

GE Security

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Product

Summary

Part No. 60-999-900

SuperBus 2000 900MHZ RF Transceiver Module

Installation Instructions

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The SuperBus 2000 900 MHz RF Transceiver Module is a UL listed device that adds or expands panel wireless zone capacity. See the specific panel *Installation Instructions* for complete UL requirements for the system you are installing.

The transceiver is compatible with all GE Security 900 MHz wireless sensors and touchpads, and can be located up to 2,800 feet away from the panel (see Table 2). It receives information from wireless sensors and touchpads then sends the data to the panel via the SuperBus 2000 digital data bus. It also transmits information to other transceivers. Power for the module is provided by the panel.

Transceivers are available in 16-zone (-16Z), 32-zone (-32Z), or panel maximum (-MAX) capacities.

The SuperBus 2000 RF Transceiver Module features:

- Compatibility with all GE Security 900 MHz wireless sensors, touchpads, and sirens.
- Backward compatibility with SuperBus panels.
- 1,500 feet nominal, open air receiving range.

Figure 1 shows the transceiver module components and Table 1 describes those components.



Figure 1. Transceiver Board

Table 1:	Component	Descriptions
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Component	Function
Antenna	Provide communication with wireless devices.

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Table 1: Component Descriptions

Component	Function
SuperBus 2000 Device ID Number Label	Identifies unique module SuperBus 2000 device ID number (SuperBus 2000 panels).
Transceiver Status LED	On continuously when the transceiver is powered. Flashes when an RF signal is received.
Terminal Strip	Used for power and bus connections to panel.

Installation

Installation Guidelines

Observe the following guidelines when installing the transceiver module:

- Concord[™] systems can accommodate a maximum of 96 wireless sensors/zones.
- In Concord systems, up to 16 SuperBus 2000 devices can be connected to the panel (SuperBus 2000 Touchpads, Receivers, Transceivers, HIMs, HOMs, ESMs, etc.).
- Each bus device must have a different unit number.
- Leave 4 inches above the module for the antenna.
- When mounting the module away from the panel, use the wire length guidelines in Table 2.

Table 2: Maximum Module Wire Lengths

Wire Gauge (Unshielded or Shielded)	Max. Wire Length Between Module and Concord Panel
18	2,800 feet
22	1,100 feet

- Avoid areas that are likely to expose the module to moisture.
- Avoid areas with excessive metal or electrical wiring, including furnace and utility rooms. If unavoidable, mount on or near metal with the antenna extending above the metallic surfaces, as shown in Figure 2.



Figure 2. Mounting on or Near Metal

Tools and Supplies

- Screwdrivers
- Drill with bits
- Mounting screws and anchors (included)
- 4-conductor, 22-gauge or larger, stranded wire
- Support standoff (included with Concord cabinet)
- ¹/₄-inch press-fit reed switch and magnet (not included)
- Small hammer

Mounting the Transceiver

The module can be mounted on any interior wall (protected from the elements).

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To prevent damaging the panel or module, remove the panel AC power transformer and disconnect the backup battery before installation.

You must be free of static electricity before handling circuit boards. Wear a grounding strap or touch a bare metal surface to discharge static electricity.

- > To mount the module on a wall:
- 1. Remove the panel AC power transformer and disconnect the backup battery.
- 2. Remove the module cover and set it aside.
- 3. Hold the base against the mounting surface and mark the three mounting holes. Remember to leave at least 10 inches above the base for the antenna.
- 4. Drill holes and insert the appropriate anchors.
- 5. Secure the back-plate to the wall with included panhead screws.

Concord Panel Wiring

This section describes how to wire the transceiver module to Concord panels.

> To wire the transceiver module to Concord panels:

- 1. Disconnect the panel power transformer and backup battery.
- 2. Wire the module to the panel power and bus terminals as shown in Figure 3.



Figure 3. Wiring Module to Concord Panel

Power Up

Note In order to enter panel program mode to verify unit numbers, an alphanumeric touchpad must be connected to all Concord panels. Use the following procedures for powering up the system and verifying bus communication.

- To power up the panel and transceiver module:
- 1. Verify that all wiring at the panel, touchpad, and transceiver is correct.
- 2. Connect the panel backup battery and plug in the panel AC power transformer.
- 3. Verify that the transceiver module status LED is on.
- 4. If desired, enter panel program mode to verify unit number exists (see panel *Installation Instructions* for more information).

Note

If the transceiver module LED is not on, unplug the panel AC power transformer, disconnect the backup battery, and see Table 3 "Troubleshooting".

Specifications	Compatibility:	GE Security Concord panels. GE Security 900 MHz wireless sensors and touchpads
	Power Required:	12 VDC nominal 500 mA maximum draw (from panel)
	Storage Temperature:	30° to 140°F (-34° to 60°C)
	Operating Temperature:	32° to 140°F (0° to 60°C)
	Maximum Humidity:	90% relative humidity, noncondensing
	Wireless Signal Range:	1,500 feet nominal, 2,000 feet typical open air (may vary with application)
	Dimensions:	4.125" x 5.25" x 1.0" (L x W x H), excluding antenna

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2266 Second Street North North Saint Paul MN 55109 Technical Support: 800-777-2624