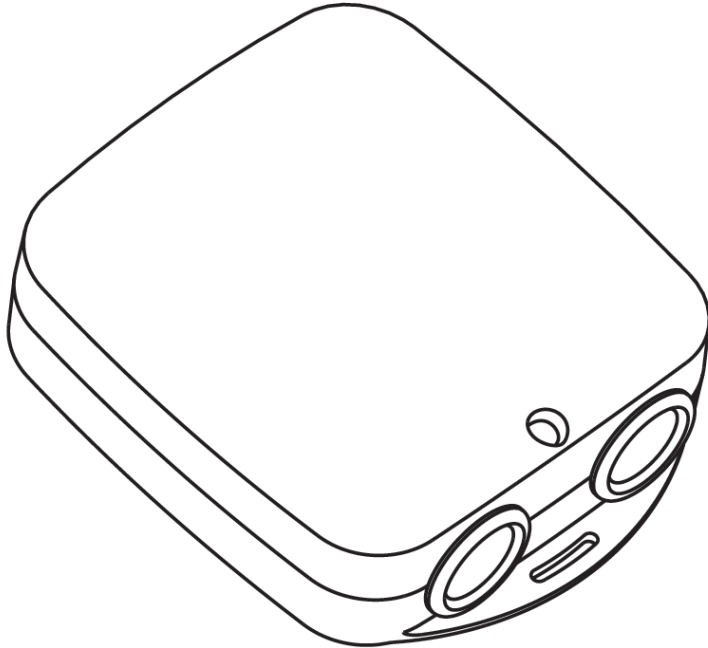


## Heavy Duty Smart Switch Gen5 user guide.

Modified on: Thu, 30 Nov, 2017 at 11:45 PM

# Aeotec by Aeon Labs Heavy Duty Smart Switch Gen5.



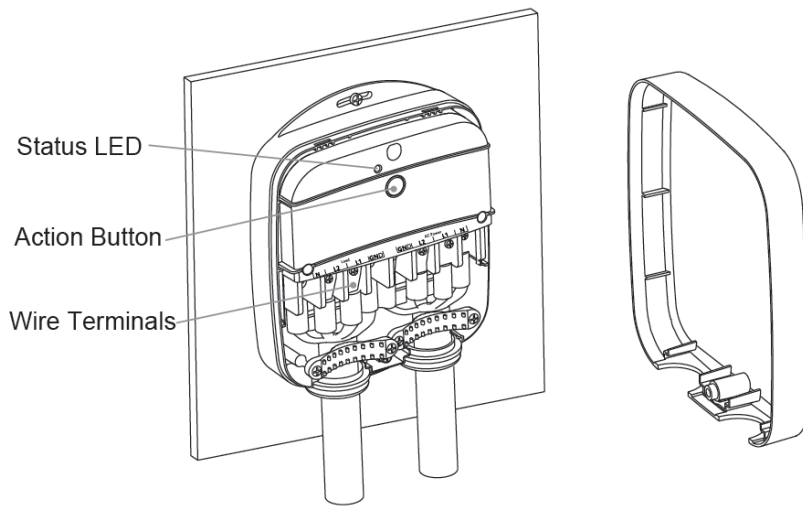
Heavy Duty Smart Switch Gen5\_ (<http://aeotec.com/z-wave-plug-in-switch>) has been crafted to power connected lighting using **Z-Wave Plus** (<http://aeotec.com/z-wave-plus>). It is powered by Aeotec's **Gen5** (<http://aeotec.com/z-wave-gen5>) technology.

To see whether Heavy Duty Smart Switch Gen5 is known to be compatible with your Z-Wave system or not, please reference our **Z-Wave gateway comparison** (<http://aeotec.com/z-wave-gateways>) listing. The **technical specifications of Heavy Duty Smart Switch Gen5** (<https://aeotec.freshdesk.com/solution/articles/6000167191-heavy-duty-smart-switch-gen5-technical-specifications->) can be viewed at that link.

## Familiarize 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.

**Status LED:** Indicates your Heavy Duty Smart Switch's status. (While unpaired, this LED will blink slowly constantly).

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

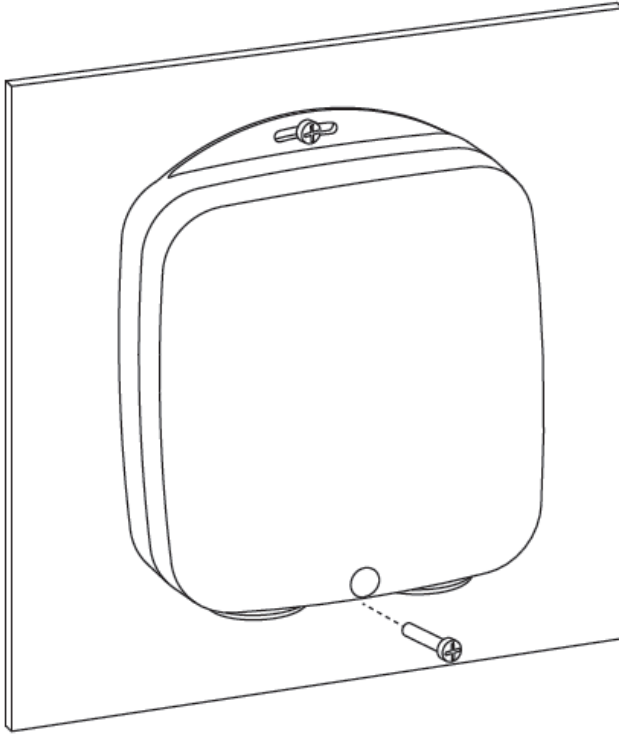
**Important:** A licensed electrician with knowledge and understanding electrician systems and electrical safety should complete the electrical installation.

## Quick Start.

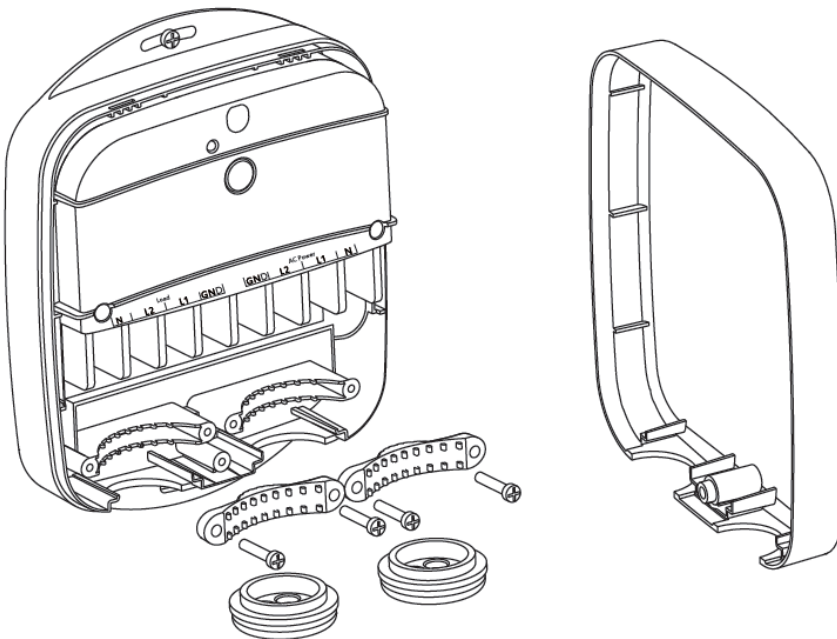
**Important:** Heavy Duty Smart Switch Gen5 must wired behind an air break switch / circuit breaker for safety.

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.

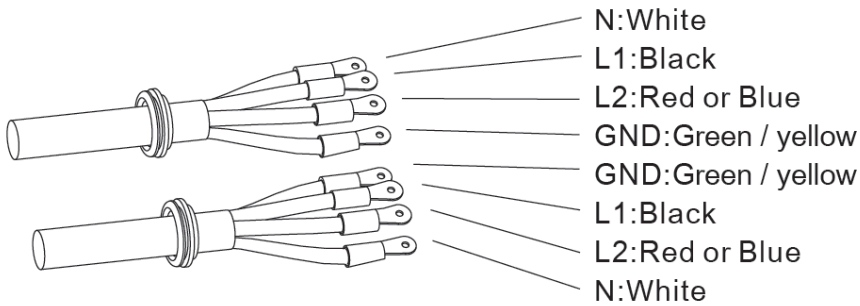
1. Mount your Heavy Duty Smart Switch on a wall as shown:



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.



**In regards to IEC 60446 wiring color mark standards in the EU where only Neutral, L1, and Ground are present (L2 and L3 do not exist for the EU model):**

N = Blue

L1 = Brown

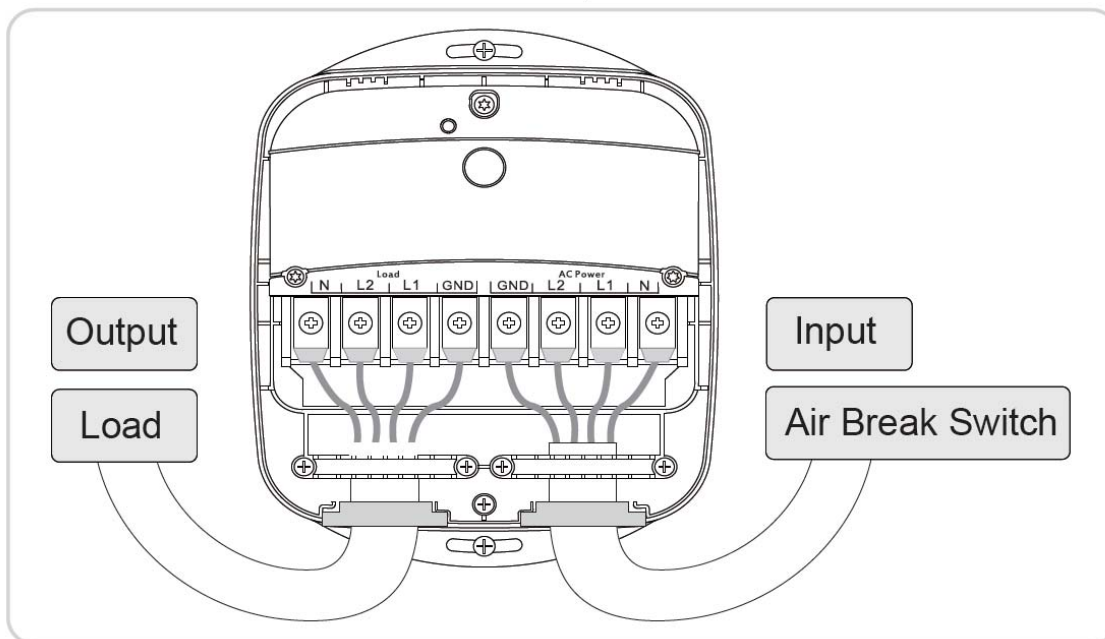
GND = Yellow-Green

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. (Note: Air Breaker is the same as Circuit Breaker)

**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. The product can be mounted on a wall or surface. To do so, drill a  $\varnothing 2.5\text{mm}$  hole that corresponds to the up upper part of your switch. Drill a second hole 138mm directly below then Affix the screws. Your installation is now complete.

**Note:**

1. Your switch should be installed in a ventilated area with good heat dissipation.
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

## Alternative Wiring Schematics

You may find other wiring schematics for using 120VAC (1 phase), 240VAC (2 phase), or EU based applications here:

**Wiring Schematics** (<https://aeotec.freshdesk.com/solution/articles/6000108707-heavy-duty-smart-switch-gen5-wiring-diagrams->)

## 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.

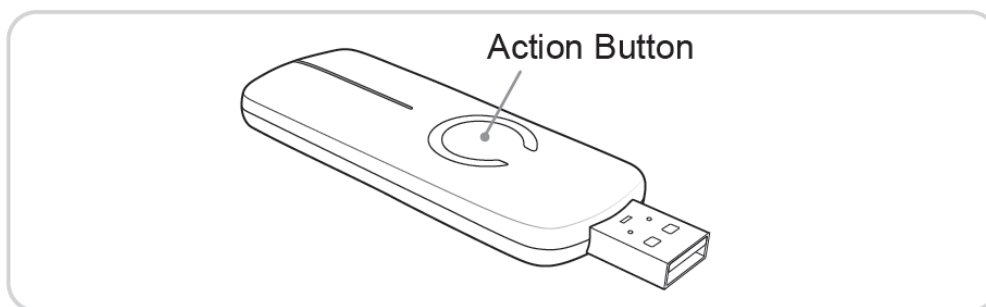
**Tip:** Turn off any devices connected to your Heavy Duty Smart Switch before adding or removing it to/from a Z-Wave network. This will help to prevent load damage.

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

### Pairing your Heavy Duty Smart Switch Gen5 into your existing Z-Wave network.

1. Place your gateway or controller into Z-Wave pair or inclusion mode. (Please refer to your controller/gateway manual on how to do this)
2. Press the Action Button on your Switch.
3. If your switch has been successfully linked to your network, its LED will no longer blink. If linking was unsuccessful, the LED will continue to blink.

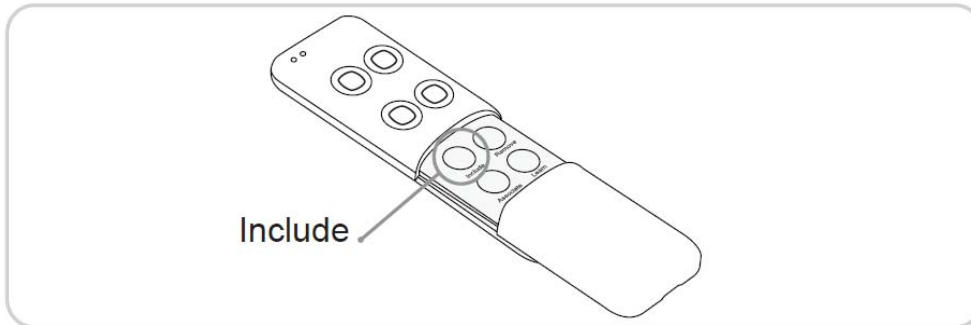
### If you're using a Z-Stick.



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
3. 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 Minimote to take it out of installation mode.

## Advanced functions.

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

#### Unpairing your Heavy Duty Smart Switch Gen5 from your existing Z-Wave network

1. Place your gateway or controller into Z-Wave unpair or exclusion mode. (Please refer to your controller/gateway manual on how to do this)
2. Press the Action Button on your Switch.
3. If your switch has been successfully unlinked to your network, its LED will begin to blink. If linking was unsuccessful, the LED will return to its last LED state.

#### 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 LED 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/controller manual for instructions on monitoring energy consumption through your Heavy Duty Smart Switch.

## More advanced configurations.

The Smart Switch Gen5 has a longer list of device configurations that you can do with Smart Switch Gen5. These are not exposed well in most gateways, but at the least you can manually set configurations through most Z-Wave gateways available. These configuration options may not be available in a few gateways.

You can find the configuration sheet here: <https://aeotec.freshdesk.com/helpdesk/attachments/6052990296>  
(<https://aeotec.freshdesk.com/helpdesk/attachments/6052990296>)

If you have any questions on how to set these, please contact support and let them know what gateway you are using.