14 | Specifications

Frequency (operating)	2.4 GHz
Battery replacement (1 per detector)	3 VDC ≥ 750mAh Energizer CR2 Lithium, Duracell Ultra CR2 Lithium, Panasonic CR2 Lithium, Sanyo CR2 Lithium
Battery life	≥ 5 years with 38 open and 38 close events per day (Door Window Detector) ≥ 5 years (Tilt Detector) ≥ 6 years with 2 water alarms per year (Water Detector)
Dimensions (detector)	1.8 in. x 0.92 in. x 0.79 in. (46.0 mm x 23.5 mm x 20.3 mm)
Dimensions (magnet)	1.8 in. x 0.32 in. x 0.79 in. (46.0 mm x 8.3 mm x 20.3 mm)
Temperature (indoor operating)	-14°F to +131°F (-10°C to +55°C)
Relative humidity	0% to 85% at +30°C (+86°F)
Break distance	≥ 1.3 in. (33 mm) installed on metal, vinyl, or wood
Tilt detection angle	45°

15 | Certifications

Agency	Certification
ETL C US LISTED Intertek	Control No. 3170792 Conforms to ANSI/UL Std. 634 1. Clause 1.6 Scope of ANSI/UL 634 requires that products shall be installed in accordance with the Standard for Installation and Classification of Burglar and Holdup Alarm Systems, UL 681, or with the Standard for Installation and Classification of Residential Burglar Alarm Systems, UL 1641. Conforms to ANSI/UL 2017 Type Non – Emergency signalling Type NM. Clause 1.1 Scope of ANSI/UL 2017 requires that requires that products shall be installed in accordance with the Standard for National Electrical Code, NFPA 70. (Water Detector) ULC/ORD-C634-86 CSA C22.2#205:2012 Signal Equipment
ZigBee Certified product	This ZigBee® Certified product works in global 2.4 GHz networks supporting ZigBee HA 1.2.1. ZigBee® Certified is a registered trademark of the ZigBee Alliance. ZigBee® Cert No. ZIG17052ZHA25886-24

Bosch Security Systems, Inc. product manufacturing dates

Use the serial number located on the product label and refer to the Bosch Security Systems, Inc. website at http://www.boschsecurity.com/datecodes/.

FCC

This device complies with part 15 of the 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

IC

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada.

Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

WPP

Zigbee®
wireless multi-sensor
RFMS-ZBMS

BOSCH

en Installation Manual

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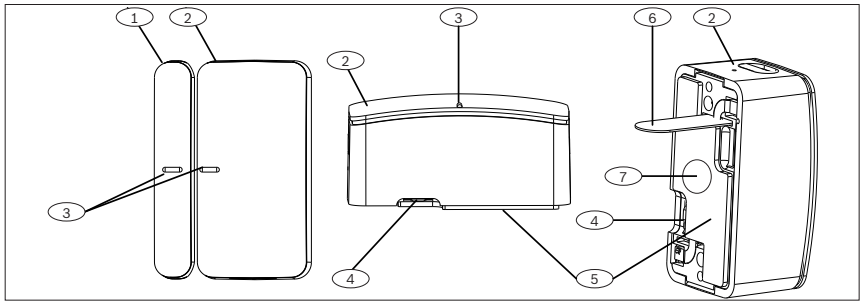
1 | Overview

The wireless multi-sensor is a surface-mount selectable function detector. You can configure the detector to operate as a Door Window Detector, a Water Detector (includes the Low Temperature Alarm function), or a Tilt Detector.



Callout – Description
1 – Magnet
2 – Detector
3 – Magnet and detector alignment marks
4 – Water probe
5 – Detector base with double-sided tape
6 – Battery isolation tab
7 – Perforated double-sided tape section

2 | Product contents

The product box contains:

- 3 detectors with installed batteries
- 3 magnets
- 1 hardware kit
- 1 Installation instructions

3 | Installation considerations

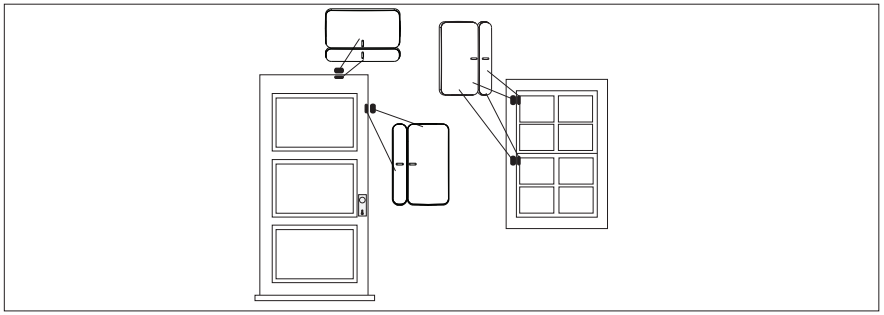
- Suitable flat surfaces for installation include wood, metal, vinyl, glass, and painted surfaces.
- Installation on metal surfaces can affect the RF propagation pattern of the radio transceiver.
- Verify proper clearance with the latch of a window or door and the detector to allow proper access during detector maintenance.
- Moving the home automation or security system may improve RF performance. To improve poor performance, add another device, such as a repeater.

4 | Installing a Door Window Detector

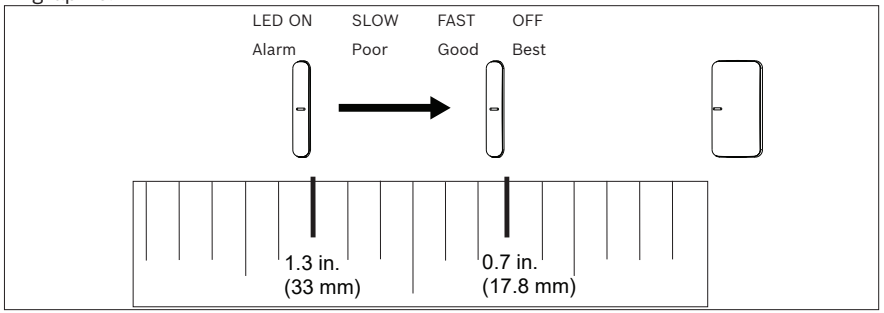
Use a smart phone and scan the following QR code for more installation information.

To install a Door Window Detector:

1. Make sure that your security or home automation system is in pairing mode.
2. Place the magnet near the detector. Align the detector and magnet using the alignment marks.
3. Pull the battery isolation tab from the base of the detector. The green LED turns on and flashes (3 times every 5 seconds) to indicate pairing mode.
4. When the system discovers the detector, move the magnet away and then back toward the detector (trip to pair) to complete the pairing process. Once paired, the detector enters LED test mode, which provides visual feedback on the magnetic field strength and RF signal strength during installation. LED test mode is active for 10 minutes and extends up to 30 minutes with magnet alarm. Tamper (open and close) the detector to restart LED test mode.
5. Place the detector on a surface of an interior door or window frame. The correct alignment and placement are illustrated in the following graphic.

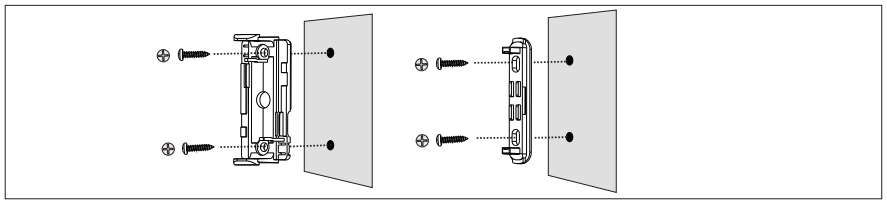


6. Move the magnet toward the detector. Use the alignment marks for correct orientation. The LED flashes faster as the magnet moves closer to the detector. The LED turns off to indicate the best location for the magnet. Refer to the following graphic.



7. To verify proper wireless signal strength, open the door or window and check the color of the LED. If the LED is green, the magnet and detector location are good. If the LED is red, reposition the magnet and/or detector, then recheck the LED color.

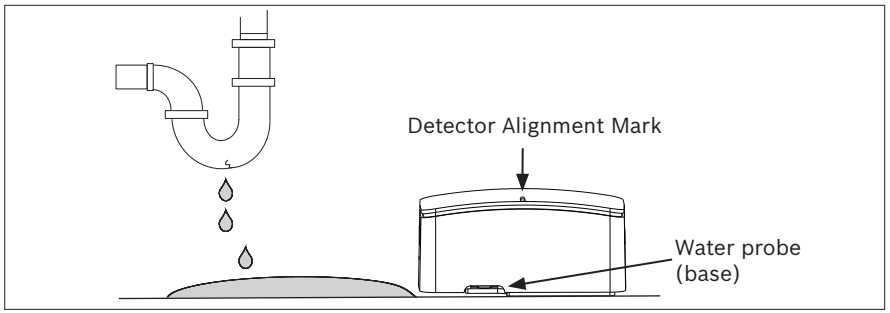
8. To test alarm operation, open the door or window. When the distance between the detector and magnet is greater than or equal to 1.3 inch (33 mm), an alarm occurs.
9. To install the detector with screws, remove the detector and magnet covers to access the mounting holes. Refer to *Section 10* and *Section 12* for removing the magnet and detector covers. Remove the tape on the bottom of the detector and magnet bases to install flush on a surface.



5 | Configuring and installing a Water Detector

To configure the detector to operate as a Water Detector with or without the Low Temperature Alarm function:

1. The Water Detector does not use the magnet to operate. Either remove the magnet completely or move it at least 1 ft (30.5 cm) away from the detector.
2. Pull the battery isolation tab from the base of the detector. The green LED turns on.
3. Put the detector base down on the floor or area. Refer to the following graphic for proper placement.



4. Slowly tap the detector 3 times within 15 seconds of pulling the battery isolation tab. The orange LED flashes 2 times to indicate Water Detector. If the LED flashes red, the orientation is incorrect. Make sure that the detector is oriented with the base down on the floor or area and configure again. The detector enters pairing mode after 15 seconds.

- To optionally enable the Low Temperature Alarm Function, slowly tap the detector 3 times again within the next 15 seconds. The orange LED flashes 4 times to indicate the function is enabled. The detector immediately enters pairing mode.

5. When the system discovers the detector, tamper (open and close) the detector to complete the pairing process. The detector appears as a water detector in the system.

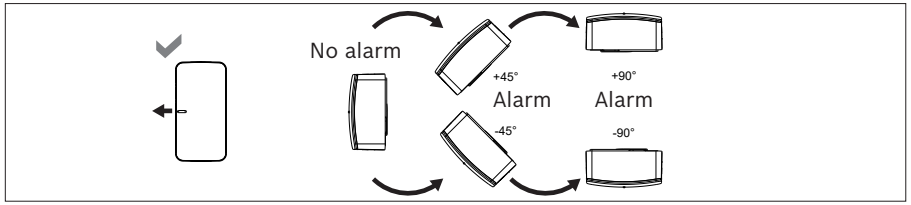
NOTICE!

Damage may occur if the detector is submerged in water.
Avoid placing the detector in areas of high foot traffic where damage to the detector might occur.

6 | Configuring and installing a Tilt Detector

To configure the detector to operate as a Tilt Detector:

1. The Tilt Detector does not use the magnet to operate. Either remove the magnet completely or move it at least 1 ft (30.5 cm) away from the detector.
2. Pull the battery isolation tab from the base of the detector. The green LED turns on.
3. Orient the detector vertically on a surface that tilts a minimum of 45º degrees when opened. Make sure that the alignment mark faces left.
4. Slowly tap the detector 3 times within 15 seconds of pulling the battery isolation tab. The orange LED flashes 3 times to indicate Tilt Detector is selected. The detector immediately enters pairing mode. If the LED flashes red, the orientation is incorrect. Make sure that the sensor is oriented with the alignment mark facing left and configure again. Refer to the graphic below for proper orientation.
5. When the system discovers the detector, tilt the detector past 45º (trip to pair) to complete the pairing process. The detector appears as a Door - entry/exit in the system. Once paired, the detector enters LED test mode, which provides visual feedback of alarm events and RF signal strength during installation. LED test mode is active for 10 minutes and extends up to 30 minutes with tilt alarm. Tamper the detector to restart LED test mode.
6. Tilt the detector to test. The green LED turns on to indicate an alarm.



7 | LED behavior

The LED provides feedback during installation and configuration.

LED	Condition
Green Flashing	• Flashing 3 times every 5 seconds during a 2 minute interval indicates pairing mode • Flashing at a variable rate indicates the magnetic field strength during installation, and provides feedback for 10 minutes after pairing or tampering the detector (LED test mode): – Flashing slow indicates poor magnet installation position – Flashing fast indicates better magnet installation position
Green	Good wireless signal strength performance (LED test mode)
Red	• Poor wireless signal strength performance (LED test mode) • Incorrect orientation of detector during Water or Tilt Detector configuration
Off	• Normal operation and use • Optimal door window installation position • 10 minutes of inactivity during LED test mode
Orange	• Flashing indicates the detector type selection: Water Detector (flashes 2 times), Tilt Detector (flashes 3 times), Low Temperature Alarm Function enabled (flashes 4 times)

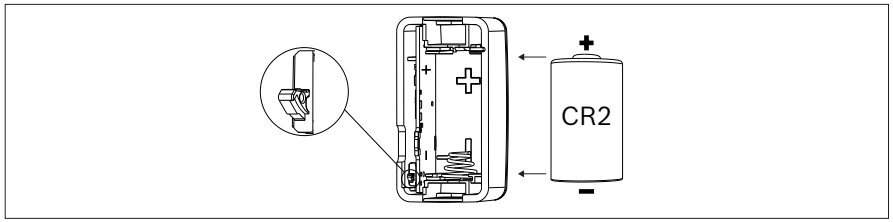
8 | Changing the detector type

If the detector is paired with the system (enrolled) and you want to change the detector type, go to your system and delete the detector. The detector is removed from the system. Next, reset the detector to factory defaults by following the steps in *Section 9* to make sure that the detector type is reset.

9 | Resetting the detector to factory defaults

To reset the detector:

1. To open the detector, simultaneously push the 2 buttons on both sides of the cover and pull the base off.
2. Push and hold the tamper switch as you reinsert the battery. The green LED turns on. Release the tamper switch before the green LED turns off (within 4 seconds).



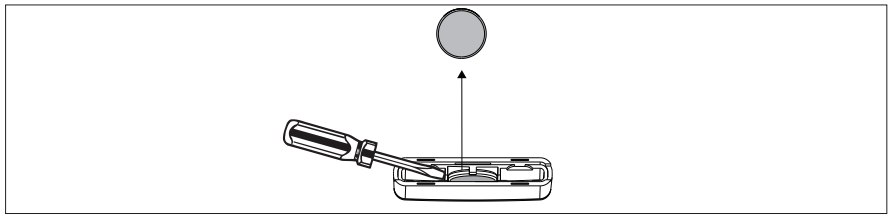
3. The LED turns off, then turns on for 2 seconds (indicated by 3 green LED flashes). The detector is reset to factory defaults.
4. To close the detector, push the detector cover onto the detector base until the buttons “click” into place.
5. Configure and pair the detector. Refer to *Sections 4*, *5*, or *6* depending on the detector type to configure.

10 | Installing a Door Window Detector on thin windows

Use this procedure for special applications, such as thin windows where the magnet cover may prevent the window from opening.

To install on thin windows:

1. To remove the magnet base, insert a small flat head screwdriver or similar tool in the slots on either end of the magnet base and carefully pry off.
2. Pry out the enclosed magnets from the magnet cover using a small flat head screwdriver or similar tool.



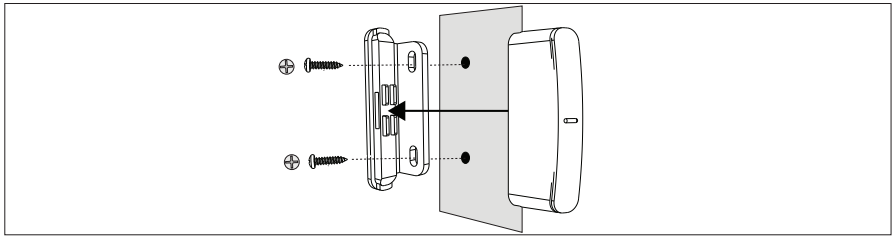
3. Remove the round perforated section of double-sided tape from the base of the detector.
4. Attach the round section of tape to 1 magnet and place the magnet on the window opposite the detector. Refer to the overview graphic in *Section 1* for tape location.
5. Use the alignment mark on the detector to align and center the magnet with the detector.

11 | Installing a Door Window Detector with bracket

The mounting bracket allows installation of the magnet on its left or right side (90°), instead of its base. For example, use the mounting bracket for installations where the detector is installed on the inside of a door frame.

To use the mounting bracket:

1. To remove the magnet base, insert a small flat head screwdriver or similar tool in the slots on either end of the magnet base and carefully pry off.
2. Push the magnet cover onto the bracket.
3. Add a tape strip to the bottom of the bracket.
4. If using screws, install the bracket first, then replace the magnet cover. Refer to the following graphic.



12 | Battery replacement

To replace the battery:

1. To open the detector, simultaneously push the 2 buttons on both sides of the cover and pull the base off.
2. Remove the old battery.
3. Refer to the markings and *Section 9* on the inside cover for correct polarity orientation, then insert the new battery. The green LED turns on and begins flashing.
4. To close the detector, push the detector cover onto the detector base until the buttons “click” into place.

NOTICE!

Bosch is committed to responsible environmental stewardship. Please dispose of batteries in accordance with local laws and regulations in your area. Contact your local waste disposal authorities or consult www.ecyclingcentral.com to find an electronics recycling center near you.

13 | Troubleshooting

- A trouble status reported on the controller might be the result of low batteries on the detector. Replace the battery and re-check the status.
- Monitor the LED for issues when pairing, testing, or installing the detector and magnet. Refer to *Section 7* for LED behavior.
- If the system does not discover the detector within 2 minutes when pairing, the detector exits pairing mode. To re-enter pairing mode, open and close the detector cover (tamper the detector).

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