WenzhiloT MTG276-WF-RL-24G

WenzhiloT Smart Presence Sensor (MTG276-WF-RL-24G) User Manual

Model: MTG276-WF-RL-24G

1. Product Overview

The WenzhiloT Smart Presence Sensor (MTG276-WF-RL-24G) is a Wi-Fi enabled 24 GHz mmWave radar sensor designed for accurate human presence detection. It can detect human presence, static presence, micro-motion, and general movement, making it suitable for various smart home applications, including automated lighting control.

Key Features:

- **Advanced Detection:** Utilizes mmWave Radar for precise detection of human presence, including static states like sleeping.
- **Dual Installation Options:** Supports both ceiling and wall mounting using double-sided adhesive or expansion screws.
- **Illuminance Monitoring:** Integrated light intensity sensor for smart scene linkage, allowing automatic light control based on ambient brightness.
- **Integrated 16A Relay:** Features a built-in relay for direct control of lighting or other electrical loads (85-265V AC).
- **Configurable Settings:** Offers multiple adjustable parameters for sensitivity, detection range, relay modes, and more via the Tuya Smart APP.

Package Contents:

- WenzhiloT Smart Presence Sensor (MTG276-WF-RL-24G)
- Double-sided tape
- Expansion screws
- User Manual

2. Safety Information

Please read and understand all safety instructions before installation and operation. Failure to follow these instructions may result in electric shock, fire, or other hazards.

- **Electrical Safety:** Installation should be performed by a qualified electrician or in accordance with local electrical codes. Ensure power is disconnected before wiring.
- **Voltage:** This device operates on 85-265V AC. Verify your power supply matches this requirement.
- **Indoor Use Only:** This sensor is designed for indoor use. Do not expose to moisture, extreme temperatures, or direct sunlight.
- **Avoid Obstructions:** Do not install the sensor near large metal objects or other devices that may interfere with radar signals.
- **Children and Pets:** Keep the device out of reach of children and pets.

3. Installation

3.1 Choosing an Installation Location

Select a location that provides an unobstructed view of the area to be monitored. Avoid placing the sensor directly above heat sources or in areas with constant air movement (e.g., near air vents) to prevent false detections. The sensor can be installed on the ceiling or a wall.

3.2 Mounting the Sensor

The sensor supports two primary mounting methods:

1. **Using Double-Sided Tape:**
    - Clean the mounting surface thoroughly to ensure it is free of dust and grease.
    - Apply the provided double-sided tape to the back of the sensor.
    - Press the sensor firmly onto the desired ceiling or wall location for at least 30 seconds.
2. **Using Expansion Screws:**
    - Mark the positions for the expansion screw installation holes on the ceiling or wall.
    - Drill pilot holes at the marked positions.
    - Insert the expansion screws into the holes.
    - Align the sensor's mounting holes with the screws and secure the sensor.

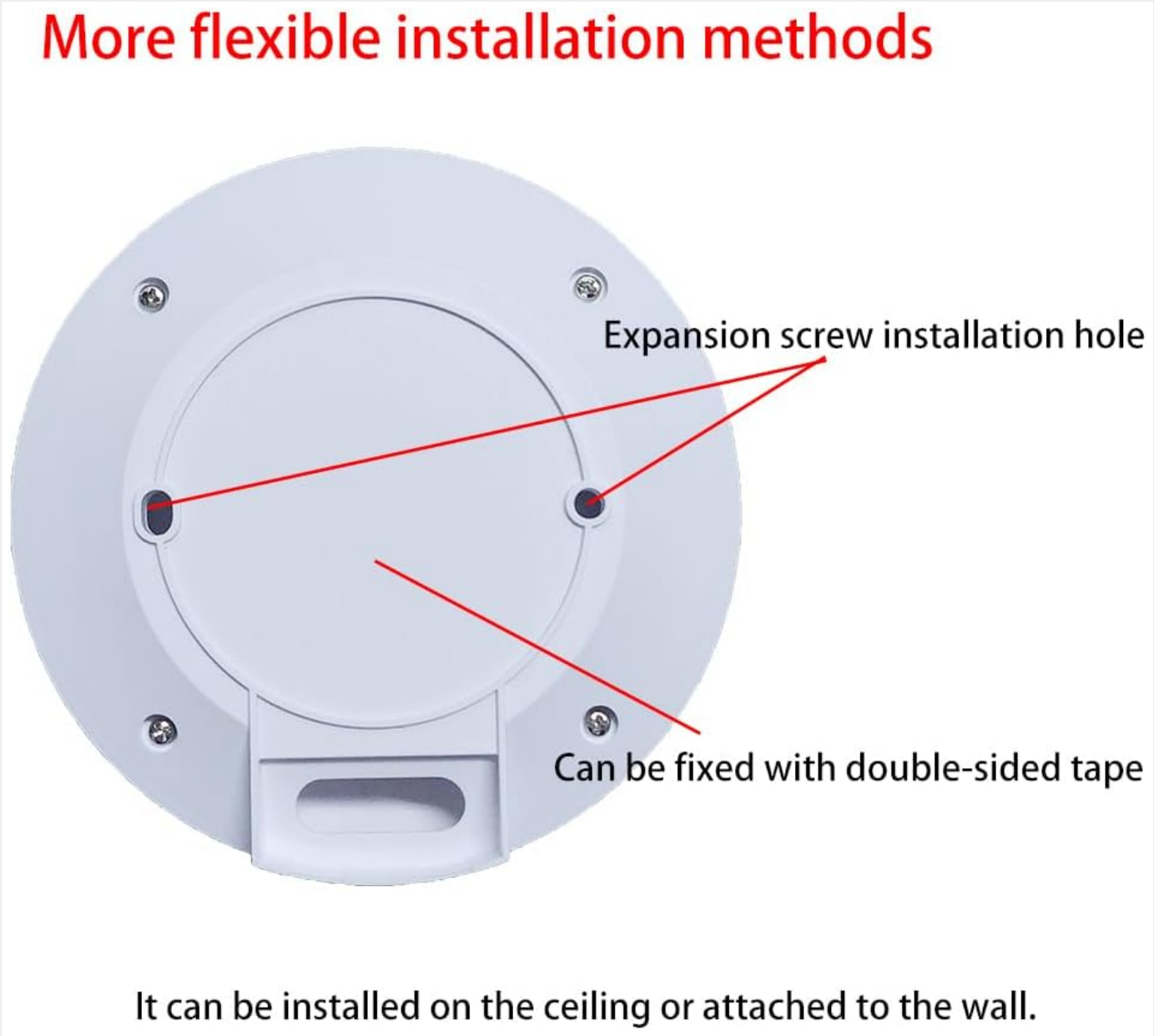


Figure 1: Sensor back with mounting options. The back of the sensor features designated areas for attaching double-sided tape and pre-drilled holes for expansion screw installation, allowing for flexible mounting on ceilings or walls.

3.3 Wiring Instructions

WARNING: Ensure power is OFF at the circuit breaker before performing any wiring.

The sensor requires an 85-265V AC power supply. It also includes a 16A relay for direct control of a light fixture or other compatible load.

1. Identify the Live (L) and Neutral (N) wires from your AC power supply.
2. Connect the Live (L) wire to the 'L' terminal on the sensor.
3. Connect the Neutral (N) wire to the 'N' terminal on the sensor.
4. **For Relay Function (Optional):** If you intend to control a light directly, connect the Live wire from the light fixture to the 'L' terminal of the sensor's relay output, and the Neutral wire from the light fixture to the 'N' terminal of the sensor's relay output. The sensor's internal relay will switch the power to the light.
5. Secure all wire connections firmly.
6. Restore power at the circuit breaker.



Figure 2: Wiring Diagram. This diagram illustrates how to connect the sensor to an AC power source (L and N) and optionally to a light fixture for direct control via the integrated 16A relay.

4. App Setup and Operation

4.1 Pairing with Tuya Smart Life App

1. Download the "Tuya Smart" or "Smart Life" app from your mobile device's app store (iOS or Android).
2. Register or log in to your account.
3. Ensure your mobile device is connected to a 2.4GHz Wi-Fi network.
4. Power on the sensor. The indicator light should blink rapidly, indicating it's in pairing mode. If not, refer to the troubleshooting section for reset instructions.
5. In the app, tap the "+" icon to add a device.
6. Select "Sensor" or "Presence Sensor" from the device list.
7. Follow the on-screen instructions to connect the sensor to your Wi-Fi network.
8. Once successfully paired, you can rename the device and access its settings.

4.2 Sensor Settings in the App

The Tuya Smart app provides extensive customization options for the sensor's performance.

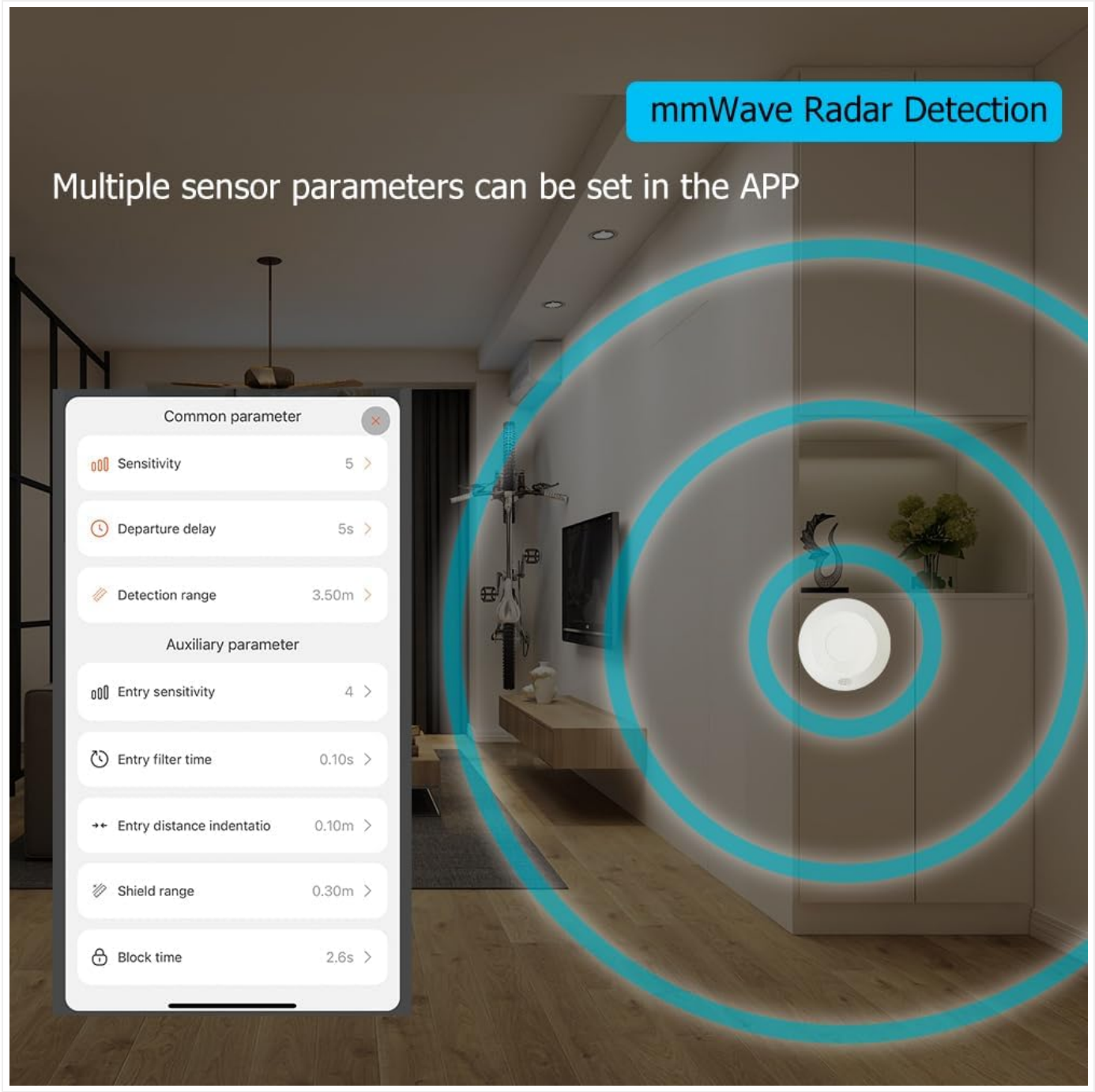


Figure 3: Common Parameter Settings. This screenshot displays the app interface for adjusting parameters such as Sensitivity, Departure Delay, and Detection Range.

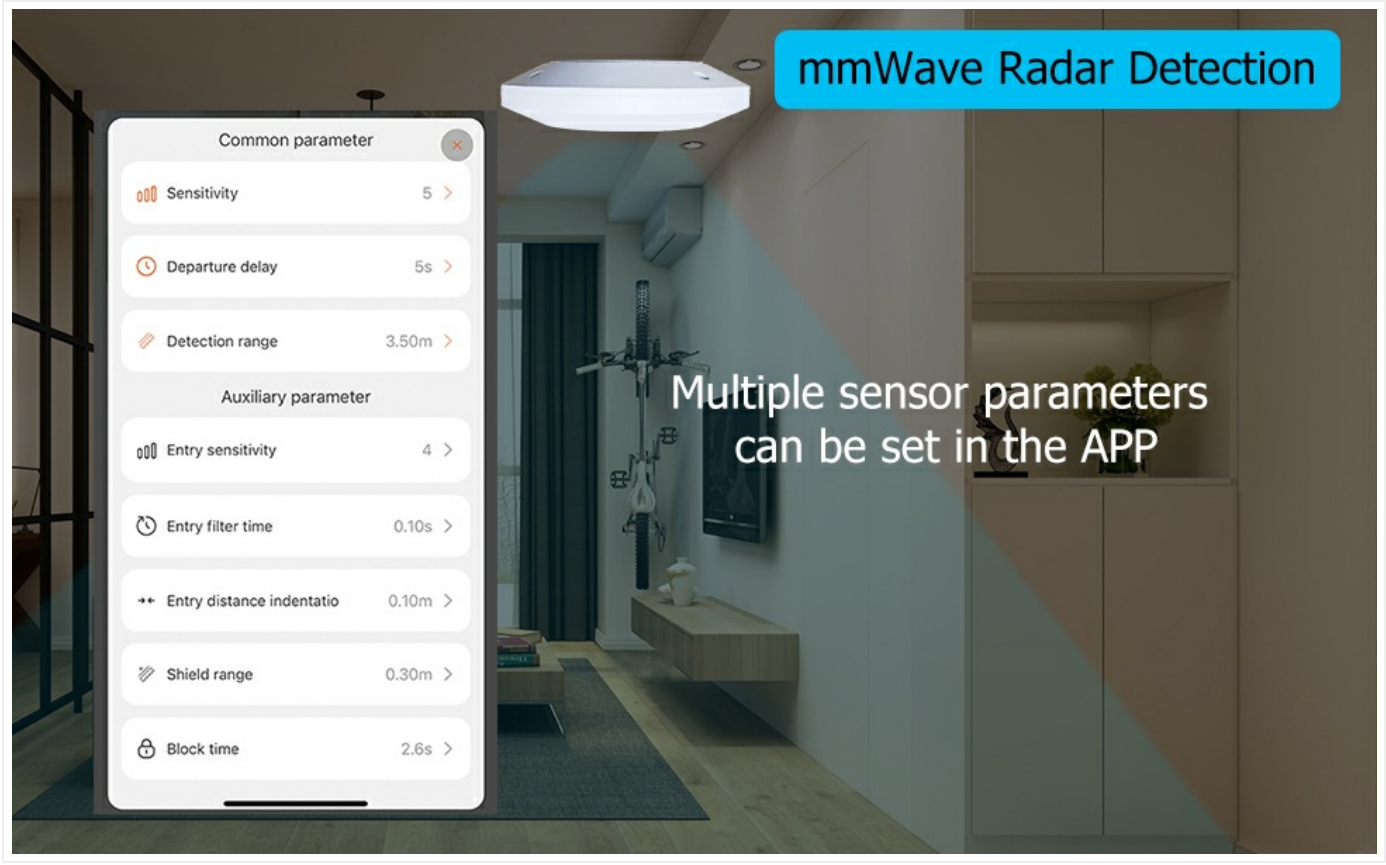


Figure 4: Control Parameter Settings. This image shows the app's control settings, including Status Indication, Sensor On/Off, Breaker Mode, and Illuminance Threshold.

Common Parameters:

- **Sensitivity:** Adjusts the sensor's responsiveness to motion. Higher values increase sensitivity.
- **Departure Delay:** Sets the time duration after which the sensor reports "no presence" once movement ceases.
- **Detection Range:** Defines the maximum distance for presence detection.
- **Entry Sensitivity:** Fine-tunes sensitivity for initial entry detection.
- **Entry Filter Time:** Sets a delay to filter out brief, insignificant entries.
- **Entry Distance Indentation:** Adjusts the effective detection area from the sensor's center.
- **Shield Range:** Defines a minimum distance within which detection is ignored.
- **Block Time:** Sets a period during which the sensor will not re-trigger after an event.

Control Parameters (Relay Function):

The sensor's 16A relay can be configured with three modes:

- **Standard (Cloud Linkage):** The relay can be remotely controlled (ON/OFF) via the Tuya Smart app.
- **Local (Automatic):** The relay automatically turns ON when presence is detected and OFF when no presence is detected.
- **Not Support (Disable Relay):** The relay function is disabled. The device operates solely as a sensor.



Figure 5: Relay Modes and Wiring. This image illustrates the wiring for the optional relay connection and the three configurable relay modes within the app: Standard, Local, and Disabled.

Illuminance Monitoring:

The sensor includes an illuminance monitor. You can set an "Illuminance Threshold" in the app. This allows for smart scene linkage, where lights can automatically turn ON/OFF based on ambient brightness and presence detection.



Figure 6: Illumination Detection Function. The sensor can detect ambient light levels, enabling smart automation scenarios such as turning on lights when it's dark and presence is detected.

4.3 Smart Scene Linkage

Leverage the Tuya Smart app's automation features to create smart scenes. For example:

- **Automated Lighting:** If presence is detected AND ambient light is below a certain threshold, turn on smart lights.
- **Security Alerts:** If presence is detected in an unoccupied area during specific hours, send a notification or trigger an alarm.
- **Energy Saving:** If no presence is detected for a set period, turn off lights or adjust thermostat settings.



Figure 7: Smart Home Automation. The WenzhiloT sensor integrates with other smart devices through the Tuya Smart platform to enable comprehensive home automation scenarios.

5. Maintenance

The WenzhiloT Smart Presence Sensor requires minimal maintenance.

- **Cleaning:** Gently wipe the sensor's surface with a soft, dry cloth. Do not use abrasive cleaners, solvents, or excessive moisture.
- **Firmware Updates:** Periodically check the Tuya Smart app for available firmware updates to ensure optimal performance and access to new features.
- **Environmental Conditions:** Ensure the sensor remains within its specified operating temperature and humidity ranges.

6. Troubleshooting

Problem	Possible Cause	Solution
Sensor not detecting presence.	• Incorrect sensitivity settings. • Obstructions in detection area. • Sensor mounted too high or too far. • Power issue.	• Increase "Sensitivity" and "Detection Range" in the app. • Ensure clear line of sight for the sensor. • Relocate the sensor to a more optimal position. • Check power connection and ensure the sensor is receiving power.

Problem	Possible Cause	Solution
False detections or sensor too sensitive.	• High sensitivity settings. • Environmental interference (e.g., fans, curtains moving). • Pets within detection range.	• Decrease "Sensitivity" and "Detection Range" in the app. • Adjust "Shield Range" to ignore close-proximity movements. • Ensure sensor is not affected by drafts or moving objects.
Cannot pair with Tuya Smart app.	• Incorrect Wi-Fi band (only 2.4GHz supported). • Sensor not in pairing mode. • Weak Wi-Fi signal.	• Ensure your phone is connected to a 2.4GHz Wi-Fi network. • Reset the sensor (power cycle or hold reset button if available) to enter pairing mode. • Move the sensor closer to your Wi-Fi router or use a Wi-Fi extender.
Relay not controlling light.	• Incorrect wiring. • Relay mode set to "Not Support" or "Standard" without app control. • Light fixture issue.	• Verify wiring according to Section 3.3. • Set "Breaker mode" to "Local (Automatic)" or use app control in "Standard" mode. • Test the light fixture independently to ensure it is functional.

7. Specifications

Feature	Detail
Brand	WenzhiIoT
Model Number	MTG276-WF-RL-24G
Color	Circular
Power Source	Corded Electric (AC 85-265V)
Maximum Range	10 meters
Mounting Type	Ceiling Mount (also wall mountable)
Frequency	24 GHz (MmWave Radar)
Item Dimensions (D x W x H)	4.57"D x 4.57"W x 1.3"H
Compatible Devices	Smart Home Devices, Smart Home Hubs, Lighting Controls (via Tuya Smart Life App)
Built-In Media	Double-sided tape, Expansion screws, Manual, Presence Sensor
Relay Output	16A

8. Warranty and Support

WenzhiIoT products are designed for reliability and performance. For warranty information and technical support, please refer to the official WenzhiIoT website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

Contact Information: Please visit the WenzhiIoT Store on Amazon or their official website for the latest support details.

© 2026 WenzhiIoT. All rights reserved.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question