Door/Window Sensor & LongLife Door/Window Sensor

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60-362 & 60-641

INSTALLATION INSTRUCTIONS

About This Document

This document describes how to install, program, and test the Learn Mode Door/Window and Long Life Door/Window Sensors.

Product Summary

The Door/Window Sensor (60-362) and Long Life Door/Window Sensor (60-641) can be installed on doors, windows, or virtually anything that opens and closes. During normal operation, the sensors transmit open (TRIP) and close (RESTORE) signals to the panel. The sensors also send a supervisory signal to the panel every 64 minutes.

Sensors transmit open and close signals to the panel when a magnet (mounted near the sensor) is moved away from or closer to the sensor.

The sensors are powered by a 3.6-volt lithium battery.

NOTE: The Long-Life Door/Window Sensor battery cannot be replaced by installers or users. If you receive a low battery report, you must return the sensor to ITI for replacement.

Tools Needed

ν #6 flathead screws or 18-gauge brads
ν Screwdriver or brad driver
ν Small wire cutters
ν Sensor and magnet spacers (optional)

Installation Guidelines

ν Keep all sensors within 100 feet of the panel.
ν Mount the sensor on the door frame and the magnet on the door. If the sensor is to be used on double doors, mount the sensor on the least used door and the magnet on the other door.
ν Mount sensors with screws or brads, not double-sided tape.
ν Place sensors at least 5 inches above the floor to avoid damaging them.
ν Use spacers (not included) to keep sensors and magnets away from metal or metallic surfaces such as foil wallpaper.

Door/Window Sensor Spacers
White: ITI Part #60-189
Brown: ITI Part #60-191

Magnet Spacers
White: ITI Part #60-188
Brown: ITI Part #60-190

ν Remove the internal reed switch not being used.
ν Avoid mounting sensors in areas with a large quantity of metal or electrical wiring, such as a furnace or utility room.
ν Avoid mounting sensors in areas where they will be exposed to moisture.
ν Avoid mounting sensors in locations where the operating temperature (10° to 120° F) will be exceeded.

CAUTION: Do not remove the jumper from the Long-Life Door/Window Sensor circuit board! The sensor cannot work without the jumper.

Installation

CAUTION: You must be free of all static electricity when handling electronic components. Touch a grounded, bare metal surface before touching a circuit board or wear a

grounded wrist strap.

1) Decide if the sensor should be mounted horizontally or vertically by locating the alignment marks on the sensor and magnet plastic (see Figure 1.)

   The marks indicate reed switch locations. Each sensor uses only one of the two switches. You will remove the unused one in step 4.
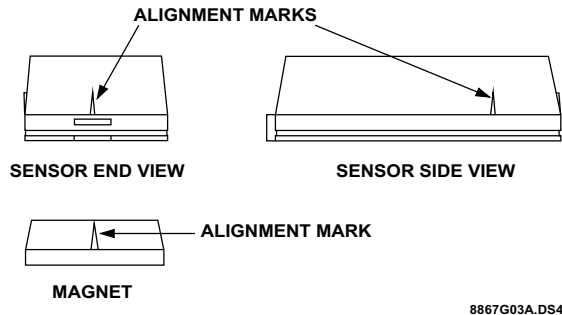

ALIGNMENT MARKS

SENSOR END VIEW   SENSOR SIDE VIEW

ALIGNMENT MARK

MAGNET

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Figure 1. Alignment marks

2) Remove the sensor cover by squeezing the cover ends firmly to release the tab on the cover from the slot on the sensor base.
3) Remove the circuit board from the sensor base by pulling back the plastic tab and lifting the battery to release the circuit board.
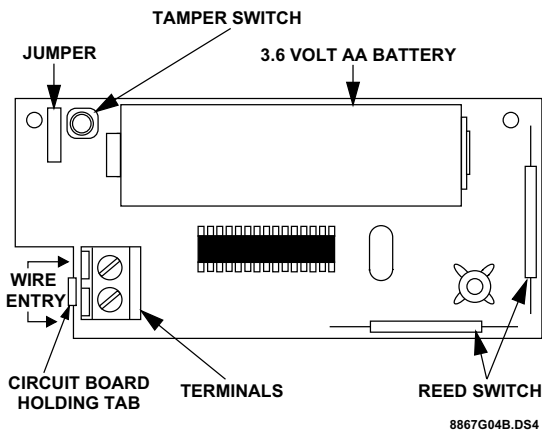4) Remove the unused reed switch, clipping the leads as close to the board as possible (see Figure 2.)

TAMPER SWITCH

JUMPER   3.6 VOLT AA BATTERY

WIRE ENTRY

CIRCUIT BOARD HOLDING TAB   TERMINALS   REED SWITCH

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Figure 2. Long-Life Door/Window Sensor (60-641) Circuit Board; Door/Window Sensor (60-362) Circuit Board Similar

5) Mount the sensor base with screws or brads. Use spacers to compensate for metal surfaces or height variations.

6) Remove the magnet from its base. Mount the magnet base no more than 3/8 inches away from the sensor base (see Figure 3). Replace magnet cover.)
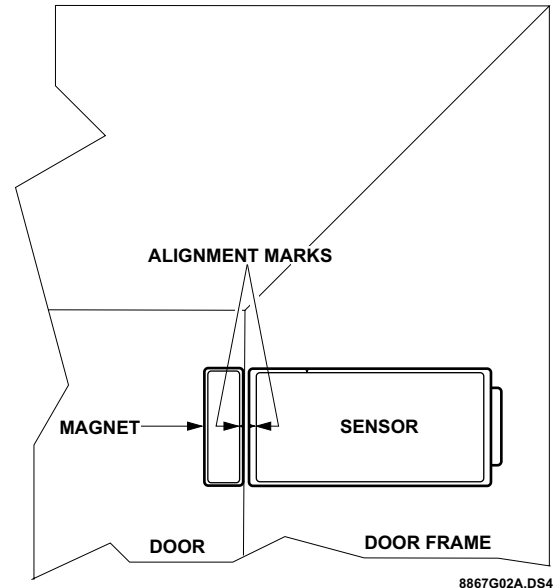

ALIGNMENT MARKS

MAGNET   SENSOR

DOOR   DOOR FRAME

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Figure 3. Mounted Sensor and Magnet

NOTE: Mount the magnet so it won't interfere with door or window openings. Do not use two-sided tape.

7) Reattach the circuit board to the sensor base.
8) Reattach the sensor cover to the sensor base.

Connecting External Switches

Door/window sensors can be connected to either normally open (close on alarm) or normally closed (open on alarm) external switches. Wire multiple, normally closed switches in series. Wire multiple, normally open switches in parallel.

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

NOTE: In UL listed installations, only the normally closed configuration can be used.

Materials Needed

ν Hermetically sealed external switches (sealed reed switch) that supply a minimum 250-millisecond open or closure on alarm.

ν Stranded 22-gauge wire.

Installation Guidelines

ν Do not use solid core wire.

ν Do not use mechanical switches.

ν If you are connecting a remote device to a door/window sensor, do not use the built-in reed switches.

ν Do not connect fast pulse devices (such as Window Bugs) to door/window sensors.

ν Do not use more than 25 feet of 22-gauge, stranded wire in any wire run.

ν Do not use more than 6 feet of untwisted wire in any wire run.

ν Do not connect more than five switches or more than one alarm screen to a door/window sensor.

ν Do not run wires parallel to electrical wires. If you can't avoid a parallel wire run, keep it at least 18 inches away from electrical wiring.

ν If necessary, you may cross electrical wires at a 90 degree angle.

Programming

The following steps describe the general guidelines for programming (learning) the sensor into panel memory. Refer to the specific panel installation instructions or reference manual for complete programming details.

1) Set the panel to the program mode.

2) Proceed to the LEARN SENSORS menu.

3) Select the appropriate sensor group and sensor number assignments.

4) Set the external switch (if one is connected) in the alarm condition (**open** for normally closed circuits; **closed** for normally open circuits).

5) Trip the sensor's tamper switch by removing the sensor cover.

6) Exit program mode.

7) Place the cover back on the sensor.

Testing

The following steps describe the general guidelines for testing the sensor. Refer to the specific panel installation instructions or reference manual for complete testing details.

1) Set the panel to the dealer sensor test mode.

2) Trip the sensor.

3) Listen for interior siren beeps to indicate how many rounds the panel receives from the sensor. You should hear 6 to 8 beeps.

Notes on Testing the LongLife Door/Window Sensor

The LongLife Door/Window Sensor has a built-in power-saver feature that turns on automatically when the sensor is tripped more than once, within a 4-1/4 minute time period.

When the power-saver feature is on, the sensor transmits only half the usual number of data rounds when tripped. For example, during a dealer sensor test you normally expect to hear up to 8 data rounds. When the power-saver feature is on, you may hear only up to 4 data rounds.

To be sure the sensor has acceptable transmitting range to the panel, leave the sensor undisturbed in the closed (non-alarm) condition for 5 minutes before tripping it for testing. This gives the sensor enough time to turn off the power-saver feature so you can get accurate sensor test results.

Specifications

Operating
Temperature Range: 10° to 120° F.

Compatibility: All Learn Mode panels

Power Source: 1/2 AA 3.6-volt lithium battery
(60-362)

AA 3.6-volt lithium battery
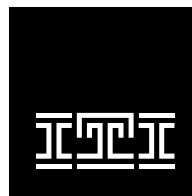(60-641)

Transmit Range: At least 500 feet, open air

FCC Notice

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

This device may not cause harmful interference.

The device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Interactive Technologies, Inc. can void the user's authority to operate the equipment.