# Instruction Manual
# Siren Alarm

Thank you for your support

- Please read the instruction manual carefully before operating
- Please keep the instruction manual for future reference


**Shenzhen NEO Electronics Co., LTD**

## Product Introduction

Siren alarm is an intelligent device that can be controlled remotely by the radio frequency. Siren alarm send messages via Z-wave network to the Z-Wave main controller. In the Z-wave network communications, Siren alarm can be connected to any Z-wave main controller, Different countries or areas, the radio frequency of the Z-wave network is different . In the communication between the Siren alarm and Z-wave main controller, the siren alarm can both send and receive messages. When press the code button of siren alarm, it will send message to the Z-wave main controller, the Z-wave main controller can display the on/off status of the siren alarm; when the siren alarm receives messages from the Z-wave main controller, the siren alarm will be triggered. The siren alarm is battery powered, small and easily install. When siren alarm is working, LED light will flash, and there will be alarm sound at the same time. The sound is not lower than 90 decibels.

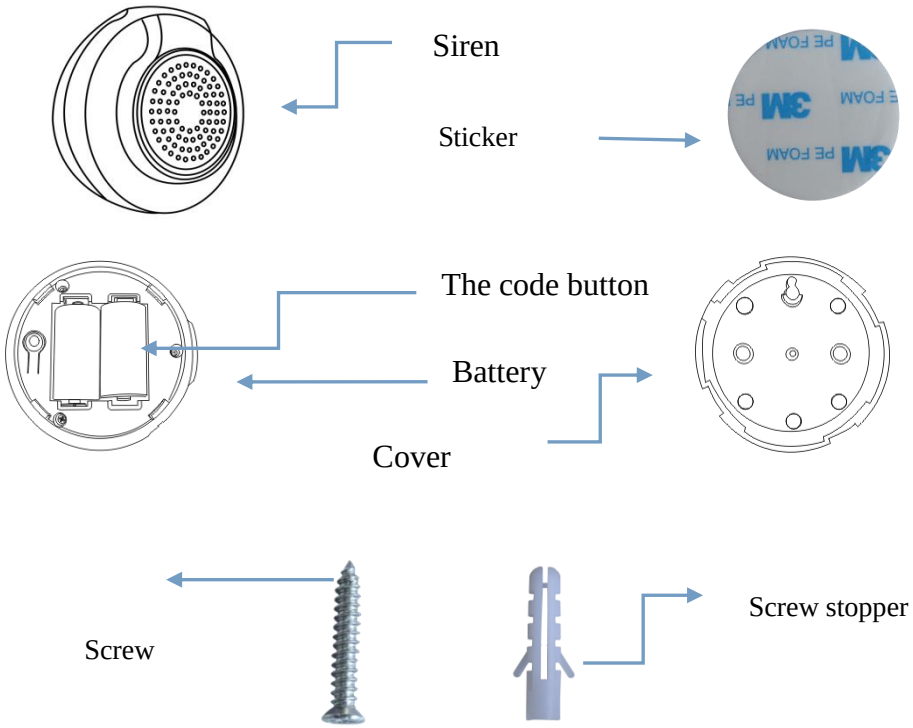
## Technical parameters

- Power supply:CR123A x 2
- Stand-by time: 1 year
- Radio Frequency: 868.4MHz EU; 908.4MHz US
- Compatible with 300 series and 500 series
- Easy installation on wall or any surface
- 10 sound can be select
- Range: up to 70m outdoor
  up to 50m indoor
- Radio Protocol: Z-wave
- Sound intensity: >90 dB
- Operation temperature: 0~40℃
- Storage temperature: 0~60℃
- Dimension: (D x W x H):70mm x 68mm x 31mm

## Technical Information

- When the siren alarm triggered, it will make alarm sound and LED light flash at the same time.
- When the other sensor is triggered, the siren alarm can associate with the sensors through the Z-wave network.
- Siren alarm can be controlled remotely via mobile phone App.
- Compatible with any Z-wave controller.

## Product Configuration




## Product List

- Siren alarm 1pc
- Battery 2pcs
- Screw 3pcs
- Screw stopper 3pcs
- Double-side adhesive 1pc
- Instruction manual 1pc

## Including Sensor (Siren alarm) to Z-wave Network

The siren alarm can be included to the Z-wave network by pressing on the code button.

1) Power to the code, the device is plugged into the power 20S can not have any operation!

2) Disassemble the siren alarm and insert the battery into the siren alarm. Make sure the device is located within the direct range of the controller.
3) Set the controller into the learning mode (see main controller's operating manual).
4) Quickly, triple click the code button, LED light will flash red for 5 times.
5) Siren alarm will be detected and included in the Z-wave network.
6) Wait for the main controller to configure the siren alarm.

## Excluding Sensor (Siren alarm) from Z-wave Network

1) Make sure the sensor is connected to power source.
2) Set the main controller into the learning mode (see main controller's operating manual).
3) Quickly, triple click the code button, LED light will flash red for 5 times.
4) Wait for the main controller to delete the sensor.

# Installation Steps

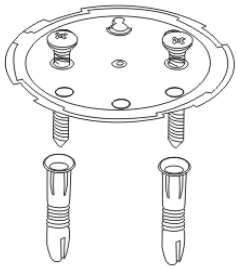
## Hardware Installation

- Cover installation
- Battery installation

## Cover installation

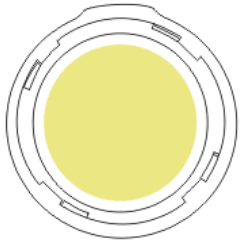
Option One

Fix the siren alarm with Screws

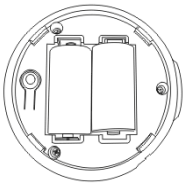


Option Two

Fix the siren alarm with sticker



## Battery installation

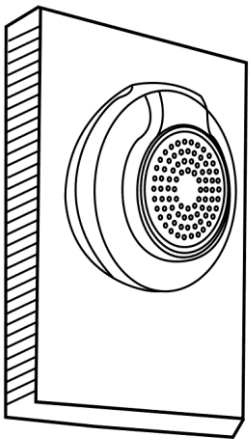


Open the siren alarm

Install battery

Close the siren alarm

## Installation example



## Tips

- When install the siren alarm, please avoid the noisy places.
- Please install somewhere easy to find.
- Do not install in a ventilated position to affect the effect of the siren alarm.
- Do not install at a wet place to prevent the siren alarm from damaging.
- When the siren alarms, it would sound and the led would flash red lights.
- Association allows for direct communication between Z-wave network devices. Main controller does not take part in such communication. Using this mechanism, siren alarm may communicate with other devices even when the main controller is damaged.

## The status of LED lights

1. when the siren alarm is triggered, LED light flashes red for 12 seconds.
2. When the siren alarm installs battery, LED light will flash red for 3 seconds.
3. Quickly, triple click the code button ,add the siren alarm to the Z-wave network or delete siren alarm from Z-wave network , LED light flashes red for 5 times.
4. Press on the code button for 10 seconds, the siren alarm will be restored to factory default settings, LED light flashes red for 3 seconds.
5. In the normal condition, the LED light keeps being off.

# Restore the Sensor 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 sensor to factory default settings.

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

# 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

**NOTE**

Association allows for direct communication between Z-wave network devices. Main controller does not take part in such communication.

## Battery Usage Tips

Battery life of the siren alarm is approximately 1 years at factory default settings. The current battery level is displayed in the z-wave main controller. Red battery icon means the battery needs replaced.

## Note

Siren alarm is battery powered. Using batteries other than specified may result in explosion. Dispose of properly, please observe environmental protection rules.

## Advanced Configuration

### 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 '2'.

| Parameter Number | Size | Available Settings | Default |
|---|---|---|---|
| 1 | 1 | 1 ~ 3 | 2 |

### 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 '255'). Default value is '2'.

| Parameter Number | Size | Available Settings | Default |
|---|---|---|---|
| 2 | 1 | 0 ~ 3,255 | 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. The door bell music will be played always if this parameter is set to '255'. 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.

| Parameter Number | Size | Available Settings | Default |
|---|---|---|---|
| 3 | 1 | 0 ~255 | 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 '2'.

| Parameter Number | Size | Available Settings | Default |
|---|---|---|---|
| 4 | 1 | 1 ~ 3 | 2 |

**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 | 9 |

**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 | 10 |

**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 set to '1', siren will select ALARM MUSIC MODE to play music;
If parameter set to '2', siren will select DOOR BELL MUSIC MODE to play music;

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

# Command Class Interact

**Binary Switch CC**

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 CC

The Functions of BASIC_SET = 0x00 is same to SWITCH_BINARY_SET = 0x00; And BASIC_SET = 0x01 ~ 0x99, 0xFF are same to SWITCH_BINARY_SET = 0xFF.

## Notification CC

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 receivers 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, Adding siren in a Z - Wave Network or 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 Sensor 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 (V6)
* COMMAND_CLASS_CONFIGURATION (V1)

**SPECIFICATIONS**

| | |
|---|---|
| Baaery type: | 2×CR1123(3.0V) |
| Power Consumption: | 2W |
| Max Current: | 35mA(In Radio Transmitter Mode) |
| EU Standards Compliance: | |
| Radio Protocol: | Z-Wave |
| Radio Frequency: | EU-868.4MHz<br>US-908.4MHZ |
| Valid Range: | Up to 80m outdoors<br>Up to 40m indoors(Depending on terrain and building structure) |
| Operational Temperature: | 0-40℃ |

**Guarantee**

1. The Guarantee is provided by Shenzhen NEO Electronics Co., Ltd (hereinafter "Manufacturer" )
2. The Manufacturer is responsible for equipment malfunction resulting from physical defects (manufacturing or material) of the device for 12 months from the date of its purchasing.
3. During the Guarantee period, the Manufacturer shall remove any defects, free of charge, by repairing or replacing.
4. In special cases, when the device cannot be replaced with the device of the same type (e.g. the device is no longer available in the commercial offer), the Manufacturer may replace it with a different device having technical parameters similar to the faulty one. Such activity shall be considered as fulfilling the obligations of the Manufacturer. The Manufacturer shall not refund money paid for the device.
5. The guarantee shall not cover:
   - mechanical damages (cracks, fractures, cuts, abrasions, physical deformations caused by impact, falling or dropping the device or other object, improper use or not observing the operating manual);
   - damages resulting from external causes, e.g.: flood, storm, fire, lightning, natural disasters, earthquakes, war, civil disturbance, force majeure, unforeseen accidents, theft, water damage, liquid leakage ,battery spill, weather conditions, sunlight, sand, moisture, high or low temperature, air pollution
   - damages caused by malfunctioning software, attack of a computer virus, or by failure to update the software as recommended by the Manufacturer;

**Shenzhen NEO Electronics Co., LTD**
Address: 6TH Floor, Building No.2, Laobing Industrial Park, Tiezhai Road Xixiang, BaoAn District, Shenzhen, China.
Http://www.szneo.com
Tel: +86-4007-888-929
Fax: +86-755-29667746
E-mail: support@szneo.com