

Aeotec 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. |
| 3 | 12/14/2015 | Add Configuration parameter 38. |

Aeotec Siren Gen5 Engineering Specifications and Advanced Functions for Developers (V3.25)

Aeotec 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 |
| Traine | | 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 |

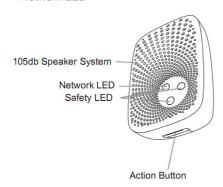
2. Technical Specifications

Operating distance: Up to 492 feet (150 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 Action 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 | Toggle on the alarm sound, test the last siren 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 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 | er Definitions (8 bit): Description | Default Value | Size |
|--------------------------|---|----------------------------|------|
| Number | Description | Delault value | SIZC |
| | | | |
| Hex / Decimal 0x25 (37) | 1, The value1 (High 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 (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. | Value1 = 1. Value2 = 3. | 2 |
| 0x26 (38) | Enable/disable to turn off the alarm sound via pressing the Action Button. Value=0, disable. Value=1. Enable. | 1 | 1 |
| 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= Aeotec 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 | N/A | 4 |
| | 2, Value=0 Default=1 Size=1 Reset to factory default setting | N/A | 1 |