Aeotec

NanoMote Quad

SKU: AEOEZWA003

Quickstart

This is a **secure Wall Controller** for **Europe**. To run this device please insert fresh **1 * LIR2450** batteries. Please make sure the internal battery is fully
1. Insert the LIR2450 battery.
2. Set the Z-Wave network main controller into learning mode (see Z-Wave network controller operating manual).
3. Pressing and holding a button for 3 seconds.
4. If the inclusion is successful, the LED will blink in green less than for 5 seconds and then keep on for 15 seconds.

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, impor 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 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 sou

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 s

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

The NanoMote Quad is a wireless, portable and rechargeable scene switch. It can control a Z-Wave device, such as smart plug, smart dimmer with a Z-Wa You can also activate a scene like sleep scene, movie scene and entertainment scene with it.

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 c by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommenc the primary controller of the previous network to make sure the very device is excluded properly from this network.

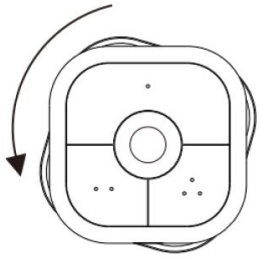
Reset to factory default

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 inope

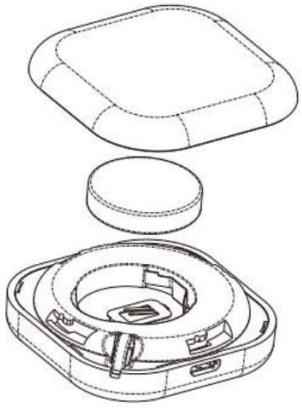
Pressing and holding a button for 20 seconds. Release the button after 20 seconds, LED will keep in yellow for 3 seconds. Scene Controller will be reset to defaults if you short press the button within this 3 seconds.Please use this procedure only when the network primary controller is missing or otherwise inop

Safety Warning for Batteries
The product contains batteries. Please remove the batteries when the device is not used. Do not mix batteries of different charging level or different brands

Installation
Open the cover



Insert your battery and close the cover



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 wi 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 netwo controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Inclusion
1. Open the NanoMote
2. Insert the battery
3. Press the button on the NanoMote One twice

Exclusion
1. Press the button on the NanoMote One twice

Product Usage
LOW BATTERY ALARM FUNCTION

NanoMote Quad will send battery report to the lifeline group when button is triggered during the sleep mode. If the battery level of the NanoMote Quad is le 20%, the NanoMote Quad will send a low battery alarm to the main controller.

CHILD LOCK FUNCTION

Child Lock function. If enable the Child Lock function, the LED indicator will not be on when press down the button. To switch on/off the Child Lock function, press and hold the button for 10 seconds, the LED indicator will be solid on in red. Then release the button, the LED indicator will be continuously stay in re seconds. During this 2 seconds, please click the button once, the LED light will be blink fast in red for 2 seconds.

TESTING Z-WAVE NETWORK RANGE

Press and hold the button for 15 seconds, the LED light will be solid on in purple. Then release the button, the LED light will be stay in purple for 2 seconds 2 seconds, please click the button once, it will start to test the Z-Wave network range and LED light will blink fast in purple. After finish the test, if the LED li green, it refers to strong signal; if in blue, it refers to medium signal, and if in red, it refers to weak signal or no signal.
Tip: This function works only when NanoMote Quad has been included into a ZWave network.

BATTERY CHARGING

NanoMote Quad has an internal rechargeable battery that will run for three months under the normal use condition. The chargers output should be a micro terminal with the specification of output DC 5V.The LED color is red during the charging process, and it will turn to green if the charging is finished.

Communication to a Sleeping device (Wakeup)

This device is battery operated and turned into deep sleep state most of the time to save battery life time. Communication with the device is limited. In orde communicate with the device, a static controller **C** is needed in the network. This controller will maintain a mailbox for the battery operated devices and stor commands that can not be received during deep sleep state. Without such a controller, communication may become impossible and/or the battery life time significantly decreased.

This device will wakeup regularly and announce the wakeup state by sending out a so called Wakeup Notification. The controller can then empty the mailbo Therefore, the device needs to be configured with the desired wakeup interval and the node ID of the controller. If the device was included by a static contr controller will usually perform all necessary configurations. The wakeup interval is a tradeoff between maximal battery life time and the desired responses o device. To wakeup the device please perform the following action: Pressing and holding a button for 3 seconds. Led will turn to green,which means Scene (has been woken up.

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

Firmware-Update over the Air

This device is capable of receiving a new firmware 'over the air'. The update function needs to be supported by the central controller. Once the controller sta update process, perform the following action to confirm the firmware update: With reference to Wake-up operation (VI.WAKE UP) and Z-Wave controllers g do OTA.

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 di device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they a related to certain events (e.g. button pressed, sensor triggers, ...). In case the event happens all devices stored in the respective association group will rece same wireless command wireless command, typically a 'Basic Set' Command.

Association Groups:

Group Number	Maximum Nodes	Description
1	5	NanoMote Quad will send the central scene notification command and battery report comma associated nodes if any button is triggered.
2	5	NanoMote Quad will send Basic Set command to the associated nodes if button 1 is presse
3	5	NanoMote Quad will send switch multilevel set, the multilevel start level change and multilev level change command to the associated nodes if button 1 is pressed, hold and released, re
4	5	NanoMote Quad will send Basic Set command to the associated nodes if button 2 is presse
5	5	NanoMote Quad will sendswitch multilevel set, the multilevel start level change and multilev level change command to the associated nodes if button 2 is pressed, hold and released, re
6	5	NanoMote Quad will send Basic Set command to the associated nodes if button 3 is presse
7	5	NanoMote Quad will sendswitch multilevel set, the multilevel start level change and multilev level change command to the associated nodes if button 3 is pressed, hold and released, re
8	5	NanoMote Quad will send Basic Set command to the associated nodes if button 4 is presse
9	5	NanoMote Quad will sendswitch multilevel set, the multilevel start level change and multilev level change command to the associated nodes if button 4 is pressed, hold and released, re

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 fu 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 value minus 256. For example: To set a parameter to 200 it may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the sar applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 32: Level of low battery

Define a battery level as the low battery.
Size: 1 Byte, Default Value: 20

Setting	Description
10 - 50	when the value is 10% to 50%,it will send a low battery command.

Parameter 41: Enable send central scene notification.

Set of sending central scene notification or not.
Size: 1 Byte, Default Value: 1

Setting	Description
0	Disable
1	Enable

Parameter 42: Setting the duration value of the command switch multilevel.

Setting the duration value of the command switch multilevel.
Size: 1 Byte, Default Value: 255

Setting	Description
0 - 255	The higher the value,the long the duration value of the command switch multilevel

Parameter 43: Enable/disable the buzzer alarm when battery is running low.

Set the buzzer alarm or not when battery is low.
Size: 1 Byte, Default Value: 0

Setting	Description
0	Disable
1	Enable

Technical Data

Dimensions	50 x 50 x 14 mm
Weight	26 gr
Hardware Platform	ZM5101
EAN	1220000016118
IP Class	IP 20
Voltage	3,6 V
Battery Type	1 * LIR2450
Device Type	Wall Controller
Network Operation	Portable Slave
Z-Wave Version	6.71.01
Certification ID	ZC10-18036056
Z-Wave Product Id	0x0371.0x0002.0x0003
Frequency	Europe - 868,4 Mhz
Maximum transmission power	5 mW

Supported Command Classes

- Association Grp Info
- Association V2
- Battery
- Central Scene V3
- Configuration
- Device Reset Locally
- Firmware Update Md V3
- Manufacturer Specific V2
- Powerlevel
- Security 2
- Security
- Supervision
- Transport Service V2
- Version V2
- Wake Up V2
- Zwaveplus Info V2

Controlled Command Classes

- Basic
- Battery
- Switch Multilevel 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.
