

TECHNICAL DOCUMENT

# Miboxer 5 in 1 SPI+DMX LED Controller (WiFi+2.4G) SPIW5

Product reference: Miboxer-SPIW5

Brand: MiBoxer

## Original Brand document

The original technical pages follow this distributor cover and are preserved without changes to Brand identity, specifications, diagrams, certifications or claims.

Source file: spiw5\_en.pdf

## 5 in 1 SPI+DMX LED Controller (WiFi+2.4G)

Model No.: SPIW5

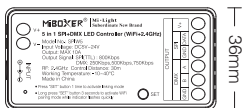
### Product Feature

- Support WIFI+2.4GHZ wireless transmitting technology
- 5 in 1 SPI controller, single color, cct, rgb, rgbw, rgb+cct output selection
- Speed, static mode, dynamic mode and music mode adjustable
- Dual SPI/DMX control protocol, compatible with DC5-24V input
- Dynamic mode : 28 kinds of white color and 80 kinds of RGB color for selection, it can change color, brightness, width and speed for those modes
- 8 kinds of music mode work with internal microphone and smart phone microphone
- Freely switching dynamic mode and music mode
- Setting up boot animation via TUYA APP
- Have DND mode, usually used in power failure area to save power

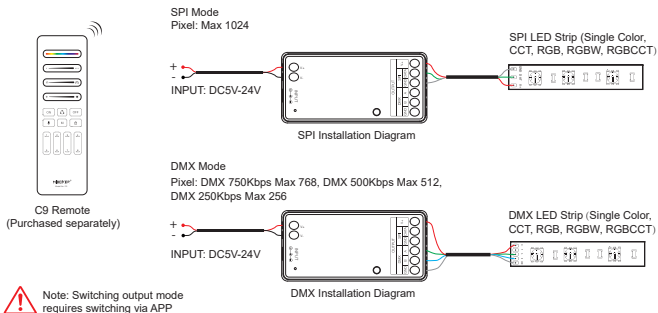


### Product Parameter

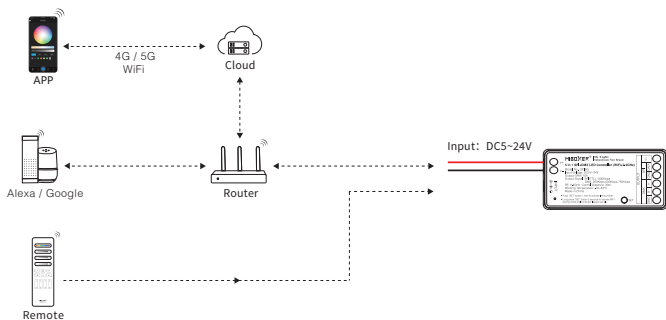
|                  |                                                                                                                                |                        |                                                       |
|------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------|
| Product Name:    | 5 in 1 SPI+DMX LED Controller (WiFi+2.4G)                                                                                      | Control Distance:      | RF: 30m                                               |
| Model No.:       | SPIW5                                                                                                                          | IP Rate:               | IP20                                                  |
| Input Voltage:   | DC 5V-24V                                                                                                                      | Working Temp.:         | -10~40°C                                              |
| Output Current:  | Max 10A                                                                                                                        | Dimension:             | 74.5*36*17mm                                          |
| Output signal:   | SPI(TTL) 800Kbps (Max 1024 Pixel)<br>DMX: 250Kbps(Max 256 Pixel)<br>DMX: 500Kbps(Max 512 Pixel)<br>DMX: 750Kbps(Max 768 Pixel) | EMC Standard (EMC):    | ETSI EN 301 489-1 V2.2.3<br>ETSI EN 301 489-17 V3.2.4 |
| Standby current: | 20mA                                                                                                                           | Safety Standard (LVD): | EN 62368-1; 2020+A11;2020                             |
| Protocol:        | WiFi+RF 2.4GHz                                                                                                                 | Radio Equipment (RED): | ETSI EN 300 440 V2.2.1                                |
|                  |                                                                                                                                | Certification:         | CE, EMC, LVD, RED                                     |



## Connection Diagram



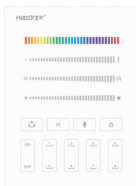
## Application Diagram



## Compatible remote ( purchase separately)



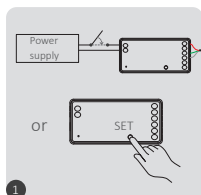
C9 SPI Remote



B9 SPI Panel Remote

# Link/Unlink

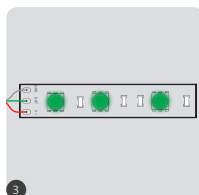
## 1). Link



Power off 10 seconds and power on again or short press "SET"



Short press "ON" button 3 times within 3 seconds.

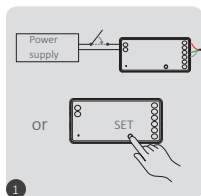


Green flashing state, then the code is successful.



Link is failed if light doesn't flash, please repeat above steps  
(Attention: can not link again if remote already finished linking)

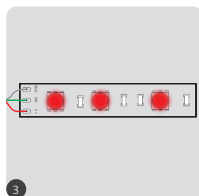
## Unlink:



Power off 10 seconds and power on again or short press "SET"



Short press "ON" button 5 times within 3 seconds.



Red flashing state, Then clear the code successfully.



Unlink is failed if light doesn't flash, please repeat above steps  
(Attention: no need to unlink if the light never be linked)

# Smart Phone APP Control

## Pairing Network ( don't support 5G router)

### 1).Download and install "TUYA SMART" APP

search "TUYA SMART" in application store or scan QR code, please register account if using it in the first time, login into account if already have account



### 2).Pairing Network

Connect controller with mains

Ensure indicator flashes quickly( 2 times per seconds)

You have 2 ways to correct indicator status

- Long press" SET" button

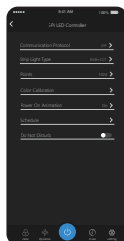
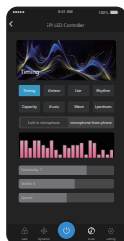
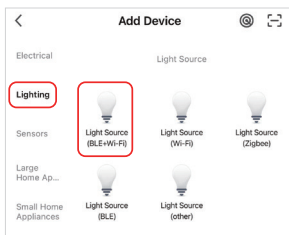
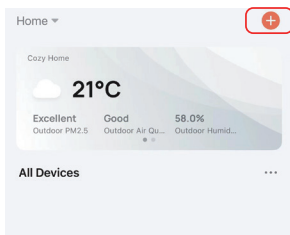
- Power off and power on controller 6 times

Connect phone with home wifi 2.4GHZ network

Open the APP interface, click "+"

Click "Lighting" and "Light source (BLE+Wifi)

Complete the rest steps



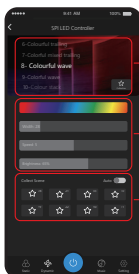
# Function Instruction



APP

## Static Mode

Adjust or save pure static illumination



28 kinds of white color 80 kinds of rgb color

Change color, width, speed and brightness for all those modes

Save 8 scenes

For example, regarding as App

## Dynamic Mode ( select it via remote)

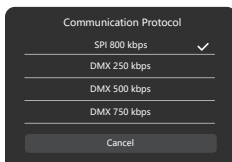
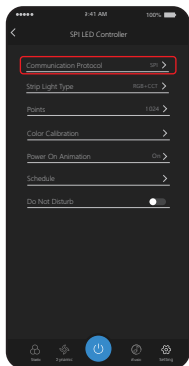
28 kinds of white color, 80 kinds of rgb color, save favorite modes and 8 scenes mode, all modes can change color ,brightness, width and speed

## Music Mode

8 kinds of music mode work with internal microphone and smart phone microphone

# Setting Communication Protocol

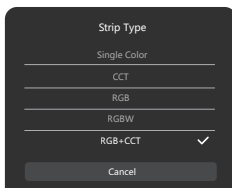
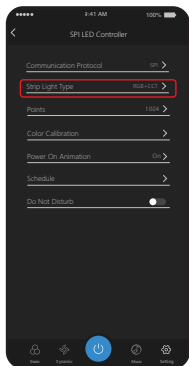
Setting it via APP



Select SPI or DMX protocol

## Setting LED strip light

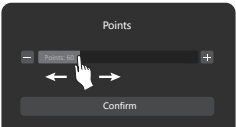
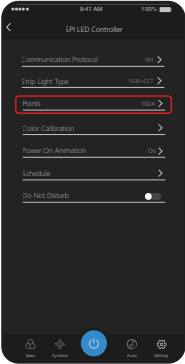
Change output based on different LED strip lights  
like single color, cct, rgb, rgbw, rgb+cct



LED strip light types

# Setting Pixel points

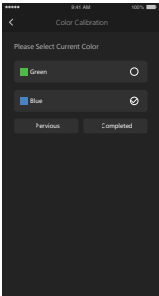
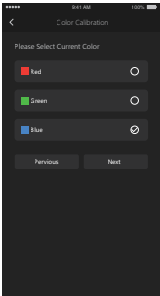
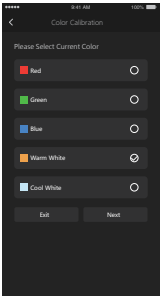
Setting it via program



Slip the slider to change numbers

## Color Calibration

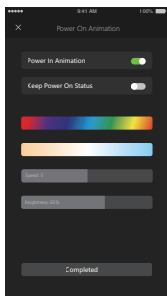
Correct the color of led strip light via APP



Following the tip to complete color calibration

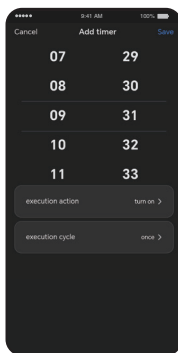
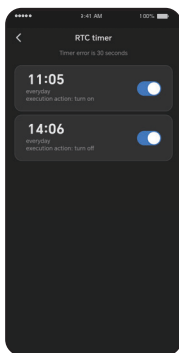
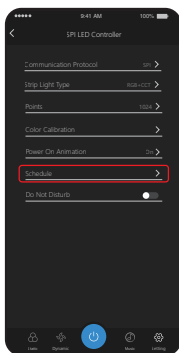
## Boot Animation

Setting color or color temperature, speed and brightness



## Timer Function

Setting it via APP



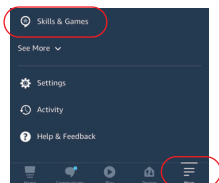
## DND Mode ON/OFF

Turn on DND mode ( usually using in power failure area to save power)

# Alexa voice control instruction

Please add device into **[Tuya Smart]** app, then start following steps

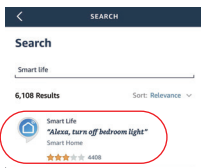
- 1). Open Alexa App
- 2). Click "More" on the bottom of right corner
- 3). Click "Skills & Games"



- 4). Click "Q" on the top of right corner
- 5). Type into "Smart life" and search



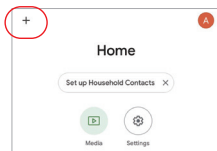
- 6). Click "Smart Life" skill, follow instruction to finish configuration and start voice control



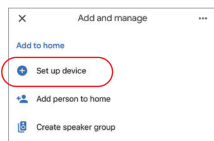
# Google Home voice control instruction

Please add device into **[Tuya Smart]** app , then start following steps

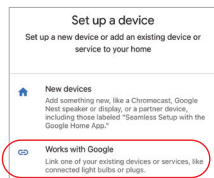
- 1). Open Google Home App
- 2). Click “+” on the top of left corner



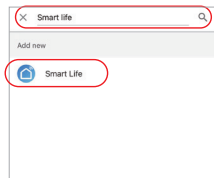
- 3). Click “Set up device”



- 4). Click “Works with Google”



- 5). Click “Q” on the top of right corner
- 6). Type into “Smart life” and search
- 7). Click “Smart Life” skill, follow instruction to finish configuration and start voice control



## Attention

1. Please turn off power supply before installation.
2. Please ensure input voltage to be same as requirements from device.
3. Don't disassemble device if you are not expert, otherwise it will damage it.
4. Please do not use the light in the place with widely range metal area or strong electromagnetic wave nearby, otherwise, the remote distance will be seriously affected.



Made in China