



Door/Window & Long Life Door/Window Sensors Installation Instructions

466-1022 Rev. F
January 2009

Product Summary

Door/Window (60-362) and Long Life Door/Window (60-641) sensors can be installed on doors, windows, or other devices that open and close. Under normal use, door and window sensors transmit open (TRIP) and close (RESTORE) signals to the panel each time a magnet connects with or breaks away from a sensor.

Also, each sensor sends a supervisory signal to a panel every 64 minutes. The door/window sensor is powered by a 3.6V lithium battery.

Note: The Long Life Door/Window Sensor battery cannot be replaced. If you experience a low-battery condition, you must return the sensor to GE Security for a full replacement.

Installation Guidelines

- Mount sensors within 100 feet of the panel.
- For door mounts, mount the sensor to a door frame and the magnet to the door.
- Mount sensors with screws; do not mount with double-sided tape or other adhesive products.
- To avoid damage, mount each sensor a minimum of five inches above the floor.
- For Long Life sensors, **do not** remove the jumper from the circuit board. The sensor cannot operate without the jumper.
- Use spacers (not included) to keep sensors and/or magnets away from metal surfaces such as flashing or foil wallpaper.

Door/Window Sensor Spacers:

White: Part No. 60-189

Brown: Part No. 60-191

Magnet Spacers:

White: Part No. 60-188

Brown: Part No. 60-190

- Remove internal reed switches not in use.
- Do not mount sensors near areas with excessive metal or electrical wiring, or near areas with excessive moisture.
- Do not mount sensors where temperatures exceed 120°F.

Tools Needed

- #6 Flathead screws
- Phillips and Slotted screwdrivers
- Wire cutter/stripper
- Sensor/magnet spacers (not included)

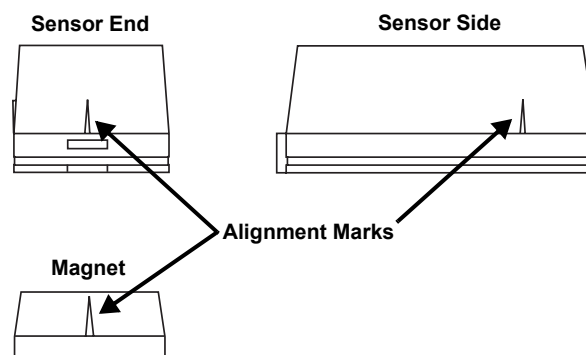
Installation



CAUTION: You must be free of static electricity while handling electronic components. Touch a bare metal surface before touching the circuit board.

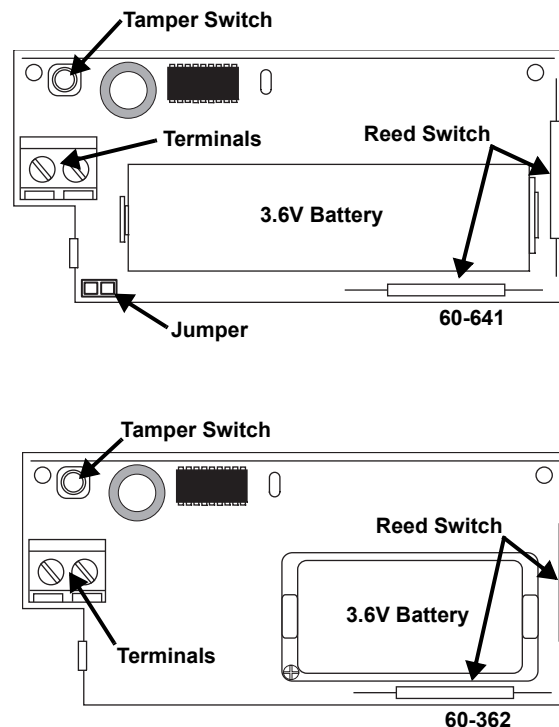
1. Decide on a horizontal or vertical mount. Next, locate the alignment marks on the mounting surface (see Figure 1). The marks indicate reed switch locations. Remove unused reed switches (Step 4)..

Figure 1. Locating Sensor Alignment Marks



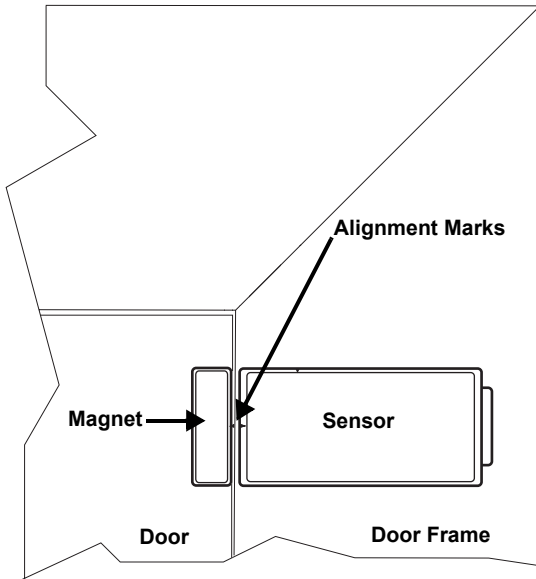
2. Remove sensor cover.
3. Remove the circuit board from the sensor base. Pull back on the plastic tab and lift the battery to release the circuit board.
4. Remove unused reed switches. Clip the leads as close to the board as possible (see Figure 2).

Figure 2. Circuit boards



5. Mount the sensor base. Next, remove the magnet from the base and mount it no more than 3/8" from the sensor base (see Figure 3).

Figure 3. Sensor Base and Magnet Mounted on a Door and Door Frame



Note: Mount the magnet so that it does not interfere with door or window openings. Do not use double-sided tape or other adhesive products.

6. Connect the circuit board to the base.
7. Replace the sensor cover.

Connecting External Switches

Door and window sensors can be connected to normally open (close on alarm) or normally closed (open on alarm) external switches. For normally open switches, wire multiple sensors in parallel; for normally closed switches, wire multiple sensors in series.

Do not use both a built-in reed switch and an external switch on the same door/window sensor. For high-security installations, remove *both* reed switches when external switches are connected to sensor terminals.

Note: For UL-listed installations, use only a normally closed configuration.

Materials Needed

- Sealed, external reed switches with a minimum 250 mS open or close on alarm.
- Stranded, 22-gauge wire.

Installation Guidelines

- Do not use solid-core wire or mechanical switches.
- For remote device connections, do not use a sensor's built-in reed switches.
- Do not connect fast pulse devices such as a Window Bug to a door or window sensor.
- Do not exceed a wire length of 25 feet for 22-gauge, stranded wire runs. For UL-listed installations, do not exceed a wire length of three feet between a sensor and external device.
- Do not exceed a length of six feet for untwisted wire pairs.

- Connect up to five switches and one alarm screen to a door/window sensor.
- Do not route wire runs parallel to other electrical wires. If a parallel wire run cannot be avoided, ensure a minimum distance of 18" exists between the nearest electrical wiring.
- When necessary, cross electrical wires at a 90° angle.

Programming

The following provides a general guideline for programming a door/window sensor into panel memory. Refer to specific panel *Installation Instructions* for complete programming details.

1. Set panel to **Program Mode**.
2. Enter the **Learn Sensors** menu. Next, select the appropriate sensor group and number assignments.
3. Set external switches to **Alarm** (open for normally closed circuits; closed for normally open circuits).
4. Remove sensor cover. The sensor tamper switch trips.
5. Exit **Program Mode**.
6. Replace sensor cover.

Testing

The following provides a general guideline for testing a door/window sensor. Refer to the specific panel *Installation Instructions* for complete testing details.

1. Set panel to **Sensor Test Mode**.
2. Trip the sensor. Listen for interior siren beeps to determine appropriate responses (refer to the panel *Installation Instructions*).

The Long Life Door/Window Sensor has a built-in power saving feature that automatically turns on when a sensor is tripped two or more times within a four minute period.

When the power saving feature is on and a sensor is tripped, the sensor transmits only half of the regular data rounds.

For example, during a sensor test you normally expect to hear up to eight data rounds. Because the power saving feature is on, you may only hear up to four data rounds.

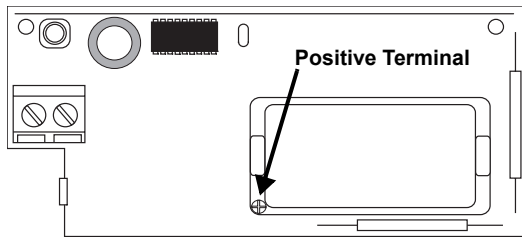
To ensure a sensor is within range of a panel, leave the sensor in the closed (non-alarm) condition for five minutes prior to tripping it. This allows the sensor to disengage the power-saving feature and provides for more accurate test results.

Battery Replacement (60-362 only)

When the system indicates a low sensor battery, immediately replace the battery. Use only exact replacement batteries (see *Specifications*).

1. Remove sensor cover.
2. Remove battery and dispose as required by local laws.
3. Insert replacement battery. Observe polarity (see Figure 4).
4. Perform sensor test.

Figure 4. Observing Battery Polarity



Specifications

Model No.	60-362: Door/Window Sensor 60-641: Long Life Door/Window Sensor
Compatibility	All GE Security 319.5 MHz Learn Mode panels
Power Source	60-362: 1/2 AA 3.6V Soft or Tekcell Lithium Battery 60-641: AA 3.6V Lithium Battery
Storage Temperature	-30° to 140°F (-34° to 60°C)
Operating Temperature	10° to 120°F (-12° to 49°C)
Maximum Humidity	85%, non-condensing
Transmit Range	Minimum of 500 feet in open-air
Listings	UL 1023 – Household Burglar Alarm Units and Systems ULC Subject C1023-1974

Notices

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by GE Security can void the user's authority to operate the equipment.

FCC ID: B4Z-772A-DWS

IC: 867 1032 229