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



FC C CE RoHS EMC LVD RED

Features

- Match with 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.

Technical Parameters

Input and Output			
Input voltage	12-48VDC		
Input current	32.5A@12/24V 20.5A@36/48V		
Output voltage	4 × (12-48)VDC		
Output current	4x8A@12/24V 4x5A@36/48V		
Output power	4x96VV@12V 4x192VV@24V 4x180VV@36V 4x240VV@48V		
Output type	Constant voltage		

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

Dimming data		
Input signal	RF 2.4GHz	
Control distance	15m	
Dimming level	4096 levels	
Dimming range	0-100%	
Dimming curve	Logarithmic	
PWM Frequency	500Hz (default)	
Environment		
Operation temperature	Ta:-30 ℃ ~ +55 ℃	
Case temperature (Max.)	Tc:+85 ℃	
IP rating	IP20	
Warranty and Protection		

5 years

Over-load Short circuit

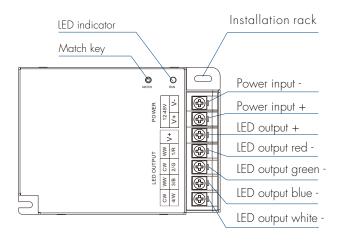
Reverse Polarity

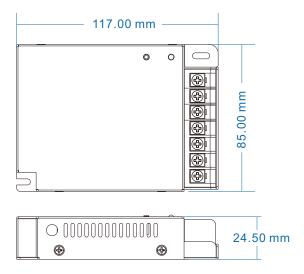
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Warranty

Protection

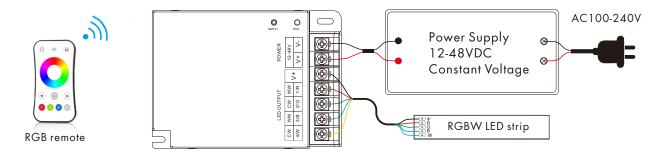
Mechanical Structures and Installations





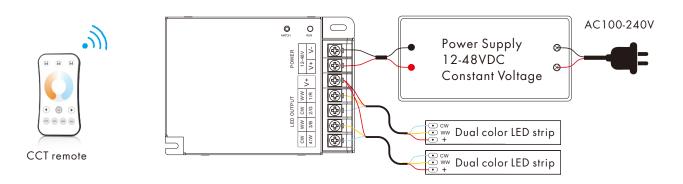
Wiring Diagram

• V4-X for RGB/RGBW



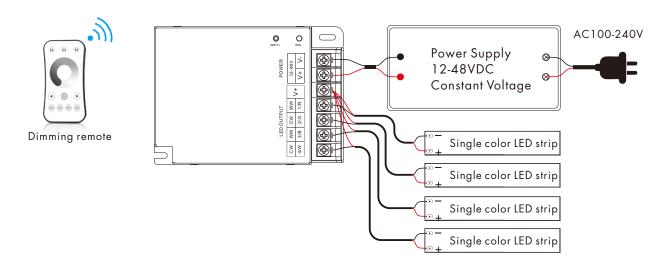
Note: If connect with RGB LED strip, please long press match key for 15s, the controller will become RGB type.

• V4-X for dual color



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• 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) 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.

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

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Dual color control

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

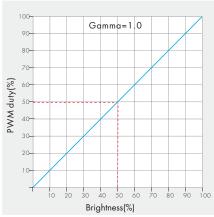
Each channel can supply up to 192W(@24V) and white balance can be controlled as such:

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

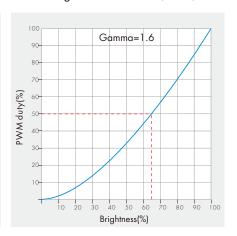
Linear dual color tuning



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. Re-match the remote.

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