5000 Meters RF Wireless Remote Control Kit (Model 0020693 S1PFW-DC-ANT3)

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.

The installation of wireless control is easy and fast.

Super long range, with a transmitter to form a complete set, the working distance can reach 5000m in an open ground.

Waterproof: The receiver has waterproof case and waterproof connector, it can be installed outdoors.

Power Supply: Four working voltage versions, DC 6V, 9V, 12V, 24V.

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.

High Power: Each channel can work at maximum current 30A.

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

With wired control terminals:You can connect manual switches or external devices (with low level output signal, such as sensors) to control the motor.

With the external antenna, it can have a further working range.

You can control the equipments by using the receiver with transmitter (remote control) from any place within a reliable distance.

Wireless RF signal can pass through walls, floors, doors or windows.

With characteristics of reverse power protection and over current protection.

Reliable control: The code has thousands of different combinations, and the receiver only works with the transmitter which use the same code.

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

You can use two or more units in the same place.

Feedback function:

The receiver and the transmitter have a Two-way working mode, and the user can know the working status of receiver by the transmitter in such a long distance.

Two-way working mode: When you press the remote control to send RF signal to the receiver, if the receiver has been successfully triggered or operated, the receiver will immediately transmit a RF feedback signal to the remote control. Then the remote control will send out a buzzing sound to inform you that the receiver has been successfully operated.

Receiver Parameters:

Model No: S1PFW-DC06-ANT3 / S1PFW-DC09-ANT3 / S1PFW-DC12-ANT3 / S1PFW-DC24-ANT3

Control Mode: Latched or Momentary

Power Supply (Operating Voltage): DC6V (S1PFW-DC06-ANT3), DC9V±1V (S1PFW-DC09-ANT3), DC12V±1V (S1PFW-DC12-ANT3), DC24V±1V (S1PFW-DC24-ANT3)

Output: DC6V (S1PFW-DC06-ANT3), DC9V±1V (S1PFW-DC09-ANT3), DC12V (S1PFW-DC12-ANT3), DC24V (S1PFW-DC24-ANT3)

Working Frequency: 433.92MHz

Channel: 1 CH, can work with 1 DC motor

Static Current: ≤6mA

Maximum Working Current: 30A / each channel, so motor's maximum starting current can not exceed 30A.

PCB Size: 90mm x 59mm x 18mm

Case Size: 100mm x 68mm x 50mm

External Telescopic Antenna:

Length of external telescopic antenna: 108mm / 445mm (stretch)

With SMA connector.

If you stretches the external telescopic antenna, it can have a further working range.

Matching Transmitters:

This receiver only works with 5000m transmitters, such as model CC-2 / CC-4 (5000M), or CCW-2 / CCW-4 (5000M, waterproof).

When you set the receiver in momentary mode, it should work with two buttons transmitter, such as model CC-2 (5000m) or CCW-2 (5000m, waterproof). When you set the receiver in latched mode, it should work with four buttons transmitter, such as model CC-4 (5000m) or CCW-4 (5000m, waterproof).

Working Range:

With a transmitter to form a complete set, the maximum working distance can reach 5000m 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.

Usage (with transmitter CC-2 or CC-4):

The receiver can be used to control a DC motor.

Wiring:

1) 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.

2) Connect output terminals to motor. You can exchange motor's two wires to change the rotating direction of motor.

Setting different control modes:

1) Setting control mode Latched (with transmitter CC-4): Turn on the second bit of the dip switch.

Press button A: motor rotates in positive direction.

Press button C: motor stops.
Press button B: motor rotates in reversal direction.
Press button D: motor stops.

2) Setting control mode Momentary (with transmitter CC-2): Turn on the first and the second bits of the dip switch.
Press and hold the big button: motor rotates in positive direction
Release the big button: motor stops
Press and hold the small button : motor rotates in reversal direction
Release the small button: motor stops Setting control mode Latched: Turn on the second bit of the dip switch.

Limit control terminals:
You can connect limit switches (normally open type) to terminals S1 and S2, and terminals S1 and S2 are normally open..
When motor rotates forward, if connect two terminals of S1, the motor will stop automatically.
When motor rotates reversal, if connect two terminals of S2, the motor will stop automatically.

Wired control terminals:
The receiver has wired control terminals, you can connect external devices, sensors, limit switches or manual switches to trigger the receiver.

1) By low level signal:
You can connect external devices (with low level output signal) to trigger the receiver.
When external device outputs low level signal to terminal 1 (signal +) and 2 (signal -), motor rotates in positive direction.
When external device stops to output signal, motor stops.
When external device outputs low level signal to terminal 3 (signal -) and 4 (signal +), motor rotates in reversal direction..
When external device stops to output signal, motor stops.

2) By NO/NC contact:
You can connect manual switches (with NO/NC contact) to trigger the receiver.
When connect terminals 1 and 2 by manual switch, motor rotates in positive direction.
When disconnect terminals 1 and 2 by manual switch, motor stops
When connect terminals 3 and 4 by manual switch, motor rotates in reversal direction
When disconnect terminals 3 and 4 by manual switch, motor stops
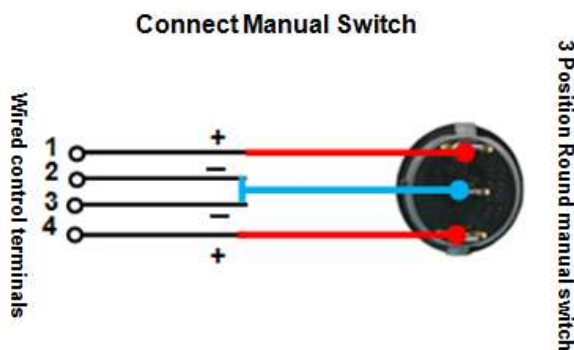
Setting feedback function:
If you want to switch on the feedback function, you need to turn on the third bit of the dip switch.
When the receiver gets the signal of transmitter, it will immediately send a return signal to the transmitter. When the transmitter receive the feedback signal of the receiver, the transmitter will exude a buzzing sound like "D~" which means it receive the feedback signal successfully.
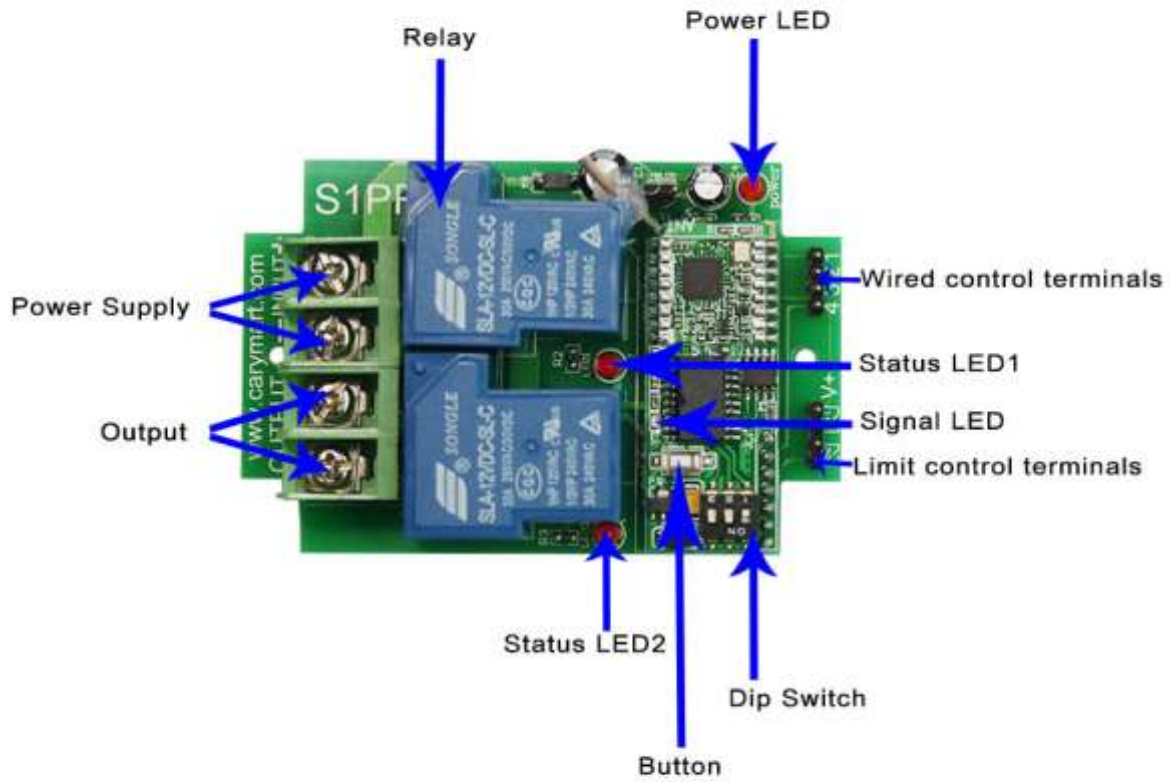
How to pair the transmitter to the receiver:
1) Press button K1 of receiver for 1- 2 seconds; signal LED on the receiver is turned on. The receiver starts the LEARNING procedure.
2) Press any one button on remote control. If signal LED flashes twice, it means learning is successful.
3) When receiver 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 three times. That means all stored codes have been deleted successfully.

Connect Manual Switch

Relay — Power LED

Power Supply

Output

S1PF

Status LED1
Signal LED
Wired control terminals
Limit control terminals

Status LED2

Button

Dip Switch

Control DC Motor

DC Power Supply

+ (red)
− (black)

DC Motor (M)

INPUT + / −

OUTPUT

Relay1

Relay2

Status LED1

Status LED2

Power LED

Signal LED

Learning Button

dip switch

3 2 1

ON

External devices

1 +
2 −
3 −
4 +

S1

S2