# RF Wireless Receiver (Model 0020440 S1PX-AC)

### 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.

Universal input: Support voltage of AC110V (100V~120V), widely used in US, Canada... and voltage of AC220V (200V~240V), used in UK, France...

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

High Power: Each channel can work at maximum current 30A, such as 3000W/110V or 6000W/220V.

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-AC220

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

Output: AC100~240V (110V/120V/220V/240V) 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 AC 110~240V equipments.

## Wiring:

If you want to control an AC 220V lamp, do as following:

- 1) Connect the live wire of AC power supply to terminal "L / +" of INPUT, and connect the neutral wire of AC power supply to terminal "N / -" of INPUT.
- 2) Connect one side of AC lamp to terminal "L / +" of OUTPUT, and connect another side of AC 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 AC 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 AC 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 AC 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 AC 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 AC 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.



