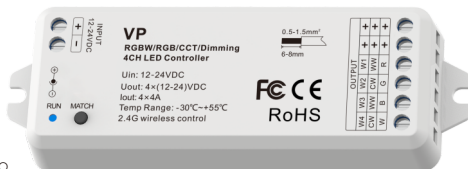


VP

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

Features

- DC socket or wiring screw terminal power input and 4 channel constant voltage output.
- 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 30m control distance.
- Synchronize on multiple number of controllers.
- Light on/off fade time 3s selectable.
- PWM frequency 1KHz, 2KHz, 4KHz or 8KHz selectable.

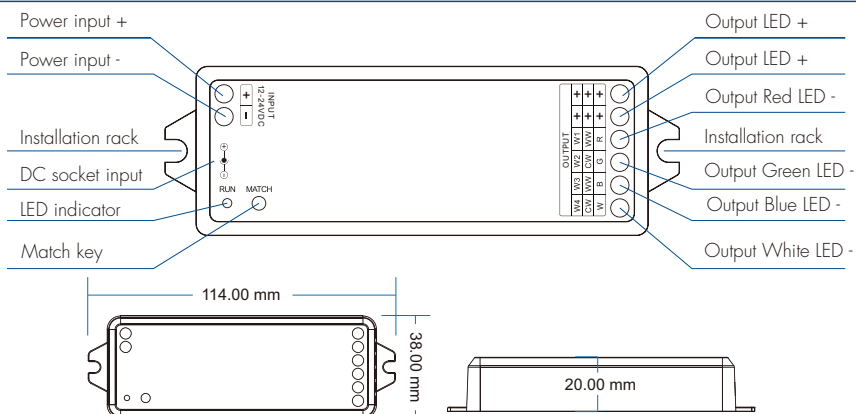


FCC CE RoHS

Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-24VDC	Input signal	RF 2.4GHz	EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3
Input current	16.5A	Control distance	30m(Barrier-free space)	Safety standard	EN 61347-1/-2
Output voltage	4 x (12-24)VDC	Dimming gray scale	4096 (2^12) levels	Radio equipment	ETSI EN 300 440
Output current	4CH, 4A/CH, Max 6A	Dimming range	0 -100%	Certification	CE RoHS FCC
Output power	4 x (48-96)W	Dimming curve	Logarithmic	Environment	
Output type	Constant voltage	PWM frequency	1000Hz (default)	Operation temperature	Ta: -30 °C ~ +55 °C
Warranty and Protection		Package		Case temperature(Max.)	Tc: +85 °C
Warranty	5 years	Size	L120 x W43 x H27mm	IP rating	IP20
Protection	Reverse Polarity, Short circuit	Gross weight	0.066kg		

Mechanical Structures and Installations



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:

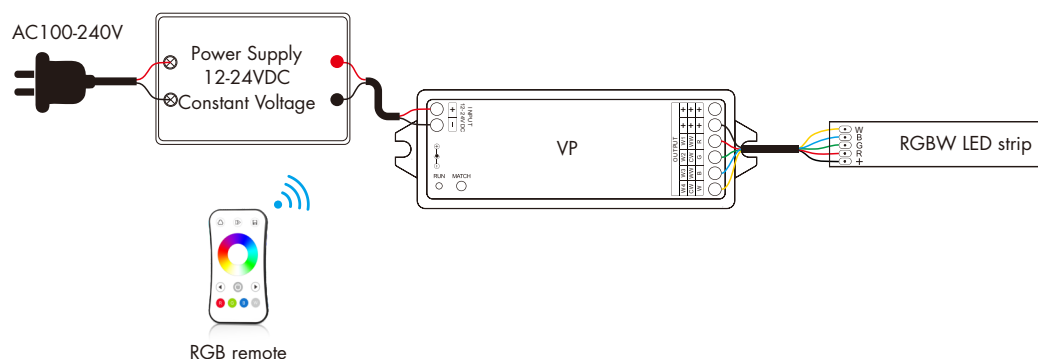
Switch off the power of the receiver, then switch on power, repeat again. Immediately short press on/off key (single zone remote) or zone key (multiple one remote) 3 times on the remote. The light blinks 3 times means match is successful.

Delete:

Switch off the power of the receiver, then switch on power, repeat 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.

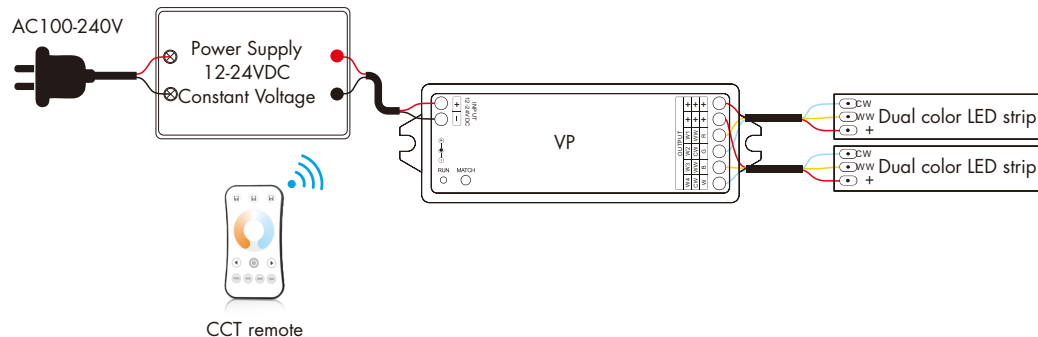
Wiring Diagram

• VP for RGB/RGBW

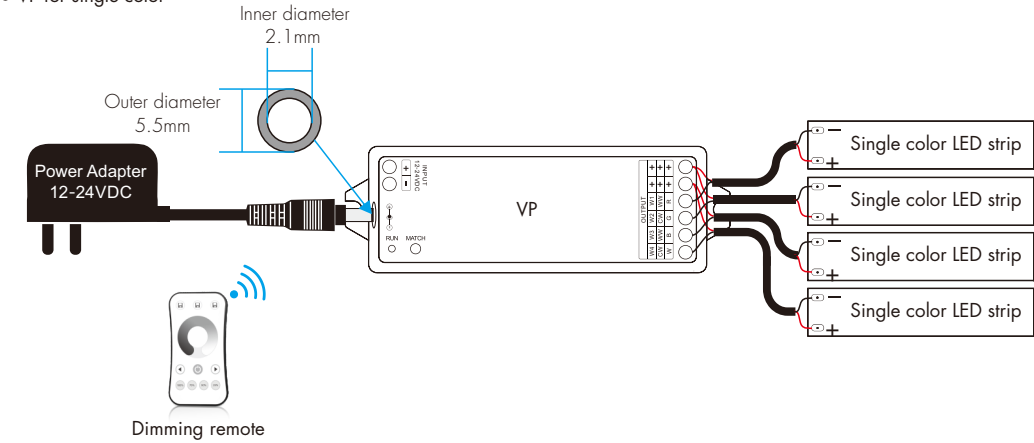


Note: If connect with RGB LED strip, please long press match key for 1.5s, the controller will become RGB type (Long press match key for 10s, the controller will restore RGBW type).

• VP for dual color



● VP for single color



Note: User can connect constant voltage power supply or power adapter as power input.

PWM Frequency Setting

At the moment of power-up:
Long press the match key for 2s, set the output PWM frequency to 1KHz, the LED indicator flash 1 time.
Long press the match Key for 5s, set the output PWM frequency to 2KHz, the LED indicator flash 2 times.
Long press the match Key for 10s, set the output PWM frequency to 4KHz, the LED indicator flash 3 times.
Long press the match Key for 15s, set the output PWM frequency to 8KHz, the LED indicator flash 4 times.
The factory default PWM frequency is 1KHz.

Note: Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

PWM frequency and output current mapping:

$\frac{U_{out}}{U_{in}}$ PWM	1KHz	2KHz	4KHz	8KHz
12-24V	4A	4A	4A	3A

Light On/Off Fade Time

Long press match key 5s, then short press match key 3 times, the light on/off time will be set to 3s, the indicator light blink 3 times.
Long press match key 10s, restore factory default parameter, the light on/off time also restore to 0.5s.

RGB/RGBW Dynamic Mode List

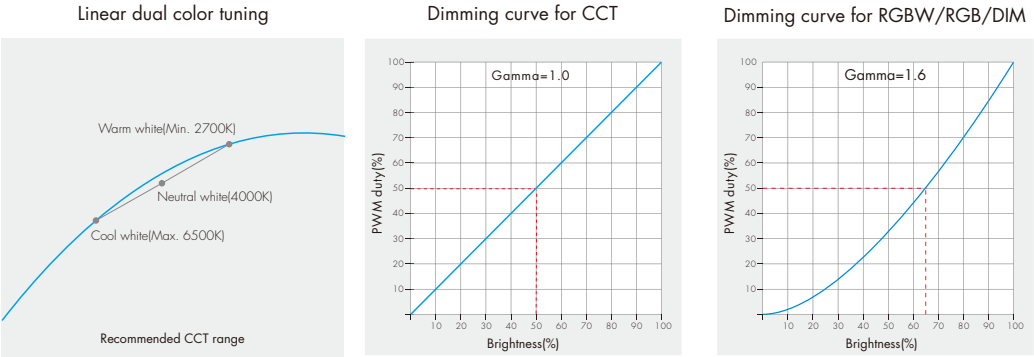
No.	Name	No.	Name
1	RGB jump	6	RGB fade in and out
2	RGB smooth	7	Red fade in and out
3	6 color jump	8	Green fade in and out
4	6 color smooth	9	Blue fade in and out
5	Yellow cyan purple smooth	10	White fade in and out

Dual Color Control

CH1,CH3=Warm white LED
CH2,CH4=Cool white LED
Each channel can supply up to 96W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	CH1=0W,CH2=96W CH3=0W,CH4=96W	CH1=48W,CH2=48W CH3=48W,CH4=48W	CH1=96W,CH2=0W CH3=96W,CH4=0W

Dimming Curve



Statement

FCC Statement:
This device complies with Part 15 of the FCC Rules.operation is subject to the following two conditions:
(1)this device may not cause harmful interference,and
(2)this device must accept any interference received,including interference that may cause undesired operation.

IC Statement:
This Class B digital apparatus complies with Canadian ICES-003.
(Cet appareil numérique de la Classe B conforme à la norme NMB-003 du Canada).