

## RF Wireless Remote Receiver & Transmitter Model (S4C-DC12 & CWB-4)

### Feature:

Wireless control, easy to install

Relay output, can 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

Use microcontroller model of EM78P156, 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 receivers in the same place, you can set them with different codes.

### Receiver:

Model No.: S4C-DC12

Power Supply (Operating Voltage): DC12V±1V

Working Frequency: 315MHz

Channel: 4 CH

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

Output: Relay output (Normally open and normally closed)

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

Maximum Working Current of Relay: 5A / each channel

Static Current: ≤6mA

PCB Size: 68mm x 48mm x 20mm

Case Size: 75mm x 55mm x 30mm

Work with Fixed code transmitters or Learning code transmitters.

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

If you want to have a further working range, you can install an external antenna to the receiver, such as magnetic mount antenna (model 0020909), which working range is three times as much as it used to be. Or telescopic antenna (model 0020908), which working range is twice as much as it used to be.

### Transmitter:

Model No.: 0021095 (CWB-4)

Waterproof

Shell Color: Black

Channel/Button: 4

Button Symbol: A, B, C, D

Operating Voltage: 6V (2 x CR2016 -3V button cell batteries,, can be used for 12 months)

Operating Current: 5mA

Operating Frequency: 315Mhz

Encoding Chip: LX2260

Encoding Type: Fixed code by soldering, up to 6561 codes

Transmitting Distance: 50m / 150ft (theoretically)

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.

Modulation Mode: ASK

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

Unit Size: 56mm x 32mm x 12mm

Weight: 20g

Uses: garage doors, motorcycles, car alarm products, home security products, wireless remote control products, industrial control products.

### How to set up the 8-bits code of the transmitter:

1. Open the transmitter shell, then you will see the circuit board. There are two rows pads and one row of chip feet on the back side.
2. The upper row of pads is "H" side, and the lower row of pads is "L" side.
3. If solder the middle row of chip feet to the "L" side, it is code 1. If solder the middle row of chip feet to the "H" side, it is code 2. Don't solder to any side, it is code 0.
4. The 8-bits code order is from right to left (from D1 to D8).
5. Here is an example, the 8-bits code in the picture is 00001020, solder as the following way:
6. Code 0: don't solder any side, like D1, D2, D3, D4, D6, D8.
7. Code 1: solder to the "L" side, like D5.
8. Code 2: solder to the "H" side, like D7.

### 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 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.

#### **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.

#### **Usage (with the transmitter like CWB-4) :**

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

Setting control mode Latched: Disconnect Jumper-1 and Jumper-2.

Control mode Latched (Channel 1~4): Press -> On, other relays Off; Press other button -> Off.

Such as:

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

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

Press button B: Turn on relay 2 (connect B and C, disconnect A and B)

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

Setting control mode Momentary: Only connect Jumper-1.

Control mode Momentary (Channel 1~4): Press and hold -> On; Release -> Off.

Such as:

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

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

Press and hold button B: Turn on relay 2 (connect B and C, disconnect A and B)

Release button B: Turn off relay 2 (disconnect B and C, connect A and B)

Setting control mode Toggle: Only connect Jumper-2.

Control mode Toggle (Channel 1~4): Press -> On; Press again -> Off.

Such as:

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

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

Press button B: Turn on relay 2 (connect B and C, disconnect A and B)

Press button B again: Turn off relay 2 (disconnect B and C, connect A and B)

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

Control mode Momentary (Channel 1, 2): Press and hold -> On; Release -> Off.

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

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

Press and hold button B: Turn on relay 2 (connect B and C, disconnect A and B)

Release button B: Turn off relay 2 (disconnect B and C, connect A and B)

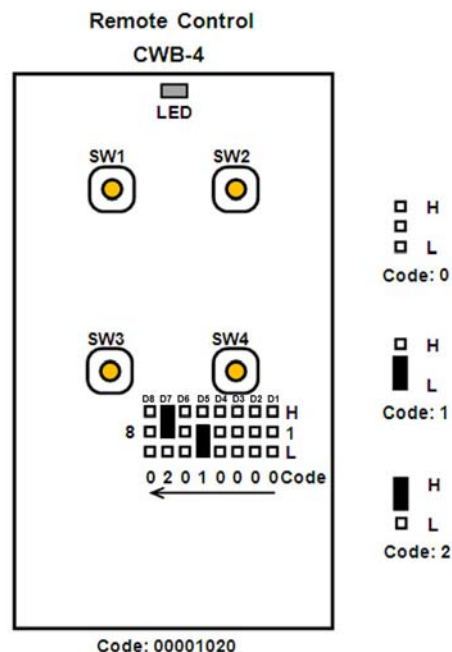
Control mode Toggle (Channel 3, 4): Press -> On; Press again -> Off.

Press button C: Turn on relay 3 (connect B and C, disconnect A and B)

Press button C again: Turn off relay 3 (disconnect B and C, connect A and B)

Press button D: Turn on relay 4 (connect B and C, disconnect A and B)

Press button D again: Turn off relay 4 (disconnect B and C, connect A and B)



#### FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### FCC Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### Caution!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.