MHCOZY TYTHWB4CH-D1RF

MHCOZY Tuya App WiFi 4-Channel Temperature Sensor Controller Instruction Manual

1. PRODUCT OVERVIEW

The MHCOZY Tuya App WiFi 4-Channel Temperature Sensor Controller is a versatile smart device designed for remote monitoring and control of environmental temperatures and humidity. It features a 4-channel dry contact relay switch, allowing you to automate electrical devices based on temperature ranges. Compatible with popular smart home platforms like Amazon Alexa and Google Home, this controller offers real-time data, scheduling, and voice control capabilities.

Figure 1: MHCOZY 4-Channel Temperature Sensor Controller with DS18B20 probe.

Figure 2: The controller supports Tuya app, Google Assistant, and Amazon Alexa for smart integration.

2. SETUP AND INSTALLATION

2.1 Powering the Device

Connect the controller to a power source using either USB 5V or AC 85-250V. Ensure the blue indicator light flashes to confirm power is supplied.

2.2 App Installation and Pairing

1. Download the **Tuya Smart Life** app from your smartphone's app store.

2. Open the app and register/log in.

3. Ensure your phone's Bluetooth is enabled.

4. Once powered on, check if the blue light on the device flashes in a pattern of**two short flashes followed by one long flash**. This indicates Quick Pairing Mode.

5. In the Tuya Smart Life app, click 'Add Device'. The app should automatically discover the device. Follow the on-screen prompts to connect, entering your 2.4GHz Wi-Fi network password.

6. If the device is not found or Quick Pairing Mode fails, press and hold the reset button on the controller until the blue light flashes rapidly. Then, in the app, select 'Compatible Mode' for pairing.

2.3 Sensor Connection

Connect the provided DS18B20 waterproof temperature sensor probe to the designated 'Sensor' port on the controller. The sensor has a measuring range of -40°C to 80°C and operates at 3.0-5.5V.

Figure 3: The waterproof DS18B20 temperature sensor probe.

2.4 Wiring Diagram (Dry Contact Relay)

The controller features 4-channel dry contact relays. This means the relays provide a switch closure without supplying power to the connected device. You must provide external power to the device you are controlling. Refer to the diagram below for typical wiring with a heating device and contactor.
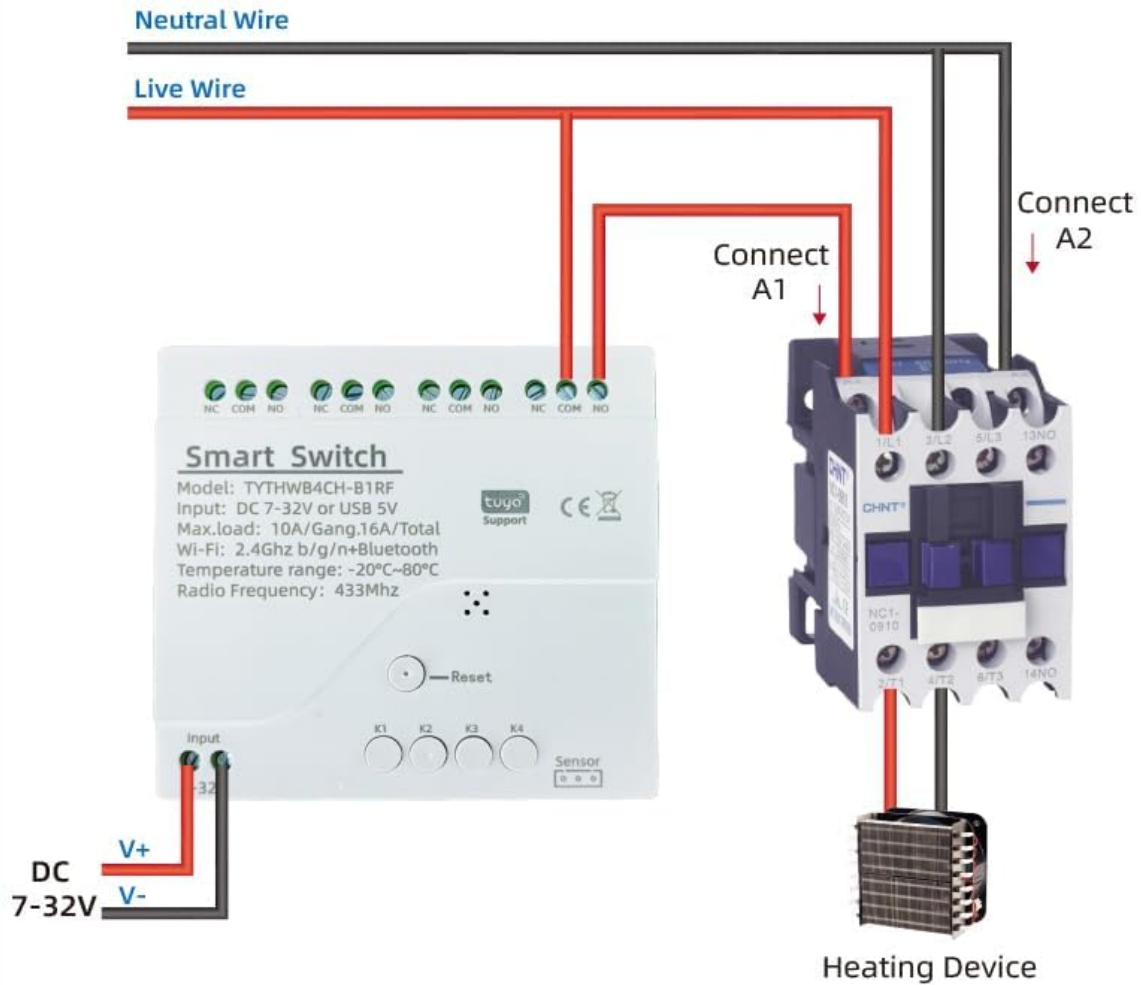
Figure 4: Example wiring for controlling a high-power heating device using a contactor.

- **Input (N, L)**: Connect your AC 85-250V power supply here.
- **Output (NC, COM, NO)**: These are the dry contact terminals for each of the 4 channels.
- **NC (Normally Closed)**: The circuit is closed when the relay is off.
- **NO (Normally Open)**: The circuit is open when the relay is off.
- **COM (Common)**: The common terminal for the relay.

Important: Do not exceed the maximum load current of 10A per channel. For high-power appliances or generators, use an external contactor.

3. OPERATING INSTRUCTIONS

3.1 Remote Monitoring and Control

Once connected to the Tuya Smart Life app, you can remotely monitor the real-time temperature and humidity from anywhere. The app displays the current temperature (switchable between °C/°F) and humidity percentage.
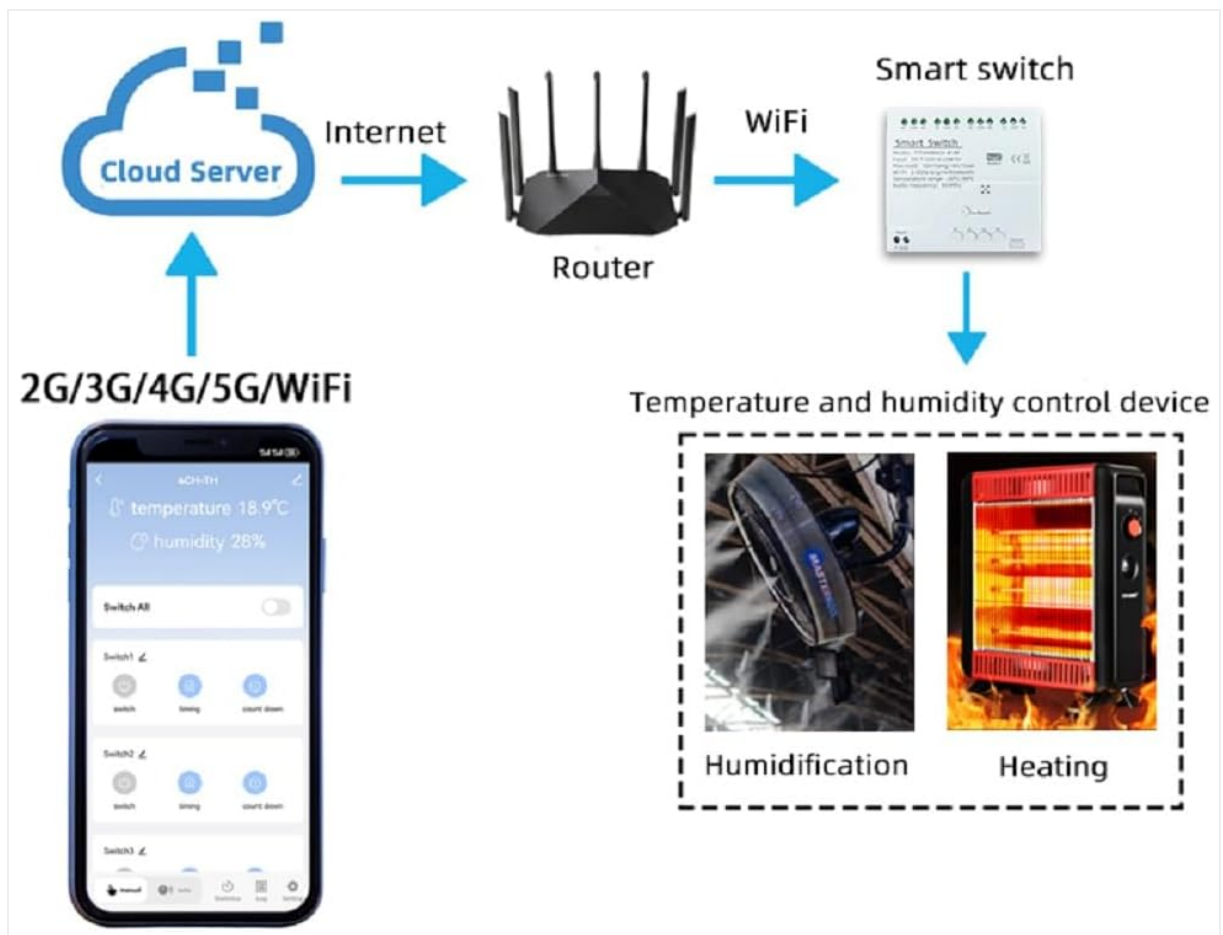
Figure 5: Real-time temperature and humidity monitoring via the Tuya Smart Life app.

3.2 Manual and Automatic Control Modes

- **Manual Mode**: Turn electrical devices connected to the relays ON/OFF directly from the app at any time.

Figure 6: Manual control of individual channels within the app.

- **Automatic Mode**: Set specific temperature ranges within the Tuya Smart Life app. The controller will automatically turn connected appliances ON or OFF when the environmental temperature falls within or outside the preset range. This is ideal for applications like home brewing, fermentation, breeding, incubation, greenhouses, or mushroom cultivation.

3.3 Timing Functions

Utilize the app's timing features to set scheduled, countdown, or loop timers for your connected devices. This allows for precise control over when appliances turn on or off.

3.4 Voice Control and Smart Home Integration

The controller is compatible with Amazon Alexa and Google Home. You can manage your devices using voice commands. Additionally, create smart scenes in the Tuya Smart Life app to enable Siri voice control.
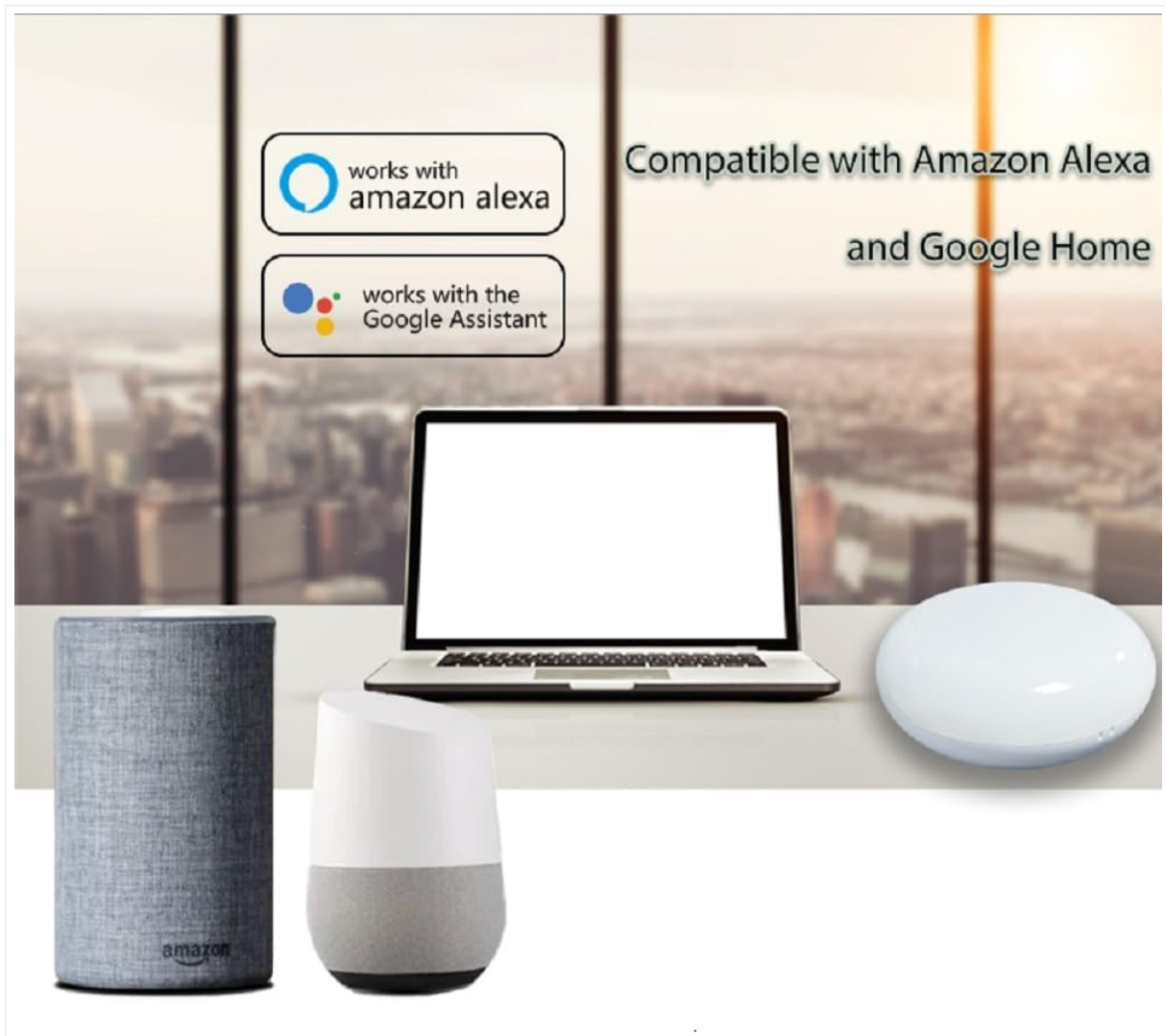
Figure 7: The controller is compatible with Amazon Alexa and Google Home for voice control.

3.5 Share Control and Data History

Easily share control of your smart home devices with up to 19 other individuals through the app. The Tuya app also provides a detailed temperature history record, allowing you to track environmental changes over time.

Video 2: Overview of the MHCOZY 4-Channel Tuya app Dry Contact WiFi Temperature Humidity Sensor Controller features.

4. MAINTENANCE

To ensure the longevity and accurate operation of your MHCOZY Temperature Sensor Controller:

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid exposing the controller to extreme temperatures or humidity levels outside its operating range.
- Handle the temperature sensor probe with care to prevent damage. Although waterproof, avoid unnecessary physical stress.

5. TROUBLESHOOTING

- **Device Not Connecting to Wi-Fi:**
  Ensure your Wi-Fi router operates on a 2.4GHz frequency (5G routers are not supported). Place the switch close to your router during the pairing process. If quick pairing fails, try compatible mode as described in Section 2.2.

- **Incorrect Temperature Unit Display:**
  The Tuya Smart Life app allows you to switch between Celsius (°C) and Fahrenheit (°F). Check the app settings for the correct unit display.

- **Connected Appliance Not Functioning:**
  Verify that the wiring is correct according to the diagram in Section 2.4. Ensure the appliance is receiving external power if using dry contact relays. Check that the maximum load current of 10A per channel is not exceeded. For higher power loads, a contactor is required.

- **Bluetooth Control Issues:**
  If the device is offline, you can control it via phone Bluetooth through the Tuya app within available distance. Ensure Bluetooth is enabled on your phone.

6. SPECIFICATIONS

Manufacturer	mic technology co.,ltd
Model	TYTHWB4CH-D1RF
Power Supply Input Voltage	USB 5V or AC 85-250V
Power Consumption	<1W
Quiescent Current	80mA
Cutover Current	<10A/Channel, total 4 channels <16A
Working Temperature	-20 to 80 °C
Working Humidity	5% to 90% RH
Wireless Standard	Wi-Fi 2.4GHz b/g/n
Security Mechanism	WEP/WPA-PSK/WPA2-PSK
Material	RF-ABS, Copper
Product Dimensions	2.95 x 2.87 x 0.79 inches (7.5 x 7.3 x 2 cm)
Item Weight	4.9 ounces
Included Components	4 channel WiFi dry contact relay, DS18B20 waterproof temperature probe (5m length)
DS18B20 Sensor Measuring Range	-40~80 °C
DS18B20 Sensor Operating Voltage	3.0-5.5V

7. WARRANTY AND SUPPORT

For warranty information, technical support, or any inquiries regarding your MHCOZY Tuya App WiFi 4-Channel Temperature Sensor Controller, please contact the manufacturer, mic technology co.,ltd, or refer to the product's official support channels. Keep your purchase receipt for warranty claims.

Related Documents - TYTHWB4CH-D1RF

MHCozy USB 5V Switch *FlexRadio* This simple remote 5VP switch can be used to remotely turn your FlexRadio on and off remotely. Using the Remote connector on the back of a FLEX-6000 radio allows for a clean shutdown of your radio. **Model:** TYWB-4ch **Input:** DC 7-32V **USB Input:** 5V **RCA Pigtail:** 5V **Software:** Tuya Smart **Required:** Jumeller Screwdriver It is shipped with a USB 5V power supply allowing you to plug it into a wall socket. Optionally, you can connect it to another power source between 7V and 32V. Only 1 power source is required (and recommended).	[MHCozy USB 5V Switch Installation and Setup Guide](#) A comprehensive guide to installing and configuring the MHCozy USB 5V Switch for remote control of FlexRadio devices using the Tuya Smart app. Includes step-by-step instructions, connection diagrams, and testing procedures.
FlexRadio A Beginner's Guide to Remote HF Station Setup FlexRadio Systems Michael Walker VE3WSV May 2022	[A Beginner's Guide to Remote HF Station Setup - FlexRadio Systems](#) Learn how to set up a reliable remote High Frequency (HF) radio station with this beginner's guide from FlexRadio Systems. Covers essential components like AC power control, internet monitoring, remote PC access, and lightning mitigation.