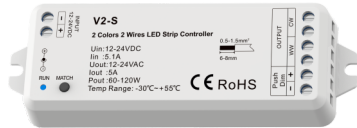# 2 Colors 2 Wires LED Strip Controller

Model No.: V2-S

2–wires CCT/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize/Push Dim

Feature

C CE **RoHS** emc LVD RED

● Only apply to 2-wires WW+CW LED strip.
● Match with RF 2.4G single zone or multiple zone dual color remote control.
● One RF controller accept up to 10 remote control.
● 4096 levels 0-100% dimming smoothly without any flash.
● Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
● Synchronize on multiple number of controllers.
● 3 levels color temperature (WW, NW and CW) selectable by continuous power off and on operation.
● Connect with external push switch to achieve on/off and 0-100% dimming function.

Technical Parameters

Input and Output

Input and Output	
Input voltage	12-24VDC
Input current	5.1A
Output voltage	12-24VDC
Output current	5A
Output power	60-120W
Output type	Constant voltage

Environment

Environment	
Operation temperature	Ta: -30℃ ~ +55℃
Case temperature (Max.)	Tc: +85℃
IP rating	IP20

Warranty and Protection

Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity

Dimming data

Dimming data	
Input signal	RF 2.4GHz + Push Dim
Control distance	30m(Barrier-free space)
Dimming gray scale	256 levels
Dimming range	0-100%
Dimming curve	Linear
PWM Frequency	500Hz

Safety and EMC

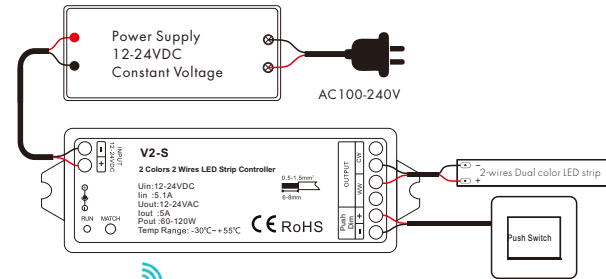| Safety and EMC	
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard(LVD)	EN 62368-1:2020+A11:2020
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Certification	CE,EMC,LVD,RED

Weight

Weight	
Net weight	0.053kg
Gross weight	0.066kg

Mechanical Structures and Installations

Power input -
Power input +
Installation rack
DC socket input
LED indicator
Match key
Output CW LED
Output WW LED
Installation rack
Push switch
Push switch common

114.00 mm
38.00 mm
20.00 mm

Wiring Diagram

Power Supply
12-24VDC
Constant Voltage

AC100-240V

2-wires Dual color LED strip

Push Switch
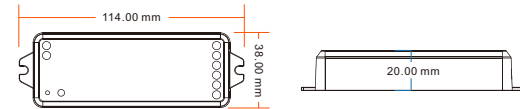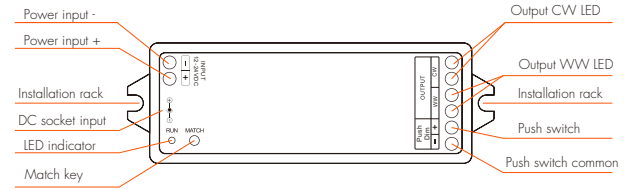
CCT Remote

Push Dim:

Click	ON/OFF
Long press(>1s) from OFF	Color temperature UP/DOWN (turn off and turn on to return dimming)
Long press(>1s) from ON	Dimming UP/DOWN

Note: Continuously switch off and on the power supply two times rapidly,
        It will change 3 levels color temperature (WW, NW and CW) in sequence.

Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the controller's Match key

Match:

Short press match key, immediately press on/off key (single zone remote) or zone key (multiple zone remote) of the remote.
The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key for 5s to delete all match,
The LED indicator fast flash a few times means all matched remotes were deleted.

Use Power Restart

Match:

Switch off the power, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 3 times on the remote.
The light blinks 3 times means match is successful.

Delete:

Switch off the power, then switch on power, repeat again.
Immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 5 times on the remote.
The light blinks 5 times means all matched remotes were deleted.

Application notes

1. All the receivers in the same zone.
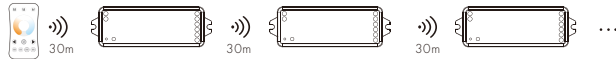
RF remote

Auto-transmitting: One receiver can transmit the signals from the remote to another receiver within 30m, as long as there is a receiver within 30m, the remote control distance can be extended.
Auto-synchronization: Multiple receivers within 30m distance can work synchronously when they are controlled by the same remote.
Receiver placement may offer up to 30m communication distance. However, we recommend for indoor applications that receiver placements should be no further apart than15m.

2. Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4.

RF remote

Push Dim with Synchronization

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switchs.
If more than one controller are connected to the same push switch, do a long press for more than 10s,
then the system is synchronized and all lights in the group dim up to 100%.
This means there is no need for any additional synchrony wire in larger installations.
We recommend the number of controllers connected to a push switch does not exceed 50 pieces,
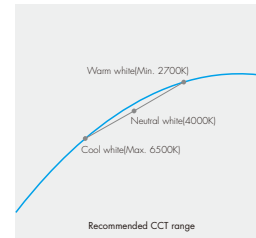The maximum length of the wires from push to controller should be no more than 50 meters.

Dual color control

Each channel can supply up to 120W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	WW=0W,CW=120W	WW=60W,CW=60W	WW=120W,CW=0W

Linear dual color tuning

Dimming curve