# RGBW/RGB/CCT/Dimming 4 Channel LED RF Controller

## Model No.: V4-X

4 Channels/Step-less dimming/Wireless remote control/Auto-transmitting/Synchronize/Multiple protection

## Features

- 4 channel PWM constant voltage output, Max 8A per channel.
- Match with RF 2.4G single zone or multiple zone single color, dual color and RGB/RGBW remote control.
- One RF controller accept up to 10 remote control.
- 4096 levels 0-100% dimming smoothly without any flash.
- When using with RGB/RGBW light, built in 10 dynamic mode, include jump or gradual change style.
- Auto-transmitting function: Controller automatically transmit signal to another controller with 15m control distance.
- Synchronize on multiple number of controllers.
- Over-load / Short circuit protection, recover automatically.



FC C CE RoHS emc LVD RED

## Technical Parameters

Input and Output		
Input voltage	12-48VDC	
Input current	32.5A@12/24V 20.5A@36/48V	
Output voltage	4 x (12-48)VDC	
Output current	4x8A@12/24V 4x5A@36/48V	
Output power	4x96W@12V 4x192W@24V 4x180W@36V 4x240W@48V	
Output type	Constant voltage	

Dimming data	
Input signal	RF 2.4GHz
Control distance	15m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	O-100%
Dimming curve	Logarithmic
PWM Frequency	500Hz (default)

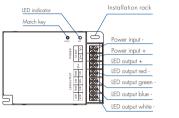
Safety and EMC	
EMC standard (EMC)	EN301 489,EN 62479
Safety standard(LVD)	EN60950
Radio Equipment(RED)	EN300 328
Certification	CE,EMC,LVD,RED

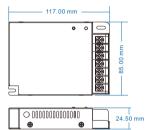
Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity Over-load Short circuit

Weight	
Net weight	0.284kg
Gross weight	0.304kg

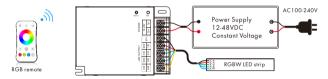
## Mechanical Structures and Installations





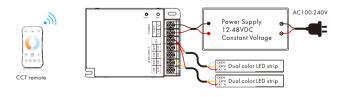
## Wiring Diagram

## • V4-X for RGB/RGBW



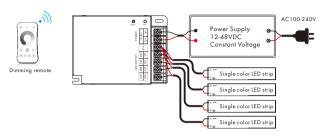
Note: If connect with RGB LED strip, please long press match key for 15s, the controller will become RGB type.

### • V4-X for dual color



User Manual Ver 1.0.4

### • V4-X for single color



## 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

# RGB/RGBW 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	Yellow cyan purple smooth	10	White fade in and out

## Dual color control

CH1,CH3=Warm white LED CH2.CH4=Cool white LED

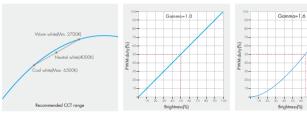
Each channel can supply up to 192W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1=0W,CH2=192W	CH1=96W,CH2=96W	CH1=192W,CH2=0W
rower distribution	CH3=0W,CH4=192W	CH3=96W,CH4=96W	CH3=192W,CH4=0W

### Linear dual color tuning

### Dimming curve for CCT

Dimming curve for RGBW/RGB/DIM



## Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	No power. Wrong connection or insecure.	Check the power. Check the connection.
Wrong color	1. Wrong connection of R/G/B/W wires.	1. Reconnect R/G/B/W wires.
Uneven intensity between front and rear,with voltage drop	Output cable is too long. Wire diameter is too small. Overload beyond power supply capability. Overload beyond controller capability.	Reduce cable or loop supply. Change wider wire. Replace higher power supply. Add power repeater.
No response from the remote	The battery has no power. Beyond controllable distance. The controller did not match the remote.	Replace battery. Reduce remote distance. Rematch the remote.

User Manual Ver 1.0.4