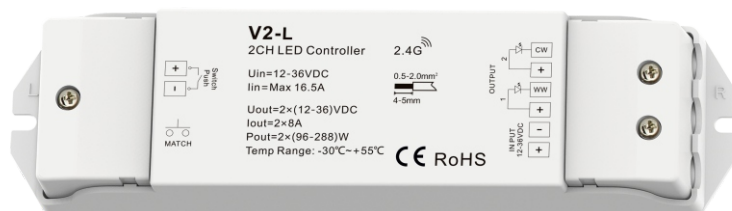# Dual Color LED Controller

Model No.: V2-L

2 Channel/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize/Push Dim/Multiple protection

CE RoHS emc LVD RED

Feature

- 4096 levels 0-100% dimming smoothly without any flash.
- Match with all 2.4G single zone or multiple zone dual color or single color remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Over-load / Short circuit protection, recover automatically.

Technical Parameters

Input and Output

Input voltage	12-36VDC
Input current	16.5A
Output voltage	2x(12-36)VDC
Output current	2CH,8A/CH
Output power	2x(96-288)W
Output type	Constant voltage

Dimming data

Input signal	RF 2.4GHz + Push Dim
Control distance	30m
Dimming level	4096 levels
Dimming range	0-100%
Dimming curve	Linear
PWM Frequency	2KHz (default)

Safety and EMC

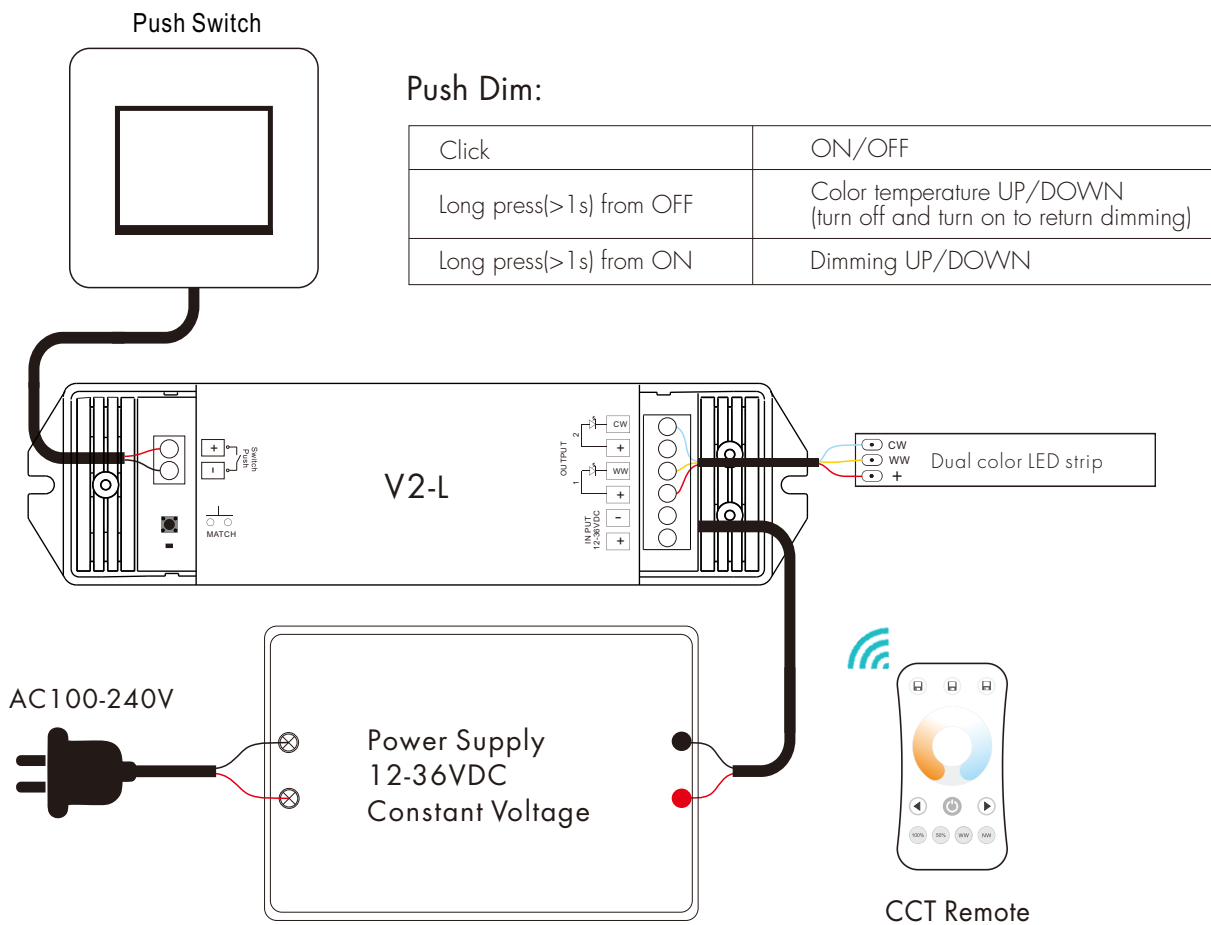|	
EMC standard (EMC)	EN301 489,EN 62479
Safety standard(LVD)	EN60950
Safety standard(LVD)	EN300 328
Certification	CE,EMC,LVD,RED

Environment

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

Warranty and Protection

Warranty	5 years
Protection	Reverse Polarity Over-load Short circuit

Mechanical Structures and Installations

Push switch

Push switch common

Installation rack

Match key

LED indicator

Cool white LED -

LED output +

Warm white LED -

LED output +

Installation rack

Power input -

Power input +

175mm

45mm

160mm

27mm

Wiring Diagram

Push Switch

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

V2-L

Dual color LED strip

AC100-240V

Power Supply
12-36VDC
Constant Voltage

CCT Remote

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.

Delete:

Press and hold match key for 5s to delete all match, The light blinks 5 times means all matched remotes were deleted.

Use Power Restart

Match:

Switch off the power, then switch on power 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 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.
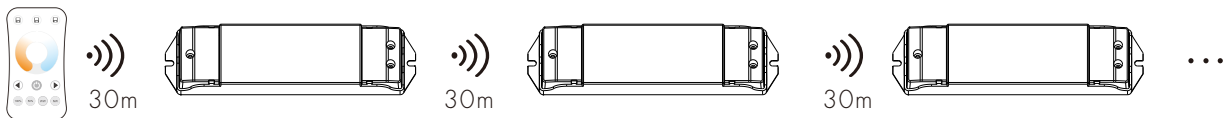
RF remote

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 limitless.

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. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

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
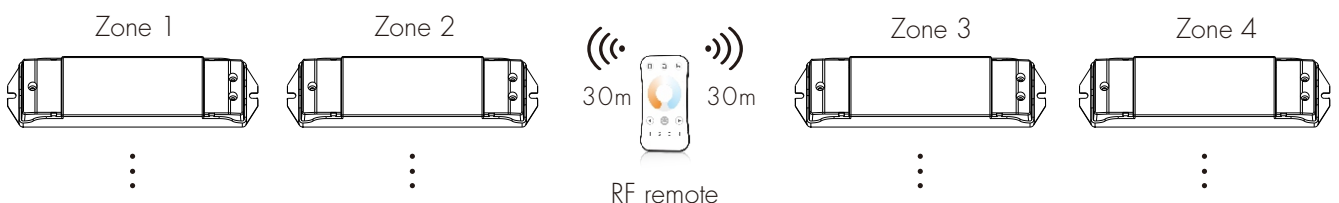
Push Dim with Synchronization

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 25 pieces,
The maximum length of the wires from push to controller should be no more than 20 meters.
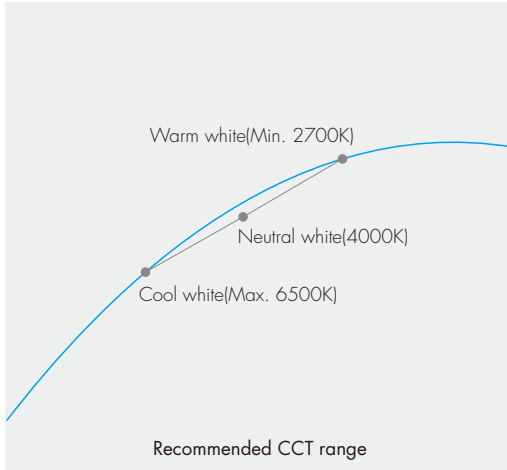
Dual color control

CH1=Warm white LED
CH2=Cool white LED
Each channel can supply up to 192W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1=0W,CH2=192W	CH1=96W,CH2=96W	CH1=192W,CH2=0W

Linear dual color tuning

Warm white(Min. 2700K)

Neutral white(4000K)

Cool white(Max. 6500K)

Recommended CCT range

Dimming curve

Gamma=1.0

PWM duty(%)

Brightness(%)