

## RF Wireless Receiver (Model 0020130 S1PFC-AC220)

### Features:

Application: It can be used in rolling blinds, rolling doors, projection screens, awnings, pumps, winches, conveyors or other appliances and equipments with AC motors, it can remote control AC motor rotates in the positive or reversal direction.

Wireless control, easy to install.

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

You can rotate a motor in the positive or reversal direction with the transmitter (remote control) from any place within a reliable distance.

The RF wireless signal can pass through walls, floors and doors.

High Power: Each channel can work at maximum current 30A.

With limit control terminals: You can connect limit switches or sensors to stop the motor.

With wired control terminals: You can connect manual switches or external devices (with low level output signal, such as sensors) to control the motor.

Design with low-power and high-speed CMOS technology.

You can turn on/ off the receiver with transmitter (remote control) from any place within a reliable distance.

With reverse power protection and over current protection.

Reliable control: The receiver only works with the transmitter which use 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: S1PFC-AC220

Control Mode: Latched or Momentary

Coding Type: Fixed code or learning code

Coding Setting: By learning

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

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

Working Frequency: 315MHz / 433MHz

Channel: 1 CH, can work with 1 AC motor

Static Current:  $\leq 6\text{mA}$

Maximum Working Current: 30A / each channel, so motor's maximum starting current can not exceed 30A.

PCB Size: 140mm x 73mm x 18mm

Case Size: 192mm x 100mm x 45mm

### Matching Transmitters:

This receiver can work with different transmitters. When you set the receiver in momentary mode, it should work with two button transmitters, such as model C-2-2 (100M), CWB-2 (50M, waterproof), CP-2 (500M), CV-2-2 (500M), or CB-2 (1000M) etc. When you set the receiver in latched mode, it should work with three or four button transmitters, such as model C-3-2,(100M), CWB-3 (50M, waterproof), CB-3 (1000M),CP-4 (500M), or CV-4-2 (500M) etc.

### Working Range:

With a transmitter (such as CV-4-2) to form a complete set, the working distance can reach 500M in an open ground. The maximum working distance 500M is a theoretical data, it shall be operated in an open ground, no barriers, no any interference. But in the practice, it will be hindered by trees, walls or other constructions, and will be interfered by other wireless signals. Therefore, the actual distance may or may not reach 500M. 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 transmitters.

### Usage (with transmitter CV-4-2):

Connect live wire to terminal "L" and neutral wire to terminal "N". Then connect AC motor to terminals "UP", "COM" and "DOWN". You can exchange "UP" and "DOWN" wires of motor to change the rotating direction of motor.

Setting control mode Latched: Do not connect Jumper-1 (CN1) or Jumper-2 (CN2)

Press button ▲: motor rotates in positive direction.

Press button ▼: motor rotates in reversal direction.

Press button ■ : motor stops.

Setting control mode Momentary: Only connect Jumper-1 (CN1)

Press and hold button ▲: motor rotates in positive direction. Release button ▲: Motor stops.

Press and hold button ▼: motor rotates in reversal direction. Release button ▼: Motor stops.

### Limit control terminals:

Limit control terminals S1 and S2 are normally open, you can connect limit switches or sensors (normally open type) to terminals S1 and S2, and then you can use limit switches or sensors to stop the motor.

When motor rotates in positive direction, if connect two terminals of S1, the motor will stop automatically.

When motor rotates reversal direction, if connect two terminals of S2, the motor will stop automatically.

### Wired control terminals:

You can connect manual switches, external devices or sensors (with low level output signal) to control the motor.

#### 1) The manual switches:

You can connect manual switches to terminals "Signal 1+", "Signal 1-", "Signal 2+", "Signal 2-", then you can use manual switches to control the motor.

When connect terminals "Signal 1+" and "Signal 1-", motor rotates in positive direction. And when disconnect "Signal 1+" and "Signal 1-", motor stops. When connect terminals "Signal 2+" and "Signal 2-", motor rotates in reversal direction. And when disconnect "Signal 2+" and "Signal 2-", motor stops.

#### 2) Signal input:

You can connect external devices (with low level output signal) to terminals "Signal 1+", "Signal 1-", "Signal 2+", "Signal 2-", then the external device's output signal can control the motor.

When the external device outputs low level signal to terminal "Signal 1-" and "Signal 1+", motor rotates in positive direction.

When the external device outputs low level signal to terminal "Signal 2-" and "Signal 2+", motor rotates in reversal direction.

### 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.

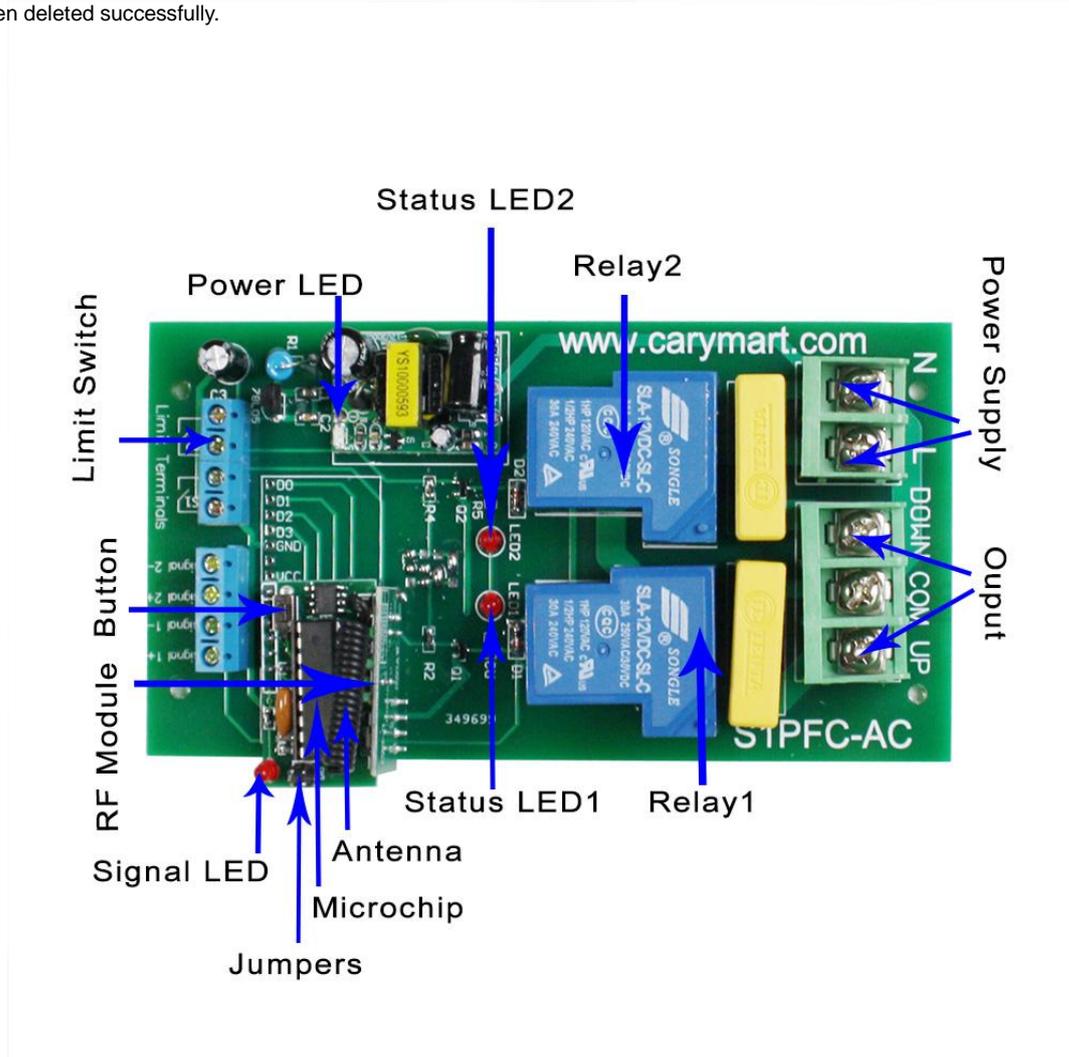
3) When receiver is in the status of LEARNING, press again the button of receiver, signal LED turns off, learning process will be discontinued.

4) The receiver can learn several remote controls with different codes.

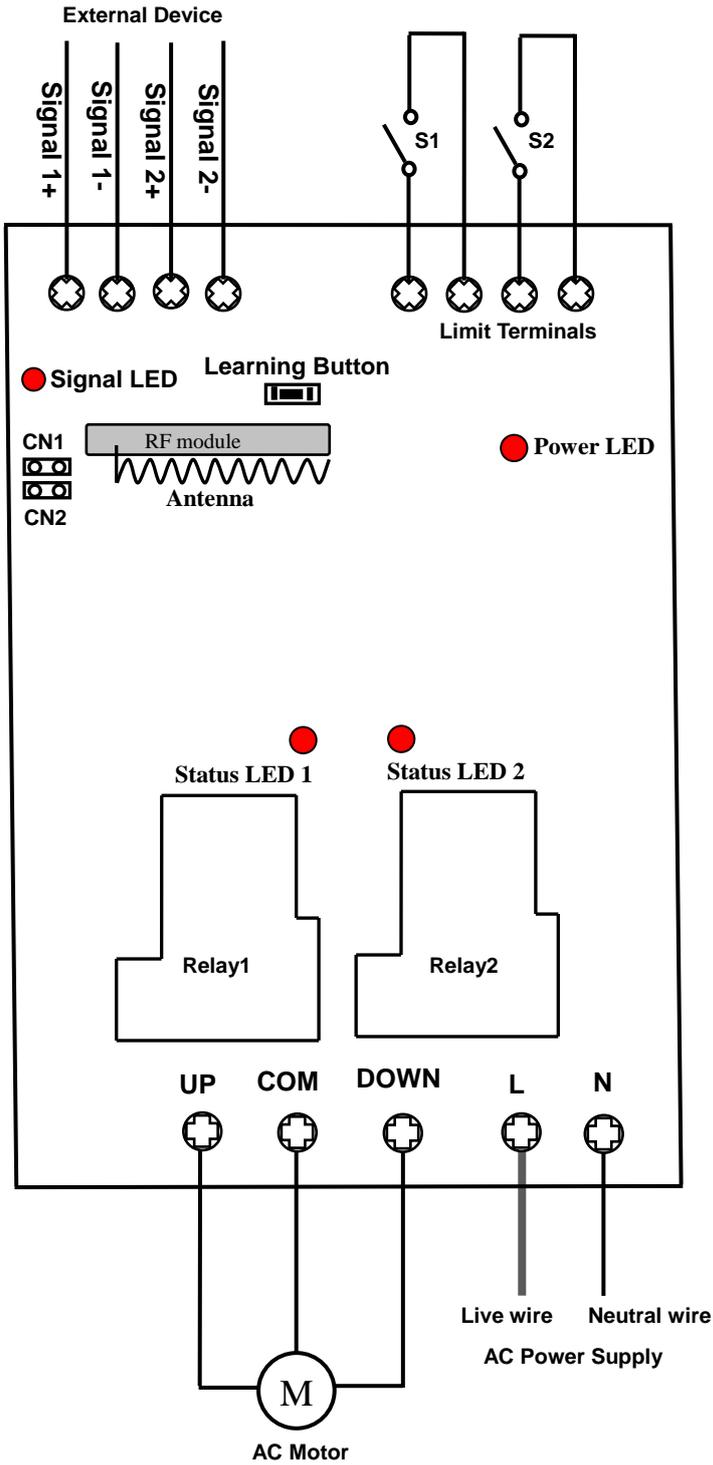
### Delete all transmitters:

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 button of receiver until signal LED flashes slowly; release the button, LED keeps slow flash. That means all stored codes have been deleted successfully.



## Control AC Motor



## Connect Manual Switch

3 Position Round manual switch

