Z WAVE
PLUS

Heimdall
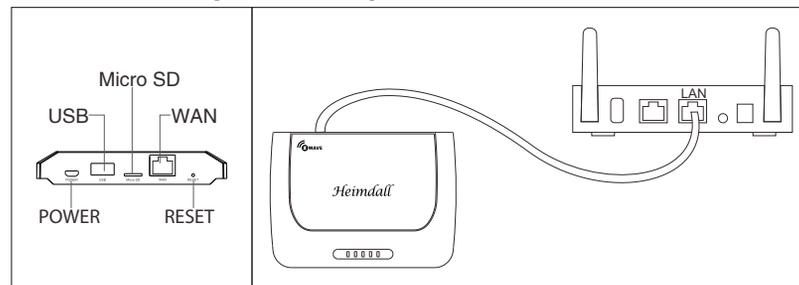Installation & Operation Manual

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Introduce:

This gateway is a Z-Wave™ enabled controller and security enabled Z-Wave plus product. Z-Wave™ enabled devices displaying the Z-Wave™ logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave™ enabled networks.
All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.
The Z-Wave protocol is an interoperable, wireless, RF-based communications technology designed specifically for control, monitoring and status reading applications in residential and light commercial environments. Mature, proven and broadly deployed. Z-Wave is by far the world market leader in wireless control, bringing affordable, reliable and easy-to-use 'smart' products to many millions of people in every aspect of daily life.
For a more complete look at Z-Wave technology for non technologists, and to learn more about Z-Wave's role as a key enabling technology for the Internet of Things and connected objects, please visit www.z-wave.com.

Product Description and Specification

Specification:	Package Content:
Protocol: Z-Wave™(Heimdall) Frequency Range: 865.2MHz (Heimdall-IN) 868.4MHz (Heimdall-EU) 868.4MHz (Heimdall-CN) 869.0MHz (Heimdall-RU) 908.4MHz (Heimdall-US) 922.5MHz (Heimdall-JP) Using Environments: indoor use Operating Temp.: 0°C~ 50°C (32°F~122°F) Relative Humidity:10% to 95%RH Input power: Micro USB port, DC 5V/1A Size: 124 x 90.5 x 22.2 mm	1pcs : Heimdall Gateway 1pcs : Installation & Operation Manual 1pcs : AC/DC Adapter(5V/1A) 1pcs : USB A to Micro USB Cable

icon and command classes (Device types and icons list)

Camera		Illumination	
CO		IR	
CO2		Meter	
Dimmer		PIR	
Door		Switch	
Doorlock		Roller shutter	
Humidity		Siren	
Flood		Temperature	
Glassbreak		Smoke	
Gateway		Unknown	
Repeater		Color control	

Gateway Z-Wave Supported Command Classes:

COMMAND_CLASS_ZWAVEPLUS_INFO
COMMAND_CLASS_VERSION
COMMAND_CLASS_MANUFACTURER_SPECIFIC
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_ASSOCIATION_GRP_INFO
COMMAND_CLASS_ASSOCIATION
COMMAND_CLASS_APPLICATION_STATUS
COMMAND_CLASS_CRC_16_ENCAP
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SECURITY

Gateway Z-Wave Controlled Command Classes:

COMMAND_CLASS_ASSOCIATION
COMMAND_CLASS_ASSOCIATION_GROUP_INFORMATION
COMMAND_CLASS_BASIC
COMMAND_CLASS_BATTERY
COMMAND_CLASS_SWITCH_BINARY
COMMAND_CLASS_SENSOR_BINARY
COMMAND_CLASS_COLOR_CONTROL
COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_CRC_16_ENCAP
COMMAND_CLASS_DOOR_LOCK
COMMAND_CLASS_MANUFACTURER_SPECIFIC
COMMAND_CLASS_METER
COMMAND_CLASS_MULTI_CHANNEL
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION
COMMAND_CLASS_MULTI_CMD
COMMAND_CLASS_SENSOR_MULTILEVEL
COMMAND_CLASS_SWITCH_MULTILEVEL
COMMAND_CLASS_NO_OPERATION
COMMAND_CLASS_NOTIFICATION
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SECURITY
COMMAND_CLASS_THERMOSTAT_FAN_MODE
COMMAND_CLASS_THERMOSTAT_MODE
COMMAND_CLASS_THERMOSTAT_SETPOINT
COMMAND_CLASS_USER_CODE
COMMAND_CLASS_VERSION
COMMAND_CLASS_WAKE_UP

If Heimdall receives a Basic Command, it will ignore the command.

Z-Wave's Groups (Association Command Class Version 2)

The gateway will send DEVICE_RESET_LOCALLY_NOTIFICATION to associated Z-Wave devices when it is reset or factory-reset.

It supports 1 association group which supports only one(maximum) associated node.

Group 1 support command DEVICE_RESET_LOCALLY_NOTIFICATION of COMMAND_CLASS_DEVICE_RESET_LOCALLY.

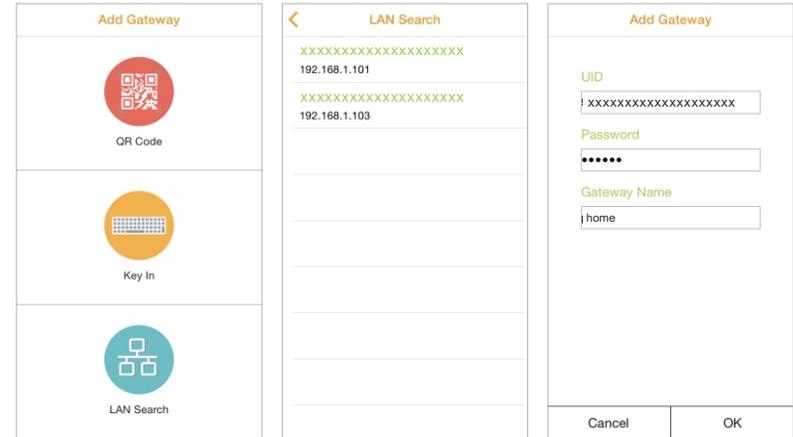This only group supports

Connection:

A. Connect Heimdall with WiFi router through an Ethernet cable.

B. Plug in power supply.

C. Mobile phone connects to WiFi router.

D. Launch Heimdallr APP, use LAN search or QR Code to add Heimdall Gateway.

Scan QR Code to Download "Heimdallr APP"

iOS   **Google play**

1 Add Gateway

Three methods to add a new Gateway: QR code/Manually Key In/LAN Search.

A. Scan the QR Code, then enter the Gateway name and password, then press OK, as attached photo.

B. Manually Key in the Gateway UID/Password/Gateway name, then press OK, as attached photo.

C. LAN search the Gateway UID, click UID and enter Gateway and password, then press OK. Gateway and Mobile has to be under same WiFi router, as attached photo.

| Add Gateway	LAN Search	Add Gateway
QR Code	XXXXXXXXXXXXXXXXXXX 192.168.1.101	UID xxxxxxxxxxxxxxxxxxx
Key In	XXXXXXXXXXXXXXXXXXX 192.168.1.103	Password •••••• Gateway Name home
LAN Search		Cancel OK

2 Dashboard

Enter Home page when Gateway is connected, Home page shows Dashboard, Device, Automator, Place, total 4 sections.

If connected successfully, will show green " √ " on the top left corner.

If connected failed, will show red "×" on the top left corner.

home   Arm   Disarmed

home   Arm   Disarmed

★ Dashboard Device Automator Place
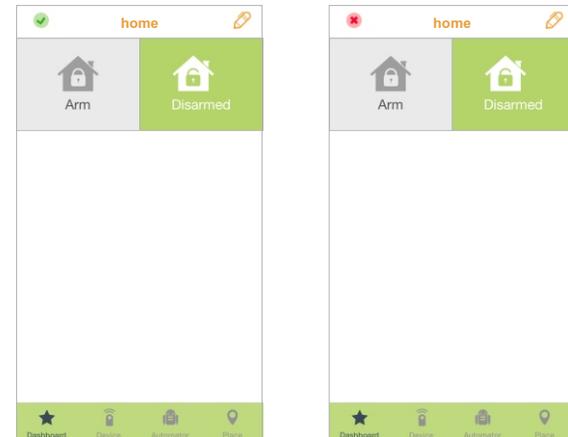
3 Arm (Secured)/Disarm(Insecured) status

A. Arm/Disarmed: while you are away or in sleep, Arm mode is suggested. When user is active within the area(Home or Office), Arm is not suggested.

B. Function: while include one of the IR/ Shock/Door sensor and Siren, the Siren will automatically alarm if the device is triggered
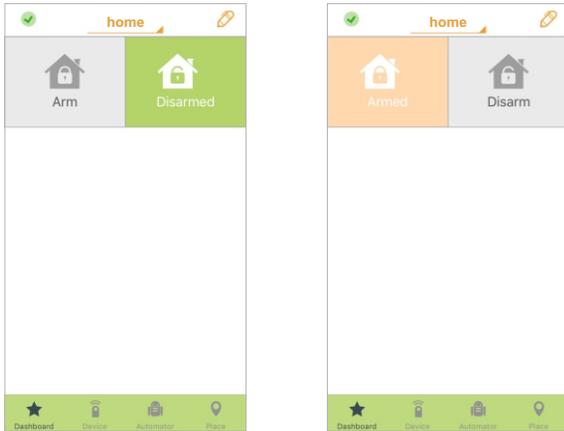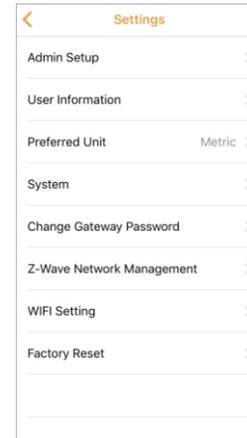
4 Edit

On Homepage, top center shows connected Gateway, click top right corner " ✐ " to Add/ Edit/Delete Gateway, and Edit Shortcut, Send Password in Email, Settings. as attached photo.
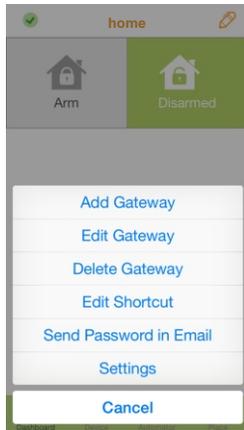
5 Settings page

Include "Admin Setup", "User Information", "Preferred Unit", "System", "Change Gateway Password", "Z-Wave Network Management", "WIFI Setting", "Factory Reset",

5-1. **Z-Wave Network Management**: Include "Add", "Remove", "Learn Mode", "Reset", as attached photo
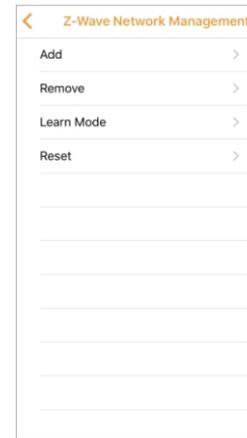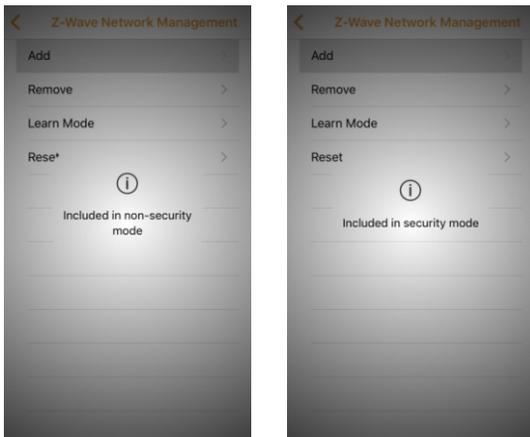
5-1-1. Add(Include):

A. Ensure Gateway is connected, enter device page and click "Add" to include devices, please flick the right button to include it according to the product manual.
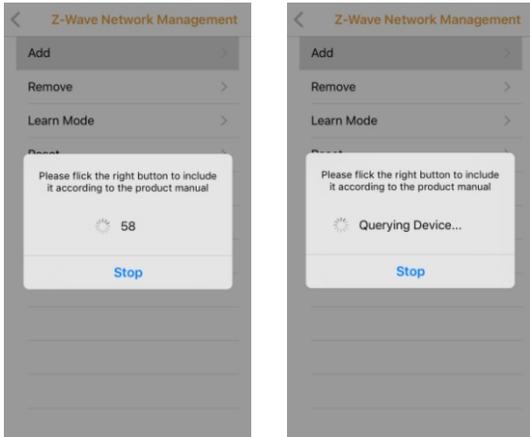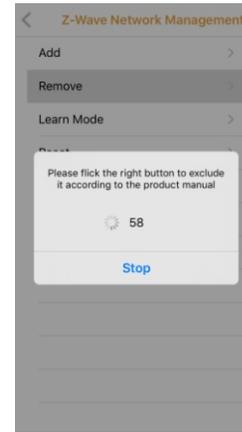

B. After device include show information (as attached photo), You can view the device at the "Device" interface


C. If cannot include the device in 60 seconds, please remove the device and include it again.

D. In the process of inclusion, please note the In/Ex changes of gateway, lights flash only when the gateway works properly.

5-1-2. Remove(Exclude):

A. Ensure gateway connected, click "Remove" to exclude devices, please flick the right button to exclude it according to the product manual.


B. After device exclude show information (as attached photo), At the same time the device is removed at the "Device" interface.
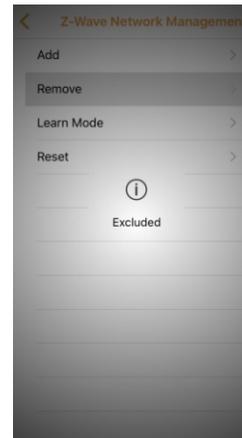
5-1-3. Learn Mode:

Ensure the Gateway not include any device or Reset the Gateway.
You can review and control the device for learned Gateway.
Into the Learn Mode, show "Processing…", operate another Controller into inclusion device mode, after the completion of the study to be prompted to inclusion success. When you need initiate a replication of network information from the controller to another controller or want to receive network information, please enter "include" and "learn mode"； Refer pic. 1,2,3,4 to enter "learn mode" and pic. 5,6 to enter "include".
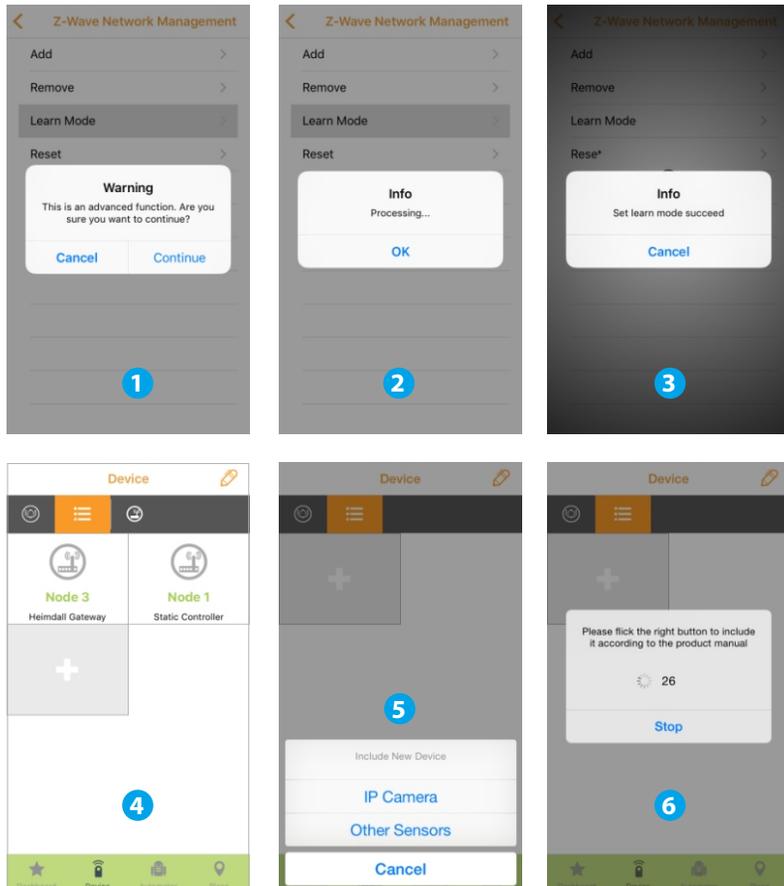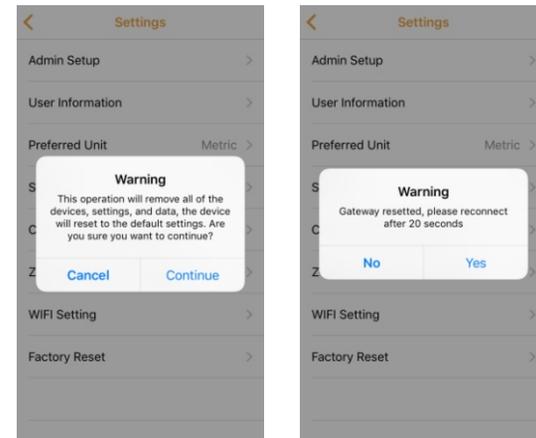

5-1-4. Reset:

Click "Reset", show "Proccessing…" to reset the Z-Wave network. as attached photo.
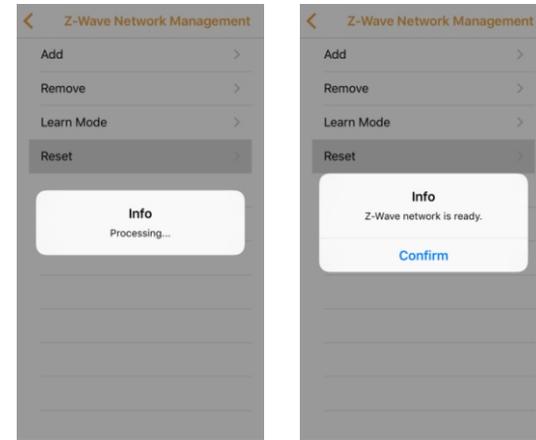

5-2. Factory Reset:

Click " Factory Reset", show warning prompt, click " Continue" to reset the Gateway, the Gateway will disconnected and then re-connection. as attached photo.
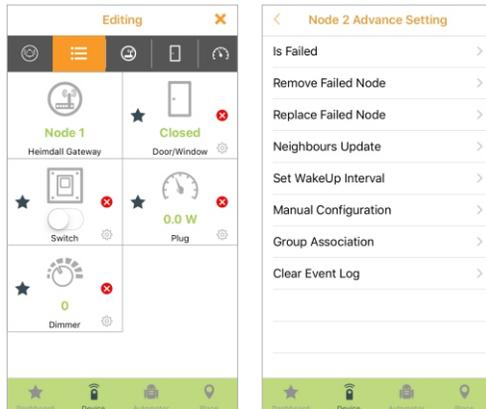
6　Device page

Will show the trigger device and existing device icon on the top column of device page. Can move it around, also can click one of the device, will show the separate device on the page and you can control the device.

A. Click " 🔘 " on device page, can check all the device status: tamper prevention trigger/low battery/ trigged.

B. Click" ≡ " to check the information of all device. If devices too many, can fast search the device, as attached photo.

**C**. Click Gateway icon, show the gateway info
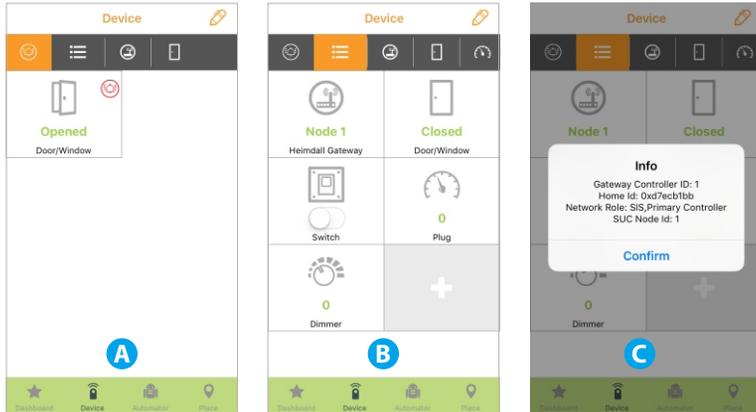
D. On device page, click top right corner " ✏ ", next click" ⚙ ", you can:
"Is Failed",
"Remove Failed Node",
"Replace Failed Node",
"Neighbours Update",
"Set WakeUp Interval",
"Manual Configuration",
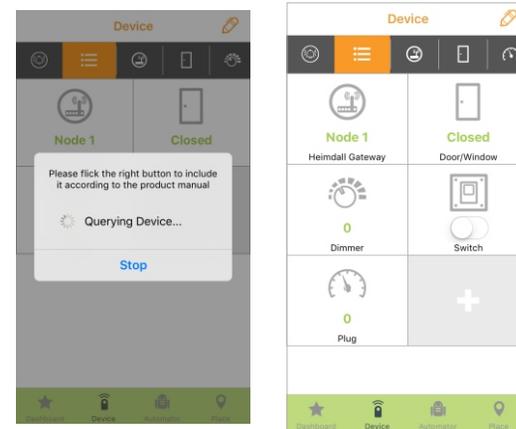"Group Association",
"Clear Event Log",

as attached photo.

7　Inclusion Page

A. Ensure Gateway is connected, enter device page and click "+" "Other Sensors" to include devices, please flick the right button to include it according to the product manual.
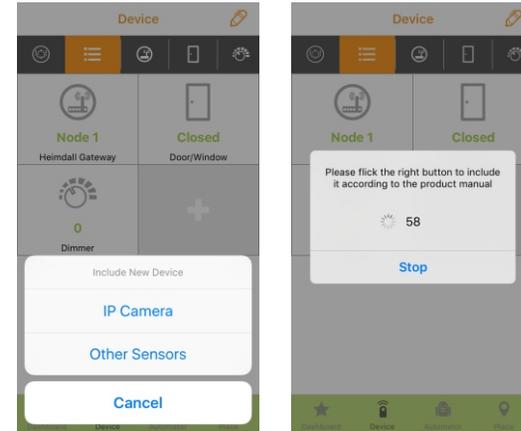
B. After device include show information as attached photo, You can view the device at the "Device" interface

C. If cannot include the device in 60 seconds, please remove the device and include it again.
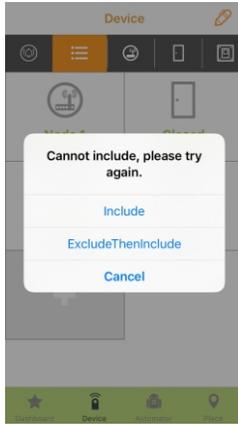
D. In the process of inclusion, please note the In/Ex changes of gateway, lights flash only when the gateway works properly.

E. When inclusion, device due to some reasons can not complete inclusion then device icon show "Basic Device ", If users solved the problem, to enter the edit and point "Query node information", then operating device to "include" mode, device will get correct device type.
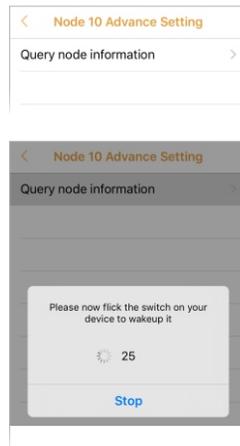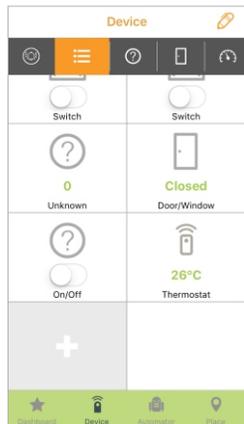
8 Exclusion Page

Ensure gateway connected, click top right corner " 🖉 " on the device page select the device and click " X ", please flick the right button to include it according to the product manual.