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-drivern 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.

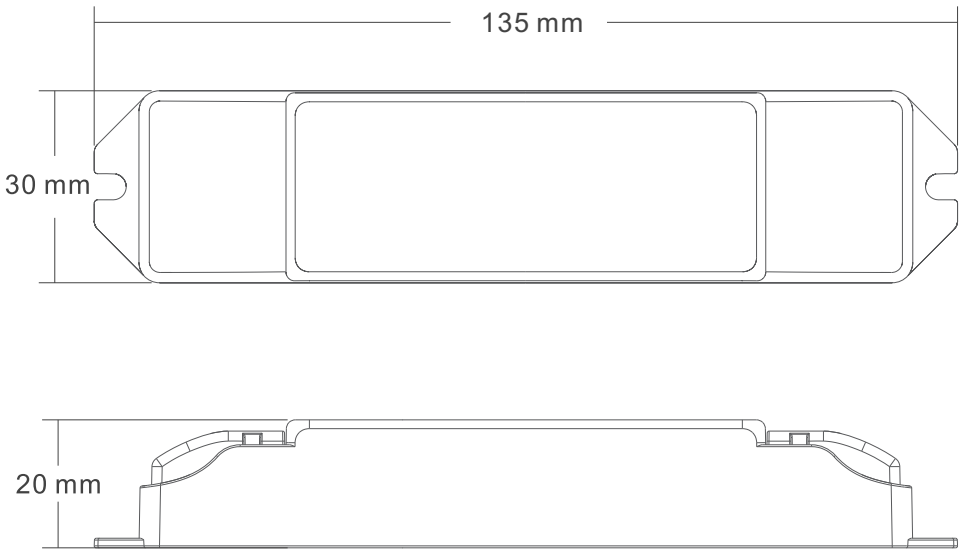
Bluetooth® CE RoHS FC

Technical Specs

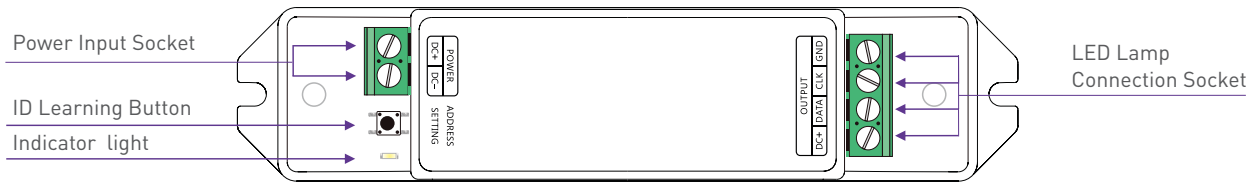
Model	CG-SPI
Wireless Protocol Type	Bluetooth 5.0 SIG Mesh
Inut Voltage	5-24V⎓
Output Signal	SPI
Working Temperature	-25°C~50°C
Channel of switch	Single Channel
Dimensions	135×30×20(L×W×H)
Package Size	136.5×32×22(L×W×H)
Weight (G.W)	52g±5g

Product Size

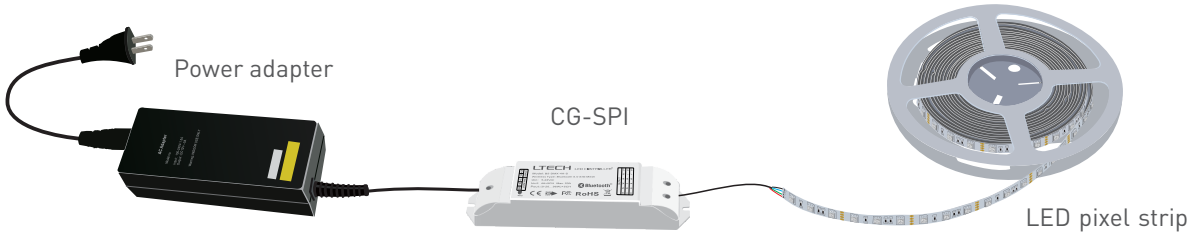
Unit: mm



Terminal Description

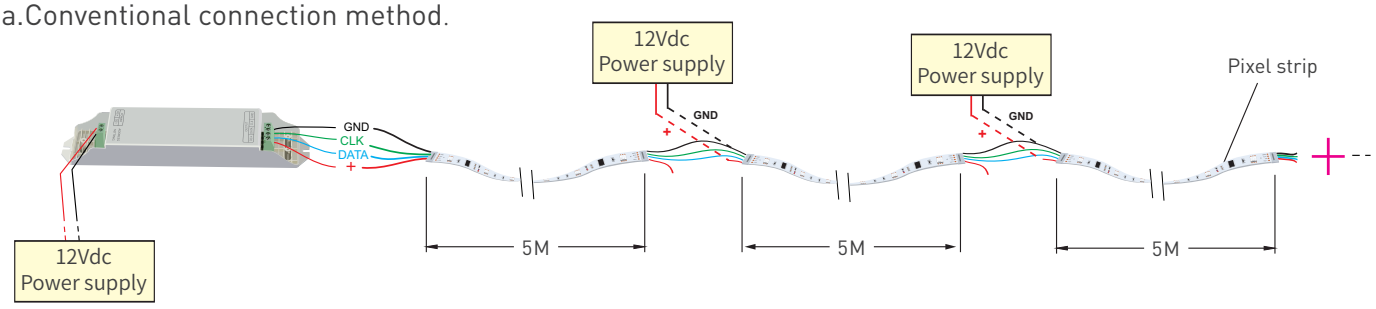


Wiring diagram

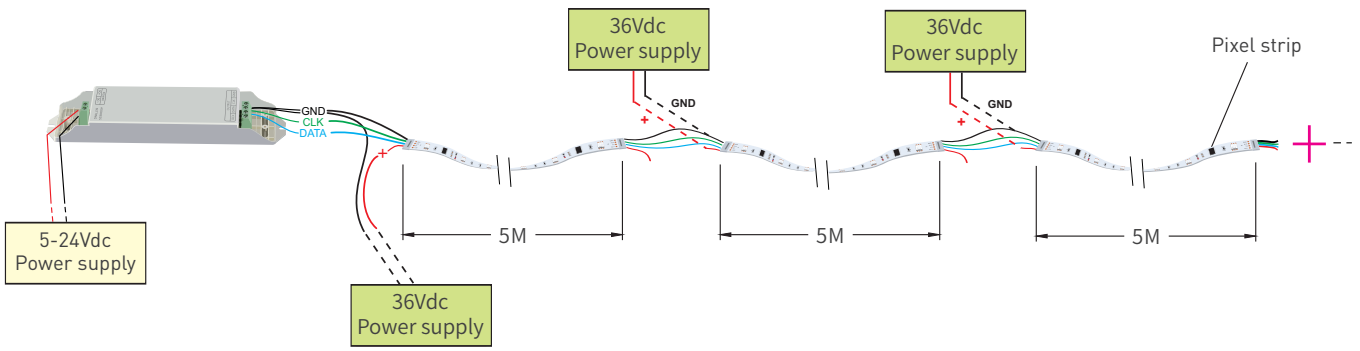


LED pixel strip wiring diagram

a.Conventional connection method.



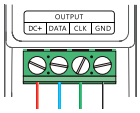
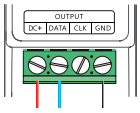
b.Light fixtures and controller using different operating voltages.



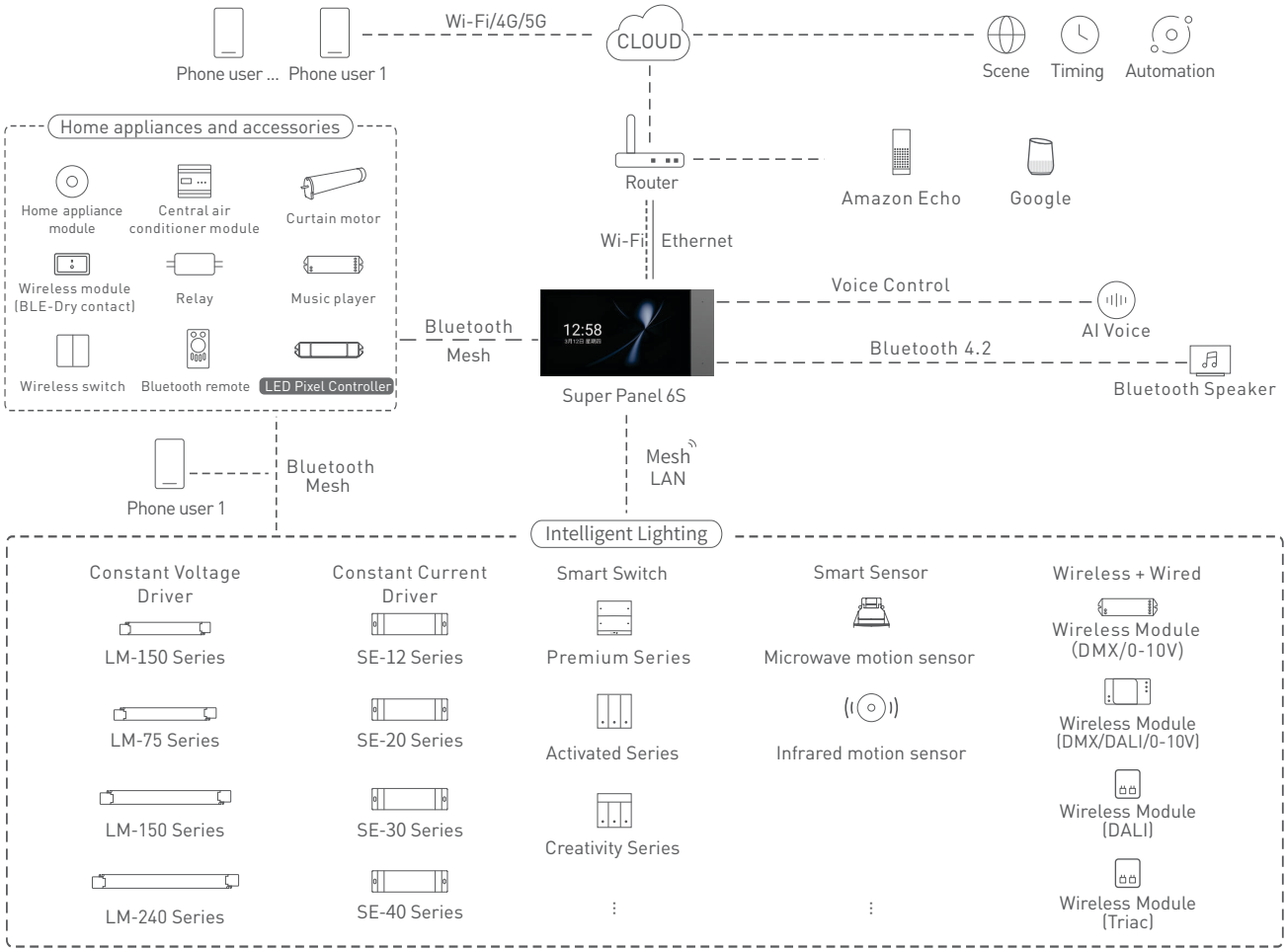
Dynamic mode list

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

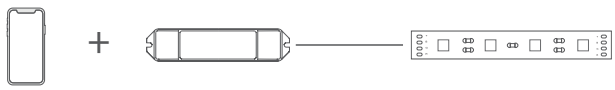
Wiring method	Signal wire	Supported IC model
	Two-wire DATA CLK	Ws2801, WS2803, APA102, LPD6803, LPD1101, LPD8803, LPD8806, P9813, UCS6912
	Single-wire DATA	Tm1804, TM1809(Default), Tm1812, Tm1803, TM1814, TM1914, TM1914A, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS5603A, UCS2912, UCS2904B, WS2811,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

Application Diagram

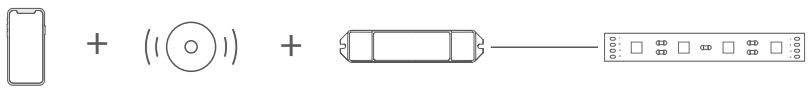


Recommended Applications

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.

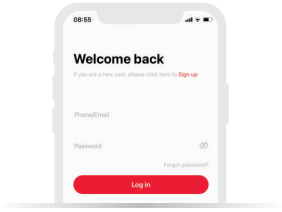
App Operating Instructions

1.Register an account

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

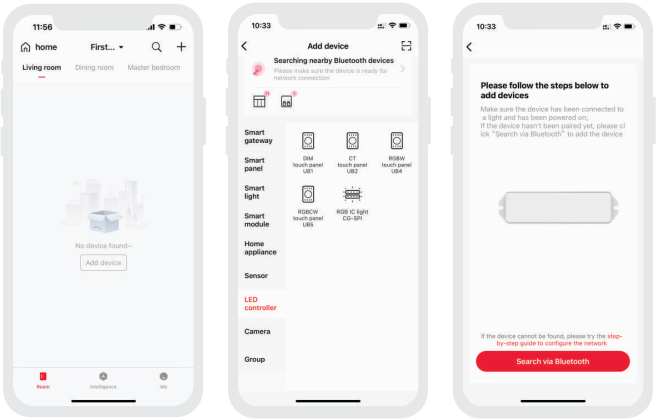
Scan and download the App

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



2. Pairing instructions

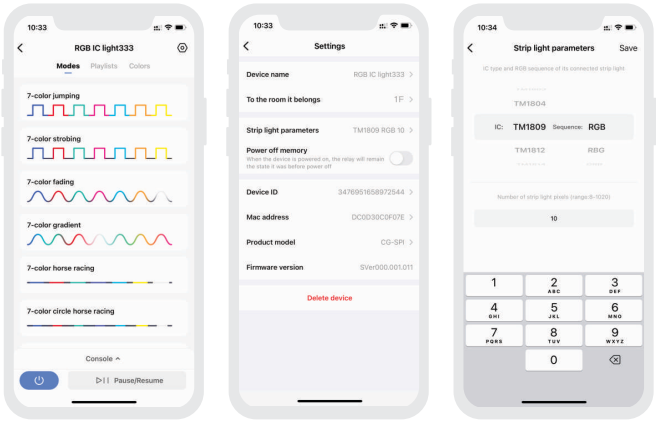
Create a home if you are a new user. Click "+" icon in the upper right corner to access the "Add device" page. Select "LED Controller"- "RGB IC light (CG-SPI)". Make sure the device has been connected to the light and powered on, then click "Search via Bluetooth" and follow the prompts to add the device.



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.

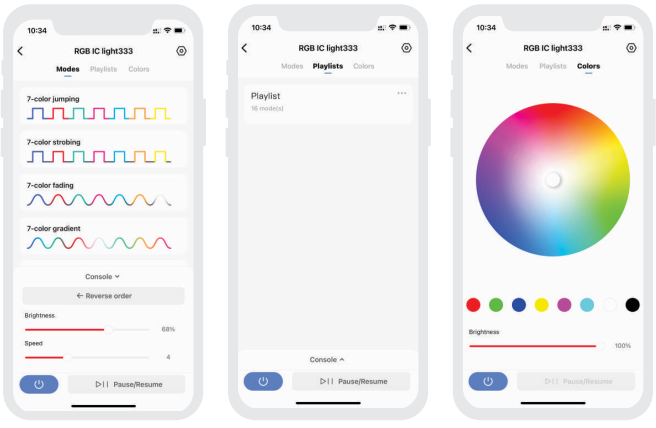


4. APP interface settings

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.

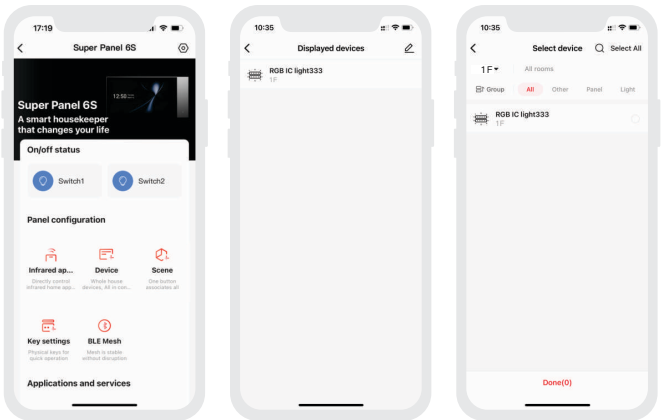
Playlist: There are 16 dynamic modes available. Looping dynamic modes is supported. According to personal needs, the playback order of looping dynamic modes can be changed and the number of dynamic modes can be increased or decreased.

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

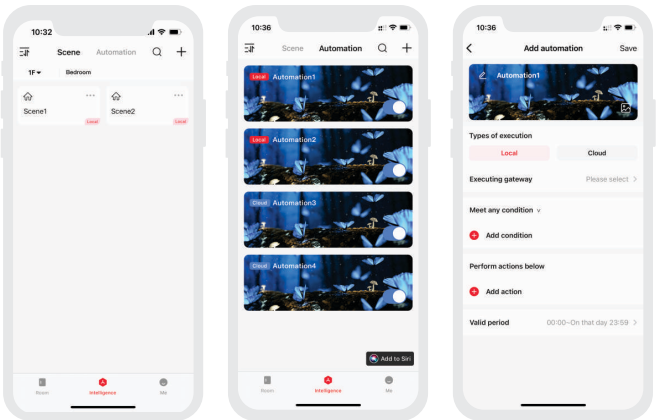
In the "Room" interface, click a smart gateway that has been added to access its control interface. Then click "Settings" to go to Displayed Devices interface. Click the icon in the upper right corner and pick the device you want to control on the smart gateway. After clicking "Save", you can control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



6. Advanced functions

Achieve local control through the linkage with a local scene.

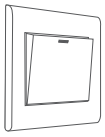
Add a smart gateway like Super Panel 6S to achieve a variety of cloud scenes, cloud-based automation and local automation. For details, please view the instructions in the APP.



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

Method 1: After you long press the paring 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.



When the controller is being powered on

Turn it off —15s— Turn it on —2s— .....

(Repeat 6 times)

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