

## 5000 Meters RF Wireless Receiver (Model 0020103 S2PUW-AC-ANT2)

### Feature:

Application: It can be used in industry automation, agriculture automation and home automation, such as factory, house, farm, pasture, vehicle, ship, offshore operation, aerial vehicle, field call, etc. It can remote control equipments on land, water and air, such as remote control lights, sirens, locks, motors, fans, winches, blinds, linear actuators, doors, windows, electric solenoid valves, security alarm, business signs and various devices.

The installation of wireless control is easy and fast.

Super long range, with a transmitter to form a complete set, the working distance can reach 5000m in an open ground.

Waterproof case with waterproof connectors. The receiver can be installed outdoors.

AC Power Output: It can control AC equipment with voltage 110V / 120V / 220V / 240V AC.

Relay Output: This receiver is relay output, it can be used to operate both DC and AC equipments. The terminals are NO / NC (normally open / normally closed), which serves as a switch. That means you should also connect a separate power supply to equipments.

High power, Each relay output can work at maximum current 30A. The maximum power of the device is 360W/12V, 180W/6V, 270W/9V, 720W/24V, 3000W/110V, 6000W/220V.

With wired control terminals: You can connect sensors, limit switches, manual switches or external devices to control the receiver.

External magnetic sucker antenna with 5meters cable, the antenna can be installed outside the building to get better working distance.

You can control the equipments by using the receiver with transmitter (remote control) from any place within a reliable distance.

Wireless RF signal can pass through walls, floors, doors or windows.

With characteristics of reverse power protection and over current protection.

Reliable control: The code has thousands of different combinations, and the receiver only works with the transmitter which use the same code..

One/several transmitters can control one/several receivers simultaneously.

You can use two or more units in the same place.

### Feedback function:

The receiver and the transmitter have a Two-way working mode, and the user can know the working status of receiver by the transmitter in such a long distance.

Two-way working mode: When you press the remote control to send RF signal to the receiver, if the receiver has been successfully triggered or operated, the receiver will immediately transmit a RF feedback signal to the remote control. Then the remote control will send out a buzzing sound to inform you that the receiver has been successfully operated.

### Receiver Parameters:

Model No. S2PUW-AC220-ANT2

Power Supply (Operating Voltage): AC100~240V (110V/120V/220V/240V)

Working Voltage Range of Relay: AC110~240V or DC0~28V

Working Frequency: 433.92MHz

Channel: 2 CH

Control Modes: Toggle, Momentary, Latched

Output: Relay output (Normally open and normally closed)

Maximum Working Current of Relay: 30A

Static Current: ≤6mA

PCB size: 140mm x 73mm x 18mm

Case size: 192mm x 100mm x 45mm

### External Magnetic Sucker Antenna:

Frequency Range: 300~450MHz

Impedance: 50Ω

Antenna Length: 15cm

Cable Length: 5m, we also can offer longer cable, such as 10 meters or 30 meters.

Anti-interference, waterproof, shielded wire set inside

Magnetic stand design for easy to install

### Matching Transmitters:

**Notice:** This receiver only works with 5000m transmitters, such as model CC-2 / CC-4 (5000M), or CCW-2 / CCW-4 (5000M, waterproof).

When you set the receiver in toggle mode or momentary mode, it should work with two button transmitter, such as model CC-2 (5000m), or CCW-2 (5000m, waterproof). When you set the receiver in latched mode, it should work with four buttons transmitter, such as model CC-4 (5000m) or CCW-4 (5000m, waterproof).

### Working Range:

Super long range, with a transmitter (such as CC-2) to form a complete set, the maximum working distance can reach 5000M in an open ground.

The maximum working distance is an ideal range, it shall be operated with no barriers and interference in an open ground. But in the practice, it will be hindered by trees, walls or other constructions, and will be interfered by other wireless sign. Therefore, the actual distance may not reach this maximum working distance.

### Usage (with the transmitter CC-2):

The receiver and transmitter can be used to control both DC0~28V and AC110~240V equipments.

Notice: The receiver is relay output, not DC/AC power output. Initial state of relay output terminals: Terminals A and B are Normally Open; Terminals A and C are Normally Closed.

### Writing:

1) If you want to control a DC12V lamp, do as following:

1.1 Connect AC220V power supply's live wire to terminal "L / +" and Connect AC220V power supply's neutral wire to terminal "N / -".

2.1 Connect Terminal A to the positive pole of the lamp, connect Terminal B to the positive pole of the power supply, and connect both lamp and power supply's negative pole.

2) If you want to control an AC220V lamp, do as following:

2.1 Connect AC220V power supply's live wire to terminal "L / +" and Connect AC220V neutral wire to terminal "N / -".

2.2 Connect Terminal A to one side of the lamp, connect Terminal B to the live wire of the power supply, and connect lamp's another side to power supply's neutral wire.

#### **Setting different control modes:**

We have set the receiver in toggle mode before delivery, if you want to use other modes, do as following operation.

1) Setting control mode Toggle: Turn on the first bit of the dip switch.

Control mode Toggle (with transmitter CC-2): Press -> On; Press again -> Off.

Press the big button of the transmitter: Turn on the relay1 (connect B and C, disconnect A and B), the lamp 1 is turned on.

Press the big button of the transmitter again: Turn off the relay1 (disconnect B and C, connect A and B), the lamp 1 is turned off.

Press the small button of the transmitter: Turn on the relay 2 (connect B and C, disconnect A and B), the lamp 2 is turned on.

Press the small button of the transmitter again: Turn off the relay 2 (disconnect B and C, connect A and B), the lamp 2 is turned off.

2) Setting control mode Momentary: Turn on the first and the second bits of the dip switch.

Control mode Momentary (with transmitter CC-2): Press and hold -> On; Release -> Off.

Press and hold the big button of the transmitter: Turn on the relay1 (connect B and C, disconnect A and B), the lamp 1 is turned on.

Release the big button: Turn off the relay1 (disconnect B and C, connect A and B), the lamp 1 is turned off.

Press and hold the small button of the transmitter: Turn on the relay 2 (connect B and C, disconnect A and B), the lamp 2 is turned on.

Release the small button: Turn off the relay 2 (disconnect B and C, connect A and B), the lamp 2 is turned off.

3) Setting control mode Latched: Turn on the second bit of the dip switch.

Control mode Latched (with transmitter CC-4): Press button A -> On; Press button B -> Off.

Press button A of the transmitter: Turn on the relay 1, the lamp 1 is turned on. And turn off the relay 2 at the same time, the lamp 2 is turned off.

Press button B of the transmitter: Turn on the relay 2, the lamp 2 is turned on. And turn off the relay 1 at the same time, the lamp 1 is turned off.

Press button C/D of the transmitter: Turn off two relays 1 and 2, two lamps 1 and 2 are turned off.

#### **Wired control terminals:**

The receiver has wired control terminals, you can connect external devices, sensors, limit switches or manual switches to trigger the receiver.

1) By low level signal:

You can connect external devices (with low level output signal) to trigger the receiver.

When external device outputs low level signal to terminals 1 and 3, turn on the relay 1, and the lamp 1 is turned on.

When external device stops to output signal, turn off the relay 1, and the lamp 1 is turned off.

When external device outputs low level signal to terminals 2 and 3, turn on the relay 2, and the lamp 2 is turned on.

When external device stops to output signal, turn off the relay 2, and the lamp 2 is turned off.

2) By NO/NC contact:

You can connect manual switches (with NO/NC contact) to trigger the receiver.

When connect terminals 1 and 3 by manual switch, turn on the relay 1, and the lamp 1 is turned on.

When disconnect terminals 1 and 3 by manual switch, turn off the relay 1, and the lamp 1 is turned off.

When connect terminals 2 and 3 by manual switch, turn on the relay 2, and the lamp 2 is turned on.

When disconnect terminals 2 and 3 by manual switch, turn off the relay 2, and the lamp 2 is turned off.

#### **Setting feedback function:**

If you want to switch on the feedback function, you need to turn on the third bit of the dip switch.

When the receiver gets the signal of transmitter, it will immediately send a return signal to the transmitter. When the transmitter receive the feedback signal of the receiver, the transmitter will exude a buzzing sound like "D~" which means it receive the feedback signal successfully.

#### **How to pair the transmitter to the receiver:**

1) Press button K1 of receiver for 1- 2 seconds; signal LED on the receiver is turned on. The receiver starts the LEARNING procedure.

2) Press any one button on remote control. If signal LED flashes twice, it means learning is successful.

3) The receiver can learn several transmitters with different codes.

#### **Delete all transmitters:**

We have learned remote control to the receiver. If you don't want the receiver to work with the remote control, you can delete all codes of remote controls, which are stored in the receiver.

Operation: Press and hold the button of receiver until signal LED flashes three times. That means all stored codes have been deleted successfully.



