

RF RGBW/RGB/CCT/DIM

V44

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

Features

- 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.
- Connect with external push key to achieve on/off and 0-100% dimming function.
- Light on/off fade time 3s selectable.
- PWM frequency 1KHz, 2KHz, 4KHz or 8KHz selectable.
- Over-heat / Over-load / Short circuit protection, recover automatically.



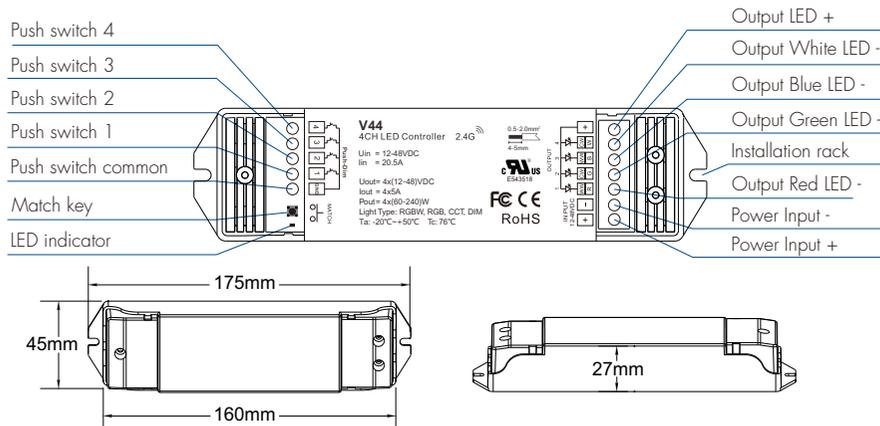
Notice:
Please use in a dry environment
This control circuit is not isolated-see installation instructions
Remarque: Ce circuit de commande n'est pas isolé - voir les instructions d'installation



Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	RF 2.4GHz + Push Dim	EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3
Input current	20.5A	Control distance	30m(Barrier-free space)	Safety standard	EN 61347-1/-2
Output voltage	4 x (12-48)VDC	Dimming gray scale	4096 (2^12) levels	Radio equipment	ETSI EN 300 440
Output current	4CH,5A/CH	Dimming range	0-100%	Certification	CE RoHS FCC UL
Output power	4 x (60-240)W	Dimming curve	Logarithmic	Environment	
Output type	Constant voltage	PWM frequency	1000Hz (default)	Operation temperature	Ta: -20°C ~ +50°C
Warranty and Protection		Package		Case temperature(Max.)	Tc: +76°C
Warranty	5 years	Size	L178 x W50 x H38mm	IP rating	IP20
Protection	Over-heat Over-load, Short circuit	Gross weight	0.144kg		

Mechanical Structures and Installations



Match Remote Control (Two Match Ways)

When match different color remote, the controller become different light type automatically. 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. 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.

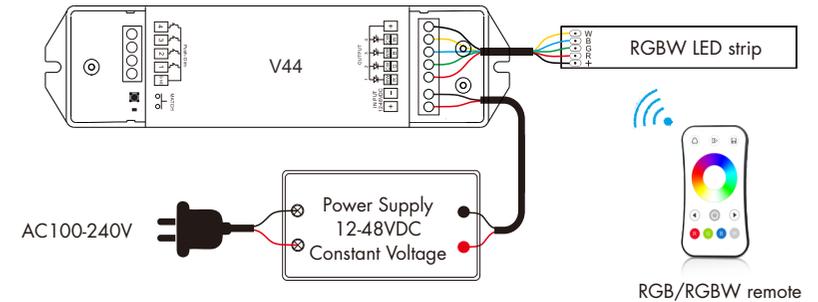
Use Power Restart

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 zone 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

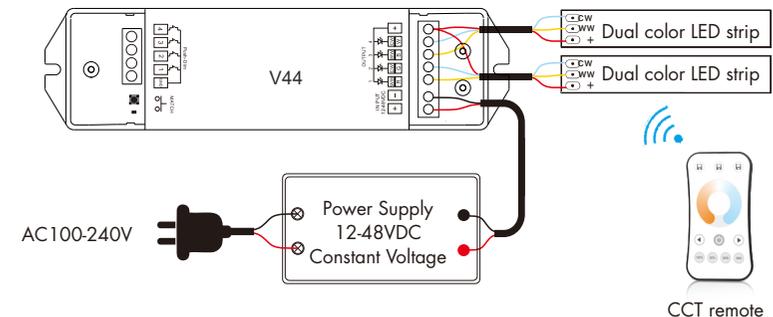
• V44 for RGB/RGBW



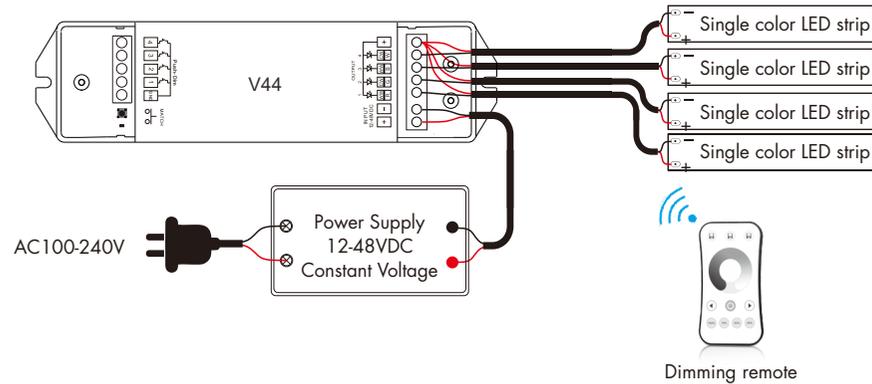
Note:

If connect with RGB LED strip, please long press match key for 1.5s, the controller will become RGB type, the LED indicator blinks 2 time.(Long press match key for 10s will restore to RGBW type)

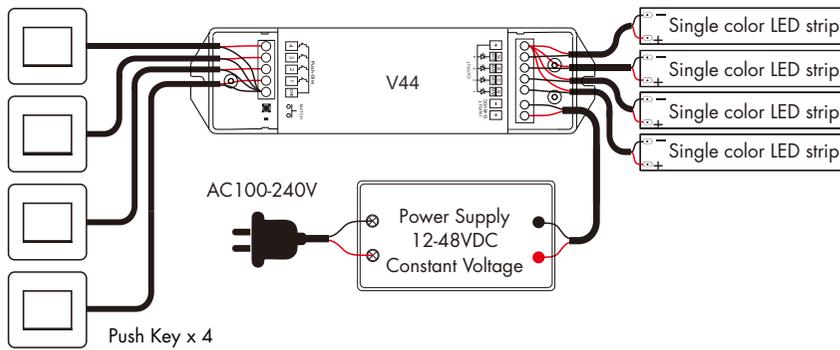
• V44 for dual color



- V44 for single color



- V44 with four push key for 4 channel single color



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.

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:

U_{in}	I_{out} PWM	1KHz	2KHz	4KHz	8KHz
12/24V		5A	5A	4A	4A
36/48V		5A	4A	3A	3A

Push-Dim Control

The 4 push key have 4 channel dimming function defaultly.

- **Short press:** Turn on or off each channel.
- **Long press (1-6s):** Press and hold to step-less dimming of each channel,
 With every other long press, the light level goes to the opposite direction.
- **Dimming memory:** Light returns to the previous dimming level when switched off and on again.

You also can long press push key and Match key at the same time to select 4 kinds light type, and each light type will have different push key function.

Long press 1 key and Match key 2 seconds, set as 4 channel single color type (default).

Long press 2 key and Match key 2 seconds, set as dual color type.

Long press 3 key and Match key 2 seconds, set as RGB type.

Long press 4 key and Match key 2 seconds, set as RGBW type.

at this time, if the light type has set as dual color, RGB or RGBW, match remote will not change light type.

If you want to cancel light type set, please long press Match key 10 seconds to restore factory setting.

Light Type	Key	Function
Single color (4 CH)	1 key	Short press turn on/off 1 channel, long press 1-6s dim up/down
	2 key	Short press turn on/off 2 channel, long press 1-6s dim up/down
	3 key	Short press turn on/off 3 channel, long press 1-6s dim up/down
	4 key	Short press turn on/off 4 channel, long press 1-6s dim up/down
Dual color	1 key	Short press turn on/off light, long press 1-6s dim up/down
	2 key	Short press 3 levels color temperature (WW, NW, CW), long press 1-6s color temperature up/down
	3 key	Invalid
	4 key	Invalid
RGB	1 key	Short press turn on/off light, long press 1-6s dim up/down
	2 key	Short press change dynamic mode, long press 2s to set speed (1-10 levels)
	3 key	Short press change static RGB color (24 levels), long press 1-6s adjust saturation
	4 key	Invalid
RGBW	1 key	Short press turn on/off light, long press 1-6s dim up/down
	2 key	Short press change dynamic mode, long press 2s to set speed (1-10 levels)
	3 key	Short press change static RGB color (24 levels), long press 1-6s adjust saturation (W off)
	4 key	Short press turn on/off W channel (4 channel), long press 1-6s dim up/down (RGB off)

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

Tc Point Location

