Shenzhen Sperll Optoelectronic Technology SP511E Smart Speaker Music Addressable LED Controller User Manual

SP511E Smart Speaker Music Addressable LED Controller

Contents

Features:

1. WIFI fast access technology, remote control via the Internet;

2. Supports APP control, IR remote control, and Buttons control, both iOS, and Android are available;

3. Able to works with Amazon Alexa, Google Assistant or AliGenie smart speakers;

4. 8 dynamics LED effects, 8 solid color scenes and 8 music effects can be called via voice commands directly;

5. Built-in 8 music effects and 180 non-music dynamic effects with adjustable brightness and speed;

6. Support change device name, reorder the RGB order, OTA firmware update;

7. Support common single-wire LED driver ICs in the market, support up to 900 pixels;

8. DC5~24V wide voltage input, with power supply anti-reverse connection function;

9. With the function of automatically saving setting parameters.

App Functions:

SP511E works with the FairyNest App, both IOS and Android systems are available. Apple devices are required IOS 10.0 or later, Android devices are required Android 4.4 or later, you can search "FairyNest " in the App Store or Google Play to find the app, or scan the QR code to download and install: App Operations:

https://download.ledhue.com/page/fairynest/new/

1. Open the App and register your Fairy Nest account with your mobile number or email address.

2. Connect your phone or tablet to a 2.4G Wi-Fi network.(Doesn't support 5.0G Wi-Fi network)

3. Power up the SP511E controller(DC5-24V), and connect the controller to the LED strip.

4. Click the "+" button to configure the new SP511E controller:

   a. Input your Wi-Fi network password.

b. Configuration processing(Automatic mode or Manual mode)

Automatic mode:

·Select Automatic mode;

·Pressing and holding the button on the controller until the LED fast flashes in white.
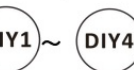
Manual mode:

·Select Manual mode;

·Pressing and hold the button on the controller, keep pressing when the LED fast flashes in white, until the LED flashes in white slowly, release the button;

·Go to your device Settings page, find and connect the controller(named like SP511E_XXX, the password is 12345678);

·Go back to the APP and continue; c. Wait for the configuration finished.(please keep your phone, the Wi-Fi router, and the controller closer together to maintain a better signal connection during configuration)

5. After the configuration is completed, the controller is now successfully accessed the Internet, user can control the controller where ever has an Internet connection.

Note: For help and detailed information about SP511E please refer to the Help&FAQ page.

IR Remote Functions:

ON	OFF	R ~ W	RAINBOW	METEOR	STARS	FIRE	< MODE >	M
ON	OFF	16 Static colors	Rianbow	Meteor	Stars	Fire	Mode -	Mode+	All Auto
Music	Music	Speed -	Speed +	Bright	Bright	Sensit	Sensit	Change	DIY1 ~ DIY4
Music	Music	Speed -	Speed +	Bright	Bright	Sensit	Sensit	Change	4 DIY Mode

Buttons:

1. The ON/OFF button:

   Short pressing: Turning on/off the LED light;

   Long pressing:

   a.Enter Automatic mode(press and hold until the LED flashes slowly in white)

   b.Enter Manual mode(press and hold longer until the white light flashes slowly in white)

2. The M button:

   a.Switching the non-music effect when the controller is running the non-music effect;

   b.Switching the music effect when the controller is running the music effect;

3. The S button: Switching the speed of non-music effects.

Technical Parameters

Working temperature:-20℃~60℃ Dimensions:60mm*30mm*14mm Without wire Remote control Dimensions: 125mm*56mm*7.5mm	Working voltage:DC5V~24V Operating current:15mA~65mA

Connect to Amazon Alexa:

1. Sign in to the Alexa App and get your smart speaker ready.
2. Enable skills:

   There is two skills for the SP511E LED controller: FariyNest and FairyLight.

   a. Search FairyNest and FairyLight on the Alexa App's Skills page, click Enable button to enable the skills.

   b. Go to the FairyNest login page and enter your FairyNest account and password.

   c. Go to the Authorization page and click the "GRANT" button to grant Alexa permission to control the LED controller.
3. Voice control instructions

   With the FairyNest and FairyLight skills enabled, you can now control your LEDs with voice commands
4. Skills

   FairyNest skill has basic functions such as turning on, turning off, changing colors, and adjusting brightness.

   FairyLight skill has advanced functions for dynamic LED effects and can be used to change effects and adjust the speed with voice commands.

Now, try to say (presume your controller's name is "living room light"):

====== Basic Control Commands======	===== Dynamic Effect Comma
Alexa, turn on the living room light. Alexa, turn off the living room light. Alexa set the living room light color to red. Alexa set the living room light color to purple. Alexa set the brightness of the living room to 80%. Alexa, brighten the living room light. Alexa, dim living room light.	Alexa, ask fairy light to run the rai Alexa, ask fairy light to run the Alexa, ask fairy light to run the s Alexa, ask fairy light to run ripp Alexa, ask fairy light to run the Hall Alexa, ask fairy light to run the th Alexa, ask fairy light to run the gra Alexa, ask fairy light to run gorge

====== Music Effect Commands ======	========= Solid
Alexa, ask fairy light to run spectrum effect. Alexa, ask fairy light to run twinkle effect. Alexa, ask fairy light to run the effect of the beat. Alexa, ask fairy light to run the scrolling effect. Alexa, ask fairy light to run rhythm effect. Alexa, ask fairy light to run the blink effect. Alexa, ask fairy light to run the pulse effect. Alexa, ask fairy light to run the ejection effect.	Alexa, ask fairy lig Alexa, ask fairy lig Alexa, ask fairy lig Alexa, ask fairy lig Alexa, ask fairy lig Alexa, ask fairy lig Alexa, ask fairy lig Alexa, ask fairy lig

Connect to Google Home/Assistant:

1. Enable basic smart home function (on/off, brightness, color):

   a. Open the Google Home app.

   b. Click the "+" button.

   c. Click the "Set up device" button.

   d. Click the "Have something already set up?" button.

   e. Select "Fairy Nest" from the list of providers.

   f. Sign in to your FairyNest account.

g. Click the "Grant" button to grant Google to control your LED controller.

2. Enable advanced function:

    a. Open the Google Assistant app.

    b. Click the compass icon.

    c. Type "fairy light" in the search box.

    d. Click the "Fairy Light" icon to go to the detail page.

    e. Click the "Link" button.

    f. Sign in to your FairyNest account.

    g. Click the "Grant" button to grant Google to control your LED controller.

Now, try to say (presume your controller's name is "living room light"):

========== Basic Control Commands =========	====== Dynamic Ef
Hey Google, turn on the living room light. Hey Google, turn off the living room light. Hey Google, set the living room light color to red. Hey Google, set the living room light color to purple. Hey Google, set the brightness of the living room light to 80%. Hey Google, brighten the living room light. Hey Google, dim the living room light.	Hey Google, ask fairy Hey Google, ask fairy Hey Google, ask fairy Hey Google, ask fairy Hey Google, ask fairy Hey Google, ask fairy Hey Google, ask fairy Hey Google, ask fairy

| ========== Music Effect Commands =========	========== Solid Color
Hey Google, ask fairy light to run the spectrum effect. Hey Google, ask fairy light to run a twinkle effect. Hey Google, ask fairy light to run beats effect. Hey Google, ask fairy light to run scrolling effect. Hey Google, ask fairy light to run the rhythm effect. Hey Google, ask fairy light to run the blink effect. Hey Google, ask fairy light to run pulse effect. Hey Google, ask fairy light to run the ejection effect.	Hey Google, ask fairy light Hey Google, ask fairy light Hey Google, ask fairy light Hey Google, ask fairy light Hey Google, ask fairy light Hey Google, ask fairy light Hey Google, ask fairy light Hey Google, ask fairy light

========== Switch Speed Commands ==========
Hey Google, ask fairy light to speed up.
Hey Google, ask fairy light to run faster.
Hey Google, ask fairy light to speed down.
Hey Google, ask fairy light to run slower.

Connect to more voice assistance

To connect more voice assistance, please refer to the FairyNest App.

Wire Connection:
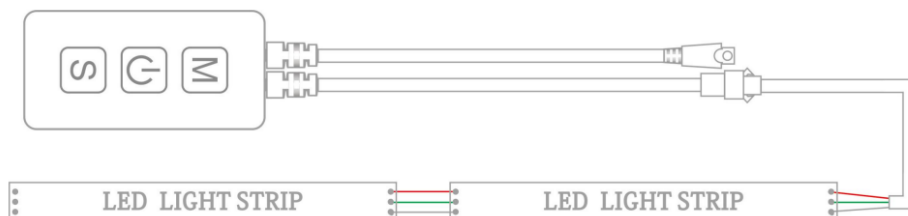
FCC Warning

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. 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.

Radiation Exposure Statement
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.

Documents / Resources

	Shenzhen Sperll Optoelectronic Technology SP511E Smart Speaker Music Addressable LED Controller [pdf] User Manual SP51XE, 2ATV8SP51XE, SP511E Smart Speaker Music Addressable LED Controller, Smart Speaker Music Addressable LED Controller