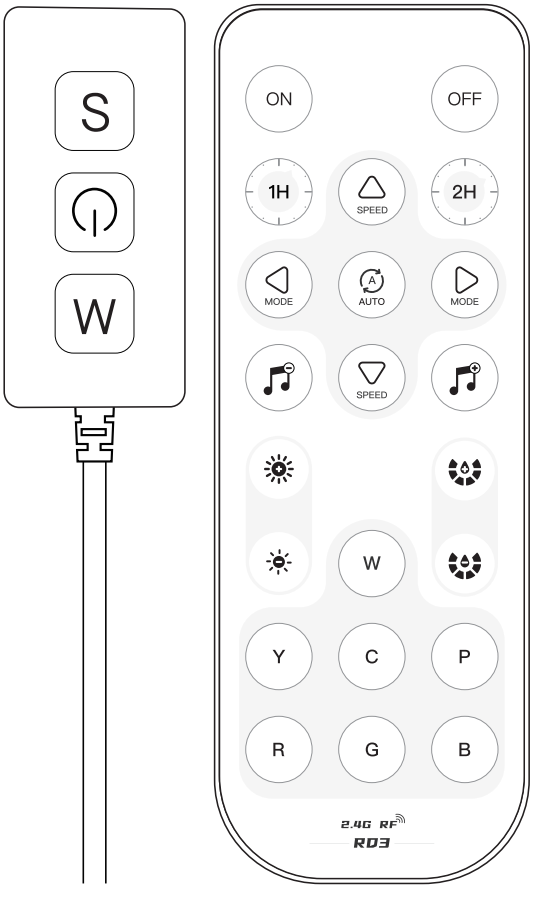
SP548E Instructions



SP548E SPI RGB IoT LED Controller

1.Brief:

SP548E is an advanced SPI three-channel RGB color IoT LED controller that offers unique dynamic, musical, and customizable effects, enabling users to fully control and create their ideal atmospheric scenes. This controller combines the latest technology with flexible features, providing solutions for homes, commercial spaces, and any scene requiring a personalized atmosphere.

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 Smart Speaker Voice Control: Integrated with smart speaker platforms like Alexa, Google Home, XiaoDu, XiaoAi, allowing for voice commands to control light switches, brightness, and colors;

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 Features a rich array of dynamic and music effects, with adjustable brightness, speed, direction, and effect length, including a pause function, and supports customizable static and dynamic effects in solid and gradient colors;

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 OTA firmware upgrades; connects with “BanlanX ®” Cloud for a stable IoT cloud connection;

⑨ Supports the APP's automatic connection and device reconnection function, as well as group management for multiple devices.

3.APP:

Support iOS system

Supports Android system

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
- 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 Collected Effect Cycle

❻ Mode+/-

❼ Music+/- ❽ Brightness+/-

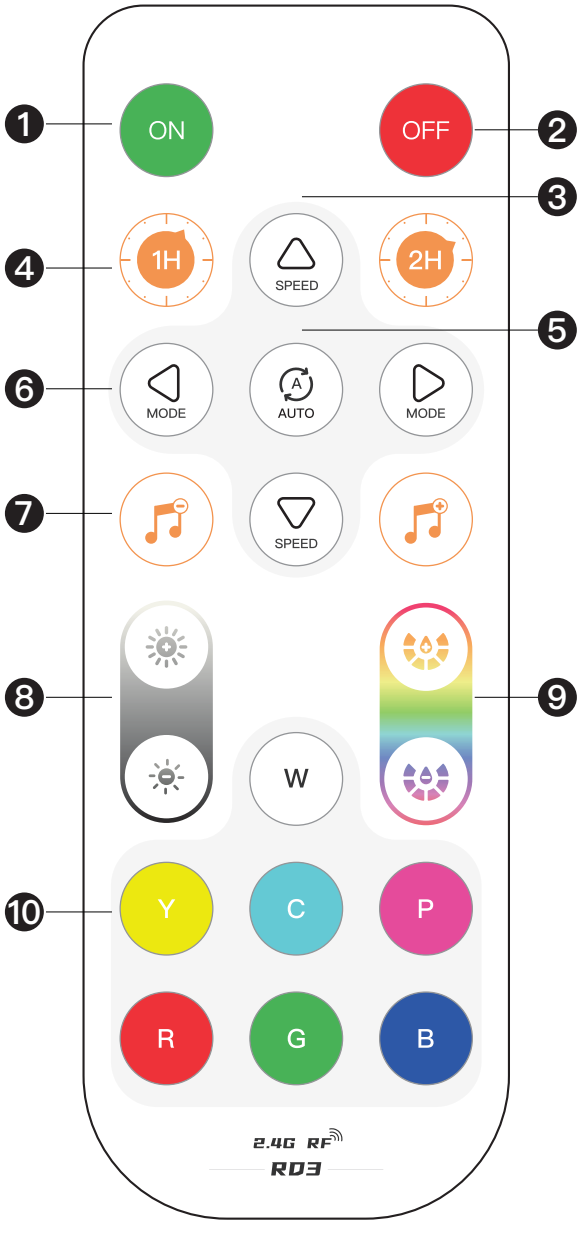
❾ Color+/-

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.Technical Parameters：

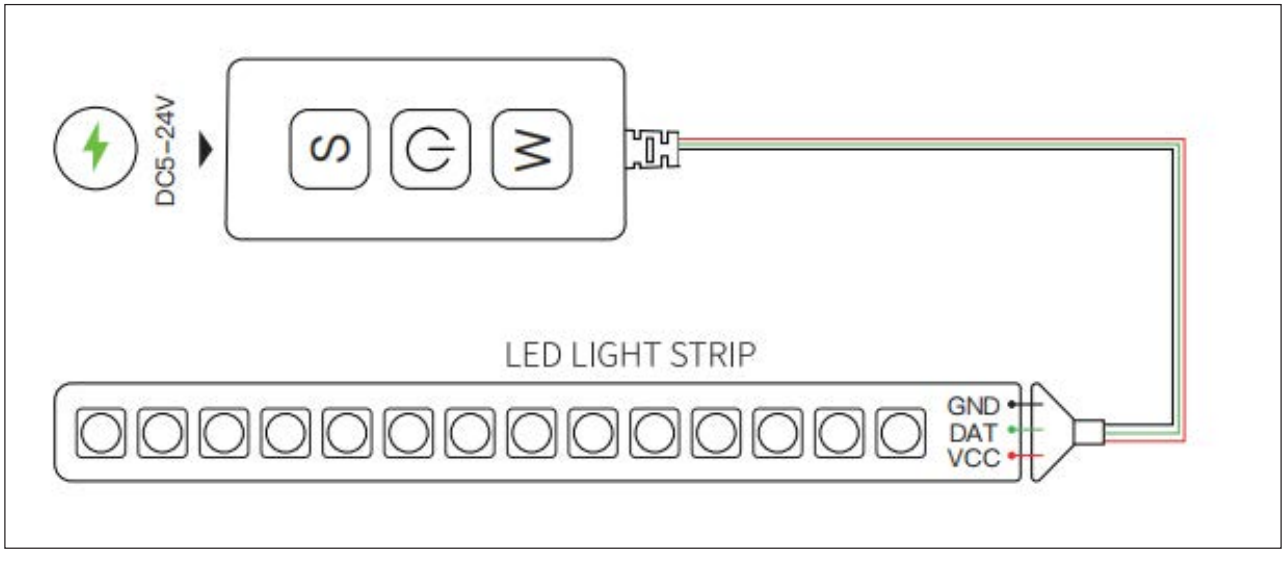
Controller:

Working Voltage：DC5V~24V	Working Current：14mA~42mA
Working Temp：-10°C~60°C	Dimension：55mm*26mm*12mm (not including wires)

2.4G Remote：

Operating Voltage: 3V (CR2025)	Static Current: 1uA
RF Frequency: 2.4G	Remote Control Distance: 30 meters
Remote Control Dimensions: 135mm48mm10mm	

6.wiring:



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 notoccur 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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following twoconditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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