

# Installation Guide

AC Powered Indoor Siren

(SRV-23-ZBS / SRV-23B-ZBSR / SRV-23B-ZBS)



# NookBox

Smart Home Security



## AC Powered Indoor Siren Zigbee (SRV-23-ZBS / SRV-23B-ZBSR / SRV-23B-ZBS)

SRV-23(B)ZBS is an AC Powered ZigBee Indoor Siren. It is capable of raising alarm upon receiving alarm signal from the coordinator in the ZigBee network when an alarm is activated, and notify user of system condition with voice prompt during daily operation.

The Indoor Siren utilizes ZigBee technology for wireless signal transmission. ZigBee is a wireless communication protocol that is reliable and has low power consumption and high transmission efficiency. Based on IEEE802.15.4 standard, ZigBee allows a large amount of devices to be included in a network and coordinated for data exchange and signal transmission.

### Model

The Indoor Siren includes the following models:

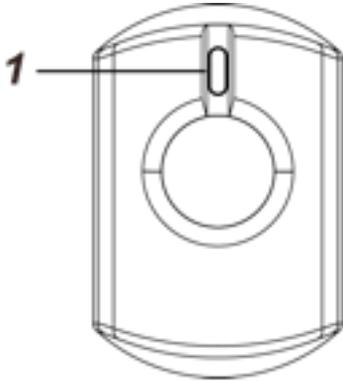
**SRV-23-ZBS:** Standard Indoor Siren

**SRV-23B-ZBS:** Features built-in rechargeable battery to serve as backup power source when the Siren is unplugged from AC power.

**SRV-23B-ZBSR:** Features built-in rechargeable battery and ZigBee network router function.

Model No.	Rechargeable Battery	ZigBee Router
SRV-23-ZBS	No	No
SRV-23B-ZBS	Yes	No
SRV-23B-ZBSR	Yes	Yes

# Parts Identification



## 1. Function Button/LED Indicator

### Function Button Usage:

- Press once to send a supervision signal.
- Press and hold the button for 10 seconds then release to reset the Indoor Siren.

### LED Indicator:

- One Flash:  
The security system is armed.
- Two flashes:  
The security system is disarmed  
The Indoor Siren has successfully joined a ZigBee network
- One Flash every 20 minutes (SRV-23(B)-ZBS Only)  
The Indoor Siren has not joined any ZigBee network, or has lost connection to its current ZigBee network.
- Continuous Flash:  
The Siren is alarming.

# Features

## Alarm Activation

When an alarm is activated, the Indoor Siren will sound continuous alarm and the LED indicator will flash continuously while the siren is alarming. If the alarm system control panel has programmed alarm duration, the Siren will be activated according to panel alarm length. If the alarm system does not have alarm duration programmed, the Siren will be activated for 3 minutes.

- The Siren can be enable/disable to sound a door chime by the Control Panel.

## Audio Indication

The Indoor Siren emits different audio indication & voice prompts according to different status of the security system as listed table below:

Condition	Audio Indication
Alarm	Continuous alarming
Panel enters Arm Mode	Voice prompt: "Away Arm"
Panel enters Home Mode	Voice prompt: "Home Arm"
Panel enters Disarm Mode	Voice prompt: "Disarm"
Door Chime	Door Chime sound: "Ding-Dong" x 1
Door Bell	Door Bell sound: "Ding-Dong" x 4
When arming with fault in system	Voice prompt: "Fault in system please check system status"
Entry time countdown	"Beep" sound
Exit time countdown	"Beep" sound
Pre-alarm (Outdoor sensor)	Voice Prompt: "Outdoor sensor is triggered please check!"

- You can change the volume of the indication voice sound between High, Medium and Low through the Control Panel.  
The factory default volume is set to Medium, please refer to your control panel for details.

## Power Supply

The Siren is powered by AC power; plug the Siren into the power socket to activate the Siren. The Siren will enter normal operation mode.

SRV-23B-ZBS and SRV-23B-ZBSR models have a rechargeable battery inside that serves as backup when the Siren is unplugged from AC power. The battery will be charged automatically when the Siren is plugged. It takes about 72 hours to fully charge the battery.

## Low Battery Detection (SRV-23B-ZBS / SRV-23B-ZBSR Only)

After AC power failure, the Siren will transmit a Low Battery signal to The Control Panel when low battery voltage is detected. To restore battery, re-plug AC power into the power socket. After 12 hours, the Siren will transmit a low battery restored notification to the Control Panel.

## AC Failure Detection

Whenever the Siren is removed from the power socket, the siren will transmit an AC fault signal to the coordinator to notify the situation. The Siren will then switch to its internal battery for power supply.

When the Siren is plugged in again on the power socket, it will send an AC power restore signal to the coordinator.

## Supervision

The Indoor Siren will transmit a supervision signal to report its condition regularly according to user setting. The factory default interval is 30 minutes. The user can also press the Function Button once to transmit a supervision signal manually.

# ZigBee Network Setup

## ZigBee Device Guideline

ZigBee is a wireless communication protocol that is reliable and has low power consumption and high transmission efficiency. Based on IEEE802.15.4 standard, ZigBee allows a large amount of devices to be included in a network and coordinated for data exchange and signal transmission.

Due to the fundamental structure of ZigBee network, ZigBee device will actively seek and join network after powering on. Since performing a task in connecting network may consume some power, it is required to follow the instructions to avoid draining battery of a ZigBee device.

- Ensure your ZigBee network router or coordinator is powered on before powering on the ZigBee device.
- Ensure the ZigBee network router or coordinator is powered on and within range while a ZigBee device is in use.
- Do not remove a ZigBee device from the ZigBee network router or coordinator without powering down the ZigBee device.

## Joining the ZigBee Network

As a ZigBee device, the Indoor Siren needs to join a ZigBee network to send and receive alarm signal. Please follow the steps below to join the Indoor Siren into the ZigBee network.

1. Plug the Indoor Siren into a power outlet.
2. Press and hold the function button for 10 seconds as the Siren resets and starts searching for existing ZigBee network. Please make sure the permit-to-join feature on the router or coordinator of your ZigBee network is enabled.
3. If the Indoor Siren successfully joins a ZigBee network, the LED Indicator will flash twice to confirm.
4. After joining the ZigBee network, the Indoor Siren will be registered in the security system in the network automatically. Please check the security system control panel or CIE (Control and Indicating Equipment) to confirm if joining and registration is successful.
5. For SRV-23B-ZBS, after joining the ZigBee network, if the Siren loses connection to its current ZigBee network, the LED indicator will flash every 20 minutes to indicate. Please check your ZigBee network condition and siren signal range and correct the condition

## Removing Device from ZigBee Network (Factory Reset)

To remove the Siren from current ZigBee network, the Siren must be put to Factory Reset to complete device removal. Factory Reset function will clear the device of its stored setting information and prompt the Siren to search for new ZigBee network.

***Before removing device, make sure the Siren is within current ZigBee network signal range.***

1. Press and hold the function button for 10 seconds, then release the button to reset Siren.
2. Upon reset, the Siren will clear current ZigBee network setting and transmit signal to ZigBee coordinator to remove itself from current ZigBee network. It will then actively search for available ZigBee network again and join the network automatically.

## ZigBee Router Device Capacity (SRV-23B-ZBSR)

The Siren model with Router function (SRV-23B-ZBSR) allows other ZigBee devices to join the ZigBee Network through the Router. It has maximum capacity of 40 ZigBee devices or routers.



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