

Siren User Guide

Introduction

In the front casing, there is button that is used to carry out include, exclude or reset factory default settings on PCB Board.

When power is first supplied, the LED will flash on and off alternately at one second intervals within 5 seconds if the detector has not been added a Z-Wave network. Please get familiar with the terms below before starting the operations.

This product 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.

Manufacture ID: 0x0258
Product ID: 0x0088 (US)
Product ID: 0x1088 (EU)

Add the Siren to Z-Wave Network

1. Remove the siren cover.
2. Make sure the siren is powered.
3. Set Z-Wave controller or Z-Wave gateway into inclusion mode (Refer to the controller or gateway operating manual)
4. Press the button three times within 1.5 second, the device will enter inclusion mode. And the LED will flash on and off alternately five times.

Note: If siren has not been added to Z-wave network, the siren will enter inclusion mode automatically when it is powered on. You should let the controller enter into inclusion first before power on the siren in order to run this function.

Remove the Siren from Z-Wave Network

1. Remove the siren cover.
2. Make sure the siren is powered.
3. Set Z-Wave controller or Z-Wave gateway into exclusion mode (Refer to the controller or gateway operating manual)
4. Press the button three times within 1.5 second, the device will enter exclusion mode.

Restore the Siren to Factory Default Settings

Reset procedure will delete all information on the Z-Wave network and Z-Wave controller or Z-Wave Gateway, and restore the siren to factory default settings.

1. Remove the device cover.
2. Make sure the siren is powered.
3. Press and hold the button for 10 seconds, led will blink once.
4. Release the button.

Note: to use the reset procedure only when the primary controller is missing or inoperable.

Associations (Association Command Class Version 2)

This Siren supports 3 groups; each group supports max 5 associated nodes.

This siren can identify some z-wave notification sensors such as Motion Sensor, Door/Window Sensor, Water Leakage Sensor, Smoke Sensor and so on. If these sensors associate this siren to their lifeline group or other group that supports NOTIFICATION_REPORT, the siren will play different music when sensor is triggered.

GROUP 1 is lifeline service that assigned to Siren status. It enables the Siren to send reports and readings to Z-Wave Controller or Z-Wave Gateway whenever the sensor is triggered. This Group Support:

SWITCH_BINARY_REPORT,
NOTIFICATION_REPORT,
BATTERY_REPORT,
DEVICE_RESET_LOCALLY_NOTIFICATION

GROUP 2 allows for Send Binary Switch Report to associated devices in this group. This Group Support:

SWITCH_BINARY_REPORT

GROUP 3 allows for Send Notification to associated devices in this group. This Group Support:

NOTIFICATION_REPORT

Advanced Configuration

This Siren supports 10 music for customer selecting their favorite music.

1. Configure Alarm Music Volume

This parameter defines the output volume when siren plays door bell music. Door Bell music volume is divided into 3 stages, Low (Parameter is set to '1'), Middle (Parameter is set to '2'), High (Parameter is set to '3'). Default value is '3'.

Parameter Number	Size	Available Settings	Default
1	1	1 ~ 3	3

2. Configure Alarm Music Duration Time

This Parameter defines the alarm music duration time when siren receive an alarm sensor notification report or an alarm command from controller. The duration time is divided into 5 stages: Siren is not on (Parameter is set to '0'), 30 second (Parameter is set to '1'), 1 minute (Parameter is set to '2'), 5 minute (Parameter is set to '3') and Siren is always on until battery is dead (Parameter is set to '0xFF'). Default value is '2'.

The value for this parameter is unsigned value.

Parameter Number	Size	Available Settings	Default
2	1	0 x00~ 0x03, 0xFF	2

3. Configuring Door Bell Music Duration Time

This parameter defines the door bell music duration time when siren receives a door/window sensor notification report or an alarm command (BASIC_SET = 0x02) from controller. The door bell music will be played always if this parameter is set to '0xFF'. The door bell music will not be played if this parameter is set to '0'. Other values are the door bell music playing duration time. Unit: Time.

The value for this parameter is unsigned value.

Parameter Number	Size	Available Settings	Default
3	1	0x00~0xFF	1

4. Configure Door Bell Music Volume

This parameter defines the output volume when siren plays alarm music. Door Bell music volume is divided into 3 stages, Low (Parameter is set to '1'), Middle (Parameter is set to '2'), High (Parameter is set to '3'). Default value is '1'.

Parameter Number	Size	Available Settings	Default
4	1	1 ~ 3	1

5. Configure Alarm Music Index

This parameter defines the alarm music index for siren play different music when alarm occurs. There are 10 different music for user selection.

Parameter Number	Size	Available Settings	Default
5	1	1 ~ 10	10

6. Configure Door Bell Music Index

This parameter defines the door bell music index for siren play different music when alarm occurs. There are 10 different music for user selection.

Parameter Number	Size	Available Settings	Default
6	1	1 ~ 10	9

7. Configure Default Siren On Mode

This parameter defines the default music index, volume and the duration time for siren on. This parameter can be selected between ALARM MUSIC and DOOR BELL MUSIC. The settings for ALARM MUSIC MODE defines by Param #1, #2 and #5. The settings for DOOR BELL MUSIC MODE defines by Param #3, #4 and #6.

If parameter is set to '1', siren will select ALARM MUSIC MODE to play music;

If parameter is set to '2', siren will select DOOR BELL MUSIC MODE to play music;

Parameter Number	Size	Available Settings	Default
7	1	1 ~ 2	1

8. Configure Alarm Led Enable

This parameter defines the default led enable status when siren is on for ALARM MUSIC MODE.

If parameter is set to '0', led will be disable.

If parameter is set to '1', led will be enable. When siren is on, the led will blink.

Parameter Number	Size	Available Settings	Default
8	1	0, 1	1

9. Configure Door Bell Led Enable

This parameter defines the default led enable status when siren is on for DOOR BELL MUSIC MODE.

If parameter is set to '0', led will be disable.

If parameter is set to '1', led will be enable. When siren is on, the led will blink.

Parameter Number	Size	Available Settings	Default
9	1	0, 1	0

Command Class Interact

Binary Switch Command Class

Siren can be turned on and off by COMMAND_CLASS_SWITCH_BINARY Which music will be play by siren is decided by advance configuration parameter #5. When Siren stop play alarm music, it will send a SWITCH_BINARY_REPORT = 0x00 to controller.

Siren Alarm On:

Command Class: COMMAND_CLASS_SWITCH_BINARY

Command: SWITCH_BINARY_SEND

Value: 0xFF

Siren Alarm Off:

Command Class: COMMAND_CLASS_SWITCH_BINARY

Command: SWITCH_BINARY_SEND
Value: 0x00

Basic Command Class

The Functions of BASIC_SET = 0x00 And BASIC_SET = 0xFF are same to Binary Switch Command Class.

Indicator Command Class

The INDICATOR_SET Value is indicated that which music will be played. For example: INDICATOR_SET = 0x01, Siren will play the first music.

See the Table As Blow:

Command	Music Index in Memery	Playing Volume And Time
INDICATOR_SET = 0x01	1	Defined By Param #3, #4
INDICATOR_SET = 0x02	2	Defined By Param #3, #4
INDICATOR_SET = 0x03	3	Defined By Param #3, #4
INDICATOR_SET = 0x04	4	Defined By Param #3, #4
INDICATOR_SET = 0x05	5	Defined By Param #3, #4
INDICATOR_SET = 0x06	6	Defined By Param #3, #4
INDICATOR_SET = 0x07	7	Defined By Param #3, #4
INDICATOR_SET = 0x08	8	Defined By Param #3, #4
INDICATOR_SET = 0x09	9	Defined By Param #3, #4
INDICATOR_SET = 0x0A	10	Defined By Param #3, #4

Other INDICATOR_SET values are invalid for this siren.

Notification Command Class

If Siren receives a command from associated devices or controller to play any music, siren will send an active notification to controller. If Siren stops play music, it will send a no active notification to controller.

Siren Active Notification Report:

Command Class : COMMAND_CLASS_NOTIFICATION
Command: NOTIFICATION_REPORT
Notification Type: NOTIFICATION_TYPE_SIREN
Event: NOTIFICATION_EVENT_SIREN_ACTIVE

Siren No Active Notification Report:

Command Class : COMMAND_CLASS_NOTIFICATION
Command: NOTIFICATION_REPORT
Notification Type: NOTIFICATION_TYPE_SIREN
Event: NOTIFICATION_EVENT_SIREN_NO_EVENT

Battery Check Command

The users can also enquire the battery status of the siren by sending BATTERY_GET command. Once the siren receives the command, it will return BATTERY_REPORT command. The siren will send BATTERY_LEVEL = 0xFF command to the Z-Wave Controller to inform that the siren is in dead battery status, otherwise BATTERY_LEVEL value range is 0% to 100%.

LED Color Indicator

LED Color	Led Display Status	Description
Red	Blink 5 Times(1s Interval)	Power on and Not Add in Z-Wave Network
	Blink 5 Times(500ms Interval)	Press Button tripled: 1, Enter Inclusion Mode 2, Enter Exclusion Mode 3, Send Node Info.
	Blink 5 Times(300ms Interval)	Power on and Already Add in a Z-Wave Network
	Blink 1 Time	Press the Button Long Time, Reset the Plug to restore default settings
	Turn on with rotation	Alarm on

Command Classes

This siren supports Command Classes as Below:

- * COMMAND_CLASS_ZWAVEPLUS_INFO (V2)
- * COMMAND_CLASS_VERSION (V2)
- * COMMAND_CLASS_MANUFACTURER_SPECIFIC (V2)
- * COMMAND_CLASS_DEVICE_RESET_LOCALLY (V1)
- * COMMAND_CLASS_POWERLEVEL (V1)
- * COMMAND_CLASS_BATTERY (V1)
- * COMMAND_CLASS_ASSOCIATION (V2)
- * COMMAND_CLASS_ASSOCIATION_GRP_INFO (V1)
- * COMMAND_CLASS_WAKE_UP (V2)
- * COMMAND_CLASS_SWITCH_BINARY (V1)
- * COMMAND_CLASS_NOTIFICATION (V8)
- * COMMAND_CLASS_CONFIGURATION (V1)
- *COMMAND_CLASS_INDICATOR (V1)

SPECIFICATIONS

Battery type:	2 × CR123 (3.0V)
Power Consumption:	2W
Max Current:	35mA (In Radio Transmitter Mode) 500mA (In Siren On and Max Volume Mode)
EU Standards Compliance:	
Radio Protocol:	Z-Wave
Radio Frequency:	EU – 868.4MHz US – 908.4MHz
Valid Range:	Up to 80m outdoors

Operational Temperature: Up to 40m indoors (Depending on terrain and building structure)
0 – 40 °C