FTVOGUE FTVOGUEygw0nrk1qs6525-12

FTVOGUE 12V Level Control Switch Module

Instruction Manual

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your FTVOGUE 12V Level Control Switch Module. Please read this manual thoroughly before using the product to ensure safe and efficient operation.

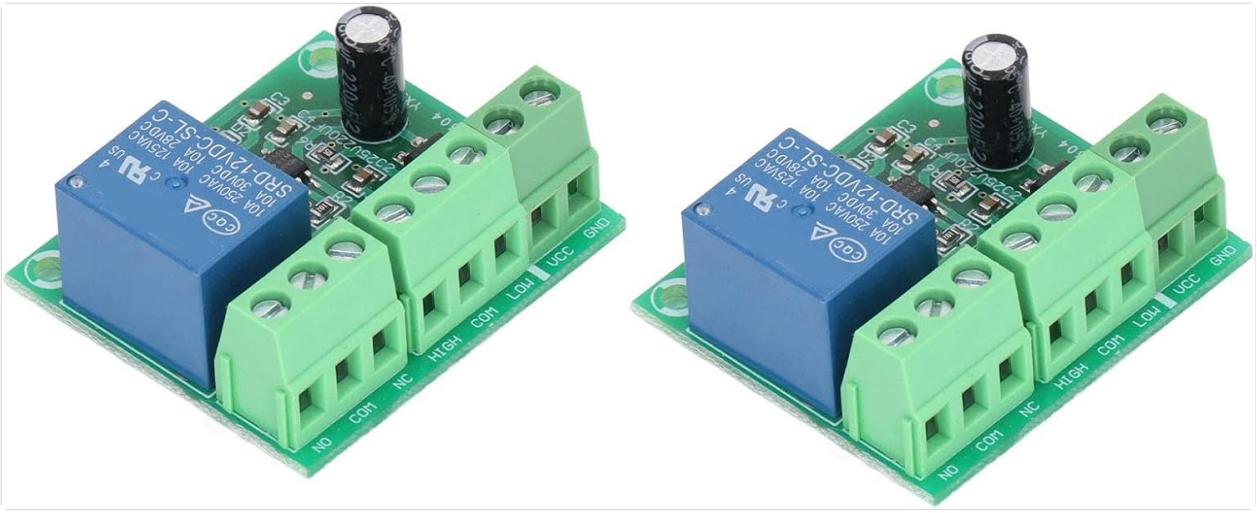


Figure 1: Two FTVOGUE 12V Level Control Switch Modules, showing the relay, capacitor, and terminal blocks from an angled top-down perspective.

2. Safety Information

- Ensure the power supply matches the module's voltage requirements (12V DC).
- Disconnect power before making any connections or performing maintenance.

- Avoid exposing the module to moisture, extreme temperatures, or corrosive environments.
- Installation should be performed by qualified personnel if you are unfamiliar with electrical wiring.
- Do not exceed the relay's maximum switching capacity (10A at 250VAC / 10A at 30VDC).

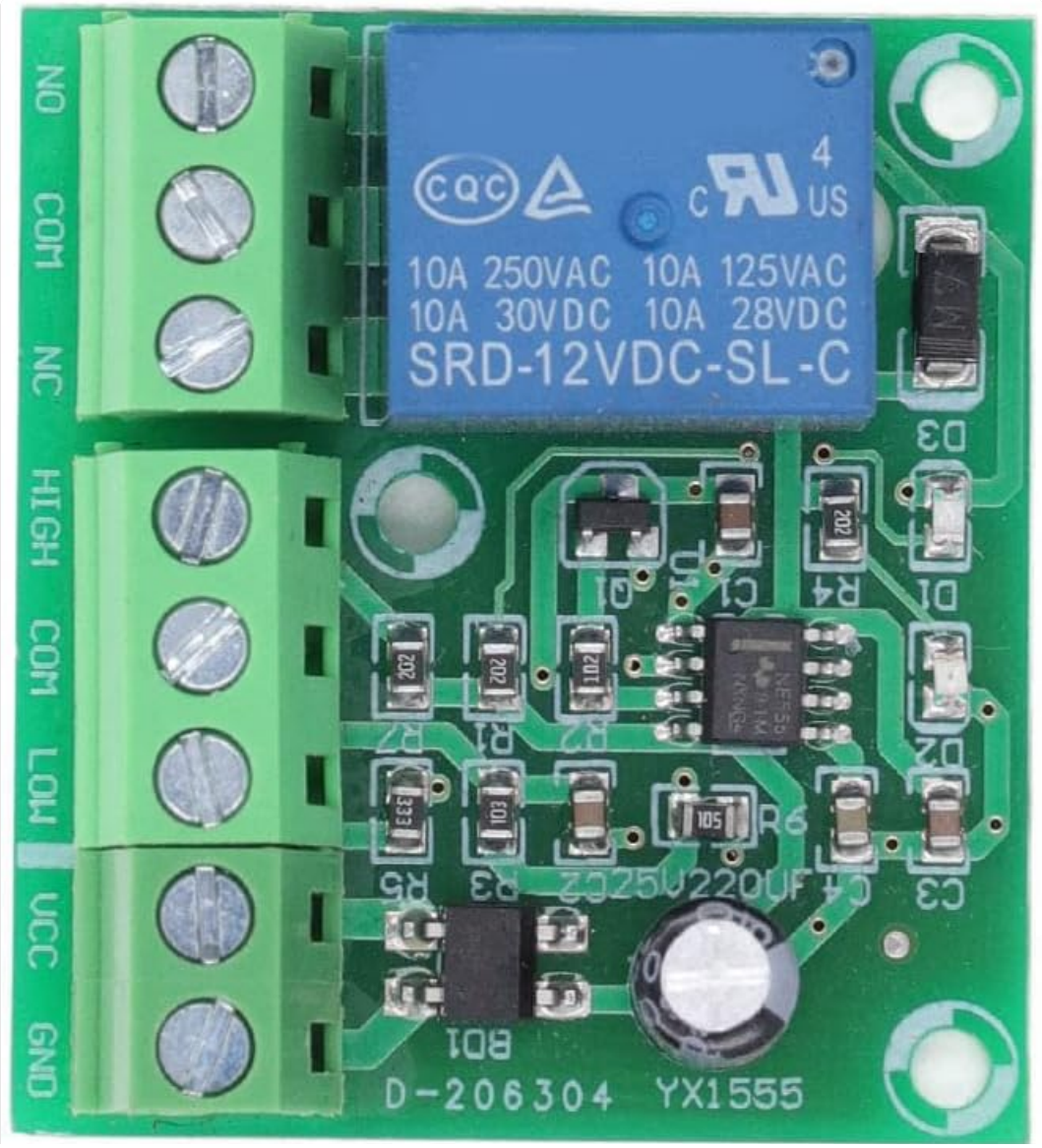
3. Product Features

The FTVOGUE 12V Level Control Switch Module offers reliable liquid level detection and control with the following features:

- **Durable Construction:** Made with a high-quality PCB board for low power consumption and extended lifespan.
- **Stable Performance:** Features simple wiring, low power consumption, and high switching capacity for consistent operation.
- **Easy Installation:** Compact and lightweight design allows for convenient setup.
- **Wide Application:** Suitable for use in various environments requiring automatic drainage or liquid level management, such as pond tanks, garages, and basements.

4. Component Identification

Familiarize yourself with the key components and terminals of the module:



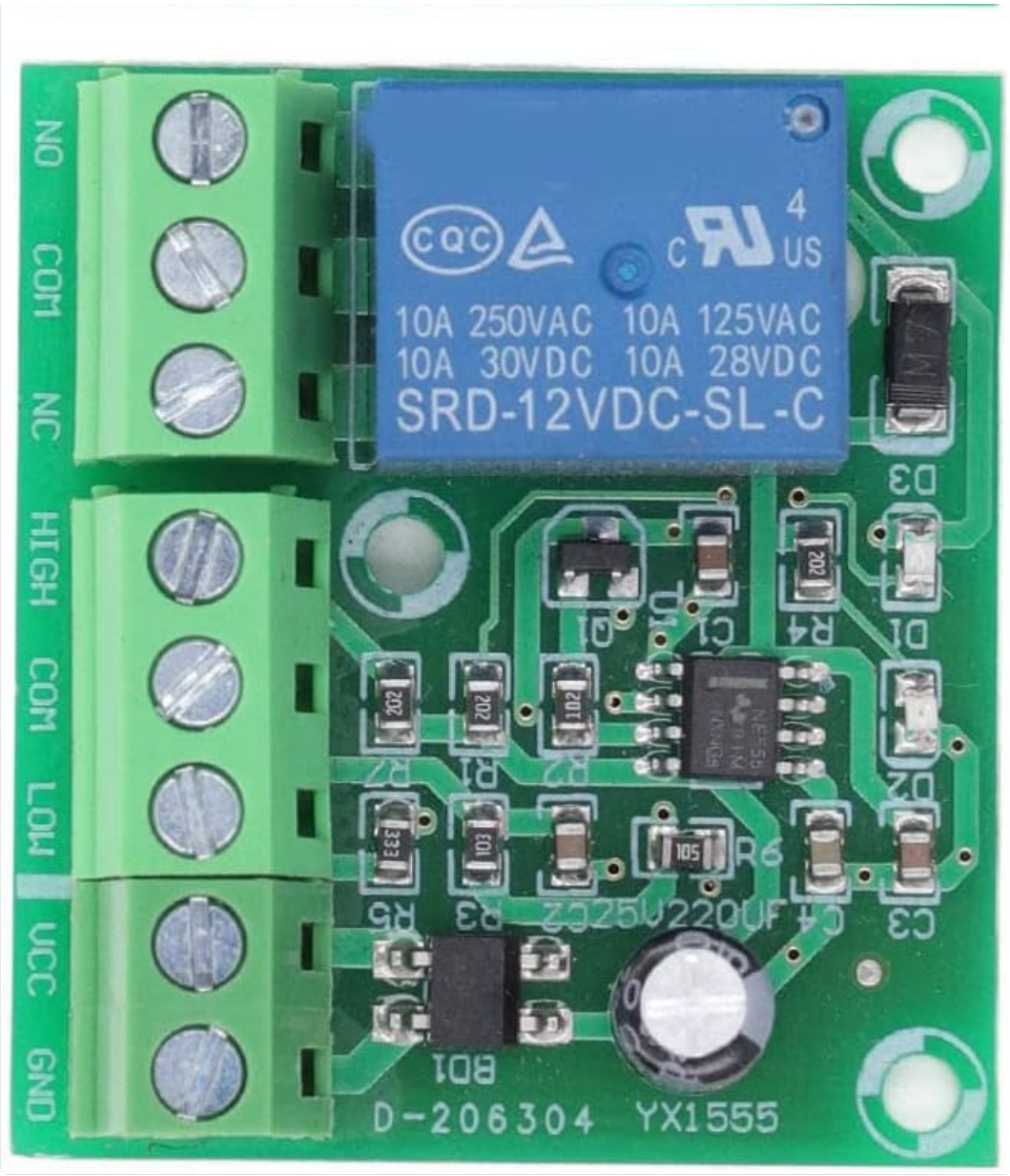


Figure 2: Close-up top view of a single FTVOGUE 12V Level Control Switch Module, highlighting the relay, PCB traces, and terminal block labels (VCC, GND, LOW, COM, HIGH, NC, NO).

- **VCC:** Power input (12V DC).
- **GND:** Ground connection.
- **HIGH:** Input for the upper liquid level sensor.
- **LOW:** Input for the lower liquid level sensor.
- **COM (Sensor):** Common connection for liquid level sensors.
- **NO:** Relay Normally Open contact.
- **NC:** Relay Normally Closed contact.
- **COM (Relay):** Common contact for the relay output.

5. Setup and Installation

Follow these steps to install your level control switch module:

1. **Mounting:** Securely mount the module in a dry, stable location away from direct moisture or excessive vibration.

2. **Power Connection:** Connect a 12V DC power supply to the **VCC** and **GND** terminals. Ensure correct polarity.
3. **Sensor Connection:** Connect your liquid level sensors to the **HIGH**, **LOW**, and **COM (Sensor)** terminals. The **HIGH** terminal is for the upper level sensor, and the **LOW** terminal is for the lower level sensor. The **COM (Sensor)** terminal is the common connection for both sensors.
4. **Load Connection:** Connect the device you wish to control (e.g., pump, valve) to the relay output terminals: **NO**, **NC**, and **COM (Relay)**. Choose between NO (Normally Open) or NC (Normally Closed) based on whether you want the device to activate when the relay is energized or de-energized.
5. **Verify Connections:** Double-check all wiring for correctness and secure connections before applying power.

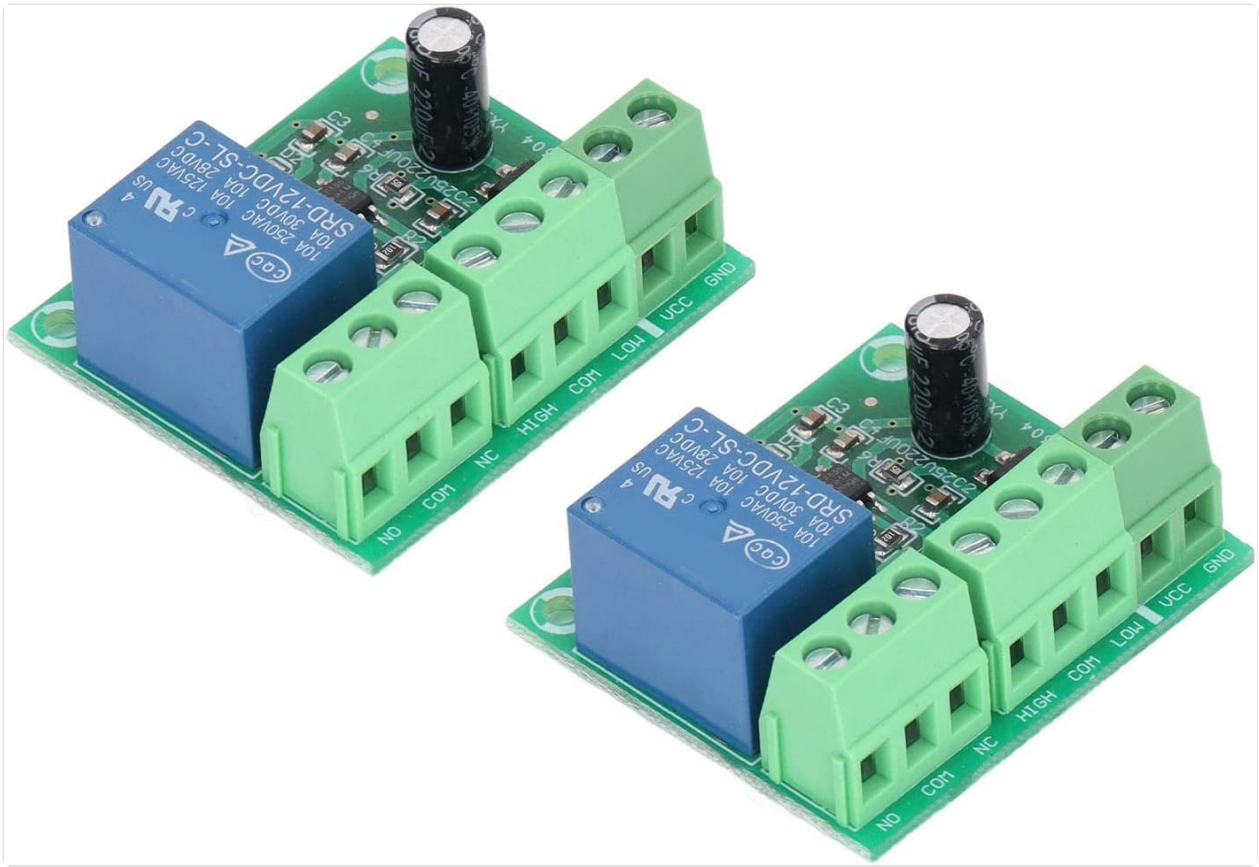


Figure 3: Two FTVOGUE 12V Level Control Switch Modules, viewed from a slightly different angle, emphasizing the compact size and terminal block arrangement.

6. Operating Instructions

Once properly installed and powered, the module operates as follows:

- The module continuously monitors the liquid levels via the connected sensors.
- When the liquid level reaches the **HIGH** sensor, the relay will activate (or de-activate, depending on configuration) to control the connected load.
- When the liquid level drops below the **LOW** sensor, the relay will switch back to its original state, controlling the connected load accordingly.
- This allows for automatic control of pumps (e.g., for drainage or filling) or alarms based on predefined liquid levels.

7. Maintenance

The FTVOGUE Level Control Switch Module is designed for long-term, low-maintenance operation. To ensure optimal performance:

- Periodically inspect all wiring connections to ensure they remain secure.
- Keep the module clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Ensure the operating environment remains within the specified temperature and humidity ranges.
- Regularly check the liquid level sensors for any buildup or damage that might affect their accuracy.

8. Troubleshooting

If you encounter issues with your module, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Module not powering on	Incorrect power supply voltage or polarity; loose power connections.	Verify 12V DC power supply. Check VCC and GND connections for correct polarity and tightness.
Relay not switching	Sensor malfunction; incorrect sensor wiring; liquid level not reaching trigger points.	Inspect sensors for damage or obstruction. Confirm HIGH, LOW, and COM sensor wiring. Ensure liquid levels are reaching the sensor points.
Connected device not activating	Incorrect load wiring (NO/NC); faulty load device; relay contacts damaged.	Check connections to NO, NC, and COM relay terminals. Test the connected device independently. If relay clicks but device doesn't work, relay contacts might be damaged (unlikely for new module).

9. Technical Specifications

Specification	Value
Manufacturer	FTVOGUE
Part Number	FTVOGUEygw0nrk1qs6525-12
Input Voltage	12V DC
Relay Switching Capacity	10A 250VAC / 10A 30VDC
Item Weight	2.12 ounces
Package Dimensions	4.72 x 3.94 x 1.57 inches
Item Package Quantity	1 (Note: Product is sold in 2 pieces)
Batteries Required	No
ASIN	B0B8Z9M7P9

Specification	Value
Date First Available	August 8, 2022

10. Warranty and Support

For warranty information or technical support, please refer to the retailer or manufacturer's official channels. Keep your purchase receipt for any warranty claims.

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