QIACHIP KR2202

QIACHIP KR2202 2-Channel 433MHz Wireless RF Remote Control Relay Switch Instruction Manual

Brand: QIACHIP | Model: KR2202

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of the QIACHIP KR2202 2-Channel 433MHz Wireless RF Remote Control Relay Switch. This universal switch is designed for controlling various electrical devices such as garage door openers, LED lights, and motors, offering flexible functionality with adjustable working modes.

2. Safety Information

- Always disconnect power before installation or maintenance to prevent electric shock.
- Ensure all wiring connections are secure and correctly matched to the power source and load.
- Do not exceed the specified voltage and current ratings of the device.
- Keep the device away from water, moisture, and extreme temperatures.
- This device is intended for indoor use or in protected enclosures.

3. Package Contents

- 1 x KR2202 2-Channel Wireless RF Receiver Module
- 2 x 433MHz FCC ID Transmitters (Remote Controls)
- 1 x Receiver Case

Image: QIACHIP KR2202 receiver module, protective case, and four remote controls.

4. Product Specifications

Specification	Value
Brand	QIACHIP
Model	KR2202
Input Voltage	AC 85~220V
Frequency	433MHz
Channels	2-Channel
Max Remote Controllers	20
Transmission Distance	Up to 164ft/50m (no obstacle)
Relay Rating	10A (each relay)

Mounting Type	DIN Rail Mount

5. Setup and Wiring

The KR2202 receiver module supports various wiring configurations for different applications. Always ensure power is disconnected before making any wiring changes.

5.1 General Connection Modes

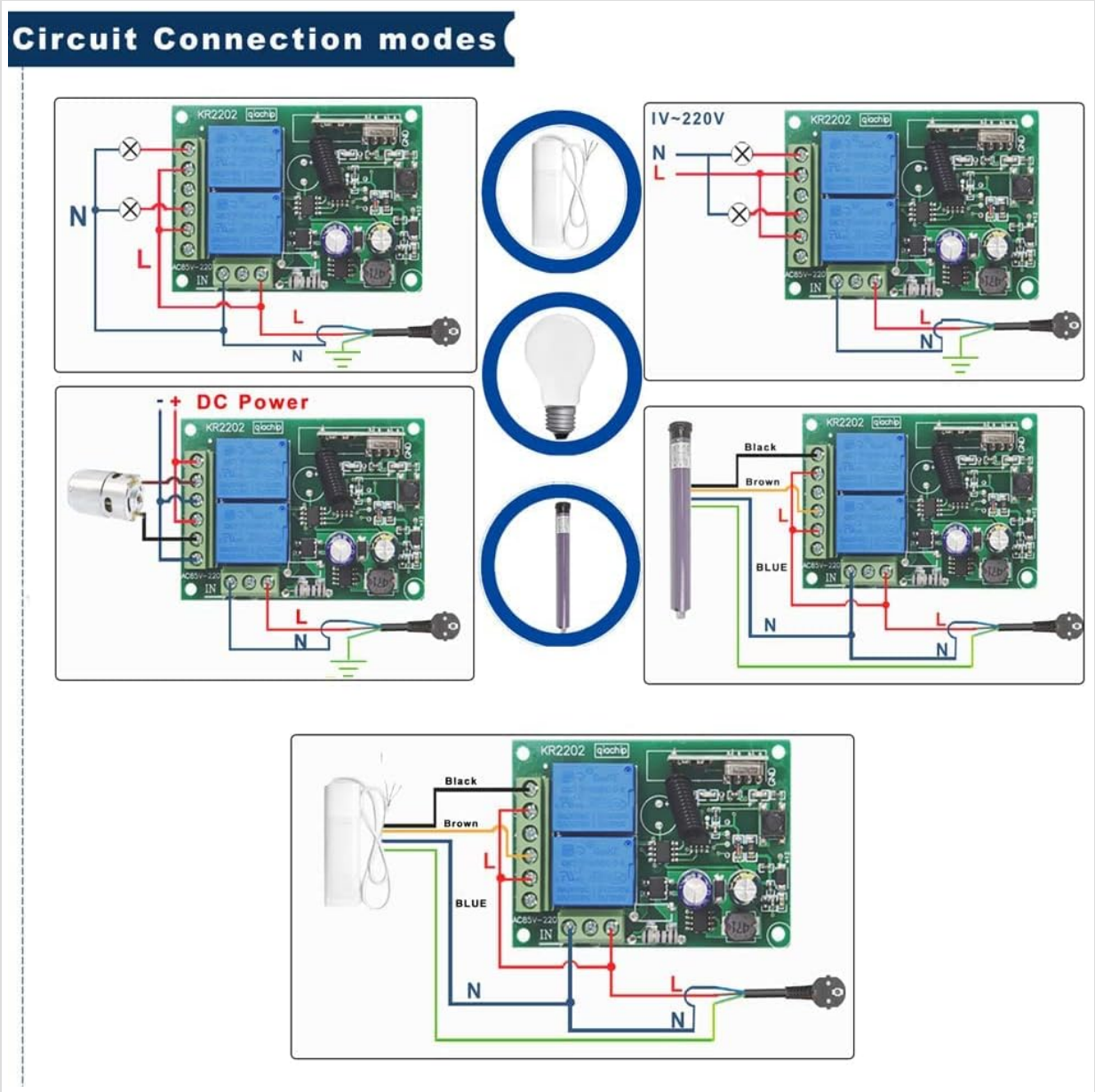


Image: Diagrams illustrating various circuit connection modes for the QIACHIP KR2202, including AC power, DC power, and different load types.

This diagram shows common wiring setups for AC and DC loads. Pay close attention to the Live (L) and Neutral (N) connections for AC power, and Positive (+) and Negative (-) for DC power. The relay outputs provide Normally Open (NO), Common (COM), and Normally Closed (NC) contacts for flexible control.

5.2 Wiring Diagram for Motors

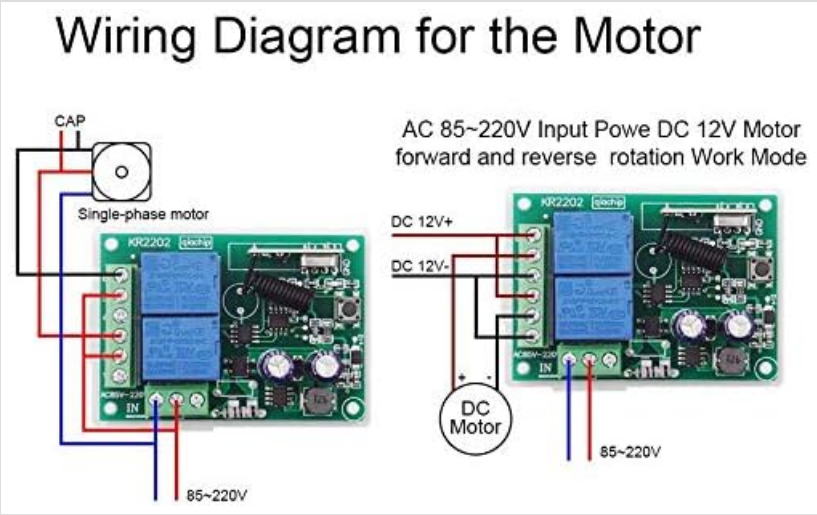


Image: Wiring diagram for connecting the KR2202 to a DC motor for forward and reverse rotation using AC 85-220V input.

For controlling a DC motor with forward and reverse rotation, connect the AC 85-220V input to the 'IN' terminals. The DC motor's two wires are connected to terminals 5 and 2. The positive pole of the external DC power supply connects to terminals 6 and 3, and the negative pole connects to terminals 1 and 4. The live wire of the 220V AC power supply connects to the L interface, and the neutral wire to the N interface, powering the controller.

5.3 Wiring Diagram for Lights

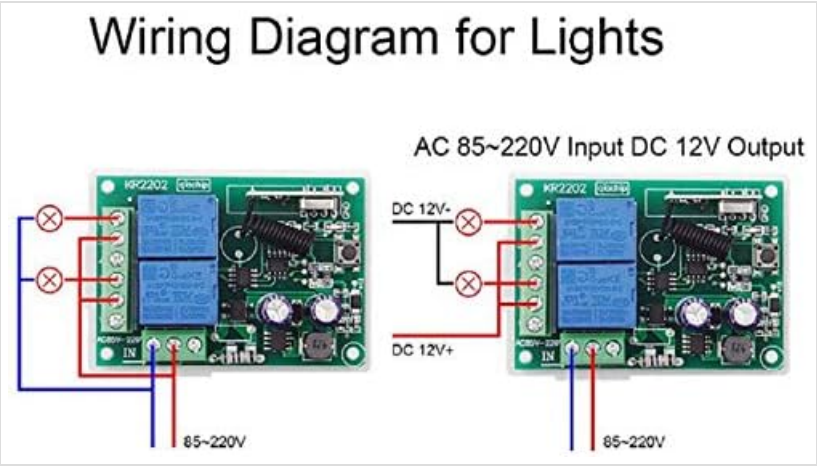


Image: Wiring diagram for connecting the KR2202 to DC lamps using AC 85-220V input.

To control two DC lamps, connect the positive poles of the lamps to terminals 6 and 3 respectively. The negative poles of the lamps connect to the negative pole of the external DC power supply. The positive pole of the external DC power supply connects to interfaces 5 and 2 respectively. The live wire of the AC power supply connects to the L interface, and the neutral wire connects to the N interface.

6. Remote Control Pairing and Operation

The KR2202 receiver supports Momentary, Toggle, and Latched modes. Follow these steps to pair your remote controls and set the desired operating mode.

6.1 Clearing Existing Codes

1. Press the 'Learning Button' on the receiver module 8 times.
2. The indicator light will flash and then go out, indicating that all previously paired remote controls have been cleared.

6.2 Momentary Mode Pairing

In Momentary mode, the relay activates only while the remote button is pressed and deactivates upon release.

1. Press the 'Learning Button' on the receiver module 1 time. The indicator light will turn on.
2. Press the first button (e.g., 'A') on your remote control. The indicator light will flash and then go out.
3. Press the second button (e.g., 'B') on your remote control. The indicator light will flash and then go out.
4. Pairing is successful. Now, pressing 'A' will activate one relay, and pressing 'B' will activate the other, as long as the button is held down.

6.3 Toggle Mode Pairing

In Toggle mode, pressing a button once activates the relay, and pressing the same button again deactivates it.

1. Press the 'Learning Button' on the receiver module 2 times. The indicator light will turn on.
2. Press the first button (e.g., 'A') on your remote control. The indicator light will flash and then go out.
3. Press the second button (e.g., 'B') on your remote control. The indicator light will flash and then go out.
4. Pairing is successful. Press 'A' to turn on/off the first relay, and 'B' to turn on/off the second relay.

6.4 Latched Mode Pairing

In Latched mode, pressing one button activates a relay, and pressing another button deactivates it. This mode typically requires a remote with at least two distinct buttons for each channel (e.g., 'A' for ON, 'B' for OFF).

1. Press the 'Learning Button' on the receiver module 3 times. The indicator light will turn on.
2. Press the first button (e.g., 'A') on your remote control. The indicator light will flash and then go out.
3. Press the second button (e.g., 'B') on your remote control. The indicator light will flash and then go out.
4. Pairing is successful. Press 'A' to activate the first relay, and 'B' to deactivate it.

Important Note for Latched Mode:

- A remote control will only match two buttons in Latched mode. Any extra buttons on a 4-button remote will not be paired.
- To change the mode for a remote, you must first clear all existing codes (Section 6.1) and then re-pair the remote in the desired mode.

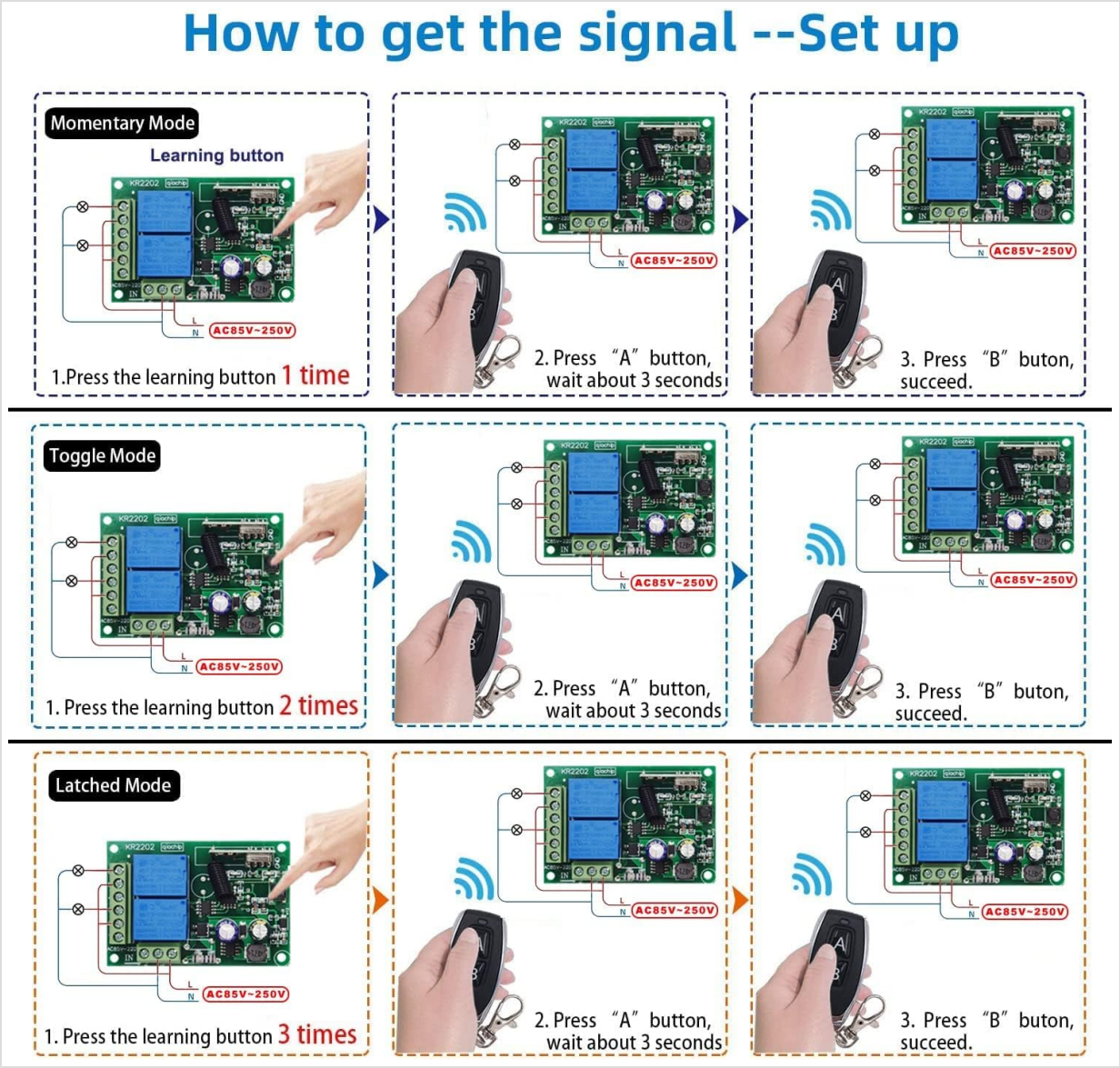


Image: Diagrams illustrating the steps for pairing remote controls in Momentary, Toggle, and Latched modes with the QIACHIP KR2202 receiver.

7. Applications

The QIACHIP KR2202 is versatile and can be used in a wide range of applications, from simple domestic remote control to autonomous control systems.

- **Garage Door Openers:** Control the opening and closing of garage doors.
- **LED Lights:** Remotely switch LED lighting on or off.
- **Motor Control:** Manage the operation of various AC or DC motors, including forward and reverse rotation.
- **Home Appliances:** Integrate into smart home systems for remote control of appliances.
- **Electric Gates & Shutter Doors:** Automate access control for gates and rolling shutters.
- **Alarm Systems:** Can be used as part of a security or alarm system.
- **Lifting Equipment:** Control small lifting mechanisms.

Image: Illustrations of various applications for the QIACHIP KR2202, including motor control, shutter doors, home appliances, electric gates, workshop management, and DC lighting.

8. Maintenance

- **Battery Replacement:** The remote controls require CR2032 batteries. Replace them when the transmission range decreases or the indicator light on the remote does not illuminate.
- **Cleaning:** Use a dry, soft cloth to clean the receiver module and remote controls. Avoid using liquids or abrasive cleaners.
- **Antenna:** Ensure the receiver's antenna is uncoiled and extended for optimal signal reception.

9. Troubleshooting

- **Remote not responding:** Check remote battery. Ensure the remote is paired correctly to the receiver in the desired mode. Verify the receiver has power.
- **Reduced range:** Replace remote battery. Ensure the receiver's antenna is fully extended and not

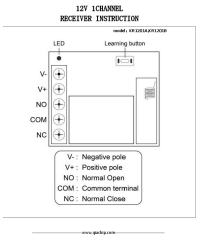
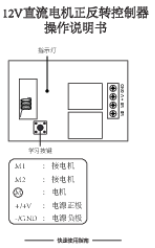
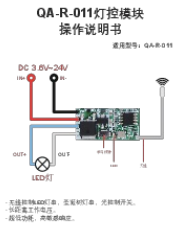
obstructed. Minimize interference from other RF devices.

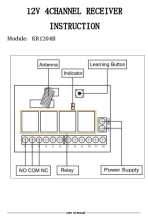
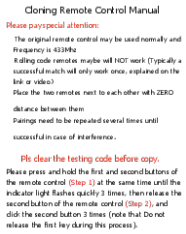
- **Device not activating:** Check all wiring connections for tightness and correctness. Verify the power supply to both the receiver and the controlled device. Ensure the relay contacts are properly connected to the load.
- **Incorrect operation mode:** Clear all codes and re-pair the remote in the correct Momentary, Toggle, or Latched mode as per Section 6.

10. Warranty and Support

QIACHIP products are designed for reliability and performance. For any issues or technical support, please contact QIACHIP customer service. Keep your purchase receipt for warranty claims. The manufacturer is QIACHIP.

Related Documents - KR2202

	QIACHIP KR1201A/KR1201B 12V 1-Channel Receiver: Installation and Operation Guide Comprehensive guide for the QIACHIP KR1201A and KR1201B 12V 1-channel RF relay receiver module. Learn about wiring diagrams, operating modes (Momentary, Toggle, Latching, Delay), and setup procedures for various applications like controlling lights, door locks, and motors.
	QIACHIP 12V DC Motor Forward/Reverse Controller Operation Manual This manual provides instructions for operating the QIACHIP 12V DC Motor Forward/Reverse Controller, including wiring diagrams, function descriptions, setting methods for momentary, toggle, and latching modes, and technical specifications. It details how to pair remote controls and reset the device.
	QA-R-011 Wireless RF Relay Module - QIACHIP Operation Manual & Specifications Comprehensive guide for the QIACHIP QA-R-011 wireless RF relay module. Covers wiring diagrams, setup instructions for various working modes (Momentary, Toggle, Latching, Time Delay), and detailed product specifications.
	QIACHIP KR1201B 1-Channel Wireless Receiver Module: Instructions and Setup Detailed instructions and setup guide for the QIACHIP KR1201B 1-channel wireless remote control receiver module, including wiring diagrams and working mode configuration.

	[QIACHIP KR1204B 12V 4-Channel Wireless Remote Control Receiver User Manual] Comprehensive user manual for the QIACHIP KR1204B 12V 4-Channel Wireless Remote Control Receiver. Includes wiring diagrams, operating modes (Momentary, Toggle, Latching), setup instructions, and technical specifications.
	[QIACHIP 433.92Mhz Remote Control Cloning Guide] Learn how to clone your remote control using the QIACHIP 433.92Mhz 4-in-1 duplicator. This guide covers pairing, clearing codes, and recovery modes for garage doors and electric gates.