东莞泰克威科技有限公司
POWER 7 TECHNOLOGY Co., Ltd.

WiFi Outlet

WiFi Repeater Applications

Cloud
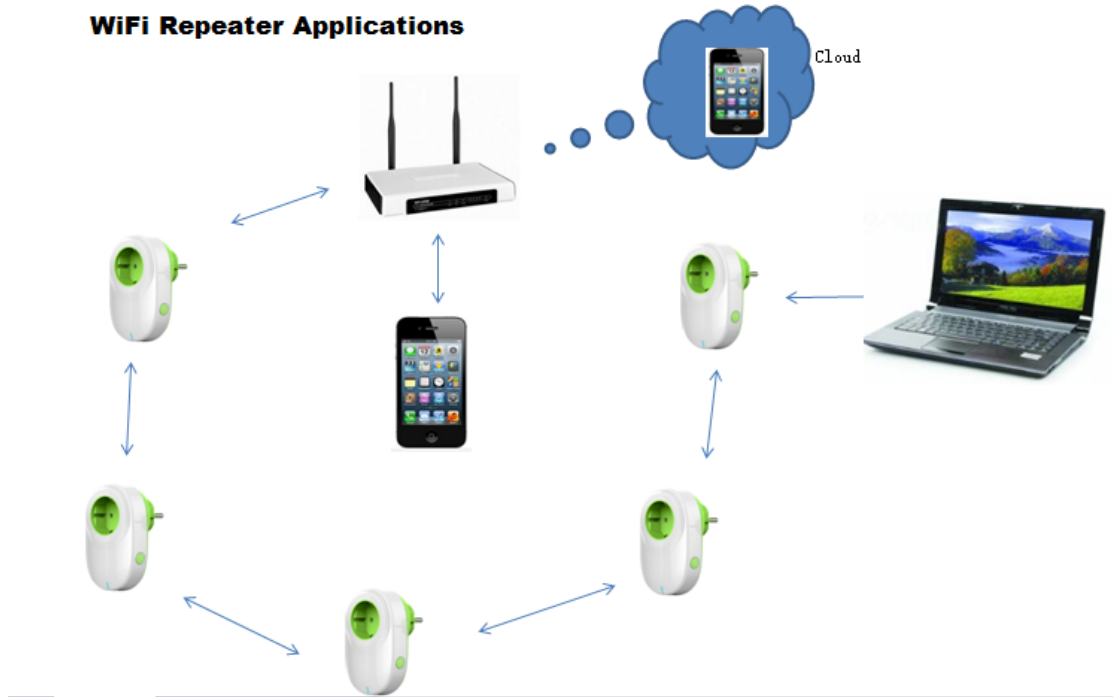
Version 0.2

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1 Product introduction

This is a kind of smart Outlet by using Internet of Things technologies (IOT). The smart Outlet is connected to the mobile phone with Wi-Fi, and then the mobile phone can control the smart Outlet. The smart Outlet can be directly connected to the mobile phone or Tablet PC with WI-FI, and it also can make the remote control comes true through the router. When you install APP in your mobile phone and the electrical equipment is connected to the smart Outlet, you can control the power switches by using your mobile phone. The smart Outlet is used as the signal relaying device beyond the coverage of your own home wireless network. And it can be connected to each other among the smart Outlets. It can turn off all of the powers of electric equipment which are connected to the smart Outlets with APP.

It is the simple way to make your Household equipment become smart. And you can control Household equipment and light by using the smart Outlet. It is so easy to use. And it provides a smart plan to make your life more smart, comfortable, safety.
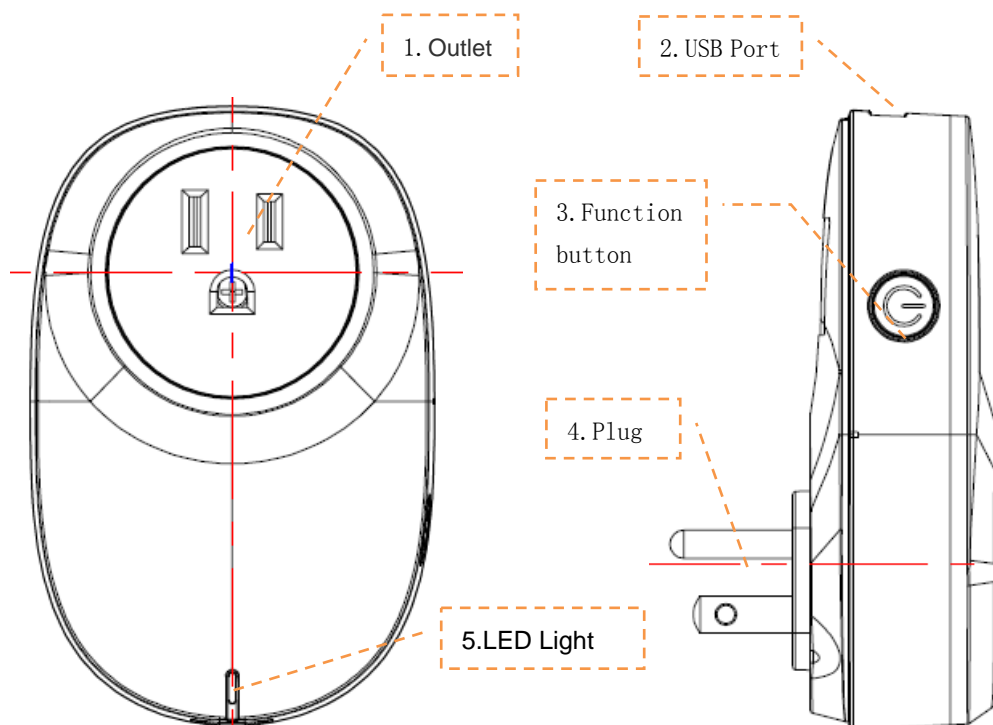
Picture describe：

 1.Outlet： Connect electric consuming equipment, supply power for these equipment

2.USB Port：Can charge the phone and connect intelligent controled plug-in, eg. USB

vidicon, temperature and humidity sensor, infrared sensor and so on. but the ADT
need extra charge, for detail information please contact POWER7 or access the

3.Function Button：Used to control and Wi-Fi connection mode switch ,1~5s and the blue light quick flashing is Smart connection model, 5~10s and the blue light slow flashing is system reset model ,press the button until the blue light slow flashing and stop press is reset to factory pattern.

4.Plug：Connect Outlet, supply power for smart outlet

5.LED light：Green light bright the switch is on, green light dark stands switch off.

Blue light long bright Wi-Fi dis-connection, blue light dark stands Wi-Fi connected. Blue light slow shining go into system reset model, blue light quick shining go into Smart connection model.

2 Product specification

2.1 Hardware Parameters

◆CPU MTK7688A

◆Power supply mode: AC 110-240V 50Hz/60Hz

◆The maximum power : 3840W(Resistive load)

◆The maximum load current: 16A

◆PLUG standard: EU CEE7/7，US NEMA 5-15P

◆Outlet standard: EU CEE7/7，US NEMA 5-15P

◆Wireless standard: Wi-Fi 2.4GHz 802.11b/g/n

◆The distance between sending and receiving is about 30m (straight line distance)

◆Boot times < 10 seconds, first use < 1 minute

◆Standby Power Consumption：≦2W

◆Connection power consumption ：≦2W

◆Working temperature : 5～40℃

◆Working humidity: ≦80%

2.2 Function Overview

◆Support Wi-Fi 2.4GHz 802.11b g/n, customizable support the Zigbee Protocol.

◆Support the Smart connection technology and the Apple's HomeKit Accessory Protocol.（Optional，Temporarily not supporting this feature）

◆Support cellphone connections and the connections through wireless routers, mobile phone remote control via Wi-Fi/2G/3G/4G mobile network.

◆Control smart Outlets via phone and Tablet, and support set the timer switch.

◆Support electrical energy measurement, could know use quantity of electricity through APP.

◆Support overloads protection function, when the electrical equipment which is connected to the smart Outlet is out of the rated power range, the smart Outlet will power off automatically.

◆Plug and play. Use and connections are simple. When smart Outlet power on, it can be connected to the router automatically. Through the app, you only one step to complete setting. You don't need to set the IP address. After the first setting successfully, you don't need to set again, unless the router setting is to change.

◆Support Wi-Fi signal relay. The signal is strengthened beyond the coverage of Wi-Fi signal. Multiple smart Outlets can be connected to each other. All of the powers of the smart Outlets can be turned off by APP.

◆Support scenario settings. According to the different rooms or connective device's types, the smart Outlet can be classified and managed, such as management of children's rooms. At most 10 smart Outlets interconnect.

◆Smart Outlet can be connected at least 10 personnel.

◆Multi-function control buttons. After pressing button in a short time, you can control the smart Outlet switch. After pressing button in a long time, the smart Outlet will be restored to the factory defaults and reconfigure the connection mode is entered.

◆The firmware of the smart Outlet can be upgraded by Wi-Fi.

◆Wi-Fi can be connected among the distance of 30 meters.

◆ The LED can display power supply status and connection status indication

◆ USB Port output 5V/1A.

◆USB HOST, support extensions, allow you to connect USB webcam, USB temperature and humidity detection equipment, air/smoke detection equipment, infrared detection equipment. （Optional，Temporarily not supporting this feature）.

2.3 Software Features

◆After the power of smart Outlet is turn on, the smart Outlet can be connected to the router automatically. According to the environment of the wireless router, the router can be connected automatically through the app. If automatic connection is not successful, you need to manually connect.

◆Having a switch interface; Can control single or multiple smart Outlets, and display the listing of the connective smart Outlet.
◆Support electrical energy measurement. And you can select day/week/month/year to count the quantity of electricity.
◆Timing control interface, you can set the year/month/day/hour/minute/second. You also can be programmed in cycles (daily/weekly).
◆Scenario setting, according the scenario you can control single or multiple switches. Also you can edit the name of the different scenarios.

3 Software Parameters

| System settings	Language settings	App can set automatically according to the phone voice, support for Chinese/English
	Firmware upgrades	Software and firmware can be upgraded via a hand-held terminal
	Restore the default settings	Restore the system to its original settings
Access control	Password protection	A) WI-FI access control: • None • WPA • WPA2 • WPA&WPA2
	User name / Password	Show the router's user name and password after Connecting the router (when the phone is connected for the first time)
Network management	WAN port Settings	A) Dynamic IP (Direct connect APP or Wi-Fi Repeater) B) Automatically/manually connecting to the router.
	Client	Android and iOS

4 Application scenarios

随心所欲　家电远程控制
插入开关 --> 连接电器 --> 下载APP --> 一键配置

Smart control of household appliance

WiFi Smart Outlet

功能扩展　智能无微不至
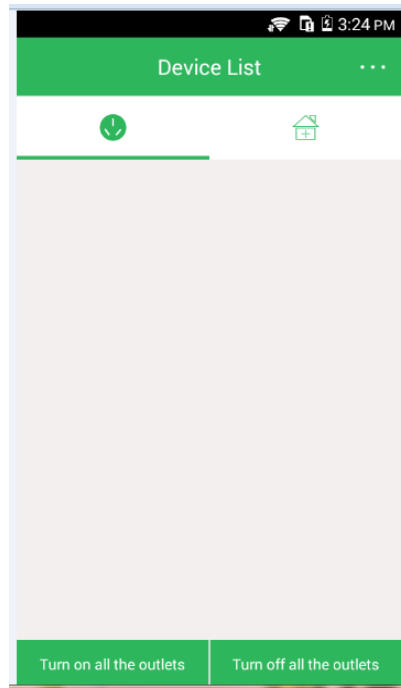温度检测 --> 空气检测 --> 移动检测 --> 摄像监控

USB extension
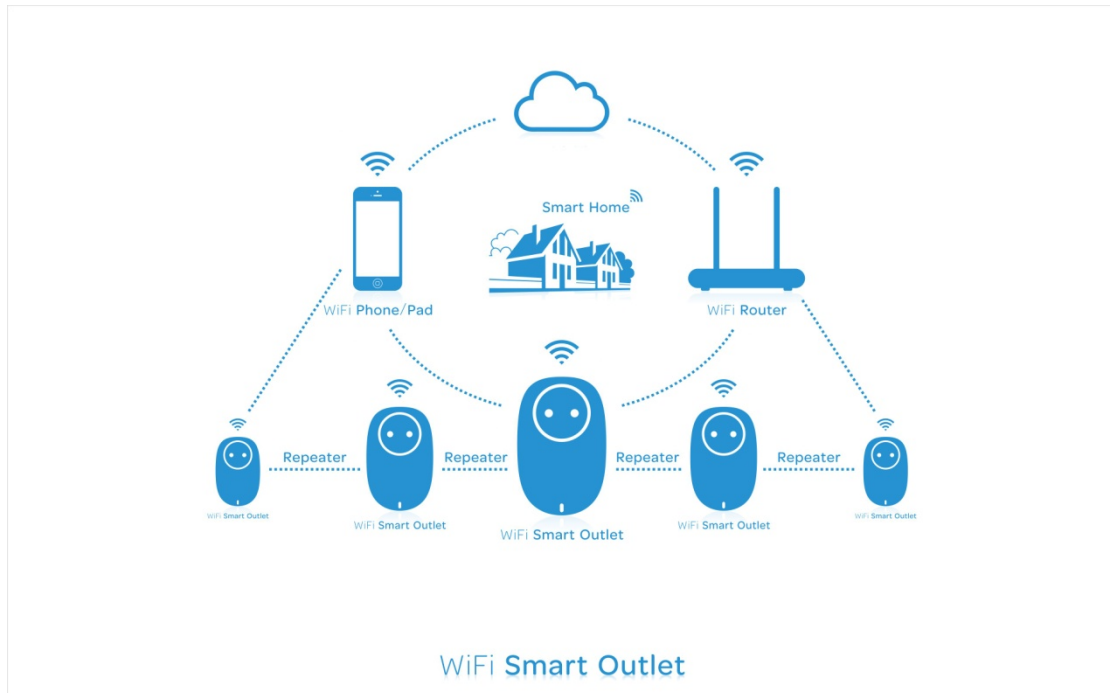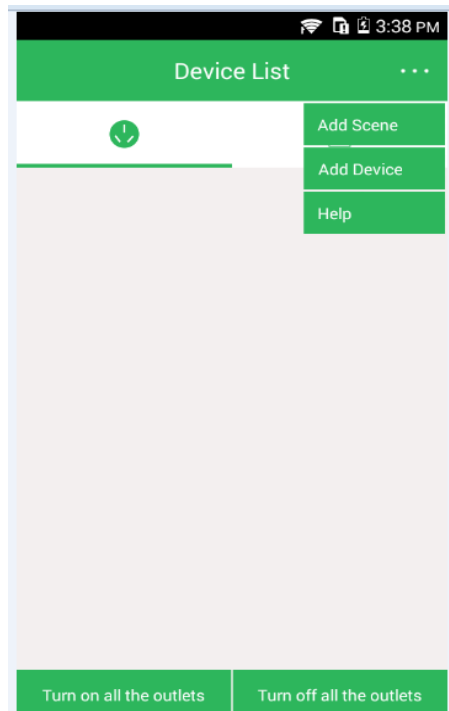
WiFi Repeater/Remote control

5. Client Tools

5.1 Login device

1.Click app,go into the home page. Make sure the smartphone has connected the router and the router could access the internet.
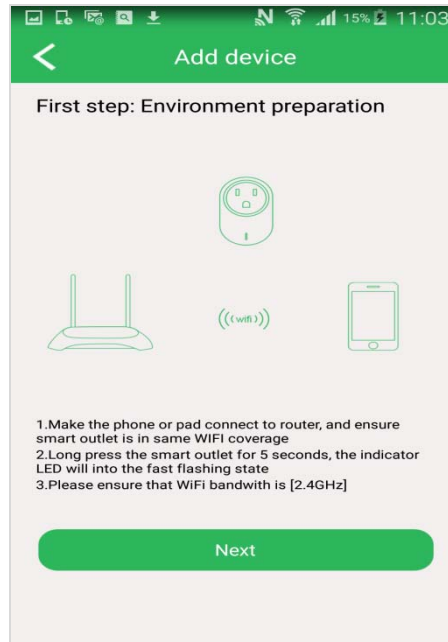
【pic】

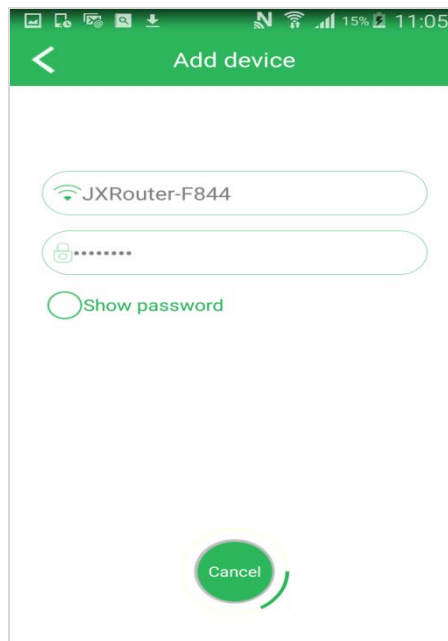2.Cilck the drop-down box on the top-right of the home page.Select 'Add Device'

【pic】

3.After clicking 'Add Device', will go to Environment preparation interface. Click Next.

4.Enter your correct password of router and click configue. For about 20s, it will pop up the 'Add successfully' message.


【pic】

5.You can find the outlet in the home page
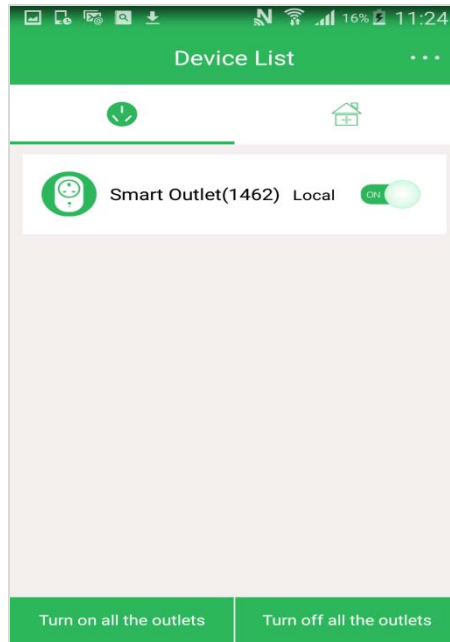
【pic】

5.2 Outlet Catalog

1. Click the Smart outlet icon from the device list; go into the management main interface. You can control your switch on and off by clicking the big power button showing below. There are also stimulating voltage and power display. There 3 features in this catalog: Timer settings, Device information settings and Electric consume graph.
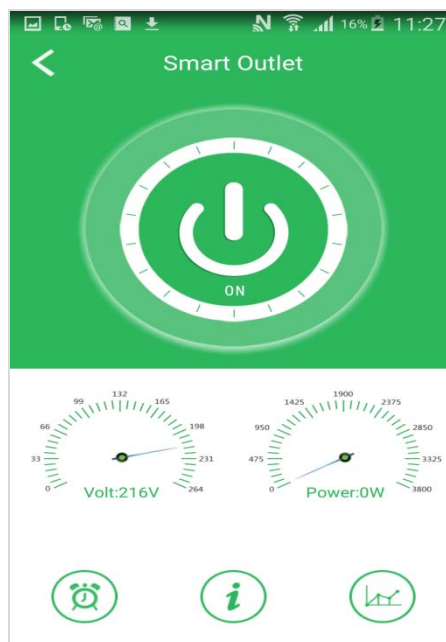

2. Time Zone settings: For the first time, it should be set the time zone before using the outlet. Since the time zone will affect the timer function. Click anywhere on the management interface, will pop up the box showing 'Time

zone is not set'. Click OK, will go into the time zone settings interface. Select the right zone, the time will change to the zone you select.
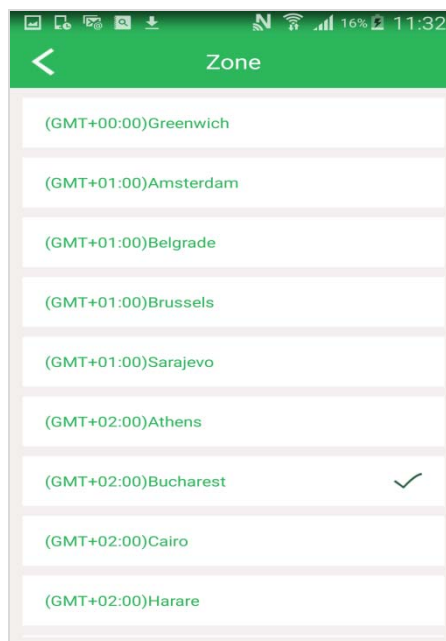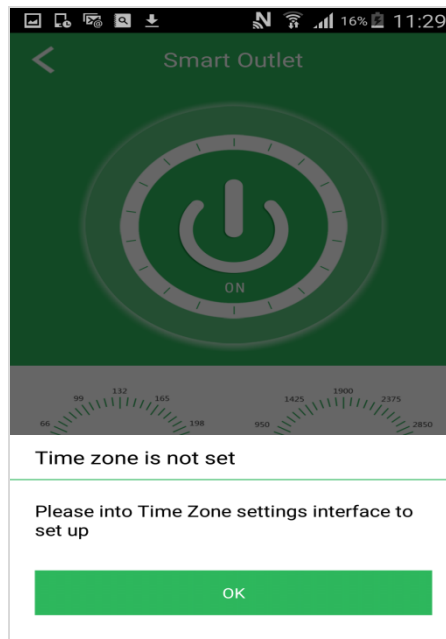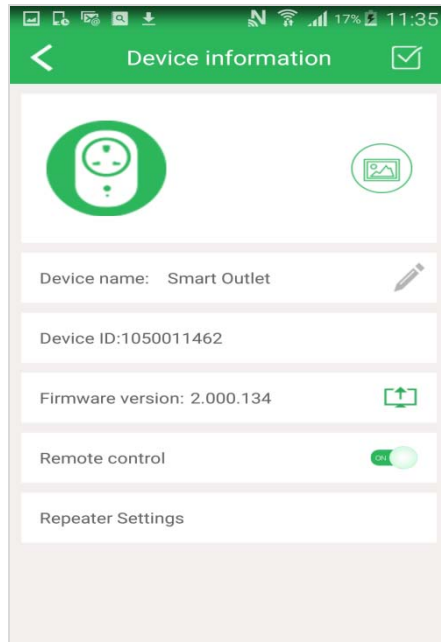

3. Timer settings: Click the clock button on the left below in the page. Then you can set time for your smart outlet control it turn on or turn off.
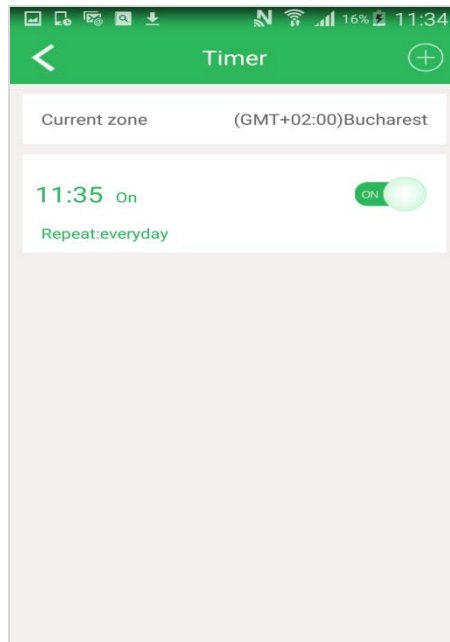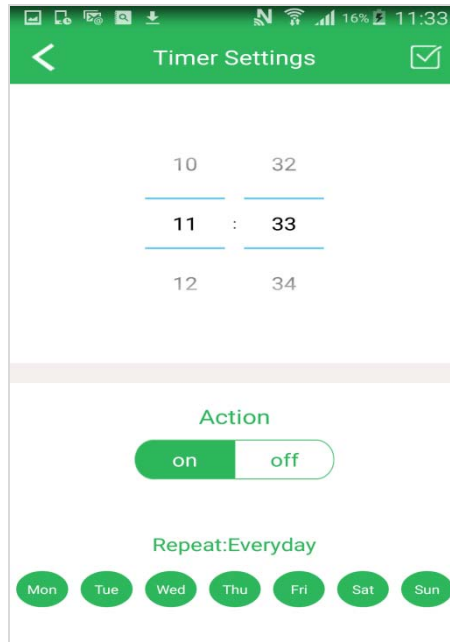
【pic】

4. Device information setting: Click the "i" style logo in the bottom of the page. Then you can set your device information.

 Click this icon, it can change the device icon

 Click this icon, it can change the device name

Firmware update:For android app, download the firmware to smartphone,and then select the FW to upgrade. For iOS app, if the outlet could access the internet, when the offical website release new firmware, will pop up a message "New Firmware version detected, download or not ?" Click OK, will download the firmware.
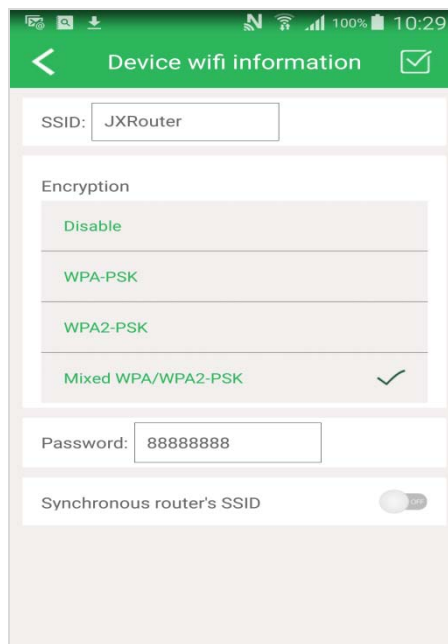
 Repeater Settings: The router and several outlets which connected the same router consist of the scene 4, the outlet works as a repeater. End user can control other outlets that connected to the same router
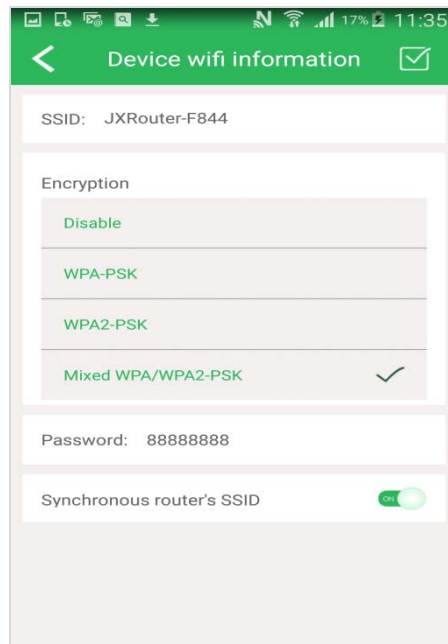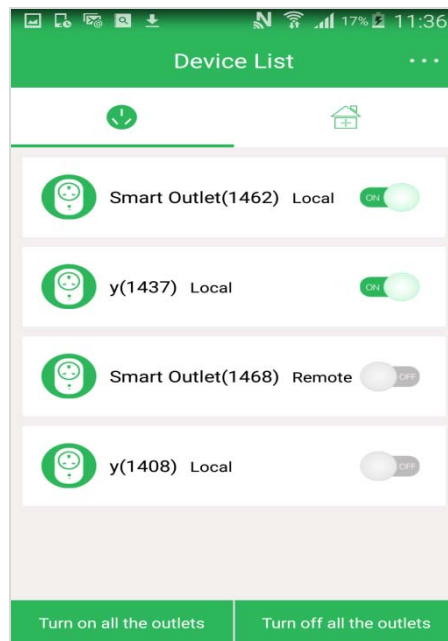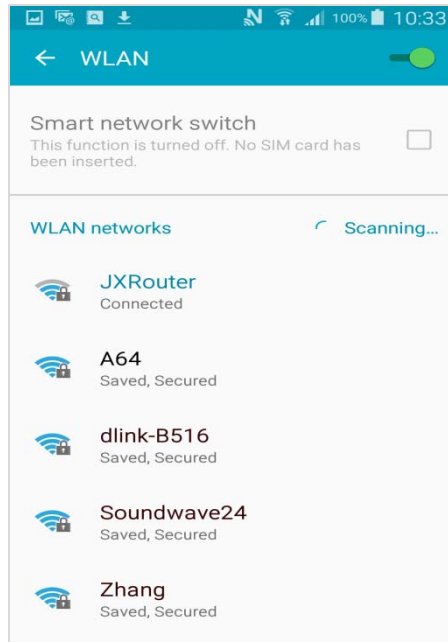
【pic】

Turn off "Synchronous router's SSID", change the SSID and encryption mode, and then save.

Go into smartphone WiFi settings interface, scan new SSID of outlet and connect it. Enter into app main interface, will display all the outlets that connected the same router (Local/LAN) and remote outlet.
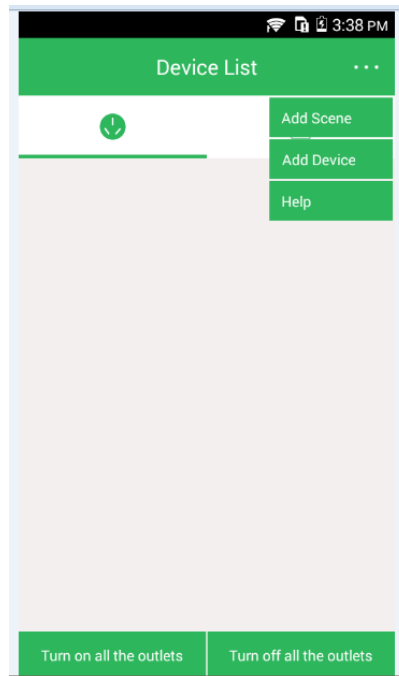
3. Electric consume graph. Click the graph button on the right bottom on the page and go into electric consume module. This module can calculate the electric used and its cost.
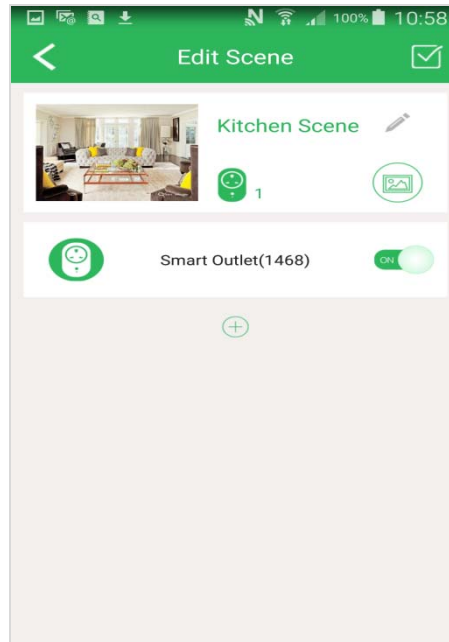
【pic】

5.3 Scene page

1. It is designed for controlling the outlet conveniently in one area. Click the drop-down box in the right top of the home page, select Add Scene.

【pic】
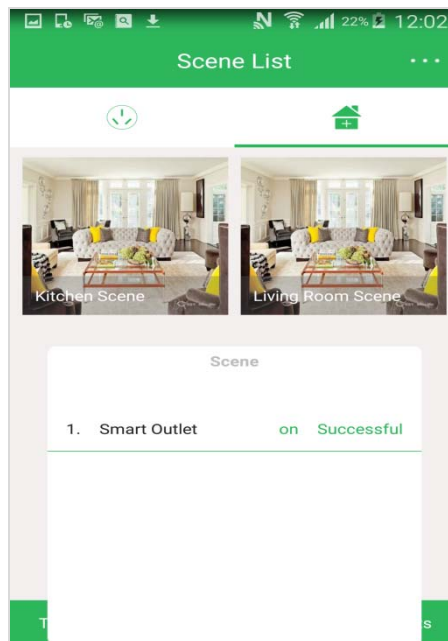
2. Go into the scene adding page, enter the scene name. click'+' to add the outlet you want in the scene then save.

3. You can control all the outlets in the same scene by click the scene only.

5.4 Remote access

After you connect to the smart outlet or the router that outlet connected, you can

control the outlet via WiFi/2G/3G/4G anywhere, anytime. Also can check the outlet

status.

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.

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.

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.

Caution!

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