
WIFI-MINI

WIFI-MINI-LED Controller Specification



Before installing this product, Please read this manual carefully. Ensure full understanding of this specification to avoid unnecessary damage and additional costs.

This product warranty is 1 years (exclude the artificial situation of damaged or overload working)

Product Description

WIFI-MINI controller appeared with the installation of controlling software on mobile devices with Android or IOS system, such as android phone, iPhone, tablet PCs, they can remote control LED lighting products through WiFi, which makes LED control more intelligent and humanization. One WIFI-MINI controller can be used as dimmer, CT controller, and RGB controller, only need to select the right control interface in the software. In addition, this model has DIY function. Users can get any effect they want based on our controlling software. This model designed for constant voltage led products, such as led strip, led modules. For controlling more led products, amplifier is available.

Technical parameters

1. Controller

Working temperature	-20-60℃	Working voltage	DC12~24V
Power consumption	<3W	Connect method	Common anode
WIFI brightness level	100	WIFI speed level	100
Output	3 channels	Output current	≤4A(each channel)
WIFI frequency	2.4G	Output gray scale	256
Receiving sensitivity	802.11b:DSSS (-5dBm) 802.11b:CCK(-10dBm) 802.11g:OFDM(-15dBm)		
Output power	12V: ≤144W	24V: ≤288W	

2. Software

Name	FreeColor V1.0	Platform	Android 2.1 or above, IOS4.3 or above, with the wifi function
Size	Android(661KB) , IOS(1.4MB)		
Category	Communication	Language	English

Features

1. Support both wifi control of Apple products (iPod, iPad, iPhone), Android mobile devices like Samsung, HTC.
2. With the 3-in-1(Dimming, CT, RGB) apple/android software. One device suit to different lighting application scene.
3. Memory function to save scenes anytime anywhere for next play.
4. WIFI-MINI is designed for constant voltage led products, working voltage auto fit to DC12-24V.
5. Wifi control based on 2.4GHZ frequency.

Using illustration

1. FreeColor V1.0 software installation and SSID (system settings ID) reset.



1.1 Software installation

- Android: the software copy in CD which packed in the box. Open the CD and double-click the "FreeColor.apk" to start the installation.
- IOS: the same as the other software from App Store download the "FreeColor" from App store and install.

1.2 Resetting SSID

If more than one WIFI-V01 in close area, we can reset the SSID for the devices in order to avoid they jamming each other. The SSID are 16 in max.

The default SSID number for all devices is HX001, a device with WIFI function will be needed when resetting the SSID. The SSID rang is: HX000-HX016. The steps are as follow:

- ① Making the WIFI-V01 properly connected, and then open the power;
- ② Opening the WIFI device browser, type in "192.168.2.2", the interface will pop into as below:



Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).

User name:

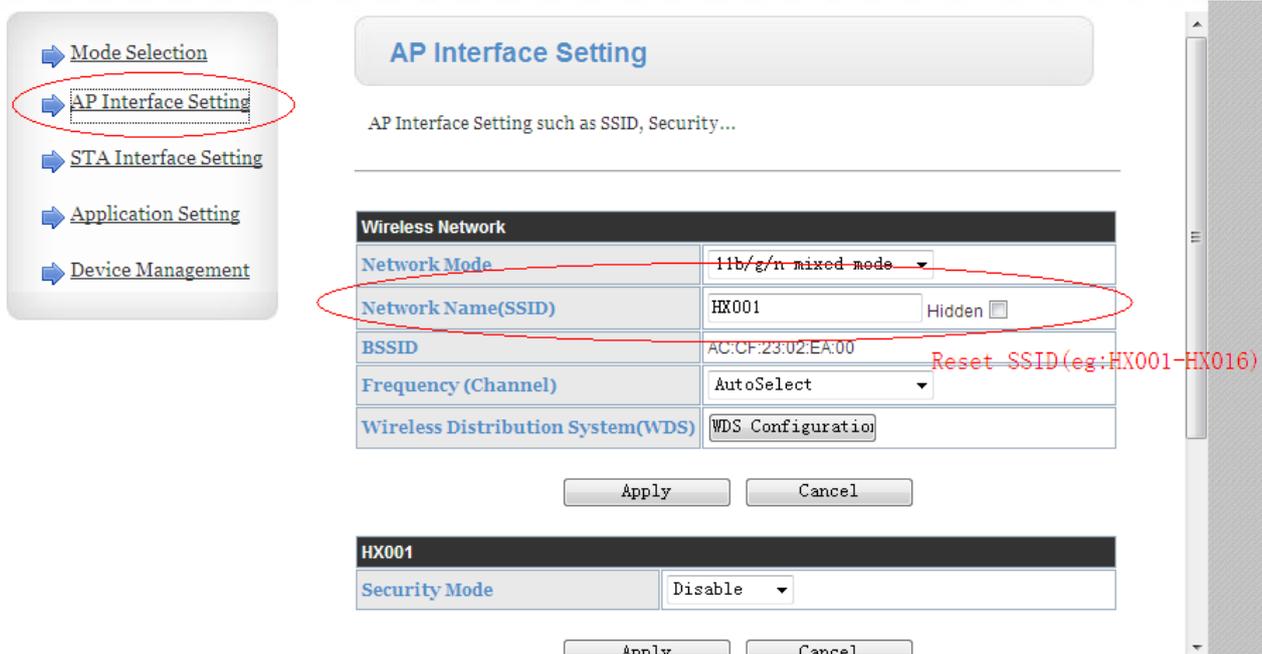
Password:

Remember my password

OK Cancel

The initial default Username: admin, password: admin. And "OK".

- ③ Resetting the SSID in the page as below:



AP Interface Setting

AP Interface Setting such as SSID, Security...

Wireless Network	
Network Mode	11b/g/n mixed mode
Network Name(SSID)	HX001 <input type="checkbox"/> Hidden
BSSID	AC:CF:23:02:EA:00
Frequency (Channel)	AutoSelect
Wireless Distribution System(WDS)	WDS Configuratio

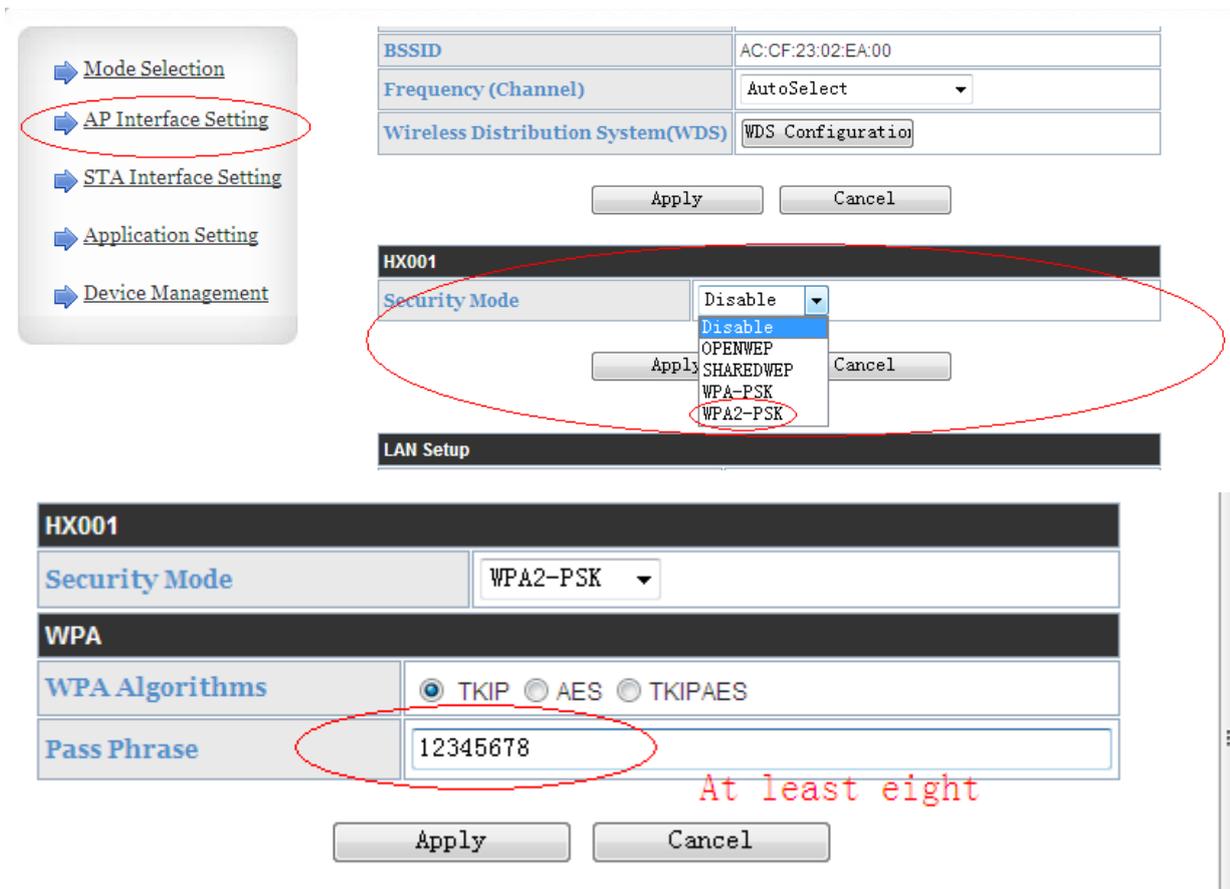
Apply Cancel

HX001	
Security Mode	Disable

Apply Cancel

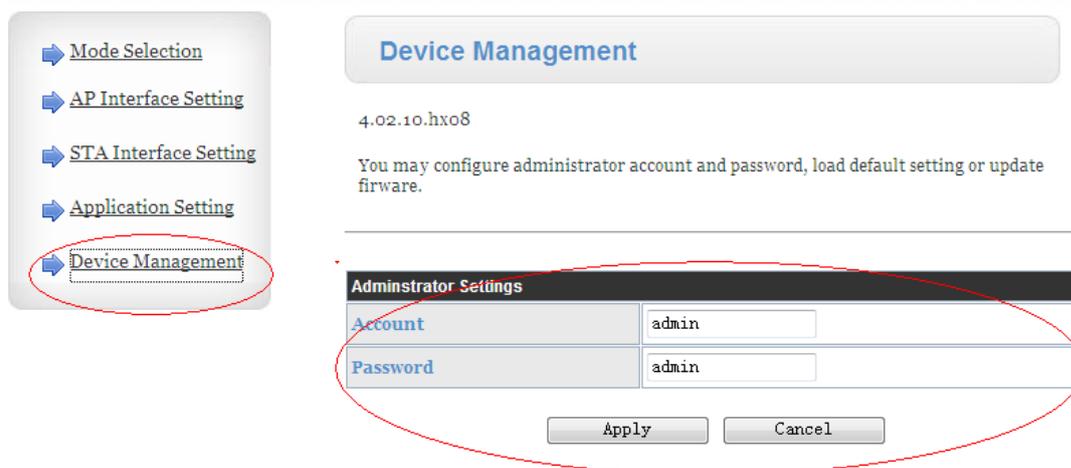
Reset SSID (eg: HX001-HX016)

- ④ If necessary, setting the linking password for more security.
 - A. Select the "Security Mode": WPA2-PSK.



After setting, click “Apply” to finish.

- ⑤ If necessary, setting new “Username” and password in the page as below:



After setting, click “Apply” to finish.

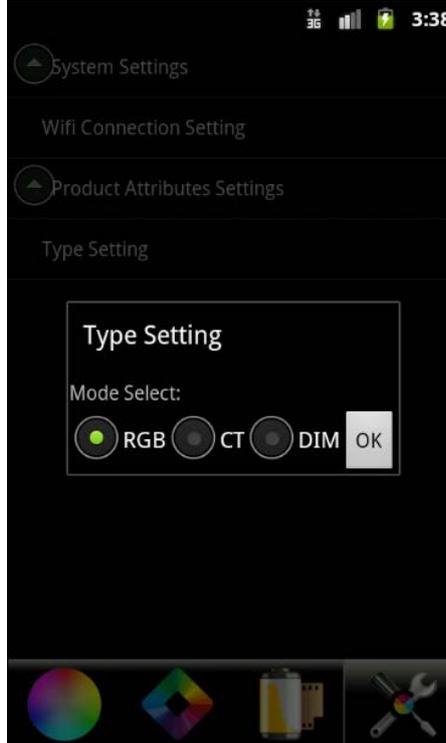
2. FreeColor V1.0 software operating illustration

- 1) Making the WIFI-V01 and LED products in correct connection, and then turn on the power supply;
- 2) After step 1), open the WIFI setting interface on the device with WIFI function will find the WIFI which named “HX---”, connect it.
- 3) Open the “FreeColor” and start operation. There also have “WIFI Connection Setting” page in the software.
- 4) “FreeColor” is 3-in-1 (Dimmer, CT, RGB) software, the RGB scene is the default application interface. Enter the “System Setting” page to change the selection. The interface as below:

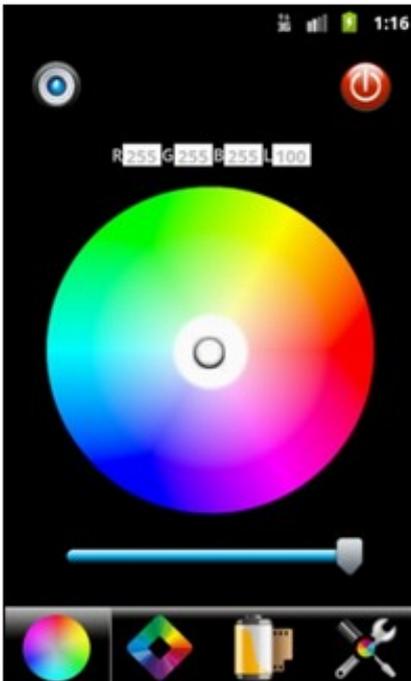
Click



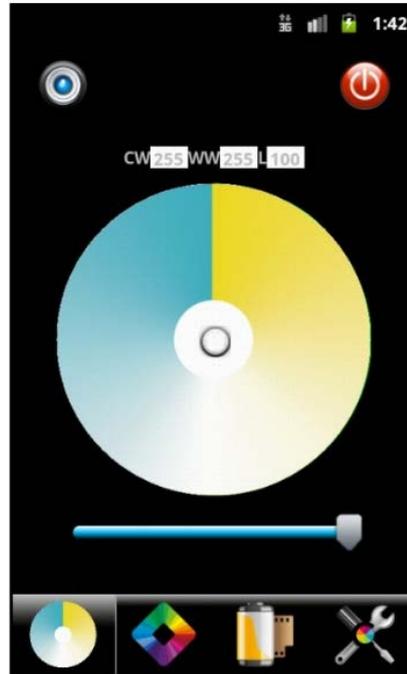
go to "System Settings" page as below, and click "OK" to finish the "Type Setting":



RGB Interface



CT Interface

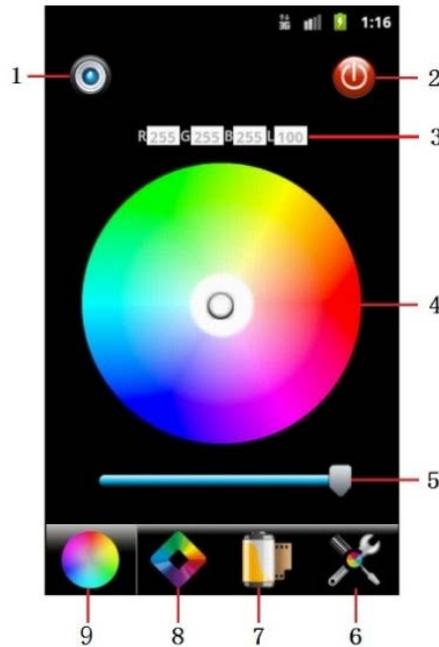


Dimming Interface



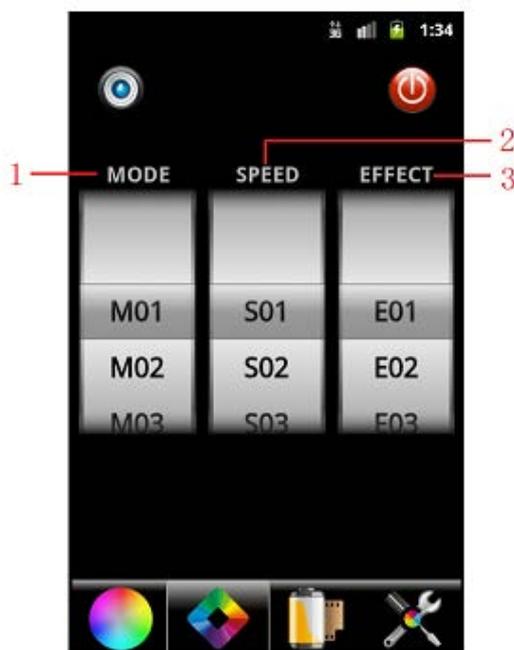
5) Using RGB interface as example (Dimming and CT are same)

① RGB control interface:



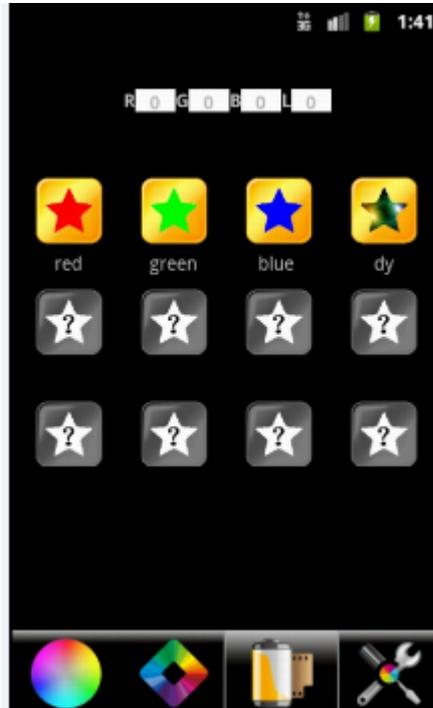
No.	Button	Function
1	DIY mode saving key	After DIY, click this key to save. Saving the DIY mode in anytime
2	ON/OFF	Turn on/off WIFI-V01
3	Color value	Display the R/G/B gray value, "L": the current brightness level.
4	Color board	Select any static color mode from the board.
5	Brightness slip	Slip to adjust the current light brightness, 100 levels in total.
6	System setting	Click to system setting page, set the WIFI connection and select the application scene (Dimming, CT, RGB).
7	DIY memory function	Go to DIY modes select page. Display all of the DIY modes.
8	Dynamic modes	Go to select the dynamic modes.
9	Current application show	Display the current application scene.

② Dynamic modes control interface:



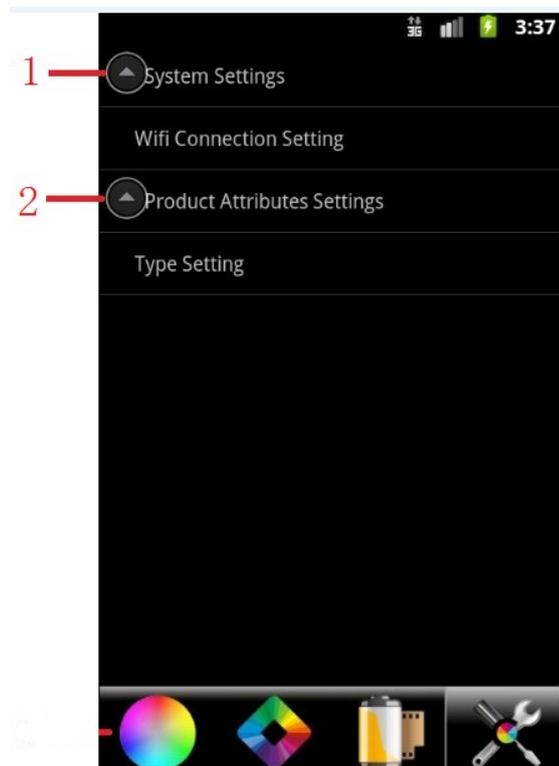
- ✧ MODE: select the different dynamic mode, such as flash, fade and etc;
- ✧ SPEED: select the speed level of the dynamic mode, 100 levels in total;
- ✧ EFFECT: select the different effect based on the different mode.

③ DIY modes manage interface:



This page displays all of the DIY modes which have been saved, up to 12 modes in total.

④ System Setting interface:



- ✧ System Settings: wifi connection Setting;
- ✧ Product Attributes Settings: Type Setting (RGB/CT/DIM).

3. Controller operation illustration

1)、 Connector illustration

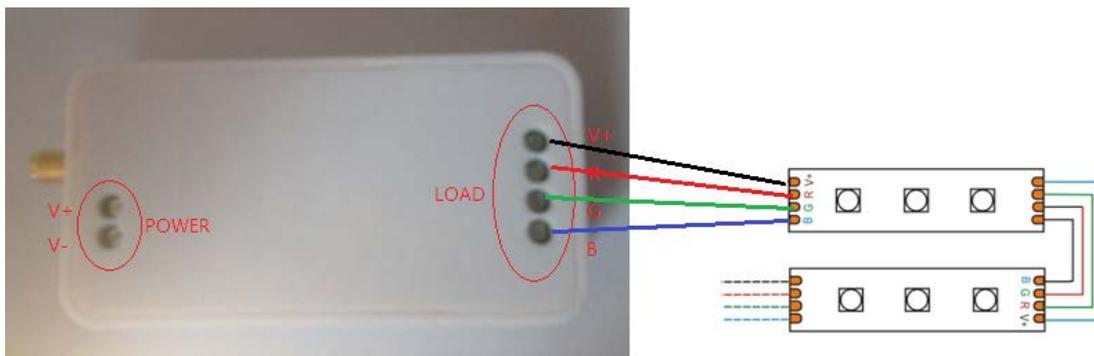


1. For Dimming: CH1→R→V-, CH2→G→V-, CH3→B→V-, V+→V+;
2. For CT: CH2→G→WW, CH1→R→WC, V+→COM;
3. For RGB: CH3→B, CH2→G, CH1→R, V+→COM.

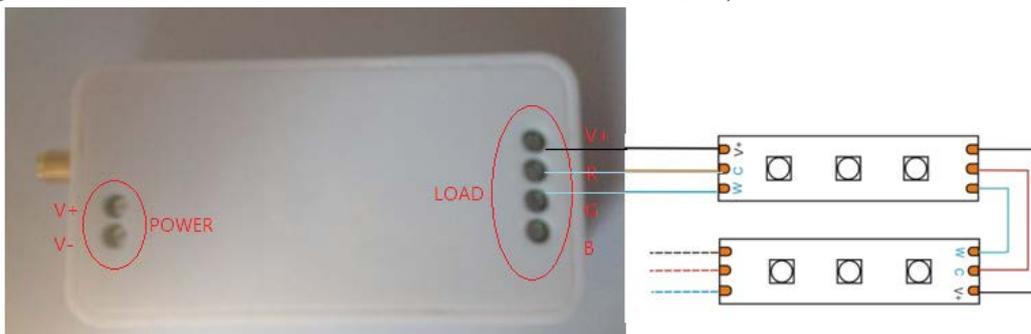
RESET key: Open the shell, there is a button, press and hold at least 5 seconds, WIFI previously set data will be cleared to return to the factory default.

2) Controller connection

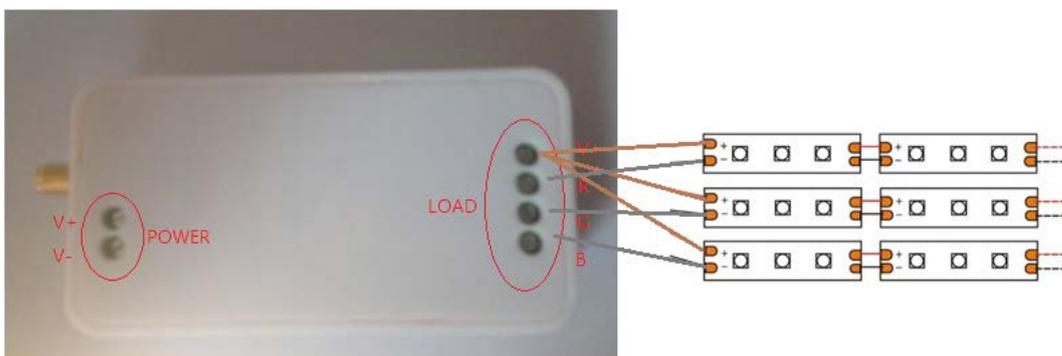
- ① RGB connection: CH3→B, CH2→G, CH1→R, V+→COM;



- ② CT connection: G→CH2→WW, R→CH1→WC, V+→COM;



- ③ Dimming connection: R→CH1→V-, G→CH2→V-, B→CH2→V-, V+→V+;





Notes

1. Supply voltage of this product is DC12V~24V, never connect to others or AC220V.
2. Lead wire should be connected correctly according to grade that connecting diagram offers. Miswires may destroy the controller and LED products.
3. Overloading may destroy the controller;
4. Warranty of this product is one year, but exclude the artificial situation of damaged or overload working.

Common Problems

Problems	Possible cause	Solution
1. Lamp does not light after power	Power cord is not properly connected, or there is not output switching power supply	Connect the power cord properly or replay the power
	Lamp power cord is not connected or short circuit	Connected lighting power cord
2. The controller does not work after connecting the load.	The connected load is too large, so that it has burned in some of the components of the controller	Replace parts of components or replace the controller
3. FreeColor is unavailable	The connection between controller and WIFI device may unnormal.	Check the connection and try again. And make sure the compatibility between the software and the WIFI device.
4. WIFI device can not remote control the controller	WIFI is not stable or off line	Reconnection or short down the distance between controller and the WIFI device.