RADION glassbreak

www.boschsecurity.com

BOSCH
Invented for life

- Dual frequency acoustic based detection technology
- Sliding, self-locking enclosure for ease of installation
- Operational up to 5 years using a single user replaceable CR123A lithium battery
- Supervised for low-battery, cover-tamper, and removal from mounting surface tamper conditions

RADION wireless from Bosch provides the range, scalability and exceptional battery life required to ensure reliable performance and superior quality. Advanced diagnostics and multiple device enrollment options make installation and maintenance simple and cost effective. With a complete line of peripherals, RADION provides the flexibility for virtually any application requirement.

System overview

RADION glassbreak is a wireless sensor that detects breaking glass. It is equipped with a tamper switch and factory preset glass break sensitivity settings providing flexible configuration to maximize false alarm immunity and catch performance in any environment.

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 glassbreak detects the flex wave first, and the audio signal second, reducing false alarms from items that only emit high frequency audio signals. The glassbreak detects breaking plate, tempered, wired, and laminated glass up to 6.4 mm (0.25 in) thick through blinds and lightweight, unlined drapes. The omni-directional microphone contained within the glassbreak can detect an audio signal in a 360 degree radius, allowing for supurb, acoustic detection and monitoring.

Glass Break Sensitivity
Factory-set sensitivity levels allow the detector to suit any environment.

Tamper Switches
The glassbreak has a wall and cover tamper switch that transmits a tamper signal when someone removes the device from its base, or pulls it away from the wall.

Self-locking Enclosure
The sliding self-locking enclosure has an integrated bubble level to make installation easier.

Certifications and approvals

Region	Certification	
Europe	CE	2004/108EC EMC Directive (EMC), 2006/95/EC Low-Voltage Directive (LVD), 1999/5/EC Radio equipment and Telecommunications Terminal Equipment (R&TTE), 2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment
USA	FCC	Part 15 Security/Remote Control Transmitter 433.42 MHZ [433.42 MHZ]
Canada	IC	1249A-RWSSFT [-A model numbers]
China	CCC	2013031901000078 [RFGB-CHI]
Brazil	ANATEL	3566-13-1855 [RFGB-A]

Installation/configuration notes

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

Mounting considerations

Mount the detector on interior walls or ceilings where it is protected from weather elements such as extreme temperatures, humidity, rain, or snow. For the best performance, mount the detector within clear view of the glass and within 6 m (20 ft) of the glass.

Wall mounting

The best location for mounting the device is on the opposite wall, within the sensor's range and line of sight. Ceiling and adjoining side walls are also suitable locations for mounting.

Ceiling mounting

Mounting of the detector can occur in a variety of ceiling types in which a direct line of sight of the protected window is achieved. However, because the direction of sound travels out from the broken glass of a window, the desired location of the detector should be at 2 to 3 m (6 to 10 ft) into the room for optimal detection.

Do not mount the detector:

- In a corner
- In rooms with loud equipment such as air compressors, bells, and power tools, or a lot of ambient (white) noise
- In rooms with sound deadening drapes, curtains, shades, blinds, or wooden window shutters
- On the same wall as the glass
- On free-standing posts or pillars
- In humid rooms
- In rooms smaller than 3 m x 3 m (10 ft x 10 ft)
- In rooms with multiple noise sources

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

Parts included

Quantity	Component
1	Glassbreak
1	Lithium battery (CR123A)
1	Hardware pack
1	Installation guide

Technical specifications

Properties

Dimensions:	101.42 mm x 112.90 mm x 35 mm (3.99 in x 4.44 in x 1.38 in)

Power

Power/Voltage:	3 VDC
Battery type:	One CR123A Lithium battery
Battery life:	Up to 5 years

Acoustic capabilities

Glass types and thickness:	**Type**	**Thickness**
	Plate	2.4 mm to 6.4 mm (3/32 in to 1/4 in)
	Tempered	3.2 mm to 6.4 mm (1/8 in to 1/4 in)
	Laminated	3.2 mm to 6.4 mm (1/8 in to 1/4 in)
	Wired	6.4 mm (1/4 in)
	Minimum pane size for all types of glass	1.2 m (4 ft)
Microphone:	Omni-directional 360 °electret	
Minimum distance from glass	1.2 m (4 ft)	
Minimum pane size for all types of glass:	1.2 m (4 ft)	

Environmental considerations

Temperature:	Functional range: -10°C to +49° (+14°F to +120°F) UL only: 0°C to +49°C (+32°F to +120°F) EN 50130-5 Class II only: -10°C to 40°C (+14°F to +104°F
Environment	Complies with EN50130-5 Class II
Relative humidity:	Up to 93% non-condensing
Wall and cover tamper switch:	Transmits a tamper switch signal when the unit is removed from its base, or the unit is pulled away from the mounting surface
Frequency:	433.42 MHz
Use:	Intended for indoor use.

Compatibility

Receivers:	B810 wireless receiver (compatible with RFGB-A only)

Ordering information

RFGB-A (433.42 MHz)
For use in North and South America
Order number **RFGB-A**

RFGB (433.42 MHz)
For use in Europe, Africa, and Australia.
Order number **RFGB**

RFGB-CHI (433.42 MHz)
For use in China only.
Order number **RFGB-CHI**

Represented by:

North America:
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
5617 BA 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 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

China:
Bosch (Shanghai) Security Systems Ltd.
203 Building, No. 333 Fuquan Road North IBP
Changning District, Shanghai
200335 China
Phone +86 21 22181111
Fax: +86 21 22182398
www.boschsecurity.com.cn

Latin America and Caribbean:
Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com

4296138763 | en, V12, 26. May 2016