

RADION receiver SD

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- ▶ Dual internal antennas provide spatial and polar RF signal reception for high reliability
- ▶ Cover and wall tamper protection
- ▶ Multiple device enrollment options as well as RF diagnostics ensure efficient and effective installation
- ▶ Supports supervision of wireless points (504), keyfobs (1000), and repeaters (8)
- ▶ External status LEDs

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

The B810 is a wireless receiver that connects RADION wireless peripherals such as the motion and specialty detectors, keyfobs, panic buttons, door window contacts, repeaters, and more, to supported Bosch control panels using the SDI2 Bus connection. The receiver supports RF communication at 433.42 MHz. This frequency features improved penetration, reflection, and refraction of signal for superior range, and reliability. The receiver also features dual antennas to achieve spatial and polar diversity to further improve RF communication reliability. Enclosed within the receiver housing for higher security, the receiver is equipped with tamper protection, and

detects and reports radio frequency interferences. The receiver supports supervision of wireless points (504), key fobs (1000), and repeaters (8). The receiver can be easily accessed and configured for a compatible control panel using the address switch on the back of the receiver housing. The receiver address switch provides a single-digit setting for the receiver's address, allowing for ease of installation.

Functions

The receiver uses the RADION wireless protocol which supports:

- SDI2 bus communication
- Tamper input processing
- RF interference (jamming) detection and reporting
- Signal strength and margin reporting
- Enroll Device Database management

Address switch addressing

Use the address switch to easily assign a bus address or setup during installation.

Easy installation

The sliding self-locking enclosure has an integrated bubble level and a custom gap-free, lift gate style terminal block to make installation easier, faster, and more reliable.

LED display

The LED provides status and troubleshooting information about the receiver and its connection.

RF interference (jamming) detection and reporting

The receiver detects and reports interference jamming when the ambient noise level is above jamming thresholds for a continuous period of 20 seconds.

Communications

RF packet information is received through the use of two spatial and polar diversity antennas. The receiver then transmits a 4-bit sequence of information back to the control panel for status changes.

Wall and cover tamper switch

The receiver transmits a tamper signal when someone removes the device from its base, or pulls it away from the wall.

Certifications and approvals

Region	Certificate
US	UL 365 – Police Station Connected Burglar Alarm Units and Systems UL 609 – Local Burglar Alarm Units and Systems UL 636 – Holdup Alarm Units and Systems UL 985 – Household Fire Warning System Units UL 1023 – Household Burglar Alarm System Units UL 1076 – Proprietary Burglar Alarm Units and Systems UL 1610 – Central Station Burglar Alarm Units FCC Part 15 Classified to ANSI/SIA CP01-2010

Region	Certification
Australia	RCM
USA	UL 20121227-BP1448; UL 1076 - Proprietary Burglar Alarm Units and Systems; UL 1610 – Central-Station Burglar Alarm Units; UL 1023- Household Burglar Alarm System Units; UL 985- Household Fire Warning System Units; UL 609- Local Burglar Alarm System Units; UL 365- Police Station Connected Burglar Alarm System Units; UL 636-Holdup Alarm Units and Systems; ANSI/SIA CP-01-2010 – Control Panel Standard – Features for False Alarm Reduction Certificate of Compliance
	CSFM see our website

Installation/configuration notes**Mounting considerations**

You can mount the wireless receiver in residential, commercial or industrial locations in which a compatible control panel is already installed. The installation of the wireless receiver should be at a distance no greater than 243 m (800 ft) from the control panel.

Wiring considerations

The wireless receiver connects to a control panel using the SDI2 connections (PWR, A, B, COM). Use appropriate gauge wires from the receiver to the control panel when connecting the wiring to the terminal block of the receiver.

Parts included

Quantity	Component
1	Wireless receiver
1	Hardware pack
1	Installation guide

Technical specifications**Properties**

Dimensions:	139.70 mm x 209.60 mm x 31.80 mm (5.50 in x 8.25 in x 1.25 in)
Wiring Distance:	243 m (800 ft)
Wiring Gauge	0.65 mm (22 AWG) to 2.0 mm (18 AWG)
Tamper detection	Transmits a tamper switch signal when the unit is removed from its base, or the mounting surface.
Compatibility:	GV4 Series (D9412GV4, D7412GV4 v2.xx or higher) control panels B5512/B4512/B3512 control panels RFDL-11-A motion detector RFDW-SM-A standard door/window contact RFDW-RM-A recessed door/window contact RFRP-A repeater RFPR-12-A motion detector RFPR-C12-A motion detector (curtain) RFUN-A universal transmitter RFKF-FB-A 4-button keyfob RFKF-TB-A 2-button keyfob RFPB-TB-A 2-button panic RFPB-SB-A single button panic RRGB-A glass break

Power

Power/Voltage:	10-14 VDC, 12 VDC nominal
Maximum Current Draw:	70 mA
Frequency:	433.42 MHz

Environmental Considerations

Operating Environment:	0°C to +49°C (+32°F to +120°F)
Relative Humidity:	Up to 93% non-condensing
Use:	Intended for indoor use.

Ordering information

RADION receiver SD (SDI2, 433.42 MHz)

For use with compatible SDI2 bus control panels.

Order number **B810**

Represented by:

Americas:

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RADION keyfob

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- ▶ Water and dust resistant
- ▶ Arm, disarm and panic functions
- ▶ Assigned by user for accurate reporting of open close signals
- ▶ LED indicator
- ▶ Programmable option buttons (only available on 4-button model)

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 keyfob allows you to arm or disarm the security system, or send a panic alarm. Programmed with a unique code, each model works exclusively with your compatible security system. On the four-button version, two option buttons are user-defined to perform additional functions.



Notice

The RFKF-TB-A is UL Listed.

Functions

Panic alarm

The keyfob sends a panic code to your monitoring company if your security system is programmed to do so. Press both the lock and unlock buttons simultaneously for more than 600 milliseconds to send a panic alarm.

LED indicator

The LED flashes to indicate a signal was sent to your security system.

Programmable option buttons

The keyfob can be programmed to control additional devices in your protected area. Two option buttons are available.

Water and dust resistant

The housing is designed to resist dust and be resistant to water.

Supervision

RADION panic buttons send supervision check-in transmissions to RADION receivers. When connected to a compatible Bosch control panel featuring user definable supervision for panic buttons, the control

panel is alerted if the receiver has not received a check-in transmission from an assigned keyfob within the supervision interval.



Notice

The control panel must be configured to supervise these devices in order to detect the removal of the device from the monitored area.

Certifications and approvals

Region	Certificate
US	UL 1023 – Household Burglar Alarm System Units ANSI/SIA CP-01-2010. Two-button (RFKF-TB-A) only.
Europe	EN 50131-1

Region	Certification
USA	FCC Part 15 Security/Remote Control Transmitter 433.42 MHz [433.42 MHz]
Canada	IC 1249A-RWSSFT [-A model numbers]
Brazil	ANATEL 4349-13-1855 [-RFKF-FB-A]
	ANATEL 4278-13-1855 [RFPB-SB-A; RFPB-TB-A; RFKF-TB-A]

Installation/configuration notes

Recommended batteries

The following battery types are recommended for correct operation of your keyfob: Duracell DL2032, Varta CR2032, or Panasonic CR2032.

Parts included

Quantity	Component
1	Keyfob
1	Lithium battery (CR2032) coin-cell, 3 VDC
1	Literature

Technical specifications

Properties

Dimensions	63.7 mm x 35.5 mm x 13.0 mm (2.51 in x 1.40 in x 0.51 in)
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Power

Power/voltage	One CR2032 Lithium battery, 3 VDC
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Represented by:

Battery life	Europe, Middle East, Africa	Asia-Pacific:
Bosch Security Systems, Inc. 130 Perinton Parkway Fairfield, CT 06424, USA Phone: +1 800 289 0096 Fax: +1 585 223 9180 se@boschsecurity.com www.boschsecurity.us	Bosch Security Systems B.V. P.O. Box 80002 Postbus 80002, 3800 GB The Netherlands Phone: +31 40 2577 284 Fax: +31 40 2577 330 emea.securitysystems@bosch.com www.boschsecurity.com	Robert Bosch (SEA) Pte Ltd, Security Systems 11 Bishan Street 21 Singapore 573943 Phone: +65 6571 2808 Fax: +65 6571 4499 apr.securitysystems@bosch.com www.boschsecurity.asia

China:	America Latina:
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	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
Frequency	433.42 MHz
Use	Intended for indoor use.

RADION product suite

Receivers	B810 (compatible with RFKF-FB-A, and RFKF-TB-A only) RFRC-OPT (compatible with RFKF-FB and RFKF-TB only)
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Trademarks

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

Ordering information

RFKF-FB (433.42 MHz)

Wireless, four-button key fob. For use in Europe, Africa, and Australia.
Order number **RFKF-FB**

RFKF-FB-A (433.42 MHz)

Wireless, four-button key fob. For use in North and South America.
Order number **RFKF-FB-A**

RFKF-FB-CHI (433.42 MHz)

Wireless, four-button key fob. For use in China only.
Order number **RFKF-FB-CHI**

RFKF-TB (433.42 MHz)

Wireless, two-button key fob. For use in Europe, Africa, and Australia.
Order number **RFKF-TB**

RFKF-TB-A (433.42 MHz)

Wireless, two-button key fob. For use in North and South America.
Order number **RFKF-TB-A**

RFKF-TB-CHI (433.42 MHz)

Wireless, two-button key fob. For use in China only.
Order number **RFKF-TB-CHI**

Functional range: 10°C to +49°C (+14°F to +120°F)
UL only: 0°C to +49°C (+32°F to +120°F)