ZEM-1
Gateway Hub

USER MANUAL

Feature List

Z-Wave plus Gateway Hub is universal controller to control Home control Group of notification sensor(Door/Window), On/Off Switch ,Valve Open/Closed, and Door Lock - Keypad remotely.

Certification

- KC : Korean Certification
- Z-Wave Plus

Z-Wave

- Device type : Central Controller
- Role type : Central Static Controller
- Always ON device
- Control Groups : Notification sensor(Door/Window), On/Off Switch, Valve Open/Closed, and Door Lock - Keypad

Power

- Powered by Adapter

Z-Wave Specifications

- Device Type : Central Controller
- Role Type : Central Static Controller

- Command Class Control

Supported

- ✓ Application Status
- ✓ Association
- ✓ Association Group Information
- ✓ CRC16
- ✓ Device Reset Locally
- ✓ Manufacturer Specific
- ✓ Power Level
- ✓ Security
- ✓ Version
- ✓ Z-Wave Plus Info

Controlled

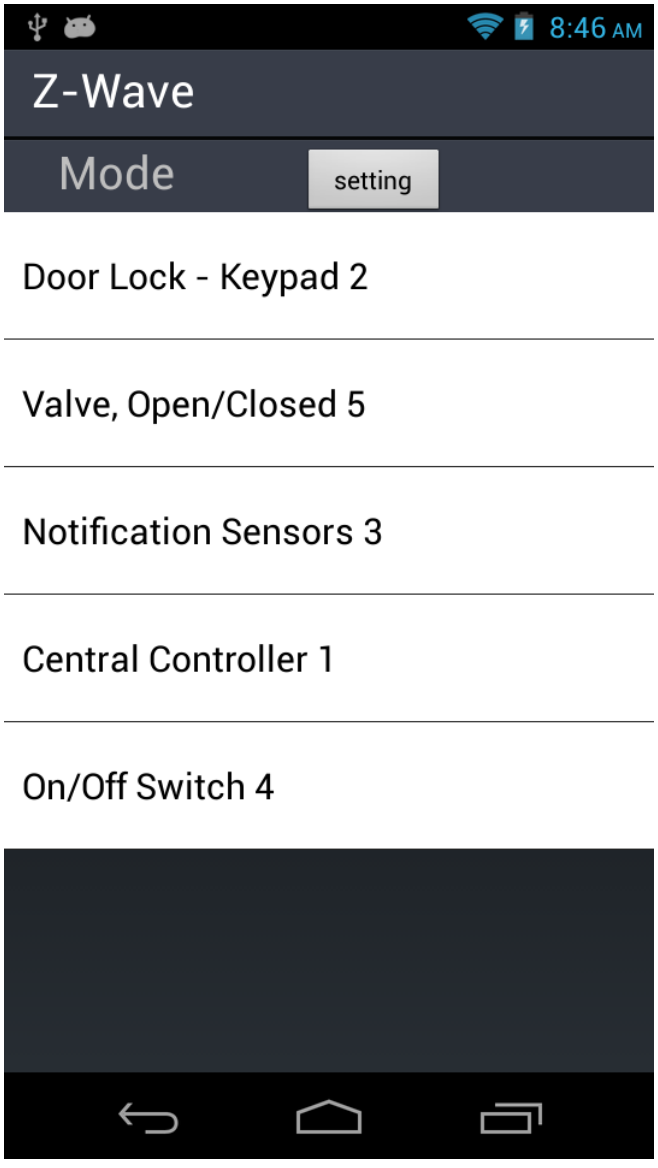
- ✓ Association
- ✓ Association Group Information
- ✓ Basic
- ✓ CRC16
- ✓ Multi Channel
- ✓ Multi Cannel Association
- ✓ Security
- ✓ Wake Up

Glossary

Device or Node	Devices and nodes are all terms to describe an individual Z-Wave device. These are all interchangeable when setting up your Z-Wave network
Inclusion	Add a Z-Wave device to the network
Exclusion	Delete a Z-Wave device from the network
Remove	To take a device out of a group, scene or association group while that device still exists in the same Z-Wave network
Network Wide Inclusion(NWI)	Network Wide Inclusion(NWI) enables both end-user friendly, Plug and Play like Z-Wave network installation as well as professional installation scenario where the inclusion process in items of time will be reduced significantly. NWI is a feature supported by a new frame type named Explorer which enables the Z-Wave protocol to implement Adaptive Source Routing.
Z-Wave Network	A collection of Z-Wave devices is controlled by primary and secondary controllers operating on the same system. A Z-Wave network has its own unique ID code so that controllers not in the network cannot control the system.
Primary Controller	The first controller is used to set up your devices and network. Only the Primary Controller can be used to include or delete devices from a network. It is recommended that you mark the primary controller for each network for ease in modifying your network.
Association	Association is used to organize nodes in different groups allowing the device to identify the nodes by a group identifier. The groups can also be copied to other devices.

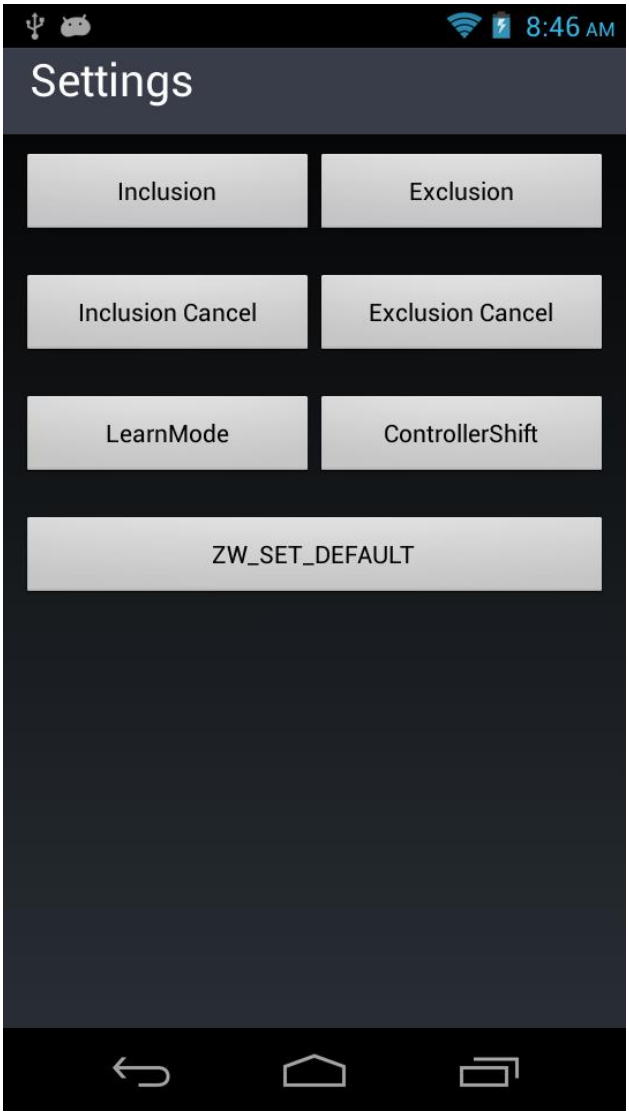
A. How to use Android UI?

1. Operate the Controller APK
2. Relevant UI page (below picture is example when Switch/Sensor/Valve/Door Lock devices are included)



3. To do inclusion

-. Click “Setting” on UI page at #2 procedure



-. Click ‘inclusion’ button and click ‘Yes’ to run inclusion mode

4. To do exclusion

-. Click “Setting” on UI page at #2 procedure

-. Click ‘exclusion’ button and click ‘Yes’ to run exclusion mode

5. To do Learn mode

-. Click “Setting” on UI page at #2 procedure

-. Click ‘LearnMode’ button and click ‘Yes’

6. To do Factory Reset

   Factory Reset method & Description of the situation to use the reset function.

   "If this controller is the primary controller for your network, resetting it will result in the nodes in your network being orphaned and it will be necessary after the reset to exclude and re-include all of the nodes in the network.

   If this controller is being used as a secondary controller in the network, use this procedure to reset this controller only in the event that the network primary controller is missing or otherwise inoperable."

   -. Click “Setting” on UI page at #2 procedure
   -. Click ‘ZW_SET_DEFAULT’ button and click ‘Yes’ to do controller factory reset

B. How to connect WIFI?

1. Connect keyboard to usb port.

2. Control + C with keyboard

3. You must edit as below, if the name of the WiFi network is “JIN_TEST”. And password is 1234567890.

Open the wpa-supplicant configuration file in nano:

pi@raspberrypi:~$ sudo nano /etc/wpa_supplicant/wpa_supplicant.conf

Go to the bottom of the file and add the following:

Network={

Ssid=”JIN_TEST”

Psk=”1234567890”

Key=WPA-PSK

}

4. Now save the file, Ctrl+O, Enter and Ctrl+X.
5. And sudo reboot or Power off/on.

The Association Groups available Info

- Group ID : 1

- Maximum Nodes : 5
- Description : Z-Wave Plus Lifeline

Product Specifications

Product Type	IoT Controller(Hub)
RF frequency	f_c±29.3kHz (f_c=920.9 / 921.7 / 923.1MHz)
RF operating distance	Up to 100m outdoor line of sight, in unobstructed environment
HW Composition	ZM5101 is used
Powered by	Adapter
Temperature	Operating : 0°C ~65°C Storage : -10°C ~75°C
Input V,A	5V, 2A
Size	258.6 x 127.4 x 41.35
Weight	785 g

Product Name	IoT Controller(Hub)
Model No	ZEM-1
Purchase Date	20 . . .
Warranty	1 Years from Purchase Date
Manufacture	ENPLUG. Co.,Ltd.
Origin	Made in Korea

- This Product is manufactured with quality control.
  - 1 Year warranty. Cause by manufacturing defect
  - 1 Year warranty. Start from purchase date

- We can guarantee 1year A/S only in case of manufacturing defect.