SP105E Bluetooth LED Controller Operating Instructions

1. Features:

- App Control via Bluetooth 4.0, long Control distance,convenient to use;
- Support almost every kind of one-wire or two-wire LED driver IC ;
- Brightness adjustable,With 200 kinds of patterns,which are vivid and beautiful;
- Support setting total pixel number,able to control up to 2048 pixels;
- DC5V~24V wide working voltage,preventing reverse connection of power supply;
- User setting saving;

2. App control:

Both IOS version and Android OS version are available.

•Requires IOS version 10.0 or later;

•Requires Android OS version 4.4 or later;

•Search "**Magic-LED**" in App Store or Google pay or scan this QR code to download and install the App:

3. Specifications:

Working Voltage：DC5V~24V; (The controller cannot regulate the output voltage at the VCC. That means the output voltage of your power supply must be the same as the work voltage of your led lights. If your lights need 5V input, please use a 5V power supply, never use 12V or 24V power supply.)

Working Current : 20mA~130mA;

Remote distance : 20 Meters;

Product size : 85mm*45mm*22mm;

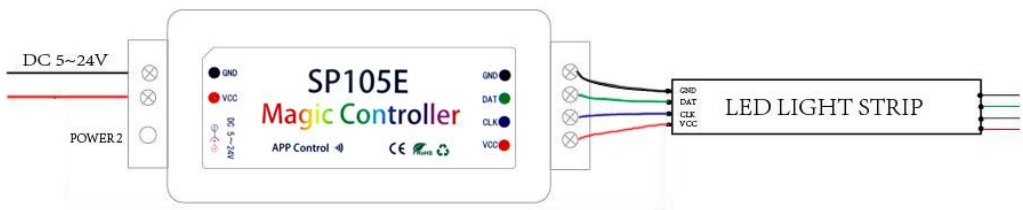
Product weight : 40g ;

Certificates : CE, RoHS;

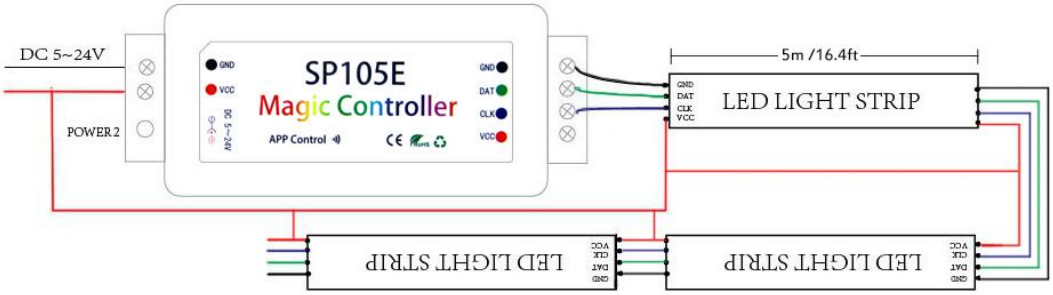
4. Wire Connection:

- **Connect one LED strip less than 5m**

  If the voltage drop much, please inject power on both ends of the LED strip.



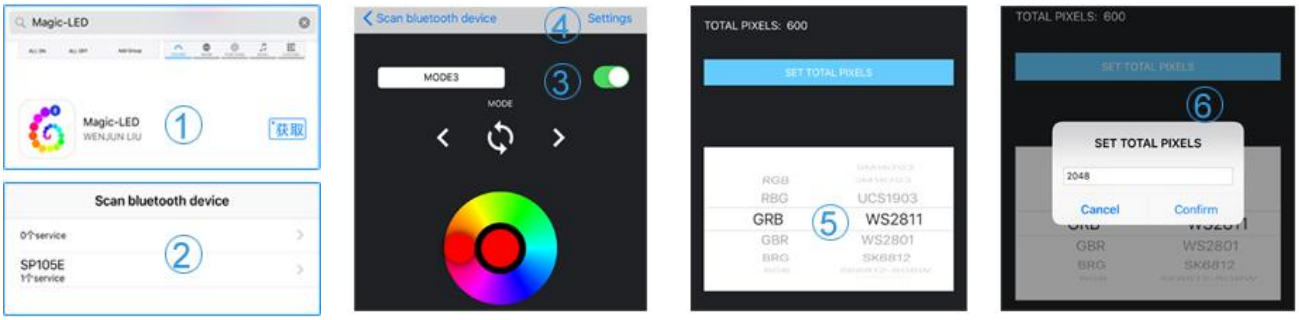
- **Connect multiple LED strips together**



Kindly note:

- Please choose the power supply depending on your LED lights. If your lights need 5V input, please use a 5V power supply, never use 12V or 24V power supply.
- If your LED lights' IC type is WS2812B, WS2811,SK6812,SK6812-RGBW, which has **data** wire, but no **clock** wires, the CLK port is useless for them. Just connect the data wire to DAT port.
- If your LED lights' IC type is WS2801, APA102,SK9822, which has both **data** and **clock** wires, please conect the as the picture showed.
- If your LED lights' IC type is WS2813 or WS2815, which has two **data** wires,but no **clock** wires, please connect data wire to DAT port, backup data wire to GND port.

5. How to set up:



① Search "Magic-LED" in app store or scan the QR code on the box. Install the app on your smart phone or Tablet.

② Open bluetooth and app on your smartphone. It will scan and connect SP105E controller automatically.

③ Enter SP105 control page. Turn on on/off button.

④ Click "Setting", enter setting page.

⑤ Set up the correct IC model and R/G/B sequence according to your LED lights. If your lights are ALITOVE WS2812B WS2813 WS2815, please choose GRB and WS2811.

⑥ Set up total pixels to 2048, which is the max pixels the controller can drive. If your light' pixels are more than 2048, the rest pixels will not work.

6. Kindly Note:

1) When connect WS2813 or WS2815 LED strip which has two data wires to this controller, please connect backup(BI) wire to GND port.

2) It can support WS2812B WS2813 and WS2815 but there is no option on the setting page. Please choose WS2811 when connect it to WS2812B WS2813 and WS2815.

3) The controller only supports LED lights with smart IC. It cannot support ordinary RGB/RGBW LED strip without IC.

4) Please use a power supply not a battery to power the controller. The output power of power supply must be more than the max power of led light. For example, if the work voltage and max amp of your led light is 5V 10A 50W, power supply output must be 5V 10A 50W at least. Otherwise, it will work smoothly.

5) The controller cannot regulate the output voltage at the VCC. That means the output voltage of your power supply must be the same as the work voltage of your led lights. If your lights need 5V input, please use a 5V power supply, never use 12V or 24V power supply.

6) Requires IOS version 10.0 or later, Android OS version 4.4 or later.

7. What can you do if you can’t make it work?

1) Please check your smart phone and led lights and confirm whether they can support the controller. Your smart Phone should be IOS 10.0 or Android 4.4 or later version and support WiFi

2) Please check output voltage and amp of your power supply and confirm whether it matchs controller and led lights. If your led light is 5V, please use 5V power supply. Never use 12V or 24V power. Otherwise, the led lights will be damaged.

3) If the power supply, controller and led lights can be compatible with each other well, please connect them and set up again following the connection and setting instructions above.

4) Please set enough total pixels number, correct RGB sequence and IC type. Otherwise they cannot work smoothly.