



# User's Manual

## Z-Wave Home Automation Control Gateway

▶ HAC-1000



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**Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio technician for help.

**FCC Caution**

To assure continued compliance, use only shielded interface cables when connecting to computer or peripheral devices. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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.

**Federal Communication Commission (FCC) Radiation Exposure Statement**

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.

**Safety**

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

### **CE Mark Warning**

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

### **WEEE Regulation**



To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

### **Revision**

User's Manual of PLANET Z-Wave Home Automation Control Gateway  
Model: HAC-1000  
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Part No. EM-HAC-1000\_v1.1

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# Chapter 1. Product Introduction

## 1.1 Package Contents

The package should contain the following:

- Quick Installation Guide x 1
- Wall-mounted & DIN-rail Kit x 1
- Power Adapter x 1
- Magnet Kit x 1



If any of the above items are missing, please contact your seller immediately.

## 1.2 Overview

### Home Automation and Smart Home Control

PLANET HAC-1000 is a Z-Wave Home Automation Control Gateway that controls all Z-Wave wireless devices regardless of brands as they are based on the Z-Wave technology. Since most users would like to control their devices via the internet, the HAC-1000 is required to turn your home into a smart and secure one where lighting control, window blinds, security monitoring, door locks, thermostats, emergency monitoring, energy management, visual reporting, and more can be managed from anywhere, whether you are at home or office, or somewhere on the road, with smart phones, tablets or other mobile devices.



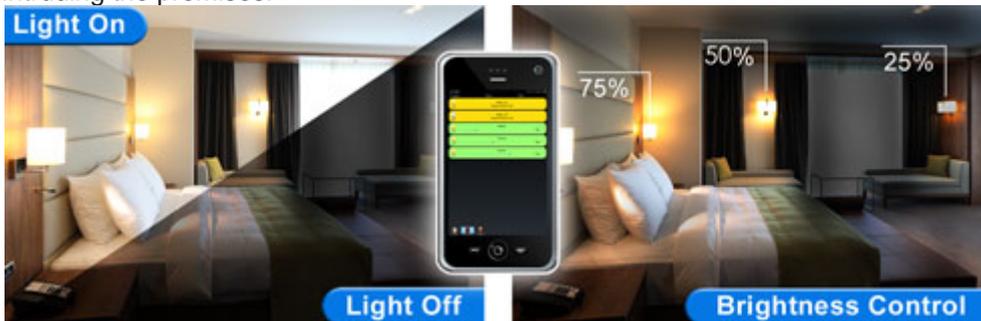
**Real-time Monitoring**

IP cameras can be linked to PLANET HAC-1000 and Cloud Home app for remote monitoring. Users can keep an eye on their home on mobile phones over a secure connection to the Home Automation Control Gateway.



**Lighting Control**

Users can choose the most comfortable lighting brightness for the perfect atmosphere. They can also choose the right time to turn the light on for comfort, or to warn and prevent burglars from intruding the premises.



**Personal Scene Mode**

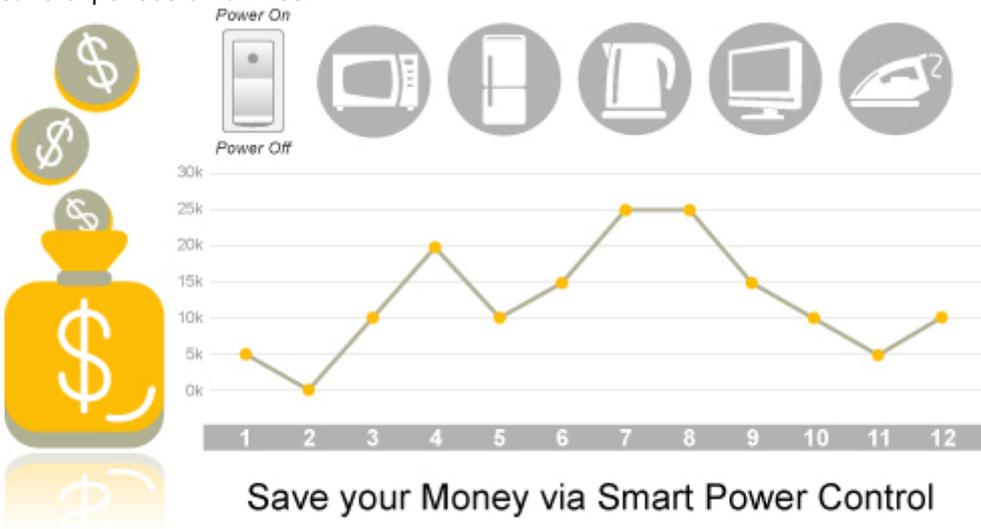
In the "Scene" mode you can set everything you want in every room of your home for any activity or anything in-between from morning to night. An unlimited number of scenes can be created and customized to your personal preferences.



**Multiple Scene Modes For Smart Home**

**Energy and Cost Saving on Every Room**

You can also check the current energy consumption in your home within the configuration interface of the HAC-1000. Manage these energy-saving devices such as power meter switches, power switches and dimmer switches to help you reduce energy consumption and thus save expenses on utilities.



**Save your Money via Smart Power Control**

**Important Alerts**

Alerts like use of electricity, home alarms and more can be brought to your notice without delays by way of cloud hosting. From now on, you can have all these alerts no matter where you are, making your home a smart and secure one.



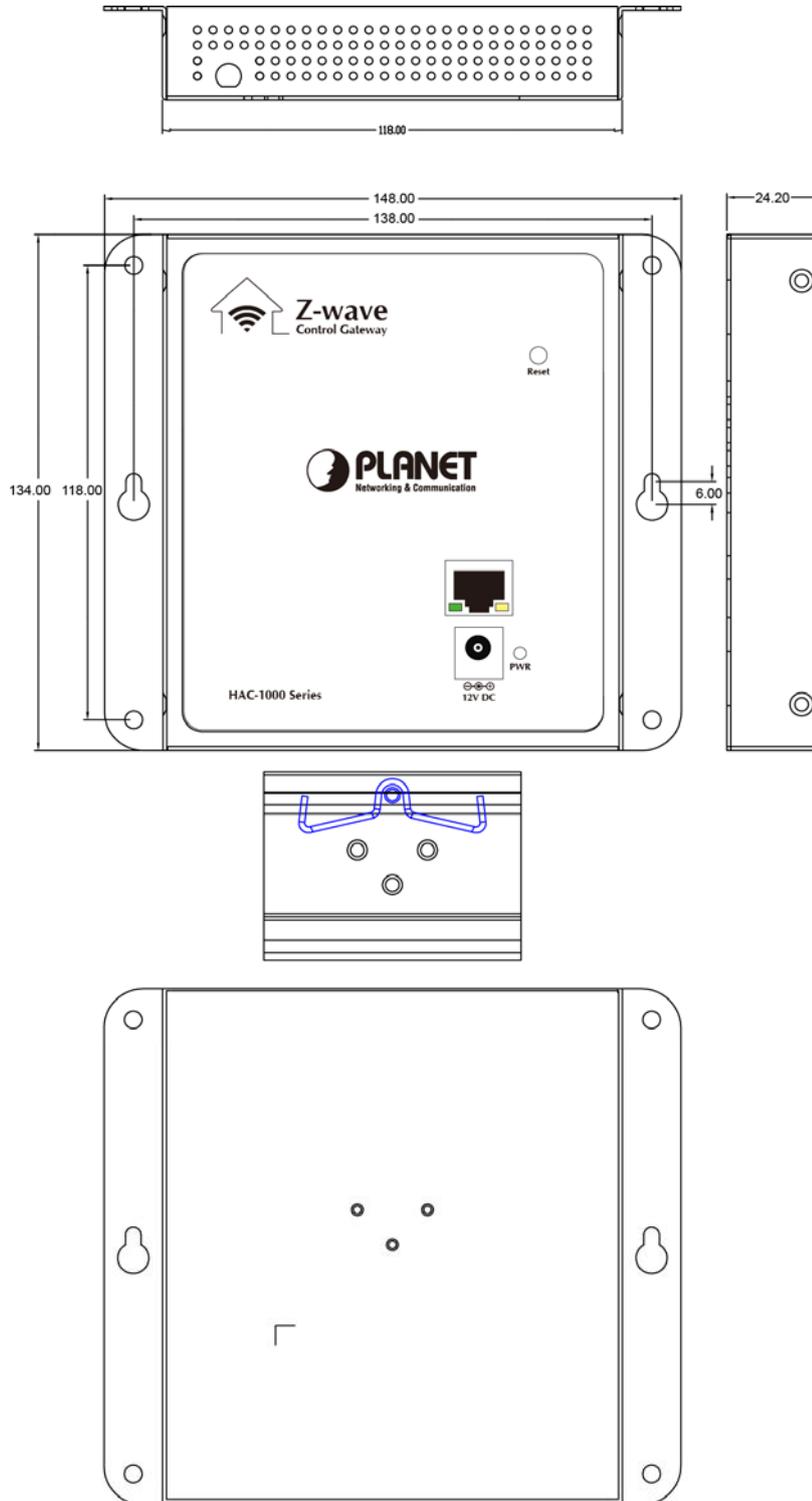
**1.3 Specifications**

Product	HAC-1000E	HAC-1000A
<b>Hardware Platform</b>		
Wi-Fi	Gain: 1 x 1dBi antenna for Z-Wave	
LED Indicators	PWR	
Buttons	1 x Reset button	
LAN Interface	1 x 10/100Mbps Ethernet port	
Enclosure	IP30 metal	
Installation	Wall mount, magnetic wall mount and DIN-rail kit	
<b>Network and Configuration</b>		
Network Standard	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX	
Z-Wave frequency	Europe: 868.42MHz	America: 908.42MHz
HA Functions	Sense Control Door Lock Control Sensor Trigger Event Schedule Setting Mobile Phone Push Notification Device's Location	
<b>General</b>		
Power Requirements	12V DC, 1A	
Operating Temperature	0 ~ 45 degrees C	
Operating Humidity	10 ~ 90% (non-condensing)	
Weight	441g	
Dimensions (W x D x H)	148 x 134 x 25 mm	
Emission	CE, FCC	

## Chapter 2. Hardware Interface

### 2.1 Physical Descriptions

Dimensions (W x D x H)	148 x 25 x 134 mm
Weight	441g (gross weight)



Dimensions ( unit = mm )

LED	Color	Description
PWR	Green	Lights to indicate that the Switch has power.
LNK/ACT	Green	Lights to indicate the port is successfully established. Blinks to indicate that the switch is actively sending or receiving data over that port.

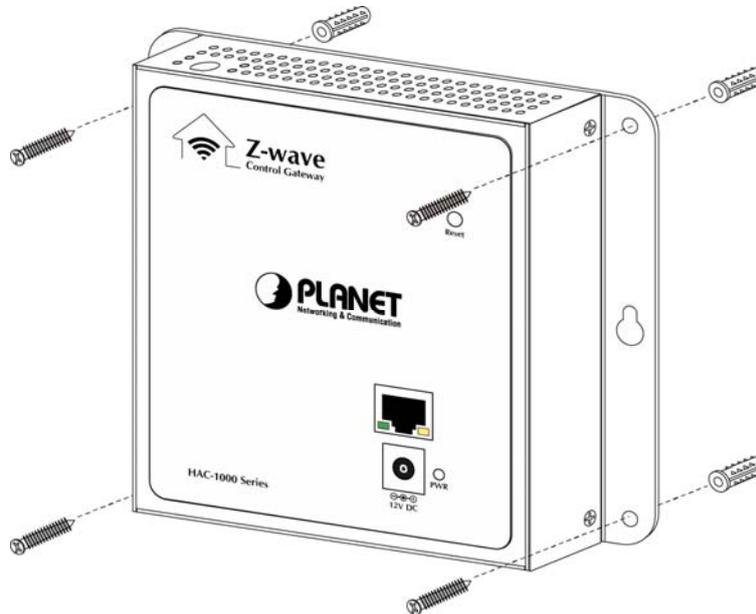
Interface	Description
Reset	This button is hidden in the pinhole. This button is used to restore all the factory default settings. Please hold the reset button for about 10 seconds to load default.

## 2.2 Hardware Installation

### A. Wall-mount Installation

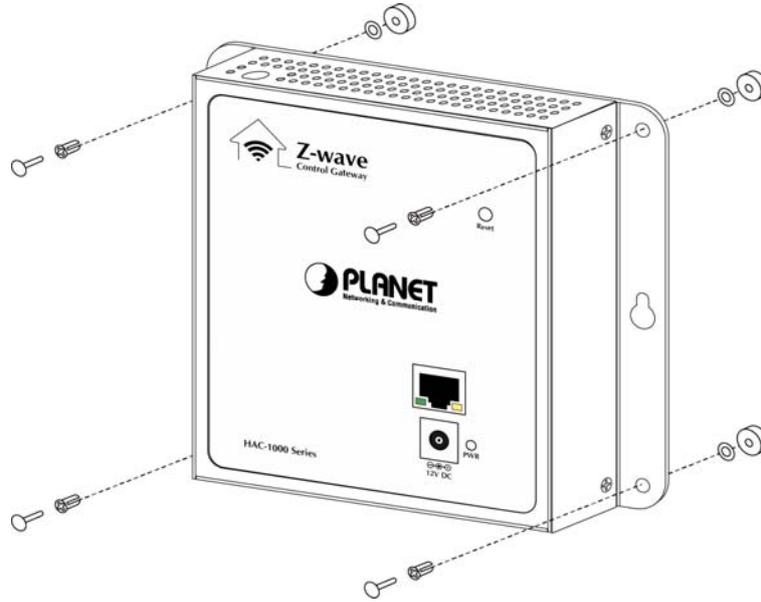
To install the PoE Ethernet Switch on the wall, simply follow the following steps:

- Step 1:** There are 4 holes with 8mm diameter on the wall; the distance between the 2 holes is 133mm and the line through them must be kept horizontal.
- Step 2:** Install a conductor pipe inside the board hole and flush the edge of the conductor pipe with the wall surface.
- Step 3:** Screw the bolts into the conductor pipe. The HAC-1000 is between bolts and conductor pipe, as shown below.



**B. Magnet Installation**

To install the HAC-1000 on a magnetic surface, simply follow the following picture:



**C. Ethernet Connection**

There is a LAN port on the HAC-1000. Please connect to your router/switch.

## 2.3 Initial Utility Installation

This chapter shows how to use utility to find the IP of your control gateway. The gateway is with the default settings. However, to help you find the network gateway quickly, the windows utility PLANET Smart Discovery can search control gateway in the network that can help you to configure some basic settings before you start advanced management.

**Step 1:** Please download the search tool from [PLANET Download Center](#):

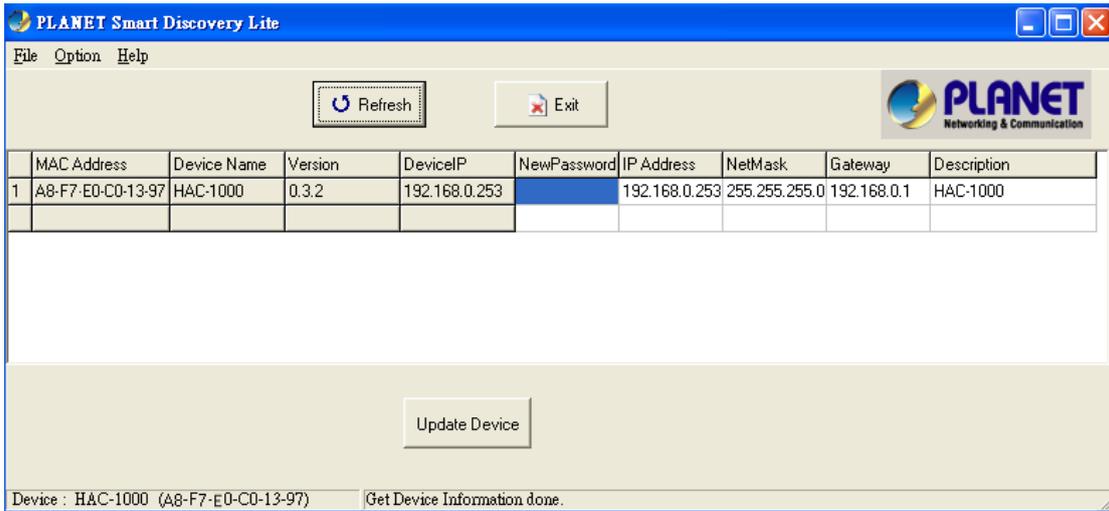
**Utility**

Date	Version	Description	Download
2015-03-06	1.0	Search Tool	

**Step 2:** Unzip the file and run the program “SmartDiscoveryLite”.



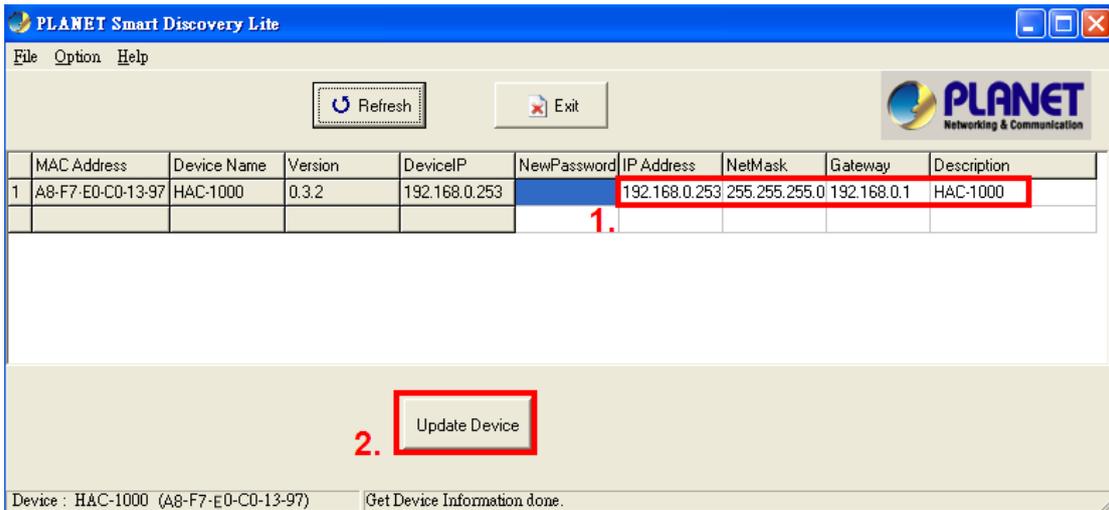
**Step 3:** The window below will show the network information of control gateway.



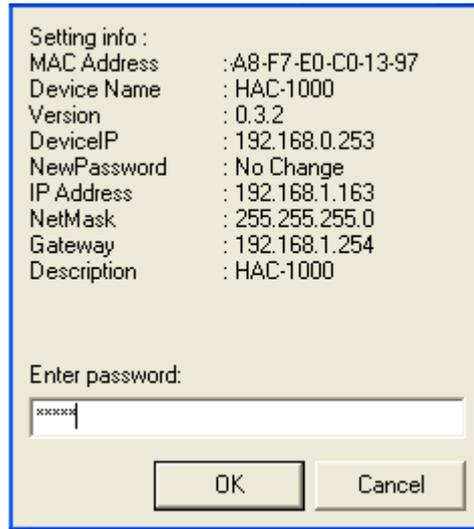


**Note** Before searching the IP, please make sure your PC is in the same IP segment as control gateway.

**Step 4:** Modify the information in the red box and then click “Update Device”.



**Step 5:** Enter the password “admin”. After clicking “OK”, the information will change.



Setting info :

MAC Address	:A8-F7-E0-C0-13-97
Device Name	: HAC-1000
Version	: 0.3.2
DeviceIP	: 192.168.0.253
NewPassword	: No Change
IP Address	: 192.168.1.163
NetMask	: 255.255.255.0
Gateway	: 192.168.1.254
Description	: HAC-1000

Enter password:

OK Cancel

## Chapter 3. Web-based Management

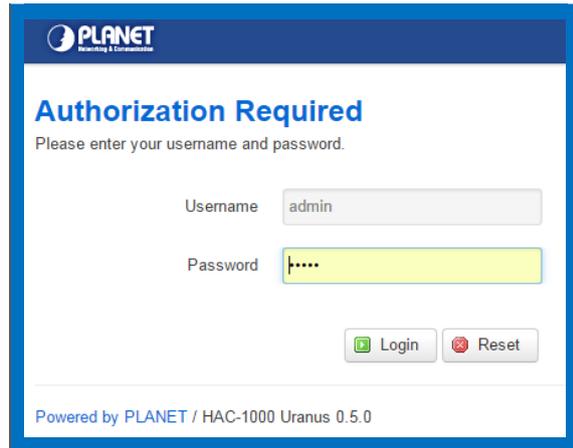
Your control gateway is ready to put you in control of your home. Please take a few minutes to read through this guide to familiarize yourself with the steps required to set up your Z-Wave network and your control gateway.

This chapter provides setup details of the control gateway web-based interface.

### 3.1 Introduction

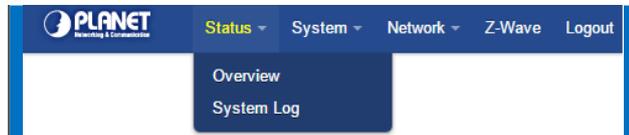
Control gateway can be configured with your web browser. Before configuring, please make sure your PC is in the same IP segment as control gateway.

Enter “**admin**” in both the user name and password fields to access interface.



### 3.2 Status

Here you can view the status of control gateway.



#### 3.2.1 Overview

Here you can view the status of control gateway.

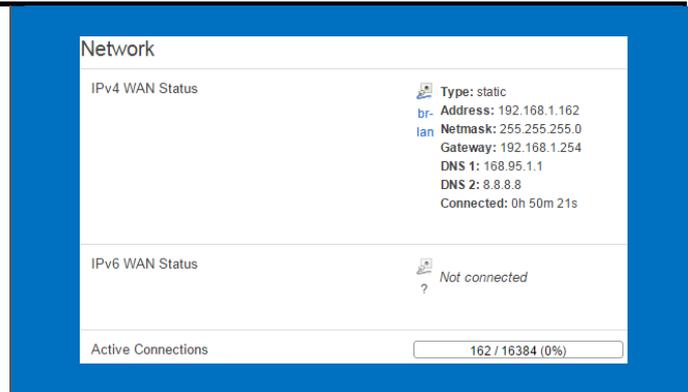
The current **System** information of control gateway.

System	
Model	PLANET HAC-1000 Home Automation Control Gateway
Firmware Version	HAC-1000 Uranus 0.5.0
Local Time	Thu Sep 10 10:52:59 2015
Uptime	0h 46m 47s
Load Average	0.27, 0.90, 0.94

The current **Memory** information of control gateway.

Memory	
Total Available	13928 kB / 61036 kB (22%)
Free	5116 kB / 61036 kB (8%)
Buffered	8812 kB / 61036 kB (14%)

The current **Network** information of control gateway.



The screenshot shows the 'Network' configuration page. It displays the IPv4 WAN Status with the following details: Type: static, br. Address: 192.168.1.162, lan Netmask: 255.255.255.0, Gateway: 192.168.1.254, DNS 1: 168.95.1.1, DNS 2: 8.8.8.8, and Connected: 0h 50m 21s. Below this, the IPv6 WAN Status is shown as 'Not connected'. At the bottom, the 'Active Connections' section shows 162 / 16384 (0%).

### 3.2.2 System Log

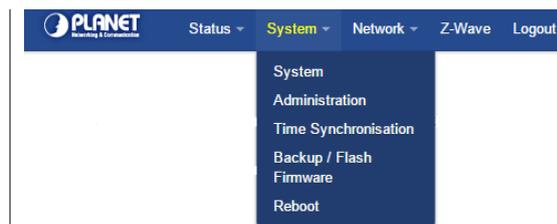
This section provides the system log of recorded files.

#### System Log

```
Thu Sep 10 10:04:05 2015 kern.info kernel: [ 0.090000] Initializing cgroup subsys net_cls
Thu Sep 10 10:04:05 2015 kern.info kernel: [ 0.090000] Initializing cgroup subsys blkio
Thu Sep 10 10:04:05 2015 kern.info kernel: [ 0.100000] Initializing cgroup subsys net_prio
Thu Sep 10 10:04:05 2015 kern.info kernel: [ 0.100000] Performance counters: mips/24K PMU enabled, 2 32-bit counters available to each CPU, irq 13
Thu Sep 10 10:04:05 2015 kern.info kernel: [ 0.110000] NET: Registered protocol family 16
```

## 3.3 System Configuration

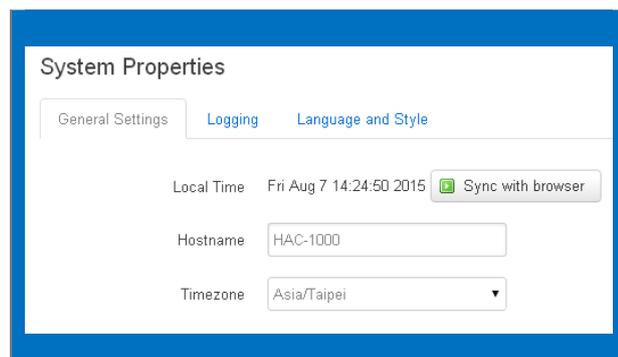
This chapter will cover the configuration of Administration, Time Synchronization, Firmware Update and Reboot.



The screenshot shows the 'System' configuration menu. The menu items are: System, Administration, Time Synchronisation, Backup / Flash Firmware, and Reboot.

### 3.3.1 System

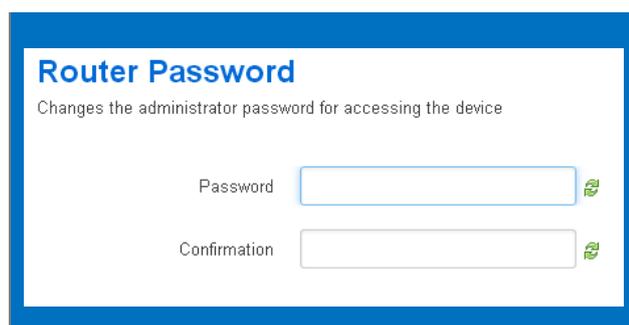
Here you can configure the basic aspects of your device like its time zone and language.



The screenshot shows the 'System Properties' configuration page. It has three tabs: 'General Settings', 'Logging', and 'Language and Style'. Under 'General Settings', there are fields for 'Local Time' (Fri Aug 7 14:24:50 2015) with a 'Sync with browser' button, 'Hostname' (HAC-1000), and 'Timezone' (Asia/Taipei).

### 3.3.2 Administration

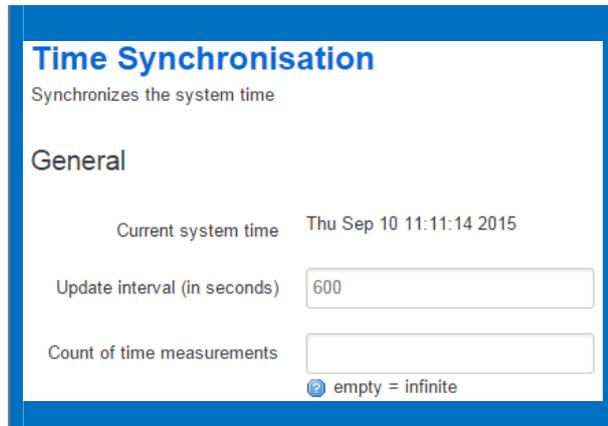
Changing the administrator password for accessing the device



The screenshot shows the 'Router Password' configuration page. It has a title 'Router Password' and a subtitle 'Changes the administrator password for accessing the device'. There are two input fields: 'Password' and 'Confirmation', each with a strength indicator icon.

### 3.3.3 Time Synchronization

Synchronizing the system time.

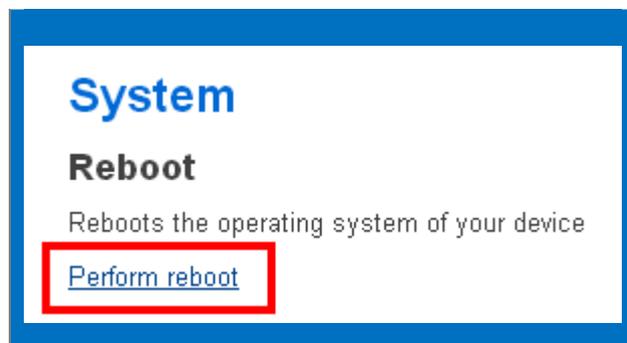


### 3.3.4 Backup/Flash Firmware

Parameters	Description
<b>Backup</b>	To have a backup of all of the parameters, click this button. If necessary, it will then be possible to return to the previous settings if settings are changed and there is unexpected behavior. Click "Generate archive" to download a tar archive of the current configuration files.  To reset the firmware to its initial state, click "Perform reset" (only possible with squashfs images).
<b>Reset to default</b>	Clicking the <b>Perform reset</b> button will reset gateway's parameters to the factory settings (including the IP address).
<b>Recovery</b>	To restore configuration files, you can upload a previously generated backup archive here.
<b>Upgrade Firmware</b>	Click "Browse" to select the OpenWrt compatible firmware image, and click "Flash image" to upload a new firmware.

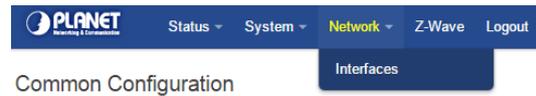
### 3.3.5 Reboot

Reboot the control gateway.



## 3.4 Network Configuration

Use this menu to configure the network to connect the device.



There are three connection types:

- ◆ Static Address (Leased Line User)
- ◆ DHCP Client IP Address (Cable Modem User)
- ◆ PPPoE (ADSL Dial-up User)

**Step 1.** Connect the Ethernet cable to your control gateway and to a network port on your internet router.

**Step 2.** Connect your computer to the same internet router with control gateway.

**Step 3.** Run Planet Smart Discovery Utility to find the IP of control gateway.

**Step 4.** Start the web browser on the computer and type the IP address you search from Planet Smart Discovery Utility of the control gateway.



Even though the control gateway cannot be found, you can still connect your computer straight to the HAC-1000. And set the same IP segment with control gateway in TCP/IP of your computer. Then use default IP of control gateway: "<http://192.168.0.253>" to access the web UI of control gateway.

### 3.4.1 Static Address

On this page, you can configure the network interfaces.

Parameters	Description
IPv4 address	This address is a unique number that identifies a computer or device on the WAN or LAN. These numbers are usually shown in groups separated by periods, for example. 192.168.0.200.
IPv4 netmask	Subnets allow network traffic between hosts to be separated based on the network's configuration. In IP networking, traffic takes the form of packets. IP subnets advance network security and performance to some level by organizing hosts into logical groups. Subnet masks contain four bytes and usually appear in the same "dotted decimal" data. For example, a very common subnet mask in its binary demonstration 11111111 11111111 11111111 00000000 will usually be shown in the corresponding, more readable form as 255.255.255.0.
IPv4 gateway	A gateway is a piece of software or hardware that passes information between networks. You'll see this term most often when you either log in to an Internet site or when you're transient email between different servers.
IPv4 broadcast	Broadcast address, if leave blank, the system will automatically calculate.
Use custom DNS servers	When you send email or position a browser to an Internet domain such as xxxxx.com, the domain name system translates the names into IP addresses. The term refers to two things: the conventions for naming hosts and the way the names are control across the Internet.

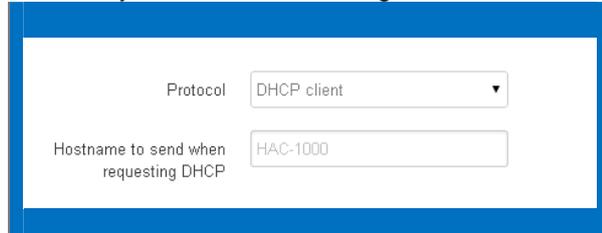


We suggest to use Static IP for HAC-1000 due to control pad need to set the IP of HAC-1000. If IP of HAC-1000 be changed, control pad can not connect with HAC-1000.

### 3.4.2 DHCP Client

If you choose this connection type, please make sure your IP won't be changed.

When a DHCP server is installed on the network to issue IP address assignment. With this setting, the IP address is assigned automatically.



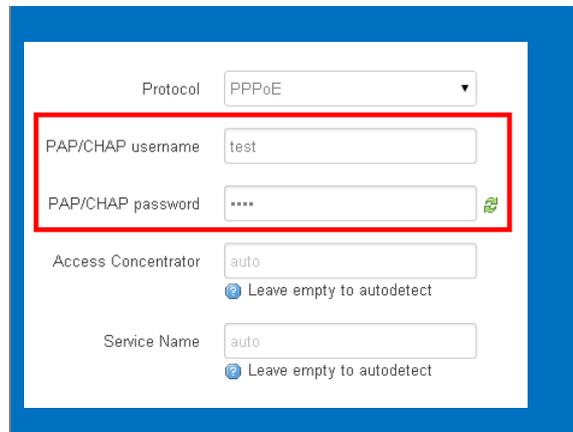
### 3.4.3 PPPoE

PPPoE stands for Point to Point Protocol over Ethernet

A standard that builds on Ethernet and Point-to-Point network protocol, it allows Internet Camera to connect to Internet with xDSL or cable connection. It can dial up your ISP and get a dynamic IP address. For more PPPoE and Internet configuration, please consult your ISP.

It can directly connect to the xDSL; however, it should be set up in a LAN environment to program the PPPoE information first, and then connect to the xDSL modem. Power it on again to enable the device to dial on to the ISP for connecting to the WAN through the xDSL modem.

Enter the **Username** for the connection.  
Enter the **Password** for the connection.



## Chapter 4. Z-Wave Setting

Control gateway has three platforms available -- Web platform, iOS/Android platform and control pad platform. There is a menu of items like Room, Device, Camera, Scene, etc. where you can select to get the function you want done by clicking on the item.



**Options of Z-Wave**

Welcome to **Control Gateway** System.  
 Click above menu to start the operation.  
 Click '**Room**' to create or manage your room for devices.  
 Click '**Device**' to control your devices by classification.  
 Click '**Camera**' to view your camera list.  
 Click '**Scene**' to set scenes to control your devices.  
 Click '**Trigger**' to control your devices when sensor is alarm/bypass/normal.  
 Click '**Schedule**' to control your devices in schedule.  
 Click '**Z-Wave**' to view logs or topology, include and exclude device.  
 Click '**Report**' to view chart of power meter.

Parameters	Description
Logs of Z-Wave	The Z-wave sensor information is shown here. The date and time are displayed at the top of the window.
Select Languages	The control gateway supports multi-languages. Users can choose their language here.

### 4.1 Rooms

The Rooms tab is designed for adding rooms and sections, i.e. single rooms, room groups, floors, or any user-defined locations. To add a section, first enter its name and click Add. The new section will be created and its name will be displayed on the left-hand side of the list. After the new section has been created, a new room within the section may be created. To do so, the room name must be entered, the desired section chosen, and the "Add" button clicked.



## 4.2 Inclusion of Z-Wave Device

The Devices tab enables you to manage devices included in the Home Automation System. Devices are plane system compatible sensors, IP cameras and door phone devices. To add a Z-Wave device, click Add. Once the system sets itself into learning mode, perform the tasks described in the manuals (see Appendix A and B).

You can control your devices by classification, based on the **HZS-100 Wall-mount Motion Sensor** to explain the application.

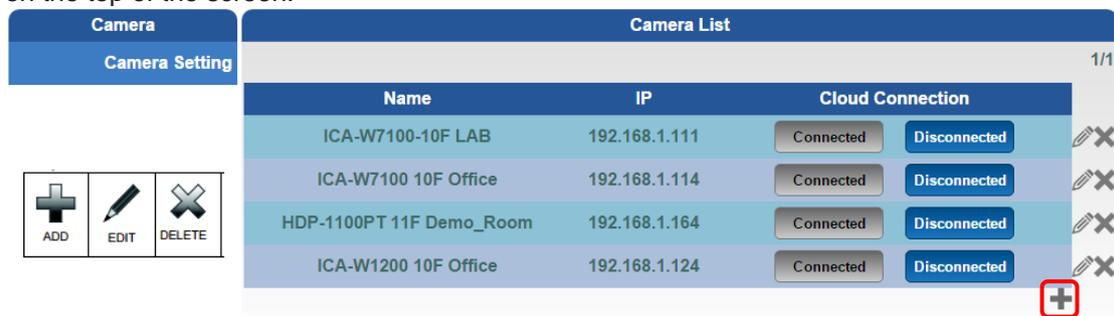


Parameters	Description
	<ul style="list-style-type: none"> <li>➤ This parameter can be configured with the value of 1 through 255. Where 1 means it will not be triggered within 1 minute again. Default is for 3 minutes.</li> <li>➤ Temperature Unit has Celsius and Fahrenheit.</li> </ul>
	<div style="border: 1px solid black; padding: 5px; background-color: #2c5e8c; color: white;"> Off/Idle Delay: <input type="text" value="3"/> minutes  Temperature Unit: <input type="text" value="Celsius"/> </div>

Parameters	Description
<b>Group</b>	<ul style="list-style-type: none"> <li>➤ Here different Z-Wave devices in a group can be connected.</li> </ul>
<b>Detect And Remove</b>	<ul style="list-style-type: none"> <li>➤ Z-Wave device without battery can use this button to check the status of devices.</li> <li>➤ When Z-Wave device is dead, use this button to remove forcibly.</li> </ul>

### 4.3 Inclusion of IP Camera

To add a new IP camera, click Add. A new window will pop up, in which all camera configuration options will be available. After completing the camera configuration, click Save on the top of the screen.



Camera	Camera List		
Camera Setting	Name	IP	Cloud Connection
	ICA-W7100-10F LAB	192.168.1.111	Connected Disconnected
	ICA-W7100 10F Office	192.168.1.114	Connected Disconnected
	HDP-1100PT 11F Demo_Room	192.168.1.164	Connected Disconnected
	ICA-W1200 10F Office	192.168.1.124	Connected Disconnected

Parameters	Description
<b>Camera Name</b>	Set up name of IP Camera
<b>Camera IP</b>	IP address of IP Camera
<b>Camera Port</b>	Set up web page connecting port and video transmitting port
<b>Camera URL</b>	RTSP CGI command <b>ICA-W7100: /cgi-bin/snapshot?channel=0</b> <b>HDP-1100PT: /image.cgi</b>
<b>MJPEG URL</b>	MJPEG CGI command
<b>Camera Account</b>	User name of IP camera
<b>Camera Password</b>	Password of IP camera

You can create and modify your camera list, based on the [HDP-1100PT 720p SIP Door Phone with PoE](#) to explain the application.



Camera	Camera Modify
Camera Setting	<p>Camera Name: <input type="text" value="Door Phone"/></p> <p>Camera Ip: <input type="text" value="192.168.1.169"/></p> <p>Camera Port: <input type="text" value="80"/></p> <p>Camera Url: <input type="text" value="/image.cgi"/></p> <p>Mjpg Url: <input type="text"/></p> <p>Camera Account: <input type="text" value="admin"/></p> <p>Camera Password: <input type="password" value="....."/></p> <p style="text-align: right;"> <input type="button" value="OK"/> <input type="button" value="Cancel"/> </p>

You can create and modify your camera list, based on the [ICA-W7100](#) 720p Wireless IR PT IP Camera to explain the application.



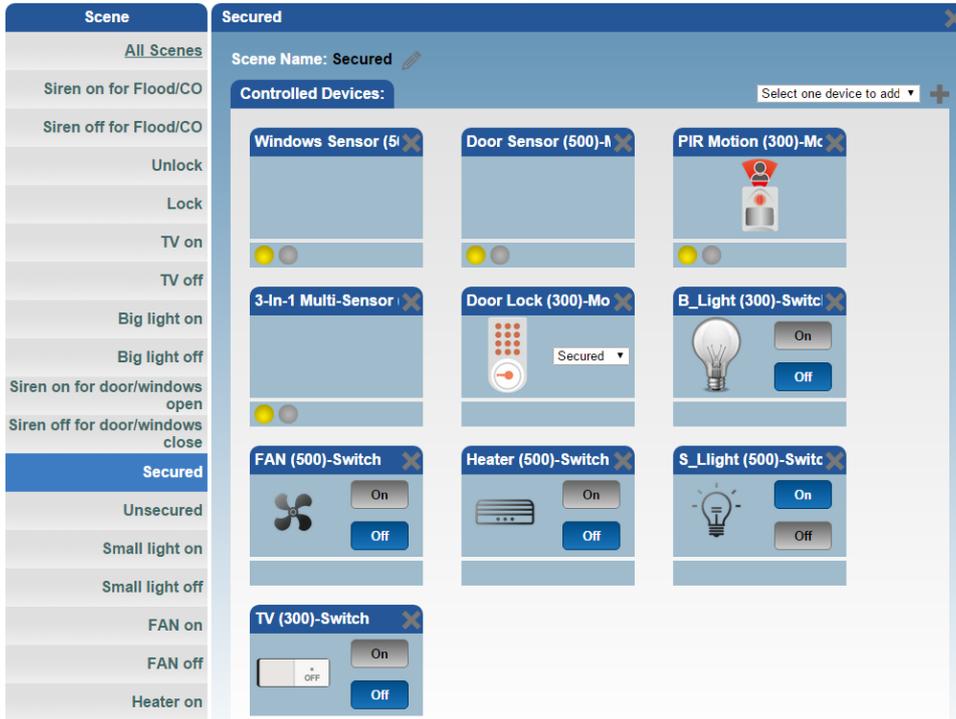
Camera	Camera Modify
Camera Setting	<p>Camera Name: <input type="text" value="ICA-W7100-10F LAB"/></p> <p>Camera Ip: <input type="text" value="192.168.1.111"/></p> <p>Camera port: <input type="text" value="80"/></p> <p>Sub Url: <input type="text" value="/cgi-bin/snapshot?channel"/></p> <p>Mjpg Url: <input type="text"/></p> <p>Camera Account: <input type="text" value="admin"/></p> <p>Camera Password: <input type="password" value="....."/></p> <p style="text-align: right;"> <input type="button" value="Ok"/> <input type="button" value="Cancel"/> </p>

## 4.4 Scenes

The Scenes tab lets the user create a scene by entering a scene name.

Create Scene
<p>Scene Name: <input type="text" value="Enter scene name"/></p> <p style="text-align: right;"><input type="button" value="Add"/></p>

To open the new scene window, click Add. The new scene must be named and assigned to certain room for easier configuration after general parameters have been set.



A Scene is a group of commands sent to user defined group of devices.



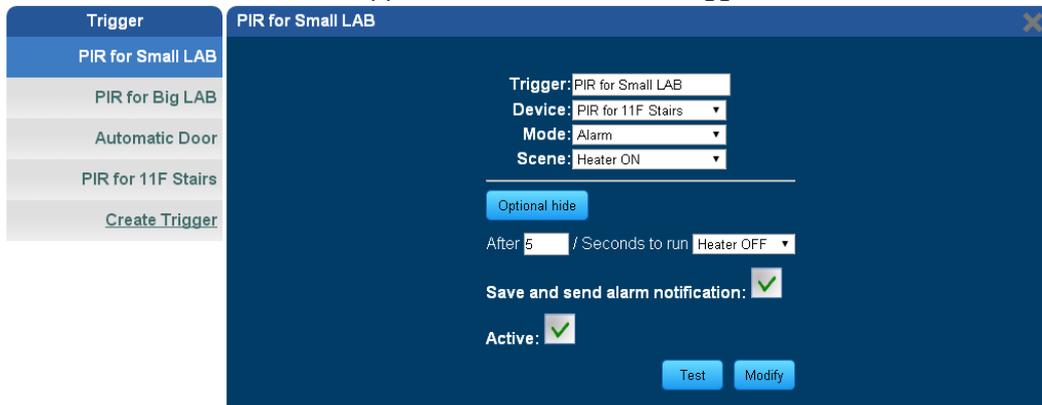
You can set scenes to control your devices. Please refer to Appendix A or B to set the scene.

## 4.5 Trigger

The Trigger tab lets the user create a trigger by entering its name, and then select a device, a mode and a scene.

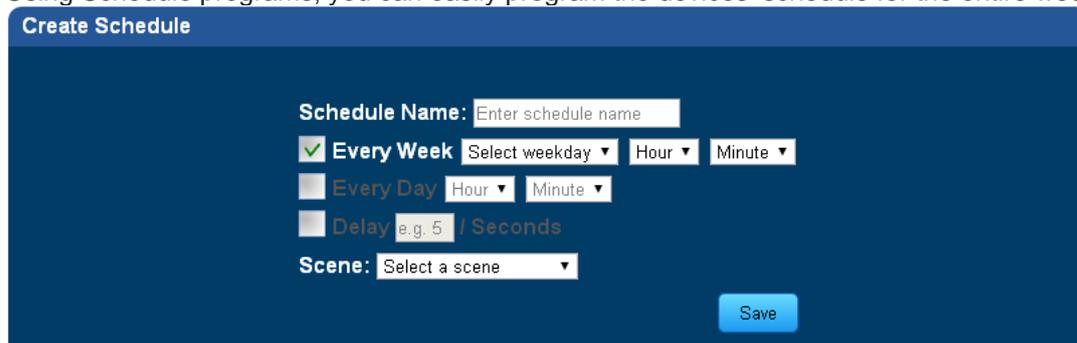


You can create a trigger when your device is selected, and set the mode and scene to “alarm” and “heater on”. Please refer to Appendix A or B to set the Trigger.

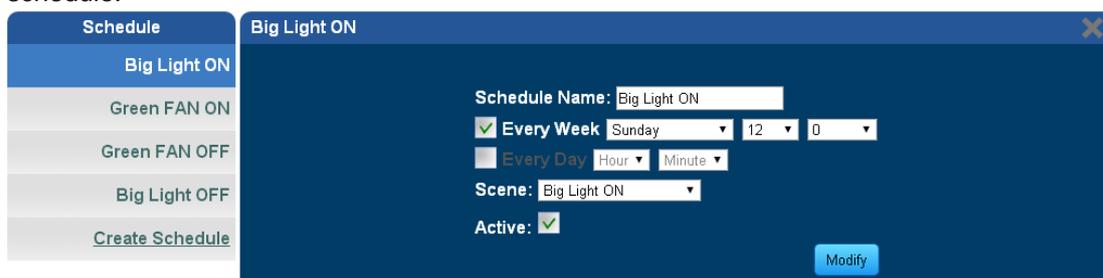


## 4.6 Schedule

Using Schedule programs, you can easily program the devices' schedule for the entire week.



You can control your devices according to schedule. Please refer to Appendix C to set the schedule.



## 4.7 Z-Wave

You can view logs, topology and included/excluded devices.

### Z-Wave Logs

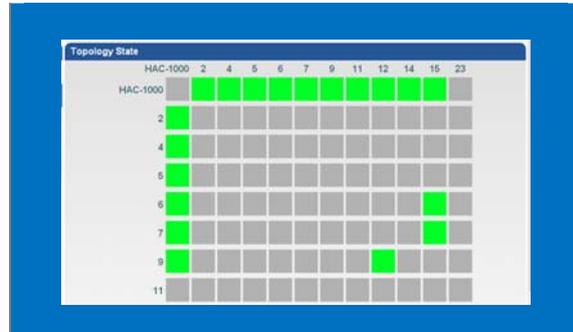
Z-Wave		Logs						
Z-Wave Alarm Log		1/5						
Topology		Time	Location	Node ID	Node Name	Event Type	Alarm Type	Alarm
Device Configuration		Fri Aug 7 17:56:41 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
Door Lock Security		Fri Aug 7 17:49:29 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
Version Information		Fri Aug 7 17:48:07 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
		Fri Aug 7 17:44:31 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
		Fri Aug 7 17:36:40 CST 2015	11F Stairs	2	PIR for 11F Stairs	Alarm	0x7	0:
		Fri Aug 7 17:17:26 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
		Fri Aug 7 17:15:00 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
		Fri Aug 7 17:09:20 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
		Fri Aug 7 17:05:17 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:
		Fri Aug 7 17:01:59 CST 2015	Small LAB	4	PIR for Small LAB(300)	Alarm	0x7	0:

ZWAVE Reset

### Topology of Z-Wave devices

This tab gives an overview of the network status and the availability of each device.

Green block means connected.  
Gray block means disconnected.





Note

Z-Wave uses a source-routed mesh network topology and has one or more master controllers that control routing and security. Devices communicate using intermediate nodes to actively route around household obstacles or radio dead spots. A message from Device A to Device C can be successfully delivered even if the two nodes are not within range, provided that a third node B can communicate with Nodes A and C. If the preferred route is unavailable, the message originator will attempt other routes until a path is found to the "C" node. Therefore a Z-Wave network can span much farther than the radio range of a single unit.

However, with several of these hops a delay may be introduced between the control command and the desired result. In order for Z-Wave units to be able to route messages, they cannot be in sleep mode. Therefore, it is not practical for a routing device to be battery-operated. Most battery-operated devices are not designed as repeater units, but as simple control devices.

### Included/Excluded Device

Z-Wave devices require a separate command and physical confirmation from the device itself (usually a button press) in order to be reset (or "excluded") and removed from a controller (HA control gateway).

**Settings**

- Z-Wave Alarm Log
- Topology
- Device Configuration**
- Door Lock Security
- Version Information

**Device configuration**

Include New Device
Exclude Device
Cancel Operation

### Removing a Device Already Connected

Your Hub will enter exclude mode automatically when you remove a Z-Wave device from the Things page. This means you can delete the device from there as you normally would, just be sure to execute the required button press or exclusion process as outlined by the device's user guide.

 Note	<p>In order to exclude a Z-Wave device, you must have the physical device with you and be within range of the SmartThings Hub.</p>
---	--

### Door Lock Setting

This section allows operating door locks.

Settings	Door Lock Security
 Z-Wave Alarm Log	Door Lock: <input type="text" value="Select a door lock to add pas:"/>
 Topology	
 Device Configuration	
 Door Lock Security	
 Version Information	

 Note	<p>Z-Wave locks give homeowners the ability to remotely manage access to their homes via most web-enabled computers or cell phones. With these locks homeowners can also receive text or email alerts when someone enters their home. Z-Wave locks can send emails and text messages so you know who is home, and it allows you to confirm the status of your system from anywhere. As long as you have a web-enabled cell phone or computer, Z-Wave locks let you stay in touch and in control.</p> <p>Z-Wave locks allows you to grant entry to your door remotely from your cell phone or computer, assign and manage a personal code for each user, and give every family member a code they can remember.</p>
---	--

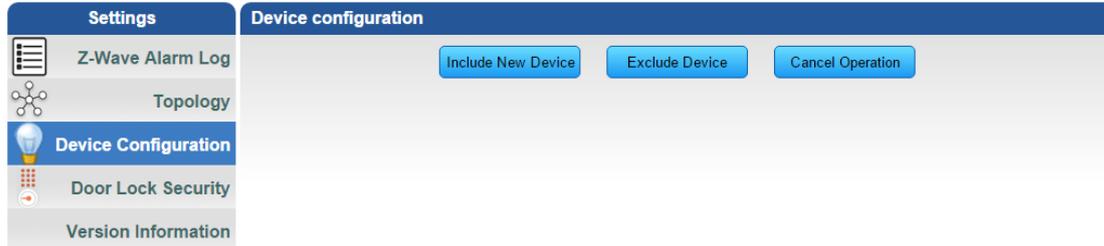
### Version Information

This information shows the software version in the device.

Settings	Version Information	
 Z-Wave Alarm Log		Version
 Topology	Gateway	0.5.0b
 Device Configuration		
 Door Lock Security		
 Version Information		

## Appendix A: Configuring Z-Wave Device via Web

Please refer to the following steps to add Z-Wave device via web.

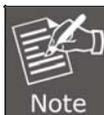


**Step 1.** Include a Z-Wave device via web.

- a) Go to "Z-Wave" and click "Device Configuration".
- b) Click "Include New Device" and the screen will appear with "Add Device: Waiting for a user action."
- c) Press the program switch button on the Z-Wave device to connect.



- d) If your device has successfully been added, it will show "Add Device: Command has been completed successfully".



If the device didn't add successfully, please place the device next to the gateway and try again.

**Step 2.** Set up the location and room for Z-Wave device via web.

a. Create rooms in your environment.

**Create a New Room**

Room Name:

[Change ICON](#) [Add](#)

b. Edit device.

**Modify Device**

Product Name: HZS-100 Wall-mount Motion Sensor  
 Device Name:   
 Room Name:

Alarm Icon [Change ICON](#)

[Configuration](#)  
[Group](#)  
[Detect And Remove](#)

[Save](#) [Cancel](#)

**Step 3.** Create a scene via web.

a. Click "Create Scene" and name new scene.

**Create Scene**

Scene Name:

[Add](#)

b. Select a device from this scene.

**Big light on**

Scene Name: **Big light on**

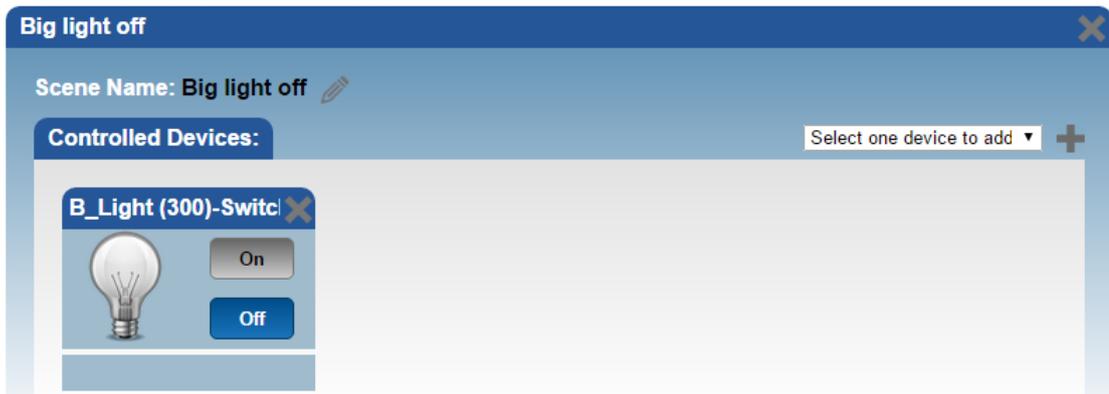
**Controlled Devices:**

- B\_Light (300)-Switch

Select one device to add

- Windows Sensor (500)-Mode
- Door Sensor (500)-Mode
- Flood Sensor (300)-Mode
- Flood Sensor (500)-Mode
- CO Detector (500)-Mode
- CO Detector (300)-Mode
- Strobe Alarm (300)-Switch
- Siren and Strobe Alarm (500)-Switch
- Siren and Strobe Alarm (500)-Mode
- TV (300)-Switch

- c. Select ON or OFF from this scene.

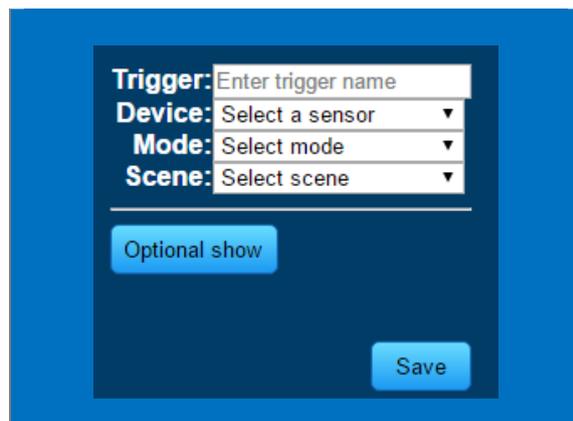


- d. You can click "RUN" to run this scene.



**Step 4. Create trigger via web.**

- Click "Create a Trigger" and name new trigger.
- Select a Z-Wave device for this trigger.
- Select when it triggers, it will alarm or bypass.
- Select when it triggers, it will run which scene.



After entering the time selected for the scene to trigger, tick “Save and send alarm notification”. Tick “Active” to enable this trigger.

Trigger	PIR Motion
PIR Motion	
3-in-1	
Windows	
Door	
CO (500)	
CO (300)	
Flood (300)	
Flood (500)	
Create Trigger	

**Trigger:** PIR Motion  
**Device:** PIR Motion (300) ▼  
**Mode:** Alarm ▼  
**Scene:** Siren on for door/winc ▼

---

Optional hide

After 5 / Seconds to run Siren off for ▼

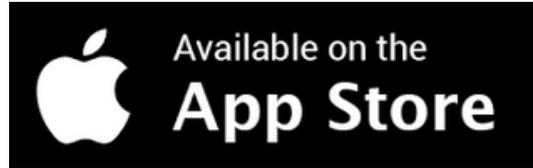
Save and send alarm notification:

Active:

Test Modify

## Appendix B: Configuring Z-Wave via Smart Phone

The HAC-1100 can be used on iOS and Android operating system. Cloud Home can be downloaded at Google Play store or app store.

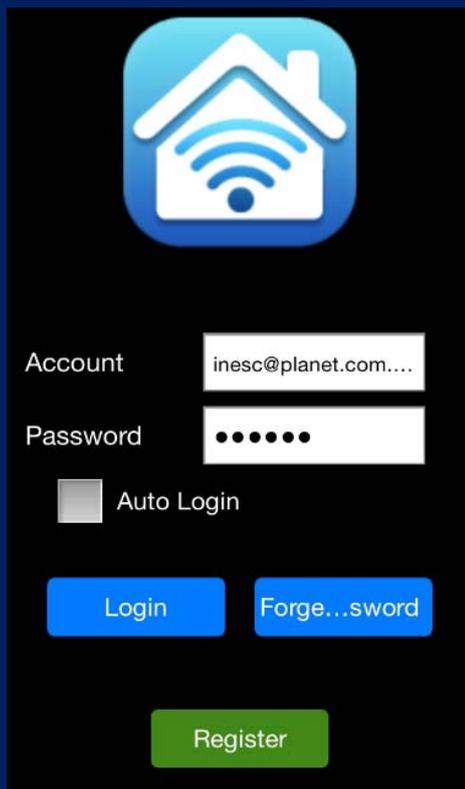


Please refer to the following steps to install Cloud Home app and add Z-Wave device via smart phone.

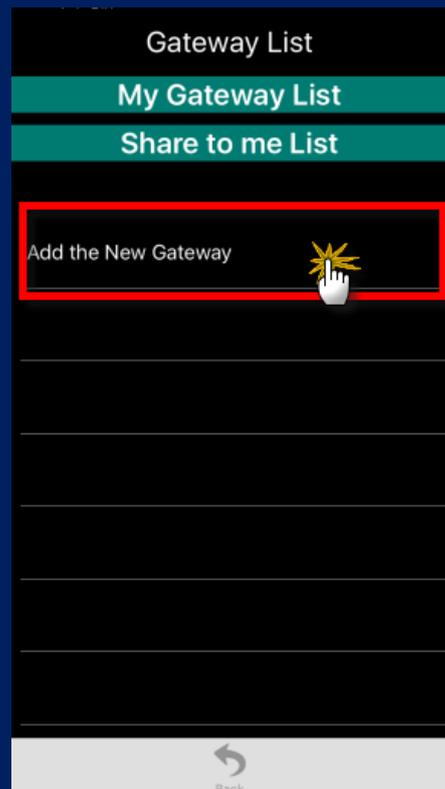
 Note	Before using Cloud Home app, please make sure your smart phone and your HAC-1000 are in the same subnet(connected to the same Wi-Fi router) so that you can find gateway.
---	---

**Step 1.** Include a Z-Wave device via smart phone (Android/iOS).

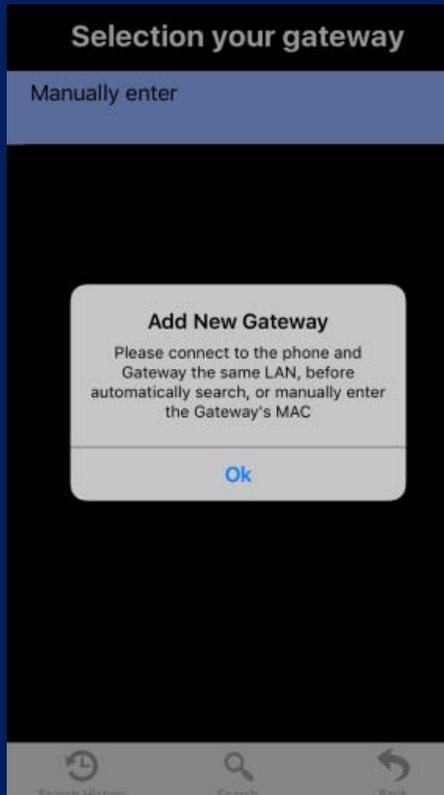
a. Register a user account.



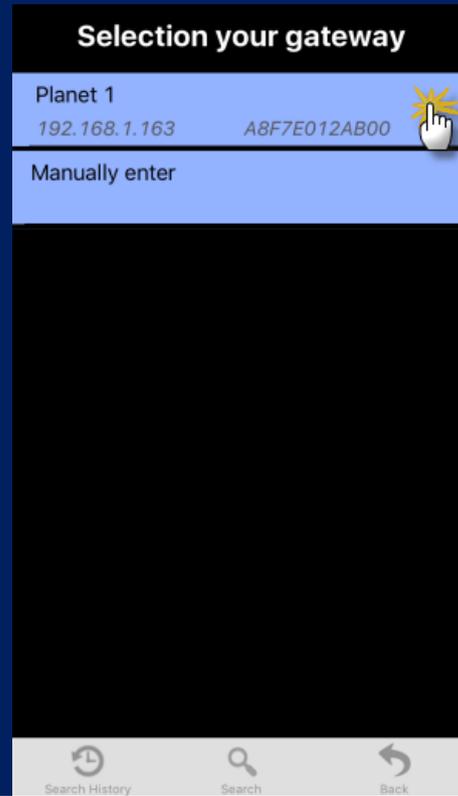
b. Add a new gateway



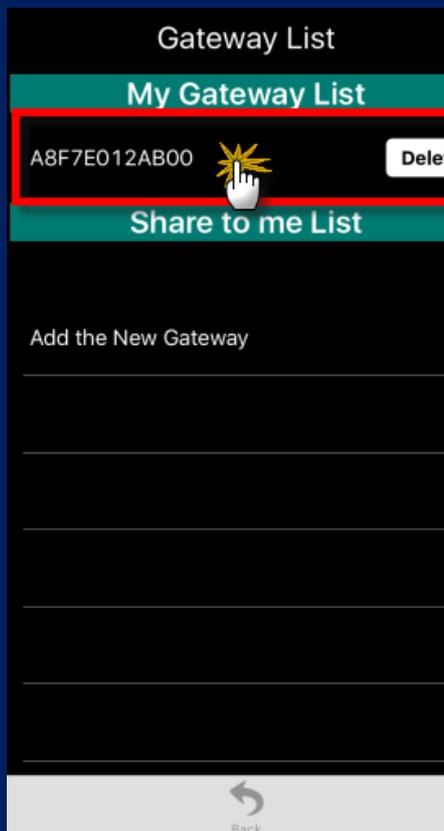
- c. Make sure your smart phone and gateway are in the same LAN.



- d. Find the gateway.



- e. Click the gateway to login.



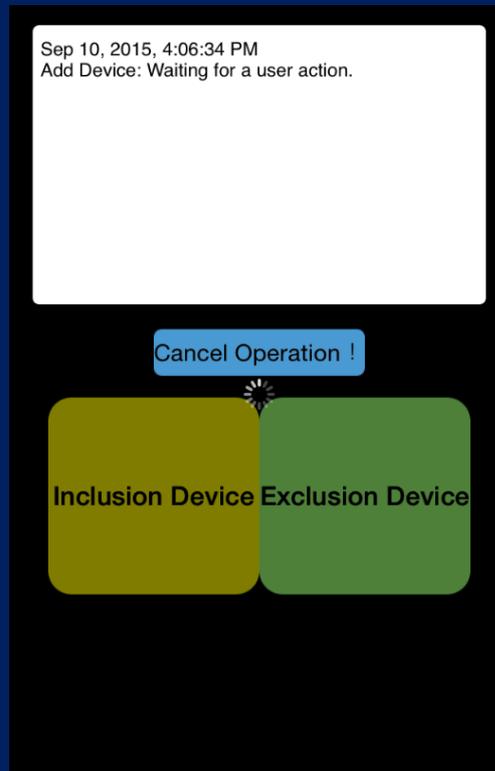
- f. Setting.



g. Inclusion/Exclusion



h. Click Inclusion to add device.



i. HZS-100: Use a paper clip or pin to press the program hole on the back of the HZS-100 for 3 times within 3 seconds to be included.



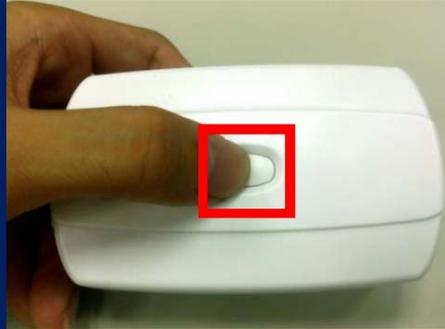
j. HZS-200: Press the program button of the HZS-200 for 3 times within 3 seconds to be included.



- k. HZS-300: Press the program button for 3 times within 3 seconds to be included.

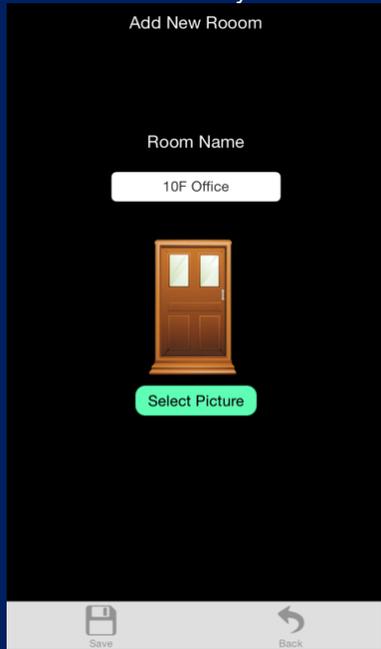


- l. HZS-530 Series: Press the program switch button 3 times within 3 seconds on the Z-Wave device to connect.

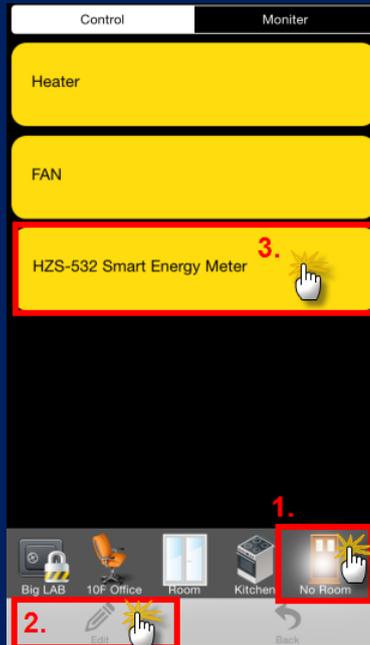


**Step 2.** Set up the location and room for Z-Wave device.

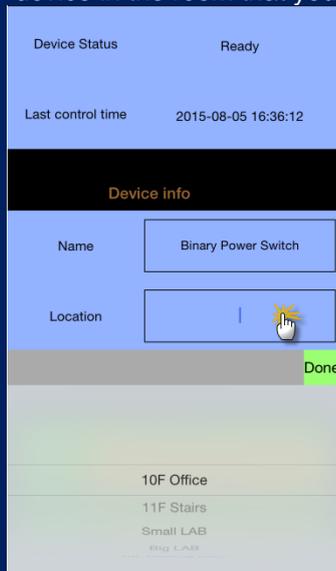
a. Create rooms in your environment.



b. Click "No Room" and will show the device. And place the new devices in a room.



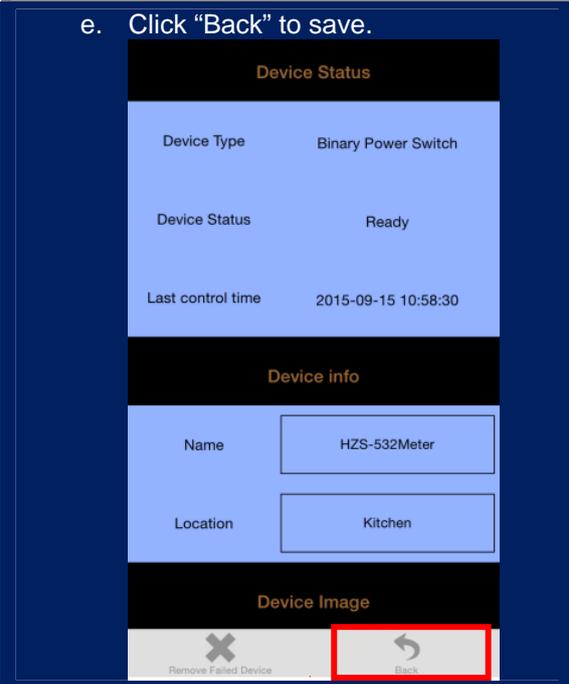
c. Select "Name" to name this device and select "Location" to place this device in the room that you created.



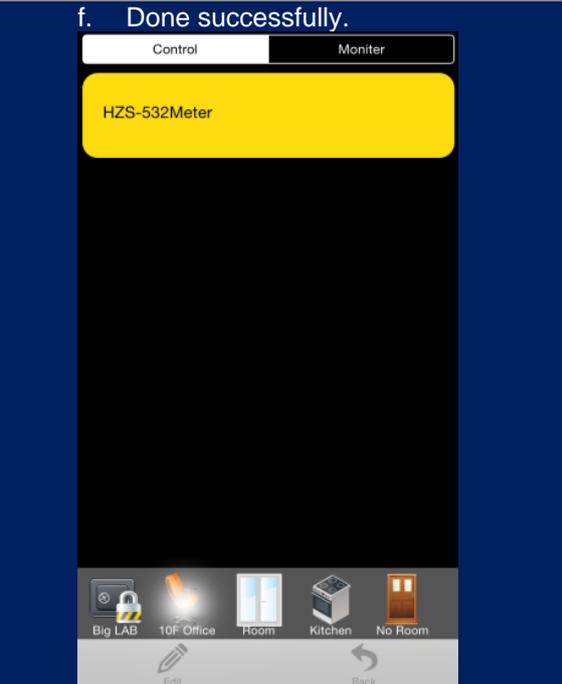
d. Select Picture for you Z-Wave device.



e. Click "Back" to save.



f. Done successfully.

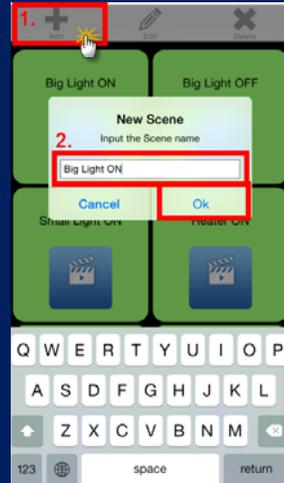


**Step 3. Create a scene via smart phone.**

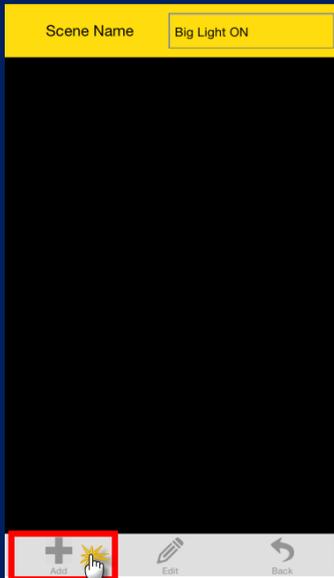
a. Click "Add" and name a new scene.



b. Click "Add" to add a Z-Wave device.



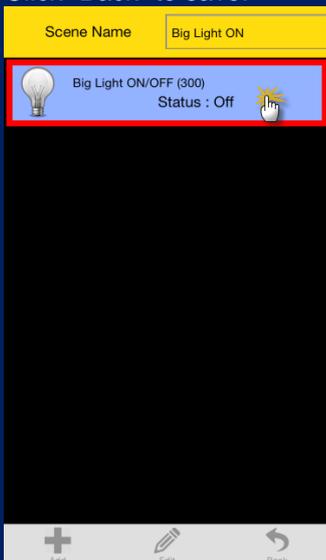
c. Select a Z-Wave device.



d. Click ON or OFF for the device you select.



e. Click "Back" to save.



f. Done successfully.



**Step 4. Create Trigger via smart phone.**

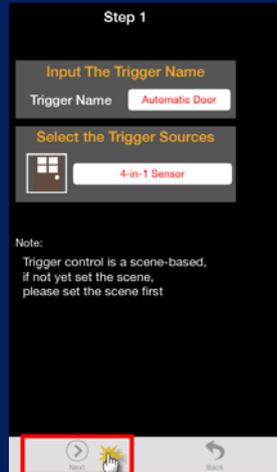
a. Click "Add".



b. Name this new Trigger.



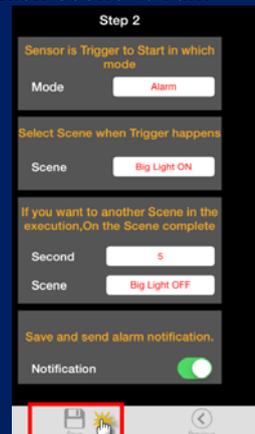
c. Select the Z-Wave device and click next.



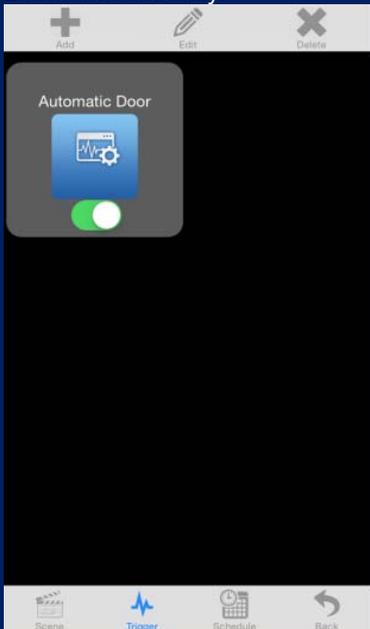
d. Select a mode for a Z-Wave device.

e. Select a scene.

f. Select the time for the trigger and which scene to run.



g. Done successfully.



h. If you enable Save and send alarm notification, when it triggers, it will have a log. You can check this in Notification History.



# Appendix C: Configuring the Schedule of Z-Wave Device

## A. Create schedule via web

**Step 1.** Click “Create Schedule” and name a new schedule.

**Step 2.** Select the day of a week and time of a day.

**Step 3.** Select a scene when the time set is up.

## B. Create schedule via smart phone

a. Click “Add”.



b. Name this new Schedule.

c. Select a schedule. (Week, Day or Once)

d. Select a scene and then click Save.



## Appendix D: Troubleshooting & Frequently Asked Questions

Features	
Control gateway connects to router via wireless	No, the antenna of control gateway is for Z-Wave device and cannot connect to router via wireless.
This difference between Z-Wave and ZigBee	<ul style="list-style-type: none"> <li>● The frequency is different between Z-Wave and ZigBee. ZigBee is 2.4GHz and Z-Wave is about 900MHz.</li> <li>● The outdoor distance is different. ZigBee is 10~75 meters and Z-Wave is about 30 meters.</li> </ul>
Network Settings	
The network cabling is required for the device.	The device uses Category 5 UTP cable allowing 10 and/or 100 BASE-T networking.
The device will be installed and work if a firewall exists on the network.	If a firewall exists on the network, port 80 is open for ordinary data communication. The HTTP port needs to be opened on the firewall or NAT router.
The username and password for the first time or after factory default reset	Username = <b>admin</b> ; password = <b>admin</b> . Note that it's all case sensitivity.
Forgot the username and password	Follow the steps below: (1) After powering on the control gateway, press the button on the control gateway for 10 seconds and then release the reset button. (2) It will take around 30 seconds to reboot the control gateway. (4) Re-login the control gateway using the default IP ( <a href="http://192.168.0.253">http://192.168.0.253</a> ), and entering "admin" for both username and password.
Forgot the IP address of the device.	Check IP address of device by using the Smart Discovery program or by UPnP Discovery or set the device to default by the Reset button.
Smart Discovery program cannot find the device.	<ul style="list-style-type: none"> <li>● Re-power the device if the unit cannot be found within 1 minute.</li> <li>● Check whether the RJ45 cable is connected to switch or router.</li> <li>● If you choose PPPoE for the connection type, please be sure your PPPoE is with static IP. The IP of control gateway needs to be set in the control pad. If it is a dynamic IP or when IP is changed, control pad will not communicate with control gateway anymore. And it is the same with DHCP.</li> </ul>
Internet Explorer does not seem to work well with the device	We suggest Google Chrome 44.0 or later version for this device.
Z-Wave Device Installation	
Cannot add Z-Wave device with NAT control gateway	<ul style="list-style-type: none"> <li>● Please adjust the distance between Z-Wave device and gateway by shortening the distance, and try it again.</li> </ul>

	<ul style="list-style-type: none"><li>• Please install the control gateway at the center of Z-Wave devices.</li></ul>
Z-Wave device is dead	There is detection in control gateway. When Z-Wave device goes to sleep or gets disconnected with control gateway, you can press the button to awake the Z-Wave device. (Only for without battery-powered devices)