

## RF Wireless Receiver (Model 0020323 S1FC-DC12)

### Features:

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

Wireless control, easy to install.

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.

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

With wired control terminals: You can connect manual switches to control the motor.

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: S1FC-DC12

Control Mode: Latched and Momentary

Power Supply (Operating Voltage): DC12V~36V

Output: DC12V~36V

Working Frequency: 315MHz / 433MHz

Channel: 1 CH, can work with 1 DC motor

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

Maximum Working Current: 10A / each channel, so motor's maximum starting current can not exceed 10A.

PCB Size: 94mm x 56mm x 24mm

Case Size: 100mm x 60.5mm x 30mm

Work with Fixed code transmitters

### 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 (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/four button transmitters, such as model C-3 (100M), CWB-3 (50M, waterproof), CP-4 (500M), CV-4-2 (500M), or CB-3 (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 transmitter CV-4-2):

Connect the positive pole of DC power supply to terminal "+" of INPUT, and connect the negative pole of DC power supply to terminal "-" of INPUT.

Connect terminals "Motor" to motor, You can exchange motor's two wires to change the rotating direction of motor.

**Note: Changing the control mode need to restart the receiver**

Setting control mode Latched: Connect Jumper 3&4

Press button ▲ on the transmitter: motor rotates in positive direction.

Press button ▼ on the transmitter: motor rotates in reversal direction.

Press button ■ on the transmitter: motor stops.

Setting control mode Momentary: Connect Jumper 1&2

Press and hold button ▲ on the transmitter: motor rotates in positive direction. Release button ▲ on the transmitter: motor stops.

Press and hold button ▼ on the transmitter: motor rotates in reversal direction. Release button ▼ on the transmitter: motor stops.

### Limit control terminals:

Limit control terminals TOPR, COM and TOPL are normally close, you can connect limit switches or sensors (normally close type) to TOPR, COM and TOPL, and then you can use limit switches or sensors to stop the motor.

When motor rotates in positive direction, if disconnect two terminals TOPR & COM, the motor will stop automatically.

When motor rotates reversal direction, if disconnect two terminals TOPL & COM, the motor will stop automatically.

### Wired control terminals:

You can connect manual switches to terminals "COM", "UP", "DOWN", "STOP", then you can use manual switches to control the motor.

1) Control mode Latched

When connect terminals "UP" and "COM", motor rotates in positive direction. And when connect "STOP" and "COM", motor stops.

When connect terminals "DOWN" and "COM", motor rotates in reversal direction. And when connect "STOP" and "COM", motor stops.

2) Control mode Momentary

When connect terminals "UP" and "COM", motor rotates in positive direction. And when disconnect "UP" and "COM", motor stops.  
 When connect terminals "DOWN" and "COM", motor rotates in reversal direction. And when disconnect "DOWN" and "COM", motor stops.

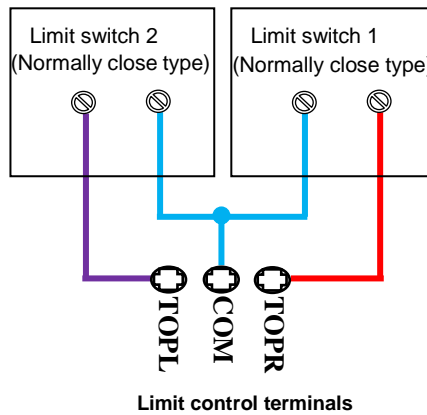
**How to pair the transmitter to the receiver:**

- 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 and hold button ▲ on remote control, signal LED flashes 2 times, release button ▲; then press and hold button ▼ on remote control, signal LED flashes 2 times again, release button ▼; then press and hold button ■ on remote control, signal LED flashes 2 times again; finally, press and hold other button ■ on remote control, signal LED flashes 2 times then 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 3 times then off; release the button. That means all stored codes have been deleted successfully.

**Connect limit switch**



**Control DC Motor**

