RGBW LED Strip Controller Kit

Model No.: VP + RT4

4 channels constant voltage/Touch color wheel/Step-less dimming/Wireless remote 30m distance



Features

FC C CE RoHS emc LVD RED

- . Mini style controller with 4 channel constant voltage output.
- Ultra sensitive color adjustment touch wheel.
- Smooth dimming and switch without any flickering.
- Built in 10 dynamic mode, include jump or gradual change style.
- Independent dimming function of each R, G, B, W channel to achieve millions of colors.
- 4 scene memory.
- Auto-transmitting function: Controller automaticly transmit signal to another controller with 30m control distance.
- · Synchronize on multiple number of controllers.
- Light on/off fade time 3s selectable.

Technical Parameters

LED Receiver's Input and Output		
Input voltage	12-24VDC	
Input current	15.5A	
Output voltage	4 x (12-24)VDC	
Output current	4CH,4A/CH,Max 6A	
Output power	192-384W(12-24V)	
Output type	Constant voltage	

Dimming data	
Dimming level	4096 levels
Dimming range	0-100%
Dimming curve	Logarithmic
PWM Frequency	1000Hz

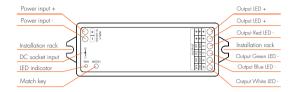
Warranty and Protection	on
Warranty	5 years
Protection	Reverse Polarity

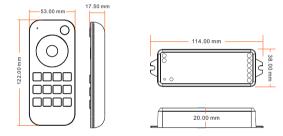
LED Remote's Input	D Remote's Input and Output		
Output signal	RF(2.4GHz)		
Working voltage	3VDC(AAAx2)		
Working current	<5mA		
Standby current	< 10µA		
Standby time	2 year		
Remote distance	30m		

Safety and EMC			
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4		
Safety standard(LVD)	EN 62368-1:2020+A11:2020		
Radio Equipment(RED)	ETSI EN 300 328 V2.2.2		
Certification	CE,EMC,LVD,RED		
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Environment			
Operation temperature	Ta: -30°C ~ +55°C		
Case temperature (Max.)	Tc:+85°C		

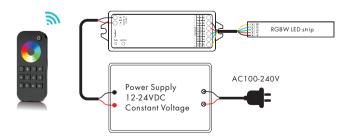
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Mechanical Structures and Installations





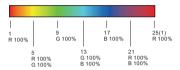
Wiring Diagram



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Remote function

- Turn on/off light.
- 💍 :Touch to change static RGB color.
- : Short press get 24 kinds static RGB color, long press for continuous static color adjustment.



- Short press run next dynamic mode, long press 2s run mode-cycle.
- For dynamic RGB mode, adjust speed,
 short press 10 levels, long press 2s get the default speed.
 For static RGB color, adjust saturation,
 namely change current static RGB color to mixed white slowly,
 short press 11 levels, long press 1-6s for continuous 256 levels adjustment.
- : Adjust brightness, short press 10 levels, long press 1-6s for continuous 256 levels adjustment.
- R G B : Short press get red, green or blue color directly.
 long press 1-6s to adjust R/G/B brightness continuously to achieve millions of colors.
 - Short press turn on/off W channel, long press 1-6s to adjust W brightness continuously, namely change saturation by add white color slowly.
- S₁ S₂ S₃ S₄ : Short press recall the scene, long press 2s save current color into S1/2/3/4.
- * When turn on light, the indicator display blue, when turn off light, the indicator display red.
- * When touch the color wheel, the indicator will display the same color
- * When press or touch operation is invalid (If the light is off), the indicator display red.
- * To extend battery life, no touch or press key operation after a few seconds, the touch wheel will enter sleep state, you need press any key to make touch wheel quit sleep state

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 1 Os, restore factory default parameter, the light on/off time also restore to 0.5s.

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, repeat again. Immediately short press on/off key 3 times on the remote. The light blinks 3 times means match is successful.

Delete:

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

Application notes

All the receivers are matched with one RF remote









RF remote

 $\textbf{Auto-transmitting:} \ \text{One receiver can transmit the signals from the remote to another receiver within 30m,}$

as long as there is a receiver within 30m, the remote control distance can be extended.

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. However, we recommend for indoor applications that receiver placements should be no further apart than 15m.

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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