### DC Motor RF Wireless Remote Control Kit / Transmitter & Receiver

This is a DC motor wireless controller. This controller can remote control one DC motor (DC12V~30V) rotates in positive / reversal direction. It is adjustable about the speed of motor rotation. You can connect two restrictive switches to controller and use them to stop motor rotation. You can also connect Optoelectronic switch, Proximity switches, or Hall switches to controller and use them to stop motor rotation. The receiver has function of signal input, which means you can connect one external device to controller and use this device to start motor rotate in positive or reversal direction.

### Package Include:

1 x Receiver: S1FB-DC12/24
1 x Transmitter: CP-6
1 x User manual

#### Feature:

- Wireless control, easy to install.
- Control motors of rolling blinds / doors, projection screens, awnings, pumps, winches, conveyors or other appliances and mechanicals with voltage DC12V~30V.
- You can rotate the motor in the positive or reversal direction with the transmitter (remote control) from any place within a reliable distance, the wireless signal can pass through walls, floors and doors.
- Reliable control: The transmitter (Encoding) and the receiver (Decoding) use a 6-bit code.
- One/ several transmitters can control one/ several receivers simultaneously.
- If you use two or more receivers in same place, you can set them with different codes.
- Transmitting Frequency: 315MHz / 433MHz

### Receiver:

- Model No.: S1FB-DC12/24
- Power Supply (Operating Voltage): DC12V~30V
- The Maximum Instantaneous Current of Starting Motor: 30A
- Internal fuse: 30A
- Maximum Rated Power for Brushed DC motors: 200 W for DC12V motor; 400W for DC 24Vmotor
- Case Size: 160mm x 100mm x 42mm
- Work with Fixed code transmitters

## Transmitter:

- Model No.: CP-6
- Remote Control Distance: 500m / 1500ft (theoretically)
- Encode: Fixed code by soldering
- Unit size: 85mm x 36mm x 16mm
- Power Supply: 1 x 23A -12V battery (included, can be used for 12 months)

# Usage:

# Power supply:

Connect power supply DC 12V~30V to the terminals "Input". Connect DC motor to the terminals "Output". You can exchange the output wires of motor to change the rotating direction of motor.

# Function of transmitter:

Connect power supply, the two LED flashes slowly. When the motor stop rotating, LED (D3) flashes once per second.

Press button 1: LED (D3) will on, LED (D4) will off, motor rotates in positive direction.

Press button 2: LED (D4) will on, LED (D3) will off, motor rotates in reversal direction.

Press button 3: Motor stop rotating, LED (D4) will off, LED (D3) flashes slowly.

Press button 4: Motor rotation will speed up.

Button 5 is useless.

Press button 6: Motor rotation will slow down.

## Speed adjustment:

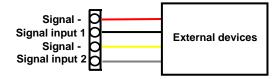
You can twist "Adjustable potentiometer" to adjust the speed of motor rotates in positive / reversal direction. Twist clockwise, motor rotation will speed up; Twist anti-clockwise, motor rotation will slow down.



# Signal input:

Connect one external device with low voltage output signal to terminal "Signal -", "Signal input 1" and terminal "Signal -", "Signal input 2", the external device's output signal can start motor rotate in positive or reversal direction.

When the low voltage external device output signal to terminal "Signal -", "Signal input 1", motor rotates in positive direction; when the low voltage external device output signal to terminal "Signal -", "Signal input 2", motor rotates in reversal direction.

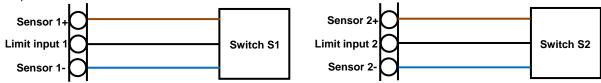


## • Restrictive function:

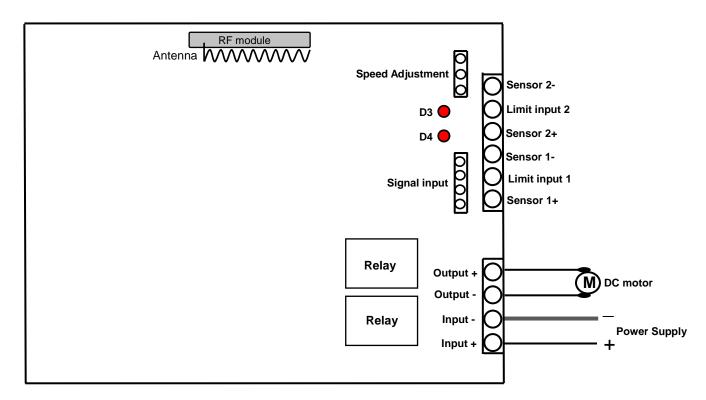
1) You can connect two restrictive switches to terminals "Sensor 1-", "Limit input 1", and terminals "Sensor 2-", "Limit input 2". When the rotation is overdone, if the restrictive switch S1 or S2 is activated, the motor will stop automatically. That means when motor rotates in positive direction, if you activate "S1", motor will stop automatically; when motor rotates in reversal direction, if you activate "S2", motor will stop automatically. You can connect according to below picture:



2) You can also connect optoelectronic switch, proximity switch, hall switch to terminals "Sensor 1-", "Limit input 1", "Sensor 1+", and terminals "Sensor 2-", "Limit input 2", "Sensor 2+", if the switch S1 or S2 is activated, the motor will stop automatically. That means when motor rotates in positive direction, if the switch S1 is activated, motor will stop automatically; when motor rotates in reversal direction, if he switch S2 is activated, motor will stop automatically. You can connect optoelectronic switch, proximity switch, hall switch according to below picture:



## **Application Circuit**



## 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 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 turns off; release the button. That means all stored codes have been deleted successfully.