

# HEAVY DUTY SMART SWITCH



View the digital manual: http://aeot.ec/spprt/heavyduty





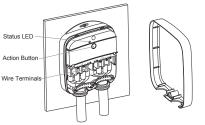
Your high-powered utilities and services don't always have to be turned on. They don't always have to be costing you money. With Heavy Duty Smart Switch you'll have full control of them. You'll have the ability to wirelessly turn them on or off using Z-Wave®. You'll be able to do it remotely and you'll be able to do it with an automatic schedule. You'll also be able to save money immediately when you use Heavy Duty Smart Switch's inbuilt energy monitoring capabilities. You'll receive real-time reports of just how much electricity you're paying for. You'll then be able to use scheduling and automatic controls to reduce the money you spend on appliances that need up to 40 amps of power.



(2) Familiarise yourself with your Heavy Duty Smart Switch Gen5.

### Package Contents:

- Heavy Duty Smart Switch Gen5
- 8AWG Wire terminal (x8)
- 10AWG Wire terminal (x8)
- Screws (x2)
- Instruction Manual



Action button: Used for Heavy Duty Smart Switch Z-Wave network inclusion and exclusion and to manually turn on or off.

Warning: Be careful of electric shock. Only installation and maintenance personnel should operate this button and get rid of the paragraph break.

Status LED: Indicates your Heavy Duty Smart Switch's status;

**Terminals**: There are two groups of terminals. As marked, mains power is to be connected to AC Power and the electric load to Load.

Important: A licensed electrician with knowledge and understanding electrician systems and electrical safety should complete the electrical installation.

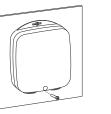


**3** Quick start

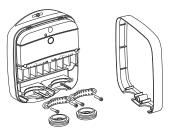
Important: Heavy Duty Smart Switch Gen5 must wired behind an air break switch for safety and electric appliance.

Before wiring, you must switch off the air break switch and confirm that the circuit power is down. If the air break switch is out of sight, please lock it to 'OFF' position and tag it to prevent unexpected application of power

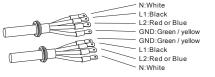
1. Mount your Heavy Duty Smart Switch on a wall as shown:



2. Loosen your Heavy Duty Smart Switch's lower screw to release its shell. Remove the shell to reveal the inner electronics.



3. Prepare the wires you will be attaching to your Heavy Duty Smart Switch by stripping them to the necessary length. Add wire terminals to each wire.

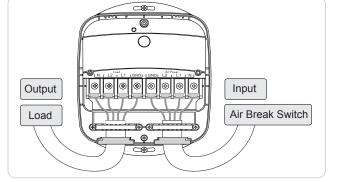


4. Wire your Heavy Duty Smart Switch according to the following diagram. As shown below, connect each live lines from Air Break Switch to the corresponding terminals marked L1 and L2 on your Heavy Duty Smart Switch. If there is a Neutral line and GND from the Air Break Switch, please respectively connect them to the terminals labelled N and GND. Similarly, wire the electric load with your Heavy Duty Smart Switch. As a final step. tighten the screws to the wire terminals.

# Important: You must make sure the wire terminals are connected firmly with each corresponding terminal on your Heavy Duty Smart Switch.

Please pay attention to the power and current of equipment. If the current is less than 32A, you can use AWG10# wire. If the current exceeds 32A, please use AWG8# wire.

Warning: Device current can not exceed 40A.



- 5. Power on your Heavy Duty Smart Switch. At this stage you need to add it to your Z-Wave network. If you're using an Aeotec Z-Stick or Minimote, please refer the "Z-Wave Network Instructions" section of this user guide. If you're using an alternative gateway, please refer to the respective section of its user manual using your Heavy Duty Smart Switch's Action Button to put it into inclusion mode.
- 6. Once added to your Z-Wave network, replace your Heavy Duty Smart Switch's shell, refastening it.
- 7. The product can be mounted on a wall or surface. To do so, drill a ø2.5mm hole that corresponds to the up upper part of your switch. Drill a second hole 138mm below this. Affix screws. Your installation is now complete.

- 1. Your switch should be installed in a ventilated area with good heat
- 2. Your switch should access to the protective earth (green/yellow) line.
- 3. Your switch should have front-end access to a short-circuit protection.
- 4. Only professionals should install, repair, or open your switch's casing.



(4) Z-Wave network instructions.

Your Heavy Duty Smart Switch must be paired with a Z-Wave network before it can receive wireless commands or report the energy consumption of the attached electronics

Note: The LED on your Heavy Duty Smart Switch will blink if it is not currently paired with a Z-Wave network.

Tip: Turn off any devices connected to your Heavy Duty Smart Switch before adding or removing it to / from a Z-Wave network. This will help to prevent load damage.

Adding your Heavy Duty Smart Switch Gen5 to a Z-Wave network.

## If you're using a Z-Stick:

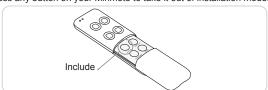
- 1. Decide on where you want your Heavy Duty Smart Switch to be placed and set it up as per the Quick Start guide steps 1 to 5. Its Status LED will begin to blink.
- 2. If your Z-Stick is plugged into a gateway or a computer, unplug it.
- 3. Take your Z-Stick to your Heavy Duty Smart Switch.
- 4. Press the Action Button on your Z-Stick.
- 5. Press the Action Button on your Heavy Duty Smart Switch.
- 6. If your switch has been successfully linked to your Z-Wave network, its Status LED will no longer blink. If the linking was unsuccessful, the Status LED continues to blink. Repeat the above steps.
- 7. Press the Action Button on your Z-Stick to take it out of installation mode.



If you're using a Minimote:

- 1. Decide on where you want your Heavy Duty Smart Switch to be placed and set it up as per the Quick Start guide steps 1 to 5. Its Status LED will begin to blink.
- 2. If your Minimote is plugged into a gateway or a computer, unplug it.

- Take your Minimote to your Heavy Duty Smart Switch.
- 4. Press the Action Button on your Heavy Duty Smart Switch.
- 5. If your Heavy Duty Smart Switch has been successfully linked to your Z-Wave network, its Status LED will no longer blink. If the linking was unsuccessful, the Status LED continues to blink. Repeat the above steps.
- 6. Press any button on your Minmote to take it out of installation mode.



# If you are using another gateway:

To include your Heavy Duty Smart Switch with other controllers please consult the operation manual for these controllers on how to include Z-Wave products into an existing network.

Once synced with a gateway, you'll be able to configure your switch from it. Please refer to your software's user guide for precise instructions on configuring your Heavy Duty Smart Switch to your needs.

Tip: If the Status LED of your Heavy Duty Smart Switch does not blink when it's first powered up it means that your Heavy Duty Smart Switch is already part of another Z-Wave network. To rectify this, first follow the subsequent removal instructions before following the section 4 of this guide.

# **5** Advanced functions.

 Removing your Heavy Duty Smart Switch Gen5 from a Z-Wave Network

You can remove your Heavy Duty Smart Switch from your Z-Wave network at any time. To do this you need use your main controller such as a Z-Stick or Minimote

## If you are using a Z-Stick:

- 1. If your Z-Stick is plugged into a gateway or a computer, unplug it.
- 2. Take your Z-Stick to your Heavy Duty Smart Switch.
- 3. Press the Action Button on your Z-Stick.
- 4. Press the Action Button on your Heavy Duty Smart Switch.
- 5. If your Heavy Duty Smart Switch has been successfully removed from your network, its Status LED will blink. If the removal was unsuccessful, its Status LED will not blink.
- 6. Press the Action Button on your Z-Stick to take it out of removal mode.

If you are using a Minimote:

- 1. Take your Minimote to your Heavy Duty Smart Switch.
- 2. Press the Remove Button on your Minimote.
- 3. Press the Action Button on your Heavy Duty Smart Switch.
- 4. If your Heavy Duty Smart Switch has been successfully removed from your network, its Status LED will blink. If the removal was unsuccessful. its Status I FD will not blink
- 5. Press any button on your Minimote to take it out of removal mode.
- Turn your Heavy Duty Smart Switch Gen5 on or off.

Your Heavy Duty Smart Switch can be turned on or off through the use of Z-Wave commands built into Z-Wave certified controllers and gateways. The specific Z-Wave commands supporting this function are the Basic Command Class and Binary Switch Command Class. Please consult the operation manual for your Z-Wave network controller for specific instructions on controlling your Heavy Duty Smart Switch.

### Monitoring power consumption.

Your Heavy Duty Smart Switch can report Watts energy usage or KWh energy usage to a Z-Wave gateway or controller. If this function is supported by the gateway/controller, your energy consumption will be displayed within its user interface. The specific Z-Wave commands supporting energy monitoring are the Meter Command Class and Multilevel Sensor Command Class. Automatic reports go to association group 1, which is setup via the Association Command Class. Please consult your gateway's / controller's manual for instructions on monitoring energy consumption through your Heavy Duty Smart Switch.

**(6)** Technical speciations

Model number: ZW078-A Waterproof: IP44 Power Consumption: 1W

Ratings: 240VAC, 50/60Hz (2Phases L1,L2);

Maxim 9600 Watts 40A Resist0r

240VAC 5HP AC Motor: RF range: 500ft/150m outdoor;

Endurance of 10ms period peak current of 1440A

Environmental Conditions: Indoor use:

Altitude up to 2000m: Ambient temperature 5°C to 40°C:

Max. relative humidity 80%:

Pollution degree 2.



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

Aeon Labs will pass on to Customer all manufacturers' Material warranties to the extent that they are transferable, but will not independently warrant any

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 products, except to the extent that such infringement exists as a result of Aeon Labs' manufacturing processes.

IN NO EVENT SHALL AEON LABS BE LIABLE FOR ANY INDIRECT INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, OR DAMAGES FOR LOSS OF PROFITS, REVENUE, OR USE INCURRED BY CUSTOMER OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT, OR TORT, OR OTHERWISE EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. AEON LABS' LIABILITY AND CUSTOMER'S EXCLUSIVE REMEDY FOR ANY CAUSE OF ACTION ARISING IN CONNECTION WITH THIS AGREEMENT OR THE SALE OR USE OF THE PRODUCTS, WHETHER BASED ON NEGLIGENCE, STRICT LIABILITY BREACH OF WARRANTY BREACH OF AGREEMENT OR EQUITABLE PRINCIPLES. IS EXPRESSLY LIMITED TO. AT AEON LABS' OPTION, REPLACEMENT OF OR REPAYMENT OF THE PURCHASE PRICE FOR THAT PORTION OF PRODUCTS WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. ALL CLAIMS OF ANY KIND ARISING IN CONNECTION WITH THIS AGREEMENT OR THE SALE OR USE OF PRODUCTS SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING WITHIN THIRTY (30) DAYS FROM AEON LABS'S DELIVERY. OR THE DATE FIXED FOR DELIVERY IN THE EVENT OF NONDELIVERY.

THE INDEMNITY AND WARRANTY IN ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER INDEMNITIES OR WARRANTIES. WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

### ⇒ 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
- 2. 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 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 instrucins, may cause harmful interference to radio communications. However, there is no quarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television 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.
- 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

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)







Z-Wave and Z-Wave Plus are registered trademarks of Sigma Designs and its subsidiaries in the United States and other countries

Version: 501001000001-AB www.aeotec.com

