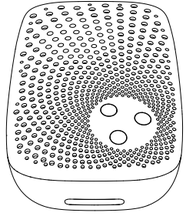
AEOTEC
BY AEON LABS

SIREN

View the expanded manual:
http://aeot.ec/spprt/siren



① Aeotec by Aeon Labs Siren Gen5.

No longer just a smart home. Now you own a safe home.

Siren takes the best smart home technology and uses it to help you build a safe home.

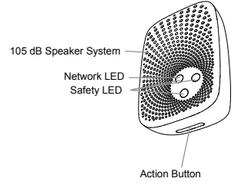
Most smart home systems have a safety flaw: in an emergency they send your smartphone a push notification. That means that your safety, and your family's safety, depends on everyone having a smartphone, and on those smartphones being turned on, and on the push notification being heard and read. In other words, your family's safety depends on a lot of things going right just when a lot of things are going wrong.

Siren is better than that. When an emergency is happening it lets you know. Its 105 dB Speaker System is always heard. Its super-bright LED system lights your path even when it's dark. Its backup battery means that Siren keeps on working even when your power is out or has been purposefully cut. Siren provides a smart home with the perfect security and safety features that it needs.

Those security and safety features are matched by smart features. Siren's speaker system can access 5 different audio alerts, allowing your smart home to pick the alert best suited to the emergency. The speaker system's volume can also be adjusted so that Siren is perfect for every space in every home. Best of all, Siren is simple to install. Plug Siren in, sync it to your smart home, and then enjoy the peace of mind that comes with knowing that your smart home is now a safe home.

② Familiarise yourself with your Siren Gen5.

- Action Button
- 105 dB speaker system
- Safety LED
- Network LED



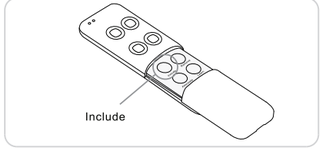
③ Quick start.

Getting your Siren up and running is as simple as plugging it into a wall socket and linking it to your existing Z-Wave® network. The following instructions tell you how to link your Siren to your Z-Wave network using Aeotec by Aeon Labs' Z-Stick or Minimote controllers. If you are using other products as your main Z-Wave controller, such as a Z-Wave gateway, please refer to the part of their respective manual that tells you how add new devices to your network.

If you're using a Z-Stick:

1. Decide on where you want your Siren to be placed and plug it in to a wall outlet. Its Network LED will begin to blink for 3 seconds when you short press and quickly release the Action Button.
2. If your Z-Stick is plugged into a gateway or a computer, unplug it.
3. Take your Z-Stick to your Siren.
4. Press the Action Button on your Z-Stick.
5. If Siren has been successfully included to your Z-Wave network its Network LED will no longer blink when you short press and quickly release the Action button on Siren. If the inclusion was unsuccessful and the Network LED continues to blink when you short press and quickly release the Action button, repeat the above steps.
6. Press the Action Button on the Z-Stick to take it out of inclusion mode and return it to your gateway or computer.

If you're using a Minimote:



1. Decide on where you want your Siren to be placed and plug it in to a wall socket. Its Network LED will begin to blink for 3 seconds when you short press and quickly release the Action Button. Take
2. your Minimote to your Siren.
3. Press the Include button on your Minimote.
4. If Siren has been successfully included to your Z-Wave network, its Network LED will no longer blink when you short press and quickly release the Action Button on Siren. If the inclusion was unsuccessful and the Network LED continues to blink when you short press and quickly release the Action Button repeat the above steps.
5. Press any button on your Minimote to take it out of inclusion mode.

With your Siren now working as a part of your smart home, you'll be able to configure it from your home control software. Please refer to your software's user guide for precise instructions on configuring Siren to your needs.

You're able to test your Siren's speaker system manually. Please note that the speaker system is 105 dB and very loud – we recommend only testing your Siren while wearing the necessary ear protection given you'll need to be next to your Siren while manually testing it. To manually test Siren, press and hold the Action Button for 5 seconds.

④ Advanced functions.

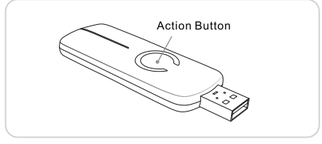
◉ Associating different tones with difference events.

Your Siren contains 5 different alert tones, and each can be set to be used for a different type of emergency. One tone is more relevant to intruder alerts, while others are more relevant to the likes of water leaks, medical emergencies and door chimes. This functionality can be setup and configured via supporting Z-Wave gateways. Please refer to your gateway's user manual for further information.

◉ Removing your Siren Gen5 from a Z-Wave network.

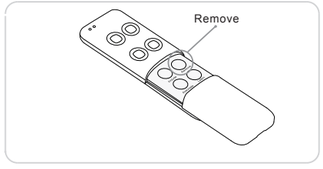
Your Siren can be removed from your Z-Wave network at any time. You'll need to use your Z-Wave network's main controller to do this and the following instructions tell you how to do this using Aeotec by Aeon Labs' Z-Stick and Minimote controllers. If you are using other products as your main Z-Wave controller, please refer to the part of their respective manuals that tells you how remove devices from your network.

If you're 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 Siren.
3. Press the Action Button on your Z-Stick.
4. Press the Action Button on your Siren.
5. If your Siren has been successfully excluded from your network, its Network LED will blink for 3 seconds when you short press and quickly release your Siren's Action Button. If the exclusion was unsuccessful, the Network LED will not blink.
6. Press the Action Button on the Z-Stick to take it out of exclusion mode.

If you're using a Minimote:



1. Take your Minimote to your Siren.
2. Press the Remove Button on your Minimote.
3. Press the Action Button on your Siren.
4. If your Siren has been successfully excluded from your network, its Network LED will blink for 3 seconds when you short press and quickly release your Siren's Action Button. If the exclusion was unsuccessful, the Network LED will not blink.
5. Press any button on your Minimote to take it out of exclusion mode.

Resetting your Siren Gen5

At some stage, you may wish to reset all of your Siren's settings to their factory defaults. To do this, press and hold the Action Button for 20 seconds and then release it. Your Siren will now be reset to its original settings, and the speaker system will sound for 3 seconds as a confirmation. This procedure should be used only when the primary controller is missing or inoperable.

⑤ Technical specfications.

Model number: ZW080
Built-in Lithium Battery: 430 mAh.
Alarm Power: 1.7W.
Max Standby Power: 0.7W.
Max Volume: 105 dB, reduced in battery powered mode.
Operating Temperature: 0-45℃
Operating Distance: Up to 550 feet/170 metres outdoors.

Version	Input(Standby Power)	Working band
AU	230V 50Hz,Max:30mA	921.42MHz
BR	220V 60Hz,Max:30mA	921.42MHz
CN	220V 50Hz,Max:30mA	868.40MHz
EU	230V 50Hz,Max:30mA	868.42MHz
IL	230V 50Hz,Max:30mA	916.02MHz
IN	230V 50Hz,Max:30mA	865.20MHz
UK	230V 50Hz,Max:30mA	868.42MHz
US	120V 60Hz,Max:30mA	908.42MHz

⑥ 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.

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

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.

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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
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 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 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: 501008000001-AA

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BY AEON LABS

Aeon Labs Siren Gen5

(Z-Wave Siren Gen5)

Change History

Revision	Date	Change Description
1	05/14/2014	Initial draft.
2	06/30/2014	Use Configuration CC to select the Siren sounds.

Aeon Labs Siren Gen5
Engineering Specifications and Advanced Functions for Developers
(V1.21)

Aeon Labs Siren is a switch multilevel device based on Z-wave enhanced 232 slave library of V6.51.01.

Siren Gen5 can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network. It also supports Security Command Class and has the AES 128 bit security encryption built right in.

1. Library and Command Classes

1.1 SDK: 6.51.01

1.2 Library

- Basic Device Class: BASIC_TYPE_ROUTING_SLAVE
- Generic Device class: GENERIC_TYPE_SWITCH_BINARY
- Specific Device Class: SPECIFIC_TYPE_SIREN

1.3 Commands Class

	Included Non-Secure	Included Secure
Node Info Frame	COMMAND_CLASS_ZWAVEPLUS_INFO V2 COMMAND_CLASS_BASIC V1 COMMAND_CLASS_SWITCH_BINARY V1 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_ASSOCIATION V2 COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_POWERLEVEL V1 COMMAND_CLASS_SCENE_ACTIVATION V1 COMMAND_CLASS_SCENE_ACTUATOR_CONF V1 COMMAND_CLASS_VERSION V2 COMMAND_CLASS_FIRMWARE_UPDATE_MD V2 COMMAND_CLASS_SECURITY V1 COMMAND_CLASS_MARK V1 COMMAND_CLASS_DEVICE_RESET_LOCALLY V1 COMMAND_CLASS_HAIL V1	COMMAND_CLASS_ZWAVEPLUS_INFO V2 COMMAND_CLASS_VERSION V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_SECURITY V1 COMMAND_CLASS_MARK V1 COMMAND_CLASS_DEVICE_RESET_LOCALLY V1 COMMAND_CLASS_HAIL V1
Security Command Supported Report Frame	–	COMMAND_CLASS_SWITCH_BINARY V1 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_ASSOCIATION V2 COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_SCENE_ACTIVATION V1 COMMAND_CLASS_SCENE_ACTUATOR_CONF V1 COMMAND_CLASS_VERSION V1 COMMAND_CLASS_POWERLEVEL V1 COMMAND_CLASS_FIRMWARE_UPDATE_MD V2

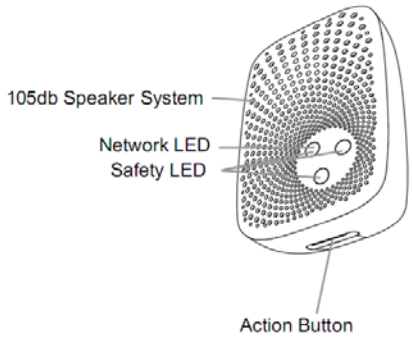
2. Technical Specifications

Operating Distance: Up to 550 feet (170 meters) outdoors.

3. Familiarize Yourself with Your Siren Gen5

3.1 Interface

- Action Button
- 105db Speaker System
- Safety LED
- Network LED



4. All Functions of Each Trigger

4.1 Functions of Z-Wave Button

Trigger	Description
Clicked	**Cancel Alarm Status, Let Siren into Learn Mode.** **Add Siren into Z-Wave Network:** 1. Install Siren, and plug it into the socket of AC Power. 2. Let the primary controller into inclusion mode (If you don't know how to do this, please refer to its manual). 3. Press the Action Button. 4. If the inclusion is failed, please repeat the process from step 2. **Remove Siren from Z-Wave Network:** 1. Install Siren, and plug it into the socket of AC Power. 2. Let the primary controller into exclusion mode (If you don't know how to do this, refer to its manual). 3. Press the Action Button. 4. If the exclusion is failed, please repeat the process from step 2. **Note**: If Siren is excluded from Z-wave network, it will be reset to factory default.
Press and hold 5~8 seconds	**Cancel Alarm Status, Test the Sound:** For 1 to 5 seconds: The Network LED will fast blink, after 5 seconds, the alarm sound will ring for 3 seconds and the same time all LEDs go into the state of fast blink.
Press and hold 20 seconds and released	**Reset Siren to Factory Default:** 1. Make sure the Siren is connected to the power supply. 2. If holding time more than one second, the Network LED will fast blink. If holding time more than 20seconds, Network LED will be on for 2 seconds, which indicates the reset operation is successful, otherwise please repeat from step1 to step2. **Note**: 1, This procedure should only be used when the primary controller is inoperable. 2, Reset Siren to factory default settings will: a), remove Siren from Z-Wave network state; b), delete the Association setting; c), restore the configuration settings to the default.

5. Special Rule of Each Command

Parameter	Value
Z-Wave Plus Version	1
Role Type	5 (ZWAVEPLUS_INFO_REPORT_ROLE_TYPE_SLAVE_ALWAYS_ON)
Node Type	0 (ZWAVEPLUS_INFO_REPORT_NODE_TYPE_ZWAVEPLUS_NODE)
Installer Icon Type	0x0F00 (ICON_TYPE_GENERIC_SIREN)
User Icon Type	0x0F00 (ICON_TYPE_GENERIC_SIREN)

5.1 Association Command Class
The Siren supports 1 Association group.
The Node IDs in Group 1 will receive Hail Command /Basic report (configurable) which is sent via single-cast (if there are more than 1 Node ID) when Siren's status is changed.

5.2 The rules of the level value (Basic CC, Binary Switch CC, Scene CC)

(1) 0x00: Close siren sound.
(2) 0x01 ~ 0x63 and 0xff: Open siren sound.
(3) The other values would be ignored.

5.3 Scene Actuator Conf Command Class
The Siren supports max 255 Scene IDs.

The Scene Actuator Conf Set command is effective, when only Level>=0 and Level<0x64 or Level=0xff, otherwise, it will be ignored.

The Scene Actuator Configuration Get Command is used to request the settings for a given scene, if scene ID is not setting, it will be ignored. If Scene ID =0, then the Siren will report currently the activated scene settings. If the currently activated scene settings do not exist, the Siren will reports Level = currently load status and Dimming Duration=0

5.4 Scene Activation Set Command Class
The Scene Activation Set Command is effective, when only Level>=0 and Level<0x64 or Level=0xff, otherwise, it will be ignored. If the requested Scene ID is not configured, it will be ignored too.

Example for the use of Scene in Siren:
You can configure a Scene for the Siren if you would like to active the siren sound with the Scene Activat ion Set CC.
You just need to configure a Scene(e. g the Scene ID =1) and the level= 0x01(0x02~0x63 or 0xff), which means that you have created a Scene (the Scene ID =1)that you can active it or trigger the siren sound vi a receiving the Scene Activation Set CC with the Scene ID=1 from the controller.

5.5 Configuration Set Command Class

7	6	5	4	3	2	1	0
Command Class = COMMAND_CLASS_CONFIGURATION							
Command = CONFIGURATION_SET							
Parameter Number							
Default	Reserved				Size		
Configuration Value 1(MSB)							
Configuration Value 2							
……							
Configuration Value n(LSB)							

Parameter Number Definitions (8 bit):

Parameter Number Hex / Decimal	Description	Default Value	Size
0x25 (37)	1, The value1 (low byte) is used to select the Siren sound : Value1=0, do not change the current Siren sound. Value1=1, Siren sound 1 is selected. Value1=2, Siren sound 2 is selected. Value1=3, Siren sound 3 is selected. Value1=4, Siren sound 4 is selected. Value1=5, Siren sound 5 is selected. Other values will be ignored. 2, The value2 (high byte) is used to adjust the volume: Value2=0, do not change the current volume. Value2=1, set the volume to 88 dB. Value2=2, set the volume to 100 dB. Value2=3, set the volume to 105 dB. Other values will be ignored.	Value1 = 1. Value2 = 3.	2
0x50 (80)	Enable to send notifications to associated devices (Group 1) when the state of Siren changed (0=nothing, 1=hail CC, 2=basic CC report).	0	1
0xC8 (200)	Partner ID (0= Aeon Labs Standard Product).	0	1
0xFC (252)	Enable/disable Lock Configuration (0 =disable, 1 = enable). Value=0, the setting of configuration parameters is allowed. Value=1, all configuration parameters cannot be set (Locked).	0	1
0xFF (255)	1, Value=0x55555555、Default=1、Size=4 Reset to factory default setting and removed from the z-wave network 2, Value=0、Default=1、Size=1 Reset to factory default setting	0	4