## WT-SPI

Graffiti APP cloud control/compatible with 45 types of chips/painting style segmented adjustment/super many dynamic effects/multiple music rhythms/wireless remote control

## Characteristic

- 1. RGB/RGBW color light strip controller, SPI signal output, graffiti APP cloud control.
- 2. Compatible with 45 types of RGB or RGBW LED light strips, the chip type and R/G/B color sequence can be set through the RF remote control. Compatible chips: TM1803, TM1804, TM18 09, TM1812, UCS1903, UCS1909, UCS1912, SK6813, UCS2903, UCS2909, UCS2912, WS281 1, 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

- 3. Painting style segmented color adjustment: Fill the entire section with color, apply color pen s in sections, and use rubber eraser to turn off the lights in sections.
  - 4. Rich dynamic effects: 44 default and 10+self defined dynamic scene modes to choose from
- , 16 variable modes to choose from
  - 5. Multiple music rhythms: 6 local music rhythms, 3 APP music rhythms.
  - 6. Can be paired with RF 2.4G RGB remote control

#### **Technical Parameter**

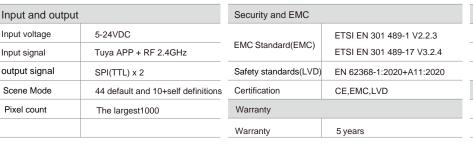
Input voltage

Input signal

output signal

Scene Mode

Pixel count

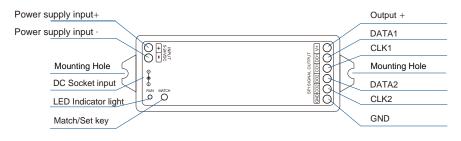


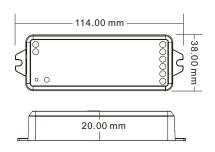
\$524VOC FUN MATCH	WT-SPI RGB/RGBW SPI LED Controller Uin=5-24/DC Uout=SPI Signal ×2 Temp range:-30°C~+55°C  ROHS	WIFT 2.46 tuya 0.5-1.5mm² 6-8mm	SPI SIGNAL OUTDOT IVE



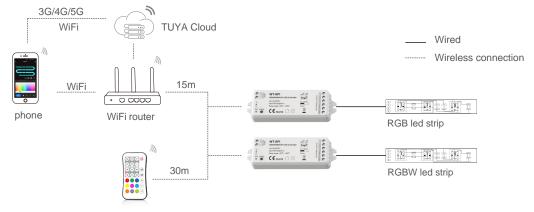
Environment				
Working temperature	Ta: -30°C ~ +55 °C			
Maximum temperature of the shell	Ta: +65 °C			
IP grad	IP20			
Packing				
Packing size	120 x 43 x 35mm			
Heavy weight	0.066kg			

# Mechanical structure and installation





## System wiring diagram



## Note:

- 1. The above distance was measured in an open and accessible environment. Please refer to the actual testing distance before installation.
- 2. Please check if the WiFi router network is in the 2.4G frequency band. The 5G frequency band is not available, please do not hide your router network. 3. Please keep the distance between the WT-SPI controller and the router close enough and check the WIFI signal.

# Wiring diagram

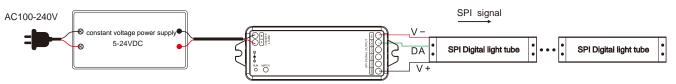
• WT-SPI Connect SPI spotlight (TM1803)



• WT-SPI Connect SPI Pixel light strip (LPD6803)



• WT-SPI Connect SPI digital light tube (TM1809)



Note: If the SPI LED strip is a single line control type, the DATA and CLK signal line outputs of the controller are the same, and one controller can connec t four LED strips.

## Pair R9 remote control

Pairing: Short press the pairing button, then press the on/off button on the remote control, and the indica tor light will flash to indicate successful pairing.

Delete: Press and hold the pairing button for 5 seconds to delete all pairs. The indicator light will flash to show that all paired remote controls have been deleted.

Use the R9 remote control to set the degree, chip type, and RGB color sequence of the SPI LED strip

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• Set LED strip angle [number of pixels (10-1000)]: *+3-digit number+* Example:
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 $^{\ast}$  032  $^{\ast},$  set the number of pixels to 32

\*600 \*, set the pixel count to 600

\*1000 \*, set the pixel count to 1000

• Set LED strip core type: \*+2 digits+\*

\*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 color sequence: \*+1 digit+\*

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

Quickly press and hold the pairing button twice, or press and hold the pairing button for 2 seconds, to clear the previous network connection, enter Smart pairing mode, and the LED indicator light will flash quickly.

Press and hold the pairing/setting button for 5 seconds to clear the previous network connection, enter the configuration mode of the A PP, and the LED indicator light will flash slowly. If Smart configuration fails, please try APP configuration. If the Tuya APP network connection is successful, the RUN LED indicator light will stop flashing. On the Tuya app, you can find RGB-SPI devices.

#### TUYA APP interface



Colorful light: Touch the color palette to adjust the color and saturation. Touch the brightness bar to adjust the brightness.



White light:
Touch the temperature dial to
adjust the temperature, and touch
the brightness bar to adjust the br
inhtness



Card:
Touch the chuck to choose from
a variety of different colors. Touc
the brightness bar to adjust the
brightness.



Combination: Select the multi disk allocated by proportion, Evenly distribute Yan Qi on the LED light strip.



Color filling: Change the color of the entire LED strip.



Color pen: Change the appearance of a single segment in the LED strip.



Rubber eraser: erase the color of a single segment in the LED strip, that is, turn off the light



Color transition: When there are multiple colors in the LED strip, the color gradient transition can be set to be turned on or off.



## Scene boundary

44 predefined scenarios and 10+self defined dynamic scenarios are available for selection.

Self defined scenarios can choose from 16 types of variations (gradient, jumping, breathing, flashing, flowing water, rainbow, meteor, accumulation, falling, chasing light, drifting, flashing, reb ounding, shuttle, random flashing, opening and closing), 1-8 col ors, full or segmented control, forward or reverse motion, adjust able brightness and speed.



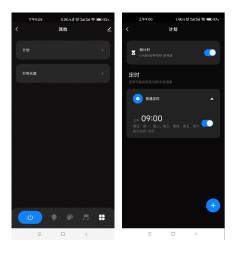
The realm of music and rhythm

Six local music modes (rock, jazz, classical, scrolling, energy, spectrum) are available for selection. Three APP modes (Music Rhythm, Games, Romance) are available for selection.

Adjustable sensitivity for receiving sound.

The lights move in rhythm with the music collected by the handheld device. Note: Currently, the controller only supports App mode.

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Plan boundary

Countdown: Define the countdown time (up to 24 hours) for performing the on/off light action.

Timer: Define multiple times (in weeks) for performing on/off

light actions.



Lamp strip angle boundary

Lamp strip angle setting: Select the appropriate number of pixel points based on the actual angle of the lamp strip, with a minimu m of 10 and a maximum of 1000

#### Note:

- 1.In the APP, a light strip has 20 fixed segments, and the degree of the light strip (total pixel points) ÷ 20 segments=the pixel points of each segment.
- 2. The maximum number of pixels set for the angle of the light strip is 1000. For example, for a light strip of 5 meters with 60 pixels per meter, the angle of the light strip can be set to 300 pixels. The entire section of the light strip is divided into 20 segments with 1 5 pixels per segment.
- 3. When the angle of the light strip is less than or equal to 20 pixels, such as 10-20, each pixel corresponds in sequence to each segment from the beginning.
- 4.When the angle of the light strip is not an integer multiple of 20, the remainder will show the appearance of the last paragraph.
- 5. When the actual degree of the light strip is not an integer multiple of 20, it is recommended to set the degree of the light strip slig htly higher and increase the setting value by a multiple of 20.
- 6. When the number of pixels in the set angle of the light strip is less than the actual angle of the light strip, the rear part of the light strip will be uncontrollable.

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