Walfront Walfrontui9mgdct586176-02

Walfront 8-Channel RJ45 Ethernet TCP/IP Remote Control Relay Module

Model: Walfrontui9mgdct586176-02

1. Introduction

This manual provides detailed instructions for the Walfront 8-Channel RJ45 Ethernet TCP/IP Remote Control Relay Module. This device is designed for industrial and home automation applications, allowing remote control of electrical circuits via an Ethernet network. It features 8 independent relay channels and supports TCP/IP communication with an integrated web server for easy access and configuration.

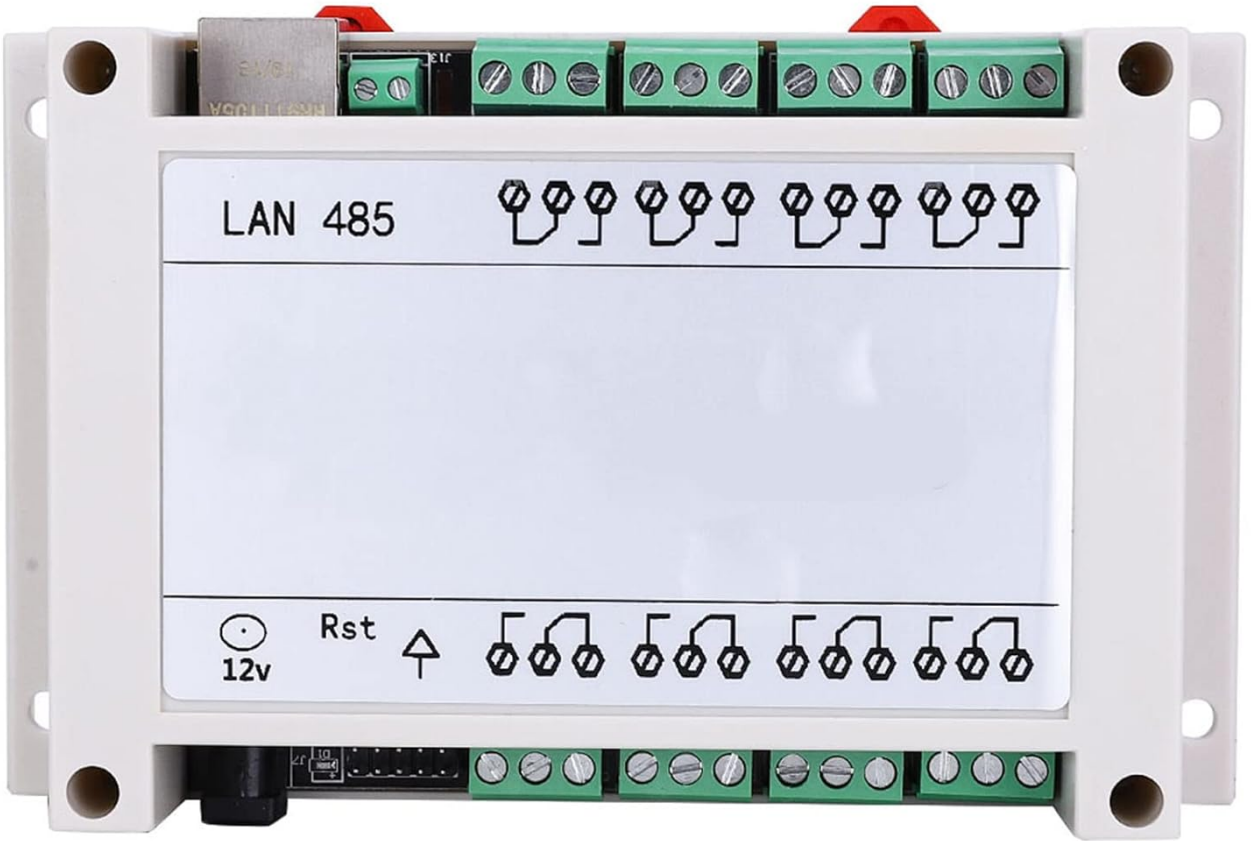


Figure 1: Top view of the Walfront 8-Channel RJ45 Ethernet TCP/IP Remote Control Relay Module, showing the LAN 485 label, 12V power input, reset button, and screw terminals for relay outputs.

2. Key Features

- **TCP/IP RJ45 Ethernet Port:** Configurable IP address for network integration.
- **Integrated Web Server:** Enables remote access and control of relays via a web browser.
- **8 Independent Relay Channels:** Each channel supports 250V/AC 10A switching.
- **8 External Control Outputs:** Active low level outputs for controlling switches or sensors.
- **Remote Access:** Supports re-engineering protocol for router connection, allowing global access control via Android, tablet, or other systems.

3. Setup

3.1 Physical Connections

1. **Power Supply:** Connect a 9V DC power supply to the 12V input terminal. Ensure correct polarity.
2. **Ethernet Connection:** Connect a standard RJ45 Ethernet cable from your network router or switch to the RJ45 port on the module.
3. **Relay Outputs:** Connect the devices you wish to control to the 8 relay output screw terminals. Each relay can switch up to 250V/AC at 10A. Refer to the diagram below for terminal identification.
4. **External Control Inputs:** If using external switches or sensors, connect them to the 8 external control input terminals. These inputs are active low.

Figure 2: Angled view of the module, highlighting the RJ45 Ethernet port and the green screw terminals for relay outputs and external control inputs.

3.2 Initial Network Configuration

Upon initial power-up, the module will attempt to obtain an IP address via DHCP. If DHCP is not available or if a static IP is preferred, the IP address can be configured through the module's web interface or a dedicated configuration tool (if provided by the manufacturer). Consult the manufacturer's documentation for default IP addresses or configuration utility details.

4. Operating Instructions

4.1 Accessing the Web Interface

1. Ensure the module is powered on and connected to your network.
2. Open a web browser on a computer connected to the same network.
3. Enter the module's IP address into the browser's address bar (e.g.,http://192.168.1.100).
4. The web interface will load, displaying the status of the 8 relays and providing controls to switch them on or off.

4.2 Controlling Relays

Within the web interface, each relay channel will have a corresponding control element (e.g., a button or toggle switch). Click or tap these elements to change the state of the respective relay (ON/OFF). The module will respond by physically switching the connected device.

4.3 Using External Control Inputs

The 8 external control inputs can be used to trigger actions or monitor states from external devices like switches or sensors. When an input receives an active low signal, the module can be configured to perform a specific action, such as changing a relay state or sending a notification. Refer to the module's web interface or advanced documentation for configuring these input actions.

4.4 Remote Access via Router

For global access, connect the module to a router and configure port forwarding or use the provided re-engineering protocol. This allows control of the module from anywhere with internet access using a compatible application on Android, tablet, or other systems. Consult your router's manual and the module's advanced documentation for specific instructions on remote access configuration.

5. Maintenance

5.1 Cleaning

To clean the module, disconnect it from all power sources and networks. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners, solvents, or abrasive materials, as these can damage the device.

5.2 Environmental Considerations

Ensure the module is operated within its specified temperature and humidity ranges. Avoid exposing the device to direct sunlight, excessive moisture, dust, or corrosive environments. Proper ventilation is recommended to prevent overheating.

6. Troubleshooting

Problem	Possible Cause	Solution
Module does not power on.	No power supply connected or faulty power supply.	Verify power supply connection and ensure it provides 9V DC. Test with a known working power supply.

Problem	Possible Cause	Solution
Cannot access web interface.	Incorrect IP address, network cable disconnected, or network configuration issue.	Check network cable connection. Verify the module's IP address. Ensure your computer is on the same network segment. Try resetting the module.
Relays do not switch.	Incorrect wiring, overload, or module malfunction.	Check relay wiring for correct connections. Ensure the load does not exceed 250V/AC 10A. If the issue persists, contact support.
External inputs not responding.	Incorrect wiring, input not active low, or configuration issue.	Verify wiring of external devices. Ensure the input signal is active low. Check the module's configuration for input actions.

7. Specifications

Parameter	Value
Brand	Walfront
Model Number	Walfrontui9mgdct586176-02
Dimensions (Package)	15 x 10 x 5 cm
Weight (Package)	267 grams
Country of Origin	China
Connector Type	RJ45, Screw Terminal
Contact Material	Copper-based alloy
Current Rating	10 A
Mounting Type	Socket Mount
Operating Mode	Automatic
Power Consumption	1.6 Watts
Coil Voltage	9 Volts (DC)
Minimum Switching Voltage	9 Volts (DC)

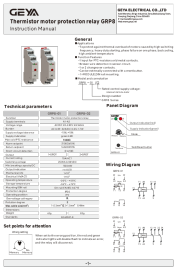
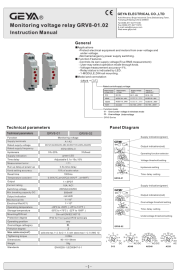
8. Warranty Information

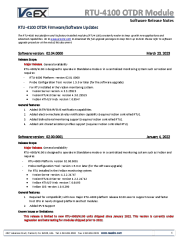
Specific warranty information for this product is not available in the provided data. Please refer to the product packaging or contact the seller/manufacturer directly for warranty details.

9. Support

For technical assistance, troubleshooting beyond this manual, or inquiries regarding product functionality, please contact Walfront customer support or the retailer from whom the product was purchased. Refer to their official website or contact information provided with your purchase for assistance.

Related Documents - Walfrontui9mgdct586176-02

	INVT ICA400-02/ICA413-02 Series 4G IoT Data Transmission Terminal Operation Manual This operation manual provides detailed information on the INVT ICA400-02 and ICA413-02 series 4G IoT data transmission terminals. It covers product features, specifications, installation procedures, quick startup guides for IWOstudio, web, and mobile platforms, as well as frequently asked questions.
	R&S®OSP Open Switch and Control Unit Operating Manual Comprehensive operating manual for the Rohde & Schwarz R&S®OSP Open Switch and Control Unit, detailing setup, operation, functions, safety instructions, and module specifications for test and measurement applications.
	PRIMEQUEST 3000 (NVM) v7.00 This document provides instructions for updating the firmware (NVM) for FUJITSU PRIMEQUEST 3000 Series network cards, including Dual-channel and Quad-channel LAN cards (10GBASE, 10GBASE-T, 25GBASE).
	GEYA GRP8 Thermistor Motor Protection Relay: Instruction Manual for GRP8-01 & GRP8-02 Comprehensive instruction manual for GEYA GRP8 series thermistor motor protection relays (GRP8-01, GRP8-02). Details applications, technical specifications, panel/wiring diagrams, and operational modes for reliable motor thermal overload protection.
	GEYA GRV8-01.02 Monitoring Voltage Relay: Instruction Manual This instruction manual provides comprehensive details on the GEYA GRV8-01.02 monitoring voltage relay, covering its applications in protecting electrical equipment and motors from over/under-voltage, function features, technical specifications, panel and function diagrams, and wiring instructions.



RTU-4100 OTDR Module

Software Release Notes

RTU-4100 OTDR Firmware/Software Updates

[VeEX RTU-4100 OTDR Module Software Release Notes and Updates]

Comprehensive release notes detailing firmware and software updates for the VeEX RTU-4100 OTDR Module, including version history, new features, and system requirements from 2019 to 2023.