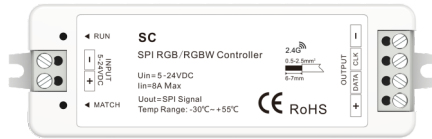


# SPI RGB/RGBW LED RF Controller

Model No.: SC

Compatible with 34 kinds IC/Max 1024 pixels/Wireless remote control



FC CE RoHS 95% LVD RED

## Features

- Mini-style multi-pixel RGB RF LED controller with SPI output, match with RF 2.4G RGB/RGBW remote control.
- Compatible with 34 kinds digital IC RGB or RGBW LED strip, IC type and R/G/B order can be set.  
Compatible ICs: TM1803, TM1804, TM1809, TM1812, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, WS2811, WS2812, TM1829, TIS3001, TIS3002, GW6205, MBI6120, TM1814B, SK6812, UCS8904B, LPD6803, LPD1101, D705, UCS6909, UCS6912, LPD8803, LPD8806, WS2801, WS2803, P9813, SK9822, TM1914A, GS8206, GS8208.
- 32 kinds dynamic mode, include horse-race, chase, flow, trail or gradual change style.

## Technical Parameters

Input and Output	
Input voltage	5-24VDC
Power consumption	1W
Input signal	RF 2.4GHz
Output signal	SPI(TTL)
Dynamic mode	32
Control dots	Max 1024 pixels

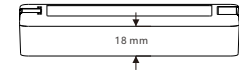
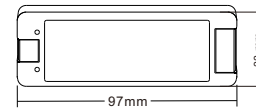
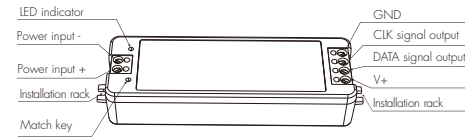
Safety and EMC	
EMC standard [EMC]	EN55032:2015, EN61000-3-2:2014, EN61000-3-2:2013, EN55024 :2010/A1:2015
Safety standard [VD]	EN 61347-1:2015, EN 61347-2-11:2015
Certification	CE,EMC, LVD

Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +65°C
IP rating	IP20

Warranty and Protection	
Warranty	5 years
Protection	Reverse Polarity

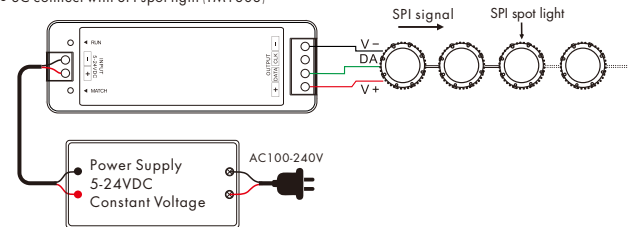
Weight	
Net weight	0.038kg
Gross weight	0.049kg

## Mechanical Structures and Installations

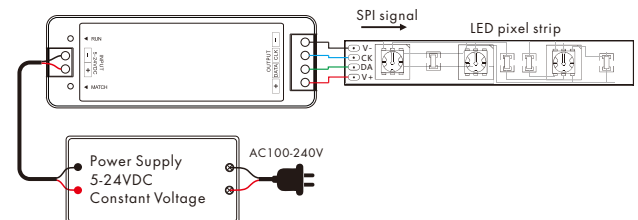


## Wiring Diagram

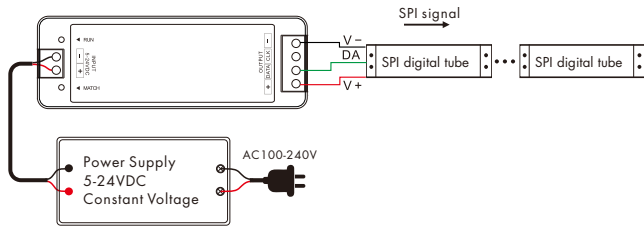
- SC connect with SPI spot light (TM1803)



- SC connect with SPI pixel strip (LPD6803)



- SC connect with SPI Digital light tube (TM1809)



**Note:**

- If the SPI LED pixel strip is single-wire control, the DATA and CLK output is same, we can connect up to 2 LED strips.

### Match Remote Control

**Match:**

Short press match key, immediately press on/off key 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.

### Dynamic mode list

No.	Name	No.	Name	No.	Name
P01	Red horse race white ground	P12	Blue White chase	P23	Purple float
P02	Green horse race white ground	P13	Green Cyan chase	P24	RGBW float
P03	Blue horse race white ground	P14	RGB chase	P25	Red Yellow float
P04	Yellow horse race blue ground	P15	7 color chase	P26	Green Cyan float
P05	Cyan horse race blue ground	P16	Blue meteor	P27	Blue Purple float
P06	Purple horse race blue ground	P17	Purple meteor	P28	Blue White float
P07	7 color multi horse race	P18	White meteor	P29	6 color float
P08	7 color horse race close + open	P19	7 color meteor	P30	6 color smooth sectionally
P09	7 color multi horse race close + open	P20	Red float	P31	7 color jump sectionally
P10	7 color scan close + open	P21	Green float	P32	7 color strobe sectionally
P11	7 color multi-scan close + open	P22	Blue float		

### Compatible IC type

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	IPD6803, IPD1101, D705, UCS6909, UCS6912	DATA, CLK
11	IPD8803, IPD8806	DATA, CLK
12	WS2801, WS2803	DATA, CLK
13	P9813	DATA, CLK
14	SK9822	DATA, CLK
15	TM1914A	DATA
16	GS8206, GS8208	DATA

### Use R9 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\*: IPD6803, IPD1101, D705, UCS6909, UCS6912
  - \*22\*: IPD8803, IPD8806
  - \*23\*: WS2801, WS2803
  - \*24\*: P9813
  - \*25\*: SK9822
  - \*31\*: TM1914A
  - \*32\*: GS8206, GS8208
- Set LED strip RGB order. \* + 1 number + \*
  - \*1\*: RGB, \*2\*: RBG, \*3\*: GRB, \*4\*: GBR, \*5\*: BRG, \*6\*: BGR.