

# User's Manual

## Z-Wave 4-in-1 Multi Sensor

▶ HZS-300E/HZS-300A



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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 Ceiling-mount Smoke Detector  
Model: HZS-300  
Rev: 1.00 (October, 2015)  
Part No. EM-HZS-300 Series\_v1.0.doc

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# Chapter 1. Product Introduction

## 1.1 Package Contents

The package should contain the following:

- 4-in-1 Sensor x 1
- Quick Installation Guide x 1
- AAA Battery x 2
- Accessory Bag x 1



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

## 1.2 Overview

### Home Automation and Smart Home Control

The HZS (Z-Wave Sensing Device) series of PLANET Home Automation product family, based on Z-Wave technology, provides the advanced security system that protects your home and family 24/7. Easy operation and flexible configuration are the attractive features of our system; the simple one-touch button lets you program your regular settings according to your preference and operation mode. Worked with PLANET HAC-1000 Z-Wave Home Automation Control Gateway, you get the all-round and reliable home security services that we offer. Our full range of product lines ensure that you get all the devices you need for your home security system.



### Safeguarding Homes Conveniently via the Multi-functional Sensor

PLANET HZS-300, a Z-Wave 4-in-1 Multi Sensor, has four sensors integrated into one device, thus enabling you to monitor the security of doors and windows, humidifiers, lightings, and thermostats of your home at site or remotely. The HZS-300 sends Z-Wave signal to the user when someone is prying a door or window open,

or there is a change in humidity, luminosity and temperature. It not only helps to protect homes, offices and other establishments from theft, but also helps to keep humidity, luminosity and temperature in these places within their ideal range.



#### **Mini Design for Easy Installation**

As the HZS-300 Z-Wave sensor comes in lightweight and compact size, it can be installed on any door and window in less than 60 seconds. It is also hardly visible to intruders as its size is miniature.



### Getting Started is as Easy as 1-2-3

1. Via the Cloud Home App (including Home Automation Controller Pad and Control Gateway): Press Inclusion/Exclusion to include/exclude Z-Wave device.
2. On the Z-Wave device: Press the Pair button to establish a connection with the control gateway.
3. Users can enjoy and manage Z-Wave network right away.



## 1.3 Specifications

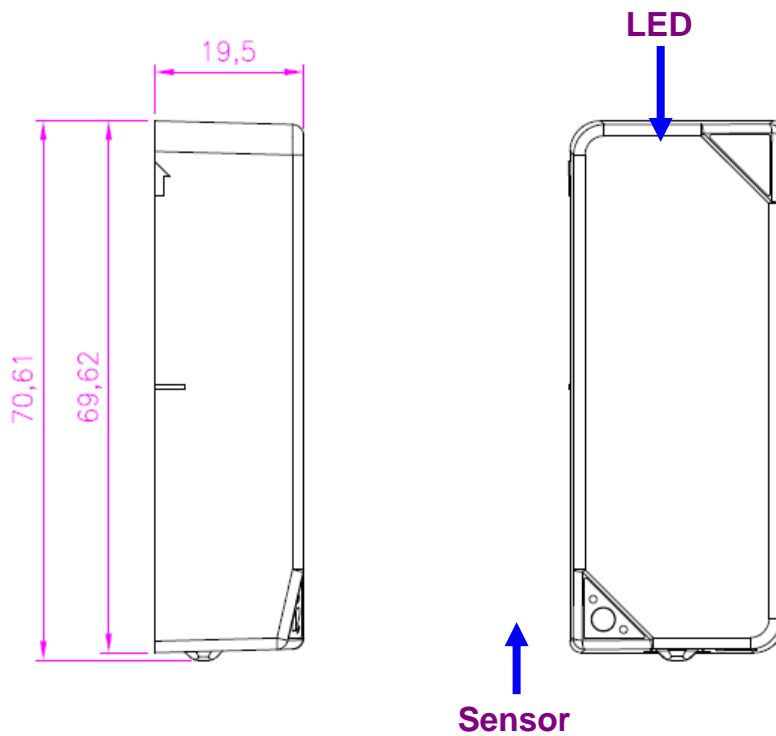
Product	HZS-300A	HZS-300E
<b>Feature Specifications</b>		
<b>Z-Wave Frequency</b>	America: 908.42MHz	Europe: 868.42MHz
<b>Sensor</b>	Door and window Illumination Temperature Humidity	
<b>Temperature Detection Range</b>	-40 ~ 105° C	
<b>Illumination Range</b>	Photoresistor, 0V~1.148V (0%~100%)	
<b>Humidity Range</b>	0%~100%	
<b>LED Indicators</b>	Opening/Closing the door/window Tamper switch Temperature change	
<b>Operating Range</b>	Up to 30 meters in open space	
<b>Installation</b>	Wall mount, indoor use only	
<b>Hardware Specifications</b>		
<b>Power Requirements</b>	AAA battery, 1.5V	
<b>Operating Temperature</b>	-15 ~ 60 degrees C	
<b>Operating Humidity</b>	0 ~ 95% (non-condensing)	
<b>Weight</b>	40g	
<b>Dimensions (W x D x H)</b>	69 x 28 x 19 mm	
<b>Emission</b>	CE, FCC	

## Chapter 2. Hardware Interface

<b>Model</b>	HZS-300E/HZS-300A
<b>Dimensions (W x D x H)</b>	69 x 28 x 19 mm
<b>Weight</b>	40g (gross weight)

➤ **Front Panel**

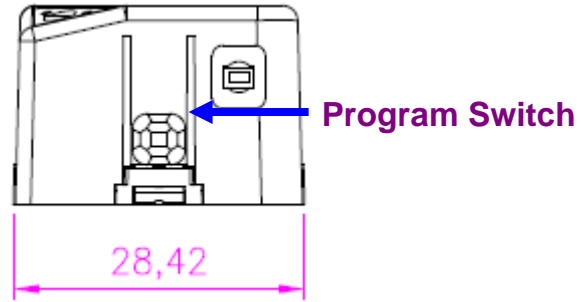
### LED/Test/Program Switch



Interface	Description											
<b>LED</b>	Opening/Closing the door/window Tamper switch Temperature changed											
	<table border="1"> <thead> <tr> <th>Temperature</th> <th>LED Color</th> </tr> </thead> <tbody> <tr> <td>Under 15°C</td> <td>Green</td> </tr> <tr> <td>15~23°C</td> <td>Blue</td> </tr> <tr> <td>23~28°C</td> <td>Yellow</td> </tr> <tr> <td>28~36°C</td> <td>Orange</td> </tr> <tr> <td>Over 36°C</td> <td>Red</td> </tr> </tbody> </table> <p>*For more details on indicator, please refer to HZS-300 user manual.*</p>	Temperature	LED Color	Under 15°C	Green	15~23°C	Blue	23~28°C	Yellow	28~36°C	Orange	Over 36°C
Temperature	LED Color											
Under 15°C	Green											
15~23°C	Blue											
23~28°C	Yellow											
28~36°C	Orange											
Over 36°C	Red											
<b>Sensor</b>	The sensor is for illumination detection.											



➤ **Bottom**



## Chapter 3. Z-Wave Device Setting

### 3.1 Configuring Z-Wave Device via HAC-1000

Please refer to the following steps to add Z-Wave device via HAC-1000 web.

1. The default username and password are both admin.

#### Authorization Required


Please enter your username and password.

Username

Password

Powered by PLANET / HAC-1000 Uranus 0.5.4

2. Click **Z-Wave**.



**Status**

**System**

Model	PLANET HAC-1000 Home Automation Control Gateway
Firmware Version	HAC-1000 Uranus 0.5.4
Local Time	Fri Nov 6 16:31:18 2015
Uptime	0h 41m 50s
Load Average	0.35, 0.19, 0.23

3. Click **Z-Wave**.

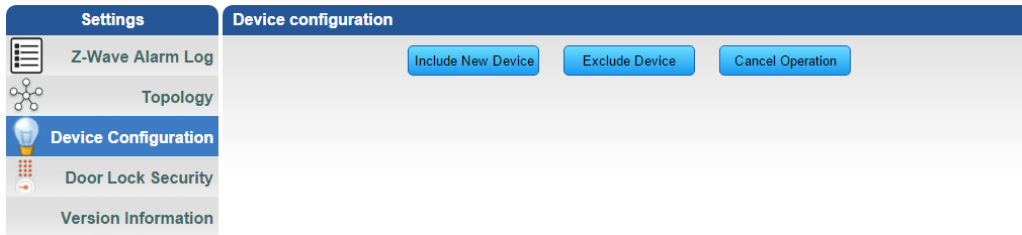


English  
15 Seconds   
Checking version...  
MAC ID: A8F7E001397

Home Room Device Camera Scene Trigger Schedule **Z-Wave** Report

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.

4. Click **Device Configuration**.



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

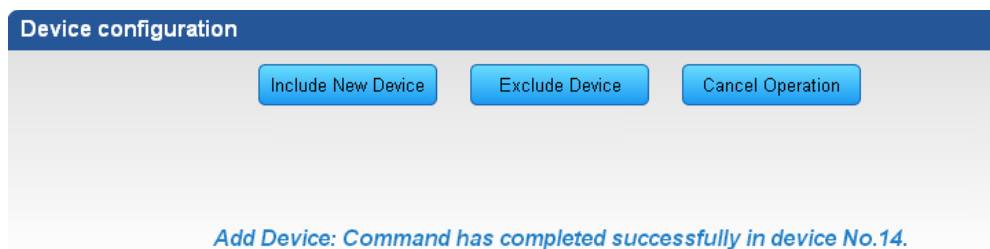
- a) Go to "Z-Wave" and click "Device Configuration".
- b) Click "Include New Device" and the screen will appear with "Add Device: Waiting for a user action."
- c) The distance between HZS-300 and HAC-1000 is suggested to be in one meter. Press the program switch of HZS-300 at least for 1 second to be included.




Include New Device



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

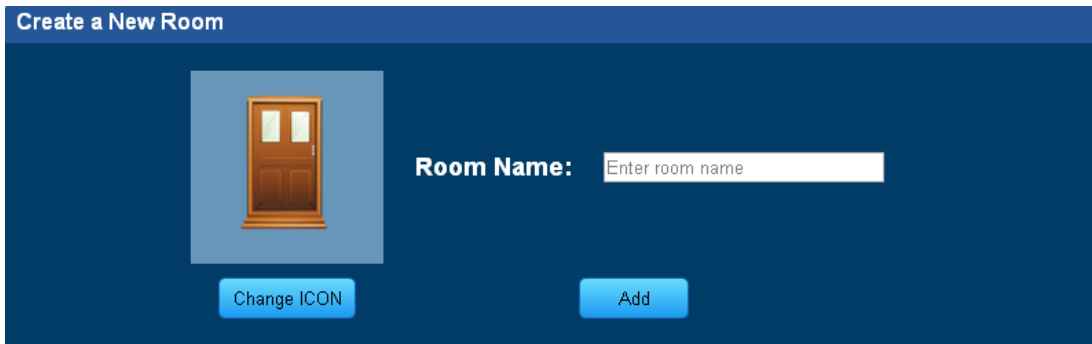




If the device didn't add successfully, please place the device next to the gateway and try again.

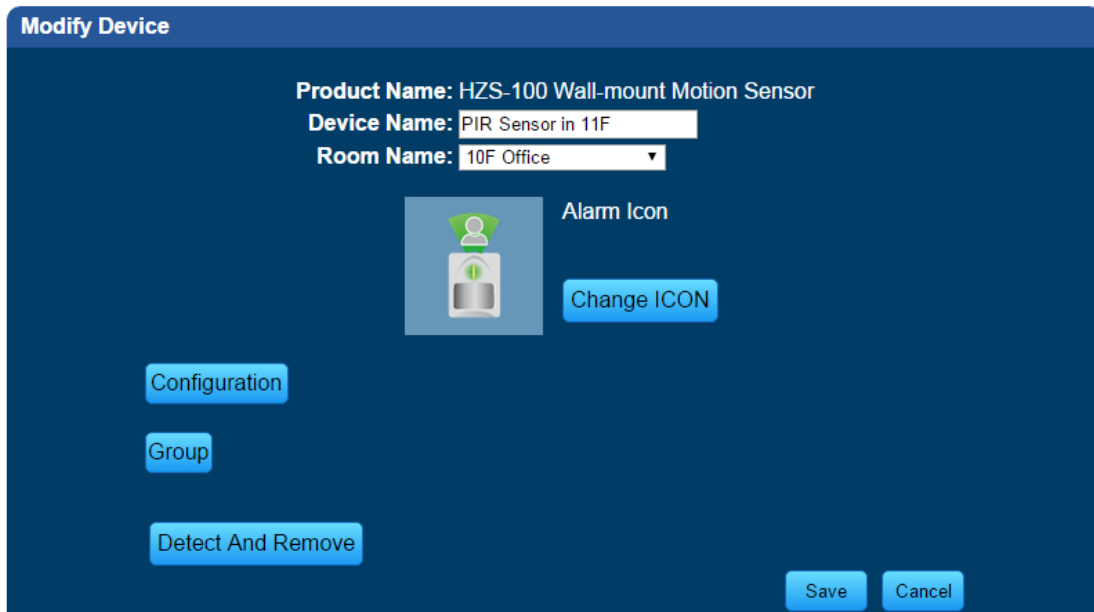
**Step 2.** Set up the location and room for Z-Wave device via HAC-1000 web.

- a. Create rooms in your environment.



The screenshot shows a web interface titled "Create a New Room". On the left, there is a square placeholder containing an icon of a wooden door. Below this icon is a blue button labeled "Change ICON". To the right of the icon, the text "Room Name:" is followed by a white text input field containing the placeholder text "Enter room name". Below the input field is a blue button labeled "Add".

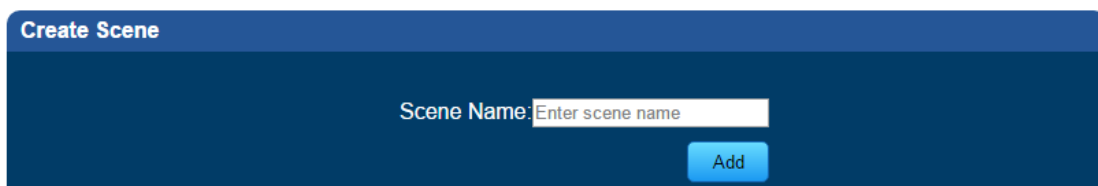
- b. Edit device.



The screenshot shows a web interface titled "Modify Device". At the top, it displays the following information: "Product Name: HZS-100 Wall-mount Motion Sensor", "Device Name: PIR Sensor in 11F" (in a text input field), and "Room Name: 10F Office" (in a dropdown menu). Below this information is a square placeholder containing an icon of a motion sensor with a green alarm symbol. To the right of the icon is the text "Alarm Icon" and a blue button labeled "Change ICON". At the bottom left, there are three blue buttons: "Configuration", "Group", and "Detect And Remove". At the bottom right, there are two blue buttons: "Save" and "Cancel".

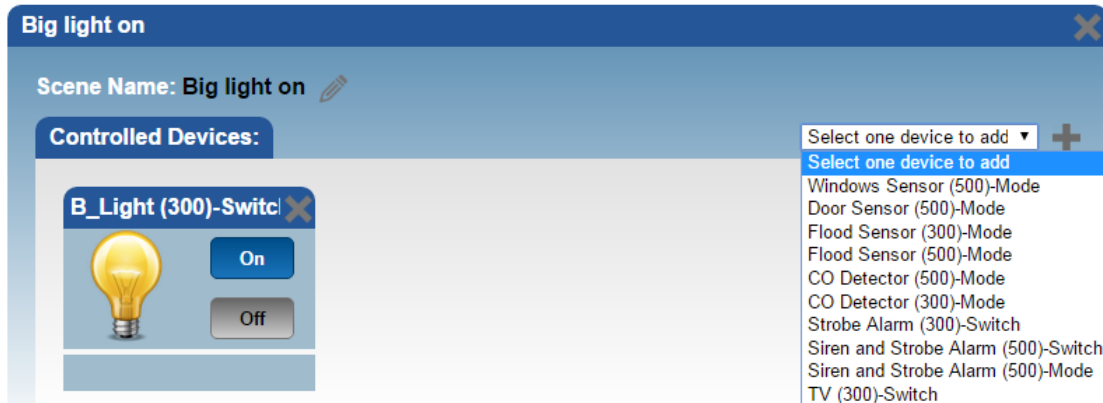
**Step 3.** Create a scene via web.

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

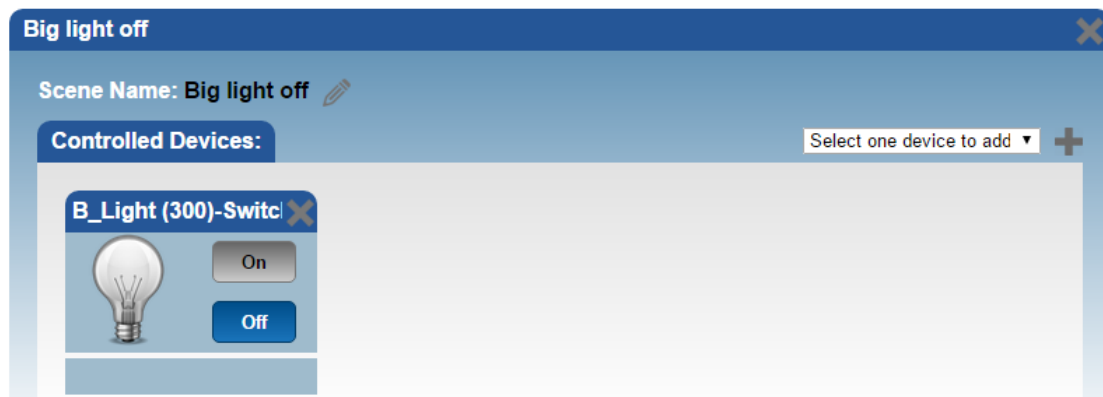


The screenshot shows a web interface titled "Create Scene". It features a white text input field for "Scene Name:" with the placeholder text "Enter scene name". Below the input field is a blue button labeled "Add".

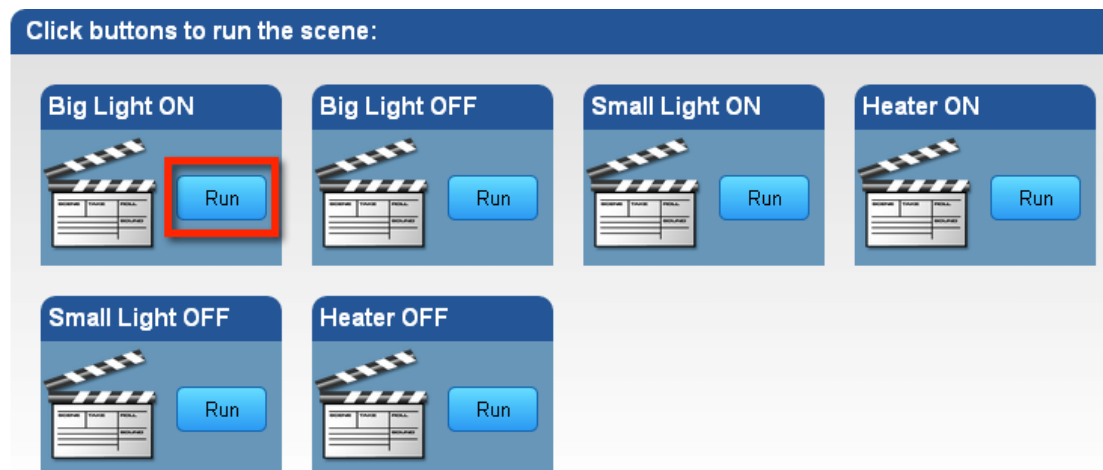
- b. Select a device from this scene.



- c. Select ON or OFF from this scene.

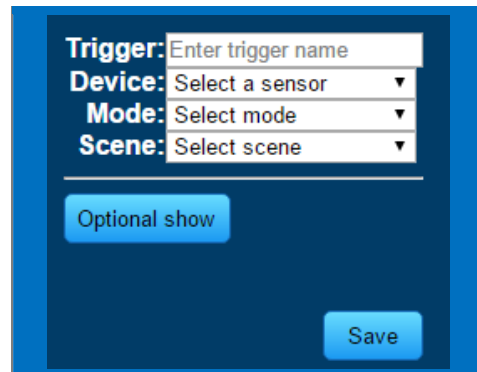


- d. You can click "RUN" to run this scene.

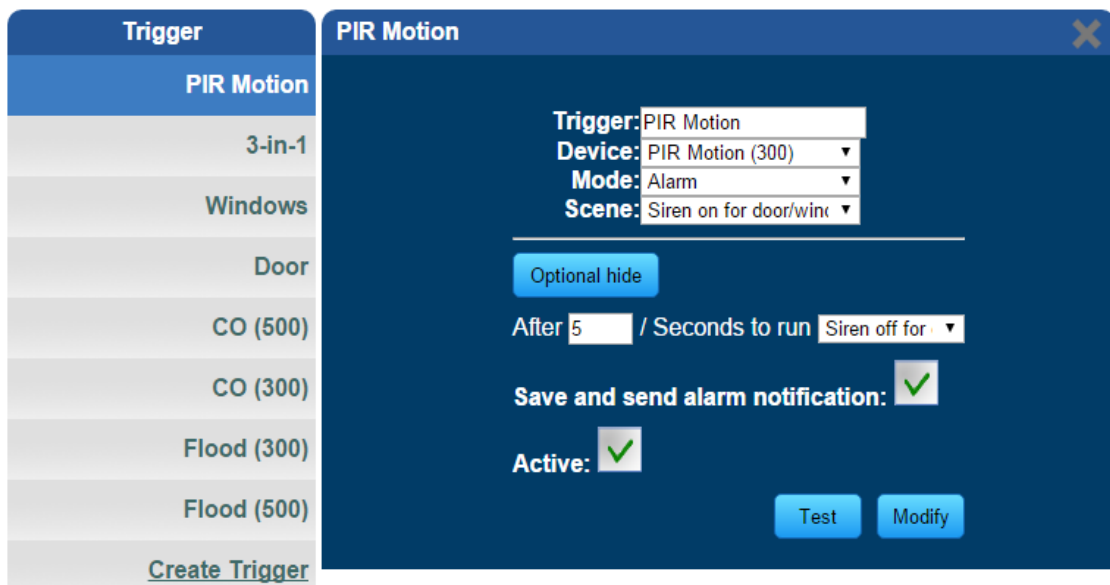


**Step 4.** Create trigger via web.

- 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.

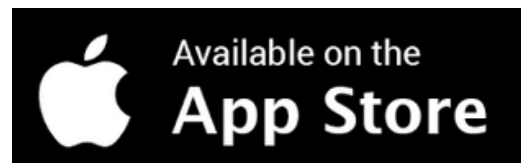


After entering the time selected for the scene to trigger, tick “**Save and send alarm notification**”. Tick “**Active**” to enable this trigger.



### 3.2 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.

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

**a. Register a user account.**

**b. Setting**

**c. Inclusion/Exclusion**

**d. Click Inclusion to add device.**

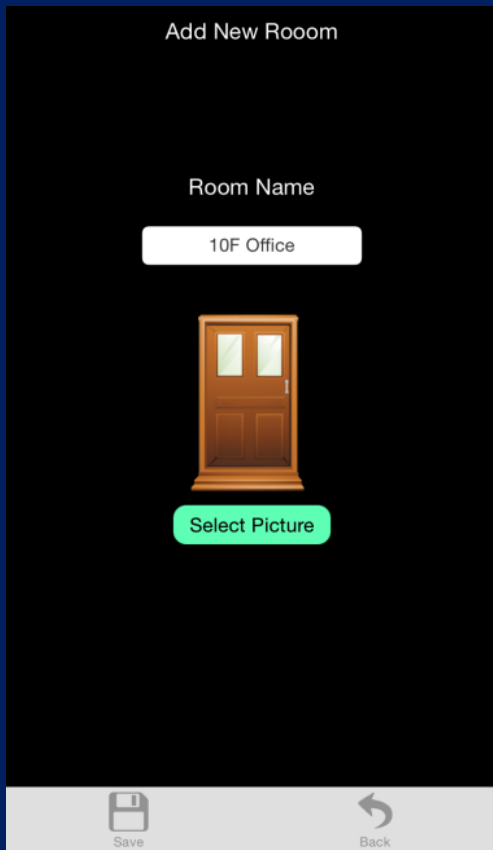
- e. The distance between HZS-300 and HAC-1000 is suggested to be in one meter. Press the program switch 3 times within 3 seconds to be included.



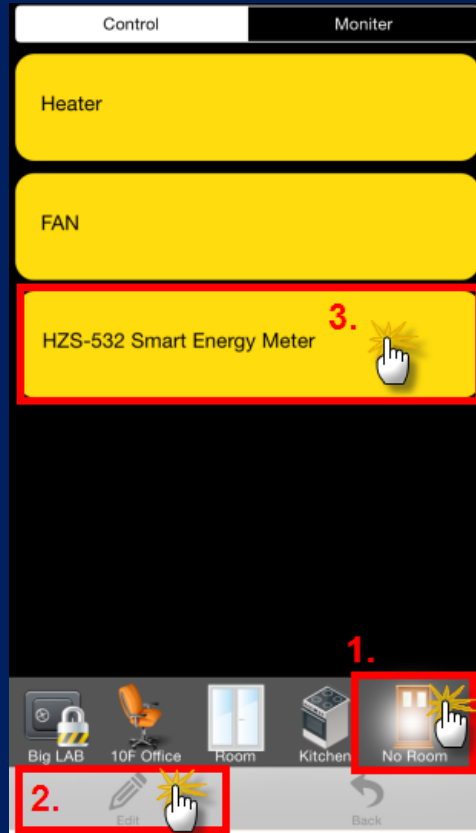


**Step 2.** Set up the location and room for Z-Wave device.

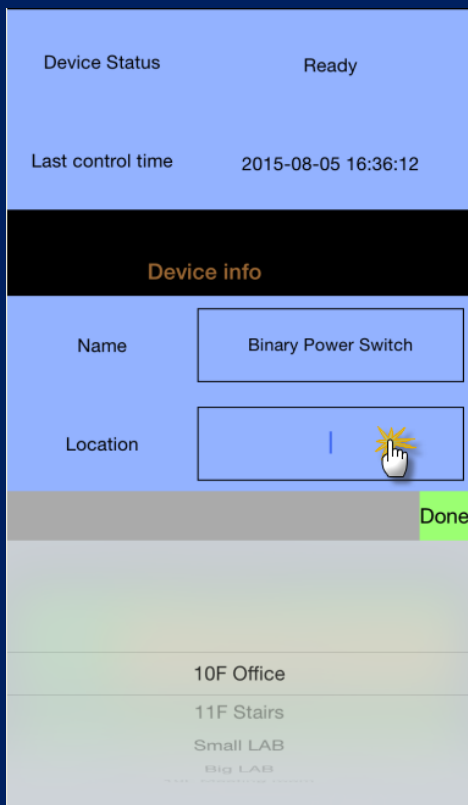
a. Create rooms in your environment.



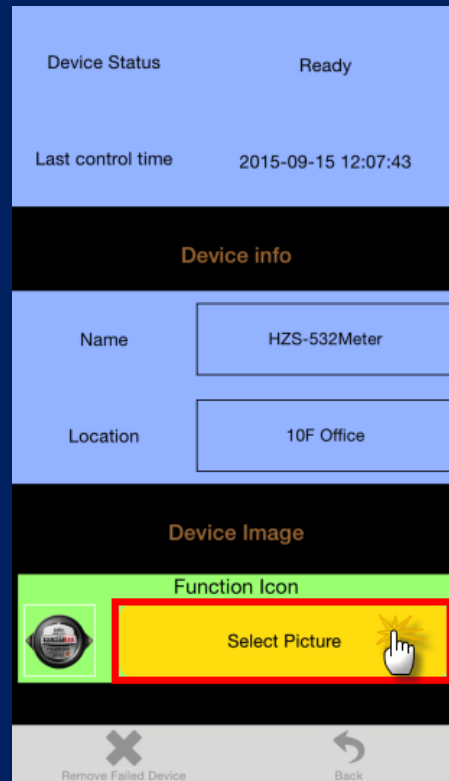
b. Click "No Room" to show the device. And place the new device in a room.




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



d. Select Picture for your Z-Wave device.



e. Click "Back" to save.



**Device Status**

Device Type	Binary Power Switch
Device Status	Ready
Last control time	2015-09-15 10:58:30

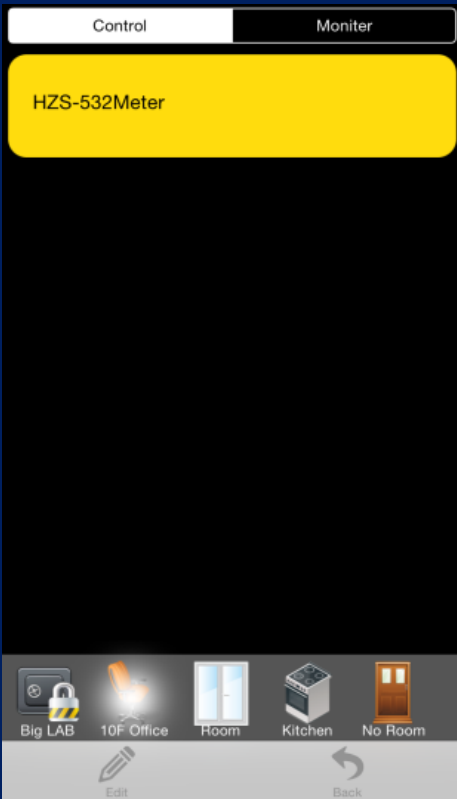
**Device info**

Name	HZS-532Meter
Location	Kitchen

**Device Image**

Remove Failed Device    Back

f. Done successfully.



Control    Monitor


HZS-532Meter

Big LAB    10F Office    Room    Kitchen    No Room

Edit    Back

**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.

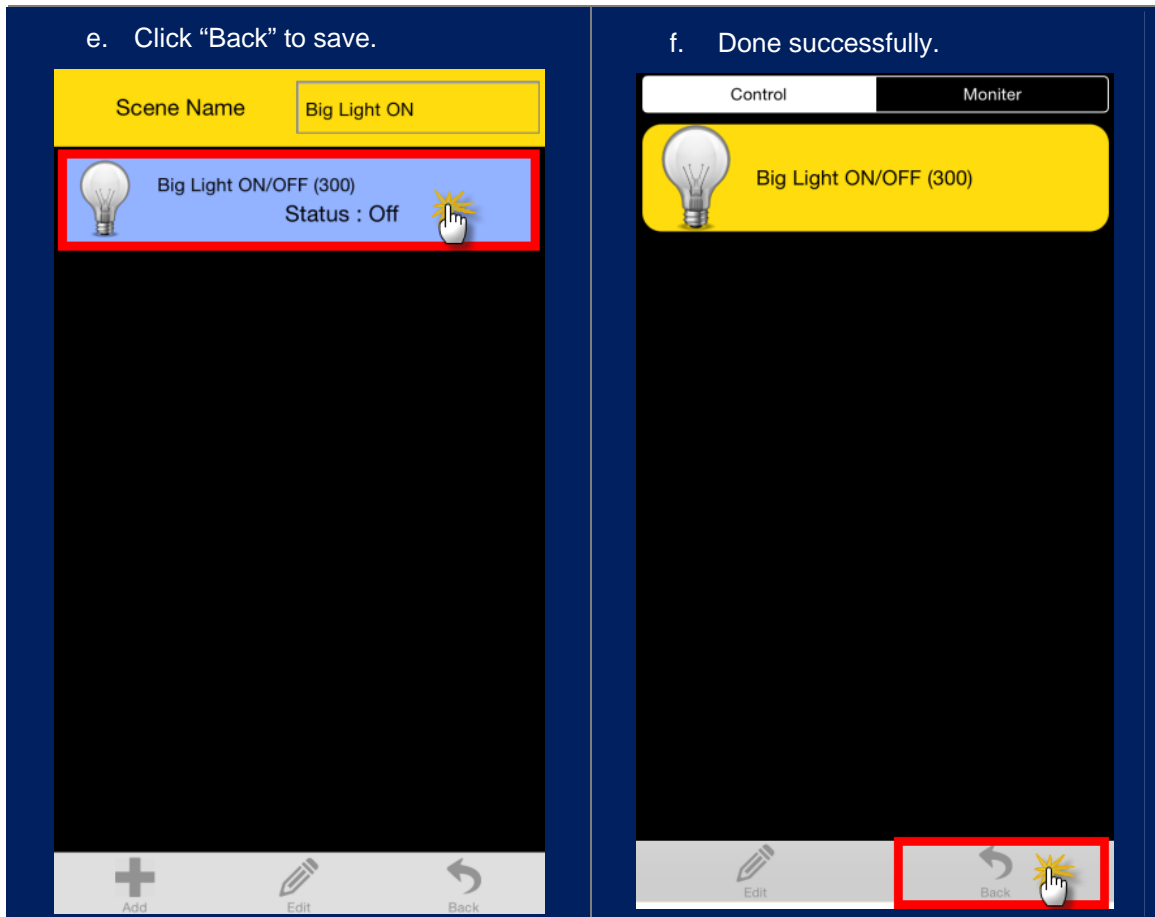


c. Select a Z-Wave device.



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





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

a. Click "Add".



b. Name this new Trigger.



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

**Step 1**

**Input The Trigger Name**

Trigger Name

**Select the Trigger Sources**

Note:  
Trigger control is a scene-based,  
if not yet set the scene,  
please set the scene first

Next
Back

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.

**Step 2**

**Sensor is Trigger to Start in which mode**

Mode

**Select Scene when Trigger happens**

Scene

**If you want to another Scene in the execution, On the Scene complete**

Second

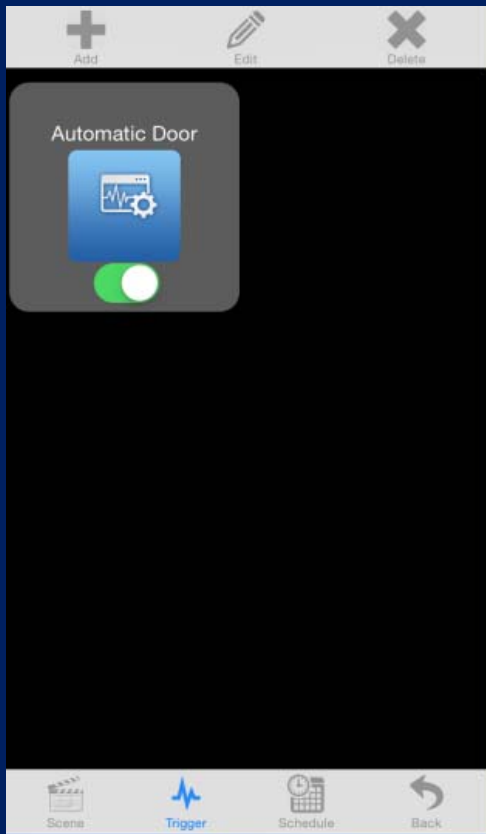
Scene

**Save and send alarm notification.**

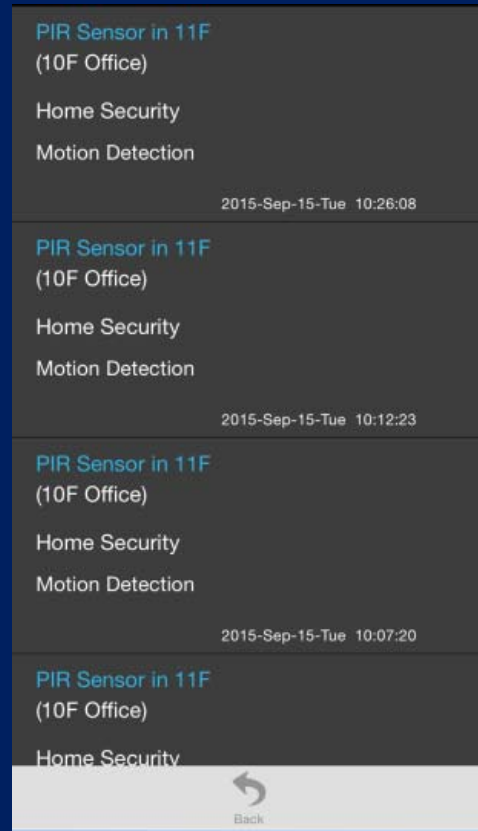
Notification

Save
Previous

g. Done successfully.



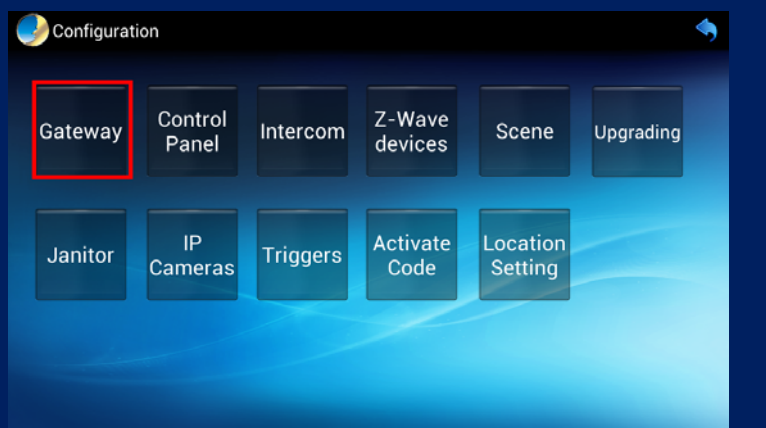
h. If you enable Save and send alarm notification, when it triggers, it will have a log. You can check this in Notification History.



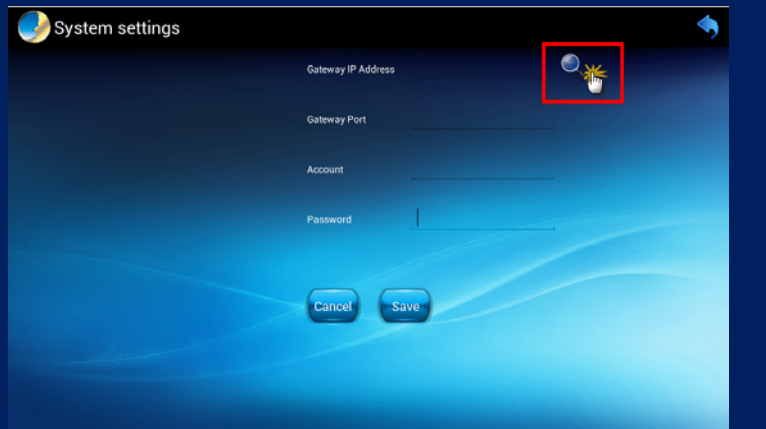
### 3.3 Configuring Z-Wave via HTS-1000P

Step 1. Fill out the IP of control gateway to connect with gateway.

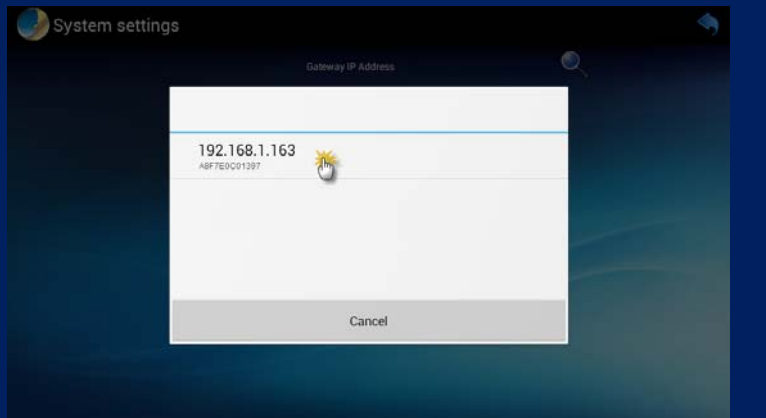
Click the "Gateway" button.



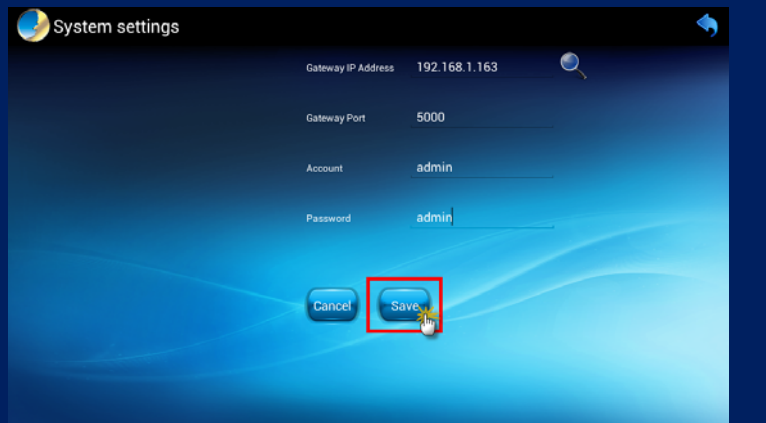
Click the magnifying glass to search the IP of gateway.



Control pad found an IP of gateway. Click the IP to join.



The default gateway port is 5000, and user name and password are both **admin**.

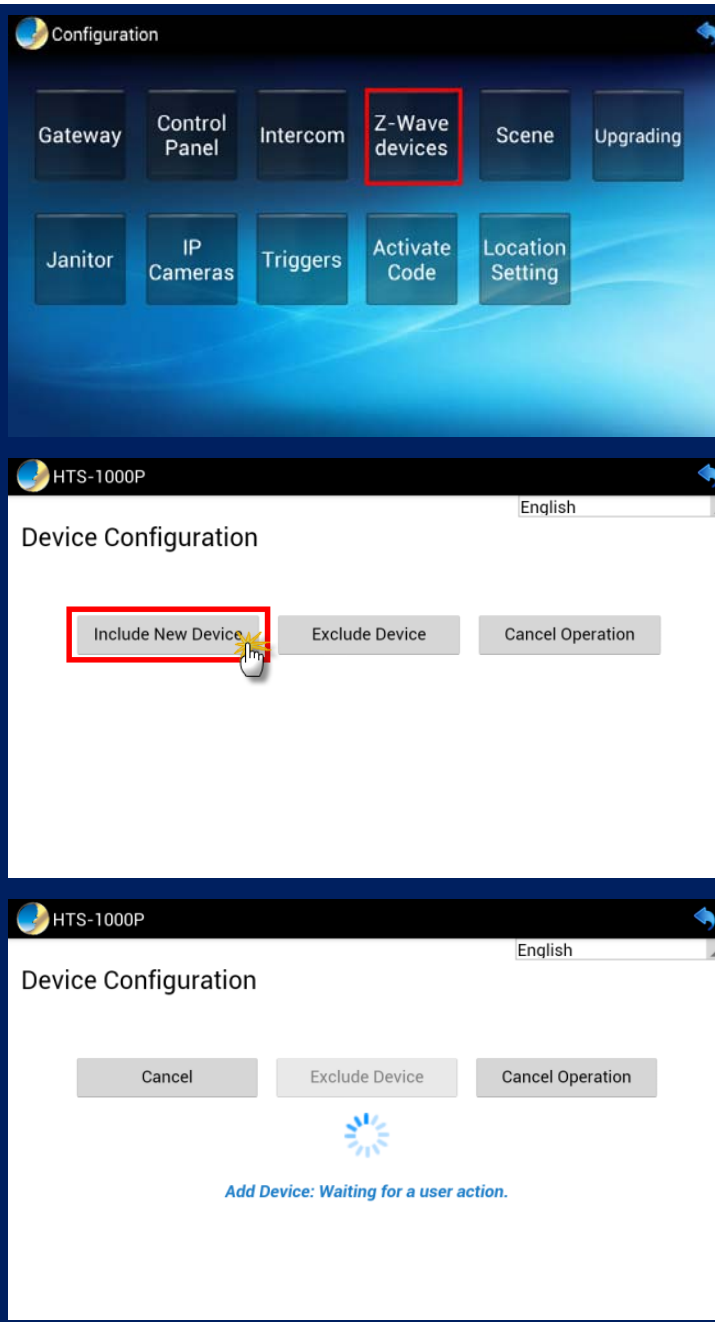


**Step 2.** Include a Z-Wave device via HTS-1000P.

Click the “Z-Wave devices” button to add Z-Wave devices to gateway.

Click the “Include New Device” button to add Z-Wave device.

When you see the message “Waiting for user action”, you can press the match button on Z-Wave devices.

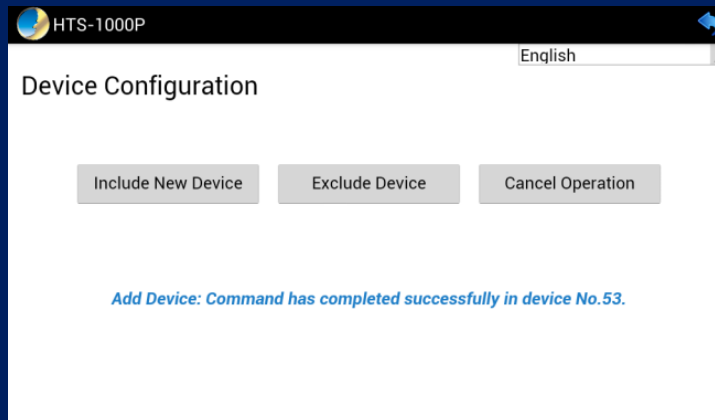




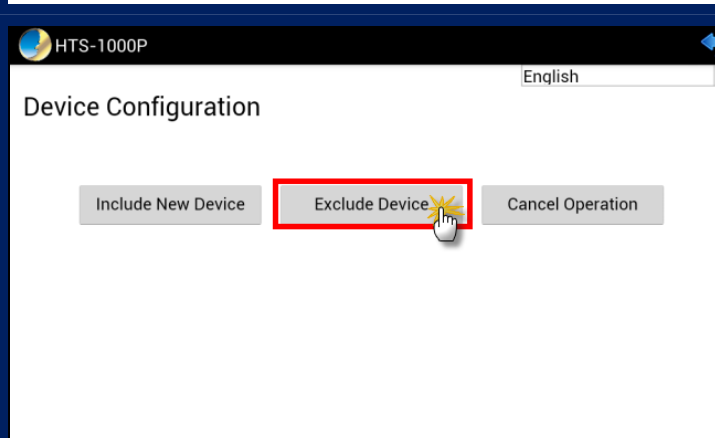
The distance between HZS-300 and HAC-1000 is suggested to be in one meter. Press the program switch 3 times within 3 seconds to be included.



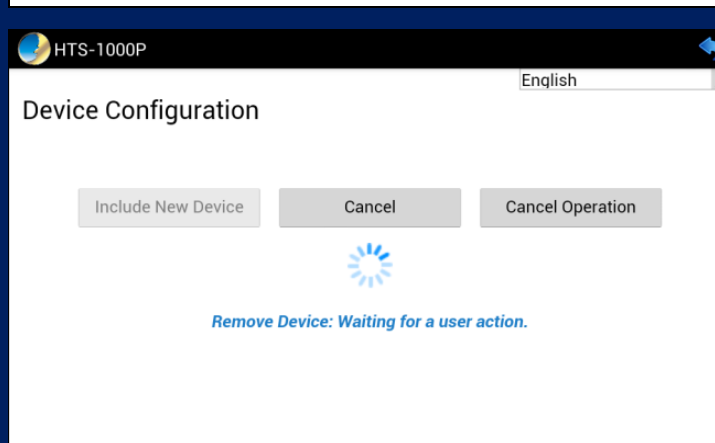
If a device is added successfully, it will show the message: Command has completed successfully in device No. XX.






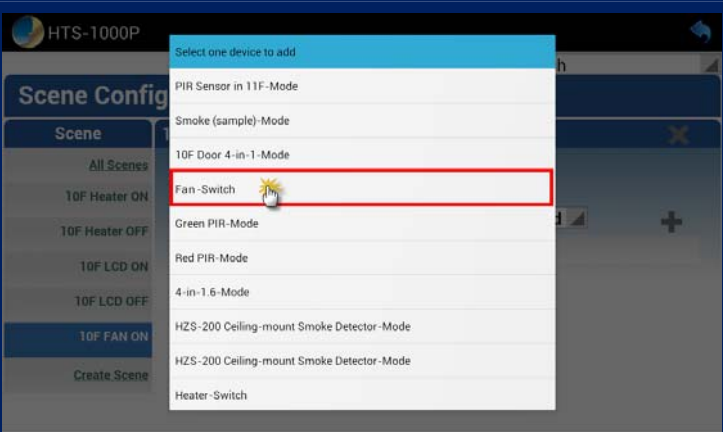
Click the "Exclude Device" button to exclude Z-Wave device.

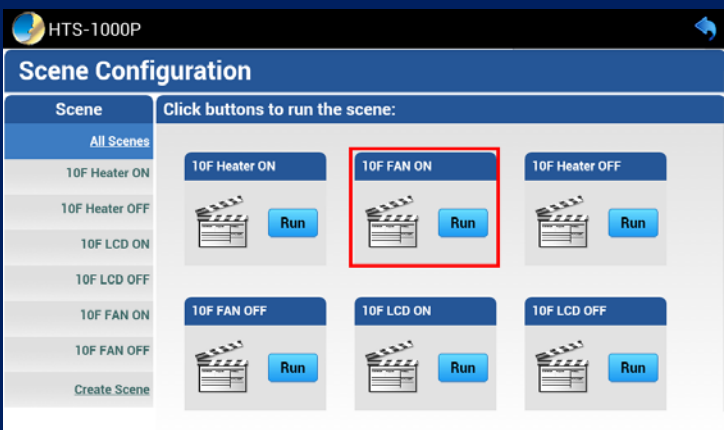


When you see the message "Waiting for user action", you can press the match button on Z-Wave devices to exclude device.



**Step 3.** After including Z-Wave devices in gateway, you can create different scenes with this function. You can set scenes to control your devices in **Scene** mode.

<p>Click the "Scene" button.</p>	
<p>Click "Create Scene" and name the new scene.</p>	
<p>Select one device to add to the device list.</p>	
<p>Select one device.</p>	

<p>Click the “Plus” button to add device.</p>	
<p>Select the status of device (ON or OFF).</p>	
<p>Click “All Scenes” to check the scene.</p>	

**Step 4.** In Trigger mode, the trigger time is set. An alarm notification is sent via sensor. If a sensor is not installed, this step can be skipped.

<p>Click the “Trigger” button.</p>	
------------------------------------	--------------------------------------------------------------------------------------

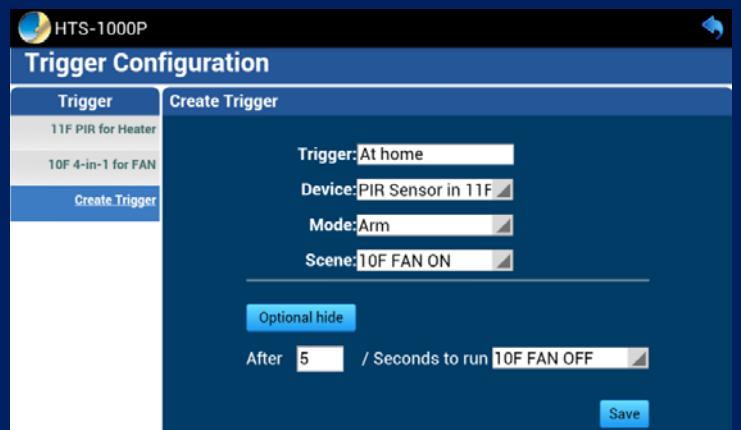
Click "Create Trigger".  
Trigger: Name this trigger.

**Device:** Select a Z-Wave device.

**Mode:** Select "Arm" to enable alarm.

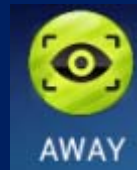
**Scene:** When it triggers, the fan will turn on.

**Optional:** After triggering for 5 seconds, the fan will turn off by itself.



Trigger	Create Trigger
11F PIR for Heater	Trigger: <input type="text" value="At home"/> Device: <input type="text" value="PIR Sensor in 11F"/> Mode: <input type="text" value="Arm"/> Scene: <input type="text" value="10F FAN ON"/> <input type="button" value="Optional hide"/> After <input type="text" value="5"/> / Seconds to run <input type="text" value="10F FAN OFF"/> <input type="button" value="Save"/>

Switch to "AWAY" to enable monitor mode.



When one of Z-Wave devices is triggered, control pad will alarm.

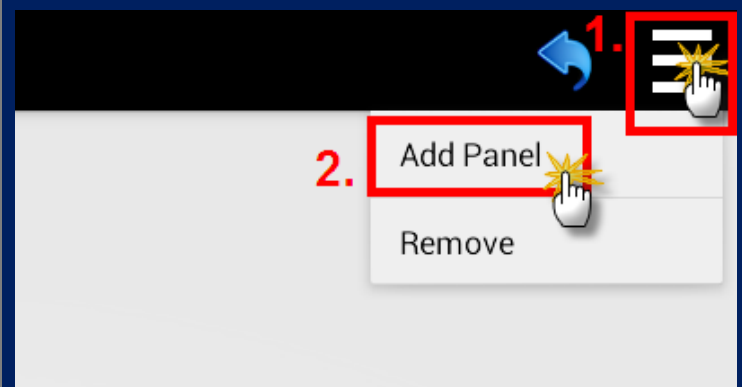


**Step 5.** After configuring this part, you can control Z-Wave devices and scenes via control pad.

Click the "Control Panel" button.



Click the three-line button on the upper right corner and click "Add Panel".




There are two types of panel that you can choose from.



Name the panel.



<p>Click and hold for two seconds to select the device or scene.</p>	
<p>Click on the Device field.</p>	
<p>Go back to the main page and click the "Control" button.</p>	
<p>You can control scenes and devices here.</p>	

## Appendix A: Troubleshooting & Frequently Asked Questions

Features	
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>
Z-Wave Device Installation	
How to reset the HZS-300 Series	Open the rear cover to send the Alarm Report and then press the program switch 10 times in 10 seconds to enable the HZS-300 to send the "Device Reset Locally" command and reset to the factory default.
Repeater Function	Only HZS-530 Series can extend the frequency range of Z-Wave. HZS-530 Series can act as a signal repeater to enhance the Z-Wave wireless communication range. For example, the HAC-1000 (Control gateway) is installed on the second floor to control over the HZS-300 (4-in-1 Sensor) on the first floor, but the Z-Wave frequency is weak. Thus, HZS-530 Series can be installed in between the second floor and the first floor to solve the problem.