

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 (V3.24)

Aeon Labs Siren is a switch binary 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	COMMAND_CLASS_ZWAVEPLUS_INFO V2	COMMAND_CLASS_ZWAVEPLUS_INFO V2
Frame	COMMAND_CLASS_BASIC V1	COMMAND_CLASS_VERSION V2
	COMMAND_CLASS_SWITCH_BINARY V1	COMMAND_CLASS_MANUFACTURER_SPECIFIC V2
	COMMAND_CLASS_CONFIGURATION V1	COMMAND_CLASS_SECURITY V1
	COMMAND_CLASS_ASSOCIATION V2	COMMAND_CLASS_MARK V1
	COMMAND_CLASS_ASSOCIATION_GRP_INFO V1	COMMAND_CLASS_DEVICE_RESET_LOCALLY V1
	COMMAND_CLASS_MANUFACTURER_SPECIFIC V2	COMMAND_CLASS_HAIL V1
	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	
Security	-	COMMAND_CLASS_SWITCH_BINARY V1
Command		COMMAND_CLASS_CONFIGURATION V1
Supported		COMMAND_CLASS_ASSOCIATION V2
Report		COMMAND_CLASS_ASSOCIATION_GRP_INFO V1
Frame		COMMAND_CLASS_MANUFACTURER_SPECIFIC V2
riaille		COMMAND_CLASS_SCENE_ACTIVATION V1
		COMMAND_CLASS_SCENE_ACTUATOR_CONF V1
		COMMAND_CLASS_VERSION V2
		COMMAND_CLASS_POWERLEVEL V1
		COMMAND_CLASS_FIRMWARE_UPDATE_MD V2
		COMMAND_CLASS_DEVICE_RESET_LOCALLY V1
		COMMAND CLASS HAIL V1

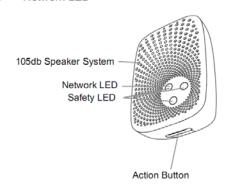
2. Technical Specifications

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 7-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 Learning 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 remove is failed, please repeat the process from step 2.		
	Note: If Siren is removed from Z-wave network, it will be reset to factory default.		
Press and hold	Cancel Alarm Status, Test the Sound:		
5~8 seconds	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	Reset Siren to Factory Default:		
20 seconds and	1. Make sure the Siren is connected to the power supply.		
released	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: 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) $0x01 \sim 0x63$ 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.

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	Description	Default Value	Size
Number			
Hex / Decimal			
0x25 (37)	1, The value1 (High Byte) is used to select the Siren sound :	Value1 = 1.	2
	Value1=0, do not change the current Siren sound.	Value2 = 3.	
	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 (Low 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.		
0x50 (80)	Enable to send notifications to associated devices (Group 1)	0	1
	when the state of Siren changed (0=nothing, 1=hail CC,		
	2=basic CC report).		
0xC8 (200)	Partner ID	0	1
	(0= Aeon Labs Standard Product).		
0xFC (252)	Enable/disable Lock Configuration (0 = disable, 1 = enable).	0	1
	Value=0, the setting of configuration parameters is allowed.		_
	Value=1, all configuration parameters cannot be set (Locked).		
0xFF (255)	1, Value=0x55555555 Default=1、Size=4	N/A	4
	Reset to factory default setting and removed from the z-wave		
	network		
	2, Value=0、Default=1、Size=1	N/A	1
	Reset to factory default setting		-