# RF RGB/RGBW

## 4 Knob RGB/RGBW LED RF Controller

- RGB/RGBW constant voltage LED RF controller, can also be used as a RGB/RGBW RF remote.
- 4 knob dimming, digital numeric display and easy key operation.
- Match with RF 2.4G single zone or multiple zone RGB/RGBW remote control optional.
- 256 levels 0-100% dimming smoothly without any flash.
- Built in 10 dynamic mode, include jump or gradual change style.
- PWM frequency 1000/2000/4000/8000Hz selectable.
- Logarithmic or linear dimming curve selectable.



C ∈ RoHS

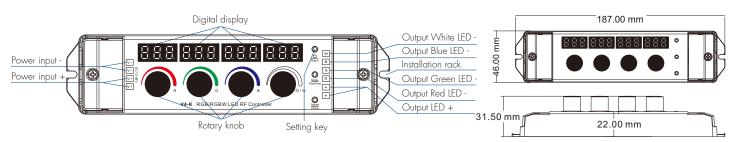
## **Technical Parameters**

Input and Output		
Input voltage	12-48VDC	
Input current	16.5A	
Output voltage	4 x (12-48)VDC	
Output current	4CH, 4A/CH	
Output power	4 x (48-192)W	
Output type	Constant voltage	
Environment		
Operation temperature	Ta:-30°C ~ +55°C	
Case temperature (Max.)	Tc:+85°C	

Dimming data	
Input signal	Knob + Key + RF 2.4GHz
Control distance	30m(Barrier-free space)
Dimming gray scale	256 levels
Dimming range	0-100%
Dimming curve	Logarithmic / linear
PWM Frequency	1000/2000/4000/8000Hz
PWM Frequency Package	1000/2000/4000/8000Hz
. , ,	1000/2000/4000/8000Hz L190 x W50 x H38mm
Package	

Safety and EMC		
EMC standard	EN IEC 55015 EN IEC 61547ETSI EN 301 489-1/-3	
Safety standard	EN 61347-1/-2	
Radio Equipment	ETSI EN 300 440	
Certification	CE RoHs	
Warranty and Protection		
Warranty	5 years	
Protection	Reverse polarity	

## Mechanical Structure and Installation

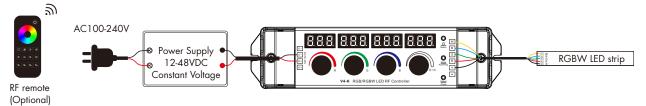


## Wiring Diagram

• Work as RGB LED controller



• Work as RGBW LED controller



• Work as RGB/RGBW RF remote



## Knob and Key Operation

## 4 knob dimming:





Red Brightness (000-255)





Green Brightness (000-255)





Blue Brightness (000-255)





RGB: Total Brightness(000-100) RGBW: White Brightness (000-255)

#### 3 key setting:

Short press: Turn on or turn off the light. When light is off, display "OFF".



Long press 2s: Enter RF remote matching state, display "RLS", within 5s, press on/off key or zone key of the RGBW RF remote, display "RLO", match is successful.



Long press 5s: Until display "RLE", delete all matched RF remote.

Long press 15s: Restore factory default parameter(Default RGBW mode), display"RES".



Short press: Switch between 10 dynamic change mode (P01~P10).

Long press 5s: Prepare for setup output PWM frequence, then short press mode key to switch between

1000Hz("F10"), 2000Hz("F20"), 4000Hz("F40") or 8000Hz("F80"). Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

Long press Mode key for 5s or timeout 10s, quit output PWM frequence setting.



Short press: Set mode speed, switch between 1-10 level speed (S-1, S-9, S-F).

Long press 5s: Prepare for setup output brightness curve, then short press speed key to switch between linear curve("C-L") or logarithmic curve("C-E"). Long press Speed key for 5s or timeout 10s, quit output brightness curve setting.

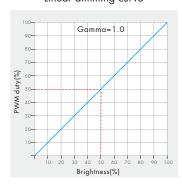
RGB/RGBW light setting: Press and hold the "Match" and "Speed" key for 2s to switch between RGB or RGBW light type. The rightmost digital tube show "CH3" (RGB) or "CH4"(RGBW) momently.

#### RGB/RGBW dynamic mode list:

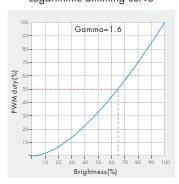
No.	Name	No.	Name
PO1	RGB jump	P06	RGB fade in and out
PO2	RGB smooth	P07	Red fade in and out
PO3	6 color jump	PO8	Green fade in and out
P04	6 color smooth	P09	Blue fade in and out
P05	Yellow cyan purple smooth	P10	White fade in and out

## Dimming curve:

## Linear dimming curve



## Logarithmic dimming curve



## 4 Knob Controller Work as RGB/RGBW RF remote

When used as an RGB/RGBW RF remote control, it can be matched with one or more RGB/RGBW LED RF controllers. 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 of receiver,

immediately press on/off key on the knob controller.

The LED indicator fast flash a few times means match is successful.

Press and hold match key of the receiver for 5s to delete all match, The LED indicator fast flash a few times means all matched RF 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 3 times on the knob controller. The light blinks 3 times means match is successful.

Switch off the power of the receiver, then switch on power, repeat again. Immediately short press on/off key 5 times on the knob controller. The light blinks 5 times means all matched remotes were deleted.