

DieseRC 2401H2

DieseRC Waterproof Wireless Remote Control DC 8V-80V 30A Radio Control Switch

User Instruction Manual

1. PRODUCT OVERVIEW

The DieseRC Waterproof Wireless Remote Control Switch is designed for controlling electrical appliances in various environments, including outdoor and wet locations. It features a robust IP65 waterproof rating, a high-power 30A relay, and a 433MHz RF wireless control system, offering stable and reliable performance for applications such as water pumps, lighting, and irrigation systems.



Image 1.1: The DieseRC waterproof receiver unit and two accompanying remote control transmitters.

2. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1x Relay Receiver Unit
- 2x Transmitters (remote controls, batteries included)
- 1x Product Manual (this document)

3. SPECIFICATIONS

Parameter	Value
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Receiver Working Voltage	DC 8V~80V
Quiescent Current	<5MA
Max Current	30A
RF Frequency	433MHz
Working Temperature	-30~+80°C
Receiving Sensitivity	>97dbm
Storage Remote Controls	Up to 20 pieces
Support Encoding	1527 Leaning code
RF Operating Mode	ASK superheterodyne wireless reception
Receiving Range	Open space is more than 50 meters
Waterproof Grade	IP65
Operating Modes	Momentary / Toggle / Latched Mode
Transmitter Battery	2x CR2016 (included)



Image 3.1: The remote control offers a receiving range of over 50 meters in open spaces.

HIGH QUALITY COMPONENTS

⚡ 30A



Image 3.2: The device features an IP65 waterproof rating, suitable for outdoor exposure to various weather conditions.

4. INSTALLATION AND WIRING

The receiver unit is designed for easy integration into your electrical system. Ensure power is disconnected before performing any wiring.

4.1 Wiring Diagram

Connect the receiver between the power supply and the device to be controlled as shown in the diagram below. The input and output terminals are clearly marked for DC 8V-80V connections.

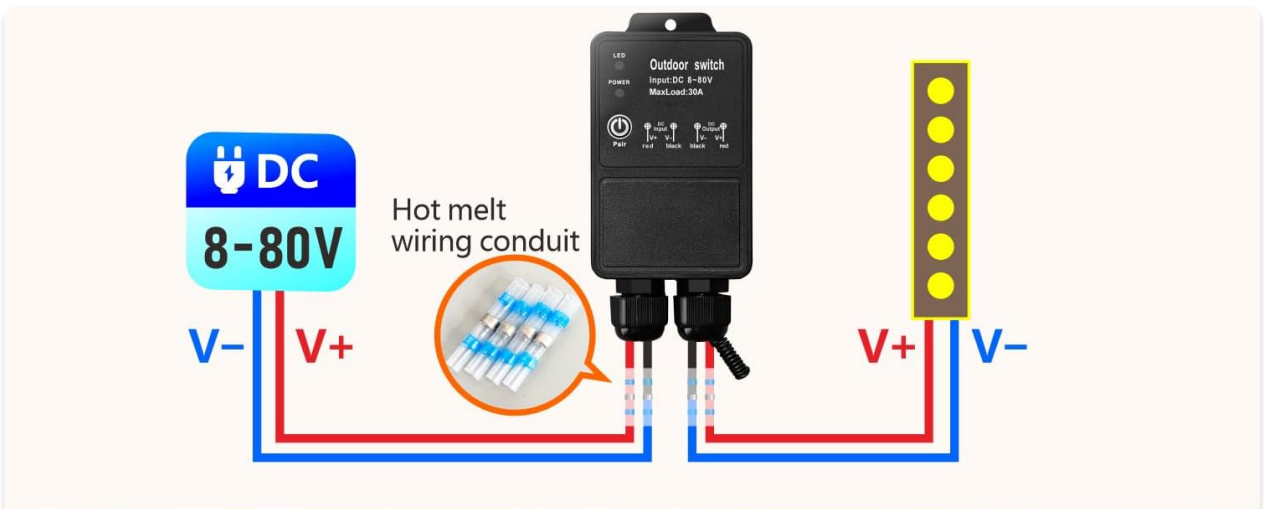


Image 4.1: Wiring connections for the DC 8V-80V receiver unit. Ensure correct polarity for input (V- V+) and output (V+ V-).

4.2 Wire Connection Steps

For secure and waterproof connections, follow these steps using the provided heat shrink solder connectors (if applicable):

1. **Step 1:** Strip approximately 5-7mm of insulation from the wire ends at the link point.
2. **Step 2:** Insert the stripped wire into the solder ring of the connector and move it to the center position. Ensure the wire does not extend beyond the hot melt glue.
3. **Step 3:** Use a heat gun to evenly heat the connector. The solder will melt and flow, and the heat shrink tubing will shrink, creating a sealed connection.
4. **Step 4:** After heating, allow the connection to cool for one minute before handling.

Wide range of applications

Such as Fish pond oxygenation, Greenhouse watering, Farmland irrigation, Light, Exhaust fan, etc.



Image 4.2: Detailed steps for making secure wire connections using heat shrink solder sleeves.

5. OPERATING MODES

The receiver supports three operating modes: Momentary, Toggle, and Latched. The product is pre-set to Latched mode by default.

5.1 Momentary Mode

- Press and hold a button on the transmitter: The relay will turn on.
- Release the button: The relay will turn off.

5.2 Toggle Mode

- Press a button on the transmitter: The relay will turn on.
- Press the same button again: The relay will turn off.

5.3 Latched Mode (Default)

- Press the 'ON' button on the transmitter: The relay will turn on.
- Press the 'OFF' button on the transmitter: The relay will turn off.

6. PROGRAMMING (SETUP AND RESET)

The receiver and transmitters need to be paired for wireless control. The operating mode can be adjusted during the setup process.

6.1 Setup Operating Mode

To set the operating mode and pair a transmitter:

1. Press the learning button on the receiver:
 - Once for **Momentary Mode**.
 - Twice for **Toggle Mode**.
 - Three times for **Latched Mode**.

Wait for 3 seconds after pressing.

2. Press the 'ON' button on your transmitter. Wait for 3 seconds.
3. Press the 'OFF' button on your transmitter. The setup is complete.

6.2 Resetting the Receiver

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

1. Press the learning button on the receiver 8 times consecutively.
2. The reset is successful. All previously paired remote controls will no longer function with this receiver.

Receiver

Input: DC 8~80V

Operation Frequency: 433Mhz



Image 6.1: Instructions for programming the remote control to the receiver in Latched Mode and performing a full reset.

7. WIDE APPLICATION

This remote control switch is suitable for a variety of indoor and outdoor applications due to its waterproof design and high power load capacity. Common uses include:

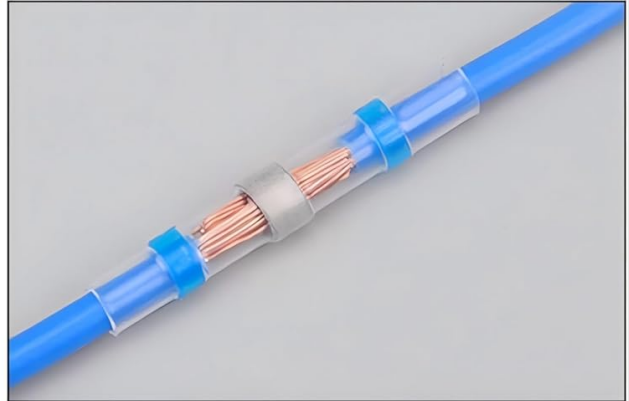
- Controlling water pumps for irrigation or fountains.
- Operating outdoor lighting systems.
- Managing exhaust fans in garages or warehouses.

- Controlling motors and other electrical equipment in farm or garden settings.
- Integration into wireless security alarm and video equipment systems.

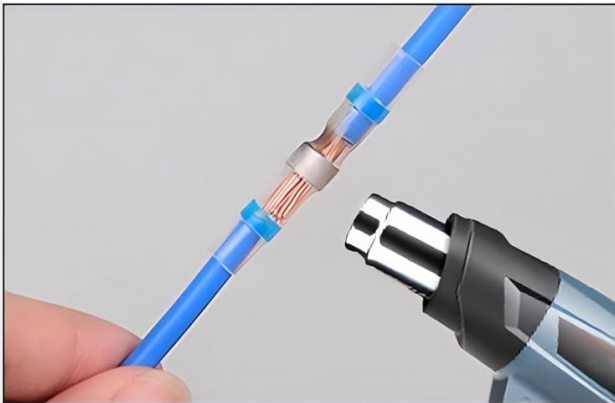
INSTALLATION STEPS



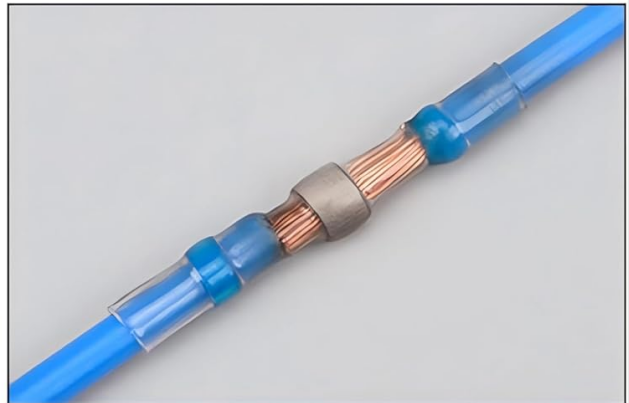
Step 1:
Strip the wire at the link



Step 2:
Insert the wire into the solder ring
and move to the center position.
The wire can not exceed the hot melt glue



Step 3:
Use a heat gun to heat and shrink



Note! Step 4:
After heating,
let it cool for one minute

Image 7.1: Examples of the diverse applications for the remote control switch in agricultural, residential, and industrial settings.

8. SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating this product. Failure to do so may result in injury or damage to the product.

- Always disconnect power to the circuit before installing or servicing the receiver unit.
- Ensure all wiring connections are secure and properly insulated to prevent short circuits or electrical hazards.
- Do not exceed the maximum current rating of 30A for the receiver.
- While the product is IP65 waterproof, avoid prolonged submersion in water.
- Keep remote controls away from children.

9. TROUBLESHOOTING

If you encounter issues with your remote control switch, consider the following:

- **No response from receiver:**

- Check power supply to the receiver.
- Verify that the transmitter batteries are not depleted.
- Ensure the transmitter and receiver are paired correctly (refer to Section 6.1). If unsure, perform a reset (Section 6.2) and re-pair.
- Check for obstructions or excessive distance between the transmitter and receiver.

- **Intermittent operation:**

- Weak transmitter battery.
- Interference from other RF devices.
- Antenna on the receiver may need to be extended for better signal reception.

- **Incorrect operating mode:**

- Re-program the receiver to the desired operating mode (refer to Section 6.1).

10. WARRANTY AND SUPPORT

This product is covered by a standard manufacturer's warranty against defects in materials and workmanship. For warranty claims or technical support, please contact DieseRC customer service through your purchase platform or the official DieseRC website. Please retain your proof of purchase for warranty validation.