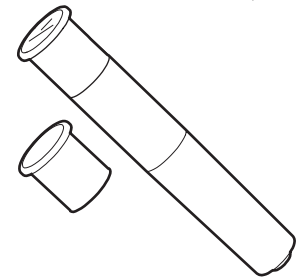


# Recessed Micro Door/Window Sensor

ITI Part No. 60-741-95 (gray)  
& 60-741-11-95 (brown)



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## Installation Instructions

### Product Summary

The Recessed Micro Door/Window Sensor detects if a door or window is open or closed. During normal operation, the sensor is installed in the door or window frame while the magnet is installed in the door or window. When the door or window is opened, the magnet is moved away from the sensor, which causes the sensor to transmit an open (TRIP) signal to the panel. The sensor transmits close (RESTORE) signals to the panel when the magnet is moved back to the sensor, which happens when the door or window is closed.

The sensor also sends supervisory signals to the panel every 64 minutes (approximately). The sensor is powered by a 3.0 volt, long life, lithium battery.

### Tools Needed

- electric drill
- $\frac{5}{8}$ " paddle or twist drill bit, 4" minimum length
- $\frac{3}{4}$ " twist drill bit
- standard  $\frac{1}{8}$ " screwdriver
- tape measure or ruler
- pencil, pen, or piece of chalk
- ITI RF Sniffer (P/N 60-401)

### Installation Guidelines

- Keep each sensor within 100 feet of the panel or repeater.
- Avoid mounting a sensor in an area where it will be exposed to moisture.
- Avoid mounting a sensor where temperatures exceed 120° F (49° C).
- Avoid mounting a sensor where temperatures fall below 10° F (-12° C).
- Avoid mounting a sensor where it will be jarred excessively, as this reduces battery life.

**⚠ WARNING**  
Some installations may have electrical wiring running through door or window frames. Use caution to avoid electrical shocks.

- Whenever possible, mount the sensor in the casing, not in the moving door or window.
- To avoid electrical wiring, mount the sensor in the header (top) of the door or window frame.
- If the sensor is to be used on double doors, mount it in the least used door, with the magnet in the other door.

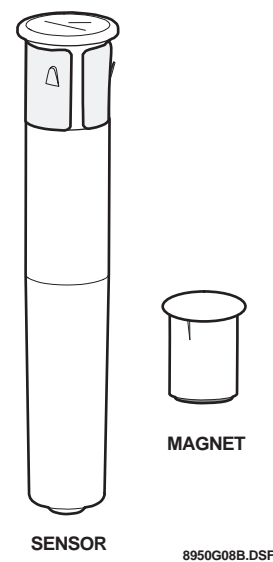


Figure 1. All Shipped Parts for Recessed Micro Sensor

### Installation

1. Determine a suitable application site for the sensor.
  - ⚠ WARNING**  
To minimize the risk of electrical shock from concealed wires, mount the sensor in the top of the door or window frame. (See Figure 2.)
2. Measure and mark where the magnet will be installed in the door or window.
3. Measure the distance between the door or window and the frame header.
4. Drill a  $\frac{5}{8}$ " diameter hole  $\frac{3}{4}$ " deep into the door or window (see Figure 2).

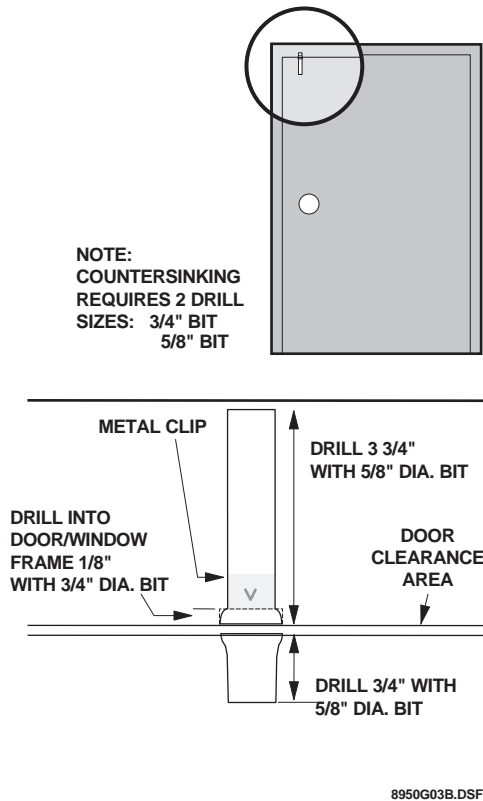


Figure 2. Preferred Method: Countersunk Mounting Dimensions

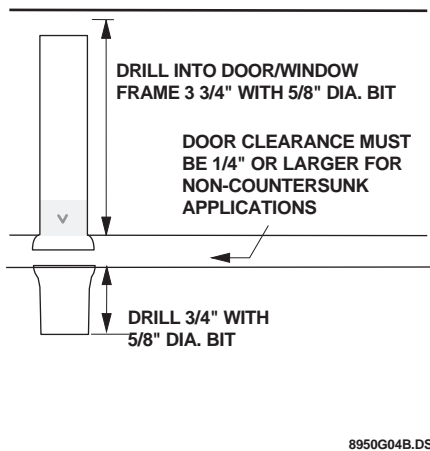


Figure 3. Optional Method: Non-Countersunk Mounting Dimensions

5. Push the magnet into the hole, magnet side first.
6. Measure and mark where the sensor will be installed in the frame.
7. Verify that the sensor and magnet marks are properly aligned with the installed magnet. If misaligned, remeasure and remark the sensor location on the frame. (See Figure 2 or 4).

8. To install the sensor in countersunk applications (preferred), drill a 1/8" deep starter hole in the frame with a 3/4" twist type drill bit. Finish the hole by drilling with a 5/8" drill bit, until the complete hole depth measures 3 3/4" (see Figure 2).

**OR**

To install the sensor in non-countersunk applications, there must be at least 1/4" of clearance between the door or window and the frame. Drill a hole with a 5/8" drill bit until the hole depth measures 3 3/4" (see Figure 3).

9. Insert sensor into the hole in the frame. Force the metal teeth into the frame by applying firm pressure on the sensor.
10. Close the door or window.

## Adding the Sensor to Panel Memory

Below are general guidelines for adding (learning) the sensor into your panel memory. Refer to your panel *installation instructions* or *reference manual* for complete details.

1. Set the panel to Program mode.
2. Proceed to the LEARN SENSORS menu.
3. Select the appropriate sensor group and sensor number.
4. Trip the sensor by gently pressing the blade of a 1/8" standard screwdriver into the small slot on the base of the sensor. Insert the screwdriver blade by gently sliding the blade along the back of the slot (see Figure 4).

**Note**

The screwdriver must be unbent and free of defects for this process to work.

5. With constant pressure, slowly tip the screwdriver (see Figure 4.) until you hear beeps from the ITI RF Sniffer (P/N 60-401) or a confirmation message from the panel.

When you tilt the blade, as described above, the screwdriver electrically connects two contacts (see Figure 5). This action causes the sensor to transmit a signal, which the panel or RF Sniffer then detects.

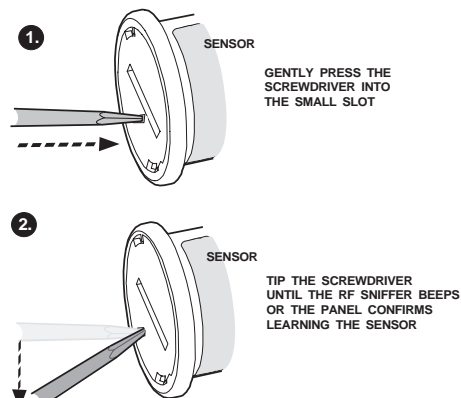
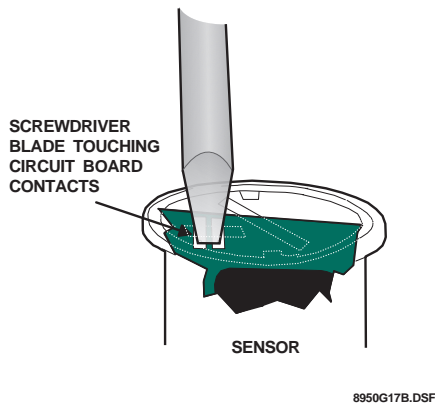


Figure 4. How to Add the Sensor to the Panel Memory



**Figure 5. Cross Section of a Screwdriver Touching the Sensor Circuit Board Contacts**

**Note**  
Although the above illustration depicts internal components, there is no need to open the sensor during this procedure.

6. Repeat the above steps until all sensors are added (learned) into the panel.
7. Exit Program mode.

## Testing

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

1. Set the panel to the Dealer Sensor Test mode.

**Note**  
This sensor uses an automatic power-saver feature if it is tripped two or more times in a 4 <sup>1</sup>/<sub>4</sub> minute interval. Therefore, we recommend leaving the sensor undisturbed for 5 minutes before testing it. See "Testing with the Power-Saver Feature."

2. Trip the sensor by opening the door or window to verify that it has an acceptable transmitting range with the panel.
3. Listen for interior siren beeps to indicate how many rounds the panel receives from the sensor. You should hear 6 to 8 beeps.

## Testing with the Power-Saver Feature

We recommend you leave the sensor undisturbed, in the closed or non-alarm condition, for 5 minutes before testing it. Waiting guarantees accurate test results because the sensor has enough time to turn off its built-in power-saver feature, which automatically turns on when it is tripped more than once in a 4 <sup>1</sup>/<sub>4</sub> 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.

## Specifications

|                              |   |
|------------------------------|---|
| Operating Temperature Range: | 10° to 120° F<br>(-12° to 49° C)                  |
| Compatibility:               | All Learn Mode panels                             |
| Power Source:                | 3.0V lithium battery<br>CR 12600SE battery number |
| 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.

This 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.



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