

# Installation Guide

Acoustic Glass Break Detector  
(ACGS-23)



**NookBox**

Smart Home Security



## Acoustic Glass Break Detector (ACGS-23)

The Glass Break Detector detects the high frequency sound emitted by glass breakage and transmits signal to notify the alarm system control panel when it is triggered.

# Parts identification



## 1. Green LED Indicator (Inside)

## 2. Red Indicator (Inside)

## 3. Microphone

## 4. Dip Switch

## 5. Battery Compartment

## 6. Learn/Test Button

Press the button once to send a learn code.

## 7. Tamper Switch

The tamper switch is compressed against the back cover and protects the Detector from cover opening or removal from mounted location.

## 8. Breakaway Area

The Breakaway Area has 2 knockouts where plastic is thinner for screw mounting. When the Detector is forcibly removed from mounting location, the Break Away area will detach and allow tamper switch to be activated.

# LED Indicator

- The LED indicators are inside the front cover and only visible when activated.
- Red LED: The Red LED activates when:
  - » Tamper Switch is activated.
  - » Learn/Test button is pressed.
  - » Glass break detected under Test Mode, Low Battery or Tamper open condition  
(The Red LED does not light up when glass break is detected during normal operation)
- Green LED  
The Green LED activates when glass break is detected under Test mode.

# Getting Started

- 1 Insert the battery to power on the device.
- 2 Put the Control Panel into learning mode, refer to panel manual for detail.
- 3 Press the Learn/Test button once to transmit learn code to panel.
- 4 Refer to panel manual to complete learning process.
- 5 Refer to panel manual to complete the learning process.

# Sensitivity Adjustment

The Glass Break Detector sensitivity can be adjusted using the two dip switches. Adjust the sensitivity to change detector range.

Sensitivity	Dip Switch 1	Dip Switch 2	Detection Range
Maximum	OFF	OFF	8m
Medium	OFF	ON	5m
Low	ON	OFF	3m
Minimum	ON	ON	1.5m

## Test Mode

The Test mode is used to help check the Glass Break Detector's detection distance. When the Learn/Test button is pressed, the Glass Break Detector will enter Test mode for 5 minutes. Pressing the button again during the 5-minute period will reset test mode time to 5 minutes. During Test mode, the Red LEDs will light up when glass break is detected.

## Testing the Detector

The Detector should be tested to ensure it is able to detect glass breakage successfully. A FlexGuard FG-701 Glassbreak Simulator is required to test the detection function.

- 1 Press Learn/Test button once to put Detector into Test mode for 5 minutes.
- 2 Set the FlexGuard FG-701 to "FLEX" and "TEST" mode.
- 3 Put FG-701 at desired testing location on the glass and point the speaker at the Detector. Close the window covering if it is present.
- 4 Strike the glass with a cushioned tool to create a glass striking sound. When FG-701 detects the glass striking sound, it will react by emitting glass break sound.
- 5 The Detector will only be activated if it detects both glass striking and glass break sounds. When activated, both Green and Red LED will light up to indicate glass break has been detected.

## Supervision Function

When the Glass Break Detector is in normal operation, it will transmit a supervision signal regularly every 30~50 minutes.

## Battery

The Glass Break Detector uses a 3V CR123A Lithium battery.

The Glass Break Detector can detect low battery voltage. When low battery voltage is detected, a low battery signal will be sent to the Control Panel along with regular signal transmissions for the Control Panel to display the status accordingly.

When changing battery, press the learn/test button a couple times to discharge after removing battery before inserting a new one.

## Glass Thickness

Plated Glass: 2.4 to 6.4 mm (3/32 to 1/4")

Tempered Glass: 2.4 to 6.4 mm (3/32 to 1/4")

Wired Glass: 3.2 to 6.4 mm (1/8 to 1/4")

Laminated Glass 3.2 to 6.4 mm (1/8" to 1/4")

# Installation

The Glass Break Detector should be mounted on ceiling or wall. There should be no obstacle between the Detector and the window protected. The Detector back cover has mounting knockouts which can be broken for screw mounting. Alternatively, you may also mount the detector with double side adhesive tape provided.

## Mounting Location

- Mount away from sound source, such as speaker, air condition or motor.
- Mount with as much distance from window or door as possible to avoid external sound interference.

## Screw Mounting

- 1 Break through the knockouts on back cover and use them as template to mark position on wall/ceiling.
- 2 Drill holes at marked location and screw the back cover onto the wall/ceiling, insert wall plug if needed.
- 3 Replace the Detector main body onto the back cover. Make sure the cover is properly closed and the device is fixed to the wall tightly.

## Adhesive Tape Mounting

When using provided double side adhesive tape, make sure to install the detector on flat surface. Do not install on uneven surface or location with cracking paints.

- 1 Clean both the detector back cover and mounting location with suitable degreaser.
- 2 Apply the double side adhesive tape to back cover of detector, then apply to mounting location.

<NOTE>

When mounting with double side adhesive tape, the tamper protection for mounting location removal will be disabled. Protection from cover opening is still available.



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