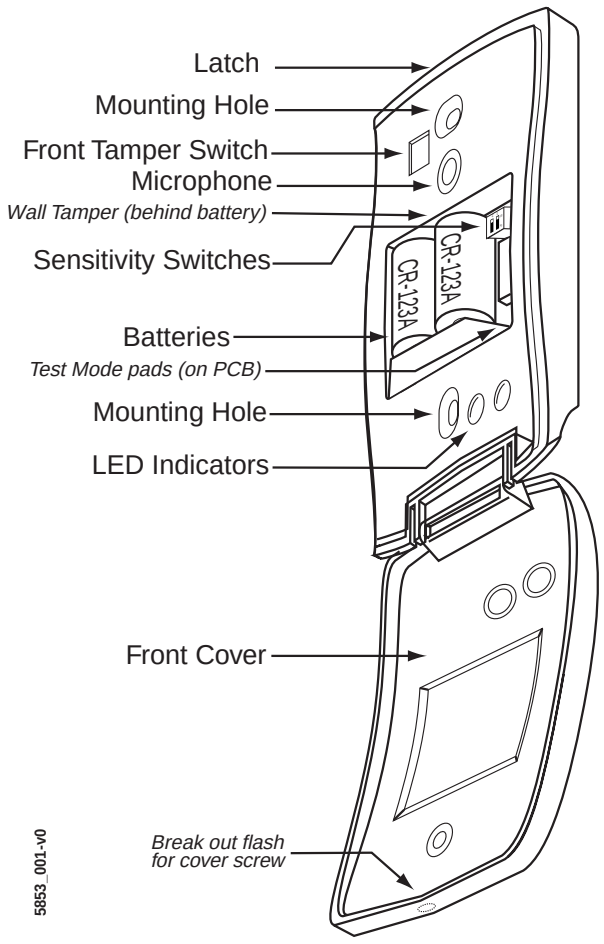
FlexGuard® 5853 Wireless Glassbreak Detector Installation Instructions

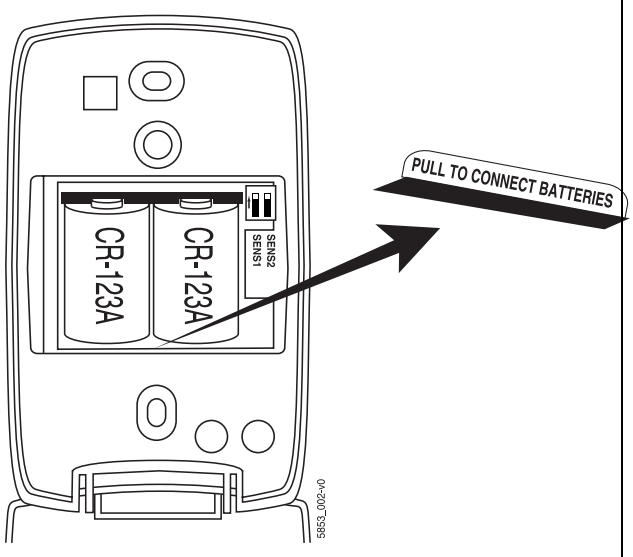
Refer to Supplemental Information (next page) for complete descriptions of these installation steps

5853 Glassbreak Detector Internal Parts

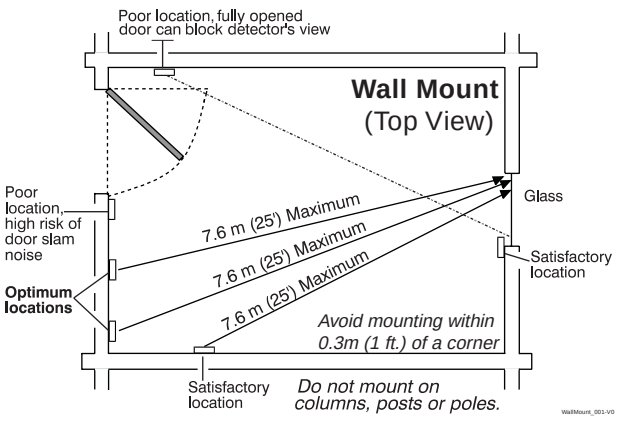


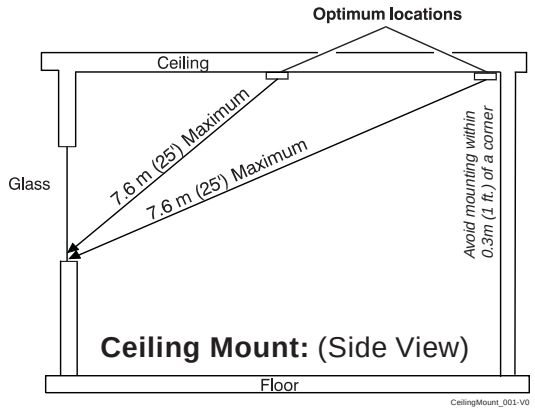
Connect Batteries

Remove pull tab to connect batteries

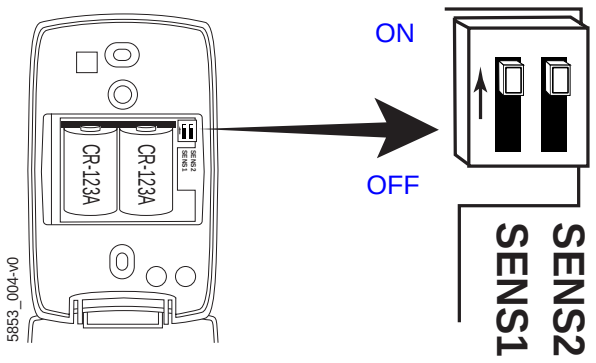


Select Mounting Location





Set Sensitivity (Range)



SENS1 & SENS2 configure sensitivity

SENSITIVITY	APPROXIMATE RANGE	SENS1	SENS2
MAX	25 ft (7.6m)	**OFF**	**OFF**
MEDIUM	15 ft (4.6m)	**ON**	**OFF**
LOW	10 ft (3m)	**OFF**	**ON**
LOWEST	5 ft (1.5m)	**ON**	**ON**

Enroll Detector

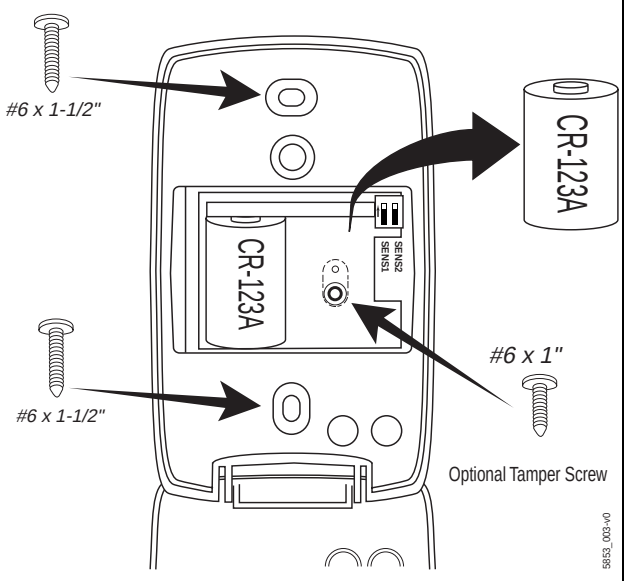
Refer to text and control panel's installation instructions.

When programming the transmitter, specify:

- Input Type = 3 (Supervised RF)
- Loop Number = 1

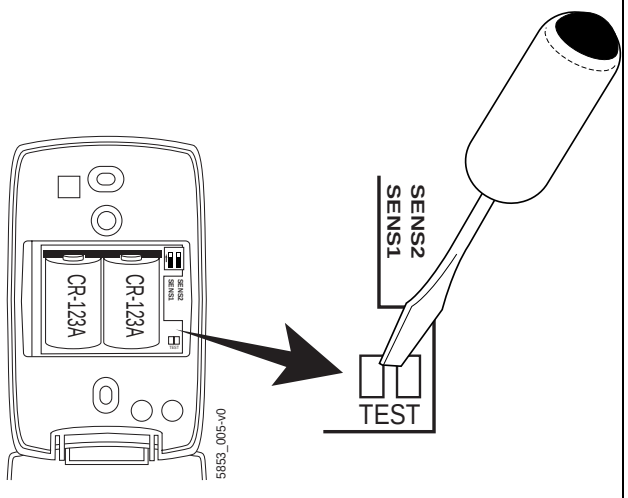
Mount Detector

- Use mounting holes as a template to mark mounting locations on ceiling or wall.
- ***If using the optional wall tamper,*** remove the batteries, then mark the rear tamper location through its mounting hole.
- Mount detector using appropriate hardware.
- Close detector cover when finished.

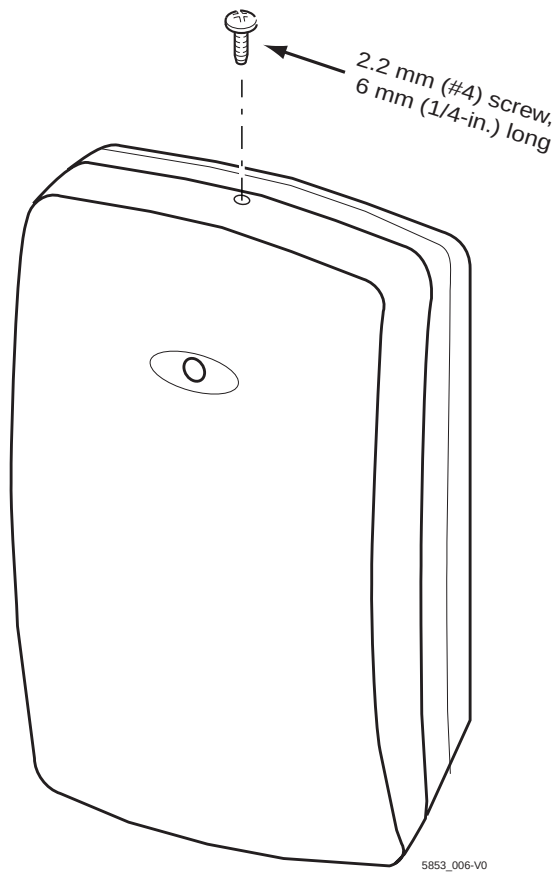


Test Detector Installation

Enter Test Mode using GBS-7 (see text). To enter Test Mode manually, short Test Mode pads (as below).



Install Cover Screw (optional)



FlexGuard® 5853 Wireless Glassbreak Detector Supplemental Information

Refer to Installation Instructions and diagrams (next page) when installing this product

1. General Information

The 5853 Wireless Glassbreak detector with Transmitter senses the sound of breaking tempered, laminated, wired, and ordinary plate glass. The self-contained detector includes a transmitter that can send alarms, tamper signals, and low battery messages to the control panel. The sensor is compatible with 5800-series wireless hardware, and is designed for continuous operation using two 3V lithium batteries (CR-123A or equivalent; included)

NOTE: The 5853 is not recommended for protection of glass areas that are less than 10-7/8 inches by 10-7/8 inches. Refer to the Protected Glass Types section and chart for complete information.

Prior to installation, you must:

- Connect its batteries by removing the tab,
- Adjust the detector's sensitivity, and
- "Enroll" the detector's serial number.

Refer to the following sections to install the 5853.

2. Connecting Batteries/Initial Power Up

To connect the batteries, remove the tab from the end of the battery holder. The detector will start its power up sequence, in which both the LED indicators will illuminate for one second. (The LED indicators are described later in these instructions.)

3. Adjusting Detector Sensitivity (Range)

The 5853 has four sensitivity settings, which are set using the SENS1 and SENS2 DIP switches The settings are: 1) maximum; 2) medium; 3) low; and 4) lowest. By default, sensitivity is set to MAXIMUM.

To change the detector's sensitivity, use a small screwdriver to adjust the SENS1 and SENS2 switches, as shown in the table below:

SENSITIVITY	APPROX. RANGE *	SENS1	SENS2
MAX	25 ft (7.6m)	**OFF**	**OFF**
MEDIUM	15 ft (4.6m)	**ON**	**OFF**
LOW	10 ft (3m)	**OFF**	**ON**
LOWEST	5 ft (1.5M)	**ON**	**ON**

4. Enrolling Detector Into 5800-Series Receiver

Before the control panel will recognize the 5853, you must program the device's serial number into the control panel. This process, ("enrolling") is described in detail in the control panel's installation instructions.

When programming the transmitter, specify:

- Input Type = 3 (Supervised RF)
- Loop Number = 1

You can transmit the device's serial number automatically or enter it manually. To transmit the number automatically, momentarily activate the front tamper switch. To enter the serial number manually, refer to the control panel's instructions to enroll the serial ID number which appears on the product.

5. Selecting Installation Location

The 5853 can be mounted on the ceiling or the wall. Choose a mounting location that is at least 7 feet (2.1m) from floor and no more than 25 feet (7.6m) from the farthest protected glass. Be sure the detector has an unobstructed line-of-sight to the protected glass!

Before mounting the detector permanently, test it to ensure that it functions satisfactorily in the chosen mounting location. Verify that the detector can detect glassbreak sounds, following the directions in the "Testing the Detector" section. Ensure that the 5853 is within range of the receiver, following the instructions for the signal-strength test found in the control panel's installation instructions. *(To send the signal required by the test, activate the detector's front tamper switch.)* If the detector fails, relocate it and repeat both tests.

Add: When ceiling mounted, the microphone should be pointed toward the glass being protected.

6. Mounting the Detector

NOTE: If using the rear tamper and installing on dry wall (sheet rock), position the detector so that the wall tamper is over a wall stud or ceiling joist.

To mount the detector:

1. Using the 5853 mounting holes as a template, mark mounting locations on the ceiling or wall.
2. ***If using the optional wall tamper,*** remove the batteries, then mark the wal tamper location through its mounting hole.
3. If required by the mounting location, install wall anchors for the mounting screws.
4. Secure the 5853 to the wall or ceiling, oriented so the microphone has the best line-of-sight to the protected glass.
5. Reinstall the batteries if previously removed.
6. Close and secure the detector front cover.

7. Testing the Detector

The detector should be tested at least once each year. Test the detector with the GBS-7 Glassbreak Simulator. Other simulators will not give accurate indication of range.

To test, you must first place the detector in test mode.

To enter Test Mode manually:

1. Open the front cover.
2. Use a screwdriver to short the Test Mode pads on the PC board (see diagram on next page).
3. Close the front cover.

The detector's green LED blinks approximately once per second to indicate that it has entered the test mode.

To enter the Test Mode with the GBS-7:

1. Stand within 4.6 m (15 feet) of the detector.
2. Switch the GBS-7 to ACTIVATE and MANual modes.
3. Point the front of the glassbreak simulator towards the detector and press the red START button. The simulator buzzes a short activation code.

When the detector enters Test Mode, the green LED on the detector flashes about once per second. If the green LED does not flash, move closer to the detector and repeat the procedure.

Testing the Detector (flex and audio signals):

To test the 5853, do the following:

1. Place the detector in Test Mode.
2. Set the GBS-7 switches to the TEST and FLEX positions.
3. Position the GBS-7 near the farthest point of the protected glass, and point it directly at the detector. If window coverings are present, close them fully and hold the GBS-7 between the coverings and the protected glass.
4. Press the red START button. The simulator clicks on and starts an eight-second armed period.
5. Generate a flex signal by carefully striking the glass with a cushioned tool. The GBS-7 responds with a burst of glassbreak audio.

If the detector receives both the flex and audio signals properly, its red Alarm LED lights for 5 seconds. (Red Alarm LED does not latch.)

Testing the Detector (audio signals only):

The GBS-7 can also be used to test the detector's ability to receive audio signals only. See the GBS-7 Operating Instructions for additional information. When it receives the audio signal, the detector flickers its green Event LED.

Exiting Test Mode:

When you have finished testing, exit Test Mode by following the same procedure used to enter Test Mode. The detector automatically exits Test Mode after five minutes if no events are detected.

3 In compliance with Underwriters Laboratories of Canada's Standard for Intrusion Detection Units (CAN/ULC-S306-M89):
a. Plate glass 3 mm (1/8 in.) to 10 mm (3/8 in.) can be used.
b. ULC recognizes a maximum range for protecting sealed insulated glass and coated glass of 2.3 m (7.5 ft.). Sensitivity should be set at Max.

8. LED Indicators

The detector is equipped with two LEDs: a green Event LED and a red Alarm LED. When the LEDs are enabled during testing, they light in a variety of patterns to convey the detector's operational status. The following table summarizes the LED messages. (Please note that the LEDs are only enabled during Test Mode, and are inactive during normal operation.)

CONDITION	GREEN LED	RED LED
Power up	ON 1 second	ON 1 second
Test Mode	Flash once per sec	OFF
Test Mode, event detected	Flicker	OFF
Test Mode, alarm	Flash once per sec	ON 5 seconds
Low Battery *	Flash once per sec	Flash once per sec

** If battery voltage drops too low, LEDs are no longer visible.*

9. Cover Screw

The front cover can be secured after installation. To do so, remove the cover breakout flash (illustration on next page) and secure the front cover with a ¼-in., #4 (2.2mm) screw (supplied).

10. Maintaining Proper Operation

To maintain the 5853 Glassbreak Detector in proper working order, please observe the following:

Replace the batteries when the system indicates a low battery condition (refer to the control panel's operating instructions.) Be sure to replace the batteries with the proper type and voltage, and ALWAYS replace both batteries at the same time.

This device should not be relocated without the advice or assistance of the alarm service company.

Fans, air conditioners, blowers, loudspeakers, or other sources of vibration and sound should not be introduced into the protected area after installation of glassbreak detectors. If unavoidable, contact the alarm service company; re-adjust/re-test the equipment as needed.

11. Protected Glass Types Chart

NOTE: The 5853 is NOT recommended for protection of glass areas smaller than 10-7/8 inches x 10-7/8 inches.

Glass Type*	Nominal Thickness	
	Minimum	**Maximum**
Plate	2.4mm (3/32 in.)	10mm (3/8 in.)
Tempered	3mm (1/8 in.)	10mm (3/8 in.)
Laminated[1]	3mm (1/8 in.)	14mm (3/8 in.)
Wired	6mm (1/4 in.)	6mm (1/4 in.)
Coated[2]	3mm (1/8 in.)	6.4mm (1/4 in.)
Sealed Insulating[1]	3mm (1/8 in.)	6mm (1/4 in.)

* Minimum size for all types is 28cm (11 in.) square; glass must be framed in the wall or mounted in a barrier at least 0.9m (36 in.) wide.

[1] Protected only if both plates in the unit are broken

[2] Coated glass with security films, including films for solar protection, up to 12 mi., thick may be used. Film Technologies, Inc.'s GLASS GARD® GLL 1200 has been evaluated with this product by Underwriters Laboratories Inc. at ADEMCO's request.

12. Specifications

Power:

Two 3 V Batteries (included). Replace only with ADEMCO # 466, Panasonic CR123A, Sanyo CR123A, Duracell DL123A, or Varta CR123A (Lithium Manganese Dioxide)

Maximum/Minimum Ranges:

Maximum range is 25 ft (7.6m) from farthest protected glass.
No minimum range.

Operating Temperature:

14° to 122° F (-10° to 50° C)

Accessories:

ADEMCO GBS7 Glassbreak Simulator

13. NOTICES

FCC NOTICE FCC ID: CFS8DL5853-1

This device complies with Part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CANADA: 1748A-58531

TO THE INSTALLER Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system. The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of testing (at least weekly) to ensure the system's proper operation at all times.

REFER TO THE INSTALLATION INSTRUCTIONS FOR THE RECEIVER/CONTROL WITH WHICH THIS DEVICE IS USED FOR DETAILS REGARDING WARRANTY INFORMATION AND LIMITATIONS OF THE ENTIRE ALARM SYSTEM.

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5-051-735-00BX 2/02