

SP669E 使用说明书

SPI RGBW蓝牙音乐LED控制器



一、简介：

SP669E是一款四通道SPI RGBW蓝牙音乐LED控制器，支持App和2.4G遥控器控制，App具有直观的灯光效果可视化预览UI，内置丰富的幻彩动态灯效和独立的白光灯效，集幻彩和白光模式于一体，全面满足用户在照明和氛围营造的综合需求。

二、产品特点：

-  支持App和2.4G遥控器两种便捷的控制方式；
-  全新的场景化App UI设计，支持更换场景，灯光效果可实时预览，灯光效果一目了然；
-  内置丰富的白光和彩光动态效果和音乐效果；
-  自定义效果界面全面升级，操作更直观简洁，且支持效果保存；
-  支持个性化收藏功能，可创建专属光效收藏列表，支持循环播放及定时设置；
-  支持自定义开关机效果及开机状态；
-  支持通道顺序校准、设备分组管理、定时开关机及自动重连功能；
-  支持OTA升级，确保设备获得最新的功能和改进。

三、BanlanX App：



- SP669E支持由BanlanX App控制，支持iOS和安卓系统；
- 苹果设备需要iOS 13.0或更高版本，安卓设备需要Android 5.0或更高版本；
- 可在App Store、Google Play搜索“BanlanX”找到App，或者扫描二维码下载安装。

• App操作:

• 注册并登录:

点击页面右上角“注册”→填写所需的信息→注册成功→登录

注:

点击“无账号登录”→进入访客模式(部分功能可能会受限)。



• 添加设备:

注册成功后,页面中间 **添加设备** 或 **+** 中的“添加设备”
→搜索页面→选择设备→完成添加



• 颜色校正:

点击控制界面右上角  图标→ 颜色校正→根据灯具实际显示的颜色选择相应的按钮→完成校正

注:

由于灯具存在差异,若界面颜色与实际灯光没有对应,则需要进行校正。



• 控制灯效:

1、动态效果:



点击界面下方的效果图标
可以选择不同的动态效果。



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一共包含多达52种动态效果。

• 彩色/白色切换:



• 纯色调节:



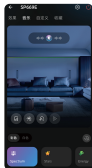
• 颜色调节:



• 渐变色调节:



2、音乐效果:



点击界面下方的效果图标
可以选择不同的音乐效果。



一共包含多达12种音乐效果。

• 选择音乐采集方式:



• 设置采集灵敏度:



• 设置灯光亮度:



• 缩放比例:



• 速度调节:



• 纯色/渐变色切换:



• 设置效果方向:



3、自定义:

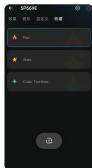


点击界面下方的效果图标
可以选择不同的自定义效果。



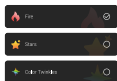
一共包含多达13种自定义效果。

4、收藏:



在任意效果界面的右上方,点击 图标,即可将当前效果添加到收藏列表。

• 长按管理收藏效果:



• 循环跑动所有效果:



• 调整循环播放时间:



四、2.4G遥控器：

与SP669E匹配的2.4G RF遥控器RF3：

- 支持一对多控制，一个遥控器可以控制多个控制器；
- 支持多对一控制，每个控制器可以绑定最多5个遥控器。

短按 **ON** : 开灯

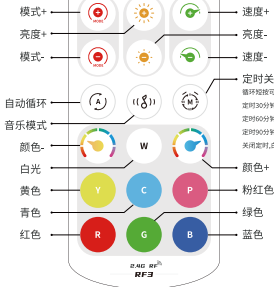
长按: 控制器上电20秒内,
长按 **ON** 键绑定/解绑遥控。

若遥控器未绑定则进行绑定, 白光呼吸3次
若遥控器已绑定则进行解绑, 白光呼吸1次
若绑定的遥控器超过最大个数(5个),
则绑定不成功, 灯光无反应

短按 **OFF** : 关灯

长按: 控制器上电20秒内,
先完全关闭灯光, 再长
按 **OFF** 键来清除所有已
绑定的遥控器。

解绑所有遥控器, 白光呼吸1次



注意：

- 确保根据极性 (+ 和 -) 正确安装电池；
- 长时间未使用的设备中的电池应取出，根据当地法规回收或处理；
- 始终完全固定电池盒。如果电池盒无法牢固关闭，请停止使用产品，取出电池，并将其远离儿童。

五、技术参数：

● 控制器参数

工作电压：	5V~24V DC	数据类型：	SPI
工作电流：	14mA~20mA	IC类型：	常规归零码四通道LED驱动IC
工作温度：	-10°C~40°C	最大控制点数：	450
控制器尺寸：	56mm*21mm*12mm(不含线材)		

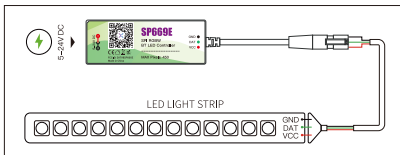
● 遥控器参数

工作电压：	3V(CR2025)	静态电流：	1uA
传输频率：	2.4G	遥控距离：	30M (空旷场地)
遥控器尺寸：	103mm*45mm*8.5mm		

注：恢复出厂设置

连续插拔电源5次 → 每次通电约1-2秒且通电时间不超过5秒（超过5秒则重新开始计数）
→ 每次断电至少2秒 → 插拔5次后灯光效果白光闪烁3次 → 完成重置。

六、接线方式：





BanlanX

SP669E Instructions

SPI RGBW BT LED Controller



1.Brief:

SP669E SPI RGBW BT LED Controller that supports both App and 2.4G remote control. App features an intuitive visualized UI for real-time lighting effect preview and includes a wide range of dynamic RGB lighting effects as well as independent white light effects. Combining both colorful and white light modes, it fully meets users' comprehensive needs for lighting and atmosphere creation.

2.Features:



Supports two convenient control methods: App control and 2.4G RF remote control.



All-new scene-based app UI design with support for scene switching, lighting effects can be previewed in real time for clear and intuitive visibility.



Built-in rich dynamic effects and music effects for both white and RGB lighting.



Upgraded custom effects interface with more intuitive operation and support for effect saving.



Supports personalized favorites, allowing users to create a custom lighting effect list with loop playback and timer settings.



Supports customizable power-ON/OFF effects and startup state settings.



Supports channel order calibration, device group management, timer ON/OFF, and auto-reconnect functions.



Supports OTA updates, ensuring your device stays with the latest features and improvements.

3.BanlanX App:



- SP669E supports App control for iOS and Android devices.
- Apple devices require iOS 13.0 or higher, and Android devices require Android 5.0 or higher.
- You can search "BanlanX" in App Store or Google Play to find the App, or scan the QR code to download and install.

• App operation:

• Register and Login:

Click on the upper right corner of the page "Sign up" → Fill in the required information → Registration success → Login

Note:

Click "Sign in without account" → Enter Guest Mode (some features may be limited).



• Add Device:

After registering successfully, Add device in **Add device** or **+** → Searching page → Select the device → Finish adding



• Color Correction:

Click the  icon in the upper right corner of the control interface →  Color Correction → Select the corresponding color button based on the actual color shown by the LED → Correction completed

Note:

Due to differences in the LED, if the UI color does not match the actual light, calibration is required.



• Control Lighting Effect:

1. Dynamic Effects:



Click the effect icons at the bottom to choose different dynamic effects.



Up to 52 dynamic effects.

• Color / White switch:



• Single color settings:



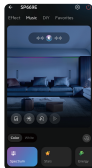
• Color adjustment settings:



• Gradient color settings:



2. Music Effects:



Click the effect icons at the bottom to choose different music effects.



Up to 12 music effects.

- Music collection methods:



- Set sensitivity:



- Adjusts brightness:



- Zoom in/out:



- Speed adjustment:



- Solid/Gradient color toggle:



- Set effect direction:



3. DIY Effects:

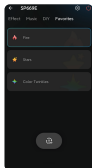


Click the effect icons at the bottom to choose different DIY effects.



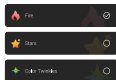
Up to 13 DIY effects.

4. Favorites:



At the top right of any effect screen, click the  icon to add the current effect to the favorites list.

- Long press to manage:



- Loop playback ON/OFF:



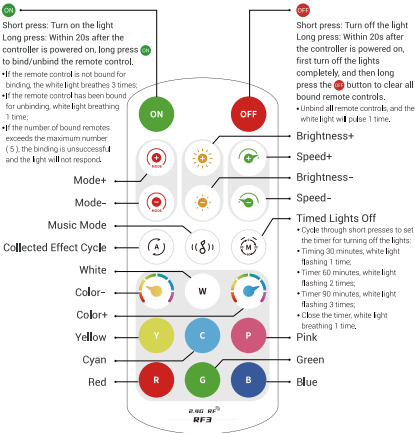
- Adjusts loop playback interval:



4. Work With 2.4G Remote Control:

The 2.4G remote control model (RF3) compatible with SP669E:

- 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.



Warning:

- Ensure the batteries are installed correctly according to polarity (+ and -);
- Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations;
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

5. Technical Parameters:

• Controller Parameters

Working Voltage: 5V~24V DC	Data Type: SPI
Working Current: 14mA~20mA	IC Type: Single-wire RZ RGBW LED driver IC
Working Temp: -10°C~40°C	MAX Pixels: 450
Dimension: 56mm*21mm*12mm (Not including the wires)	

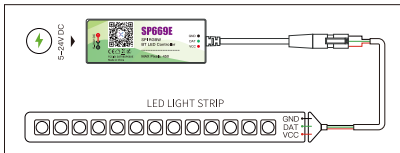
• Remote Control Parameters

Working Voltage: 3V(CR2025)	Static Current: 1uA
Transport: 2.4G	Remote Distance: 30M (Open space)
Dimension: 103mm*45mm*8.5mm	

Note:Restore Factory Settings

Plug and unplug the power 5 times consecutively → Each power-on lasts approximately 1~2 seconds and must not exceed 5 seconds (exceeding 5 seconds resets the count) → Each power-off lasts at least 2 seconds → After 5 cycles, the white light flashes 3 times to indicate a successful reset.

6. Wiring:



FCC Statement:

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.

Note:

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.
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Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

WEEE:



Correctly dispose of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU/UK. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle responsibly to promote the sustainable reuse of material resources.

To safely recycle your device, please use return and collection systems or contact the retailer where the device was originally purchased.
