# Remote Control Instructions For

# WSE2+WSR3

**Contents：**



## 1. Function and characteristics

（1）Function

Our wireless remote control is mainly used to replace the manual remote lead to operate an electric winch from longer/safer distance away from the winch.

（2）Characteristics

The remote control uses 2.4G wireless radio technology. Itsfeatures include easy to use settings, low power, automatic shutdown, stable performance, anti-interference capability.

## 2. Main technical parameters

（1）Transmitter power: Powered by a single battery ( 9v or 12v)

（2）Receiver operating voltage: 12V-24V

（3）Remote control distance：0-50m

（4）Remote control angle：0-360°

（5）Frequency band range maximum & minimum:

315MHz

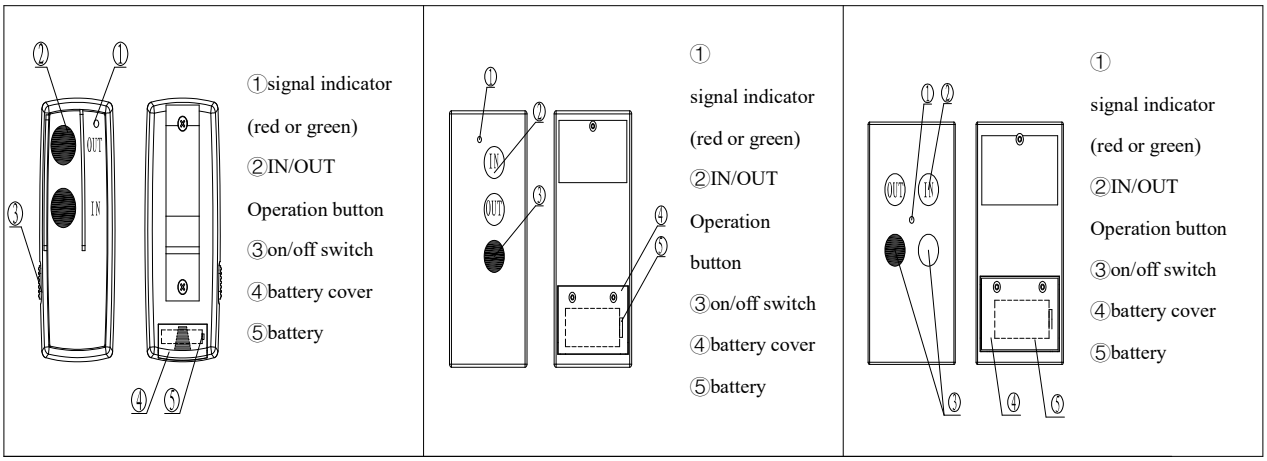
Normal operating conditions；

Temperature environment：—40 ∽ +45℃

Relative humidity：≤95%RH（25℃）

**3. Model classification and function introduction**

## Model classification and function(transmitter)




Instructions:

1.Install batteries into transmitter

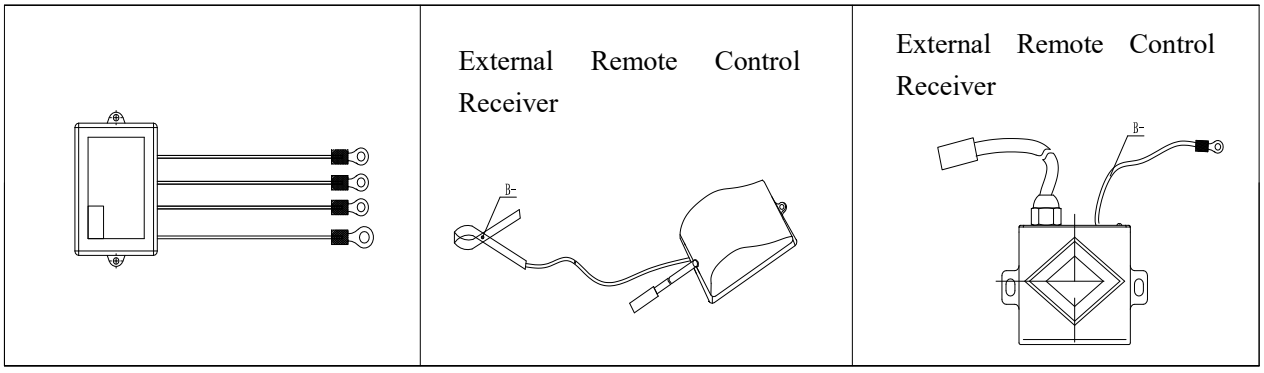
2.Press/Slide the ON/OFF switch to ON position on thetransmitter (handset).

3.The signal LED indicator flashes to indicate the status of the remote control and the electric winch.

Tips:

After use,please turn off the transmitter.

## Model classification and function(receiver)



**Instructions:**

Connect up the receiver to the solenoid (see above illustration), then connectthe power supply to thewinch.

Tips:

① Oncea connection is established,please connect the receivers earth to the nearest earth connection, (for better results earth to the battery negative terminal).

② When using an external receiver, if the electric control box socket is out of reach, the remote control receiver needs to be extended. If the electric control box socket is a 3 pin socket a 3 core cable is required. If the electric control box socket is 4 pin a 4 core cable is required.

③ The external receiver should be installed directly into the control box or socket (if 3pin or 4 Pin version). If the mounting clip or earth lead is attached, please connect the mounting clip to the negative terminal of the power supply of the battery. **Note!!! DO NOT attached earth clip or lead to motor terminals or solenoid**.

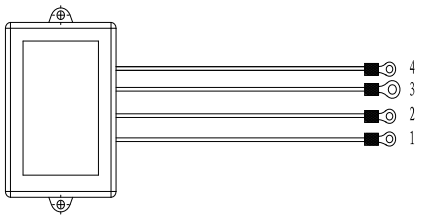
**4. The flashing of the indicator light**

| Number | Flash mode | Fault | Solution |
|---|---|---|---|
| **1** | **The light is red 1：1 indicator** | **Signal disconnected or poorly received** | **Check surrounding Area or pairing** |
| **2** | **The light is red 2：2 indicator** | **The transmitter battery is low** | **Change the battery in the transmitter** |
| **3** | **The light is red 3：3 indicator** | **Mains battery power is low** | **Start the vehicle or check the mains battery Supply for voltage** |
| **4** | **The solid red LED light is on** | **the connection is completed or OK** | **it can be used normally** |
| **5** | **The solid green LED light is on** | **IN/OUT operating** | |

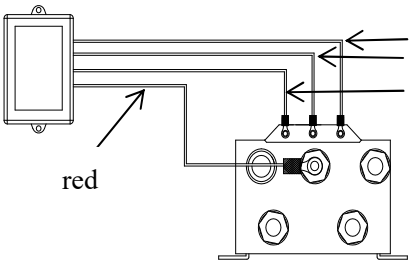
**5. Receiver wiring diagram**

（1）The remote control system is operated by the remote control transmitter and communicated via the receiver to control the winch direction in or out.

（2）wiring diagram：

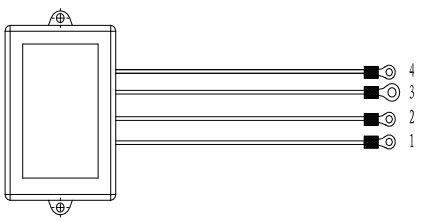



1.white out
2.yellow in
3.red B+
4.black B-

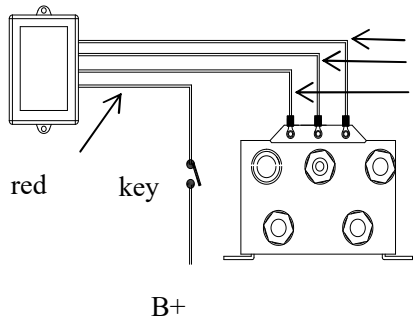



white
black
yellow

Wiring one



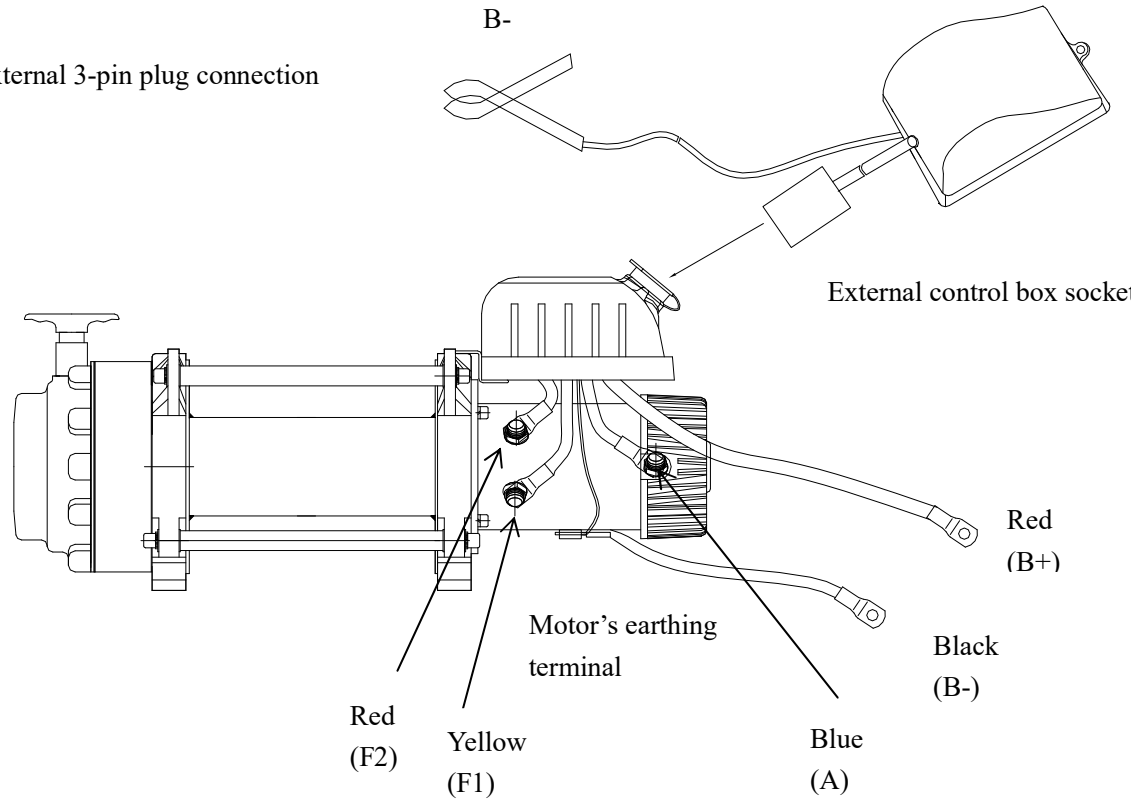

1.white out
2.yellow in
3.red B+
4.black B-




white
black
yellow

Wiring two

External 3-pin plug connection




**6．Precautions：**

（1）After the transmitter is turned on, the red LED should illuminate. A continuous green light will illuminate when the IN / OUT buttons are pressed.

（2）There is 1sec-3sec signal detection time when starting. If the winches main power supply fails or

Transmitter exceeds the maximum distance the transmitter indicator red LED will regularly flash.

（3）The maximum operating voltage of the remote control receiver is 24V, so please use a reasonable choice of power.

（4）When installing and adjusting the winch, especially when finishing the wire rope, make sure that the transmitter power (handset) is turned off.

（5）The transmitter and the receiver of the remote control are paired and cannot be interchanged unless the code is lost.

（6）If you do not use the remote control for a long time, you should remove the battery from the transmitter. Replace the battery or replace if there is loss of power.

**7. Maintenance and repair**

7.1 When the transmitter (handset) is replaced with a similar or a second transmitter is required. Please use this pairing method

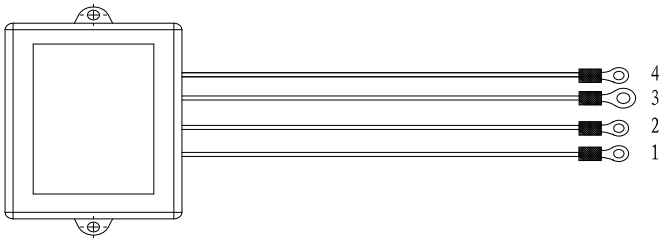
**Pairing method:**

**1.Turn off power to both receiver and transmitter (handset)**
**2.Turn on power to transmitter (handset)**
**3.Press and hold IN and OUT buttons simultaneously**
**4.Turn on power to receiver**
**5.Release IN and OUT buttons**
**6.Solid red LED should illuminate**
**7.Press IN or OUT button**
**8.Solid green LED should illuminate**
**9.If red LED flashes repeat pairing process from Step 7.1**

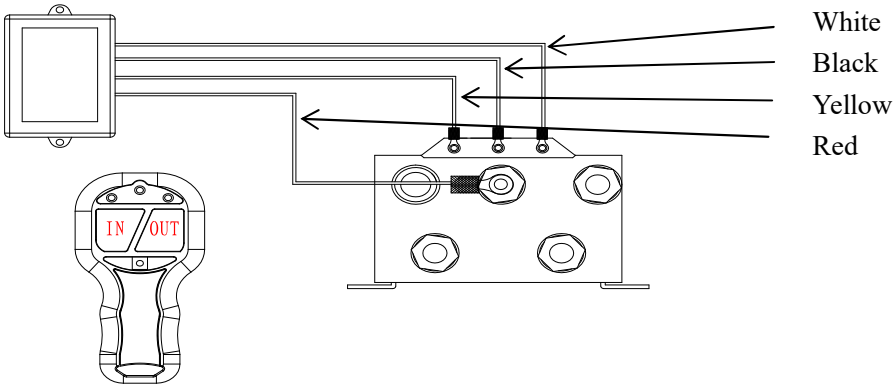
## 8.Working principle and wiring diagram For WSE2+WSR3

8.1This remote control communicates the information from the transmitter to the receiver to control the winch direction in and out.

8.2 wiring diagram：

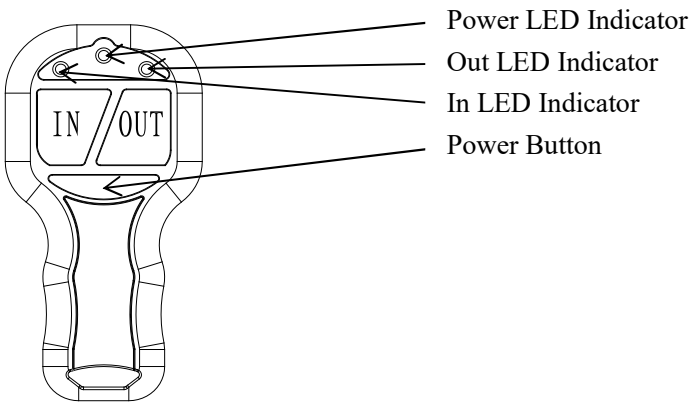



1. yellow IN
2. white OUT
3. red B+
4. black B-




## 9.Using method and Precautions

9.1Remote control transmitter function introduction




（1）Power button: Press 2sec-3sec, the power of the transmitter is turned on, and the solid blue power LED indicator will illuminate.

（2）Press the transmitter IN button and the RED LEDindicator light illuminates；

（3）Press the transmitter OUT button, the GREEN LEDindicator light illuminates.

9.2.**Precautions：**

（1）After the transmitter is turned on, the blue led light illuminates. Red/Green led illuminates when the IN / OUT buttons are pressed;

（2）There is 1sec-3sec signal detection time when starting. If the winches main power supply fails or

Transmitter exceeds the maximum distance the transmitter indicator red LED will regularly flash;

（3）The maximum operating voltage of remote control is 36V, so please use a reasonable choice of Power.

（4）When installing and adjusting the winch, especially when finishing the wire rope, make sure that the transmitter power is turned off.;

（5）The transmitter and receiver are paired and cannot be interchanged unless the code is lost;

（6）If you do not use the transmitter for a long period of time, please remove the batteries. Replace the battery if loss of power.

**10. Maintenance and repair**

10.1 When the transmitter is replaced, the same type of transmitter is required for pairing. The pairing method is as follows：

**Pairing method:**
**1.Turn off power to both receiver and transmitter (handset)**
**2.Turn on power to transmitter (handset)**
**3.Press and hold IN and OUT buttons simultaneously**
**4.Turn on power to receiver**
**5.Release IN and OUT buttons**
**6.Solid red/green LED should flash simultaneously**
**7.After approx. 2-3s blue LED should turn solid**
**8.Press IN or OUT button**
**9.Solid red/green LED should illuminate**
**10.If red/blue LED flashes repeat pairing process from Step 10.1**

**11. Trouble Shooting**

During use, if the red led flashes, the control system has detected a fault and needs to be looked in to. The reason for the problem is as follows：

（1）The distance between the receiver and the transmitter is greater than the maximum stable distance; (reduce the distance between receiver and transmitter)

（2）External environment may have an effect on the signal, if this happens or signal is lost between transmitter and receiver (use manual remote lead);

（3）Possible short circuit in the electronic control box,(check inside electronic control box or vehicle power supply).

（4）Replace transmitter battery

（5）Receiver internal failure, replace the receiver and re-code;

(Pairing method according to 10.1 or 7.1)

FCC Caution.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-ncrease the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.
The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition without restriction.