WIFI/ZigBee intelligent control system

General Description

- Features: Intelligent control, Simple operation, Scenario diversification, Efficient chemical energy saving

- three control system : remote control system, LAN control system, Cloud service system

- Control terminal: Phone, Pad, PC, Sensors, Wall Panels etc.

- Applications: Landscape lighting、Business lighting、home lighting

ZigBee intelligent control system

- Supply ZigBee Home Automation 1.2 and ZigBee Light Link Protocol

- Enables simple networks without a centralized coordinator

- Simplifies pairing and reduces cost while being fully compatible with advanced whole home systems

- Upgrade devices from any manufacturer remotely using a gateway from any service provider

WIFI intelligent control system

- Enables simple networks without a centralized coordinator

- Through existing WIFI network to control lamps without the need to gateway

System Block Diagram

MOONS' Wireless Intelligent Control System
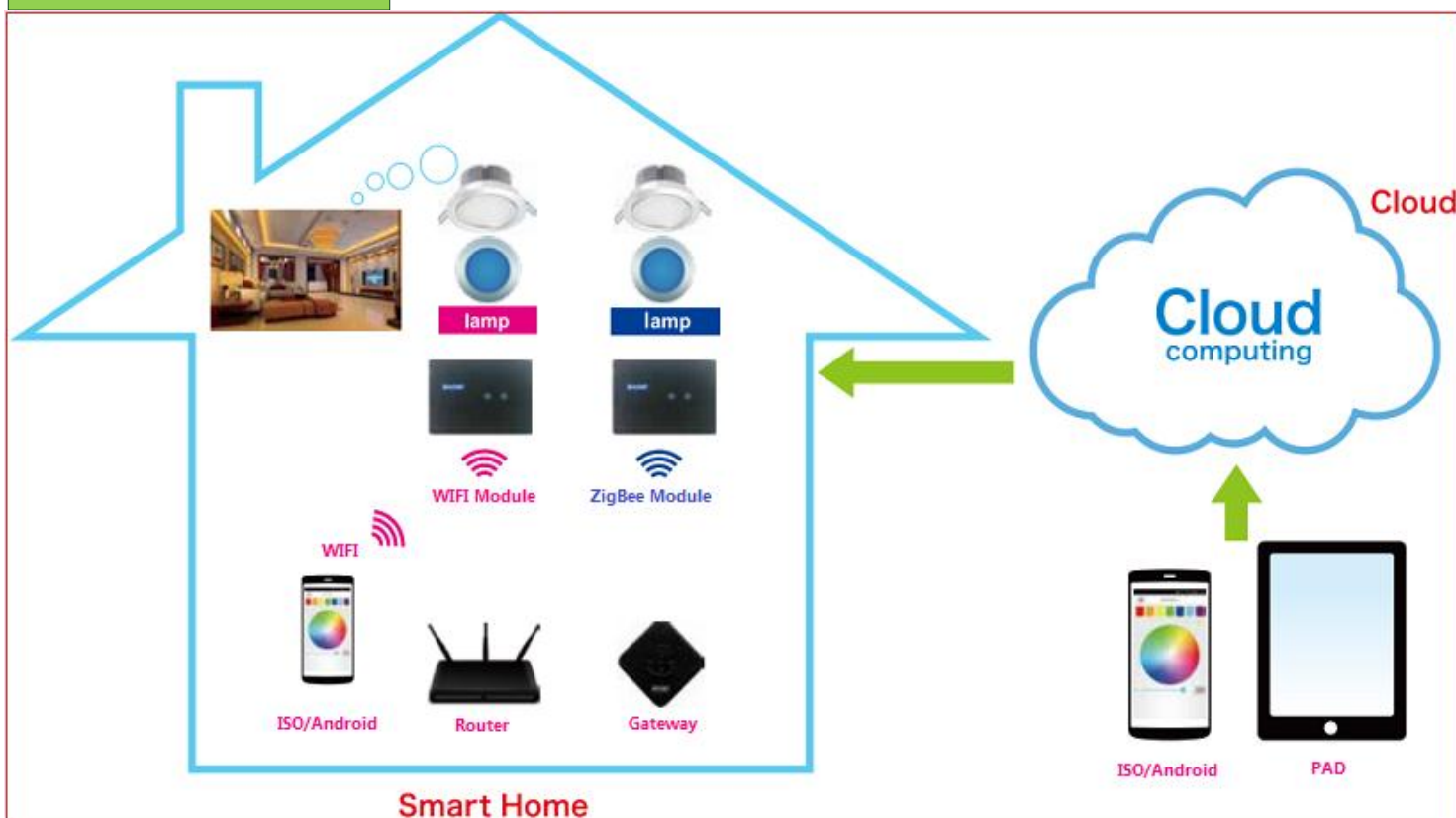
Wireless Dimming Module

Wireless Dimming Module

Models Available

Model No.	Wireless Interface	BUS Interface	STATE
MSDK800	WIFI	DMX	ACTIVE
MSDK801		DALI	ACTIVE
MSDK802		0-10V	NA
MSDK803	ZHA1.2 (ZigBee Home Automation)	DMX	NA
MSDK804		DALI	NA
MSDK805		0-10V	NA
MSDK806	ZLL （ZigBee Light Link）	DMX	ACTIVE
MSDK807		DALI	ACTIVE
MSDK808		0-10V	NA

Description

- The MSDK800 Series Dimming Module is a RF control that operates DALI/DMX/0-10V controlled LED drivers based on input from Phone、Pad、PC、Sensors and Wall Panels , Each Dimming Module can control one or more fixtures and can be individually controlled or grouped with other MSDK800 Series devices

Features

- The MSDK800 Series Dimming Module communicates via 2.4GHz RF to other devices within the wireless network,The 2.4GHz RF control interface includes Wifi and ZigBee protocol.

- WIFI: Support for IEEE 802.11b/g/n, RF：2.4G

- ZigBee: Support for IEEE 802.15.4 , RF：2.4G,

    Protocol: ZHA 1.2(ZigBee Home Automation) and ZLL(ZigBee Lingt Link)

- DALI: Support for IEC 62386-102/207/209

- DMX: Support For DMX512-A, DMX512-RDM

- 0-10V: 0-10V dimming (meets IEC60929)

- Power supply: 5VDC 300mA

ZigBee gateway

Description

- ZigBee Gateways can be used for a multitude of scenarios where the communication between ZigBee networks and IP network infrastructure is required. The use of standard interfaces for the ZigBee and IP network connection creates the opportunity to have universal adapters and operate the connection with IP back-end systems such as Service Platforms or Machine-to-Machine platforms in a standard fashion.
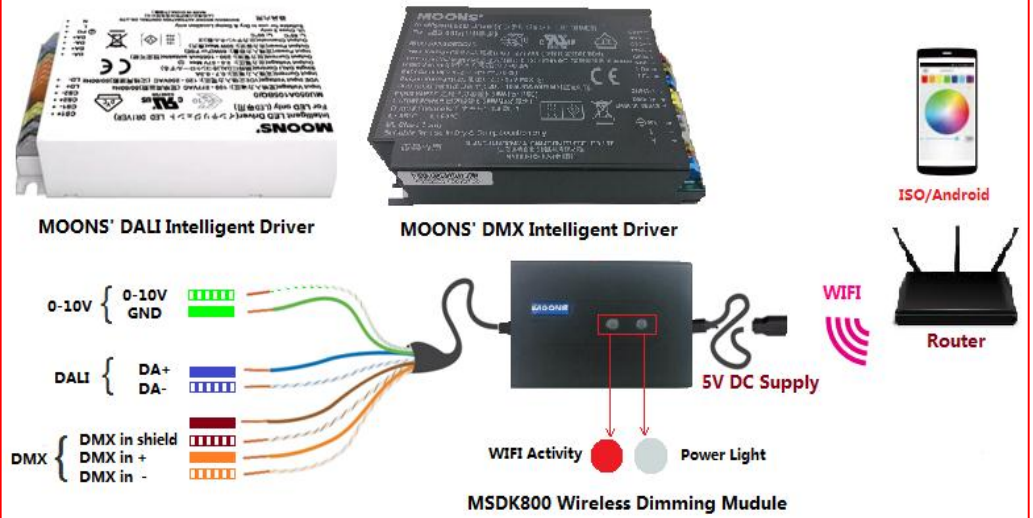
Features

- We can operate ZigBee lamps based on input from phones, computers and other WIFI devices Combined with the gateway

- WIFI: Support for IEEE 802.11b/g/n, RF：2.4G

- ZigBee: Support for IEEE 802.15.4 , RF：2.4G,

- Supply ZigBee Home Automation 1.2 and ZigBee Light Link Protocol

- Power supply: 5VDC 300mA

![MOONS' logo - moving in better ways]

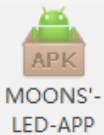## WIFI System Configuration

1、 System component

- Smartphone、Pad(android/IOS)
- WIFI Router
- Wireless Dimming Module
- 5V DC Power supply
- MOONS' DALI Intelligent Driver
- MOONS' DMX Intelligent Driver
- LED lamps

2、 System Wiring Diagram

MOONS' DALI Intelligent Driver   MOONS' DMX Intelligent Driver   ISO/Android

0-10V { 0-10V / GND }
DALI { DA+ / DA- }
DMX { DMX in shield / DMX in + / DMX in - }

WIFI   Router

5V DC Supply

WIFI Activity   Power Light

MSDK800 Wireless Dimming Mudule

3、 WIFI APP Guide

APK
MOONS'-LED-APP

Support System :   IOS + ANDROID

How to add a new Wireless Dimming Module to the current WIFI Router

- Download and install the **MOONS' -LED-APP** from APP STORE or Android Market, as shown in **Figure 1-2、 Figure 1-3**.
- Press the reset button until the red LED flashes three times , as shown in **Figure 1-1**,the Wireless dimming module is reset.
- Open the Smartphone's WLAN list, select the "**longsys_xxxxxx**" in the list and connect it ,the password is 12345678 , as shown in **Figure 1-4**.
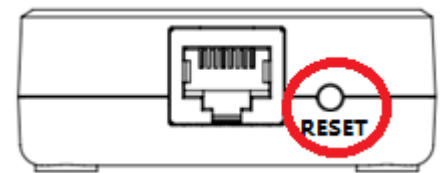- Open the **MOONS' -LED-APP**, as shown in **Figure 1-5**.

RESET

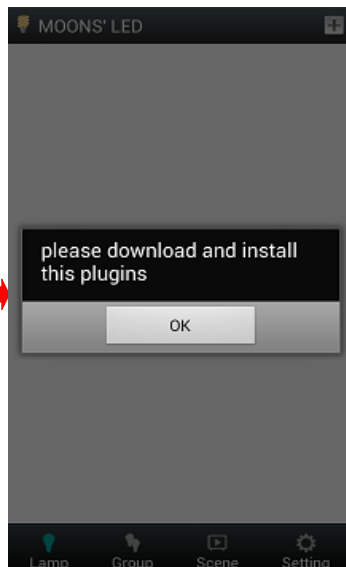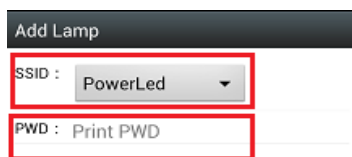**Figure 1-1**

Moons LED Dimming
是否要安装该应用程序?

来源：文件管理

> 安全相关权限 | 2
> 其他权限 | 11

取消   安装

Figure 1-2

MOONS' LED

please download and install this plugins

OK

Lamp Group Scene Setting

Figure 1-3

< WLAN

PowerLed
已连接

选取附近的WLAN

360WiFi-E9CB
通过 WPA/WPA2 进行保护

360WiFi-gj
通过 WPA2 进行保护

Golem
可使用 WPS

longsys_415893
通过 WPA2 进行保护

Moons
通过 WPA2 进行保护

MyWiFi
通过 WPA2 进行保护

sssss
通过 WPA/WPA2 进行保护

Xiaomi_BG12R
通过 WPA2 进行保护

Figure 1-4

MOONS' LED
MOONS-LED-0

Lamp Group Scene Setting

Figure 1-5

MOONS' Wireless Intelligent Control System

- Click the "**+**"in the red box, as shown in the **Figure 1-5**,Select the WIFI router'SSID the wireless dimming module will join in,enter the password, click the"OK"icon, If configured successfully,The software will Prompt "Configuration successful",as shown in **Figure 1-6**

- Connect the Smartphone to the wireless router previously selected, then return the **MOONS'LED-APP.**

- Drag the page down and release to complete a refresh, as shown in **Figure 1-7**,when appear the "MOONS'-LED-x",that means you added a lamp Successfully, as shown in **Figure 1-8**

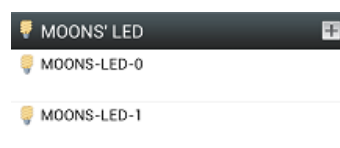**NOTE：If you want to add more than one wireless dimming module in the WIFI network,please Repeat the above steps**

Add Lamp

SSID : PowerLed

PWD : Print PWD

OK

Figure 1-6

MOONS' LED

松开刷新

Figure 1-7

MOONS' LED

MOONS-LED-0

MOONS-LED-1

Lamp   Group   Scene   Setting

Figure 1-8

MOONS' LED

MOONS-LED-GROUP-0
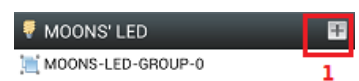
1

2

Lamp   Group   Scene   Setting

Figure 1-9

How to add a new Group

- Select the "**Group**" menu, as shown in **Figure 1-9**，Click the "**+**"in the red box 1 to add a new group named "**MOONS-LED-GROUP-0**"

- Reselect The "**Lamp**"menu(the left of "**Group**")，Select and press the"**MOONS-LED-0**"，it will pop up the following interface such as **Figure 1-10**

- Click"**Join Group**"，Select the group you just added in the Figure 1-11，click"**OK**".

- The added lamp node In the group"**MOONS-LED-GROUP-0**" will be displayed in the red box in **Figure 1-12**

- Click"**MOONS-LED-GROUP-0**",as shown in **Figure 1-13**,callout 1 it the list of "**MOONS-LED-GROUP-0**"，callout 2 can close the Corresponding lamps，callout 3 can adjust the luminance of the Lamps，the color wheel is used to adjust the color of RGBW Lamps.
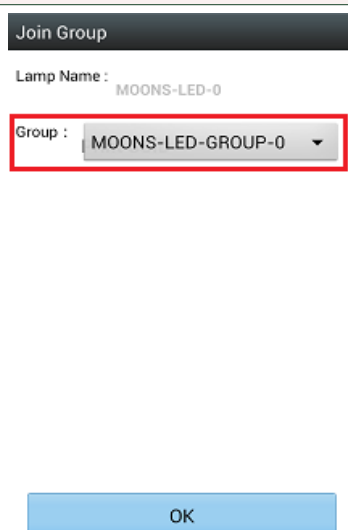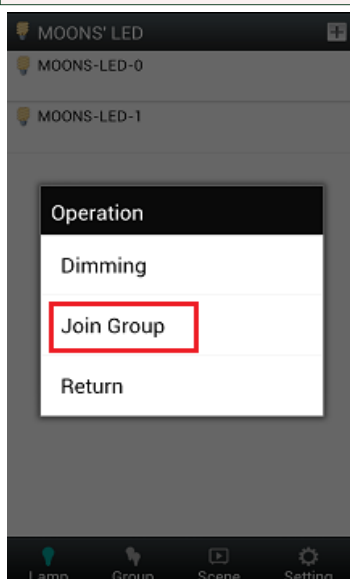
MOONS' LED

MOONS-LED-0

MOONS-LED-1

Operation

Dimming

Join Group

Return

Lamp   Group   Scene   Setting

Figure 1-10

Join Group

Lamp Name : MOONS-LED-0

Group : MOONS-LED-GROUP-0

OK

Figure 1-11

MOONS' LED

MOONS-LED-GROUP-0

MOONS-LED-0,MOONS-LED-1

Lamp   Group   Scene   Setting

Figure 1-12

Dimming

MOONS-LED-GROUP-0

OFF

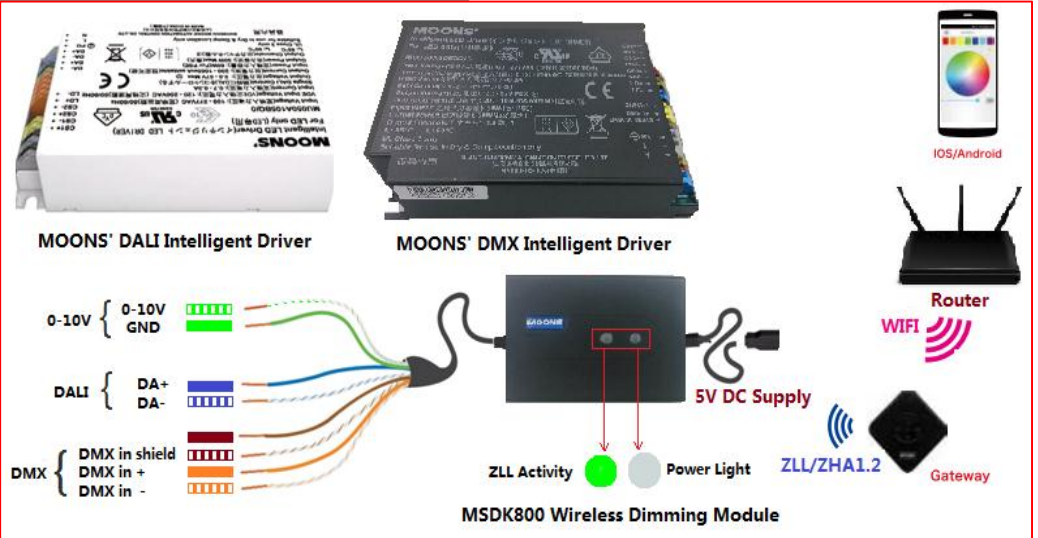MOONS-LED-0,MOONS-LED-1

2

1

Brightness   0

3

Figure 1-13

ZigBee System Configuration

1、System component

- Smartphone、Pad(android/IOS)
- WIFI Router
- ZigBee Gateway
- 5V DC Power supply
- MOONS' DALI Intelligent Driver
- MOONS' DMX Intelligent Driver
- LED lamps

2、System Wiring Diagram

MOONS' DALI Intelligent Driver   MOONS' DMX Intelligent Driver

IOS/Android

Router WIFI

5V DC Supply

ZLL/ZHA1.2 Gateway

0-10V { 0-10V / GND

DALI { DA+ / DA-

DMX { DMX in shield / DMX in + / DMX in -

ZLL Activity   Power Light

MSDK800 Wireless Dimming Module

3、ZigBee APP Guide

How to add the ZigBee gateway to the current WIFI Router

For the new WIFI router, we need to re-configure the gateway, Once configured, the gateway will save the current parameters , Steps are as follows :

- Holding down the reset button for 5 s until the three LEDs on , then release, wait 5-7s , The three LED Revert to the default state, the gateway Enter the configuration mode.

- Select the" **WIF-1500**" in the Smartphone's WLAN list, the password is "12345678" .

- Open **MOONS' LED-APP** , choose the "**setting**" menu, as shown in **Figure 2-1** , then selcet ZLL , it will link to the **Figure 2-2**
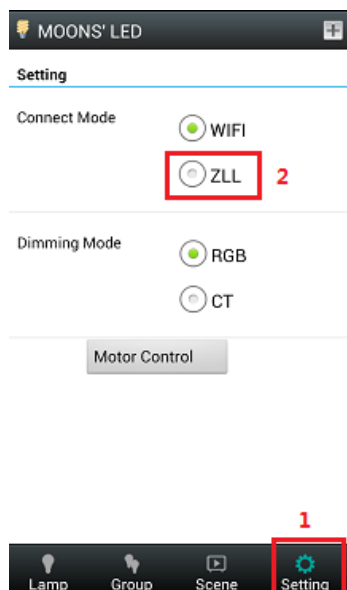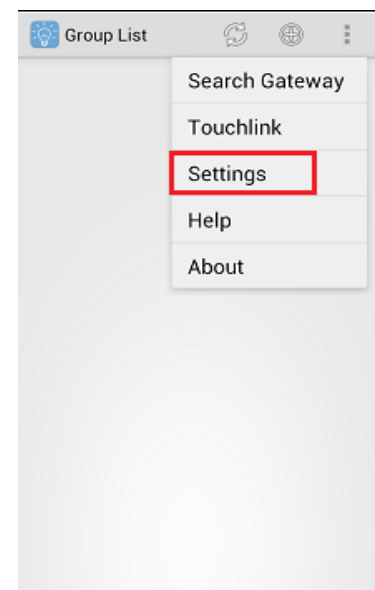

Figure 2-1

Figure 2-2

Figure 2-3

- Click the "**settings**" in **Figure 2-3**, choose "**Router Connection**" as shown in **Figure 2-4.**

- Click "**Select Gateway WiFi**",Select the "**WIF-1500**" in the list.

- Click "**Select Router WiFi**", select the WIFI router Gateway to connect, such as **Figure 2-6**.

- Click "**WiFi Key**", enter the password of the selected router, click "**OK**".**Figure 2-7.**

- After enter the password, we should click the callout 2 to save the current settings in **Figure 2-8.**

- **Figure 2- 10** indicates that the gateway is configured to success ,click " **OK**" ,it will jump to the **Figure 2-11,**click callout 1,it will prompt "**1 device found**" In the 2nd position. Click then callout 2 to jump to the **Figure 2-13.**
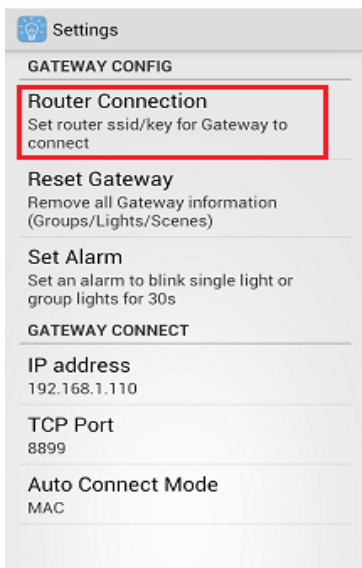
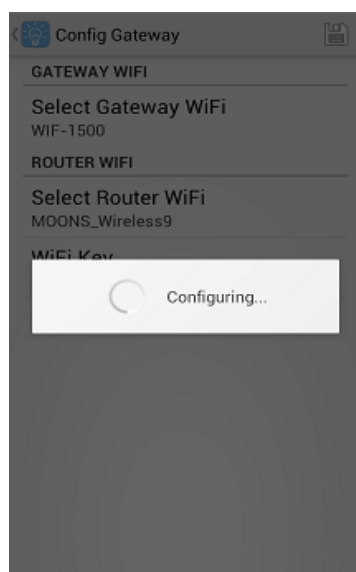**Figure 2-4**

Figure 2-5

Figure 2-6

Figure 2-7
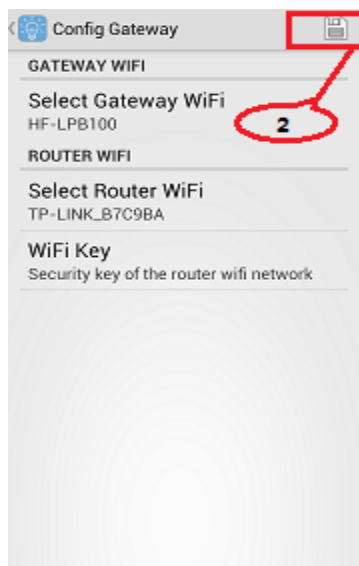
Figure 2-8

Figure 2-9

Figure 2-10

Figure 2-11

MOONS' Wireless Intelligent Control System
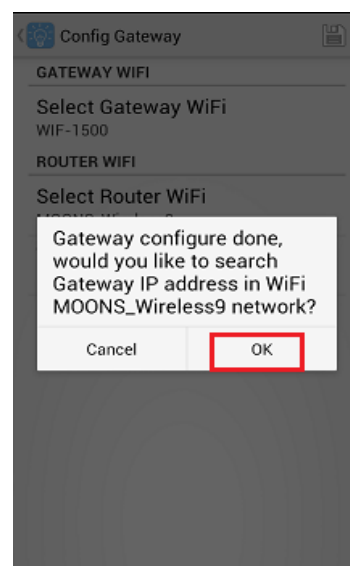
How to add/delete a new ZigBee node to the Gateway

- In order to get the control of lamps, we need to perform Touch Link command to bind a lamp and devices
- Place the Gateway near the ZigBee lamps, then click the "**Touchlink**" to perform the binding operation, as shown in **Figure 2-12,**
- Another method : Press the middle button of ZigBee Gateway until three LEDs on , the nearby ZigBee devices are added to the gateway. ,as shown in **Figure 2-14.**
- If a new ZigBee node is added to the gateway successfully, click the callout 1 in **Figure 2-15** to refresh, the node will be added to a group.
- Slide the screen to the left in **Figure 2-15,**it will jump to the" **light list"** ,as shown in **Figure 2-16**, this list will display all the added lighting nodes.

How to adjust the lamps

- Slide the screen to the right in **Figure 2-16**, it will return to the" **Group list"** .
- Click the callout 2 in **Figure 2-15** to link to **Figure 2-17.**
- Click the callout 2 in **Figure 2-17** to select the group lights, as shown in **Figure 2-18.**
- Click the callout 1 in **Figure 2-17** to open/close the lights of group, callout 3、4、5、6 are used to adjust the Hue value、Saturation value 、 Level value and Transition time.
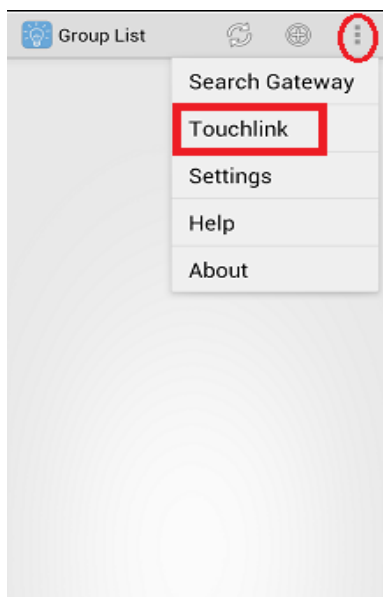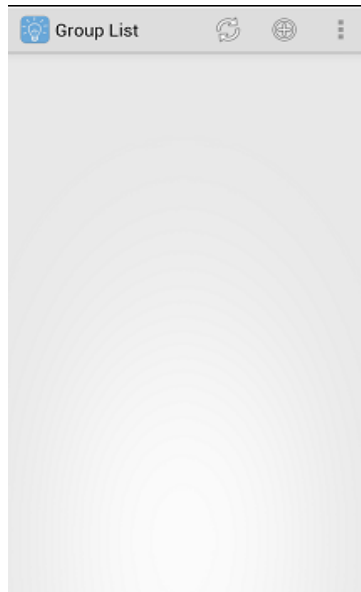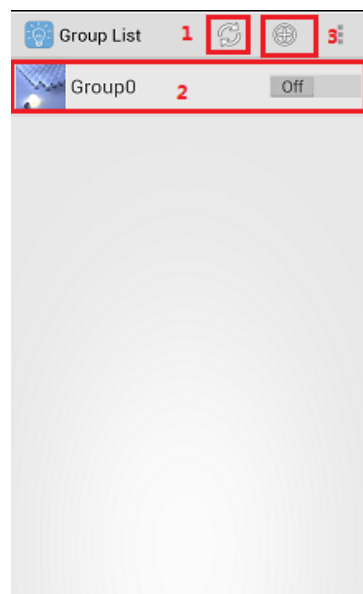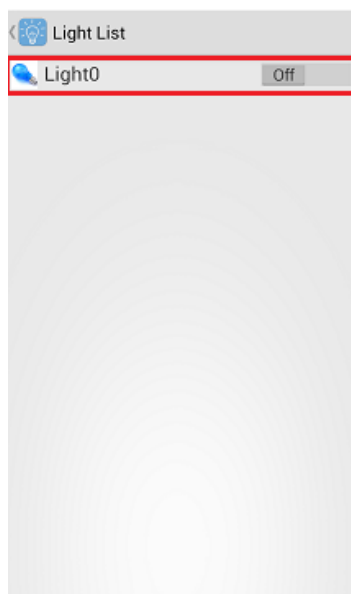

Figure 2-12

Figure 2-13

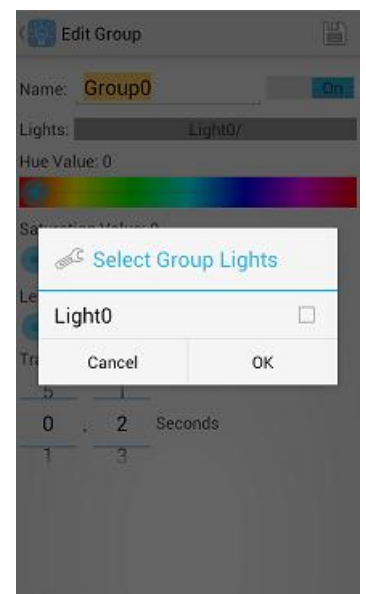

Figure 2-14

Figure 2-15

Figure 2-16

Figure 2-17

Figure 2-18