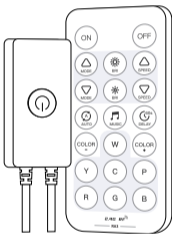


SP648E Instructions



SP648E SPI RGB LED Controller



1.Brief:

SPI three-channel addressable RGB LED controller, with unique dynamic, music and DIY effects to meet your lighting and ambiance needs.

2.Features:


1. Support App control and remote control;
2. Support up to 600 single-wire RZ RGB LED driver ICs;
3. Built-in a variety of music and dynamic effects, support effects pause, multi-parameter adjustable;
4. Capture music through the phone microphone, player streamer and on-board microphone;
5. Support effect collection;
6. support DIY effects;
7. With a variety of ON/OFF animation effects;
8. With sequential channel calibration and ON/OFF timer functions;
9. Support OTA firmware upgrade.

3.APP:



- 1.SP648E supports App control for iOS and Android devices.
- 2.Apple devices require iOS 10.0 or higher, and Android devices require Android 4.4 or higher.
- 3.You can search "BanlanX" in App Store or Google Play to find the APP, or scan the QR code to download and install

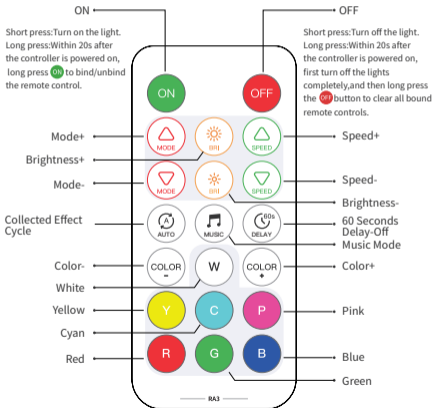
Operations

- Open the App, click the + icon in the top right corner of the home page to add device;
- Click the  icon in the upper right corner of the App to enter the settings page, where you can modify the device name, set the timings, set the on/off effect, OTA firmware upgrade, etc.

4. Work With Remote Control:

The remote control models (RA3) matched with SP648E are as follows:

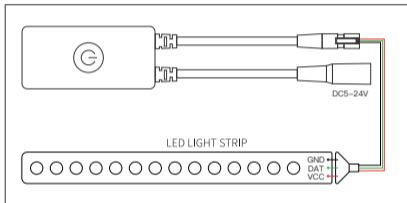
- Support one-to-many control, one remote control can control multiple controllers.
- Support many-to-one control, each controller can bind up to 5 remote controls.



5. Technical Parameters:

Working Voltage: DC5V~24V	Working Current: 12mA~25mA
Working Temp: -20°C~60°C	Dimension: 55mm*26mm*12mm (not including the wires)

6. Wiring:



7. FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.