

DieseRC AC-2CH

DieseRC AC-2CH 2-Channel WiFi Smart Switch User Manual

Model: AC-2CH

1. INTRODUCTION

This manual provides detailed instructions for the installation, setup, and operation of your DieseRC AC-2CH 2-Channel WiFi Smart Switch. This device is designed to integrate various electrical appliances into a smart home system, allowing remote control via the eWelink app, voice commands, or an optional RM2.4G Bluetooth remote control.

The AC-2CH module features two independent channels with passive output relays, suitable for AC 90V-250V applications. It supports both inching and self-locking modes, offering flexibility for different control needs.

2. PACKAGE CONTENTS

- 1x DieseRC AC-2CH WiFi Controller Module
- 1x Product Manual

Note: The RM2.4G Bluetooth remote control is not included in this package and must be purchased separately if desired.

3. PRODUCT OVERVIEW

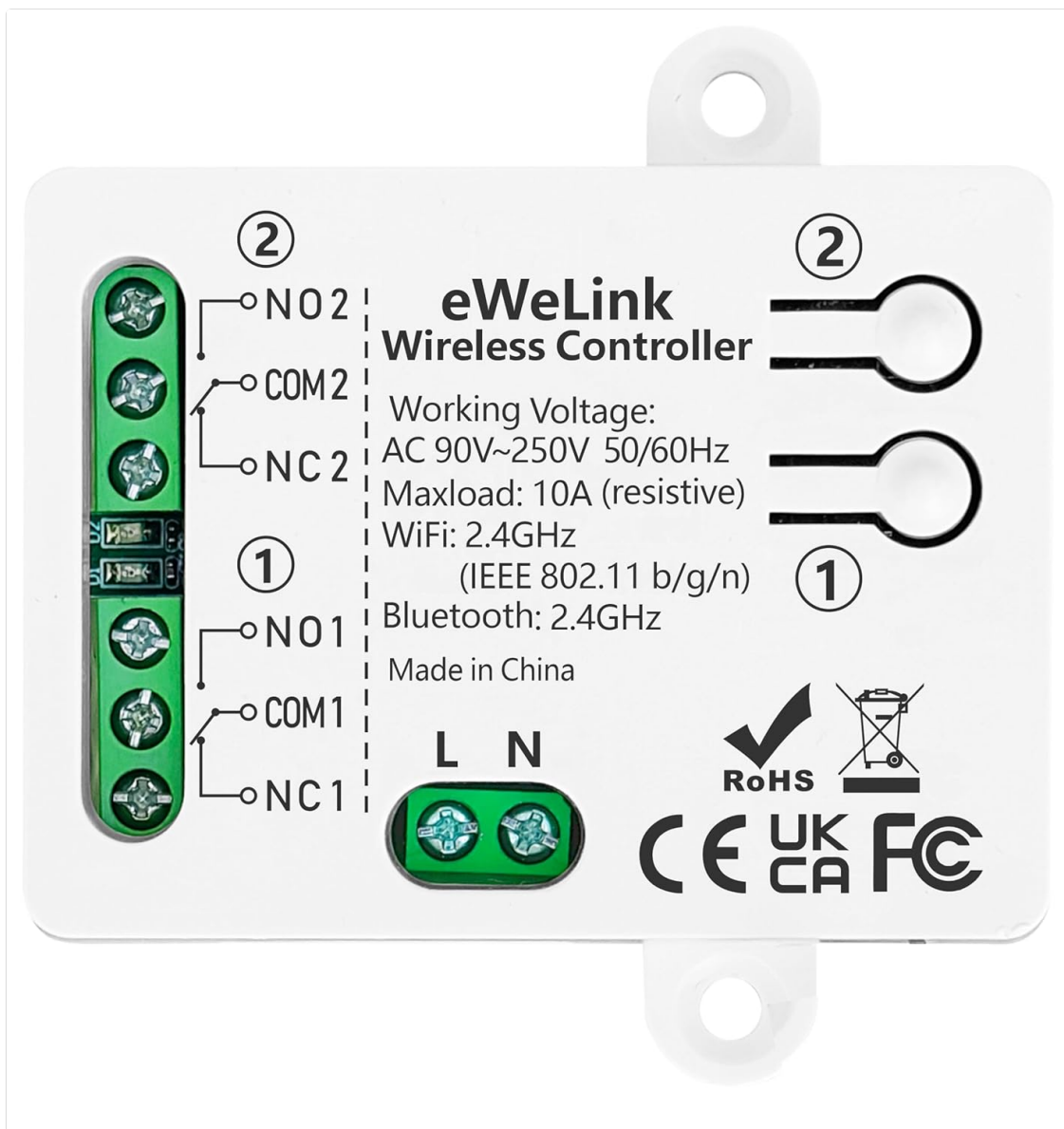


Image: The DieserC AC-2CH 2-Channel WiFi Smart Switch module, showing its compact design and terminal blocks.

The DieserC AC-2CH is a compact and versatile smart switch designed for various applications. It allows you to control two separate devices remotely. Key features include:

- **2 Independent Channels:** Control two devices separately.
- **Passive Output Relays:** Dry contacts, suitable for various voltage applications (AC 90V-250V).
- **WiFi Connectivity:** Connects to your 2.4GHz Wi-Fi network for remote control.
- **eWeLink APP Control:** Manage devices from your smartphone (Android/iOS).
- **Voice Control:** Compatible with Amazon Alexa and Google Home.
- **Operating Modes:** Supports Inching (momentary) and Self-Locking (toggle) modes.
- **Compact Size:** Designed for easy installation in electrical boxes.

3 control methods



Image: Illustration of the three primary control methods for the smart switch: via the eWelink app on a smartphone, voice control through smart speakers like Amazon Alexa or Google Home, and an optional RM2.4G remote controller.

4. SPECIFICATIONS

Parameter	Value
Working Voltage	AC 90V - 250V
Relay Max Current	10A
Output Type	Passive Output / Clean Relay (Dry Contacts)
Channels	2 Channels
WiFi Standard	IEEE 802.11 b/g/n 2.4GHz
Bluetooth	2.4GHz (for RM2.4G remote control pairing)
Dimensions	60 x 32 x 17 mm (2.4 x 1.3 x 0.7 in)
Working Temperature	-30°C ~ +80°C

5. SETUP

5.1 APP Pairing (eWelink)

1. Ensure your smartphone is connected to a 2.4GHz Wi-Fi network and Bluetooth is enabled.
2. Power on the DieseRC AC-2CH module.
3. Press and hold the pairing button on the module for more than 5 seconds. The blue LED indicator will blink twice quickly and then remain steadily on, indicating it has entered pairing mode.
4. Open the eWelink APP on your smartphone.
5. Tap the "+" icon at the bottom of the screen.
6. Select "Bluetooth Pairing".
7. Tap "Next". The app will automatically scan for the device.
8. Follow the on-screen prompts within the eWelink APP to complete the pairing process.

5.2 Wiring Instructions

Before wiring, ensure all power sources are disconnected to prevent electrical shock. The AC-2CH module uses passive output relays, meaning the relay contacts (NO, COM, NC) are dry contacts and do not supply voltage themselves. You must provide the voltage to be switched.



APP Control

Control your devices anytime, anywhere with "eWeLink" APP.





The image illustrates the remote control capability of the smart switch module. On the left, a hand holds a smartphone displaying the eWeLink app interface, which includes a 'No distance limit' banner. On the right, a close-up of the smart switch module is shown, highlighting its input terminals (L, N), USB power input, and a blue LED indicator. The module is labeled 'eWeLink' and 'AC-2CH'.

Image: A close-up view of the smart switch module, highlighting the input terminals (L, N), USB power input, and

the two sets of relay output terminals (NO1, COM1, NC1 and NO2, COM2, NC2). The pairing button and indicator lights are also visible.

Terminal Definitions:

- **L & N:** AC 90V-250V power input for the module.
- **USB 5V/0.5A:** Alternative power input for the module (e.g., via a USB adapter).
- **NO (Normally Open):** The contact is open (no connection) when the relay is off, and closed (connected to COM) when the relay is on.
- **COM (Common):** The common terminal for the relay.
- **NC (Normally Closed):** The contact is closed (connected to COM) when the relay is off, and open (no connection) when the relay is on.

Refer to the wiring diagrams in Section 8 for specific connection examples.

6. OPERATING MODES

The DieseRC AC-2CH supports two main operating modes, which can be configured via the eWelink APP:

- **Inching Mode (Momentary):** In this mode, the relay will turn on for a set duration (e.g., 0.5 seconds) and then automatically turn off. This is ideal for applications requiring a brief pulse, such as garage door openers or electric locks.
- **Self-Locking Mode (Toggle):** In this mode, the relay acts like a standard toggle switch. One command turns it on, and another command turns it off. This is suitable for controlling lights or other devices that need to remain on or off until manually changed.

You can easily switch between these modes and adjust the inching duration within the eWelink APP settings for each channel independently.

7. CONTROL METHODS

7.1 eWelink APP Control

Once paired, you can control your devices from anywhere with an internet connection using the eWelink APP.

WIRING DIAGRAM

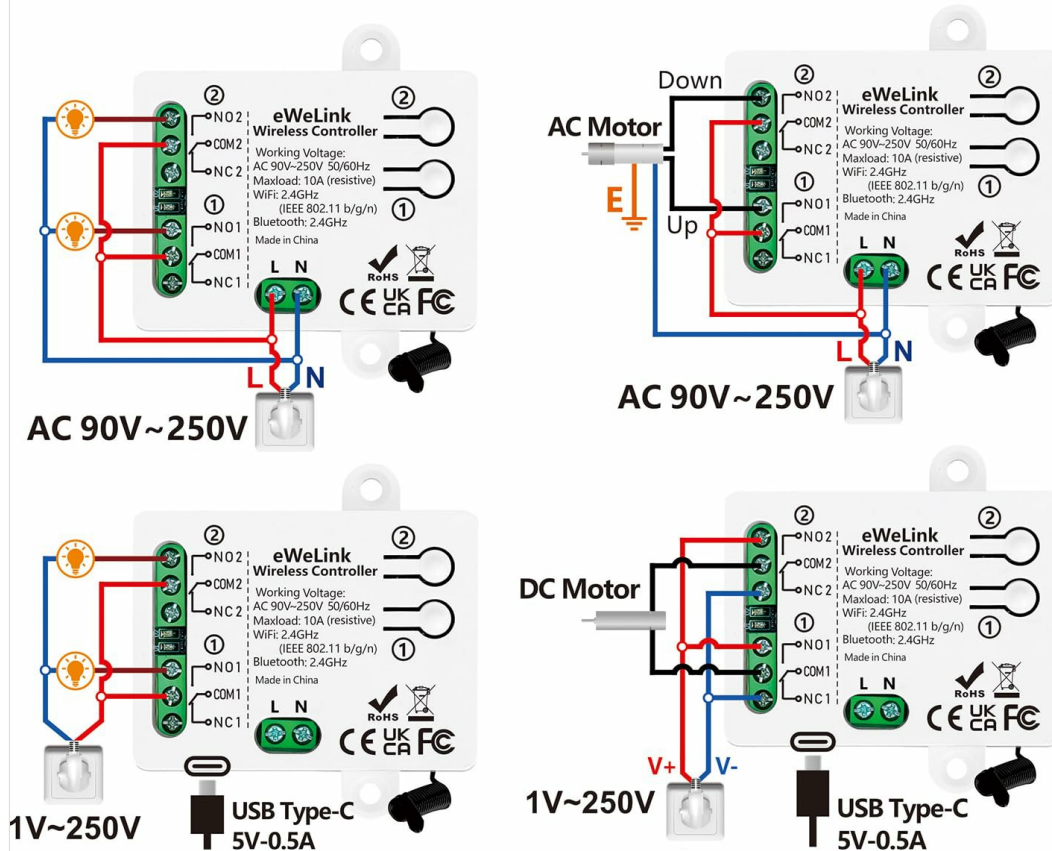


Image: A smartphone screen showing the eWeLink app interface with two control buttons, demonstrating remote control of a garage door from a beach setting, emphasizing the 'no distance limit' feature.

The app allows for:

- **Remote On/Off:** Turn connected devices on or off from your phone.
- **Scheduling:** Set specific times for devices to turn on or off automatically.
- **Timers & Countdown:** Configure countdown timers for temporary operation.
- **Scene Creation:** Automate multiple devices based on conditions or schedules.
- **Device Sharing:** Share control of the smart switch with family members.

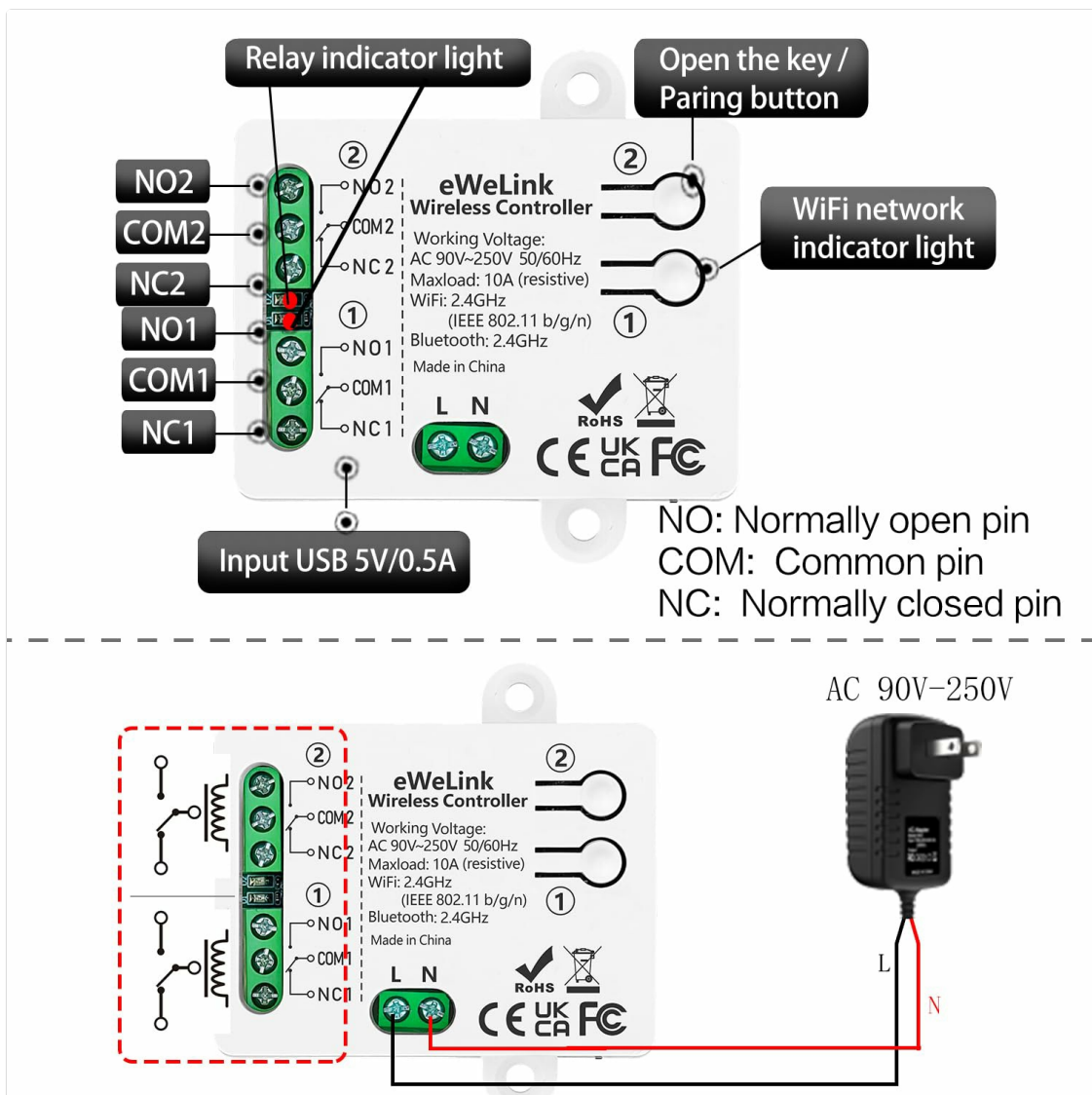


Image: A visual representation of the eWeLink app's scheduling features, including 'Timing' for one-time events, 'Schedule' for recurring events (e.g., daily), and 'Countdown' for delayed actions. Examples show lights turning on at 08:00 and off at 22:00.

7.2 Voice Control

The DieseRC AC-2CH is compatible with Amazon Alexa and Google Home, allowing for hands-free control of your connected devices.



Image: A scene depicting a person interacting with an Amazon Echo and Google Home device to control a light, illustrating the voice control capability of the smart switch. Text bubbles show example commands like "Alexa, open the light!" and the response "OK".

To enable voice control:

1. Ensure your smart switch is successfully paired with the eWelink APP.
2. Link your eWelink account to your Amazon Alexa or Google Home app.
3. Discover devices within your Alexa or Google Home app.
4. Use voice commands such as:
 - "Alexa, turn on [Device Name]"
 - "Hey Google, turn off [Device Name]"

7.3 RM2.4G Bluetooth Remote Control (Optional)

If you have purchased an RM2.4G Bluetooth remote control, you can pair it with the AC-2CH module for local control. Follow the instructions provided with your remote control and the eWelink APP to add and configure it.

8. WIRING DIAGRAMS

Always ensure power is disconnected before performing any wiring. These diagrams illustrate

common wiring configurations. If you are unsure, consult a qualified electrician.



08:00
open the lights

22:00
close the lights

Timing
16:20 on (once)

Schedule
16:20 on (everyday)

Countdown
00:20 Later off

Set the schedule through the APP to automatically open and close the lights. Never worry about forgetting to turn off again.

Image: A comprehensive diagram showing various wiring configurations for the DieseRC AC-2CH module. This includes direct AC 90V-250V load control, controlling an AC motor (e.g., for up/down movement), and controlling a DC motor, with options for USB Type-C 5V-0.5A power input.

8.1 AC 90V-250V Load Wiring

Connect the AC 90V-250V power supply to the L and N terminals of the module. For the load (e.g., a light), connect one side to the live wire (L) of the power supply and the other side to the NO (Normally Open) terminal of a relay channel. Connect the COM (Common) terminal of that relay channel to the neutral wire (N) of the power supply. This configuration allows the module to switch the AC power to your load.

8.2 AC Motor Control (e.g., Garage Door)

For controlling an AC motor that requires forward/reverse (e.g., up/down), you will typically use both relay channels. Connect the AC power to the L and N terminals of the module. For the motor, connect the 'Up' control wire to NO1 and the 'Down' control wire to NO2. Connect COM1 and COM2 to the common wire of the motor's control circuit. Ensure the motor's power supply is correctly integrated with the relay outputs.

8.3 DC Motor Control

For controlling a DC motor, power the module via its L/N terminals or the USB Type-C 5V-0.5A input. Connect the DC power supply (V+ and V-) to the COM terminals of the relays. Connect the motor's control wires to the NO terminals. For example, connect the motor's positive lead to NO1

and negative lead to NO2, with COM1 and COM2 connected to the respective DC power rails. This setup allows the relays to switch the DC power to the motor.

9. MAINTENANCE

The DieseRC AC-2CH Smart Switch requires minimal maintenance.

- Keep the device in a dry environment, away from moisture and extreme temperatures.
- Clean the exterior with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- Ensure proper ventilation if installed in an enclosed space.
- Regularly check wiring connections for security, especially after initial installation.

10. TROUBLESHOOTING

- **Device not pairing:**
 - Ensure your phone is connected to a 2.4GHz Wi-Fi network. 5GHz networks are not supported.
 - Verify Bluetooth is enabled on your phone.
 - Confirm the device is in pairing mode (blue LED blinking quickly then solid). If not, re-initiate pairing mode by long-pressing the button.
 - Move the device closer to your Wi-Fi router during pairing.
- **Device offline in APP:**
 - Check your Wi-Fi router's internet connection.
 - Ensure the device is powered on.
 - Restart the device by disconnecting and reconnecting power.
 - If the issue persists, try re-pairing the device with the eWelink APP.
- **Voice control not working:**
 - Verify the eWelink account is correctly linked to your Alexa or Google Home app.
 - Ensure the device name used in voice commands matches the name in the eWelink app and smart assistant app.
 - Try rediscovering devices in your Alexa or Google Home app.
- **Relay not switching:**
 - Check all wiring connections for security and correctness according to the diagrams.
 - Ensure the load's power requirements do not exceed the 10A relay maximum current.
 - Verify the module itself is powered on and connected to Wi-Fi.

For further assistance, please contact DieseRC customer support.

11. WARRANTY AND SUPPORT







This DieseRC product is covered by a standard manufacturer's warranty. Please refer to the warranty information provided at the time of purchase for specific terms and conditions.

For technical support, troubleshooting assistance, or warranty claims, please contact DieseRC

customer service through the retailer where you purchased the product or visit the official DieseRC website for contact information.

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Related Documents - AC-2CH

	<p>DieseRC Relay Remote Control Switch Type 2201 - User Manual</p> <p>Comprehensive user manual for the DieseRC Type 2201 Relay Remote Control Switch, detailing technical specifications, wiring diagrams, operating modes (Momentary, Toggle, Latched), programming instructions, troubleshooting, and contact information.</p>
	<p>DieseRC Wireless Light Switch Installation and Wiring Diagram</p> <p>Detailed wiring diagram and installation guide for the DieseRC Wireless Light Switch with a 10 Amp Relay receiver. Includes specifications, pairing instructions, troubleshooting, and customer service information.</p>
	<p>DieseRC 1204 Relay Remote Control Switch Manual</p> <p>User manual for the DieseRC 1204 Relay Remote Control Switch, detailing product information, wiring diagrams, operating modes (momentary, toggle, latched), programming instructions, and troubleshooting.</p>
	<p>DieseRC 2202 Relay Remote Control Switch - Product Manual</p> <p>This product manual provides detailed information for the DieseRC 2202 Relay Remote Control Switch. It covers technical specifications, operating modes (Momentary, Toggle, Latched), programming instructions, troubleshooting tips, and customer support contact details from Huizhou Wenqiao Electronic Technology Co., Ltd.</p>
	<p>DieseRC 2202G Relay Remote Control Switch Product Manual</p> <p>Comprehensive product manual for the DieseRC 2202G Relay Remote Control Switch. Details technical specifications, operating modes (momentary, toggle, latched), programming instructions, wiring diagrams, troubleshooting, and customer support information for this 433MHz RF wireless relay.</p>
	<p>DieseRC 2201H Relay Remote Control Switch Manual</p> <p>User manual for the DieseRC 2201H Relay Remote Control Switch, detailing product information, wiring diagrams, operating modes (Momentary, Toggle, Latched), programming instructions, troubleshooting, and customer service contact information.</p>