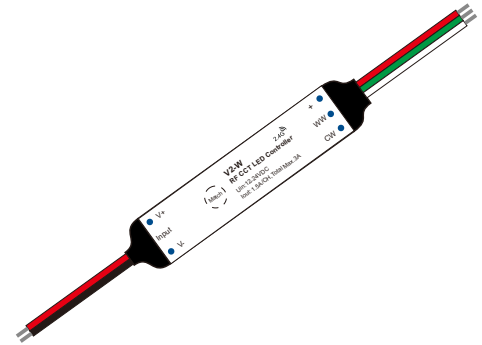


## Dual Color LED Mini RF Controller

- 2 channel constant voltage dual color LED mini RF controller.
- 1.5A per channel, output connect with 5 meters dual color LED strip, max output power 75W.
- 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.



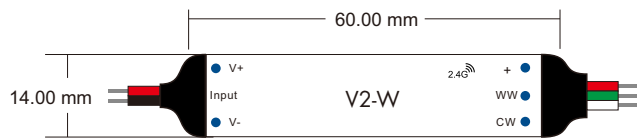
CE RoHS  RED

2 channel constant voltage / Max 75W / Step-less dimming / Wireless remote control

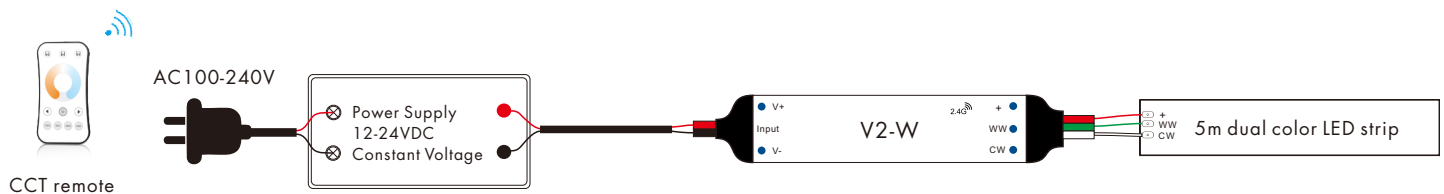
### Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-24VDC	Input signal	RF 2.4GHz	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3
Output voltage	12-24VDC	Control distance	30m(Barrier-free space)		ETSI EN 301 489-17 V3.2.4
Output power	Max. 75W	Dimming gray scale	4096 (2 <sup>12</sup> ) levels	Safety standard	EN 62368-1:2020+A11:2020
Output type	Constant voltage	Dimming range	0 - 100%	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
<b>Environment</b>		Dimming curve	Linear	Certification	CE,EMC,RED
Operation temperature	Ta: -30°C ~ +55°C	PWM Frequency	1000Hz (default)	<b>Package</b>	
Case temperature (Max.)	Tc: +85°C	<b>Warranty</b>		Size	L90x H130mm
IP rating	IP20	Warranty	5 years	Gross weight	0.013kg

### Dimension



### Wiring Diagram



### Match Remote Control

End user can choose the suitable match/delete ways. Three 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) on the remote. The light blinks 3 times means match is successful.

##### 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 of the receiver, then switch on power. 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:

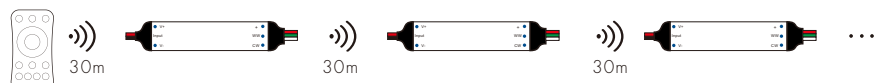
Switch off the power of the receiver, then switch on power. Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

##### Another way to match:

The receiver is power on for five consecutive times, the LED strip light start blinking slowly for 10s, Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) on the remote. The light blinks 3 times means match is successful.

## 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 than 1.5m.

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



## Dual color control

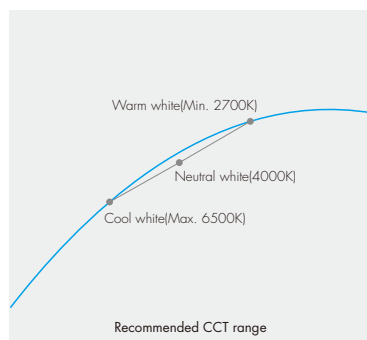
WW=Warm white LED

CW=Cool white LED

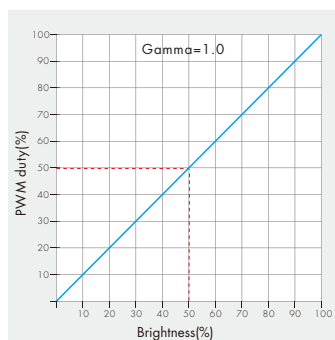
Each channel can supply up to 120W(@24V) and white balance can be controlled as such:

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



## Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power. 2. Wrong connection or insecure.	1. Check the power. 2. Check the connection.
Wrong color	1. Wrong connection of WW/CW wires.	1. Reconnect WW/CW wires.
No response from the remote	1. The battery has no power. 2. Beyond controllable distance. 3. The controller did not match the remote.	1. Replace battery. 2. Reduce remote distance. 3. Re-match the remote.

## Installation Precautions

1. The products shall not be stacked, the distance should be  $\geq 20\text{cm}$ , so as not to affect lifespan of the products due to poor heat dissipation.
2. The product shall not be installed close to the switching power supply with an interval of  $\geq 20\text{cm}$  to avoid radiation interference of the switching power supply.
3. The installation height shall be  $\geq 1\text{m}$  from the floor to avoid shortening the remote control distance due to too weak reception signal.
4. The products are not allowed to be close to or covered by metal objects, with an interval of  $\geq 20\text{cm}$  to avoid signal attenuation and shorten the remote distance.
5. Avoid installation at the corner of the wall or the corner of the beam, with an interval of  $\geq 20\text{cm}$  to avoid signal interference.