RF Wireless Receiver (Model 0020474)

Feature:

Wireless control, easy to install

Waterproof case with waterproof connectors.

High power, each output can work at maximum 30A current.

AC power output, can be used in home automation, such as security system, remote control lights, motors, doors / locks / windows / blinds / cars, and various equipment.

The receiver has four input control terminals, you can connect external devices, sensors, or manual switches to these terminals to control the outputs of receiver.

It also can be used in agriculture and industry automation, such as long range and high power remote control devices.

You can turn on/off the receiver with transmitter (remote control) from any place within a reliable distance; the wireless RF signal can pass through walls, floors and doors.

With characteristics of reverse power protection and over current protection

Use an 8-bit microprocessor designed and developed with low-power and high-speed CMOS technology.

Reliable control: The transmitter (Encoding) and the receiver (Decoding) use an 8-bit code.

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

If you use two or more units in the same place, you can set them with different codes.

Receiver parameters:

Model No.: S4PX-AC220

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

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

Working Frequency: 315MHz / 433MHz

Channel: 4 CH

4 Control Modes: Toggle, Momentary, Latched, Momentary + Toggle

Maximum Working Current: 30A / each channel

Static Current: ≤6mA

PCB size: 170mm x 109mm x 18mm

Case size:200mm x 120mm x 53mm

Work with Fixed code transmitters or Learning code transmitters.

Transmitters:

The receiver can pair different model transmitters, includes model C-4 (100M), CWB-4 (50M, waterproof), CP-4 (500M) and CB-4 (1000M) etc...

You also can use four transmitters with one button to work with this receiver, and each transmitter will control receiver's a channel. Such as model C-1 (100m), CWB-1 (50m, waterproof), CP-1 (500M) and CB-1 (1000M) etc...

The working range:

With a transmitter (such as CWB-4) to form a complete set, the distance can reach 50m. The distance of 50m 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 exposed to some interference by other signals. Therefore, the actual distance may or may not reach 50m.

If you want to have a further working range, you can install an external antenna to the receiver, such as magnetic sucker antenna (model 0020910), which working range is three times as much as it used to be. Or telescopic antenna (model 0020918), which working range is twice as much as it used to be.

Usage (with the transmitter like CWB-4):

You can use this 4 channel receiver to control 4 AC equipments.

If you want to control four AC 220V lamps, do as following:

Connect AC 220V power to terminals "L" and "N", and connect lamp 1 to terminals "L" and "N" of OUT1, connect lamp 2 to terminals "L" and "N" of OUT2, connect lamp 3 to terminals "L" and "N" of OUT3, connect lamp 4 to terminals "L" and "N" of OUT4 .

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

Setting control mode Toggle, Only connect Jumper-2.

Control mode Toggle: Press -> On; Press again -> Off.

Press button A of the transmitter: Terminal OUT1 outputs AC power.

Press button A again: Terminal OUT1 stops outputting.

Press button B of the transmitter: Terminal OUT2 outputs AC power.

Press button B again: Terminal OUT2 stops outputting.

Press button C of the transmitter: Terminal OUT3 outputs AC power.

Press button C again: Terminal OUT3 stops outputting.

Press button D of the transmitter: Terminal OUT4 outputs AC power.

Press button D again: Terminal OUT4 stops outputting.

Setting control mode Momentary, Only connect Jumper-1.

Control mode Momentary: Press and hold -> On; Release -> Off.

Press and hold button A of the transmitter: Terminal OUT1 outputs AC power.

Release button A of the transmitter: Terminal OUT1 stops outputting.

Press and hold button B of the transmitter: Terminal OUT2 outputs AC power.

Release button B of the transmitter: Terminal OUT2 stops outputting.

Press and hold button C of the transmitter: Terminal OUT3 outputs AC power.

Release button C of the transmitter: Terminal OUT3 stops outputting.

Press and hold button D of the transmitter: Terminal OUT4 outputs AC power.

Release button D of the transmitter: Terminal OUT4 stops outputting

Setting control mode Latched, Do not connect Jumper-1 and Jumper-2.

Control mode Latched: Press -> On, other relays Off; Press another button -> Off.

Press button A of the transmitter: Terminals OUT1 output AC power, and other terminals OUT2, OUT3, OUT4 no output.

Press button B of the transmitter: Terminals OUT2 output AC power, and other terminals OUT1, OUT3, OUT4 no output.

Press button C of the transmitter: Terminals OUT3 output AC power, and other terminals OUT1, OUT2, OUT4 no output.

Press button D of the transmitter: Terminals OUT4 output AC power, and other terminals OUT1, OUT2, OUT3 no output.

Setting control mode Momentary + Toggle, Connect Jumper-1 and Jumper-2:

Control mode Momentary (Channel A, B): Press and hold -> On; Release -> Off.

Press and hold button A of the transmitter: Terminal OUT1 outputs AC power.

Release button A of the transmitter: Terminal OUT1 stops outputting.

Press and hold button B of the transmitter: Terminal OUT2 outputs AC power.

Release button B of the transmitter: Terminal OUT2 stops outputting.

Control mode Toggle (Channel C, D): Press -> On; Press again -> Off.

Press button C of the transmitter: Terminal OUT1 outputs AC power.

Press button C again: Terminal OUT1 stops outputting.

Press button D of the transmitter: Terminal OUT2 outputs AC power.

Press button D again: Terminal OUT2 stops outputting.

Input control terminals:

The receiver has four input control terminals, you can connect external devices, sensors, or manual switches to these terminals to control the outputs of 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.

When the external device outputs low level signal to terminal "COM" and "Signal 1", Terminal OUT1 outputs AC power.

When the external device outputs low level signal to terminal "COM" and "Signal 2", Terminal OUT2 outputs AC power.

When the external device outputs low level signal to terminal "COM" and "Signal 3", Terminal OUT3 outputs AC power.

When the external device outputs low level signal to terminal "COM" and "Signal 4", Terminal OUT4 outputs AC power.

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.

When connect terminals "Signal 1" and "Com", Terminals OUT1 outputs AC power. And when disconnect "Signal 1" and "Com", Terminal OUT1 stops outputting.

When connect terminals "Signal 2" and "Com", Terminals OUT2 outputs AC power. And when disconnect "Signal 2" and "Com", Terminal OUT2 stops outputting.

When connect terminals "Signal 3" and "Com", Terminals OUT3 outputs AC power. And when disconnect "Signal 3" and "Com", Terminal OUT3 stops outputting.

When connect terminals "Signal 4" and "Com", Terminals OUT4 outputs AC power. And when disconnect "Signal 4" and "Com", Terminal OUT4 stops outputting.

How to pair the transmitter to the receiver:

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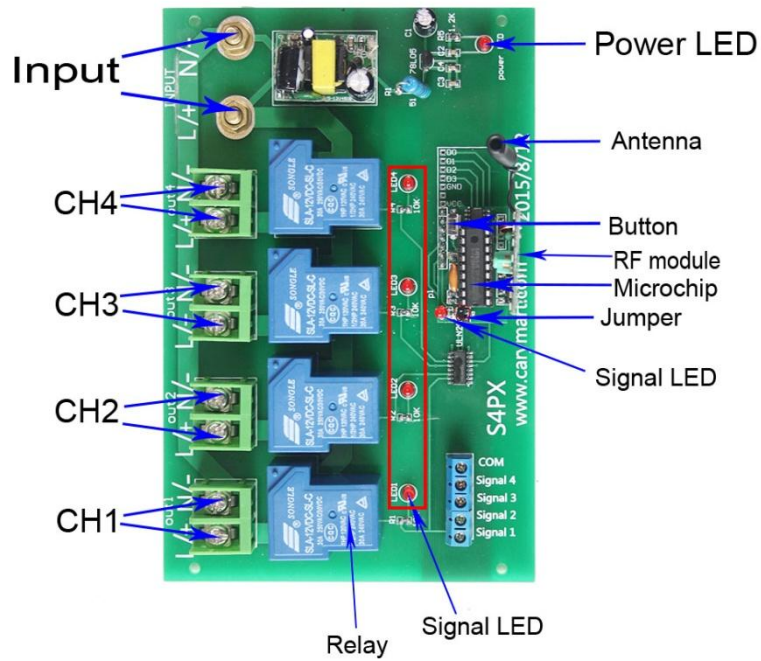
3) When receiver is in the status of LEARNING, press again the button of receiver, signal LED turns off, learning process will be discontinued.

4) The receiver can learn several 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 slowly; release the button, LED keeps slow flash. That means all stored codes have been deleted successfully.

Input

Power LED

Antenna

Button

RF module

Microchip

Jumper

Signal LED

CH4

CH3

CH2

CH1

S4PX

www.carymart.com

2015/8/7

Relay

Signal LED

Control AC Lamps

External Device

Power LED

RF module

Antenna

Button

Jumper-1

Jumper-2

Signal LED

COM
Signal 4
Signal 3
Signal 2
Signal 1

Status LED 4

Status LED 3

Status LED 2

Status LED 1

Relay 4

Relay 3

Relay 2

Relay 1

N L

N L

N L

N L

N L

OUT4

OUT3

OUT2

OUT1

AC Power supply

Lamp 4

Lamp 3

Lamp 2

Lamp 1