

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 | |
|------------------|------------------|
| Input voltage | 110-240VAC |
| Input current | 3.2A |
| Output voltage | 3 x (110-240)VDC |
| Output current | 3CH, 1A/CH |
| Output power | 3 x (110-240)W |

| Dimming data | |
|------------------|-------------------------|
| Input signal | RF 2.4GHz |
| Control distance | 30m(Barrier-free space) |
| Dimming level | 4096 levels |
| Dimming range | 0-100% |
| Dimming curve | Logarithmic |
| PWM Frequency | 2KHz |

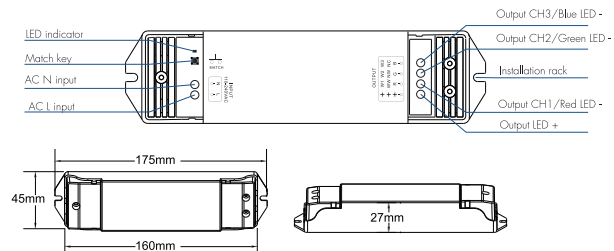
| Safety and EMC | |
|-----------------------|---|
| EMC standard (EMC) | ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4 |
| Safety standard (VDE) | EN 62368-1:2020+A11:2020 |
| Radio Equipment (RED) | ETSI EN 300 328 V2.2.2 |
| Certification | CE, EMC, LVD, RED |

| Environment | |
|-------------------------|-------------------|
| Operation temperature | Ta: -30°C ~ +55°C |
| Case temperature (Max.) | Tc: +85°C |
| IP rating | IP20 |

| Warranty and Protection | |
|-------------------------|---------|
| Warranty | 5 years |

| Weight | |
|--------------|---------|
| Net weight | 0.117kg |
| Gross weight | 0.136kg |

Mechanical Structures and Installations

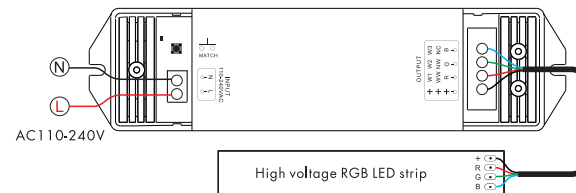


Wiring Diagram

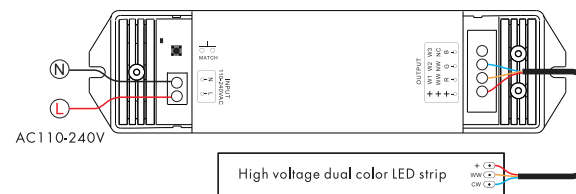


This controller apply for high voltage LED strip, please carefully ensure all wire connections and polarities are correct and secure before applying power otherwise this controller or high voltage LED strip will be damaged.

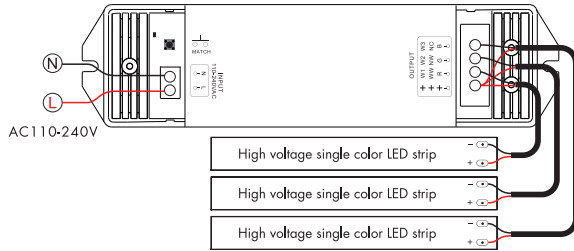
- S3 connect with RGB LED strip



- 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

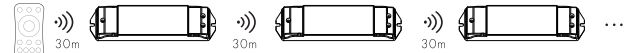
Long press match key 5s, then short press match key 3 times. The lighting effect will be set to the fade in and fade out in 3s. The indicator light of LED controller blinks 3 times.
Long press match key 10s, restore factory default parameter, the light on/off time restores to 0.5s.

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 | ó color jump | 8 | Green fade in and out |
| 4 | ó 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

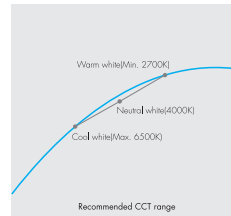
WW=Warm white LED

CW=Cool white LED

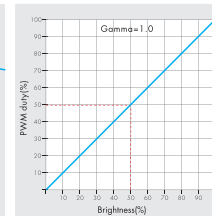
Each channel can supply up to 240W@240VAC and white balance can be controlled as such:

| 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

