Sperll SP32XE Group and Sync SPI RGB LED Controller Instructions

Contents

Sperll

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Brief

SP328E Group&Sync SPI RGB LED Controller. Equipped with flexible Mesh grouping management capabilities, it can achieve ultra-long-distance lighting effect frame synchronization, making it an ideal device for smart wireless lighting control.

Features

- It uses BT Mesh networking technology for flexible device grouping and unified management. Even if some devices fail, it won't affect overall communication, ensuring the stability of the entire lighting system.

Wide wireless communication range
In a Mesh network, any two devices can be up to 30 meters apart. With RF amplification chips, the synchronization signal can reach up to 260 meters, allowing all devices to sync their lighting effects.

BanlanX App
Scene-based App UI design allows for visual previews of lighting effects and supports personalized scene favorites.

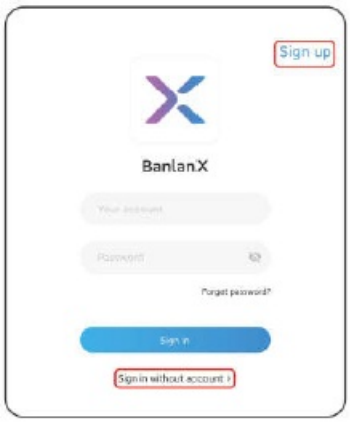
- Includes highly creative dynamic effects, versatile DIV options, and lively music effects.
- Supports OTA updates, ensuring your device stays with the latest features and improvements.

BanlanX App

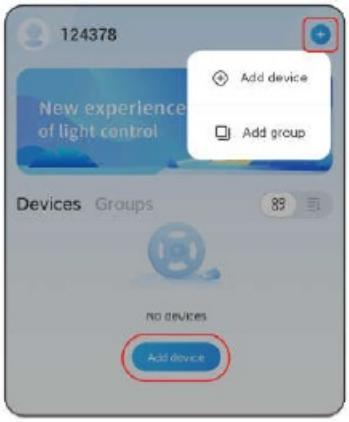
- SP328E supports App control for iOS and Android devices.
- Apple devices require iOS 10.0 or higher, and Android devices require Android 4.4 or higher.
- Yon can search "BanlanX" in App Store or Google Play to find the App, or scan the QR code to download and install it.

Register and Login:
Click on the upper right corner of the page “Sigh 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 the device in **Add device or** + ➔ Searching page ➔ Select the device➔ Finish adding.



Note:

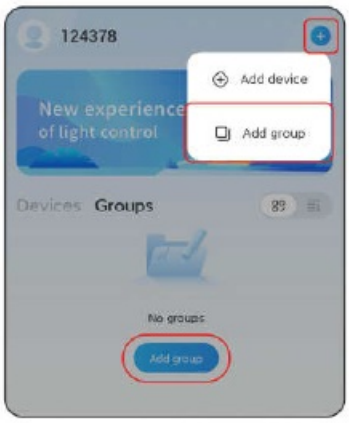
The blue indicator light flashes when a device is added.

Color Correction

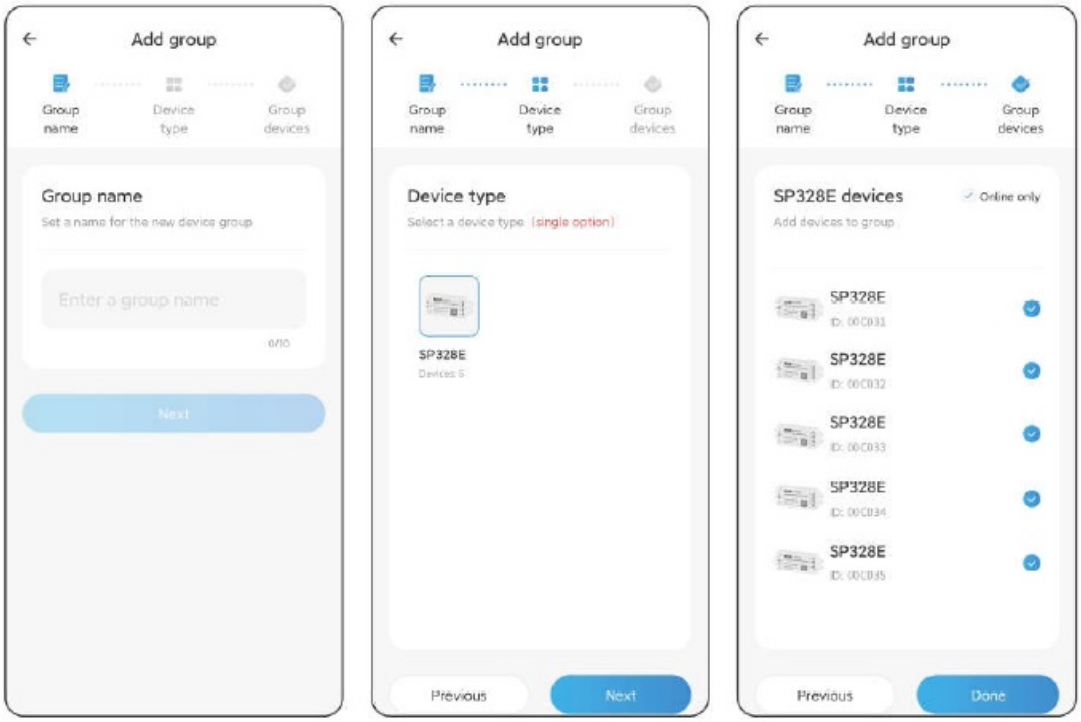
Click the icon in the upper right corner of the control interface ➔ Color Correction ➔Select the corresponding color button based on the actual color shown by the LED ➔ Correction completed.

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

Add Group:
After registering successfully, Add group in or **Add Group** Create and name a group ➔ Select device type(SP328E) ➔ Select device ➔ Finish adding.



Note
The devices within the group are automatically configured by the system as either master or slave roles.



Note

1. Devices need to be added to the device list one by one before they can be grouped. A controller can be assigned to a maximum of l 0 groups simultaneously.
2. Lighting effects:
   When adding or deleting a group. On success (White light breath l time). On failure (White light breaths 2 times).

Wireless frame synchronization
After grouping is complete, devices within the group automatically acquire wireless frame synchronization functionality (music lighting effects do not have frame synchronization), without any manual operation required.

- Single control/ Group control switch:
  - Single control:
    In the **Devices** list (Figure 1), click on the controller tab to enter single control mode, at which point the device's blue indicator light will remain on.
- Group control:
  In the **Groups** list (Figure 1), click on the group tab to enter group control mode. At this point, devices within the group automatically have frame synchronization, with the main controller's green indicator light remaining on and the sub-controller's green indicator light flashing.

(Figure 1)

(Figure 2)

Delete I Edit and Reset

- Delete group:
  Long press the group tab (Figure 2) ➔ Select delete➔ Dissolve the entire group. At this point, all devices in the group will revert to an ungrouped state, and the blue indicator light will remain on.
- Edit devices within the group:
  Long press the group tab (Figure 2) ➔ Select edit➔ Check/ uncheck devices ➔ Done.

Device deletion and reset:

1. oftware reset (Method 1): Long press the device label in the device list (Figure 1) ➔ Remove ➔ Reset complete.
2. Button reset (Method 2): Within 20 seconds of powering on the device, long press the switch button for 5 seconds➔ Blue and green indicator lights will flash simultaneously➔ Release, and the blue indicator light will remain on ➔ Reset complete.

Technical Parameters

- Working Voltage DC5V~24V
- Working Temp -10°C~60°C
- Working Current 15mA~60mA
- Data Type SPI
- IC Type: MAX Pixels Single-wire RZ RGB LED driver IC 900

(Sample image)

Wireless distance (Open space)
In a Mesh network, two devices in a group can be up to 30 meters apart, and the frame synchronization signal reaches 260 meters.

Network characteristics
BLE Mesh network supports up to 200 devices per group, with devices able to span across 10 groups.
Dimension 118mm x 45mm x 1 5mm

Indicator light status description

1. Turn ON/ OFF
2. Indicator light
3. MIC port
4. Power interface

- Green light on

  Device as the master role.
-
- Blue light on

  Device is ungrouped or in single control mode.

Both the green and blue lights are off
Device as a subordinate role.

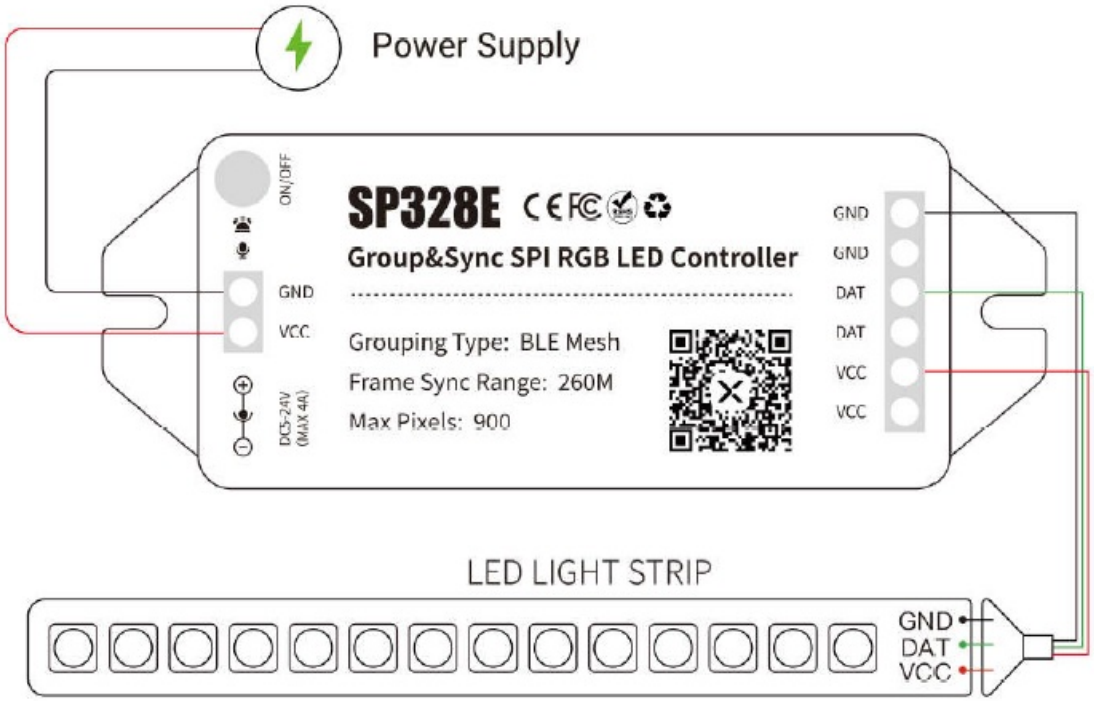
- Green light flashing

  Subordinate device has received the synchronization signal.
- Blue and green lights flashing together

  Device is about to be reset.
- Blue and green lights on When not configured.
- Blue and green lights flashing together

  During network configuration.

Wiring:



FCC Caution:

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.

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

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.

To maintain compliance with FCC' s RF Exposure guidelines,
This equipment should be installed and operated with minimum distance between 20cm the radiator your body:
Use only the supplied antenna.

Documents / Resources

	Sperll SP32XE Group and Sync SPI RGB LED Controller [pdf] Instructions SP32XE, SP32XE Group and Sync SPI RGB LED Controller, Group and Sync SPI RGB LED Controller, Sync SPI RGB LED Controller, RGB LED Controller, LED Controller, Controller

References

- User Manual