

## **GE Interlogix**

# SX-V<sup>®</sup> to Learn Mode Translator

**Installation Instructions** 

www.GE-InterlogixSecurity.com

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### Product Summary



Model No. 60-908-95R

The SX-V to Learn Mode Translator receives RF signals from SX-V sensors and converts them to Learn Mode signals that can be processed by any GE Interlogix Learn Mode panel.

This allows current owners of SX-V, CareTaker<sup>®</sup>, and RF Commander<sup>®</sup> systems to replace their existing control panel and update it to current Learn Mode technology, without replacing the SX-V sensors in the system. Learn Mode sensors can then be added to the system if the customer wants to expand their system.

#### Note

The NFPA recommends that smoke sensors be replaced every 10 years. Therefore, it is recommended that all SX-V smoke sensors be replaced with Learn Mode smoke sensors.

The translator transmits supervisory signals every hour and includes a cover tamper switch.

#### Tools and Equipment Needed

- · 2-conductor, 22-gauge or larger stranded wire
- 12 VDC Power Supply (if not using panel power)
- Mounting Hardware (included)
- · Phillips Screwdriver
- Small Slotted Screwdriver

#### Installation

Installation involves mounting, setting the House Code (to match the SX-V sensors) and wiring.

#### Installation Guidelines

- The translator requires a 12 VDC power source, either from the control panel or a separate power supply with backup battery.
- Locate the translator 10 to 20 feet away from the control panel.
- Whenever possible, centrally locate the translator with regard to sensor and control panel locations.
- Mount the translator from 6 to 8 feet above the floor for optimum wireless range.
- Be sure to provide at least 9" clearance above the translator housing for the antennas.
- Avoid mounting the translator in utility or electrical rooms where there is excessive metal and/or electrical lines that can interfere with transmitting and receiving RF signals.

#### Mounting the Translator

- 1. Remove the translator cover and set it aside.
- 2. Place the translator on the wall at the desired location and mark the three mounting hole locations (see Figure 1).
- Install anchors where studs are not present and secure the translator to the wall using the included screws.
- 4. Install the antennas (included) into the inside terminal of each antenna terminal block (see Figure 1).

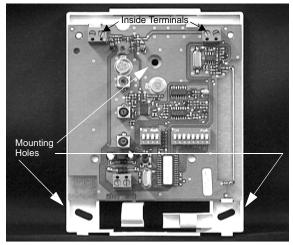


Figure 1. Mounting Hole and Antenna Locations

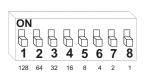
#### Setting the Translator House Code

The 8-position DIP switch lets you set the translator House Code, which must match the House Code programmed into the existing SX-V sensors and touchpads (001 to 254). Any switch that is off is considered a 0. Switches turned on assume their binary value and when added together, determine the House Code number.

Use Table 1 to determine the switch settings for the desired House Code.

- 1. For switches turned off, enter 0 in the Set Value column or leave it blank.
- 2. For switches turned on, enter the binary value in the Set Value column.
- 3. Add the numbers in the Set Value column and enter the sum in the bottom box.
- 4. Set the DIP switches according to the sum in the bottom box. For example, to set the translator House Code to 55 turn on switches 3, 4, 6,7, and 8 (values 32 + 16 + 4 + 2 + 1 = 55).

**Table 1: Setting House Code DIP Switches** 



DIP Switch	Binary Value	Set Value
1	128	
2	64	
3	32	
4	16	
5	8	
6	4	
7	2	
8	1	
House	Code	

#### Wiring the Translator

- 1. Make sure the power source (control panel or separate power supply) is powered down.
- 2. Run a 2-conductor, 22-gauge or larger stranded wire cable from the control panel or power supply to the translator.
- 3. At the translator, connect the red wire to the +12V terminal and the black wire to the GND terminal.
- 4. At the power source, connect the red wire to the +12 and connect the black wire to the GND (-).
- 5. Power up the translator by powering up the power source (control panel or separate power supply).

### **Programming**

Programming involves adding (learning) the translator into the panel (Learn Mode control panel) and then adding the SX-V sensors to the panel.

#### Adding the Translator to the Panel

The following describes the basic steps for adding (learning) the translator into the panel. For complete programming instructions, refer to the specific control panel *installation instructions*.

- 1. Set the control panel to program mode.
- 2. Select the desired sensor number and sensor group when prompted by the panel.

For 24-hour cover tamper alarm detection, select sensor group 08. For cover tamper alarm detection only when the system is armed, select sensor group 13.



Accidental alarms can occur when using sensor group 08. While this group provides maximum protection, monitored systems will report a tamper alarm to the central monitoring station if the translator cover is ever removed. Be sure to inform end-users that they should never remove the translator cover.

- Caution
- 3. When prompted by the panel to trip the sensor, press and hold the translator tamper switch for 2-3 seconds, then release it. The panel should respond by announcing or displaying an 'Okay' message.
- 4. Exit from program mode.

#### Adding SX-V Sensors to the Panel

The following describes the basic steps for adding (learning) sensors into the panel. For complete programming instructions, refer to the specific control panel *installation instructions*.

- 1. Make sure the translator House Code is set using the 8-position DIP switch (see the section "Setting the Translator House Code").
- 2. Using the translator 4-position DIP switch, turn on switches 1, 2, and 3. Leave switch 4 off.
- 3. Set the control panel to program mode.
- 4. Select the desired sensor number and sensor group when prompted by the panel.
- 5. When prompted by the panel, trip the sensor by pressing and releasing the sensor tamper switch, pressing the sensor test button, or by putting the sensor in alarm (whichever is appropriate for the sensor). The panel should respond by announcing or displaying an 'okay' message.
- 6. Repeat steps 2 and 3 for all sensors/touchpads.
- 7. Turn off switches 1, 2, and 3 on the translator 4-position DIP switch.
- 8. At the panel (or system touchpad), exit from program mode.

### Setting the Translator for Sensor Low Battery or Tamper Monitoring

The translator can be set up to transmit sensor low battery (9-volt battery smoke sensors and panic buttons only) or tamper conditions, but not both. The translator can also be set up to translate all House Codes or just the system House Code. Table 2 describes the translator 4-position DIP switch settings and the translator function.

**Table 2: DIP Switch Function Settings** 

Low Battery/Tamper DIP Switches 2 & 3	House Code Translation DIP Switch 4	
Transmits low battery for 9-volt battery smoke sensors and panic buttons only	Translates all SX-V sensors regardless of system or translator House Code	
Transmits sensor tamper signals	Translates only those SX-V sensors with the same system and translator House Code	
No low battery or tamper signals		

## **Testing**

Test the operation of all sensors and touchpads, according to the test procedures in the specific control panel *installation instructions*.

## **Specifications**

Compatibility: GE Interlogix 319.5 MHz Learn Mode Panels, SX-V Sensors

Power Requirements: 12 VDC nominal, less than 100 mA Operating Temperature: 32°F to 120°F (0°C to 49°C) Storage Temperature: -30°F to 140°F (-34°C to 60°C) Maximum Humidity: 90% relative, noncondensing

Dimensions: 4.0" (10 cm) W x 5.25" (13 cm) H x 1.0" (2.5 cm) D

#### **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 Interlogix can void the user's authority to operate the equipment.

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 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 affected equipment and the panel receiver to separate outlets, on different branch circuits.

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

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2266 Second Street North North Saint Paul MN 55109 Phone: 651-777-2690 USA & Canada: 800-777-5484 Technical Support: 800-777-2624