Aeotec

WallMote Quad

SKU: AEOEZW130

Quickstart

This is a **WallMote** for **Europe**. To run this device please insert fresh **1** * **rechargable** batteries. Please make sure the internal battery is fully charged.

1. Let your Z-Wave primary controller/gateway enter into pairing/inclusion mode.
2. Take your WallMote Quad near to your primary controller. Press the Action Button once on your WallMote Quad, the LED will blink with green color.
3. If your WallMote Quad has been successfully added to your Z-Wave network, its green LED will be solid for 2 seconds and then off. If the adding was unsuccessful and the red LED will be solid for 2 seconds and then off, repeat the above steps.

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

Aeotec WallMote Quad is an intelligent Z-Wave remote controller that mounted on a wall. It has 4 touch buttons that you can easily control the Z-Wave devices in your home network via touching, long pressing or sliding the button areas. Its surface has a RGB LED to indicate the button actions also accompanied by touch beep and vibration. The WallMote Quad is also a security Z-Wave device and supports 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 Action button (20 seconds). The LED should blink between green, purple, then red which will flash rapidly until a green LED becomes solid for 2 seconds to indicate a successful factory reset. Let go of the Action Button.

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.

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.

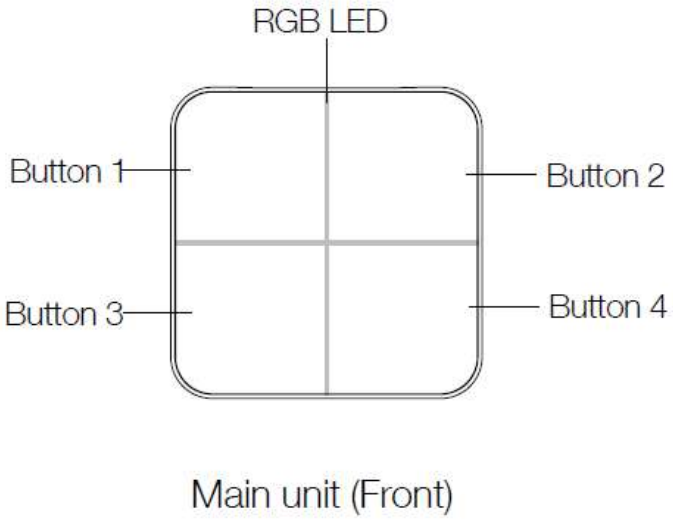
Inclusion

1. Press the Action Button on your WallMote Quad twice.

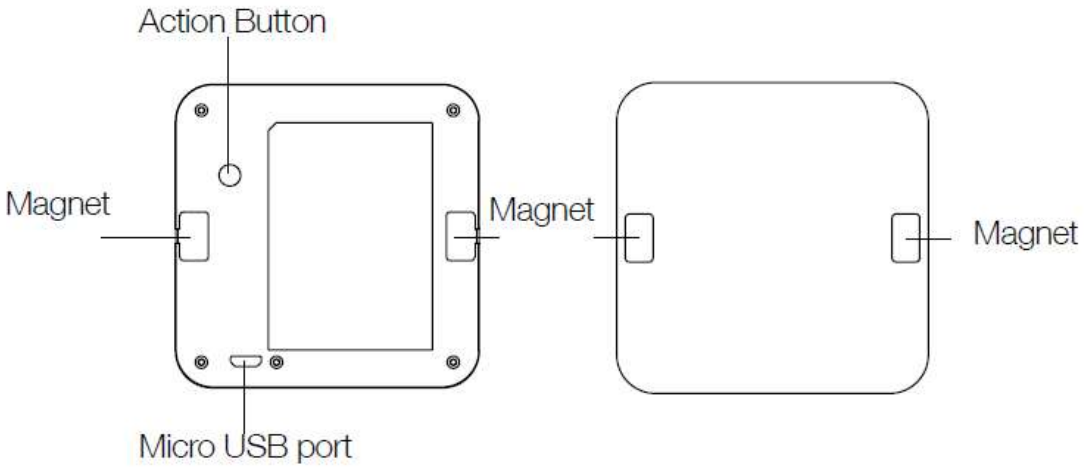
Exclusion

2. Press the Action Button on your WallMote Quad once.

Product Usage



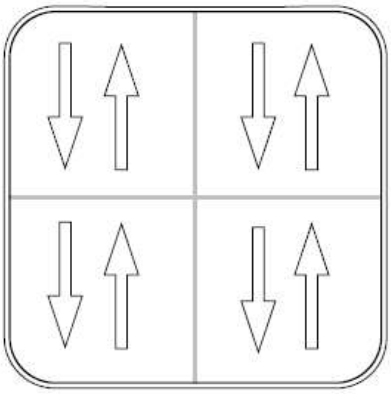
Main unit (Front)



Main unit (Back) Back-Mount plate

Dimmer control via sliding the button area.

The WallMote Quad also supports sliding control, when the parameter 4 is set to 3, you can slide up or down on the button area to control the dimmer device.



Slide direction

Your WallMote Quad?s battery.

Your WallMote Quad has a internal rechargeable lithium battery that will allow you to charge it when it is in low battery. The charger?s output should be a micro USB terminal with the specification of output DC 5V/1A. When the WallMote Quad is in charge state, the orange LED will be on. If the orange LED is off and the green LED remains on, then it indicates that the battery charge is complete.
Note: When the WallMote is in low battery, you will see the orange LED will blink when you touch the control buttons. Otherwise, if the blue LED blinks when touching the buttons, which means the battery is in normal level.

Node Information Frame

The Node Information Frame (NIF) is the business card of a Z-Wave device. It contains information about the device type and the technical capabilities. The inclusion and exclusion of the device is confirmed by sending out a Node Information Frame. Beside this it may be needed for certain network operations to send out a Node Information Frame. To issue a NIF execute the following action: Press Action Button

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 order to 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 store commands that can not be received during deep sleep state. Without such a controller, communication may become impossible and/or the battery life time is 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 mailbox. 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 controller this controller will usually perform all necessary configurations. The wakeup interval is a tradeoff between maximal battery life time and the desired responses of the device. To wakeup the device please perform the following action:

Remove your WallMote Quad unit from its Back Mounting Plate, press and hold the Action Button for 3 seconds(the buzzer chirp once and the orange LED will be ON) on the back of the WallMote Quad unit and then release it. This will trigger and send a wake up notification command to your controller/gateway, then your WallMote Quad will wake up for 10 minutes and the orange LED will fast blink while it is awake (if the WallMote Quad does not receive the Wake Up No More Info from the primary Controller).

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 starts the update process, perform the following action to confirm the firmware update:

The WallMote Quad is also a security Z-Wave device and supports Over The Air (OTA) feature for the products firmware upgrade.

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 Number	Maximum Nodes	Description
1	1	Lifeline - Central Scene control via Button 1 - 4
2	5	On/Off conrtol via Button 1
3	5	Dimmer control via Button 1
4	5	On/Off conrtol via Button 2
5	5	Dimmer control via Button 2
6	5	On/Off conrtol via Button 3
7	5	Dimmer control via Button 3
8	5	On/Off conrtol via Button 4
9	5	Dimmer control via Button 4

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 200 it 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 1: Touch Sound

Enable/disable the touch sound

Size: 1 Byte, Default Value: 1

Setting	Description
0	Disable
1	Enable

Parameter 2: Touch Vibration

Enable/disable the touch vibration

Size: 1 Byte, Default Value: 1

Setting	Description
0	Disable
1	Enable

Parameter 3: Button Slide

Enable/disable the function of button slide

Size: 1 Byte, Default Value: 1

Setting	Description
0	Disable
1	Enable

Parameter 4: Report

To configure which report will be sent when pressing the buttons.

Size: 1 Byte, Default Value: 1

Setting	Description
1	Send Central Scene Command Notfication
3	Send Central Scene Command Notification an Configuration report

Parameter 39: Battery Level

Set the low battery value

Size: 1 Byte, Default Value: 5

Setting	Description
5 - 50	Low battery value 5% -50%

Parameter 255: Factory Reset

Size: 4 Byte, Default Value: 1

Setting	Description
0	Reset to factory setting (Size 1)
1431655765	Reset to factory default setting and removed from the Z-Wave network (Size 4)

Technical Data

Dimensions	76 x 76 x 10 mm
Weight	71 gr
Hardware Platform	ZM5202
EAN	1220000015876
IP Class	IP 20
Voltage	3,7 V
Battery Type	1 * rechargable
Device Type	WallMote
Firmware Version	2.03
Z-Wave Version	04.21
Certification ID	ZC10-17035521
Z-Wave Product Id	0x0086.0x0002.0x0082
Frequency	Europe - 868,4 Mhz
Maximum transmission power	5 mW

Supported Command Classes

- Basic
- Association Grp Info
- Device Reset Locally
- Central Scene
- Zwaveplus Info
- Multi Channel
- Configuration
- Alarm

- Manufacturer Specific
- Powerlevel
- Firmware Update Md
- Battery
- Wake Up
- Association
- Version
- Multi Channel Association
- Switch Binary
- Switch Multilevel

Controlled Command Classes

- Switch Binary
- Switch Multilevel

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.
