

## RF Wireless Receiver (Model 0020436 S1PX-DC)

### 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, pumps, doors, windows, electric solenoid valves, security alarm, business signs and various devices.

Wireless remote control, easy to install.

Waterproof: The receiver has waterproof case and waterproof connector, it can be installed outdoors.

Power Supply: Four working voltage versions, DC 6V, 9V, 12V, 24V.

DC Power Output: It can control DC equipment with voltage DC 6V / 9V / 12V / 24V.

High Power: Each channel can work at maximum current 30A, such as 360W/12V, 180W/6V, 270W/9V or 720W/24V.

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

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.

### Receiver Parameters:

Model No.: S1PX-DC06 / S1PX-DC09 / S1PX-DC12 / S1PX-DC24

Power Supply (Operating Voltage): DC6V (S1PX-DC06), DC9V±1V (S1PX-DC09), DC12V±1V (S1PX-DC12), DC24V±2V (S1PX-DC24)

Output: DC6V (S1PX-DC06), DC9V (S1PX-DC09), DC12V (S1PX-DC12), DC24V (S1PX-DC24)

Wire range for the terminals: 22-9 AWG

Working Frequency: 315MHz / 433MHz

Channel: 1 CH

Control Modes: Toggle, Momentary, Latched

Static Current: ≤6mA

Operating Temperature: -20 ° C to +70 ° C

Maximum Working Current: 30A

PCB size: 90mm x 59mm x 18mm

Case size: 100mm x 68mm x 50mm

### Matching Transmitters For Receiver:

The receiver can work with different transmitters, such as model C-1 / C-2 (100M), CWB-1 / CWB-2 (50M, waterproof), CP-1 / CP-2 (500M), or CB-1 / CB-2 (1000M) etc.

When you set the receiver in toggle or momentary mode, it should work with single button transmitter, such as model C-1 (100M), CWB-1 (50M, waterproof), CP-1 (500M), or CB-1 (1000M) etc. When you set the receiver in latched mode, it should work with two buttons transmitter, such as model C-2 (100M), CWB-2 (50M, waterproof), CP-2 (500M), CV-2 (500M), or CB-2 (1000M) etc.

### Working Range:

With a transmitter (such as C-2) to form a complete set, the maximum working distance can reach 100M 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.

If you want to have a further working range, you can install an external antenna to the receiver, and you also can use a powerful transmitter, such as CB series transmitters.

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

The receiver can be used to control DC 6V / 9V / 12V / 24V equipments. If the power supply of those equipments is DC 12V, you should choose the receiver with same DC 12V version; and if the power supply of those equipments is DC 24V, you should choose the receiver with same DC 24V version.

### Wiring:

If you want to control a DC 12V lamp, do as following:

1) Connect the positive pole of DC power supply to terminal "L / +" of INPUT, and connect the negative pole of DC power supply to terminal "N / -" of INPUT.

2) Connect the positive pole of lamp to terminal "L / +" of OUTPUT, and connect the negative pole of lamp to terminal "N / -" of OUTPUT.

### 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: Only connect Jumper-2.

Control mode Toggle (with transmitter C-1): Press -> On; Press again -> Off.

Press button of the transmitter: Output terminals outputs DC power, and the lamp is turned on.

Press button again: Output terminals stops outputting, and the lamp is turned off.

2) Setting control mode Momentary: Only connect Jumper-1.

Control mode Momentary (with transmitter C-1): Press and hold -> On; Release -> Off.

Press and hold button of the transmitter: Output terminals outputs DC power, the lamp is turned on.

Release button of the transmitter: Output terminals stops outputting, the lamp is turned off.

3) Setting control mode Latched: Do not connect Jumper-1 and Jumper-2.

Control mode Latched (with transmitter C-2): Press -> On, Press another button -> Off.

Press button A of the transmitter: Output terminals outputs DC power, and the lamp is turned on.

Press button B of the transmitter: Output terminals stops outputting, and the lamp is turned off.

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

The receiver has wired control terminals, and you can connect external devices, sensors, or manual switches to the receiver's manual terminals, then use them 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 (Signal +) and terminal 2 (Signal -), the relay is activated, and Output terminals outputs DC power, and the lamp is turned on.

When external device stops to output signal, the relay is deactivated, and Output terminals stops outputting, and the lamp 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 2 by manual switch, the relay is activated. Output terminals outputs DC power, and the lamp is turned on.

When disconnect terminals 1 and 2 by manual switch, the relay is deactivated. Output terminals stops outputting, and the lamp is turned off.

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

1) Press the learning button of receiver for 1- 2 seconds; signal LED on the receiver is on. The receiver enters into status of LEARNING.

2) Press any one button on transmitter. If signal LED flashes quickly 15 times and turns off, it means learning is successful.

3) When receiver is in the status of LEARNING, press again the learning button, signal LED turns off, learning process will be discontinued.

4) The receiver can learn several remote controls 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 learning button of receiver until signal LED flashes slowly; release the button, LED keeps slow flash. That means all stored codes have been deleted successfully.

