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› DieseRC 2 Channels Wireless Relay Remote Control Switch User Manual

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Brand: DieseRC | Model: 2-Channel Wireless Relay Remote Control Switch (ASIN: B09VXPCF2C)

PRODUCT OVERVIEW

The DieseRC 2-Channel Wireless Relay Remote Control Switch is designed for convenient and efficient remote control of various electrical devices. It features stable performance, high reception sensitivity, and a strong signal capable of passing through walls and doors, with an effective range of up to 50 meters without obstacles. This product is ideal for a wide range of applications, offering flexibility and ease of use.



Figure 1: The DieseRC 2-Channel Wireless Relay Remote Control Switch and its two included keyfob transmitters.

KEY FEATURES

- **Excellent Design:** 433Mhz RF wireless remote control switch with stable and reliable performance and high reception sensitivity ($> -105\text{dBm}$). Strong signal can pass walls, floors, doors. It can be controlled within 50 meters distance with no obstacle.
- **Easy to Use:** Extremely easy to set up and reset. Features 3 operating modes (momentary/toggle/latched mode) that can be easily chosen and set up based on your needs. Products are tested and pre-programmed in toggle mode.
- **More Flexibility:** This receiver contains two 10A independent relays, each with three terminals (normally open, common, normally closed) for independent remote control. It offers potential-free contacts (passive output, dry contacts). Each receiver can store about 20 transmitters, and one transmitter can control multiple receivers.
- **Quality Assurance:** High-quality relays designed for over 100,000 uses, ensuring long-lasting and stable

operation. The blue high-power terminal can withstand a current of 10A, providing good performance even with unstable current. The receiver supports 85V~240V voltage, making it flexible for 110V, 120V, 220V, and 240V applications.

- **Wide Application:** Suitable for use in homes, farms, factories, offices, laboratories, supermarkets, and more. Can remotely operate devices such as garage doors, electric doors, shutter doors, expansion doors, electric curtains, motors, lamps, lighting, ventilation devices, and for signal transmission.

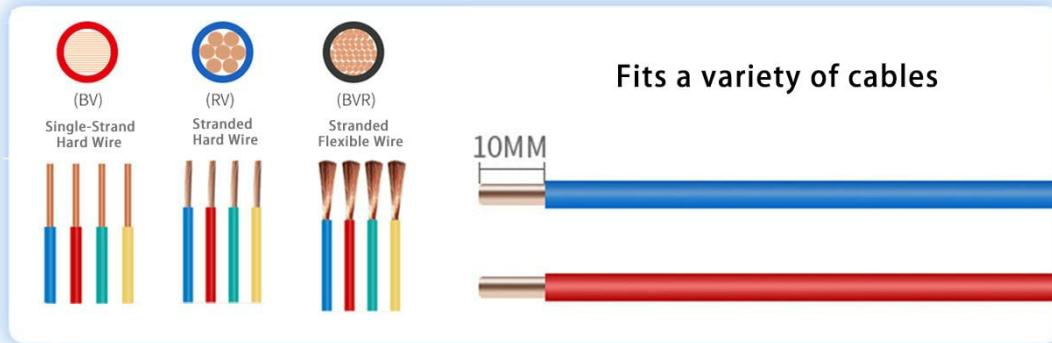
SETUP AND WIRING

Proper wiring is crucial for the safe and effective operation of your DieseRC Wireless Relay Remote Control Switch. Always ensure power is disconnected before performing any wiring.

Wiring Connections

The receiver features large screw terminals for easy installation and metal clips with a transparent flip cover for circuit adjustment. Each of the two 10A relays has three terminals: Normally Open (NO), Common (COM), and Normally Closed (NC).

Simple and convenient installation



REGULAR SCREW PORT

Big screw port easy to install.
Metal clips for easy wiring.
Transparent flip cover for easy circuit adjustment.



PASSIVE OUTPUT RELAY

2 channels relay receiver
Three pins for each relay
Potential-free contacts
Easy and flexible to use



Figure 2: Details of the screw terminals and passive output relay.

The device supports various cable types including single-strand hard wire (BV), stranded hard wire (RV), and stranded flexible wire (BVR).

Connection Diagrams

Refer to the following diagrams for common wiring configurations with AC and DC devices, including motors and lights.

Circuit Connection modes

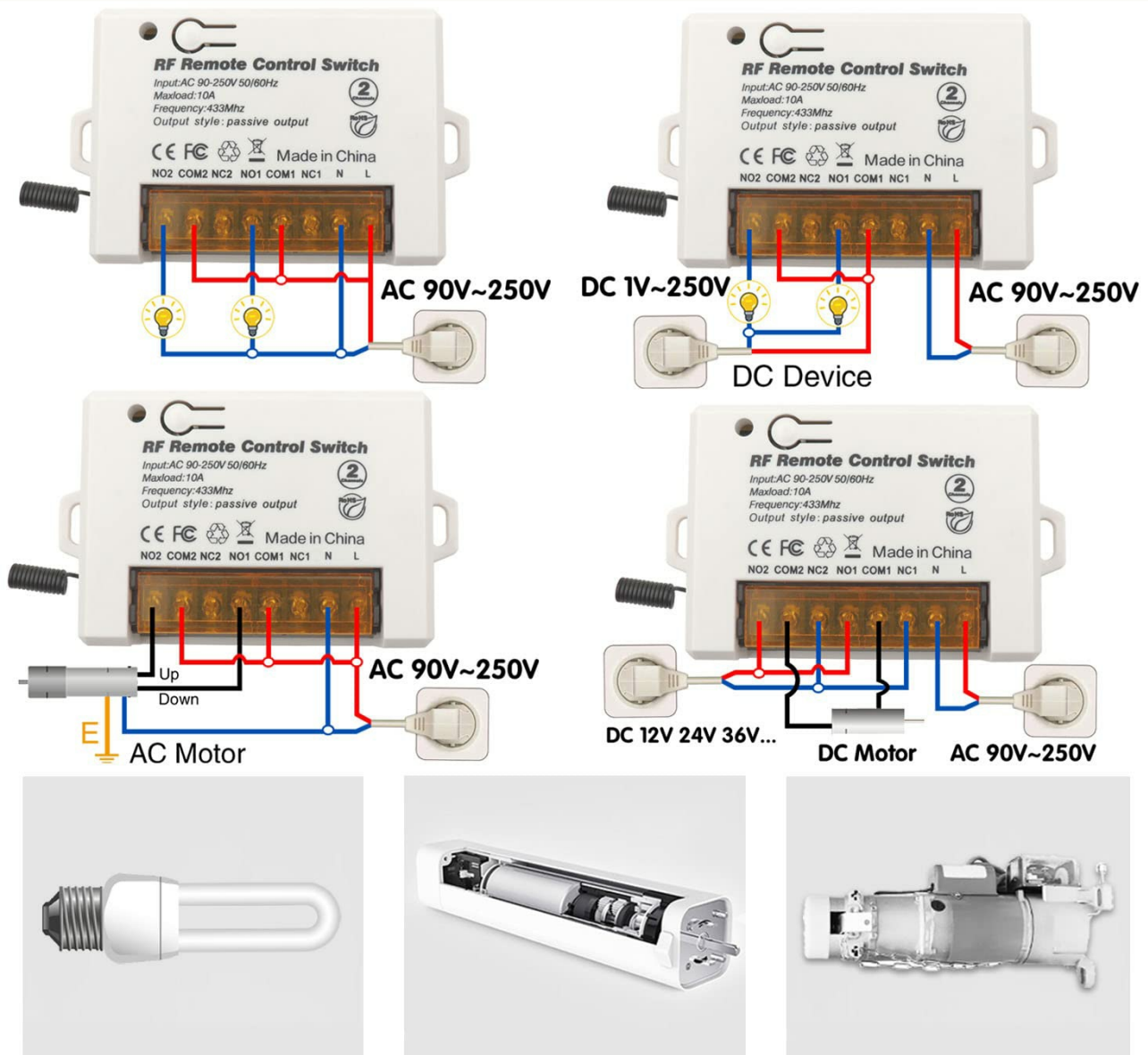


Figure 3: Examples of circuit connection modes for different applications.

For specific applications like garage doors, the relay can be integrated into existing systems.



Figure 4: Example of the relay switch used to control a garage door.

Wiring Demonstration Video

Watch this video for a visual guide on wiring the relay switch with different types of motors and a light bulb, and to see the device in operation.

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Video 1: Demonstration of wiring and operation for the DieseRC relay remote control switch with AC motors, DC motors, and lights.

OPERATING MODES

The DieseRC relay switch supports three distinct operating modes: Momentary, Toggle, and Latched. The product comes pre-programmed in Toggle mode, but you can easily switch between modes to suit your application.

Understanding the Modes

- **Momentary Mode:** The relay remains active only while the remote button is pressed. Releasing the button

deactivates the relay.

- **Toggle Mode:** Pressing the remote button once activates the relay. Pressing the same button again deactivates the relay.
- **Latched Mode:** Pressing button "A" activates Relay 1 and deactivates Relay 2 (if active). Pressing button "B" activates Relay 2 and deactivates Relay 1 (if active). This mode requires a remote control with at least 3 buttons.

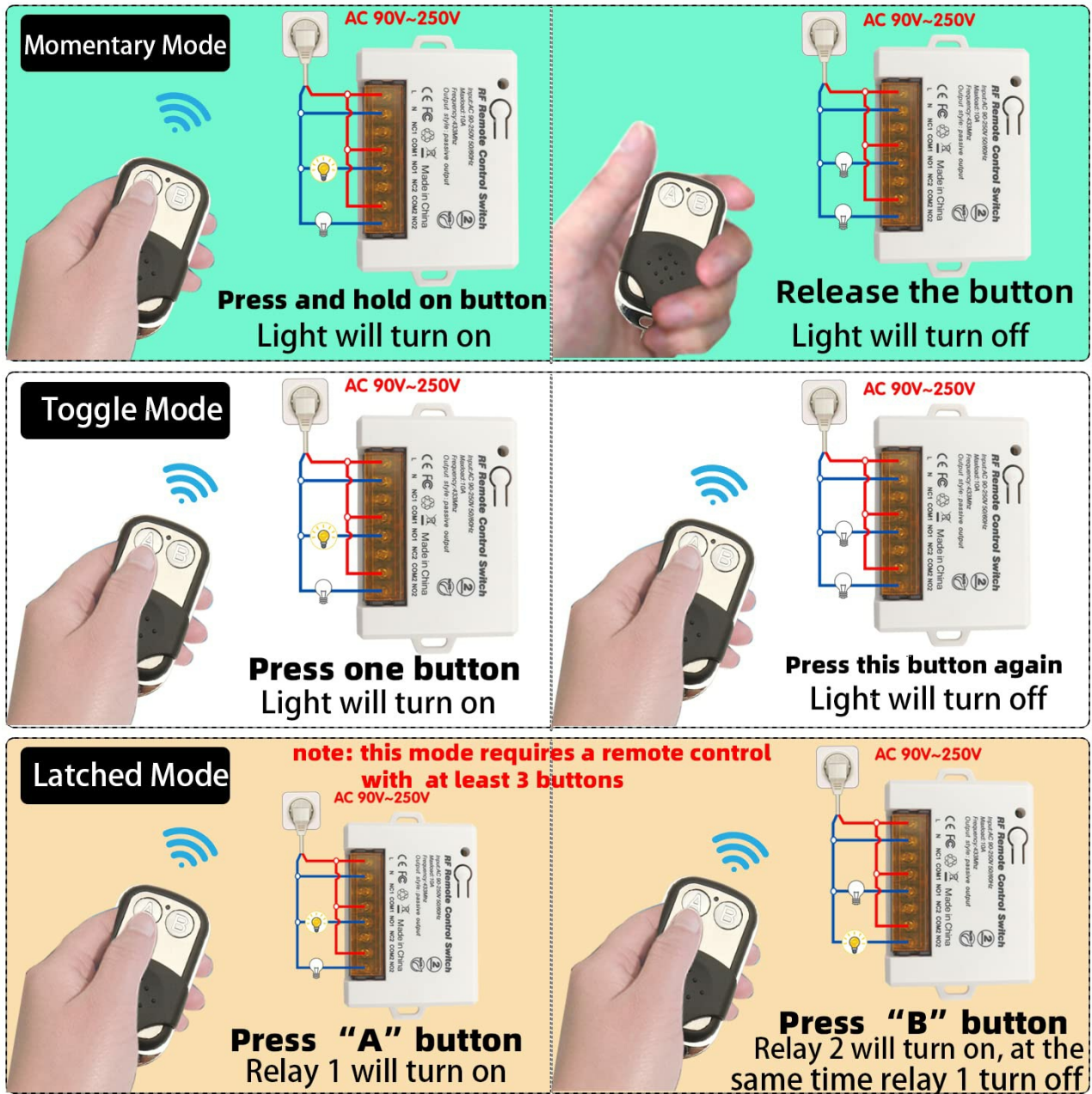


Figure 5: Visual representation of Momentary, Toggle, and Latched operating modes.

Setting Up the Signal (Learning Modes)

To change the operating mode or pair a new remote, follow these steps using the learning button on the receiver:

1. **Momentary Mode:** Press the learning button on the receiver **1 time**. Then, press button "A" on your remote control. Wait about 3 seconds. The pairing is successful.
2. **Toggle Mode:** Press the learning button on the receiver **2 times**. Then, press button "A" on your remote control. Wait about 3 seconds. The pairing is successful.
3. **Latched Mode:** Press the learning button on the receiver **3 times**. Then, press button "A" on your remote control. Wait about 3 seconds. The pairing is successful. (Note: This mode requires a remote control with at

least 3 buttons for full functionality).

How to get the signal --Set up

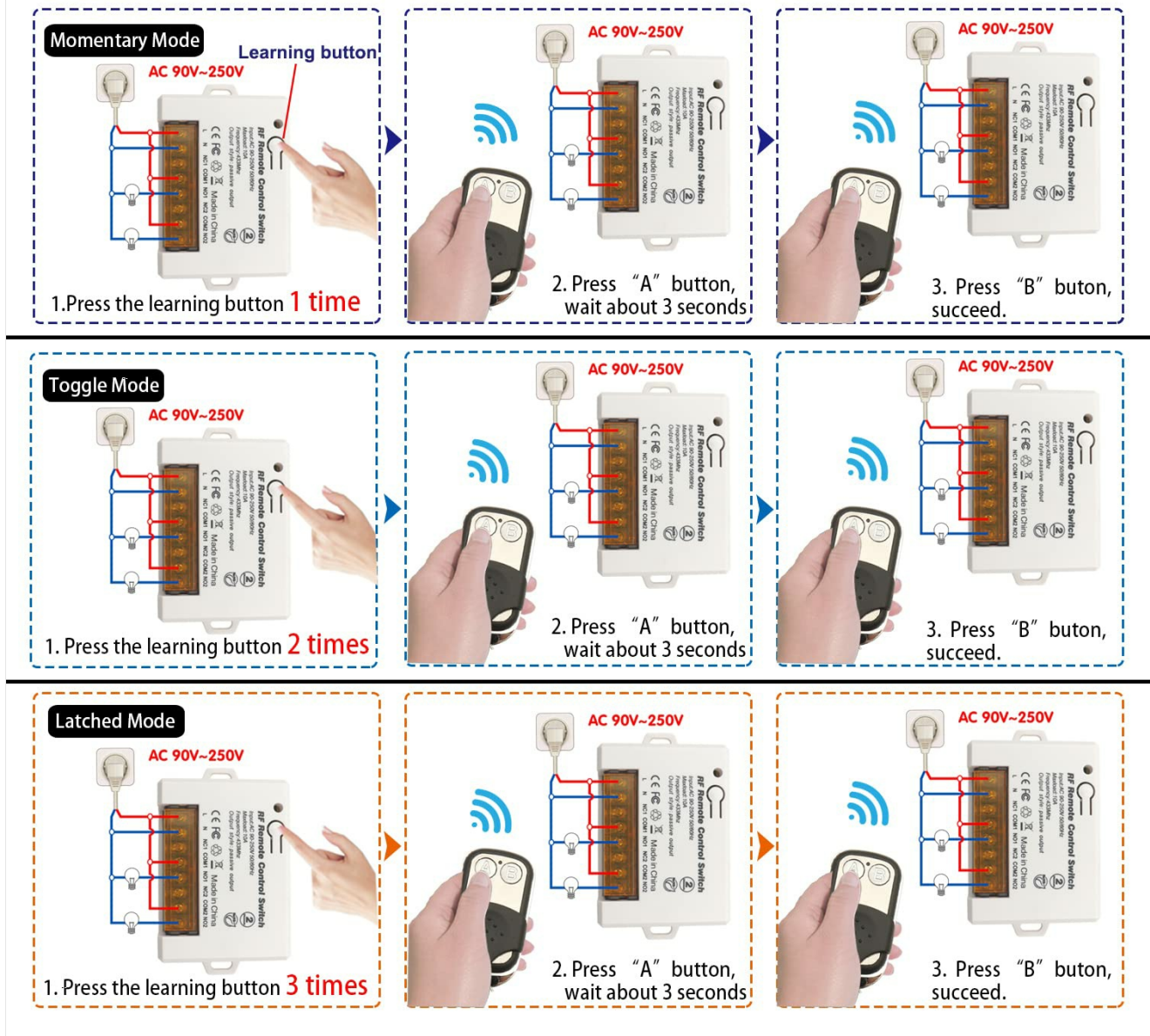


Figure 6: Instructions for programming the remote control to different operating modes.

MAINTENANCE

To ensure the longevity and optimal performance of your DieseRC Wireless Relay Remote Control Switch, follow these general maintenance guidelines:

- **Cleaning:** Regularly wipe the device with a dry, soft cloth to remove dust and debris. Avoid using harsh chemicals or abrasive cleaners.
- **Environment:** Store and operate the device in a dry environment, away from extreme temperatures, direct sunlight, and high humidity.
- **Connections:** Periodically check all wired connections to ensure they are secure and free from corrosion.
- **Remote Control:** Replace the battery in the remote control when its range decreases or it becomes unresponsive.

TROUBLESHOOTING

If you encounter issues with your DieseRC Wireless Relay Remote Control Switch, try the following troubleshooting steps:

- **Remote Not Responding:**

- Check if the remote control's battery needs replacement.
- Ensure the remote is within the effective operating range (up to 50 meters without obstacles).
- Verify that the receiver is powered on and correctly wired.
- Re-pair the remote control with the receiver following the "Setting Up the Signal" instructions above.

- **Unexpected Behavior / Incorrect Mode:**

- If the device is not responding as expected (e.g., staying on when it should turn off), it might be in the wrong operating mode or have corrupted programming.
- Perform a full reset of the receiver to clear all learned remote controls and modes.

Resetting the Device

To reset the receiver and clear all paired remote controls, press the learning button on the receiver **8 times**. After the reset, the remote control will no longer work until it is re-paired using the "Setting Up the Signal" instructions for your desired mode.



Figure 7: Instructions for resetting the device by pressing the learning button 8 times.

SPECIFICATIONS

Feature	Value
Input Voltage	AC 85V~240V (suitable for 110V, 120V, 220V, 240V)
Frequency	433Mhz RF
Max Load Current	10 Amps
Output Style	Passive Output (Dry Contacts)
Reception Sensitivity	> -105dBm
Control Distance	Up to 50 meters (no obstacle)

Feature	Value
Relay Life	Over 100,000 times
Number of Relays	2 (independent)
Contact Type	Form A/Form C (NO, COM, NC for each relay)
Connector Type	Screw Terminal
Contact Material	Copper
Mounting Type	Surface Mount
Package Dimensions	4.09 x 3.62 x 1.54 inches
Weight	5.61 ounces
Manufacturer	DieseRC
First Available Date	June 16, 2022

WARRANTY AND SUPPORT

DieseRC is committed to providing high-quality products and excellent after-sales service. Our products are designed for reliability and durability, with relays tested for over 100,000 uses.

For any questions, technical assistance, or support needs, please contact us directly. We are dedicated to helping customers with remote control solutions and resolving any issues you may encounter.

Manufacturer/Importer: Huizhou Wenqiao Electronic Technology Co., Ltd.

Service Email: dieseoelectronic@163.com

You can also refer to the official [User Manual \(PDF\)](#) for additional information.

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This manual is for informational purposes only. Specifications are subject to change without notice.