



wLSN Glassbreak Detector



The wLSN Glassbreak Detector is a wireless sensor device that detects breaking glass. It is equipped with two tamper switches and four glassbreak sensitivity settings.

Functions

Dual Acoustic Technology

When an object hits a pane of glass, the glass absorbs the blow and emits a low frequency sound pressure wave, called the flex wave. When the force of the blow is too great, glass shatters and emits a high frequency audio signal. A bell ringing or a vase breaking produces a similar audio signal, but does not produce a flex wave. The wLSN Glassbreak Detector detects the flex wave first and the audio signal second, reducing false alarms from items that only emit high frequency audio signals.

Glassbreak Sensitivity

Use the convenient DIP switches to select a sensitivity setting. There are two attack mode selections with multiple sensitivity settings.

- ▶ **DIP switches for selecting one of four glassbreak sensitivity settings**
- ▶ **Dual acoustic technology**
- ▶ **Externally-visible LEDs indicate alarm and event status; internal LED indicates RF signal strength**
- ▶ **Determine suitability of chosen installation location with RF Signal Strength (RFSS) mode**
- ▶ **Supervised for low-battery, cover-tamper, and wall-tamper conditions**
- ▶ **Operates for up to 2 years on readily-obtainable AA batteries**

RF Signal Strength Mode

Removing the device cover and pressing the tamper switch four times within 10 seconds of battery installation activates the RF signal strength mode. The LED lights steady for 5 sec and then begins to flash. A slow flash (approximately 1 sec on, 1 sec off) indicates insufficient signal reception. A quickly flashing LED (approximately five times as fast as the slow flash) indicates the device is receiving sufficient signal from the wLSN Hub.

Tamper Switches and Low Battery Indication

The wLSN Glassbreak Detector has a cover tamper switch and an optional wall tamper switch. When either tamper switch activates or when the battery power is low, the detector transmits tamper or low battery information to the wLSN Hub.

Test Mode

Activate the test mode locally using the test pads. When the detector is in test mode, use a Bosch 13-332 Sound Sensor Tester to verify that the detector detects flex wave and audio signals correctly.

Certifications and Approvals

Region	Certification
Europe	CE 1999/5/EC, IEC60950-1: 2001, EN60950-1:2001 +A11:2004, EN50130-4: 1996 +A1: 1998 +A2: 2003, EN61000-4-2: 1995 +A1: 1998 +A2: 2001, EN61000-4-3: 2002 +A1: 2003 +A2: 2005, EN61000-4-4: 1995 +A1: 2001 +A2: 2001, EN61000-4-5: 1995 +A1: 2001, EN61000-4-6: 1996 +A1: 2001 +A2: 2001 +A3: 2005, EN61000-4-11: 1994 +A1: 2001, EN55022/ANSI C63.4: 2003, ETSI EN 300 220-1 V1.3.1: 2000-09, ETSI EN 301 489-1 V1.4.1: 2002-08, ETSI EN 301 489-3 V1.4.1: 2002-08

Listings and Approvals: **CE**

Installation/Configuration Notes

Note Glassbreak detectors are intended only as a component of a perimeter protection system. They should always be used in conjunction with motion sensors.

Compatibility Information

The wireless Local SecurityNetwork (wLSN) including the wLSN Glassbreak Detector is compatible with the Easy Series Control Panel.

Acoustic Capabilities

The wLSN Glassbreak Detector can be used with the following glass types:

Glass Type	Glass Thickness
Plate	2.4 mm to 9.5 mm (0.09 in. to 0.38 in.)
Tempered	3.2 mm to 9.5 mm (0.13 in. to 0.38 in.)
Laminated*	3.2 mm to 14.3 mm (0.13 in. to 0.56 in.)
Wired	6.4 mm (0.25 in.)

* Protected only if both panes of unit are broken

Mounting Considerations

Mount the detector on interior walls or ceilings where it is protected from weather elements such as rain or snow. For the best performance, mount the detector within clear view of the glass (there is no minimum range) and within 7.6 m (25 ft) of the glass.

Note If the window is covered with heavy drapes, curtains, shades, blinds, and so on, mount the detector on the window frame.

Do not mount the detector:

- In a corner

- In rooms with loud equipment such as air compressors, bells, and power tools.
- On the same wall as the glass.
- On freestanding posts or pillars.

Note Installation on metal surfaces can affect the RF propagation pattern of the radio transceiver.

The RF transceiver has a range of approximately 1000 m (3000 ft) in open air. However, in normal operation, the actual RF range depends on building construction.

Parts Included

Quant.	Component
1	Glassbreak detector
2	AA batteries (P/N: 16556)
1	Hardware pack
1	Literature pack

Technical Specifications

Environmental Considerations

Environment:	Indoor, dry
Relative Humidity:	Up to 95%, non-condensing
Temperature (operating):	-10°C to +55°C (+14°F to +131°F)

Mechanical Properties

Color:	Off-white
Dimensions (H x W x D):	11.6 cm x 4.5 cm x 2.8 cm (4.6 in. x 4.2 in. x 1.25 in.)

Power Requirements

Battery Power

Battery Life:	Up to 2 years under normal operating conditions
Battery Requirements:	Two AA Alkaline batteries
Recommended Replacements:	Duracell® MN1500 or PC1500, Eveready® E91, Panasonic® AM-3PIX/B

Transmission and Reception Characteristics

Frequency:	European Security Band 868 MHz to 869 MHz
Range (open field):	1000 m (3000 ft)

Trademarks

Duracell® is a registered trademark of the Gillette Company, USA, in the United States and/or other countries.

Eveready® is a registered trademark of Eveready Battery Company, Inc.

Panasonic® is a registered trademark of a Matsushita Electric Industrial Co., Ltd.

Ordering Information

wLSN Glassbreak Detector	ISW-BGB1-SAX
Wireless sensor device for detecting breaking glass	

Accessories

Glassbreak Simulator	13-332
-----------------------------	---------------

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security.sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6258 5511
Fax: +65 6571 2698
apr.securitysystems@bosch.com
www.boschsecurity.com

Represented by