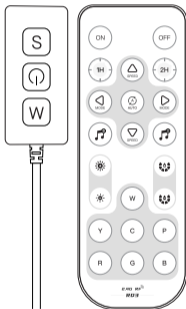# SP548E Instructions

SP548E SPI RGB IoT LED Controller

1.Brief:

The SP548E is an advanced SPI three-channel RGB magic color IoT LED controller, featuring unique dynamic, music synchronization, and customizable effects that empower users to fully control and create their ideal atmospheric scenes. Integrating cutting-edge technology with flexibility, this controller offers an optimal lighting solution for residential, commercial spaces, and any setting seeking personalized ambiance.

2.Product Features:

① APP Control: Utilizes a dual-mode master control chip for efficient Bluetooth networking, supporting Bluetooth, WiFi, and remote cloud connections;

② Voice Control via Smart Speakers: Integrated with smart speaker platforms such as Alexa, Google Home, XiaoDu, and XiaoAi, allowing for control of lighting on/off, brightness, and color through voice commands;

③ Includes a standard RD3 2.4G RF remote control;

④ Supports up to 1200 conventional zero-code three-channel single-line LED driver ICs;

⑤ Featuring a variety of dynamic and music effects, it allows for adjustment of brightness, speed, direction, and duration of effects, along with a pause feature. It also supports customization of both static and dynamic effects in solid and gradient colors, catering to personalized needs;

⑥ Diverse music collection methods, including smartphone microphones, player streaming, and onboard microphones;

⑦ Offers various switch-on/off animation effects and timed switches;

⑧ Supports online OTA firmware updates and ensures the stability of IoT cloud connections through seamless integration with "BanlanX" cloud services;

⑨ Supports automatic device connection and reconnection upon APP launch, as well as group control of multiple devices.

Support iOS system   **Supports Android system**

1. SP548E 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

● 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 2.4G Remote Control:

The 2.4G remote control models (RD3) matched with SP548E are as follows:

❶ ON Button

Short press: Turns on the light.

Long press: Long-press the ON button within 20 seconds of powering on the controller to bind/unbind the remote control.

❷ OFF Button

Short press: Turns off the light.

Long press: Within 20 seconds of powering on the controller, first turn off the light completely, then long-press the OFF button to clear all paired remote controllers.

❸ Speed+/-   **❹ Timed** 1/2H Delay—Off

❺ All Effect Cycle

❻ Mode+/-

❼ Music+/-   **❽ Brightness+/-**

❾ Color+/-

❿ Color Select

W: White

Y/C/P: Yellow/Cyan/Purple

R/G/B: Red/Green/Blue

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.Smart Speaker Control:

Hey Google/Alexa,
turn on bedroom light

Hey Google/Alexa,
set the bedroom light to red

Hey Google/Alexa,
set the brightness of bedroom
light to 80%

Integrated with smart speaker platforms like **Alexa**, **Google Home**, **XiaoDu**, **XiaoAi**,
enabling voice commands for light switches, brightness, and color control.

The specific connection method can be viewed in the BanlanX APP for details

① Login ID

▶

② Enter - My Page

▶

③ Click - Third party intelligent
voice platform

6.Technical Parameters：

Controller:

Working Voltage：DC5V~24V	Working Current：14mA~50mA
Working Temp：-10°C~60°C	Dimension：60mm*30mm*14mm (not including wires)

2.4G Remote：

Operating Voltage: 3V (CR2025)	Static Current: 1uA
RF Frequency: 2.4G	Remote Control Distance: 30M
Remote Control Dimensions: 135mm*48mm*10mm	

7.wiring: