



SuperBus® 2000 Wireless Gateway Module Installation Instructions

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Product summary

The SuperBus® 2000 Wireless Gateway Module allows customers to control and monitor their Concord™ (v2.6-later), Concord 4, and Concord Express (v4) systems from the Alarm.com Web site. Through a wireless two-way paging network, customers can control such features as security, notifications, history, and automation.

In addition to the wireless paging network, Concord owners may also receive system event notifications by e-mail, pager, or phone.

Note: For UL Listed Concord installations, the Alarm.com website can be used as an ancillary device for reporting, but cannot be used for controlling the security system.

The module interfaces with Concord panel data buses and is powered by the panel or an auxiliary 12V DC power supply. Status LEDs indicate bus and paging network communications and supervised zone inputs allow you to connect hardwire contacts.

For added security, a magnet and reed switch (not included) can be installed for tamper protection.

Figure 1. Wireless Gateway Module Main Components

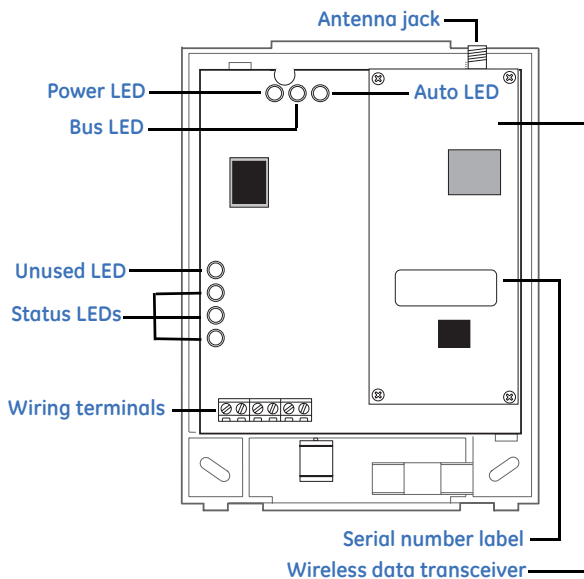


Table 1. Component functions

Component	Function
Power LED	Indicates module power status.
Bus LED	Indicates panel bus communication.
Auto LED	Indicates module/data transceiver communications.
Status LEDs	Indicate pager network communication status.
Wiring Terminals	Provide power, bus, and hardwire zone input connections.

Before installation

Before installing any Wireless Gateway, you must:

1. Create the Alarm.com customer account prior to installing the Wireless Gateway by logging into the Alarm.com dealer website at the following location:

<https://www.alarm.com/dealer>

E-mail dealer@alarm.com to become a registered Alarm.com dealer/installer.

2. Create the account at least 24 hours before installation to ensure that the wireless module is activated properly on the wireless network.

Creating a new account

To create a new account, do the following:

1. Open a web browser and enter the Alarm.com dealer website URL:
<https://www.alarm.com/dealer>
2. Enter your dealer login and password and press **GO**.
3. Click the *Check Coverage* link at the top of the page to check wireless coverage at the install location. If the location has full coverage, proceed with the next steps. If coverage is uncertain, you may contact Alarm.com for more details.
4. Click the **Customers** link on the menu bar. Then click **Create Customer**.
5. Enter the required customer information
Note: Ensure the customer e-mail address is entered correctly. Alarm.com sends a confirmation message, and a list of account changes, to the customer via e-mail.
6. Click **Next**. *Step Two, Create Customer's Login* will appear. Follow the directions as stated. You may click on **Automatically Generate Login** to have a login assigned to you.
7. Click **Next**. *Step Three, System Location* will appear. If the system is installed at the address provided at *Step One Customer Information*, click **Yes**. If the system is installed at an address different from the one provided in *Step One Customer Information*, click **No** and enter the correct address and time zone where the system is to be installed. It's important that you enter the correct system location address at this step.
8. Click **Next**. *Step Four Panel Information* will appear. In the *Modem Serial #* dialog box, enter the 10-character ID found on the gateway you purchased (see serial number label in *Figure 1*). If you are unable to proceed with the modem serial number, contact Alarm.com.
9. Select **Concord** in the *Panel Type* list box.
10. Click **Next**. The *Confirmation* screen will appear. Review the customer information. If you need to change any of the information, click the **Edit** link next to the field you want to update.
11. Click **Done**. The *Account Creation Successful* screen will appear. Click **View and Print Welcome Letter**. Print two copies of the welcome letter; one for the customer and one for your records. The letter includes the customer's login, temporary password, and instructions on how to get started. Also, a confirmation message is sent via e-mail to the address entered in *Step One: Customer Information*. The message contains a user confirmation number to be entered during initial log on to the Alarm.com website.

Note: If you leave the *Account Creation Successful* screen without printing a welcome letter, you must click on the **Customer** Tab, choose the **Customer Support** tab, and search for and click on the customer that needs a New Welcome Letter. On the customer information page that appears, select the **New**

Welcome Letter tab in the *Customer Support Option* panel on the left-hand side.

If the customer does not receive the confirmation e-mail, you may send a new confirmation e-mail by selecting **Resend Confirmation Number** in the *Customer Support Options* panel.

Installation guidelines

- Concord (v2.6-later) panels support a maximum of one wireless gateway **or** one automation module per system. You cannot use both on a single panel.
- Concord 4 and Concord Express (v4) panels support one wireless gateway and one automation module **or** two automation modules per system.
- Use four-conductor, 22- or 18-gauge stranded wire to connect the module to a panel.
- **Do not** exceed recommended maximum wire lengths from a panel to a module (see *Table 2*).

Table 2. Wire length

Gauge	Maximum Wire Length
22 ga.	40 feet
18 ga.	90 feet

- Mount the module as close to the panel as possible; the module may be mounted inside a Concord 4 or Concord Express (v4) enclosure. The module draws a maximum of 65 mA (continuous) and up to 1600 mA (instantaneous peaks) from the panel or auxiliary power supply.
- When powering bus devices and hardwired sensors from the panel, **do not** exceed the panel's total power output. Refer to specific panel *Installation Instructions* for further detail.

Tools and supplies

- Slotted and Phillips screwdrivers
- Drill (3/8"-drive) and drill bits
- Wire cutter/stripper
- Four-conductor, 22-gauge or larger diameter stranded wire
- 2k Ohm EOL resistor (included)
- Modem antenna (included)
- #6 panhead screws and wall anchors (four each included)

Installation

Installation requires you to position and mount the module, route and connect all wires, and install a cover tamper switch.

- Avoid locating the module in areas with excessive metal or electrical wiring, such as a furnace or utility room.

Mounting the module

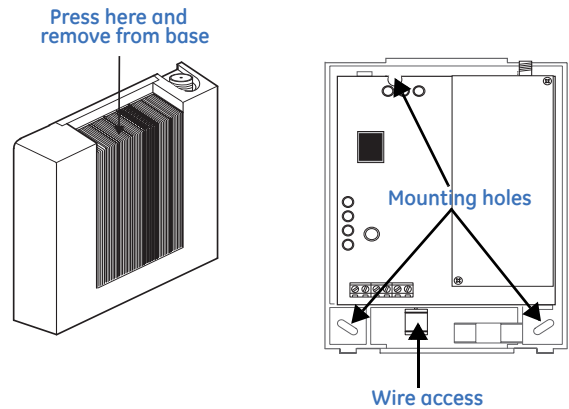


CAUTION: You must be free of static electricity while handling electronic components. Touch a grounded metal surface before touching a circuit board

1. Remove panel AC power and disconnect the backup battery.
2. Remove the module's enclosure cover (see *Figure 2*).
3. Fasten the antenna to the antenna jack (see *Figure 1* on page 1).
4. Place the module backplate at the desired location; check for levelness and mark the three mounting holes and the wire access area (see *Figure 2*). Be sure to leave 12 to 18 inches above the backplate for the antenna.

Note: If you are mounting the module inside a Concord 4 or Concord Express (v4) enclosure, remove the antenna knock-out from the left expansion module and follow Steps 2 through 6 from the *SuperBus 2000 8Z Input Module's "Mounting the Module in a Concord Cabinet" (466-1606 Rev. C)*.

Figure 2. Removing the Enclosure / Mounting Hole Locations



5. Drill for the mounting holes and install wall anchors. Next, secure the module's backplate to the wall with screws.

Wiring the module

1. Remove panel AC power and disconnect the backup battery
2. Wire the module to panel bus and terminals (see *Figure 3* for Concord, *Figure 4* for Concord 4).
3. If desired, connect an input device to the module Z1 and ZCOM terminals (see *Figure 3* for Concord, *Figure 4* on page 3 for Concord 4).

Note: Figures 3 and 4 illustrate basic module wiring connections for Concord (v2.6-later) panels. For Concord 4 and Concord Express (v4) panels, the module must be powered from the battery positive (+) terminal. Refer to specific Concord 4 and Concord Express (v4) *Installation Instructions* for further detail.

Figure 3. Basic Module Wiring Connections for Concord

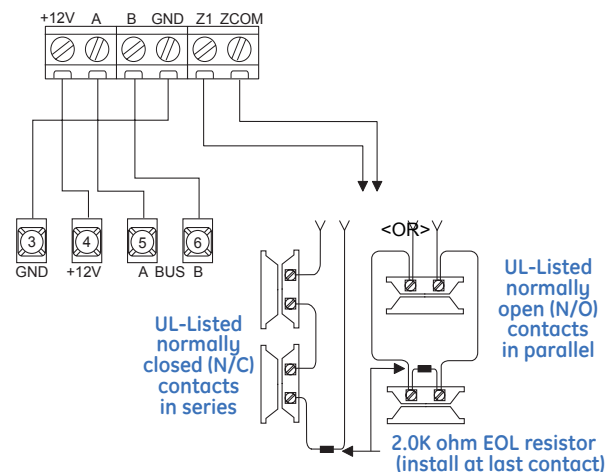
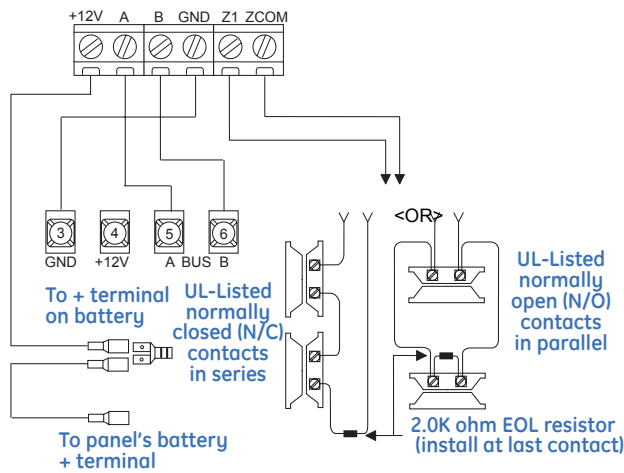


Figure 4. Basic Module Wiring for Concord 4

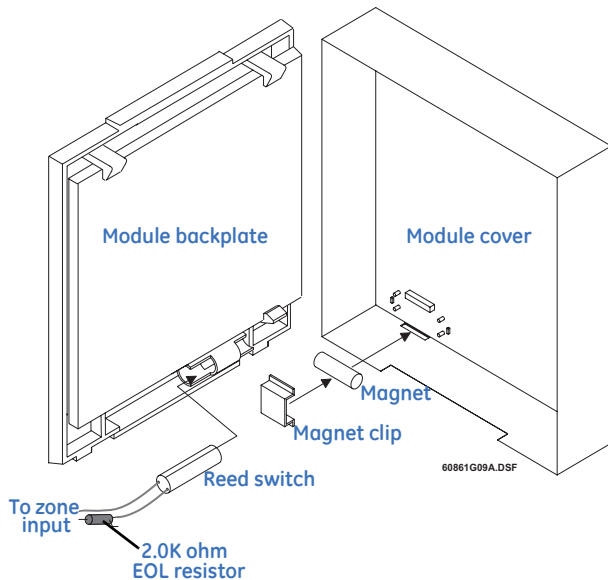


Installing a cover tamper switch

It is recommended that you install a cover tamper switch. Once programmed, if someone opens the module cover, the tamper switch opens and causes an alarm.

1. On the module's backplate, place the reed switch into the reed switch holder (see Figure 4).
2. Remove the magnet clip from the module cover. Next, insert the magnet into the tabs on the module cover (see Figure 4).
3. Press the magnet clip over the magnet until the clip locks into place (see Figure 4).

Figure 5. Installing a Cover Tamper Switch



4. Connect the UL listed reed switch (with 2k Ohm EOL resistor) to a module zone or unused hardwire input.

Power up

This section describes how to power both the module and panel.

1. Verify all wiring between the panel and module is correct.
2. If an auxiliary supply is used, reconnect the auxiliary supply's backup battery and AC power. Next, reconnect the main backup battery and restore panel AC power.

Note: Each time a module is added or changed, you must disconnect and reconnect panel AC power to ensure the panel and module can successfully communicate.

Programming

1. In the **Security** menu, enter *Installer Program* mode and set the *Access Code Lock* feature to **OFF**.
 - The module's Power LED lights. Next, the module's Bus and Auto LEDs light. The LEDs indicate successful communication between the module and panel. The yellow LED and bottom red LED light five to eight minutes after entering installer program mode. Also, the system touchpad displays the correct date and time.



CAUTION: The panel's **Access Code Lock** feature must be set to OFF for the system to communicate with Alarm.com services.

The system's date/time feature cannot set if you press a system touchpad button during this 5 to 8 minute period.

Status LEDs

Status LEDs indicate the module's current signal and status. The bottom red LED indicates the module is registered and in range. The yellow and green LEDs indicate the module's message status. The top LED is not used (see Table 3 on page 4 for a complete list of LED condition patterns).

If the Red LED remains:

- **On** – the module is registered and in range.
- **Off** – the module is out of range and not registered with the network.
- **Flashing** – the module is registered but out of range.

If the Yellow LED remains:

- **On** – the first message has been sent to and received by Alarm.com services.
- **Off** – a message has not been sent by the module, or a message failed.
- **Flashing** – the first message is being sent by the module.

If the Green LED remains:

- **Off** – The module is not currently sending a message.
- **Flashing** – a message is being sent by the module.

Table 3. LED status indicators

Number	Red	Yellow	Green	Condition
1	Off	Off	Off	Just powered up; not communicating with wireless network.
2	On	Off	Off	In range; first msg not sent; not sending msgs
3	On	Flashes	Flashes	In range; sending first msg; currently sending msg
4	On	On	Off	In range; first msg sent; not sending msgs
5	On	On	Flashes	In range; first msg sent; currently sending msg

Troubleshooting/Testing

Table 4. Troubleshooting

Problem	Solution
Power LED remains off.	<ul style="list-style-type: none"> Turn off panel AC power and verify all wiring is correct. All buffered messages can be received from the two-way paging network after restoring power to the panel.
Status LED fails to turn on after initial power up.	<ul style="list-style-type: none"> Ensure the Access Code Lock feature is set to OFF. Verify that a second module is not learned into panel memory. You may have to wait 5 to 8 minutes for the module to communicate with Alarm.com services
Touchpads/sirens continue to sound when system is not armed.	<ul style="list-style-type: none"> Press the touchpad's Status button. The panel reports the status issue and stops beeping.

Customer new user setup

This section describes how to create a new subscriber account on the Alarm.com Web site. It does not apply to wireless backup customers. Be sure to discuss this section with your customer prior to final installation.

After the system is installed and operating correctly, instruct your customer to log on to the Alarm.com Web site. Your customer will need the following items to complete the new subscriber set-up procedure:

Note: Customers will not be able to complete the New User Setup if the Alarm.com module was unable to send the list of installed sensors.

- Login and temporary password included on the Alarm.com *Welcome Letter*.
- Confirmation number sent from Alarm.com to your customer's e-mail address.
- Complete list of system sensors and wireless touchpads.

Note: This is needed to check the sensors list sent by the Alarm.com module, and also to set the correct sensor names at the website.
- A phone number and e-mail address for Alarm.com to send notifications to.

After your customer has gathered the required information, have your customer log on to <https://www.alarm.com> and login by entering the correct login name and temporary password. A *New Subscriber Setup Wizard* appears for the customer to complete. Assist the customer, if necessary, in creating an address book and turning on all Alarm.com notifications.

Customer information

Leave pages 5 and 6 from this document with your customer. The information on these pages describes security system use and

limitations of the Alarm.com Web site. This information does not appear in any *Owner's Manual* or *User Guide*.

Specifications

Compatibility	Concord (v2.6-later), Concord 4, and Concord Express (v4) panels
Power Requirements	12V nominal; 65 mA (continuous); 1600 mA (instantaneous peak) maximum
Inputs	One hardwire zone input
Paging Network	One wireless, two-way paging transceiver (reflex 25 or reflex 50)
Power / Data Bus	One four-wire, SuperBus 2000 auto-addressing data bus
Indicators	One module/panel Status LED; one module Power LED; one Automation LED; three wireless Status LEDs
Storage Temperature	-30° to 140°F (-34° to 60°C)
Operating Temperature	32° to 120°F (0° to 49°C)
Humidity	90% relative, non-condensing
Case Color	Belgian Gray
Case Material	High-impact, ABS plastic
Dimensions	5.25" x 4.125" x 1.0" (L x W x H)
Installation	Wall mount

Notices

FCC Part 15 Information to the User

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

- This device may not cause harmful interference.
- This device must accept any interference 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.

User information

System operation from Alarm.com web site

Operating your system through Alarm.com's easy-to-use Web interface gives you limited controls for managing your account, viewing system status and history, and arming your system. The limited controls for your Concord or Concord 4 system from the Alarm.com Web site are provided in the sections below. Web enabled features depend on selected service packages and may vary.

Security control

Monitor sensor zones 1 to 96

Note: Sensor zones 1 through 96 can be monitored for alarms and optionally for trouble conditions. Sensor zones 1 through 59 may also be monitored for normal activity.

Control Partition 1 (non-UL Listed systems only)

Note: When disarming your system through the Alarm.com Web site, if a fire alarm from a hardwired smoke detector sounds, you must enter the disarm command twice. The first disarm command cancels the alarm; the second disarm command resets the smoke detector. If intrusion sensors are open, you must enter the arming command twice. This avoids a protest condition which may delay system arming.

Change System Master and User Codes 1 to 100.

Note: The Alarm.com Web site only tracks codes that have been programmed and/or changed from the Web site. It is recommended that you program System Master and User Codes 1 to 100 through Alarm.com. An e-mail notification is sent each time a user code is changed.

Sensor Text

Sensor text displayed on system touchpads is different from sensor text displayed on the Alarm.com Web site. When compared to the sensor text on your system touchpad, the Alarm.com Web site only displays a limited amount of the same text.

Sensor text on the Alarm.com Web site can be changed and/or modified at anytime (40 character maximum) without effecting the sensor text displayed on your touchpad.

The Alarm.com Web site manages your installer programmed sensor text as follows:

- Only the first three words of the sensor name are displayed on the Web site.
- If the sensor text in your system was created using individual letters (custom text programmed by your dealer), only the first letter from each of the first three words are displayed on the Web site.
- The following words are not supported by the Web site: Aborted; Active; Activity; AM; Date; Disarmed; In; Install; Latchkey; Load; No; Now; Please; PM; Program; Progress; Schedule; To.

Security

The Security Tab includes *System Summary* and *Sensor Status* subtabs.

- **System Summary** – Displays arming state and status for each sensor in your system.
- **Sensor Status** – Allows you to view status messages for each sensor in your system (see *Table 5* for a detailed list of status messages).

Table 5. Status information

Status	Event	Sensors
OK	No alarms, errors, or problems have been reported. Doors/windows are closed. Motion sensors have not been activated in the last 10 minutes.	All Sensors
Open	A door or window is open.	Door/Window Sensors
Activated	A motion sensor has detected activity within the last 10 minutes.	Motion Sensors
Alarm!	A sensor has been tripped and an alarm set.	All Sensors
Bypassed	A sensor/zone was OPEN when the system was armed. As a result, the sensor is <i>not armed</i> and will not cause an alarm during the current armed period.	All Sensors (except fire and carbon monoxide)
Low Battery	A sensor is reporting a low battery. Open the sensor, check for battery type, and replace.	All Sensors
Tampering/Malfunction	Sensor has been tampered or lost contact with the panel. If the status persists, contact your dealer.	All Sensors

Automation

The Automation Tab (optional) controls the following functions:

- **Lights** – Turn individual lights on/off from any location.
- **Light Schedules** – Create schedules for individual lights to turn on or off.
- **Sensor-Light Interaction** – Allow sensors to interact with lights. For example, opening the front door automatically turns on a hall light for five minutes.

Note: It is recommended that you set Light Schedules and Sensor-Light Interaction using only your system touchpad or the Alarm.com Web site.

Notifications

The Notifications Tab allows you to control alarm notifications and system activity or set notification options for events such as battery failure or sensor tampering.

Note: Local alarms (which do not report to a central monitoring station) are reported to Alarm.com.

- **Alarm** – Allows you to edit the sequence of phone (optional) and e-mail notifications generated by an alarm. You may also turn sensor notifications on or off. These notifications are independent of, and separate from Central Station Alarm Reporting.
- **Normal Activity** – Allows you to view and edit phone (optional) and e-mail notifications generated during normal activity and other nonalarm events, and choose the events you would like to receive notification for. Nonalarm and normal activity notifications are optional features.

People

The People Tab lets you add and modify members in your Address Book.

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- **Address Book** – Includes people to notify in cases of alarm and normal activity.
- **Edit Person** – Edit the name and address for each person in your Address Book.
- **Add Person** – Add a name and address to your Address Book.
- **User Codes** – Manage User Codes and authority levels for people in your Address Book.

History

The History Tab allows you to view a system reported event. You can customize a History report based on date/time, device or event type, or specific sensor. Activity recorded and displayed in the History section is dependant on the Alarm.com service plan that you have subscribed to.

You can download (save to your computer) any History report by clicking on one of the following two icons:  for Microsoft Excel or  for Microsoft Internet Explorer.

Clicking on the Microsoft Excel icon downloads a History report in text format that can be opened in Windows Notepad or Microsoft Excel. Once the report is saved on your computer, right click on the **file folder**, select *Open With*, and select Microsoft Excel as the program to open the file. If you click the checkbox in the *Always Use This Program to Open These Files* window, future files are automatically opened in Microsoft Excel.

Clicking on the Microsoft Internet Explorer icon downloads a History report in HTML format that can be opened in Microsoft Internet Explorer. Once the report is saved to your computer, click on the file and your Web browser automatically opens the file.

Available Filters:

- **Specific Sensor or Device Type** – Only events triggered by a selected sensor or device type are displayed. You must select a sensor or device type from the drop-down menu; if not, the screen displays events for all devices.
- **Event Type** – Only specified event types are displayed. If an event type is not selected from the drop-down menu, the screen displays all event types.
- **Date and Time Span** – The Date field includes the current date by default. By setting the date and choosing a time span from the drop-down menu, you can view events that occurred during a specified time period. Only those events that occur between entered dates are displayed. The History Tab displays, by default, current-day events only.

Columns:

- **Device** – Displays which device reported an event.
- **Event** – Displays an event type and who armed/disarmed the panel.
- **Time and Date** – Displays the time and date of an event.

Note: The event date is displayed in dd-mmm-yy format. The event time is displayed as local time.

Profile

The Profile Tab allows you to view and edit account information, Web site password, and system information:

- **Account Information** – View and edit user information such as address and e-mail.
- **Change Password** – Change your Web site password (login code cannot be changed).
- **System Information** – View and edit system information such as description, address of installed system, and location type.

Technical support

Toll-free: 888.GESECURity (888.437.3287 in the US, including Alaska and Hawaii; Puerto Rico; Canada).
Outside the toll-free area: Contact your local dealer.

www.gesecurity.com