

## RF 2.4G RGB/RGBW LED SPI Controller Set

Model No.: SC + R9

SC control LED lights with the following 32 kinds compatible ICs: TM1803, TM1804, TM1809, TM1812, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, WS2811, WS2812, TM1829, TIS3001, TIS3002, GW6205, MB16120, TM1814B, SK6812, UCS8904B, IPD6803, IPD1101, D705, UCS6909, UCS6912, IPD8803, IPD8806, WS2801, WS2803, P9813, SK9822, TM1914A.

By RF remote controls you can select from a variety of dynamic lighting effects, adjust changing speed and brightness, set control pixels quantity, adjust RGB sequence, select IC type etc. you can also customize two kinds of scene modes to bring you fantastic color.

### Feature

- Mini-style RF 2.4G multi-pixel RGB/RGBW controller with SPI signal output.
- Output SPI signal to control a variety of digital LED lights with the compatible ICs listed above. IC type and R/G/B order can be set through the Remote.
- Adopt 2.4GHz wireless technology, remote distance up to 30m.
- Built in 32 dynamic mode, include horse race, chase, flow, trail, gradual change style.

### Technical parameter

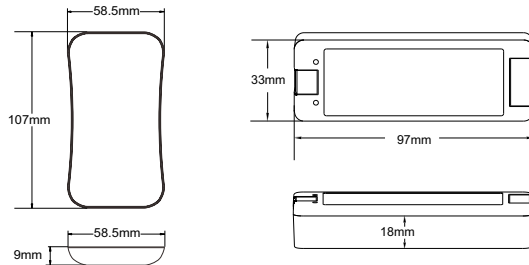
#### LED Remote

- Output signal: RF(2.4GHz)
- Working voltage: 3VDC(CR2032)
- Standby time: 2 years
- Remote distance: 30m
- Size: L107xW58.5xH9mm

#### LED Receiver

- Input voltage: 5-24VDC
- Output signal: SPI (DATA / CLK)
- Output dots: 1024 Max
- Size: L97xW33xH18mm

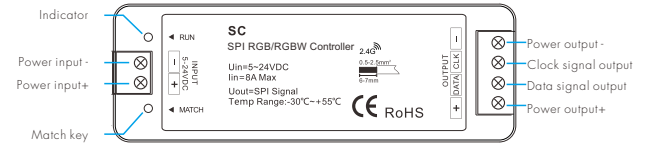
### Dimension



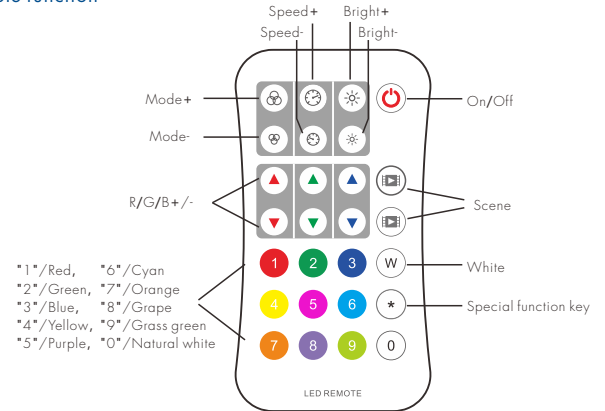
### Match guide

1. Match: Short press match key of the receiver, within 5s, press on/off key of the remote.
2. Delete: Long press match key of the receiver for 5s, delete all matched remote.

### Interface instruction



### Remote function



**Mode+/-**: Short press switch dynamic mode built in controller, long press 2s Mode+ run mode cycle, long press 2s Mode- run the first mode. The remote is default 10 dynamic mode, when match with SPI controller which have 32 dynamic mode, please long press 2s Mode+ key firstly.

**Speed+/-**: Adjust dynamic mode speed, short press 10 levels, long press 2s get the fastest / slowest speed.

**Bright+/-**: Adjust brightness, short press 10 levels, long press 1-5s for continuous 256 levels adjustment.

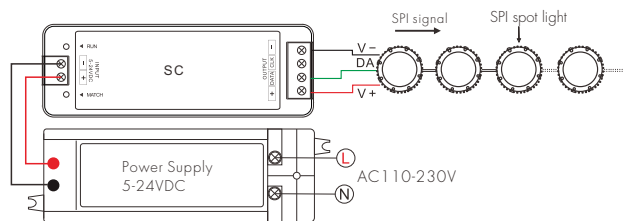
**R/G/B+/-**: Adjust R/G/B brightness respectively, short press 10 levels, long press 1-5s for continuous 256 levels adjustment.

**White**: Adjust white color, short press turn on/off white(RGB mix), long press 1-5s for continuous 256 levels saturation adjustment.

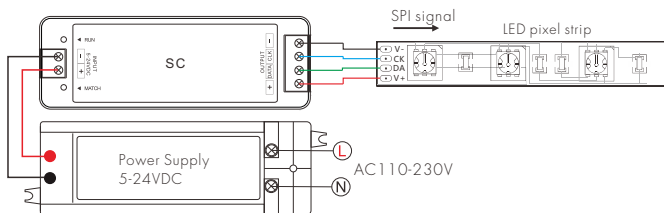
**Scene**: Two scene memory, short press recall the scene, long press 2s save current color into the scene.

## Wiring diagram

### SC connect with SPI spot light(TM1803)



### SC connect with SPI pixel strip(LPD6803)



## RGB change mode list

No.	Name	No.	Name	No.	Name
1	Red horse race white ground	12	Blue White chase	23	Purple float
2	Green horse race white ground	13	Green Cyan chase	24	RGBW float
3	Blue horse race white ground	14	RGB chase	25	Red Yellow float
4	Yellow horse race blue ground	15	7 color chase	26	Green Cyan float
5	Cyan horse race blue ground	16	Blue meteor	27	Blue Purple float
6	Purple horse race blue ground	17	Purple meteor	28	Blue White float
7	7 color multi horse race	18	White meteor	29	6 color float
8	7 color horse race close + open	19	7 color meteor	30	6 color smooth sectionally
9	7 color multi horse race close + open	20	Red float	31	7 color jump sectionally
10	7 color scan close + open	21	Green float	32	7 color strobe sectionally
11	7 color multi-scan close + open	22	Blue float		

## Compatible IC type

SC+R9 RF 2.4G RGB/RGBW LED SPI Controller Set

No.	IC type	Output signal
1	TM1803	DATA
2	TM1809, TM1804, TM1812, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, WS2811, WS2812	DATA
3	TM1829	DATA
4	TLS3001, TLS3002	DATA
5	GW6205	DATA
6	MBI6120	DATA
7	TM1814B(RGBW)	DATA
8	SK6812(RGBW)	DATA
9	UCS8904B(RGBW)	DATA
10	LPD6803, LPD1101, D705, UCS6909, UCS6912	DATA, CLK
11	LPD8803, LPD8806	DATA, CLK
12	WS2801, WS2803	DATA, CLK
13	P9813	DATA, CLK
14	SK9822	DATA, CLK
15	TM1914A	DATA
16	GS8206, GS8208	DATA

## Use remote set SPI digital LED strip

- Set LED strip length [Pixel number(8~1024)]. \* + 3 number + \* for example:
  - \*032\*, set pixel number to 32.
  - \*600\*, set pixel number to 600.
  - \*1024\*, set pixel number to 1024.
- Set LED strip chip type. \* + 2 number + \*
  - \*11\*: TM1803
  - \*12\*: TM1809, TM1804, TM1812, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, WS2811, WS2812
  - \*13\*: TM1829
  - \*14\*: TLS3001, TLS3002
  - \*15\*: GW6205
  - \*16\*: MBI6120
  - \*17\*: TM1814B(RGBW)
  - \*18\*: SK6812(RGBW)
  - \*19\*: UCS8904B(RGBW)
  - \*21\*: LPD6803, LPD1101, D705, UCS6909, UCS6912
  - \*22\*: LPD8803, LPD8806
  - \*23\*: WS2801, WS2803
  - \*24\*: P9813
  - \*25\*: SK9822
  - \*31\*: TM1914A
- Set LED strip RGB order. \* + 1 number + \*
  - \*1\*: RGB, \*2\*: RBG, \*3\*: GRB, \*4\*: GBR, \*5\*: BRG, \*6\*: BGR.

## Safety information

- The product shall be installed and serviced by a qualified person.
- This product is non-waterproof. Please avoid the sun and rain.
- Good heat dissipation will prolong the working life of the controller, please ensure good ventilation.
- Please check if the output voltage of any power supplies used comply with the working voltage of the product.
- Ensure all wire connections and polarities are correct and secure before applying power to avoid any damages to the LED lights.
- If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.