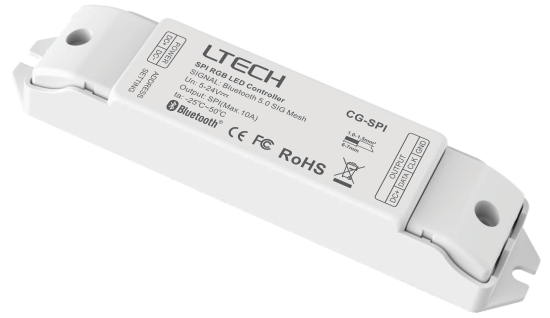


Bluetooth LED Pixel Controller

- Bluetooth 5.0 SIG Mesh communication protocol allows for seamless relay between nodes. Through the APP, edit the LED pixel strip parameters and control brightness, colors and speed locally;
- Multiple supported types of IC-driven LED lights. TM1804/TM1809/TM1812/TM1803/TM1814/TM1914/TM1914A/UCS1903/UCS1909/UCS1912/UCS2903/UCS2909/UCS2912/UCS2904B/UCS5603A/UCS6912/WS2801/WS2803/WS2811/WS2812/WS2821/WS2812B/APA102/APA104/KL590/KL592D/LPD6803/LPD1101/LPD8803/LPD8806/P9813/P943/TLS3001/TLS3002/SK6812(RGB)/GS8206(BGR)/GS8208/SM16703.
- Through the APP, select from a variety of dynamic lighting effects and adjust speed, brightness, and directions of dynamic lighting effects.
- Adjust RGB sequence, select the IC type, store and play customized scenes.
- Provide 16 optional dynamic lighting modes and support loop playback.
- Support brightness, color temperature and RGB adjustment for local scenes and set a time to turn them on/off.

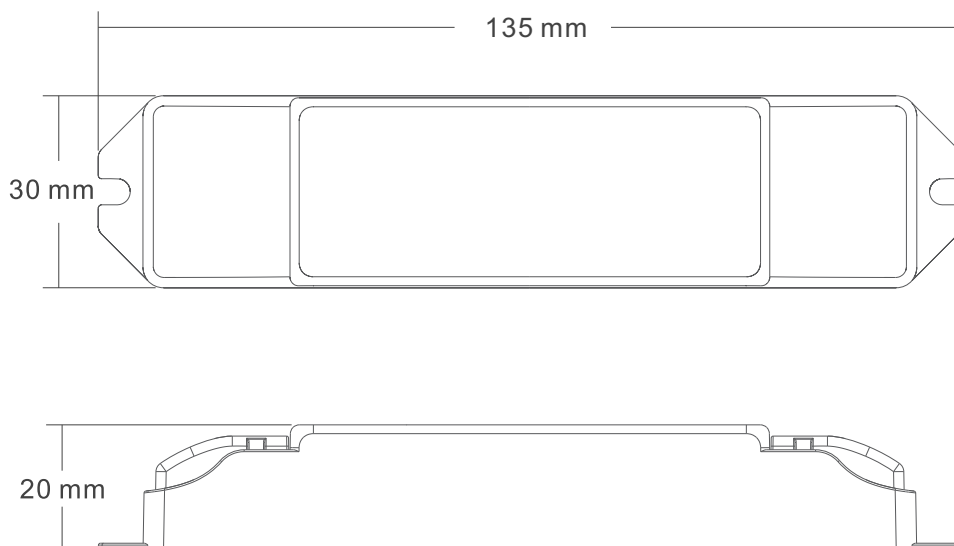


Technical Specs

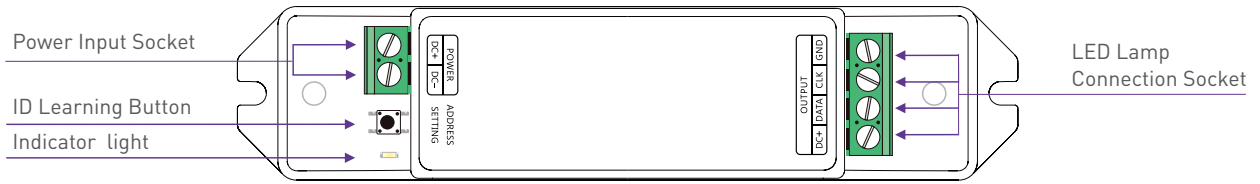
Model	CG-SPI
Wireless Protocol Type	Bluetooth 5.0 SIG Mesh
Inut Voltage	5-24V---
Output Signal	SPI
Working Temperature	-25°C~50°C
Channel of switch	Single Channel
Dimensions	135×30×20(L×W×H)
Package Size	136.5×32×22(L×W×H)
Weight (G.W)	52g±5g

Product Size

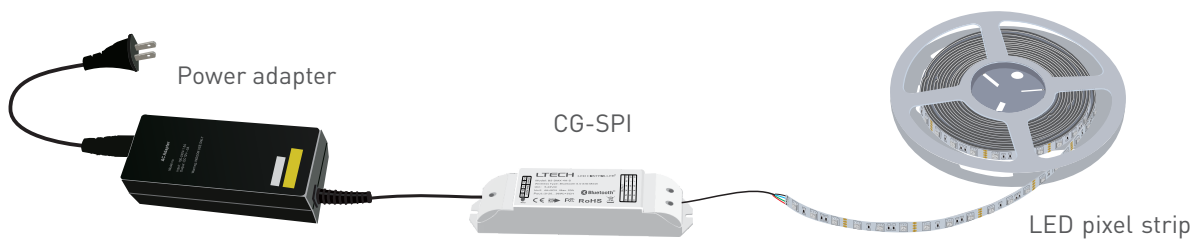
Unit: mm



Terminal Description

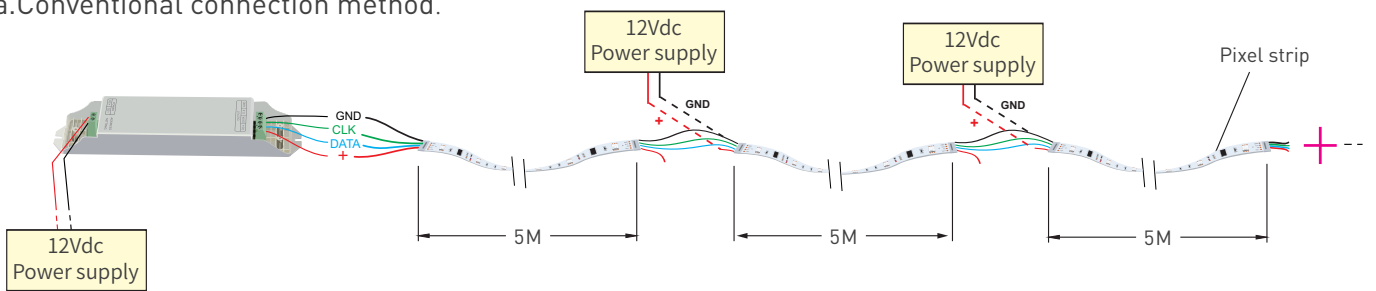


Wiring diagram

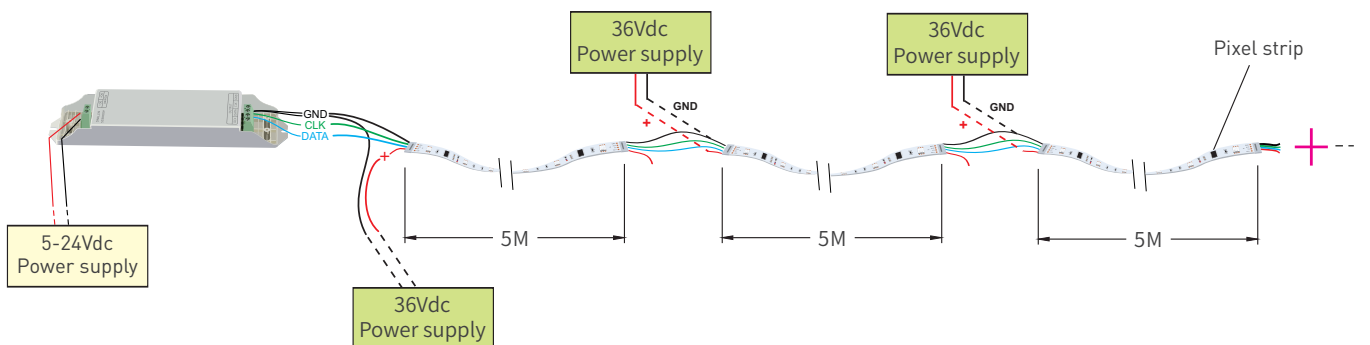


LED pixel strip wiring diagram

a. Conventional connection method.



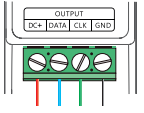
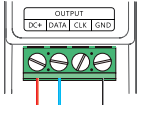
b. Light fixtures and controller using different operating voltages.



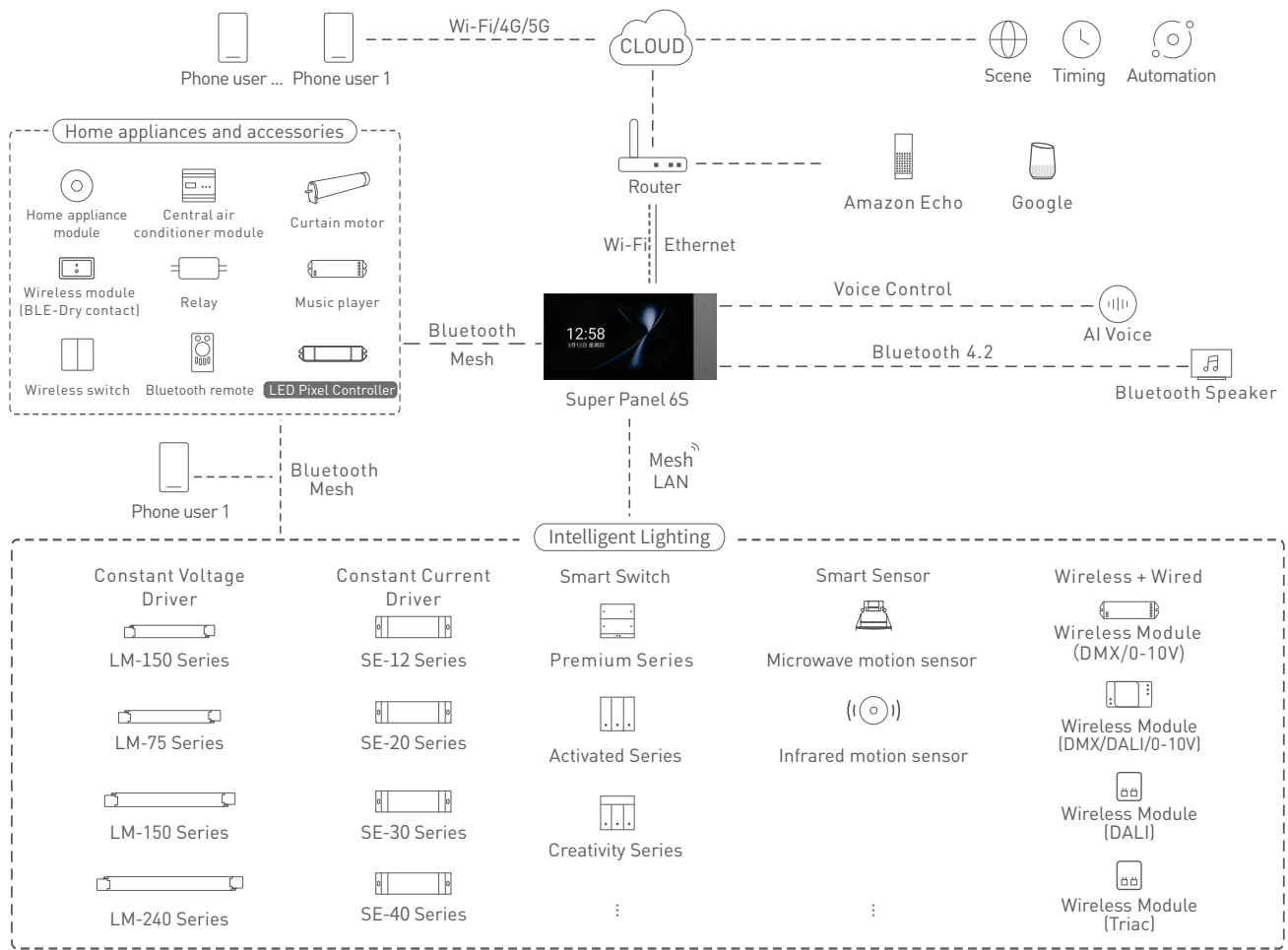
Dynamic mode list

No.	Dynamic effect	No.	Dynamic effect	No.	Dynamic effect	No.	Dynamic effect
0	7-color jumping	1	7-color strobing	2	7-color fading	3	7-color gradient
4	7-color horse racing	5	7-color circle horse racing	6	7-color flow	7	7-color gradient flow
8	6-color trail	9	6-color circle trail	10	Gradient trail	11	White meteor
12	6-color float	13	6-color double trail	14	Color white float	15	Bi-color float

Compatible IC types

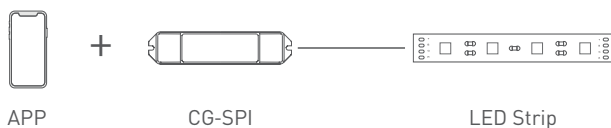
Wiring method	Signal wire	Supported IC model
	Two-wire DATA CLK	Ws2801, WS2803, APA102, LPD6803, LPD1101, LPD8803, LPD8806, P9813, UCS6912
	Single-wire DATA	Tm1804, TM1809(Default), Tm1812, Tm1803, TM1814, TM1914, TM1914A, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS5603A, UCS2912, UCS2904B, WS2811, WS2812, WS2821, WS2812B, TLS3001, TLS3002, SK6812(RGB), APA104, KL590, KL592D, P943, GS8206(BGR), GS8208, SM16703

Application Diagram

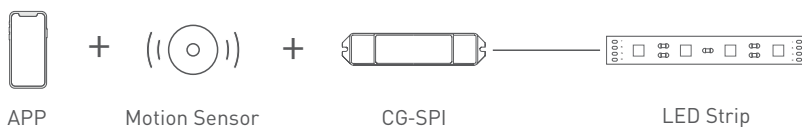


Recommended Applications

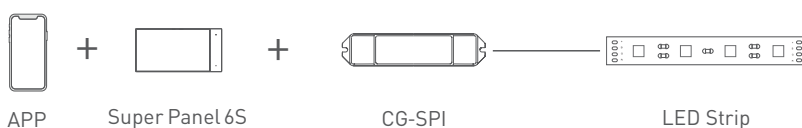
1. Quickly turn on/off the light through Bluetooth.



2. After linking the sensor with CG-SPI via APP, the RGB static color of CG-SPI will be turned on when the sensor detects people.



3. After linking the panel with the CG-SPI controller via APP, both the APP and the panel can simultaneously control the controller. When the panel is connected to the network, CG-SPI controller can be remotely controlled to turn lights on/off, play modes, perform cloud scenes and trigger automated linkage via APP.



4. More applications of intelligent control are waiting for you to set up.

Other Instructions

If the controller works with a remote, gateway, intelligent wireless switch or other items, please refer to related manuals.

App Operating Instructions

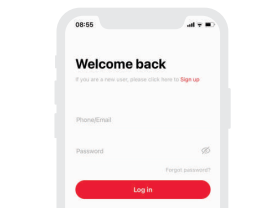
1. Register an account

1.1 Scan the QR code below with you mobile phone and follow the prompts to complete the app installation.



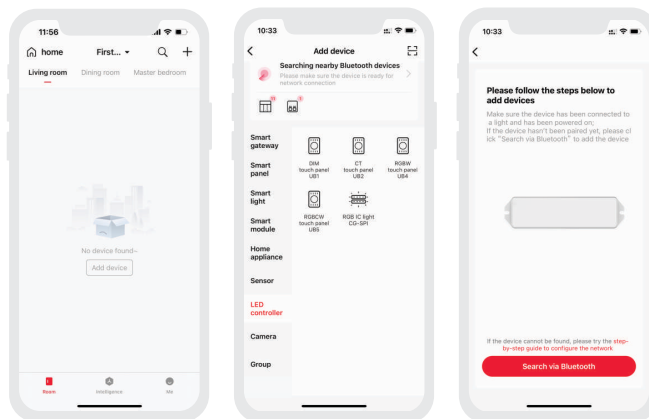
Scan and download the App

1.2 Open the App and log in or register an account.



2. Pairing instructions

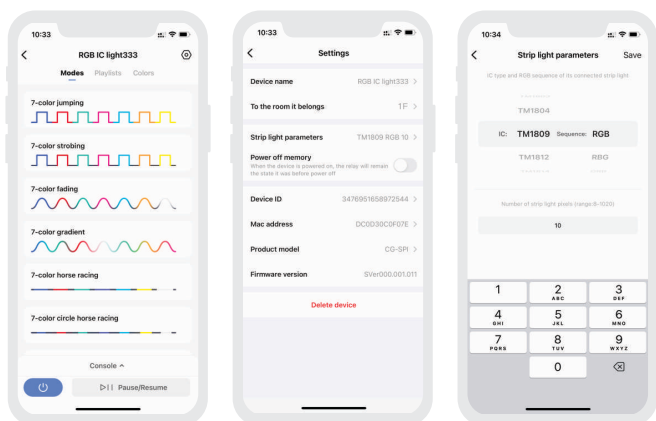
Create a home if you are a new user. Click "+" icon in the upper right corner to access the "Add device" page. Select "LED Controller"- "RGB IC light (CG-SPI)". Make sure the device has been connected to the light and powered on, then click "Search via Bluetooth" and follow the prompts to add the device.



3. Set strip light parameters

After pairing is completed, access the control interface. When turning on the device for the first time, you need to set the strip light parameters (default IC: TM1809, default sequence: RGB) then click "Save".

Note: The LED strip parameters can be modified on the settings page.

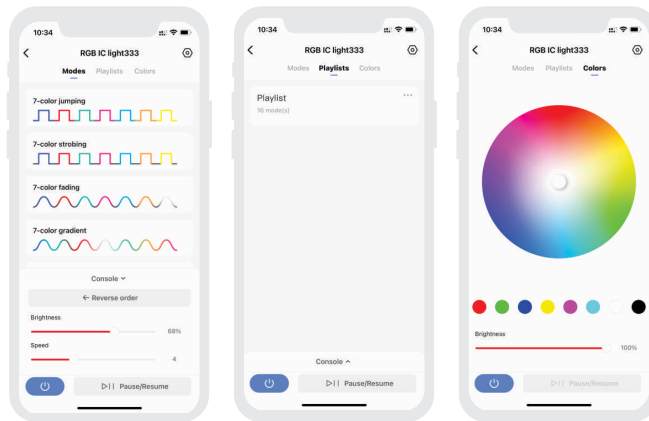


4. APP interface settings

Mode: The current interface supports playback of one single dynamic mode only. There are 16 dynamic modes available. The console can adjust brightness, speed and direction of each dynamic mode, as well as turn off devices with one tap.

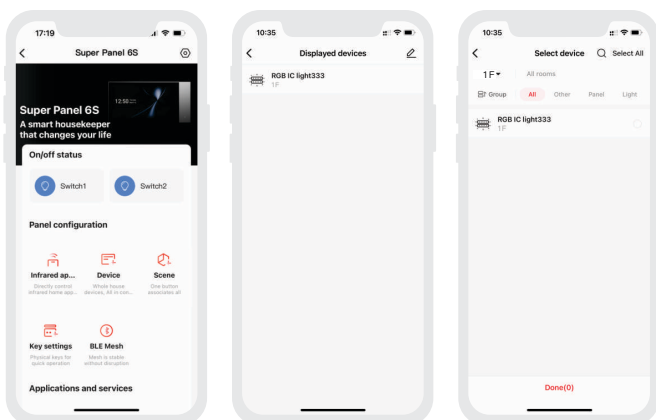
Playlist: There are 16 dynamic modes available. Looping dynamic modes is supported. According to personal needs, the playback order of looping dynamic modes can be changed and the number of dynamic modes can be increased or decreased.

Color: RGB static colors can be selected to be displayed on the LED strip. The interface includes an RGB color wheel, 8 color blocks, brightness adjustment, and turning on/off lights. Customize lighting effects to make your life more colorful.



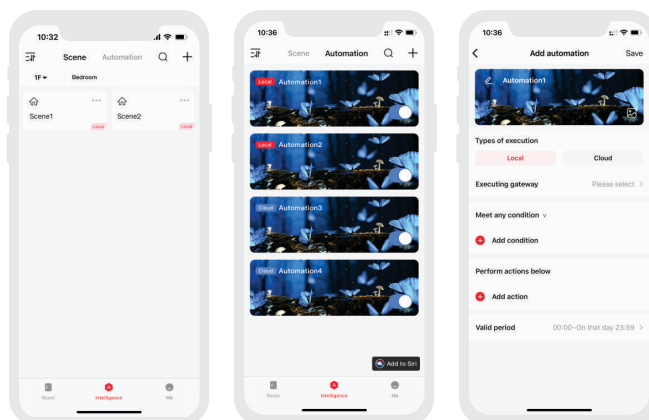
5. Bind a smart gateway

In the "Room" interface, click a smart gateway that has been added to access its control interface. Then click "Settings" to go to Displayed Devices interface. Click the icon in the upper right corner and pick the device you want to control on the smart gateway. After clicking "Save", you can control the device on the switch.



6. Advanced functions

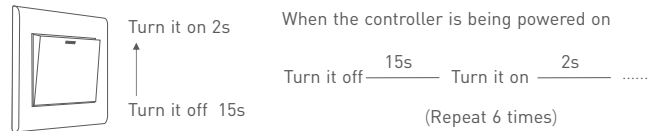
Achieve local control through the linkage with a local scene. Add a smart gateway like Super Panel 6S to achieve a variety of cloud scenes, cloud-based automation and local automation. For details, please view the instructions in the APP.



How to reset a device (reset it to factory defaults)

Method 1: After you long press the pairing key for 6s, the lamp will flash 5 times, which means the controller has been set to factory defaults.

Method 2: Make sure the controller is connected to a lamp and keep the lamp on. Turn the controller off with the switch and after 15s turn it on. After 2s, turn it off again. Repeat the same operation 6 times. When the lamp flashes 5 times, the controller has been set to factory defaults.



Attentions

- Product installation and commissioning should be done by a qualified professional.
- LTECH products are non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

- Warranty periods from the date of delivery : 2 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

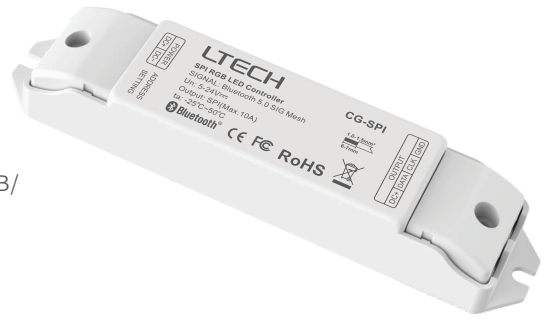
1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Update Log

Version	Updated Time	Update Content	Updated by
A0	20240202	Original version	Yang Weiling

蓝牙幻彩 LED 控制器

- Bluetooth 5.0 SIG Mesh通信协议，节点间无缝中继，通过APP实现对幻彩灯带编辑与控制，实现本地化的调光调色速度等功能；
- 支持多种灯带驱动IC种类：TM1804/ TM1809/TM1812/TM1803/TM1814/TM1914/ TM1914A/UCS1903/UCS1909/UCS1912/UCS2903/UCS2909/UCS2912/UCS2904B/ UCS5603A/UCS6912/WS2801/WS2803/WS2811/WS2812/WS2821/WS2812B/ APA102/APA104/KL590/KL592D/LPD6803/LPD1101/LPD8803/LPD8806/P9813/ P943/TLS3001/TLS3002/SK6812(RGB)/ GS8206(BGR)/GS8208/SM16703；
- 通过手机APP可选择各种灯光变化效果，可以调节变化速度、亮度、改变灯光动效变化方向、
- 调整RGB顺序，还可以选择IC类型，储存、播放自定义场景；
- 带有16种灯光动态模式供用户选择，可循环播放；
- 支持本地场景调节亮度、时间、色温、RGB。

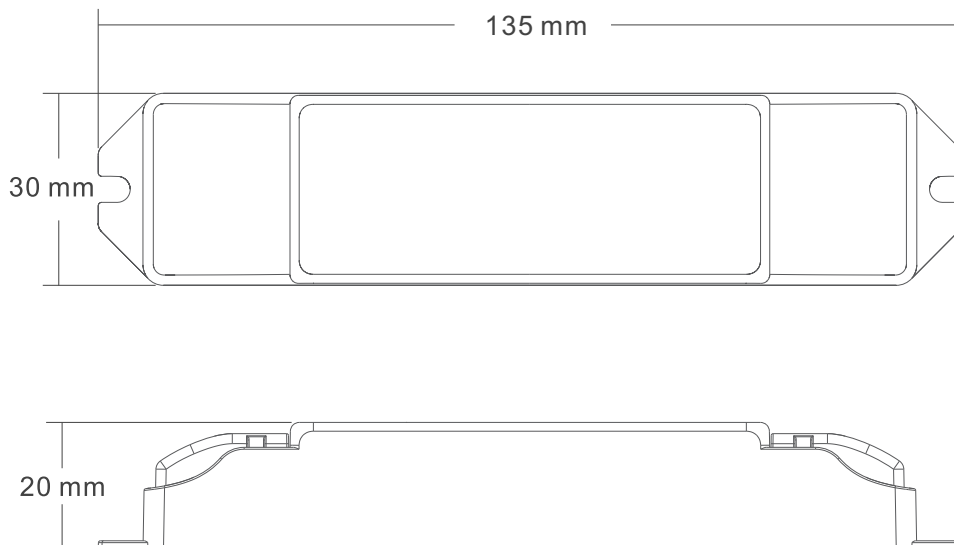


技术参数

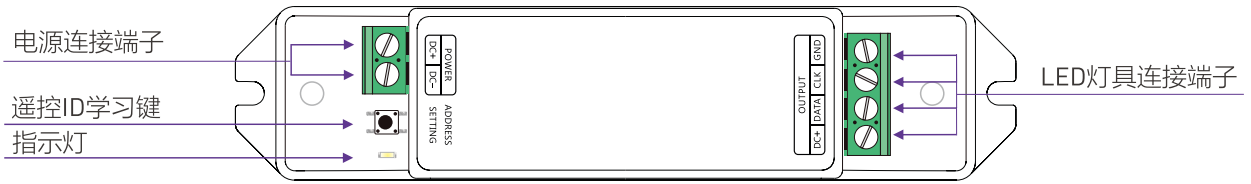
产品型号	CG-SPI
无线类型	Bluetooth 5.0 SIG Mesh
输入电压	5-24VDC
输出信号	SPI
工作温度	-25°C~50°C
开关通道	单通道
产品尺寸	135L×30W×20H
包装尺寸	136.5L×32W×22H
产品重量	52g±5g

尺寸图

单位：mm



端子说明

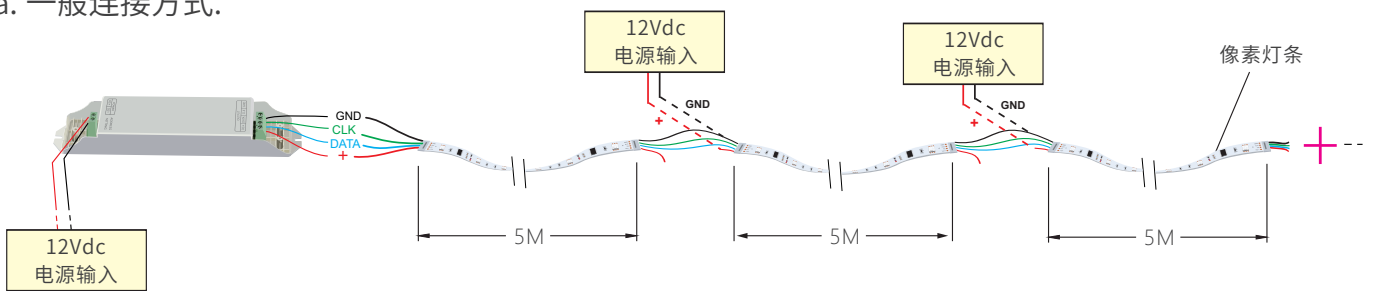


接线示意图

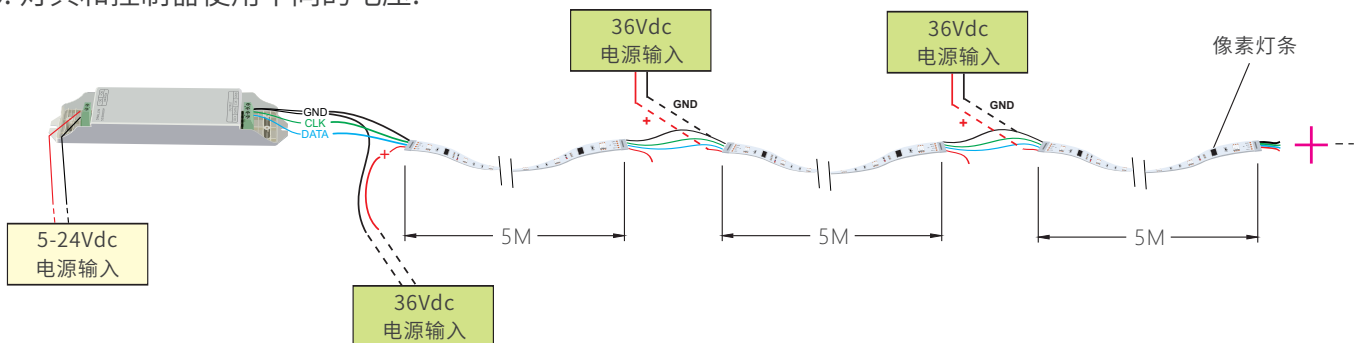


LED像素灯条连接图:

a. 一般连接方式.



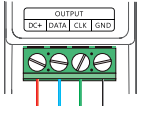
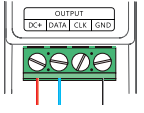
b. 灯具和控制器使用不同的电压.



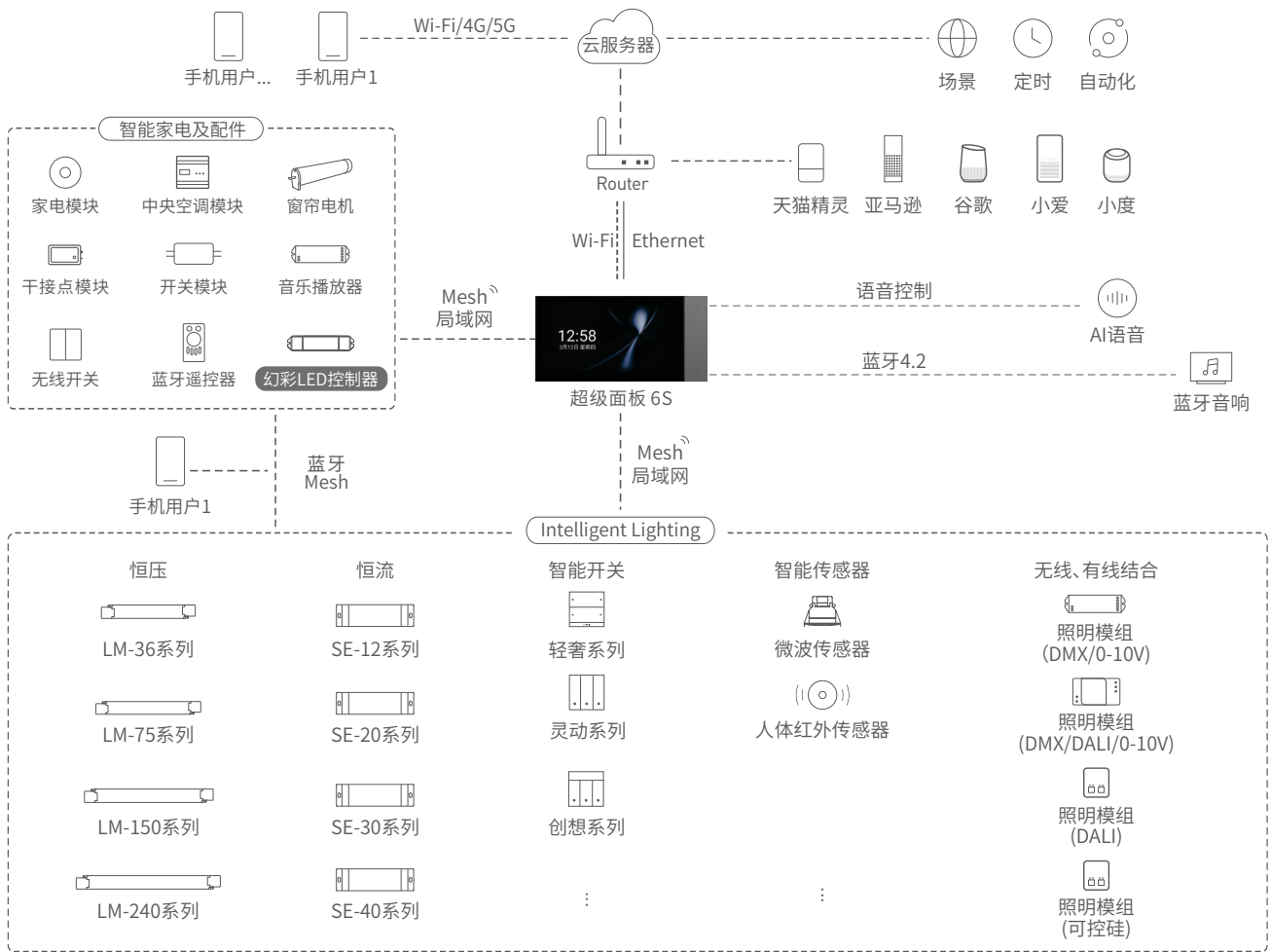
变化模式列表

序号	变化效果	序号	变化效果	序号	变化效果	序号	变化效果
0	七彩跳变	1	七彩频闪	2	七彩渐明渐暗	3	七彩交替渐变
4	七彩跑马	5	七彩循环跑马	6	七彩流水	7	七彩渐变流水
8	六彩拖尾	9	六彩循环拖尾	10	渐变色拖尾	11	白色流星
12	六彩渐变追	13	六彩双头拖尾	14	彩白渐变追	15	双色渐变追

兼容的芯片类型

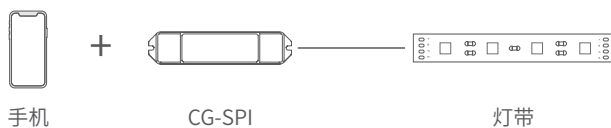
接线方式	信号线	支持芯片型号
	2线 DATA CLK	WS2801、WS2803、APA102、LPD6803、LPD1101、 LPD8803、LPD8806、P9813、UCS6912
	单线 DATA	TM1804、TM1809 (默认)、TM1812、TM1803、TM1814、TM1914、 TM1914A、UCS1903、UCS1909、UCS1912、UCS2903、UCS2909、 UCS5603A、UCS2912、UCS2904B、WS2811、WS2812、WS2821、 WS2812B、TLS3001、TLS3002、SK6812(RGB)、APA104、KL590、 KL592D、P943、GS8206(BGR)、GS8208、SM16703

系统图

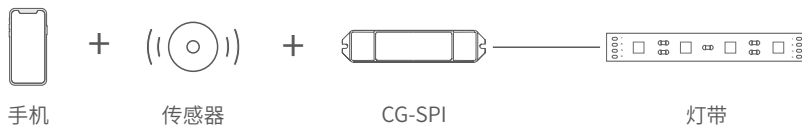


推荐应用控制方式

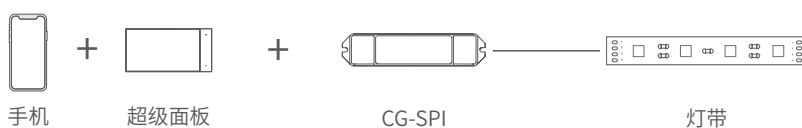
1、快速实现蓝牙控制通断电。



2、通过APP设置传感器关联CG-SPI后，当传感器检测到有人时，开启CG-SPI RGB静态色。



3、通过APP设置，面板联动CG-SPI控制器，可实现APP与面板同时控制。并能够通过面板联网，可实现APP远程控制SPI控制开关、播放模式、云场景，自动化联动功能。



4、.....智能控制，更多应用搭配等你来设置。

其他操作方法

当本产品与遥控、网关、智能无线开关……等配套使用时，请参看相应产品的使用说明书。

APP操作说明

1. 账号注册

1.1 通过手机扫描下方二维码，按提示完成APP安装。



扫码下载APP

1.2 打开APP进行登录/注册操作。



3. 灯带参数设置

配对完成后，进入控制界面，首次打开设备需设置灯带参数（默认IC:TM1809，默认顺序：RGB）点击保存即可。
注：灯带参数可在设置页面再修改。



2. 配对操作

新用户创建家庭后，点击右上角“+”进入添加设备列表，选择“LED控制器-幻影灯”后，确保设备已连接灯具且接通电源，然后点击“蓝牙搜索”后，按照提示完成添加设备。



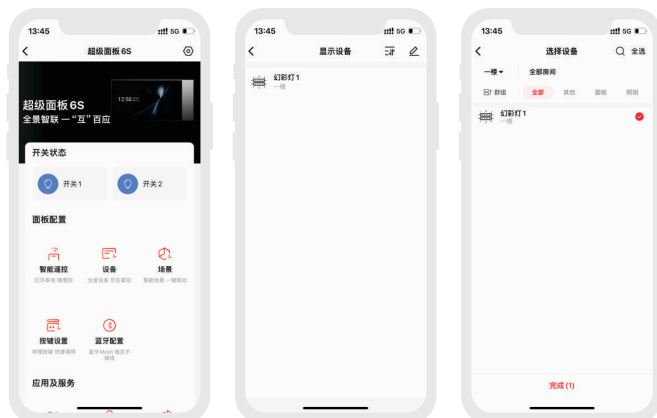
4. APP界面操作设置

模式：当前界面仅支持单动态模式播放，共有16种动态模式可选用。控制台可调整每个动态模式的播放方向、速度和亮度，还可一键关闭设备。
播放表：有16种动态模式可选用，支持动态模式循环，可根据个人需求变更循环列表播放顺序、增减模式。
颜色：可选择RGB静态色在灯带上展示，界面包含RGB色盘、8个色块、亮度调节、开/关灯。自定义灯光效果，让您的生活更加丰富多彩。



5. 智能网关绑定

在“房间”界面点击已添加的智能网关进入【控制】界面。
点击“设置”进入显示设备界面。点击右上角图标，勾选您要在智能网关上控制的设备后，点击保存即可在智能网关上控制该设备。



6. 高级功能

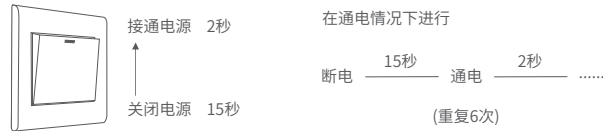
可通过联动本地场景，实现本地化控制；
可搭配具有网关功能的设备(比如:超级面板6S)实现丰富的云场景、云自动化、本地自动化控制。具体详细请查看APP操作



重置设备（恢复出厂设置）

方法一：长按配对键6秒后，灯具闪烁5次，即表示控制器已恢复到出厂设置状态。

方法二：确保控制器已接灯具且处于常亮状态下，使用开关让控制器连续断通电6次（每次断电时间15秒，通电2秒），第六次通电2秒后，灯具闪烁5次，即表示控制器已恢复到出厂设置状态。



注意事项

- 请由具有专业资格的人员进行调试安装。
 - 雷特产品（专有型号除外）不能防水防雷，需避免日晒雨淋，如安装在户外，请用防水箱和防雷装置。
 - 良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境。
 - 请检查使用的工作电压是否符合产品的参数要求。
 - 使用的电线直径大小必须能够负载连接的LED灯具，并确保接线牢固。
 - 通电调试前，应确保所有接线正确，以避免因接线错误而导致灯具损坏。
 - 如果发生故障，请勿私自维修；如有疑问，请联系供应商。
- * 本说明书的内容如有变更，恕不另行通知。若内容与您使用的功能有所不同，则以实物为准。如有疑问，请与供应商联系。

保修条例

- 自出厂之日起保修服务期为2年。
 - 在保修服务期内出现产品质量问题雷特将给予免费修理或更换服务。
- 非保修条例：
- 属下列情况不在免费保修或更换服务范围之内：
- 已经超出保修服务期；
 - 过高电压、超负载、操作不当等人为造成的损坏；
 - 产品外形严重损坏或变形；
 - 自然灾害以及人力不可抗拒原因造成的损坏；
 - 产品保修标签和产品唯一条形码损坏；
 - 无雷特签订的合同或发票凭证。
1. 修理或更换是雷特对客户唯一补救措施。雷特不承担任何附带引起的损害赔偿赔偿责任，除非在适用法律范围之内。
 2. 雷特享有修正或调整本保修条款的权利，并以书面形式发布为准。

更新日志

版本	更改日期	更改内容	更改人
A0	20231215	正稿	杨魏玲