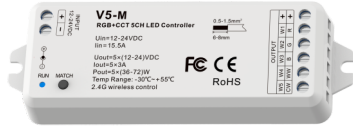


## 5 Channel RGB+CCT LED RF Controller

Model No.: V5-M

5 Channels/DC power socket input/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize



FC CE RoHS EMC RED

### Features

- DC power socket input and 5 channel constant voltage output.
- Match with RF 2.4G single zone or multiple zone RGB+CCT remote control.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- Built in 10 dynamic mode, include jump or gradual change style.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 30m control distance.
- Synchronize on multiple number of controllers.

### Technical Parameters

Input and Output	
Input voltage	12-24VDC
Input current	15.5A
Output voltage	5 x (12-24)VDC
Output current	5CH, 3A/CH
Output power	5 x (36-72)W
Output type	Constant voltage

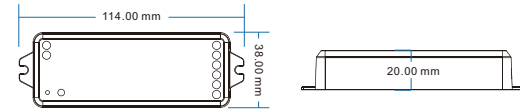
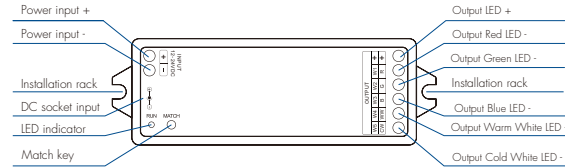
Dimming data	
Input signal	RF 2.4GHz
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2 <sup>12</sup> ) levels
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	750Hz (default)

Safety and EMC	
EMC standard [EMC]	EN55015, EN61547
Safety standard [VD]	EN61347, EN62493
Radio Equipment [RED]	EN300 440, EN50663, EN301 489
Certification [CE-RED]	Safety+EMC+RF

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

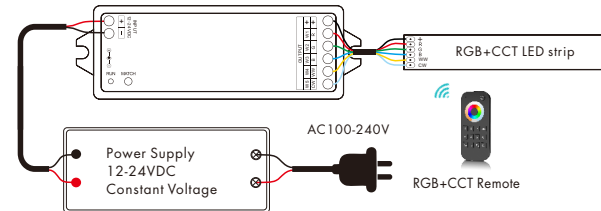
Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity Short circuit

### Mechanical Structures and Installations

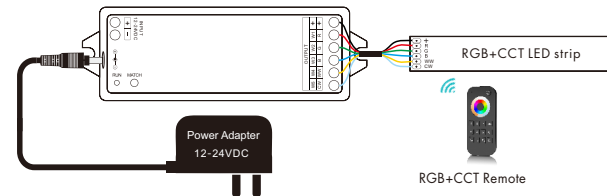


### Wiring Diagram

- Connect constant voltage power supply



- Connect power adapter



**Note:** Long press match key for 10s, RGB and CCT light can not be on at the same time.  
Long press match key for 15s, RGB and CCT light can be on at the same time.  
above operation will also restore the factory setting.

## 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) on 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:

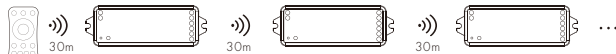
Switch off the power, then switch on power again, immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

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, under same dynamic mode and with same speed.

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.



## Dynamic mode list

No.	Name	No.	Name
1	RGB jump	6	RGB fade in and out
2	RGB smooth	7	Red fade in and out
3	6 color jump	8	Green fade in and out
4	6 color smooth	9	Blue fade in and out
5	Color temperature smooth	10	White fade in and out

## Dual color control

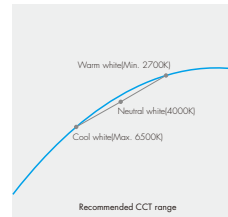
CH4=Warm white LED

CH5=Cool white LED

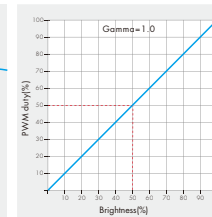
Each channel can supply up to 72W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH4=0W,CH5=72W	CH4=72W,CH5=72W	CH4=72W,CH5=0W

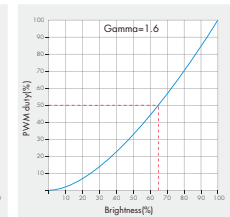
Linear dual color tuning



Dimming curve for CCT



Dimming curve for RGB



## 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 R/G/B/WW/CW wires.	1. Reconnect R/G/B/WW/CW wires.
Uneven intensity between front and rear, with voltage drop	1. Output cable is too long. 2. Wire diameter is too small. 3. Overload beyond power supply capability. 4. Overload beyond controller capability.	1. Reduce cable or loop supply. 2. Change wider wire. 3. Replace higher power supply. 4. Add power repeater.
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. Rematch the remote.