

Aeon Labs Home Energy Meter

(Z-Wave Home Energy Meter)



Introduction:

The Aeon Labs Home Energy Meter is energy meter for the entire home. It can wirelessly report immediate wattage and kWh usage of the AC mains to a Z-Wave gateway.

By taking advantage of the Z-Wave mesh network, commands can be routed to their destination via intermediary "listening" Z-Wave products. Products that are Z-Wave certified can be used and communicate with other Z-Wave certified devices.

Z-Wave Network Instructions:

The Aeon Labs Home Energy Meter must be paired (included) into a Z-Wave network before it can receive Z-Wave commands to report its energy usage. The home energy meter can only communicate to devices within it's own z-wave network.

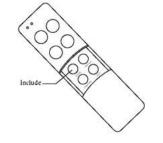
<u>Note</u>: If the Home Energy Meter is not currently paired into a Z-Wave network, the LED on the Home Energy Meter will blink after pressing the button located near the batteries.

- Adding/Including/Pairing the Home Energy Meter into a Z-Wave Network
- 1. Press the button on the Aeon Labs Z-Stick to begin the Z-Wave inclusion process.



Press the button labeled "Include" on the Aeon Labs Minimote to begin the Z-Wave inclusion process.

OR



<u>Note</u>: To include the Aeon Labs Home Energy Meter with other controllers, please consult the operation manual for these controllers on how to include Z-Wave products into an existing network. For instructions on select partner gateways, visit www.aeon-labs.com/support.

2. After placing 4 AA batteries into the Home Energy Meter, press the button located near the batteries .

<u>**Troubleshooting</u>**: If the Aeon Labs Home Energy Meter was not successfully included into any Z-Wave network, the LED will blink after pressing the button near the batteries. If the Aeon Labs Home Energy Meter was successfully included to a Z-Wave network, the LED will be lit solid after pressing the button.</u>

Removing/Excluding/Resetting the Home Energy Meter from your Z-Wave Network

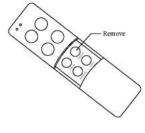
1. Hold the button on the Aeon Labs Z-Stick to begin the Z-Wave removal process.



OR

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Press the button labeled "Remove" on the Aeon Labs Minimote Stick to begin the Z-Wave removal process.



<u>Note</u>: To include the Aeon Labs Home Energy Meter with other controllers, please consult the operation manual for these controllers on how to include Z-Wave products into an existing network. For instructions on select partner gateways, visit www.aeon-labs.com/support.

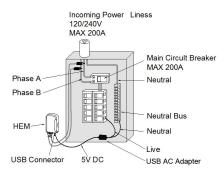
2. After placing 4 AA batteries into the Home Energy Meter, press the button located near the batteries .

Troubleshooting: If the Aeon Labs Home Energy Meter was removed from the Z-Wave network, the LED will blink after pressing the button near the batteries. If the Aeon Labs Home Energy Meter was not successfully removed from a Z-Wave network, the LED will be lit solid after pressing the button.

AC Mains Installation

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IMPORTANT: A licensed electrician with knowledge and understanding of electrical systems and electrical safety should complete the electrical installation inside the main circuit box (usually located outside of your house).



After opening the main circuit box panel, clip each of the clamps of the Aeon Labs Home Energy Meter around the two incoming wires that connect to the main circuit breaker from the main wire going into the box.

If you have purchased the optional Home Energy Meter AC Adapter, you may insert one of the AC adapters exposed wires into one of the neutral bus terminals and the other exposed wire into the live terminals coming from the main circuit breaker.

Note: Some AC Mains boxes are made of metal and may reduce the radio communication power from the Home Energy Meter to other Z-Wave devices within the house. To improve radio performance, the Home Energy Meter may be placed outside of the main circuit box. The Home Energy Meter is IP43 weatherized to be resistant to rain and snow when placed vertically with the wires protruding from the bottom of the unit.

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Power by an USB/AC Adapter
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While the Aeon Labs Home Energy Meter can operate for nearly a year on batteries, it can also be powered through it's USB port. While powered by the USB port, the Home Energy Meter can track kWh energy usage and report wattage every few seconds.

• Waking the Home Energy Meter to Receive Commands

Tap the button located near the batteries – The Home Energy Meter will stay awake for 10 seconds.

Alternatively, the Home Energy Meter is always communicable to commands sent by the latest Z-Wave protocols (4.51 and newer).

• Associating the Home Energy Meter to Report Automatically

Please refer to "Engineering Spec – Aeon Labs Home Energy Meter.pdf" (Only 1 Association Group).

Monitoring Energy Consumption

The Aeon Labs Home Energy Meter can report wattage energy usage or kWh energy usage to a Z-Wave gateway or controller when requested. If this function is supported by the gateway/controller, the energy consumption will be displayed in the user interface of the gateway/controller. (The specific Z-Wave commands supporting energy monitoring are the Meter Command Class and Multilevel Sensor Command Class.) Please consult the operation manual for these gateways/controllers for specific instructions on monitoring the Home Energy Meter.

Warranty

Aeon Labs warrants to the original purchaser of Products that for the Warranty Period (as defined below), the Products will be free from material defects in materials and workmanship. The foregoing warranty is subject to the proper installation, operation and maintenance of the Products in accordance with installation instructions and the operating manual supplied to Customer. Warranty claims must be made by Customer in writing within thirty (30) days of the manifestation of a problem. Aeon Labs' sole obligation under the foregoing warranty is, at Aeon Labs' option, to repair, replace or correct any such defect that was present at the time of delivery, or to remove the Products and to refund the purchase price to Customer.

The "Warranty Period" begins on the date the Products is delivered and continues for 12 months.

Any repairs under this warranty must be conducted by an authorized Aeon Labs service representative and under Aeon Labs' RMA policy. Any repairs conducted by unauthorized persons shall void this warranty.

Excluded from the warranty are problems due to accidents, acts of God, civil or military authority, civil disturbance, war, strikes, fires, other catastrophes, misuse, misapplication, storage damage, negligence, electrical power problems, or modification to the Products or its components.

Aeon Labs does not authorize any person or party to assume or create for it any other obligation or liability in connection with the Products except as set forth herein.

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Customer must prepay shipping and transportation charges for returned Products, and insure the shipment or accept the risk of loss or damage during such shipment and transportation. Aeon Labs will ship the repaired or replacement products to Customer freight prepaid.

Customer shall indemnify, defend, and hold Aeon Labs and Aeon Labs' affiliates, shareholders, directors, officers, employees, contractors, agents and other representatives harmless from all demands, claims, actions, causes of action, proceedings, suits, assessments, losses, damages, liabilities, settlements, judgments, fines, penalties, interest, costs and expenses (including fees and disbursements of counsel) of every kind (i) based upon personal injury or death or injury to property to the extent any of the foregoing is proximately caused either by a defective product (including strict liability in tort) or by the negligent or willful acts or omissions of Customer or its officers, employees, subcontractors or agents, and/or (ii) arising from or relating to any actual or alleged infringement or misappropriation of any patent, trademark, mask work, copyright, trade secret or any actual or alleged violation of any other intellectual property rights arising from or in connection with the

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FCC NOTICE (for USA):

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against

reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver.

harmful interference in a residential installation. This

equipment generates, uses and can radiate radio

frequency energy and, if not installed and used in

accordance with the instructions, may cause harmful

interference to radio communications. However,

there is no guarantee that interference will not occur

in a particular installation. If this equipment does

cause harmful interference to radio or television

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

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Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

Certifications (regional):



Harmonizing the Smart Home.

www.aeon-labs.com