

## RF Wireless Remote Control Radio Controller / Transmitter & Receiver

### Package Include:

1 x Receiver: S12CA-DC09 / S12CA-DC12 / S12CA-DC24 (12 Channel / 12 Control Modes)  
1 x Transmitter: CV-12  
1 x User manual

### Feature:

Wireless control, easy to install

Control Lights, Motors, Fans, electrically operated Doors/Locks/Windows/Blinds/Cars or Other Appliances with AC110~240V or DC0~28V.

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

Audible / visual indication

Use microcontroller model of EM78P447, an 8-bit microprocessor designed and developed with low-power and high-speed CMOS technology.

Use ULN2003 to drive relay, with strong anti-interference.

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 receivers in the same place, you can set them with different codes.

Transmitting Frequency: 315MHz / 433MHz

Model No.: S12CA-DC09 / S12CA-DC12 / S12CA-DC24

Channel: 12 CH

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

Coding Type: Fixed code

Coding Setting: By learning

Operating Voltage: DC12V±1V (S12CA-DC12), DC9V±1V (S12CA-DC09), DC24V±1V (S12CA-DC24)

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

PCB Size: 94mm x 73mm x 18mm

Case Size: 100mm x 80mm x 30mm

Static Current: ≤6mA

Maximum Working Current: 5A / each channel

### Transmitter:

Model No.: CV-12

Channel: 12 CH

Remote Control Distance: 500m / 1500ft (theoretically)

Encode: Fixed code by soldering

Unit size: 110mm x 50mm x 18mm

Power Supply: 1 x 23A -12V battery (included, can be used for 12 months)

### Usage:

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):

1) Learning Toggle control mode: When the receiver is in the status of LEARNING, press button 1 of the remote control.

Control mode Toggle (Channel 1~12): Press -> On; Press again -> Off.

Press button 1: Turn on relay 1 (connect B and C, disconnect A and B)

Press button 1 again: Turn off relay 1 (disconnect B and C, connect A and B)

...

Press button 12: Turn on relay 12 (connect B and C, disconnect A and B)

Press button 12 again: Turn off relay 12 (disconnect B and C, connect A and B)

2) Learning Momentary control mode: When the receiver is in the status of LEARNING, press button 2 of the remote control.

Control mode Momentary (Channel 1~12): Press and hold -> On; Release -> Off.

Press and hold button 1: Turn on relay 1 (connect B and C, disconnect A and B)

Release button 1: Turn off relay 1 (disconnect B and C, connect A and B)

...

Press and hold button 12: Turn on relay 12 (connect B and C, disconnect A and B)

Release button 12: Turn off relay 12 (disconnect B and C, connect A and B)

3) Learning Latched control mode: When the receiver is in the status of LEARNING, press button 3 of the remote control.

Control mode Latched (Channel 1~12): Press -> On, other relays Off; Press other button -> Off.

Press button 1: Turn on relay 1 (connect B and C, disconnect A and B)

Turn off other relay (disconnect B and C, connect A and B)

...

Press button 12: Turn on relay 12 (connect B and C, disconnect A and B)

Turn off other relay (disconnect B and C, connect A and B)

4) Learning Toggle (Channel 1~4) + Momentary (Channel 5~8) + Latched (Channel 9~12) control mode: When the receiver is in the status of LEARNING, press button 4 of the remote control.

5) Learning Toggle (Channel 1~6) + Momentary (Channel 7~12) control mode: When the receiver is in the status of LEARNING, press button 5 of the remote control.

6) Learning Toggle (Channel 1~6) + Latched (Channel 7~12) control mode: When the receiver is in the status of LEARNING, press button 6 of the remote control.

7) Learning Momentary (Channel 1~6) + Latched (Channel 7~12) control mode: When the receiver is in the status of LEARNING, press button 7 of the remote control.

8) Learning Latched (Channel 1~4 interlocked; Channel 5~8 interlocked; Channel 9~12 interlocked) control mode: When the receiver is in the status of LEARNING, press button 8 of the remote control.

9) Learning Toggle (Channel 1~10) + Momentary (Channel 11~12) control mode: When the receiver is in the status of LEARNING, press button 9 of the remote control.

10) Learning Toggle (Channel 1~4) + Momentary (Channel 5~12) control mode: When the receiver is in the status of LEARNING, press button 10 of the remote control.

11) Learning Toggle (Channel 1~4) + Latched (Channel 5~12) control mode: When the receiver is in the status of LEARNING, press button 11 of the remote control.

12) Learning Toggle control mode (Channel 1~10) + All On / Off (Channel 11/12): When the receiver is in the status of LEARNING, press button 12 of the remote control.

Press button 11: Turn on all 12 relays

Press button 12: Turn off all 12 relays

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.

Learning the button of remote control:

- 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 remote control. 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.

