Aeotec Range Extender 6 ZW117-H07 Manual

Contents

Aeotec

Range Extender 6

SKU: ZW117-H07

Quickstart

This is a
secure
Repeater
for
Singapore.

To run this device please connect it to your mains power supply.

To add this device to your network execute the following action:
Turn the primary controller of Z-Wave network into inclusion mode, press the Z-Wave Button on Range Extender 6.

Please refer to the
Manufacturers Manual for more information.

Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law.
The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material.
Use this equipment only for its intended purpose. Follow the disposal instructions.

Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

Product Description

Range Extender is a Z-Wave repeater device based on Z-Wave enhanced 232 slave library V6.51.10. It can extend the range of the communication between Z-Wave products and assist other devices to reach each other in your Z-Wave network. It can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network. It is a security Z-Wave plus device, so a security enabled controller is needed for take full advantage of all functionally for the Range Extender. It also supports the Over The Air (OTA) feature for the products firmware upgrade.

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state.** Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Reset to factory default

This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

Press and hold the Z-Wave Button for 20 seconds and then release it.Use this procedure only in the event that your primary network controller is missing or inoperable.

Safety Warning for Mains Powered Devices

ATTENTION: only authorized technicians under consideration of the country-specific installation guidelines/norms may do works with mains power. Prior to the assembly of the product, the voltage network has to be switched off and ensured against re-switching.

Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Inclusion

Turn the primary controller of Z-Wave network into inclusion mode, press the Z-Wave Button on Range Extender 6.

Exclusion

Turn the primary controller of Z-Wave network into exclusion mode, pressthe Z-Wave Button on Range Extender 6.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.

3. Remove all dead devices from associations. Otherwise you will see severe delays.

4. Never use sleeping battery devices without a central controller.

5. Dont poll FLIRS devices.

6. Make sure to have enough mains powered device to benefit from the meshing

Association – one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, …). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a 'Basic Set' Command.

Association Groups:

Group NumberMaximum NodesDescription

1	1	The association group 1 is the Z-Wave Lifeline group. The Device Reset Locally Notification CC can be sent to the associated node in association group 1.

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 … 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200â€ˆit may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 200: Partner ID

Set the partner ID of product.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Aeon Labs standard product
1	Other partners.

Parameter 252: Enable/disable Lock Configuration

Enable/disable to lock Configuration parameters.
Size: 1 Byte, Default Value: 0

SettingDescription

0	Disable
1	Enable

Parameter 254: Device tag

Set a device tag for your Range Extender.
Size: 2 Byte, Default Value: 0

SettingDescription

1 – 32767	The available value range is 1 to 32767.

Parameter 255: Reset the device

Reset the device to factory default.
Size: 4 Byte, Default Value: 0

SettingDescription

0	Reset all configuration parameters to factory default settings
1431655765	Reset the device to factory default.

Parameter 82: Set the default status ofthe LED when the Range Extender relays Z-Wave message

Set the default status ofthe LED when the Range Extender relays Z-Wave message
Size: 1 Byte, Default Value: 0

SettingDescription

0	The Green LED will remain ON for 2 seconds.
1	The LED remains OFF state.

Technical Data

Hardware Platform	ZM5101
Device Type	Repeater
Network Operation	Always On Slave
Firmware Version	HW: 117 FW: 1.05
Z-Wave Version	6.51.10
Certification ID	ZC10-19026376
Z-Wave Product Id	0x0086.0x1C04.0x0075
Color	White
Firmware Updatable	Updatable by Consumer by RF
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Association Grp Info
- Association V2
- Configuration
- Device Reset Locally
- Firmware Update Md V2
- Manufacturer Specific V2
- Powerlevel
- Security
- Switch Color
- Switch Multilevel V2
- Version V2
- Zwaveplus Info V2

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network.
  Controllers are typically Gateways,Remote Controls or battery operated wall controllers.
- **Slave** — is a Z-Wave device without capabilities to manage the network.
  Slaves can be sensors, actuators and even remote controls.
- **Primary Controller** — is the central organizer of the network. It must be
  a controller. There can be only one primary controller in a Z-Wave network.
- **Inclusion** — is the process of adding new Z-Wave devices into a network.
- **Exclusion** — is the process of removing Z-Wave devices from the network.
- **Association** — is a control relationship between a controlling device and
  a controlled device.
- **Wakeup Notification** — is a special wireless message issued by a Z-Wave
  device to announces that is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a
  Z-Wave device to announce its capabilities and functions.