUE
Model	FTVOGUErxcag3y2up
Part Number	FTVOGUErxcag3y2up
ASIN	B0GSC5S78P
Manufacturer	FTVOGUE
Power Supply Voltage	DC 8V to 36V
Number of Functions	20 per channel
Timing Accuracy Error	Less than 1%
Contact Current Rating	20 Amps
Current Rating	2 Amps (likely control current, not load)

Specification	Value
Contact Type	Metal
Contact Material	See Details
Connector Type	Usb_2_0 (This appears to be an error in source data, likely refers to terminal blocks)
Mounting Type	Wall Mount
Specification Met	Iso 9001
Material	ABS
Size	Approx. 85 x 75mm / 3.35 x 2.95in
Weight	Approx. 88g

## 11. WARRANTY AND SUPPORT

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For warranty information or technical support, please refer to the product packaging or contact your retailer/seller directly. Keep your purchase receipt as proof of purchase.