

Kaleinavi 03

Kaleinavi Smart 4-Channel Wireless Relay Remote Control Switch Receiver User Manual

Model: 03

1. PRODUCT OVERVIEW

The Kaleinavi Smart 4-Channel Wireless Relay Remote Control Switch Receiver is designed for versatile control applications. It features a wide voltage input range (DC 12V-36V) and utilizes 433MHz RF technology for stable and reliable wireless communication. The system includes a receiver module and a 4-button remote control, pre-paired for immediate use. Its compact size and high receiving sensitivity make it suitable for various industrial control and security systems.



Image 1: Kaleinavi 4-Channel Wireless Relay Receiver and Remote Control.

PC flame-retardant self extinguishing

Injection molding of PC+flame retardant material, with flame retardant self extinguishing characteristics



Image 2: Internal components of the Kaleinavi 4-Channel Wireless Relay Receiver, highlighting the output port, brand relays, DC power connector, learning button, and antenna interface.

2. PACKAGE CONTENTS

- 1 x Wireless Relay Receiver (with protective cover)
- 1 x Remote Control (with pre-installed battery)

3. SPECIFICATIONS

Feature	Specification
Working Voltage	DC 12V - 36V
Standby Current	< 10mA
Working Current	< 128mA
Working Temperature	-10°C to +60°C
Receiver Frequency	433.92MHz

Feature	Specification
Receiving Sensitivity	-105dB
Output State	Switching Value (Dry Contact Signal: NO, NC, COM)
Max Load (Resistive)	10A Relay, < 8A
Max Load (Inductive)	< 3A
Case Size	96 x 80 x 29mm
Encoding Type	Learning Code
Remote Distance	30-100m (open air, line of sight)
Material	PC flame-retardant self-extinguishing material

DC jack+Wiring terminal

Dual power input ports, flexible and convenient to use

Two input power modes

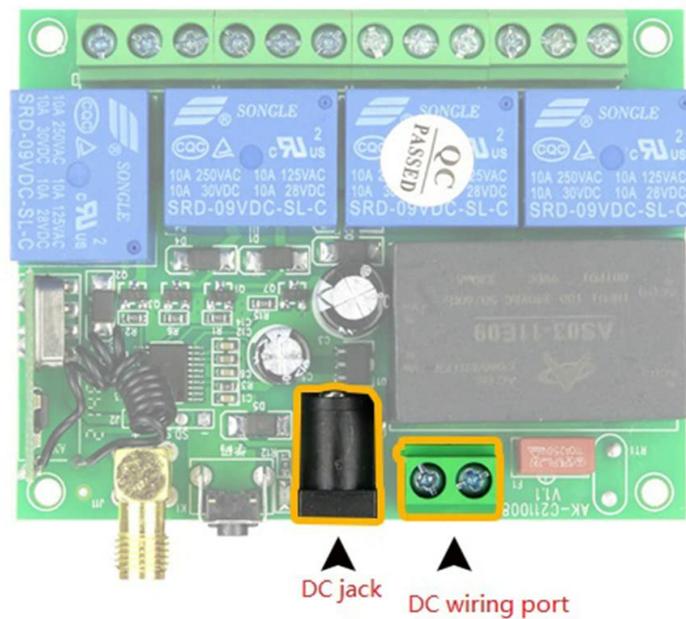


Image 3: The receiver casing is made from PC flame-retardant self-extinguishing material for enhanced safety.

4. SETUP AND WIRING

The receiver and remote control are pre-paired at the factory. Installation primarily involves connecting the

receiver to your power source and the device you wish to control. The receiver supports dual power input modes: a DC jack and a wiring terminal.

Control DC Output

Output with electric

WIRING DIAGRAM

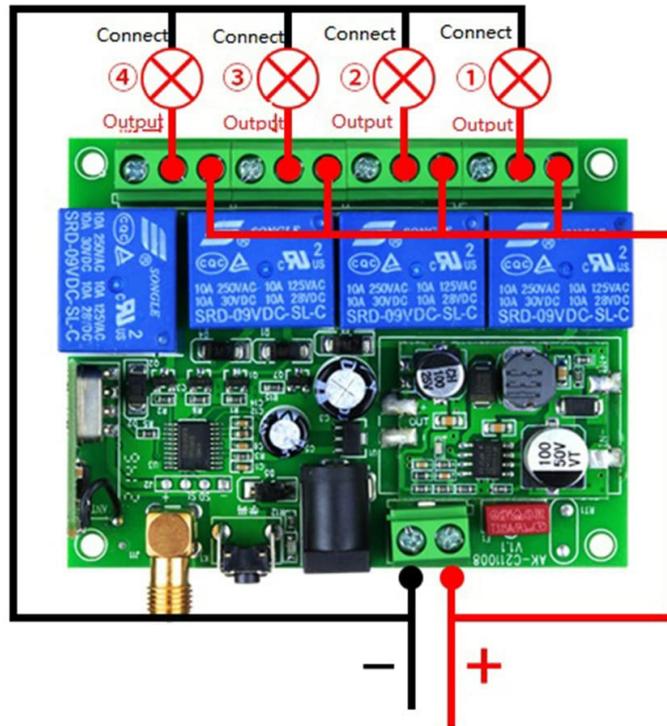


Image 4: The receiver offers two input power modes: a DC jack and a wiring port for flexible connection.

4.1 Wiring for DC Output Control

To control a DC load, connect the positive (+) and negative (-) terminals of your DC power supply to the corresponding input terminals on the receiver. Then, connect your DC load to the output terminals (NO, NC, COM) as shown in the diagram. The output is a dry contact signal.

Control AC Output

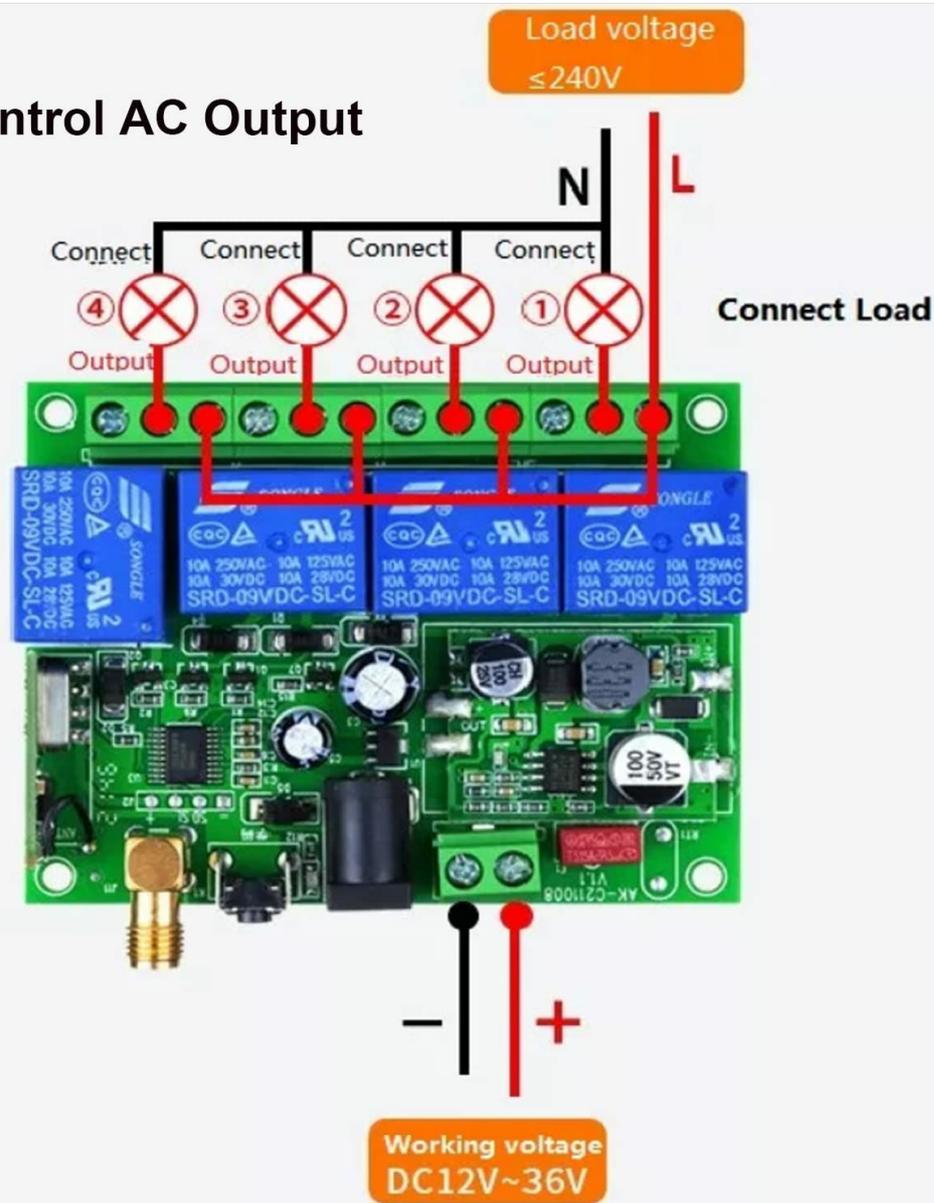


Image 5: Wiring diagram illustrating how to connect the receiver for controlling a DC output device.

4.2 Wiring for AC Output Control

For controlling an AC load, connect the DC 12V-36V working voltage to the receiver's input. Then, connect the AC load and AC power supply (L and N) to the output terminals (NO, NC, COM) of the receiver. Ensure the load voltage does not exceed 240V.

Wiring diagram for DC motor

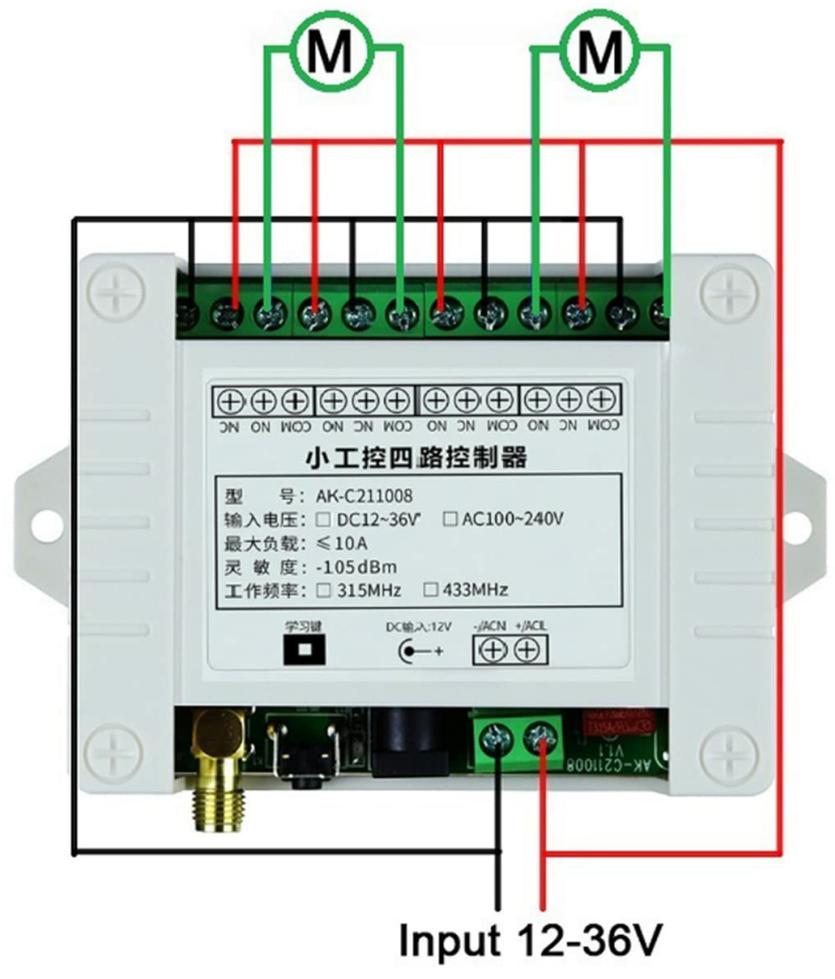


Image 6: Wiring diagram illustrating how to connect the receiver for controlling an AC output device.

4.3 Wiring for DC Motor Control

To control DC motors, connect the 12V-36V input to the receiver. Then, connect the DC motor(s) to the output terminals, utilizing the NO, NC, and COM connections to manage motor direction or on/off states.

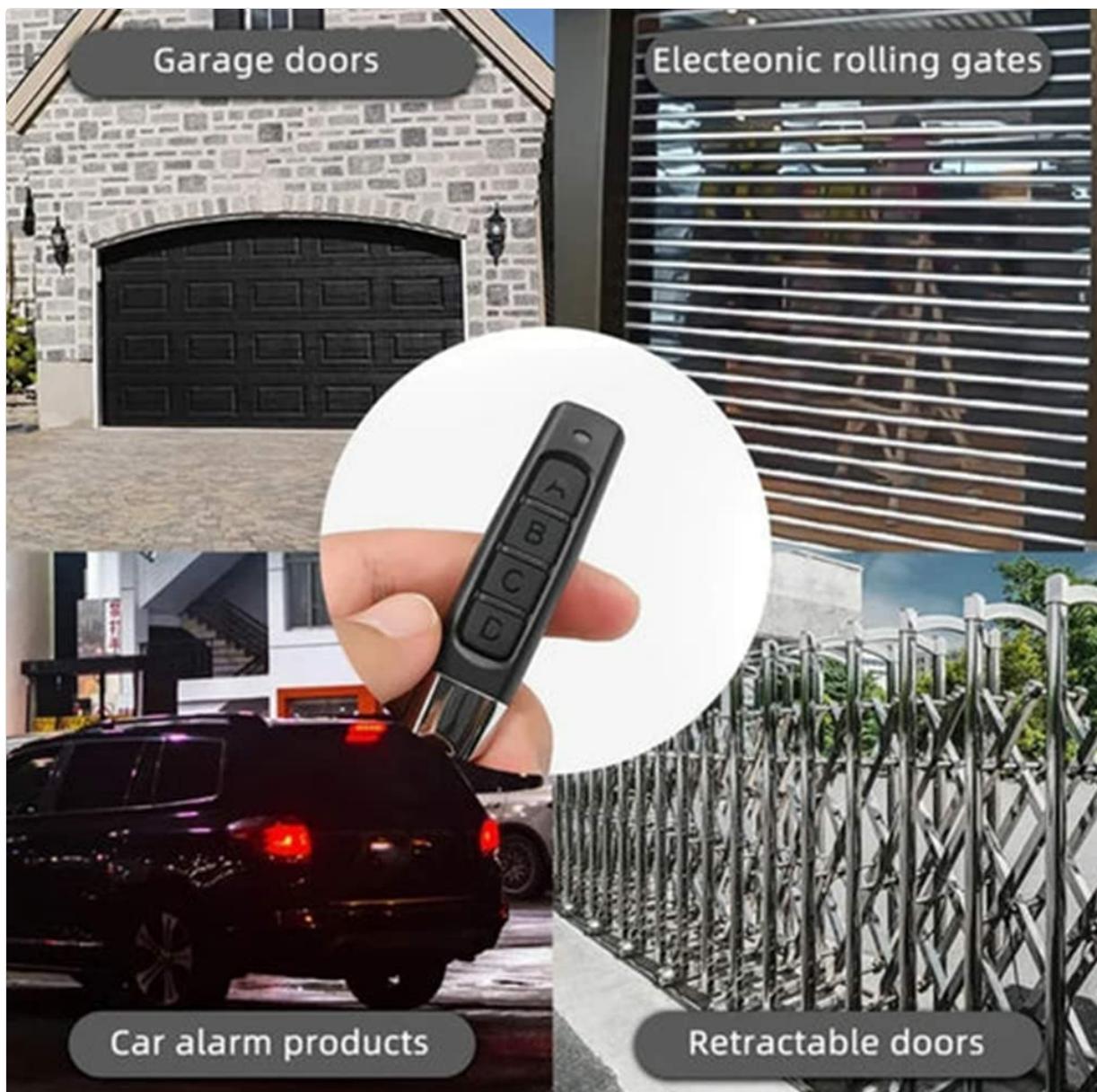


Image 7: Wiring diagram illustrating how to connect the receiver for controlling a DC motor.

5. OPERATING MODES

The receiver supports six different working modes, which can be set using the learning button. The remote control has four buttons (A, B, C, D).

5.1 Momentary Mode (Jog Mode)

- **Function:** Press and hold a remote button to turn the corresponding relay ON. Release the button to turn the relay OFF.
- **Setting:** Press the Learning Button on the receiver **1 time**.

5.2 Toggle Mode (Self-Locking Mode)

- **Function:** Press a remote button once to turn the corresponding relay ON. Press the same button again to turn the relay OFF.
- **Setting:** Press the Learning Button on the receiver **2 times**.

5.3 Latched Mode (Interlock Mode)

- **Function:** Press a remote button (e.g., A) to turn its corresponding relay ON and simultaneously turn

all other relays (B, C, D) OFF. Only one relay can be ON at a time.

- **Setting:** Press the Learning Button on the receiver **3 times**.

5.4 2-Channel Momentary + 2-Channel Latched Mode

- **Function:** Typically, two channels operate in Momentary mode, and the other two operate in Latched mode. Specific channel assignment depends on the receiver's internal configuration.
- **Setting:** Press the Learning Button on the receiver **4 times**.

5.5 2-Channel Momentary + 2-Channel Toggle Mode

- **Function:** Two channels operate in Momentary mode, and the other two operate in Toggle mode.
- **Setting:** Press the Learning Button on the receiver **5 times**.

5.6 2-Channel Toggle + 2-Channel Latched Mode

- **Function:** Two channels operate in Toggle mode, and the other two operate in Latched mode.
- **Setting:** Press the Learning Button on the receiver **6 times**.

6. LEARNING AND CLEARING METHOD

6.1 Learning a Remote Control

1. Determine the desired working mode (e.g., Momentary, Toggle, Latched).
2. Press the Learning Button on the receiver the corresponding number of times for your chosen mode (e.g., 1 time for Momentary, 2 times for Toggle, 3 times for Latched, etc.). The indicator light on the receiver will flash and then turn OFF.
3. Release your finger from the Learning Button.
4. Immediately press any button on the remote transmitter you wish to pair. The indicator light will flash three times, signifying successful learning.

You can pair multiple remote controls to one receiver. Multiple remotes can control the same receiver without interference due to digital coding.

6.2 Clearing Paired Remote Controls

To clear all paired remote controls from the receiver's memory:

- Press and hold the Learning Button on the receiver for approximately 8 seconds.
- The indicator light will flash several times and then turn OFF.
- After clearing, if you press a button on a previously paired remote, the relay will not respond, confirming that the code has been successfully cleared.

7. APPLICATIONS

This wireless relay system is highly versatile and can be used in various scenarios, including:

- Controlling lamps and lighting systems
- Operating electric doors and gates (e.g., garage doors, electronic rolling gates, retractable doors)
- Managing winches, motors, and lifters
- Integrating with car alarm products
- Converting wired door and window control systems to wireless
- General industrial control and security applications

8. TROUBLESHOOTING

- **Issue: Receiver does not respond to remote control.**

Solution: Ensure the remote control battery is functional. Verify that the remote is correctly paired to the receiver by following the 'Learning a Remote Control' steps. Check power supply to the receiver.

- **Issue: Receiver only operates in Momentary mode, cannot switch to Toggle or Latched.**

Solution: Ensure you are pressing the Learning Button the correct number of times for the desired mode (e.g., 2 times for Toggle, 3 times for Latched) before pressing the remote button. If issues persist, try clearing all codes and re-pairing.

- **Issue: Remote control range is shorter than expected.**

Solution: The stated range is for open-air, line-of-sight conditions. Obstacles such as walls, trees, and other structures can significantly reduce the effective range. Ensure the receiver's antenna is unobstructed and extended. Avoid placing the receiver near large metal objects or sources of electromagnetic interference.

- **Issue: Relay clicks but connected device does not operate.**

Solution: Verify the wiring connections to your device are correct (NO, NC, COM terminals). Ensure the load's current and voltage are within the receiver's maximum load specifications (10A relay, resistive load < 8A, inductive load < 3A).

9. MAINTENANCE

The Kaleinavi wireless relay system requires minimal maintenance. Keep the receiver and remote control clean and dry. Avoid exposing them to extreme temperatures, humidity, or corrosive environments. Replace the remote control battery as needed.

10. WARRANTY AND SUPPORT

This product comes with a 1-year warranty. If you encounter any issues or require technical assistance, please contact Kaleinavi customer support. Our team is available to provide guidance and resolve any concerns you may have.