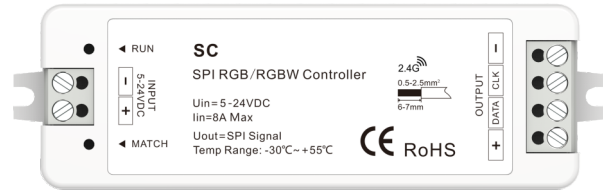


SPI RGB/RGBW LED RF Controller

Model No.: SC

Compatible with 45 kinds of chips / Max 1024 pixels / Wireless remote control



FC CE RoHS emc 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 45 kinds of 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, SK6813, UCS2903, UCS2909, UCS2912, WS2811, WS2812, WS2813, WS2815, TM1829, TLS3001, TLS3002, GW6205, MBI6120, TM1814B(RGBW), SK6812(RGBW), WS2813(RGBW), WS2814(RGBW), UCS8904B(RGBW), LPD6803, LPD1101, D705, UCS6909, UCS6912, LPD8803, LPD8806, WS2801, WS2803, P9813, SK9822, TM1914A, GS8206, GS8208, UCS2904, SM16804, SM16825, SM16714(RGBW), UCS2603, UCS5603.
- 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 |

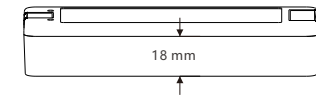
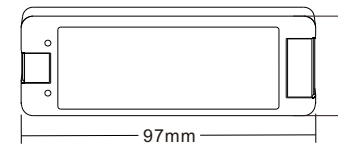
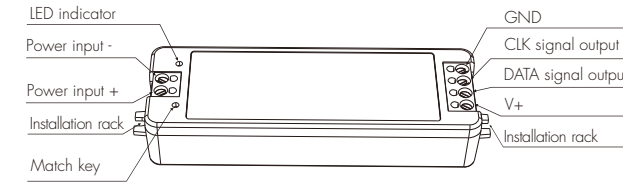
| Safety and EMC | |
|----------------------|---|
| EMC standard (EMC) | ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4 |
| Safety standard(LVD) | EN 62368-1:2020+A11:2020 |
| Certification | CE,EMC,LVD,RED |

| 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 |

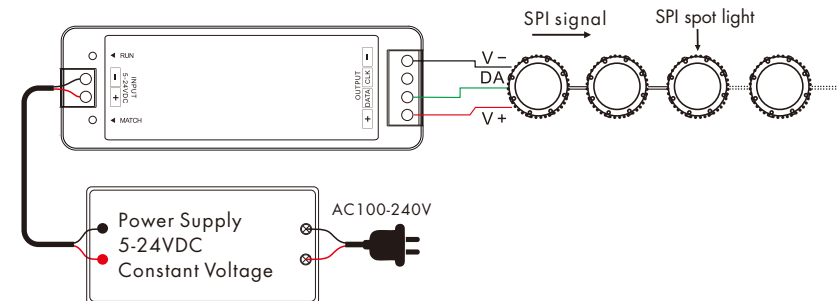
| Weight | |
|--------------|---------|
| Net weight | 0.038kg |
| Gross weight | 0.049kg |

Mechanical Structures and Installations

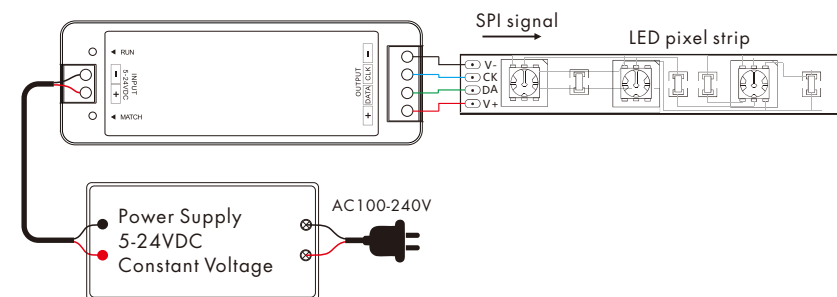


Wiring Diagram

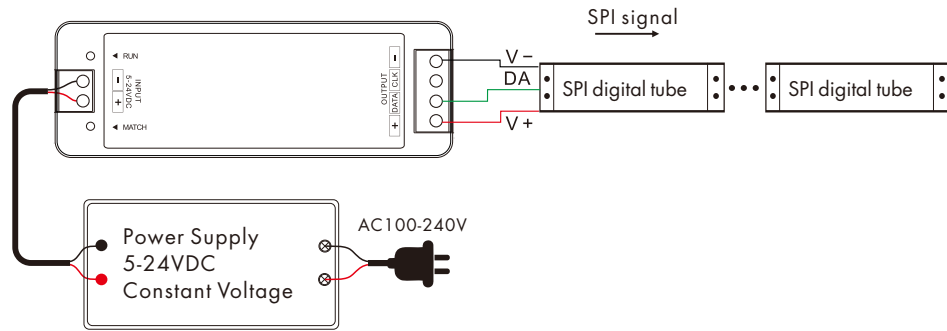
- SC connect with SPI spot light (TM1803)



- 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.

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, SK6813, UCS2903, UCS2909, UCS2912, WS2811, WS2812, WS2813, WS2815
 - *13*: TM1829
 - *14*: TLS3001, TLS3002
 - *15*: GW6205
 - *16*: MBI6120
 - *17*: TM1814B(RGBW)
 - *18*: SK6812(RGBW), WS2813(RGBW), WS2814(RGBW)
 - *19*: UCS8904B(RGBW)
 - *21*: LPD6803, LPD1101, D705, UCS6909, UCS6912
 - *22*: LPD8803, LPD8806
 - *23*: WS2801, WS2803
 - *24*: P9813
 - *25*: SK9822
 - *31*: TM1914A
 - *32*: GS8206, GS8208
 - *33*: UCS2904

- *34*: SM16804
- *35*: SM16825
- *36*: SM16714(RGBW)
- *37*: UCS5603
- *38*: UCS2603

- Set LED strip RGB order. * + 1 number + *

1: RGB, *2*: RBG, *3*: GRB, *4*: GBR, *5*: BRG, *6*: BGR.

Compatible IC type

| No. | IC type | Output signal |
|-----|--|---------------|
| C11 | TM1803 | DATA |
| C12 | TM1809, TM1804, TM1812, UCS1903, UCS1909, UCS1912, SK6813, UCS2903, UCS2909, UCS2912, WS2811, WS2812, WS2813, WS2815 | DATA |
| C13 | TM1829 | DATA |
| C14 | TLS3001, TLS3002 | DATA |
| C15 | GW6205 | DATA |
| C16 | MBI6120 | DATA |
| C17 | TM1814B(RGBW) | DATA |
| C18 | SK6812(RGBW), WS2813(RGBW), WS2814(RGBW) | DATA |
| C19 | UCS8904B(RGBW) | DATA |
| C21 | LPD6803, LPD1101, D705, UCS6909, UCS6912 | DATA, CLK |
| C22 | LPD8803, LPD8806 | DATA, CLK |
| C23 | WS2801, WS2803 | DATA, CLK |
| C24 | P9813 | DATA, CLK |
| C25 | SK9822 | DATA, CLK |
| C31 | TM1914A | DATA |
| C32 | GS8206, GS8208 | DATA |
| C33 | UCS2904 | DATA |
| C34 | SM16804 | DATA |
| C35 | SM16825 | DATA |
| C36 | SM16714(RGBW) | DATA |
| C37 | UCS5603 | DATA |
| C38 | UCS2603 | DATA |

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 | | |