

## DieseRC 2201H

# DieseRC 433Mhz Wireless Remote Control Switch AC 220V 30A Relay Receiver

MODEL: 2201H

Brand: DieseRC

## 1. INTRODUCTION

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This manual provides detailed instructions for the installation, operation, and maintenance of your DieseRC 433Mhz Wireless Remote Control Switch. Please read this manual carefully before use to ensure proper function and safety. This device is designed to remotely control various electrical appliances using a 433Mhz radio frequency signal.

## 2. PRODUCT OVERVIEW

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The DieseRC 433Mhz Wireless Remote Control Switch system consists of a receiver module and one or more remote control transmitters. The receiver features a robust 30A relay, capable of handling AC 85V-250V, making it suitable for a wide range of applications.

### Key Features:

- **433Mhz RF Wireless Control:** Ensures stable and reliable performance with high reception sensitivity (> -105dBm).
- **Extended Range:** Strong signal penetration through walls, floors, and doors, with a maximum range of up to 164 feet (50 meters) without obstacles.
- **Multiple Operating Modes:** Supports Momentary, Toggle, and Latched modes, configurable to suit various control needs.
- **High Power Capacity:** Equipped with a 30A relay, capable of charging high-power electrical devices, ensuring long-term stability.
- **Wide Voltage Compatibility:** The receiver operates on AC 85V-250V.
- **Expandable System:** Each receiver can store up to 20 transmitters. A single transmitter can also control multiple receivers.

### Product Components:

# PRODUCT DETAIL



**Relay Receiver Board**  
**Work Volts: AC 85V~250V**



Detailed view of the DieseRC 433Mhz relay receiver and remote control, highlighting components like the antenna, protective shell, indicator light, learning button, silicone buttons, chrome bezel, and metal keychain. This image shows the physical features of both the receiver and the remote.

The receiver unit includes an antenna for signal reception, a protective shell, an indicator light, and a learning button for programming. The remote control features 'ON' and 'OFF' silicone buttons, a chrome bezel, and a metal keychain for portability.

## 3. SAFETY INFORMATION

- Always disconnect power before performing any wiring or maintenance.
- Ensure all connections are secure and properly insulated to prevent short circuits.
- Do not exceed the maximum current rating of 30A for the relay.
- Operate the device within the specified voltage range of AC 85V-250V.
- Keep the device away from water and high humidity environments.
- If you are unsure about electrical wiring, consult a qualified electrician.

## 4. SPECIFICATIONS

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Feature	Specification
Brand	DieseRC
Model Number	2201H
Color	1 receiver with 1 transmitter
Connectivity Technology	Radio Frequency (433Mhz)
Special Features	Strong Signal, Wireless
Compatible Devices	Lights, Pumps, Fans, Air Conditioners, etc.
Receiver Input Voltage	AC 85V-250V
Max Current	30A
Max Range	50 Meters (164 feet) without obstacles
Number of Buttons (Remote)	2 (ON/OFF)
Max Supported Transmitters	20

## 5. SETUP & INSTALLATION

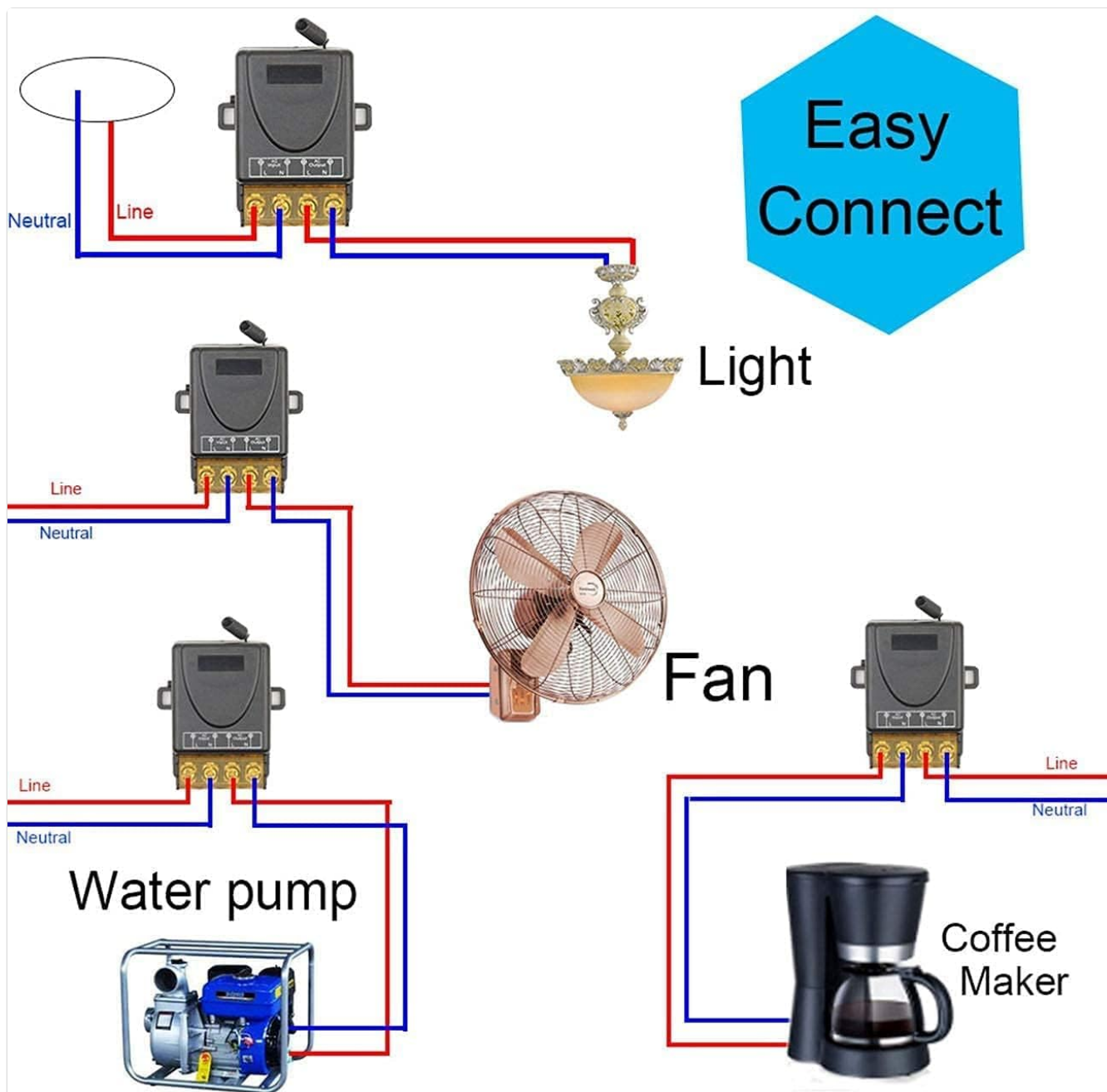
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### 5.1 Wiring Diagram

Before wiring, ensure the main power supply is OFF. Connect the AC input (Live and Neutral) to the receiver's input terminals. Connect your appliance (e.g., light, pump) to the receiver's output terminals (Live and Neutral). The receiver acts as a switch for the Live line.



This diagram illustrates how to connect the AC 85V-250V input to the receiver and the output to a light bulb. The remote control is shown operating the light.



This image shows various applications for the relay receiver, demonstrating how it can be wired to control different household and agricultural appliances.

## 5.2 Programming Operating Modes

The receiver supports multiple operating modes. To program a mode, follow these steps:

### 1. Momentary Mode (Mode 1):

Press the learning button on the receiver **1 time**. The indicator light will flash once. Then, press any button on your remote control. The indicator light will flash three times, indicating successful pairing in Momentary Mode. In this mode, the output is ON only while the remote button is pressed.

### 2. Toggle Mode (Mode 2):

Press the learning button on the receiver **2 times**. The indicator light will flash twice. Then, press any button on your remote control. The indicator light will flash three times, indicating successful pairing in Toggle Mode. In this mode, one press of the remote button turns the output ON, and another press turns it OFF.

### 3. Latched Mode (Mode 3):

Press the learning button on the receiver **3 times**. The indicator light will flash three times. Then, press the 'ON' button on your remote control, followed by the 'OFF' button. The indicator light will flash three times, indicating successful pairing in Latched Mode. In this mode, the 'ON' button turns the output ON, and the 'OFF' button



turns it OFF.

#### 4. Delay Mode (Mode 4/5/6/7):

Press the learning button on the receiver **4 times** for a 5-second delay.

Press the learning button on the receiver **5 times** for a 10-second delay.

Press the learning button on the receiver **6 times** for a 15-second delay.

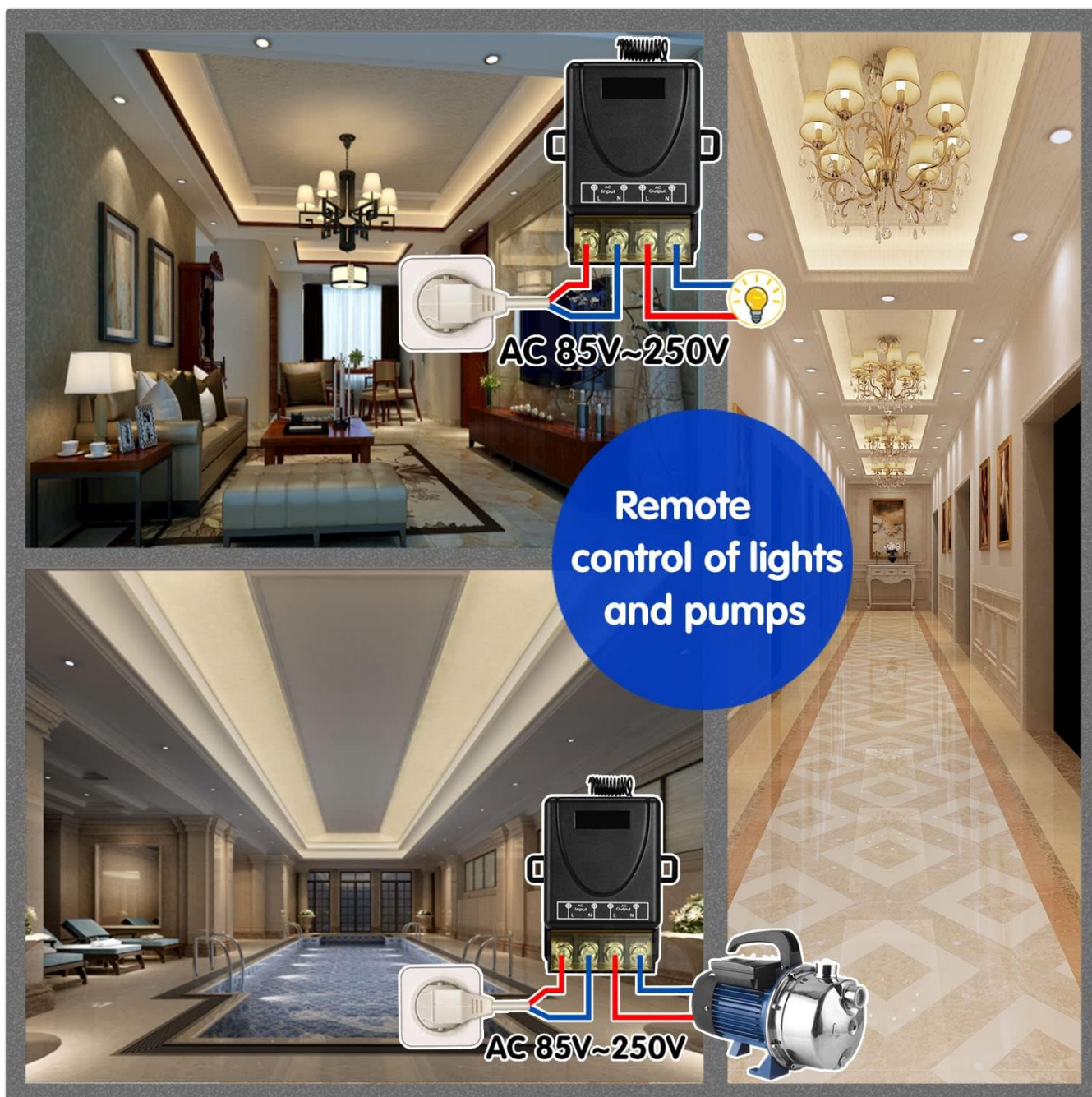
Press the learning button on the receiver **7 times** for a 20-second delay.

After pressing the learning button the desired number of times, the indicator light will flash accordingly. Then, press any button on your remote control. The indicator light will flash three times. In Delay Mode, pressing the remote button turns the output ON, and it will automatically turn OFF after the set delay time.

### 5.3 Resetting the Receiver

To clear all learned remote controls and reset the receiver to its default state:

- Press the learning button on the receiver **8 times**. The indicator light will flash eight times and then turn off, indicating a successful reset. After a reset, the remote control will no longer function until re-paired.



This visual guide details the process of pairing the remote in latched mode by pressing the learning button 3 times, then the ON and OFF buttons. It also shows how to reset the receiver by pressing the learning button 8 times.

## 5.4 Video Guides for Programming

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Demonstration of programming the DieseRC 433Mhz remote control switch for latched mode operation and how to perform a factory reset. This video illustrates the steps to pair the remote and clear all learned codes.

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Comprehensive guide to programming the DieseRC 433Mhz relay receiver into various operating modes: momentary (Mode 1), toggle (Mode 2), latched (Mode 3), and delay modes (Mode 4/5/6/7). This video shows how to set up each mode for different control functionalities.

## 6. OPERATING THE DEVICE

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Once the receiver is wired and the remote control is programmed, you can operate your connected appliance:

- **Momentary Mode:** Press and hold the remote button to turn the appliance ON. Release the button to turn it OFF.
- **Toggle Mode:** Press the remote button once to turn the appliance ON. Press the same button again to turn it OFF.
- **Latched Mode:** Press the 'ON' button on the remote to turn the appliance ON. Press the 'OFF' button on the remote to turn it OFF.
- **Delay Mode:** Press the remote button to turn the appliance ON. The appliance will automatically turn OFF after the pre-set delay (5, 10, 15, or 20 seconds).

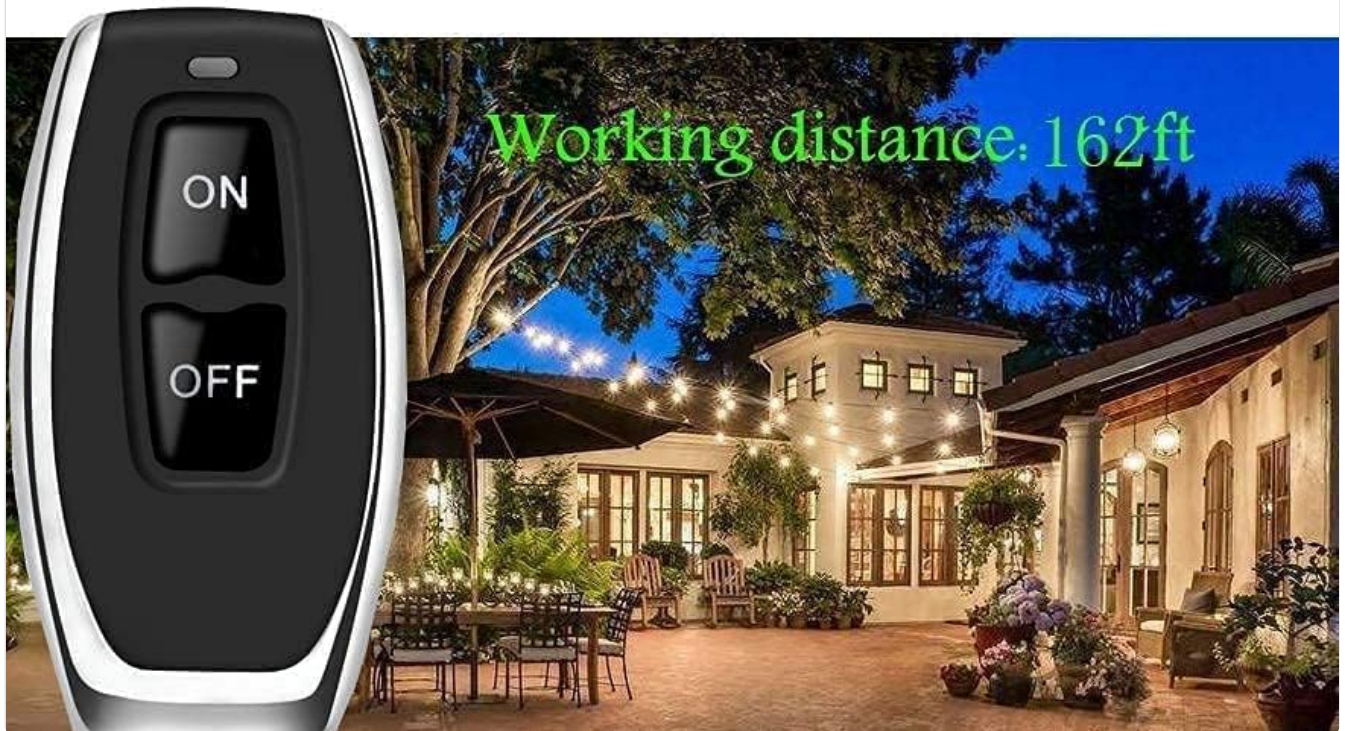
### Application Examples:



AC 75V-250V/0-2000W



It is a useful DIY product



This image highlights the compact size of the transmitter and receiver, along with the effective remote control range, suitable for various indoor and outdoor applications.



# How to connect 433Mhz remote control

Latched Mode



1. Press the learning button on the receiver **3 times**



2. Press "ON" button



3. Press "OFF" button. Succeed.

## How to reset



1. Press the learning button on the receiver **8 times**. Succeed.

Illustrates the product's versatility for DIY projects, such as controlling water pumps or ventilation systems, emphasizing its long-range capability.



Shows practical applications of the remote control switch for managing lighting in residential areas and operating water pumps for pools or irrigation.

## 7. TROUBLESHOOTING

- **Remote not responding:** Ensure the receiver is powered on and the remote control has a working battery. If the receiver was recently reset, re-pair the remote control following the programming instructions.
- **Appliance not turning ON/OFF:** Check all wiring connections for tightness and proper insulation. Verify that the power supply to the receiver is active and within the specified voltage range.
- **Reduced remote range:** Large metal objects, thick walls, or other radio frequency devices can interfere with the signal. Try repositioning the receiver or remote control.
- **Indicator light not flashing during programming:** Ensure you are pressing the learning button correctly and for the appropriate duration as specified for each mode.

## 8. MAINTENANCE

- Keep the receiver and remote control clean and free from dust and debris.

- Avoid exposing the devices to extreme temperatures, direct sunlight, or moisture.
- Replace the remote control battery when its performance degrades.
- Periodically check wiring connections for any signs of wear or damage.

## 9. WARRANTY & SUPPORT

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This product is manufactured by DieseRC and is designed for reliability and performance. For technical assistance, troubleshooting, or warranty inquiries, please contact DieseRC customer service through your purchase platform. Please retain your proof of purchase for warranty claims.