

DieseRC 1 Receiver with 1 Transmitter Kit

DieseRC Smart Wireless Roller Shutter Controller Module User Manual

Model: 1 Receiver with 1 Transmitter Kit

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your DieseRC Smart Wireless Roller Shutter Controller Module. Please read this manual carefully before installation and use to ensure proper function and safety.

2. PRODUCT OVERVIEW

The DieseRC Smart Wireless Roller Shutter Controller Module is designed to upgrade traditional roller shutter switches, allowing for smart control via a mobile application, RF remote control, and voice commands. It integrates Wi-Fi and RF 433Mhz technologies for versatile control options.

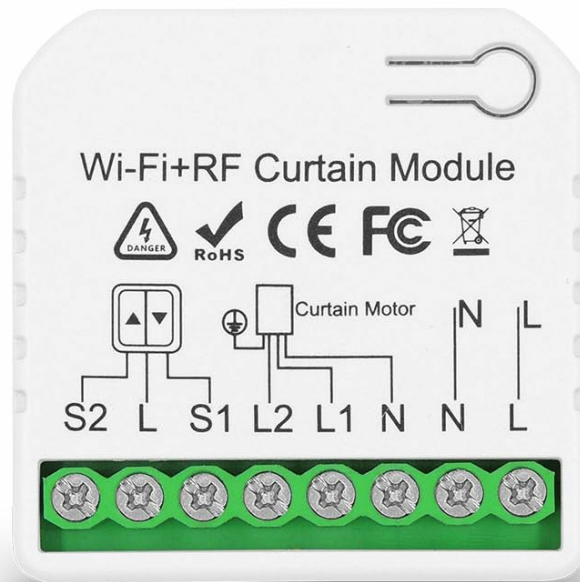


Image: DieseRC Smart Wireless Roller Shutter Controller Module, showing the compact design of the receiver and the included RF remote control.

3. KEY FEATURES

- **Multiple Control Methods:** Supports control via mobile application (Tuya/Smart Life), 433Mhz RF remote control, and traditional manual wall switch.
- **Smart APP Control:** Compatible with "Tuya" and "Smart Life" applications for unlimited wireless control via 2.4GHz Wi-Fi network from Android and iOS devices.
- **Voice Control Integration:** Works with Amazon Alexa (Echo/Dot/Spot) and Google Home for convenient voice commands.
- **RF Wireless Control:** Features a 433Mhz RF remote control with stable performance and high reception sensitivity. Offers a control range of 30-50 meters in open areas, with signal penetration through walls and floors.
- **Compact Design:** Module dimensions of 45x45x16 mm allow for easy concealment within most electrical boxes or junction boxes.

- **Percentage Control & Timer Function:** The mobile application allows for precise percentage control of shutter opening/closing and programmable timer functions.
- **Wide Application:** Suitable for controlling various AC motors, including roller blinds, electric curtains, awnings, and garage doors. Compatible with 4-wire AC motors (2 input phase wires, 1 neutral wire, 1 ground wire).
- **Durable Components:** Equipped with a high-quality relay designed for over 400,000 operations, supporting a 10A current and a maximum inductive load of approximately 5A.
- **Broad Voltage Compatibility:** Receiver operates on AC 100V~240V.
- **High-Quality Remote:** The RF remote transmitter is designed for over 500,000 clicks, is removable from its base, and includes a replaceable 27A 12V battery with an approximate 3-year lifespan.

4. PACKAGE CONTENTS

The standard package includes:

- 1 x DieseRC Smart Wireless Roller Shutter Controller Module (Receiver)
- 1 x RF Remote Control Transmitter
- 1 x Remote Control Base (for wall mounting)
- Mounting Screws / Double-sided Adhesive for remote base
- 1 x 27A 12V Battery (pre-installed in remote)
- User Manual (this document)

5. SPECIFICATIONS

Parameter	Value
Brand	DieseRC
Model Number	1 Receiver with 1 Transmitter Kit
Product Dimensions	4.5 x 4.5 x 1.6 cm
Product Weight	120 g
Operating Voltage	AC 100V~240V
Rated Current	10 Amperes
Max Inductive Load	~5 Amperes
Electrical Power	Up to 3520 Watts (depending on voltage)
Wireless Connectivity	Wi-Fi 2.4GHz, RF 433Mhz
RF Control Range	30-50 meters (open area)
APP Compatibility	Tuya Smart, Smart Life
Voice Assistant Compatibility	Amazon Alexa, Google Home
Motor Compatibility	4-wire AC motors (2 phase, 1 neutral, 1 ground)
Remote Battery	1 x 27A 12V Alkaline (included)

Parameter	Value
Material	Plastic
Country of Origin	China

6. SAFETY INFORMATION

Please observe the following safety precautions:

- Installation should only be performed by a qualified electrician or in accordance with local electrical codes.
- Ensure power is disconnected at the circuit breaker before performing any wiring.
- Do not exceed the maximum load ratings of the module (10A, ~5A inductive, 3520W).
- This device is designed for indoor use only. Avoid exposure to moisture or extreme temperatures.
- Keep the device out of reach of children.
- Ensure proper grounding for the AC motor as specified.

7. SETUP AND INSTALLATION

7.1 Wiring Diagram

The module is compatible with 4-wire AC motors. Ensure your motor has two phase wires (for up/down), one neutral wire, and one ground wire. The module can be installed with or without an existing manual panel switch.

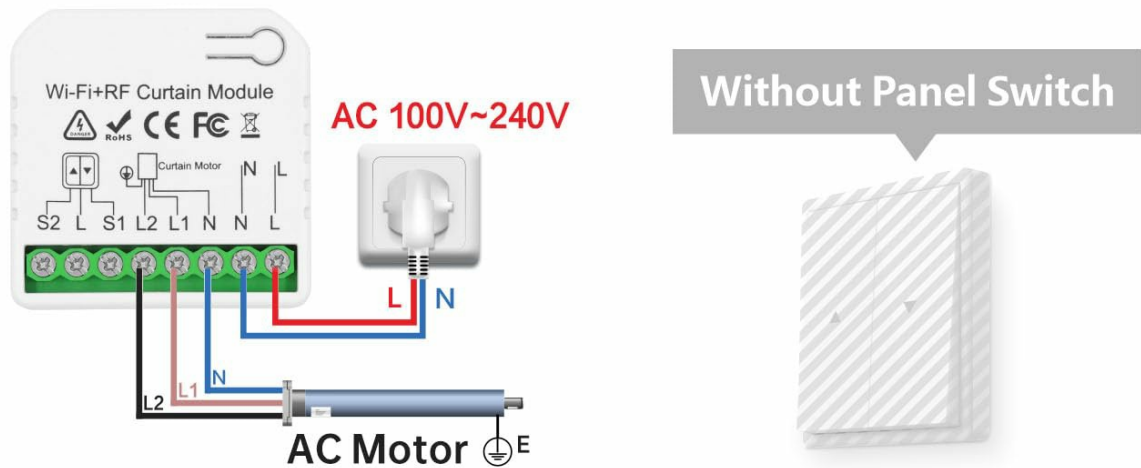
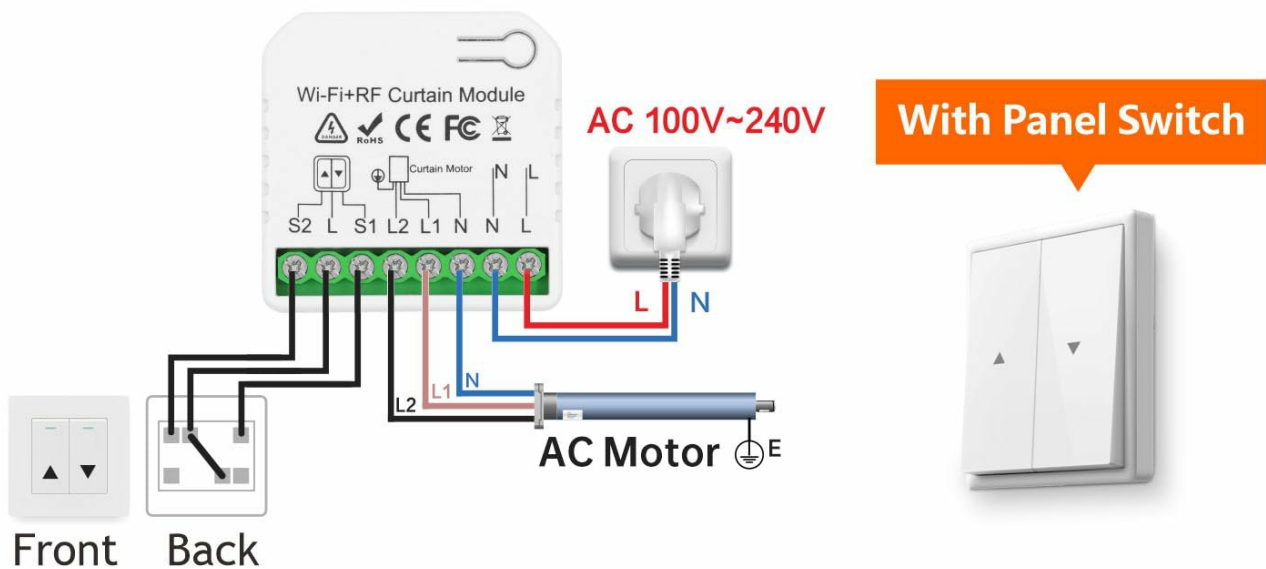


Image: Detailed wiring diagrams showing connections for the controller module with an existing panel switch (left) and without a panel switch (right). The diagrams illustrate connections for AC 100V-240V power, the AC motor, and the module's terminals (L, N, L1, L2, S1, S2, Earth).

Wiring Steps:

1. **Disconnect Power:** Turn off the main power supply at the circuit breaker before starting any wiring.
2. **Identify Wires:** Identify the Live (L), Neutral (N), and motor control wires (L1 for one direction, L2 for the other direction) from your existing setup. Also, identify the Ground (E) wire from your AC motor.
3. **Connect Power to Module:** Connect the Live (L) and Neutral (N) wires from your AC power supply to the corresponding 'L' and 'N' terminals on the module.
4. **Connect Motor to Module:** Connect the motor's L1 and L2 wires to the 'L1' and 'L2' terminals on the module. Connect the motor's Neutral (N) wire to the 'N' terminal on the module. Ensure the motor's Ground (E) wire is properly connected to the electrical system's ground.
5. **Connect Panel Switch (Optional):** If using a manual panel switch, connect its output wires to the 'S1' and 'S2' terminals on the module. Connect the Live (L) wire to the 'L' terminal of the panel switch.
6. **Secure Connections:** Ensure all wire connections are tight and secure.

7. **Restore Power:** Once all connections are verified, restore power at the circuit breaker.

7.2 APP Pairing (Tuya Smart / Smart Life)

To control the module via your smartphone, you need to pair it with the Tuya Smart or Smart Life application.



Image: QR code for downloading the Tuya Smart application. Scan this code to download the app.

Alternatively, download from [Tuya Smart official website](#).

1. **Download App:** Download and install the "Tuya Smart" or "Smart Life" app from your smartphone's app store or by scanning the QR code above.
2. **Register/Login:** Open the app and register a new account or log in with an existing one.
3. **Add Device:** Tap the "+" icon in the top right corner of the app to add a new device.
4. **Select Device Type:** Choose "Curtain Switch" or "Curtain Module" from the device list.
5. **Enter Wi-Fi Details:** Ensure your phone is connected to a 2.4GHz Wi-Fi network. Enter your Wi-Fi password in the app.
6. **Enable Pairing Mode:** Power on the module. The Wi-Fi indicator light on the module should blink rapidly. If not, press and hold the learning button on the module for 5-10 seconds until it blinks rapidly.
7. **Confirm Blinking:** In the app, confirm that the indicator light is blinking rapidly and proceed.
8. **Pairing:** The app will start searching for the device. Once found, add it to your account.
9. **Rename Device:** You can rename the device for easier identification (e.g., "Living Room Blinds").

7.3 RF Remote Control Pairing

The RF remote control is typically pre-paired at the factory. If re-pairing is needed or you have additional remotes, follow these steps:

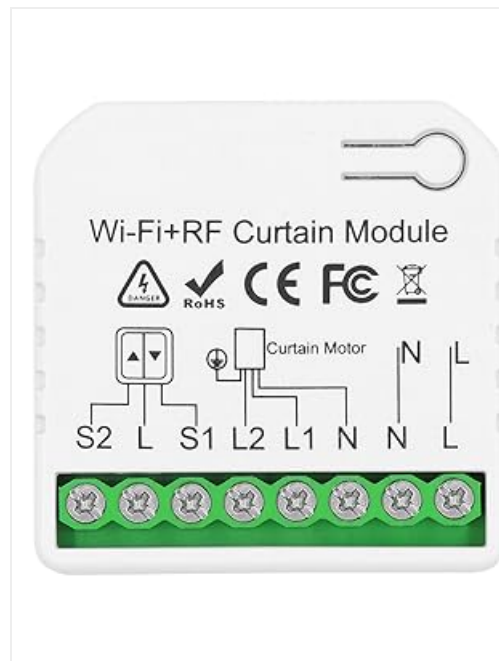


Image: Step-by-step visual guide on how to pair the 433Mhz RF remote control with the receiver module. It shows pressing the learning button on the receiver once, then pressing a button on the remote control.

1. **Enter Pairing Mode:** Press the learning button on the receiver module **1 time**. Wait for 3 seconds.
2. **Press Remote Button:** Press any button (e.g., "Up" or "Down") on the RF remote control **1 time**. Wait for 3 seconds.
3. **Confirmation:** The module will indicate successful pairing (e.g., a beep or light flash).

7.4 Clearing RF Signals

To clear all paired RF remote controls from the module:



Image: Visual guide on how to clear all paired 433Mhz RF remote control signals from the receiver module. It shows pressing the learning button on the receiver 8 times.

1. **Clear Signals:** Press the learning button on the receiver module **8 times**.
2. **Confirmation:** The module will indicate that the data has been cleared successfully (e.g., a series of beeps or light flashes). After this, the previously paired transmitters will no longer work.

8. OPERATION

8.1 APP Control (Tuya Smart / Smart Life)

Once paired, you can control your roller shutter from anywhere using the app.



APP Control

Control your devices anytime, anywhere with "Tuya" APP or "Smartlife" APP.



Image: A smartphone screen showing the Tuya Smart app interface for controlling a roller shutter, with "Open", "Paused", and "Close" options, and a slider for percentage control.

- **Open/Close:** Tap the "Open" or "Close" buttons in the app to fully open or close the shutter.
- **Pause:** Tap the "Pause" button to stop the shutter at any desired position.
- **Percentage Control:** Use the slider in the app to set the shutter to a specific opening percentage (e.g., 50% open).
- **Timer Function:** Set schedules for automatic opening and closing at specific times.
- **Scene Creation:** Create smart scenes to automate actions based on conditions (e.g., open at sunrise, close at sunset).
- **Share Control:** Share device control with family members through the app.

8.2 RF Remote Control

Use the provided RF remote control for direct, local control of your roller shutter.



RF Wireless Control

- Achieve about 30~50 meters control distance .
- The remote control is removable from its base.
- Easy to use. Suitable for the elderly and children.

Image: A hand holding the RF remote control, with buttons for up, down, and stop functions. The image also illustrates the 50-meter control distance capability.

- **Up Button:** Press to open the roller shutter.
- **Down Button:** Press to close the roller shutter.
- **Stop/Pause Button:** Press to stop the roller shutter at its current position.
- The remote control base can be mounted on a wall using the included adhesive or screws for easy access.

8.3 Voice Control (Alexa / Google Home)

Integrate the module with Amazon Alexa or Google Home for hands-free voice control.

Voice Control

Compatible with Alexa/GoogleAssistant.



Google
Assistant

Alexa

Tmall Genie

IFTTT



Image: An illustration showing Amazon Echo and Google Home devices, with a speech bubble indicating a voice command "Alexa, open the curtains!". This demonstrates the voice control capability of the module.

1. **Link Account:** In your Alexa or Google Home app, enable the "Tuya Smart" or "Smart Life" skill/service and link your account.
2. **Discover Devices:** Ask your voice assistant to "Discover devices" or manually initiate device discovery in the app.
3. **Voice Commands:** Use commands such as:
 - "Alexa, open [Device Name]"
 - "Hey Google, close [Device Name]"
 - "Alexa, set [Device Name] to 50%" (for percentage control)
 - "Hey Google, stop [Device Name]"

8.4 Manual Switch Control

If connected to a traditional manual wall switch, you can continue to operate the roller shutter directly from the wall switch.

- Press the "Up" button on the wall switch to open the shutter.
- Press the "Down" button on the wall switch to close the shutter.
- Press the "Stop" button (if available) or press the opposite direction button briefly to stop the shutter.

9. MAINTENANCE

- **Cleaning:** Wipe the module and remote control with a soft, dry cloth. Do not use liquid cleaners or aerosols.
- **Battery Replacement:** The RF remote control uses a 27A 12V battery. If the remote's range or responsiveness decreases, replace the battery. To replace, carefully open the remote casing, remove the old battery, and insert a new one with correct polarity.
- **Firmware Updates:** Periodically check the Tuya Smart or Smart Life app for available firmware updates for the module. Updates can improve performance and add new features.

10. TROUBLESHOOTING

Problem	Possible Cause	Solution
Module not responding to APP.	No Wi-Fi connection, incorrect Wi-Fi password, module not paired, 2.4GHz/5GHz Wi-Fi conflict.	<ul style="list-style-type: none"> ◦ Ensure your router is broadcasting a 2.4GHz Wi-Fi signal. ◦ Check Wi-Fi signal strength at the module's location. ◦ Re-pair the module with the app (see Section 7.2). ◦ Verify correct Wi-Fi password.
Module not responding to RF remote.	Remote battery low/dead, remote not paired, out of range.	<ul style="list-style-type: none"> ◦ Replace the remote control battery. ◦ Re-pair the remote control with the module (see Section 7.3). ◦ Ensure you are within the 30-50 meter operating range.
Roller shutter does not move or moves incorrectly.	Incorrect wiring, motor issue, module malfunction.	<ul style="list-style-type: none"> ◦ Double-check all wiring connections according to Section 7.1. ◦ Ensure the motor is a compatible 4-wire AC motor. ◦ Verify power supply to the module and motor. ◦ If the motor overheats during calibration, allow it to cool down before retrying.

Problem	Possible Cause	Solution
Voice control not working.	Alexa/Google Home account not linked, device not discovered, incorrect commands.	<ul style="list-style-type: none">◦ Ensure your Tuya/Smart Life account is correctly linked in the Alexa/Google Home app.◦ Ask your voice assistant to "Discover devices" again.◦ Use the exact device name configured in the app.◦ Check your internet connection.

11. WARRANTY AND SUPPORT

DieseRC products are manufactured with high-quality standards. For warranty information and technical support, please refer to the seller's policy on the platform where you purchased the product or contact DieseRC customer service directly. Please retain your proof of purchase for warranty claims.

For further assistance, you may visit the DieseRC brand store on Amazon:[DieseRC Store](#)

