

RGB/CCT/Dimming 3 Channel High Voltage LED Strip Controller

Model No.: S3

3 Channels/Stepless dimming/Wireless remote control/Auto-transmitting/Synchronize



FC CE RoHS LVD RED

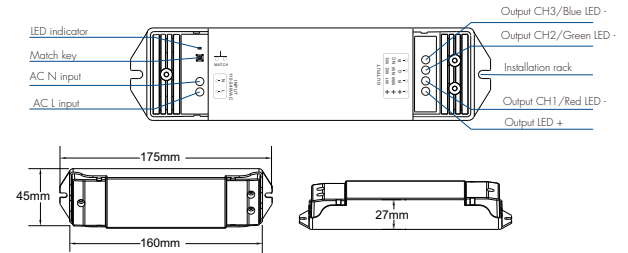
Features

- 3 channel high voltage LED strip RF 2.4G controller, can control maximum about 50 meters of high voltage LED strip, different LED strip may have difference.
- 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 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.
- Fade in and out effect selectable.

Technical Parameters

Input and Output		Safety and EMC	
Input voltage	110-240VAC	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Input current	3.2A	Safety standard(LVD)	EN 62368-1:2020+A11:2024
Output voltage	3 x (110-240)VDC	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Output current	3CH, 1A/CH	Certification	CE, EMC, LVD, RED
Output power	3 x (110-240)W		
Dimming data		Environment	
Input signal	RF 2.4GHz	Operation temperature	T _a : -30°C ~ +55°C
Control distance	30m(Barrier-free space)	Case temperature (Max.)	T _c : +85°C
Dimming level	4096 levels	IP rating	IP20
Dimming range	0-100%	Warranty and Protection	
Dimming curve	Logarithmic	Warranty	5 years
PWM Frequency	2KHz	Weight	
		Net weight	0.117kg
		Gross weight	0.136kg

Mechanical Structures and Installations

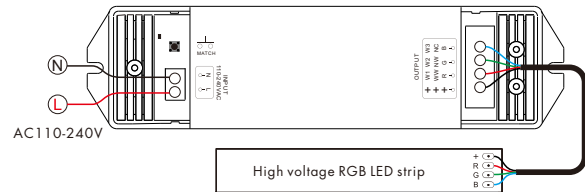


Wiring Diagram

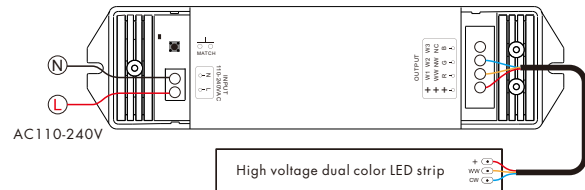
⚠ Caution:

This controller apply for high voltage LED strip, please carefully ensure all wire connections and polarities are correct and secure before applying power, otherwise this controller or high voltage LED strip will be damaged.

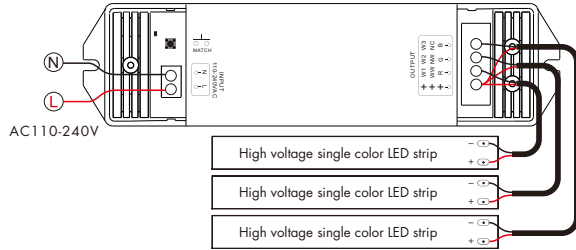
- S3 connect with RGB LED strip



- S3 connect with dual color LED strip



- S3 connect with single color LED strip



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 (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, 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.

Fade in and Fade out Setting

Long press match key 5s, then short press match key 3 times,

The lighting effect will be set to the fade in and fade out in 3s, the indicator light of LED controller blinks 3 times.

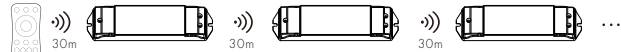
Long press match key 10s, restore factory default parameter, the light on/off time restores to 0.5s.

RGB 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

Application notes

1. All the receivers in the same zone.



RF remote

Auto-transmitting: 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. Metals and other metal materials will reduce the range. Strong signal sources such as WiFi routers and microwave ovens will affect the range.

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

2. Each receiver(one or more) in a different zone, like zone 1, 2, 3 or 4.



Dual color control

WW=Warm white LED

CW=Cool white LED

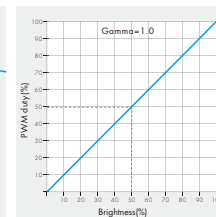
Each channel can supply up to 240W@240VAC and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	WW=0W,CW=240W	WW=120W,CW=120W	WW=240W,CW=0W

Linear dual color tuning



Dimming curve for CCT



Dimming curve for RGB/DIM

