



Shenzhen Sperll Optoelectronic Technology SP630E SPI+5CH PWM All In One LED Controller Instructions

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SHENZHEN

Shenzhen Sperll Optoelectronic Technology SP630E SPI+5CH PWM All In One LED



Brief

SP630E is compatible with multiple types of LEDs. It can work with 1/2/3/4/5CH W/CCT/RGB/RGBW/RGBCCT PWM and addressable LEDs, and it can also work with addressable+PWM combined LEDs:

NO.	Parameters			LED Type
	RGB	CW	WW	
1				1CH PWM Single Color
2				2CH PWM CCT
3				3CH PWM RGB
4				4CH PWM RGBW
5				5CH PWM RGBCCT
6				SPI Single Color
7				SPI CCT
8				SPI RGB
9				SPI RGBW
10				SPI RGBCCT
11				SPI RGB+1CH PWM Single Color
12				SPI RGB+2CH PWM CCT

Features

1. High performance, low power consumption 2.4G Bluetooth microprocessor;
2. Compatible with 12 kinds of type of LEDs;
3. Support App control, 2.4G touch remote control and 2.4G touch 86-type control panel;
4. The remote control and 86-type control panel can be set up for zone-control (can be divided into 4 zones), or unified control (ALL);
5. Support to set kinds of on/off animations and the default power-on state.
6. Support for modifying device name, color order correction and setting timers.

- Support 3 kinds of music capture modes: cell phone microphone, player streaming, on-board microphone.
- 5 major control pages in the App: dynamic, static, music, custom and setting; select different types of LED correspond to different App page content, as follows:

Functions APP Pages LED Types		Dynamic		Static		Music		Custom
		Colorful	White	Colorful	White	Colorful	White	DIY
1	1CH PWM Single Color	None	3	None	DIM	None	1	None
2	2CH PWM CCT	None	3	None	CCT	None	1	None
3	3CH PWM RGB	12	None	HUE	None	3	None	3
4	4CH PWM RGBW	12	3	HUE	DIM	3	1	3
5	5CH PWM RGBCCT	12	3	HUE	CCT	3	1	3
6	SPI Single Color	None	10	None	DIM	None	5	None
7	SPI CCT	None	10	None	CCT		5	None
8	SPI RGB	146	None	HUE	None	18	None	18
9	SPI RGBW	146	10	HUE	DIM	18	5	18
10	SPI RGBCCT	146	10	HUE	CCT	18	5	18
11	SPI RGB+1CH PWM Single Color	146	3	HUE	DIM	18	1	18
12	SPI RGB+2CH PWM CCT	146	3	HUE	CCT	18	1	18

App

- SP630E 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.

Operation

- Open the App, click the icon in the top right corner of the home page to add device .
- Please set the LED type and calibrate the color order according to the page prompts, you can also change these settings on the settings page.
- Click the icon in the upper right corner of the App to enter the settings page, where you can modify the name,

modify the type of LED, calibrate the color order, set the timings, set the on/off effect, etc.

4.2.4G Touch Remote Control

SP630E can be used with 2.4G touch remote control and 2.4G touch 86-type panel; There are 4 kinds of remote control, 4 kinds of 86-type panel; different type of LED match different remote and panel models:

1CH PWM Single Color	2CH PWM CCT	3CH PWM RGB	4CH PWM RGBW	5CH PWM RGBCCT	SPI Single Color
RB1 RC1	RB2 RC2	RB3 RC3	RB3 RC3	RB4 RC4	RB1 RC1
SPI CCT	SPI RGB	SPI RGBW	SPI RGBCCT	SPI RGB +1CH PWM	SPI RGB +2CH PWM CCT
RB2 RC2	RB3 RC3	RB3 RC3	RB4 RC4	RB3 RC3	RB4 RC4

Remote Models

- RB1



- RB2



- RB3



- RB4



86 Type Panel Models

- RC1



- RC2



- RC3



- RC4



Touch Function

ON	OFF	Brightness Level	Warm/Nature/ Cold White	White	Color HUE/ Temperature Ring
Brightness	Brightness	Brightness Ring	Temperature Ring	Color HUE Ring	Color HUE/ Temperature Ring
Speed	Mode+	Mode-	Music effect	1-4 Zones	All Zones

Note:

1. Within 20s after power on, long press the ON key: binding/unbinding the remote/panel;
2. Within 20s after power on, long press Zone1~4/ZoneAll, to set the Zones;

Technical Parameters

SP630E

Working Voltage: DC5V~24V	Working Current: 3mA~13mA
PWM Single Channel Maximun Output Current: 6A	PWM Total Maximun Output Current : 12A
Working Temp: -20°C~60°C	DIMensions: 78mm*56mm*20mm

2.4G Remote/ Panel

Working Voltage:3V(CR2032)	Quiescent Current: 35uA
RF frequency: 2.4GHz	Remote Range:30M
Remote DIMensions: 135mm*48mm*10mm	Panel DIMensions:86mm*86mm*12mm

Wiring

Different types of LED correspond to different output ports; The ports should match the selected LED type, and the specific port descriptions as follows:

LED Type		Output Port							
		VCC	R	G	B	CW	WW	DAT	GND
1	1CH PWM Single Color	✓				✓	✓		
2	2CH PWM CCT	✓				✓	✓		
3	3CH PWM RGB	✓	✓	✓	✓				
4	4CH PWM RGBW	✓	✓	✓	✓	✓			
5	5CH PWM RGBCCT	✓	✓	✓	✓	✓	✓		
6	SPI Single Color	✓						✓	✓
7	SPI CCT	✓						✓	✓
8	SPI RGB	✓						✓	✓
9	SPI RGBW	✓						✓	✓
10	SPI RGBCCT	✓						✓	✓
11	SPI RGB+1CH PWM Single Color	✓				✓	✓	✓	✓
12	SPI RGB+2CH PWM CCT	✓				✓	✓	✓	✓

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 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.

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

Documents / Resources



Manuals+,