Sperll
SP52XE
SPI RGB
IOT LED
Controller


# Sperll SP52XE SPI RGB IOT LED Controller Instructions



Contents



Sperll

**Sperll SP52XE SPI RGB IOT LED Controller**


## Brief

SP528E SPIRGB IOT LED Controller, using BT + Wi-Fi dual-mode chip, supports Bluetooth, Wi-Fi and remote cloud connection. Remote control and voice control of the smart speaker is realized through the cloud platform “BanlanX” Cloud. Provides unique dynamic, music and customized effects, enabling users to easily achieve the ideal scene atmosphere.

## Features

- **BanlanX App**

  Dual-mode chip, simple network configuration, support Bluetooth, Wi-Fi and cloud connect.

- **2.4G RF Remote Control**

  Optional RD3 2.4G RF remote control.

- **Smart Speaker Control**

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

- **Driver IC Type**

  Supports 1200 regular 3-channel single-wire LED driver IC.

- **Rich dynamics and music effects**

  Sound captured by cell phone microphone and player streaming.

- **Supports custom effects**

  Whether it’s solid colors, gradient colors, static, or dynamic effects, all can be customized.

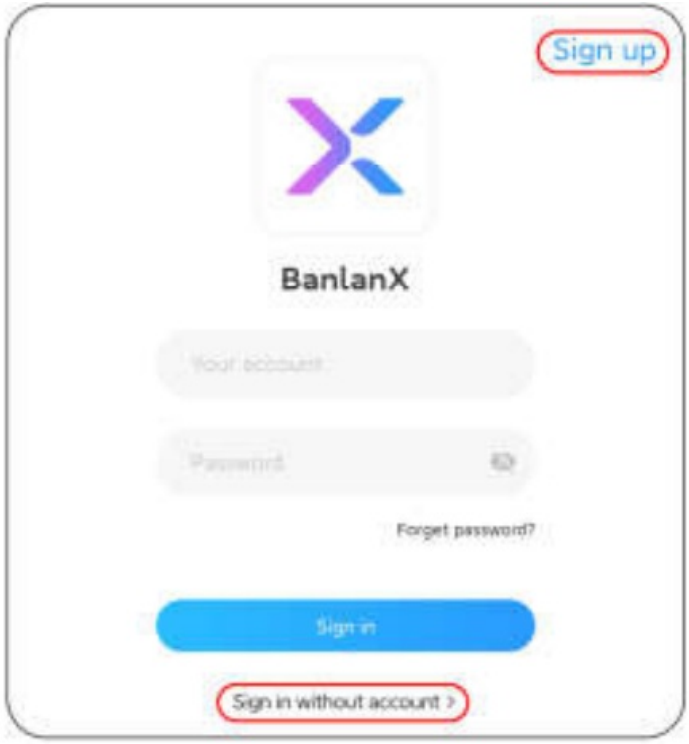
- **Various switching effects and timer functions**
  Supports multiple ON/OFF animation effects and timer switching.
- **OTA Version**
  Connects to “BanlanX” Cloud, achieving stable IoT cloud connectivity.
- **Supports group management of multiple devices**
  Supports auto-connect and device reconnect.

## BanlanX App

- SP528E supports App control for iOS and Android devices.
- Apple devices require ios 10.0 or higher, and Android devices require Android 4.4 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

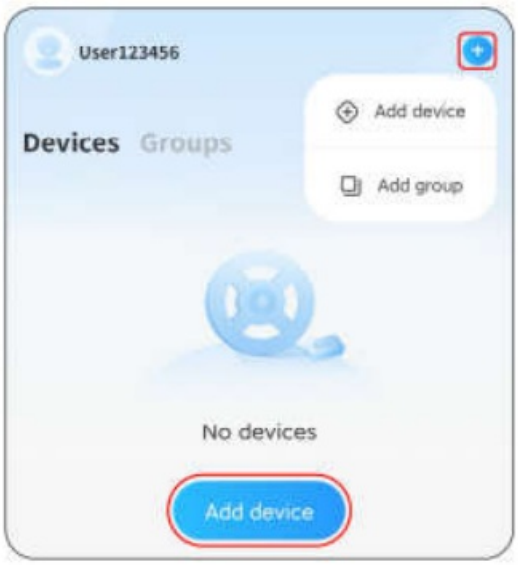
- **Register and Login:**
  Click on the upper right corner of the page “Sigh up” → Fill in the required information → Registration success → Login




**Note:** App can choose “Sign in without account” direct light control, but will limits the use of smart speaker voice command control and cloud connect features.

- **Add device:**

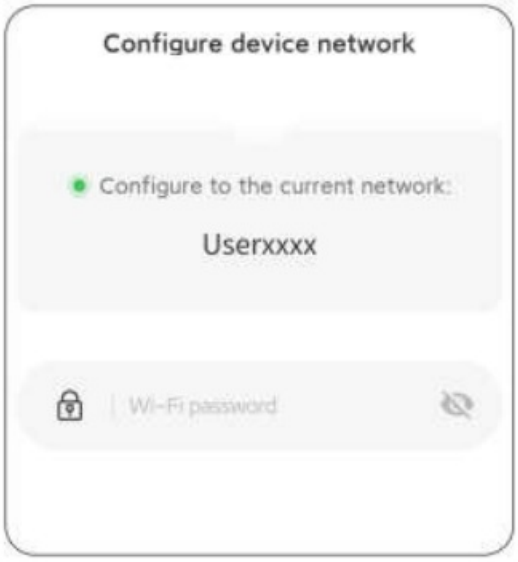
  After registering successfully, Add device in Add device or → Searching page → Select the device → Finish adding




**Note:** When adding a device, to ensure smooth addition, place your phone as close as possible to the target device.

- **Wi-Fi Configuration:**

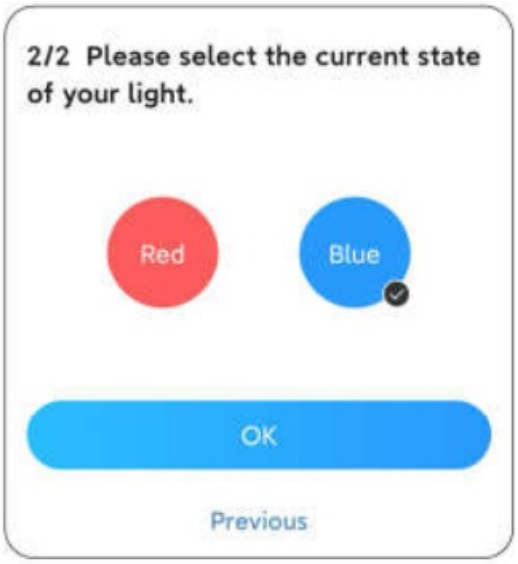
  Click the icon in the upper right corner of the control interface → Wi-Fi Configuration → Enter the Wi-Fi password → Wait for the network allocation → Configuration Successful.




**Note:** Before configuration, connect your phone to the 2.4GHz Wi-Fi network that needs to be configured.

- **Color Correction:**

  Click the icon in the upper right corner of the control interface → Color Correction → According to the actual color of the LED, select the corresponding color button in the color correction interface.



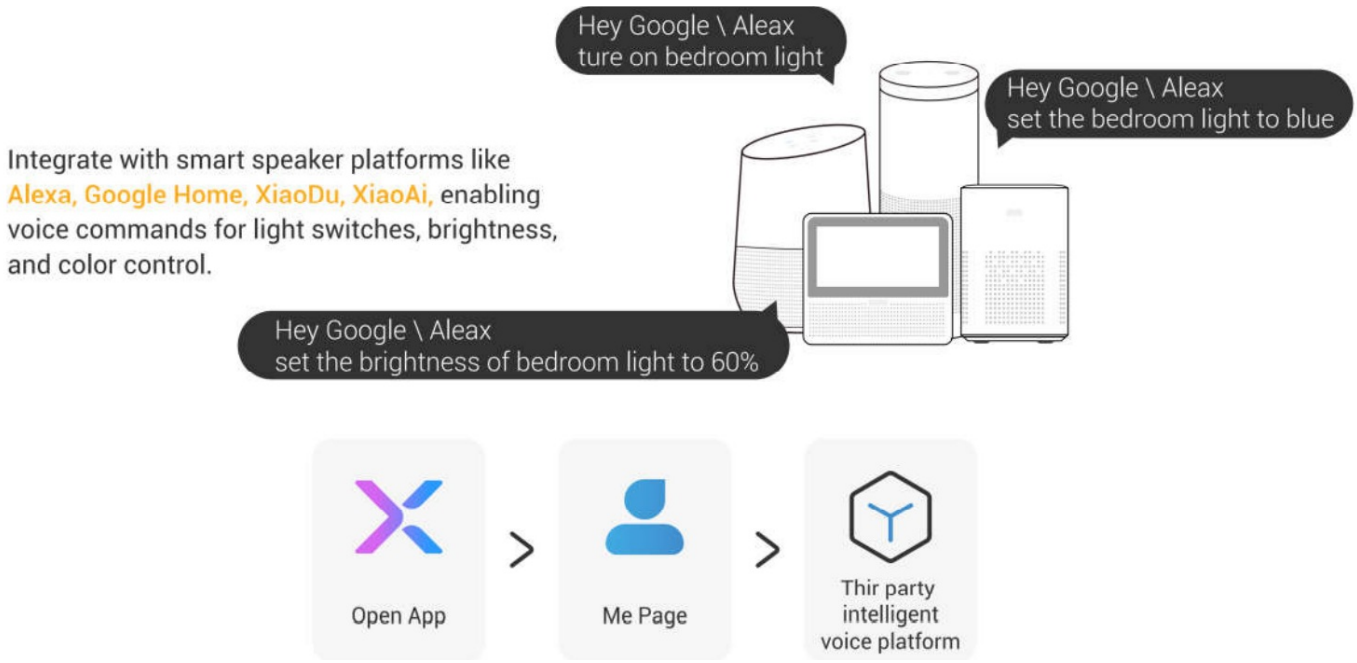

**Note:** Please complete the network configuration and color correction first before proceeding with the light effect control, and only after network configuration you use the functions of Wi-Fi connection, remote connection and smart speaker control.

**Work With 2.4G Remote control**

The 2.4G remote control model (RD3) is compatible with SP528E:

**Note:** RD3 needs to be purchased separately.

## Smart Speaker Control



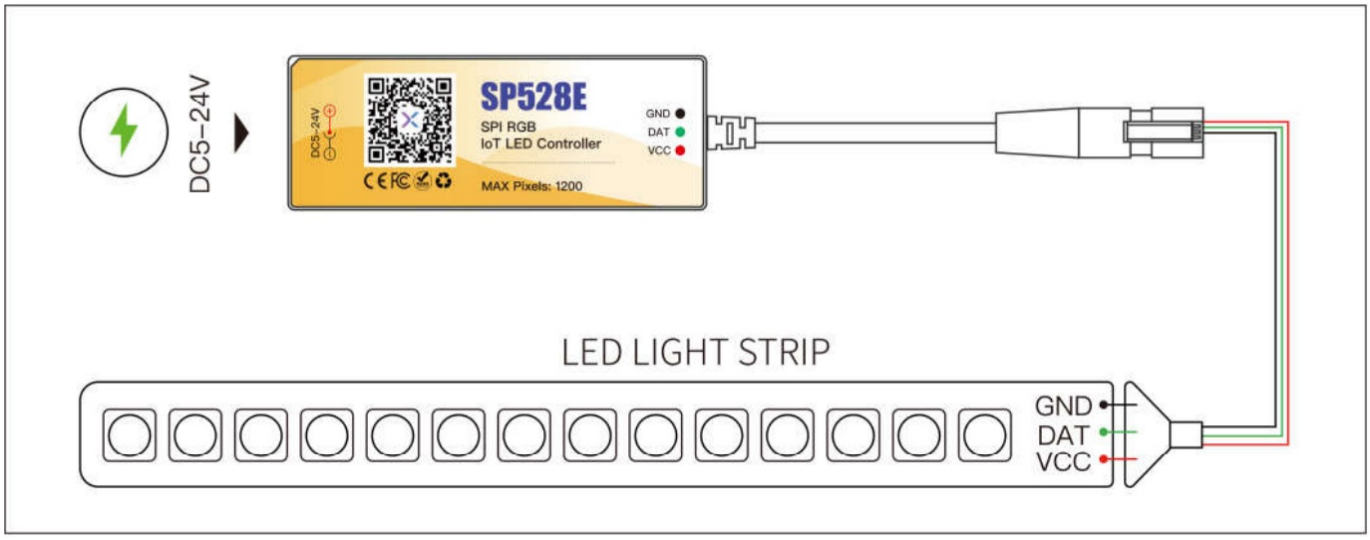

Integrate with smart speaker platforms like Alexa, Google Home, XiaoDu, and XiaoAi, enabling voice commands for light switches, brightness, and color control.

## Technical Parameters

- **Working Voltage:** DC5V~24V
- **Working Current:** 12mA~45mA
- **Working Temp:** -10°C~60°C

**Restore Factory Settings:**
To hard reset to factory settings, plug and unplug the power supply 5 times consecutively (with each power-on lasting 2 seconds before turning off).

## Wiring




## FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, under 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 by the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Suppose this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. In that case, 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.

## Documents / Resources

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|---|---|
|  | Sperll SP52XE SPI RGB IOT LED Controller [pdf] Instructions<br>SP52XE, SP52XE SPI RGB IOT LED Controller, SPI RGB IOT LED Controller, RGB IOT LED C ontroller, IOT LED Controller, LED Controller, Controller |

## References

- User Manual