

RF Wireless Receiver (Model 0020565 S4PA-AC220)

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.

Wireless control, easy to install.

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

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

You can turn on/ off 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 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.: S4PA-AC220

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

Output Type: Normally Open

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

Working Frequency: 433.92MHz

Channel: 4 CH

Control Modes: Momentary, Interlocking

Static Current: ≤6mA

Maximum Working Current: 30A / each channel

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

PCB Size: 170mm x 109mm x 18mm

Case Size: 200mm x 120mm x 53mm

Matching Transmitters:

The receiver can work with different transmitters, such as model C-2-2/C-3-2 (100M), CV-2-2/CV-4-2 (500M), or CB-3-2 (1000M) etc.

When you set the receiver in toggle or momentary mode, it should work with two buttons transmitter, such as model C-2-2(100M), CV-2-2 (500M) etc.

When you set the receiver in latched mode, it should work with three/four buttons transmitter, such as model C-3-2 (100M), CV-4-2 (500M), or CB-3-2 (1000M) etc.

Working Range:

With a transmitter (such as CV-4-2) to form a complete set, the maximum working distance can reach 500M in an open ground.

The maximum working distance 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 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 CV-4-2):

The receiver can be used to control both DC 0~28V and AC 110~240V equipments.

Notice: The receiver is relay output (Normally open), not DC/AC power output.

Wiring:

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

- 1) Connect the live wire of AC power supply to red terminal of INPUT, and connect the neutral wire of AC power supply to black terminal of INPUT.
- 2) Connect terminals 1&6(2&5) of receiver to the positive pole of DC power supply, connect terminals 2&5(1&6) of receiver to the negative pole of DC power supply, and connect terminals 3&4 of receiver to two wires of DC motor.

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

- 1) Connect the live wire of AC power supply to red terminal of INPUT, and connect the neutral wire of AC power supply to black terminal of INPUT.
- 2) Connect terminal 4 of receiver to the live wire of AC power supply; connect the neutral wire of AC power supply to common line of the AC motor
- 3) Connect terminals 1, 5&6 of receiver to the wire for reversal rotation of AC motor; connect terminal 2 of receiver to the wire for positive rotation of AC motor
- 4) Connect a side of capacitor to wire for positive rotation of AC motor, and connect another side of capacitor to the terminal 3 of receiver.

Setting different control modes:

Setting different control modes: (We have set the receiver in Momentary mode before delivery, if you want to use other modes, do as following operation.)

Setting control mode Latched (with transmitter CV-4-2): Disconnect Jumper-1 and Jumper-2.

Press button ▲ on remote: Connect terminals 1&3, and connect terminals 2&4, motor rotates in positive direction.

Press button ■ on remote: Disconnect terminals 1&3, and disconnect terminals 2&4, motor stops.

Press button ▼ on remote: Connect terminals 3&5, and connect terminals 4&6, motor rotates in reversal direction.

Press button ■ on remote: Disconnect terminals 3&5, and disconnect terminals 4&6, motor stops.

Setting control mode Momentary (with transmitter CV-2-2): Only connect Jumper-1.

Press and hold button ▲ on remote: Connect terminals 1&3, and connect terminals 2&4, motor rotates in positive direction.

Release button: disconnect terminals 1&3, and disconnect terminals 2&4, motor stops.

Press and hold button ▼ on remote: Connect terminals 3&5, and connect terminals 4&6, motor rotates in reversal direction.

Release button: disconnect terminals 3&5, and disconnect terminals 4&6, motor stops.

Wired control terminals:

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

1) Signal input:

You can connect external devices (with low level output signal) to terminals "COM", "Signal 1", "Signal 2", "Signal 3", "Signal 4", the external device's output signal can control receiver's four outputs.

1. When the external device outputs low level signal to terminal "COM" and "Signal 1", connect terminals 1&3 and connect terminals 2&4.

When the external device stops to output signal, disconnect terminals 1&3 and disconnect terminals 2&4.

2. When the external device outputs low level signal to terminal "COM" and "Signal 2", connect terminals 3&5 and connect terminals 4&6.

When the external device stops to output signal, disconnect terminals 3&5 and disconnect terminals 4&6.

3. When the external device outputs low level signal to terminal "COM" and "Signal 3", connect terminals 1&3 and connect terminals 2&4.

When the external device stops to output signal, disconnect terminals 1&3 and disconnect terminals 2&4.

4. When the external device outputs low level signal to terminal "COM" and "Signal 4", connect terminals 3&5 and connect terminals 4&6.

When the external device stops to output signal, disconnect terminals 3&5 and disconnect terminals 4&6.

2) The manual switches:

You can connect four manual switches to terminals "COM", "Signal 1", "Signal 2", "Signal 3", "Signal 4", then you can use these manual switches to control the outputs of receiver.

1. When connect terminals "Signal 1" and "Com", connect terminals 1&3 and connect terminals 2&4. And when disconnect "Signal 1" and "Com", disconnect terminals 1&3 and disconnect terminals 2&4

2. When connect terminals "Signal 2" and "Com", connect terminals 3&5 and connect terminals 4&6. And when disconnect "Signal 2" and "Com", disconnect terminals 3&5 and disconnect terminals 4&6

3. When connect terminals "Signal 3" and "Com", connect terminals 1&3 and connect terminals 2&4. And when disconnect "Signal 3" and "Com", disconnect terminals 1&3 and disconnect terminals 2&4

4. When connect terminals "Signal 4" and "Com", connect terminals 3&5 and connect terminals 4&6. And when disconnect "Signal 4" and "Com", disconnect terminals 3&5 and disconnect terminals 4&6

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.

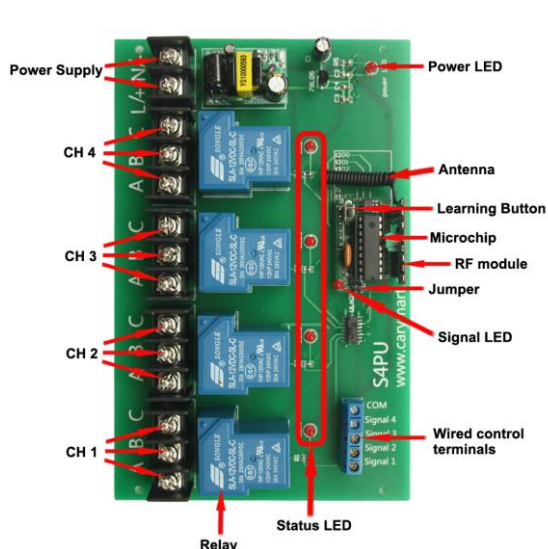
3) When receiver is in the status of LEARNING, press again the learning button, signal LED turns off, learning process will be discontinued.

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

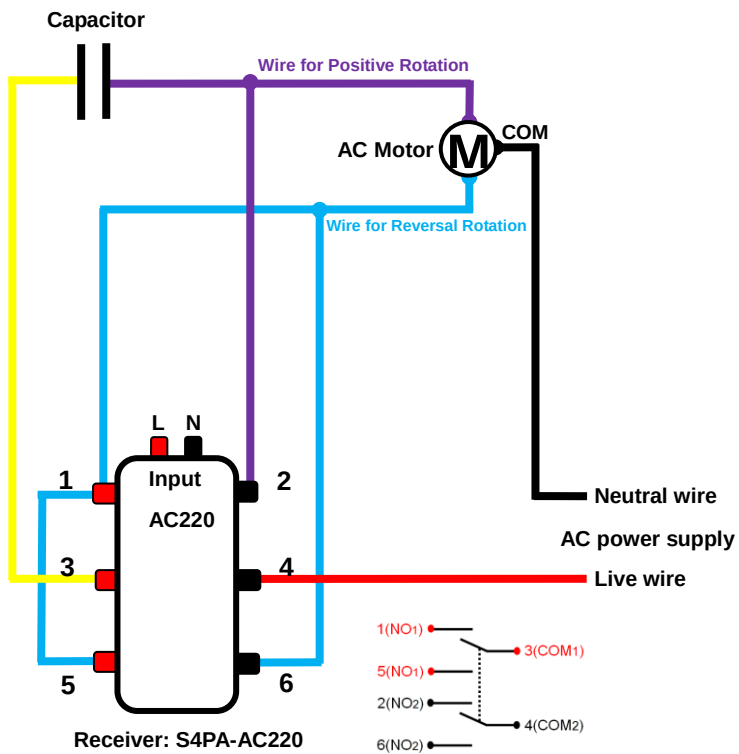
Delete all transmitters:

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.

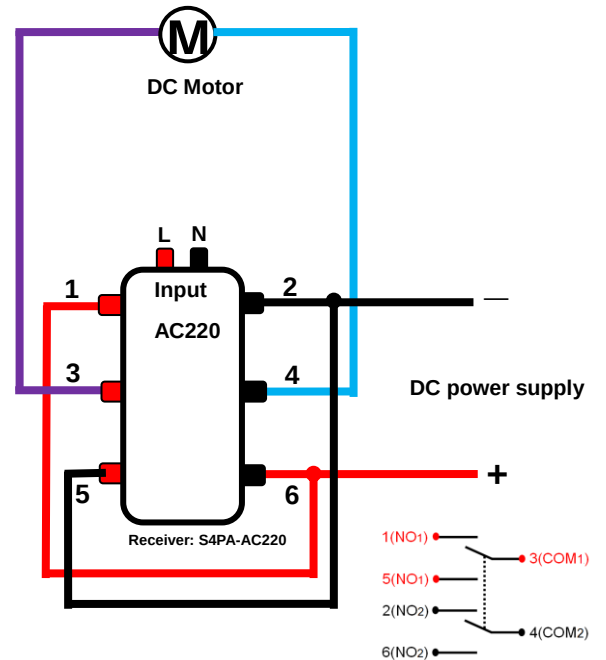
Operation: Press and hold the learning button of receiver until signal LED flashes slowly; release the button, LED keeps slow flash. That means all stored codes have been deleted successfully.



Control AC Motor



Control DC Motor



Circuit Configuration

