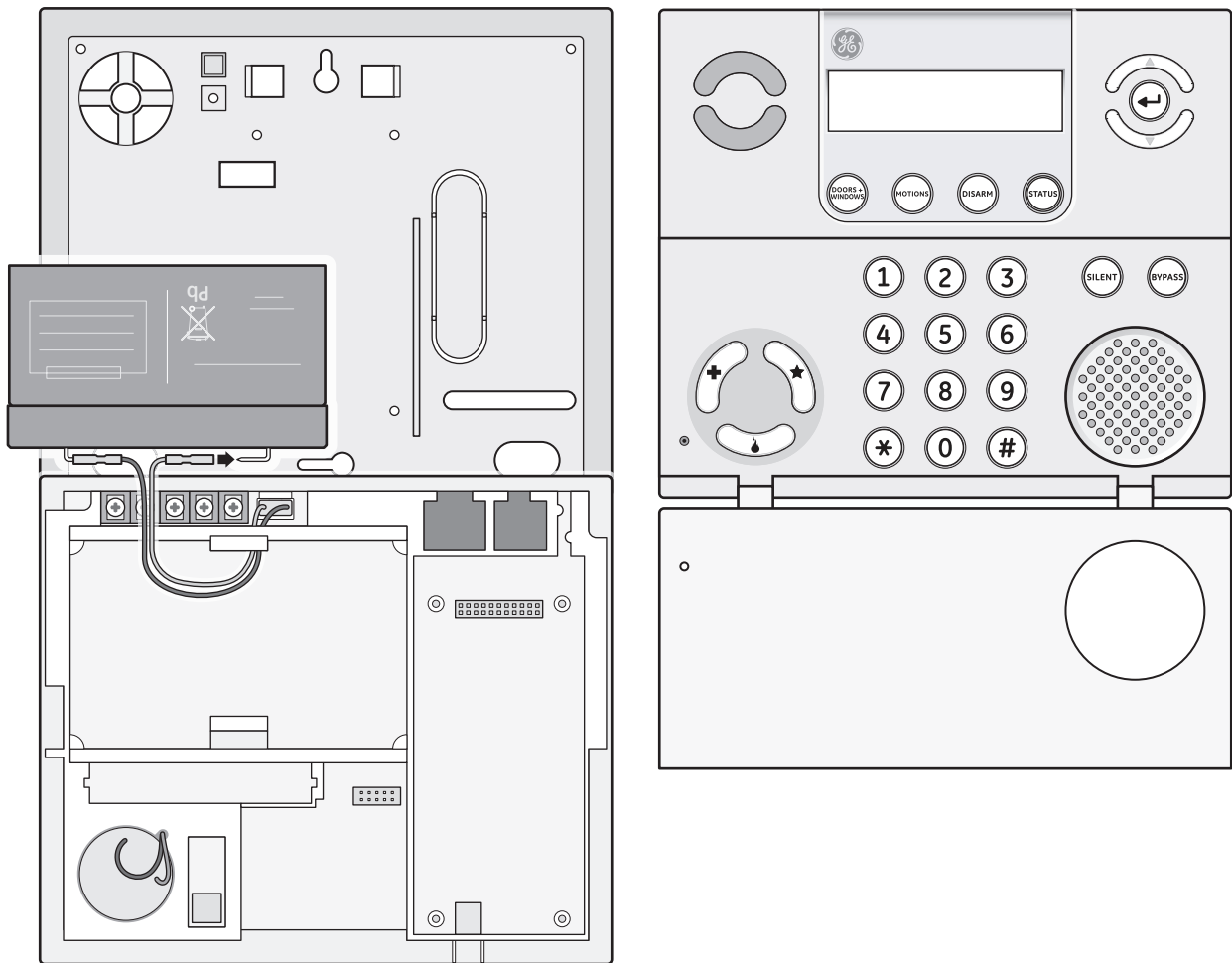


600-1054-95R

Simon XT Installation Manual



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Intended use Use this product only for the purpose it was designed for; refer to the data sheet and user documentation. For the latest product information, contact your local supplier or visit us online at www.gesecurity.com.

FCC compliance 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 harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

FCC Part 15 registration number: **B4Z-910C-SIMON**.

Part 68. This equipment complies with Part 68 of the FCC rules and the requirements adopted by ACTA. A label on this equipment contains a product identifier in the format *US:AAAEQ##TXXXX*. You must provide this number to the telephone company upon request.

FCC Part 68 registration number: **US:B4ZAL02B55910**.

The plug and jack used to connect this equipment to the premises wiring and telephone network comply with the applicable FCC Part 68 rules and requirements adopted by ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See the installation instructions for details.

The REN is used to determine the maximum number of devices that may be connected to your telephone line. Excessive RENs on a telephone line may result in devices not ringing in response to an incoming call.

In most cases, the sum of all device RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact your local telephone company.

For products approved after July 23, 2001, the REN is part of the identifier with the format *US:AAAEQ##TXXXX*. The digits represented by *##* are the REN without a decimal point. (For example, 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

Alarm dialing equipment must be able to seize the telephone line and place a call in an emergency situation. It must be able to do this even if other equipment (telephone, answering system, computer modem, etc.) already has the telephone line in use. To do so, alarm dialing equipment must be connected to a properly installed RJ31X jack that is electrically in series and ahead of all other equipment attached to the same telephone line. If you have any questions concerning these instructions, consult your local telephone company or a qualified installer about installing an RJ31X jack and alarm dialing equipment for you.

If this equipment causes harm to the telephone network, the telephone company may temporarily disconnect your service. The telephone company may notify you in advance, but when advance notice isn't practical, they will notify you as soon as possible and advise you of your right to file a complaint with the FCC.

The telephone company may make changes in their facilities, equipment, operations, or procedures that could affect the operation of the equipment. If they do, they will notify you in advance so you can make the modifications to maintain uninterrupted service.

This equipment may not be used on coin service provided by the telephone company. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission, or corporation commission for information.

If you experience trouble with this equipment, please contact the company that installed the equipment for service and repair information. If the equipment is causing harm to the telephone network, the telephone company may ask you to disconnect the equipment until the problem is resolved.

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Preface

This is the GE *Simon XT Installation Manual* for model 600-1054-95R. This document includes an overview of the product and detailed instructions explaining:

- how to install; and
- how to set up the product for customer use.

There is also information describing how to contact technical support if you have questions or concerns.

To use this document effectively, you should have a basic knowledge of electrical wiring and low-voltage electrical connections.

Read these instructions and all ancillary documentation entirely before installing or operating this product. The most current versions of this and related documentation may be found on our website. Refer to [Online resources](#) on page 70 for instructions on accessing our online publication library.

Note: A qualified service person, complying with all applicable codes, should perform all required hardware installation.

Conventions used in this document

The following conventions are used in this document:

| | |
|--------------------|--|
| Bold | Menu items and buttons. |
| <i>Italic</i> | Emphasis of an instruction or point; special terms. |
| | File names, path names, windows, panes, tabs, fields, variables, and other GUI elements. |
| | Titles of books and various documents. |
| <i>Blue italic</i> | (Electronic version.) Hyperlinks to cross-references, related topics, and URL addresses. |
| Monospace | Text that displays on the computer screen. |
| | Programming or coding sequences. |

Safety terms and symbols

These terms may appear in this manual:



CAUTION: *Cautions* identify conditions or practices that may result in damage to the equipment or other property.



WARNING: *Warnings* identify conditions or practices that could result in equipment damage or serious personal injury.

Materials needed

- Pencil
- Phillips screwdriver

Chapter 1 Introduction

This chapter provides an overview of the system and an outline of the steps you need to perform before you begin installing and configuring your security system.

In this chapter:

| | |
|--------------------------------|---|
| <i>Product overview</i> | 2 |
| <i>System components</i> | 3 |
| <i>Standard panel</i> | 4 |

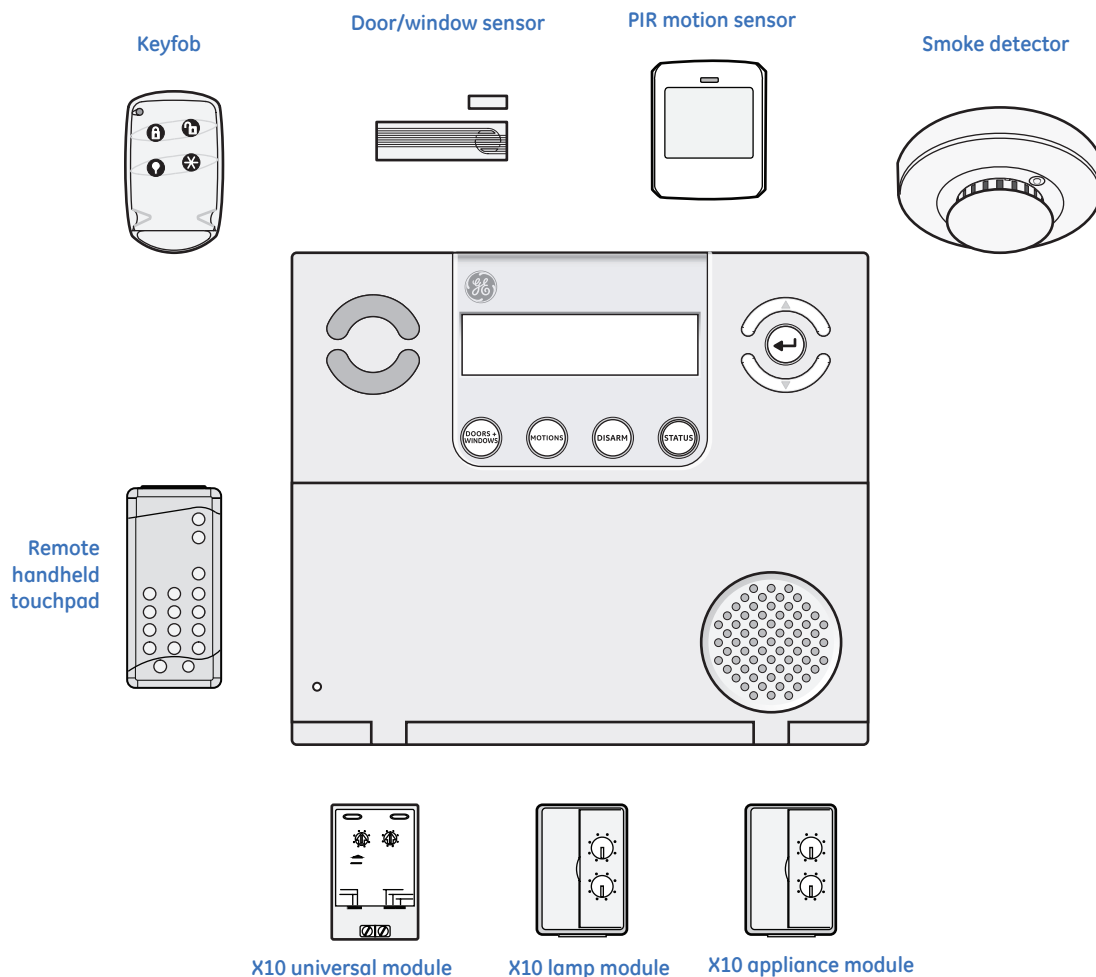
Product overview

This security system can be used as a fire warning system, an intrusion alarm system, an emergency notification system, or any combination of the three. The system (*Figure 1*) has three types of components:

- Self-contained control panel
- Devices that report to the panel
- Devices that respond to commands from the panel

Note: The keyfob and X10 modules have not been investigated by UL.

Figure 1. Simon XT system



Note: The universal, lamp, and appliance modules require a special transformer.

The self-contained panel provides the main processing unit for all system functions. It receives and responds to signals from wireless sensors and wireless touchpads throughout the premises. For monitored systems, the panel can be connected to the premises phone line for central monitoring station reporting.

You can program the panel onsite from the keypad or remotely using Enterprise Downloader software. See [Programming](#) on page 33 for complete onsite programming instructions.

System components

The system can monitor up to 40 sensors and may use any of the devices listed in *Table 1*.

Table 1. Supported devices

| Device | Description |
|---|---|
| Door/window sensor (60-670) | For intrusion protection, install door/window sensors on all ground-floor doors and windows. At a minimum, install them in the following locations: <ul style="list-style-type: none"> • All easily accessible exterior doors and windows. • Interior doors leading into the garage. • Doors to areas containing valuables such as cabinets and closets. |
| Indoor motion sensor (60-639) | Indoor motion sensors are ideal whenever it is not practical to install door/window sensors on every opening. Identify areas where an intruder is likely to walk through. Large areas in an open floor plan, downstairs family rooms, and hallways are typical locations for indoor motion sensors. For installations with pets, use the SAW Pet Immune PIR (60-807). |
| Outdoor motion sensor (60-639) | Use outdoor motion sensors to detect motion in a protected outdoor area. Detected motion in this protected area can sound chimes or turn on outside lights. |
| X10 module ^a | When the panel is powered using the line carrier power transformer, the system can work with any of the following modules: <ul style="list-style-type: none"> • X10 lamp module (13-403) • X10 appliance module (13-402) • X10 power horn/remote siren module (13-398) |
| Freeze sensor (60-742) ^a | Freeze sensors detect low temperature conditions which may indicate a furnace failure. The sensor contains a bimetallic thermal switch connected to the built-in transmitter. The sensor transmits an alarm signal to the panel when the surrounding temperature drops to about 41°F (5°C). When the temperature rises to 50°F (10°C), the sensor transmits a restore signal. |
| Water sensor (60-744) ^a | Water sensors detect a water leak/rising water. The detector is connected to the sensor by an 8-foot (2.4-meter) cable. Water that reaches both detector contact points activates the sensor, causing it to transmit an alarm signal. |
| Smoke sensor (60-848-95) | Smoke sensors provide fire protection by causing an alarm to sound throughout the house. You can add smoke sensors near sleeping areas and on every floor of the house. Avoid areas that could have some smoke or exhaust such as attics, kitchens, above fireplaces, dusty locations, garages, and areas with temperature extremes. In these areas you may want to install Rate-of-Rise sensors to detect extreme temperature changes. Emergency planning on page 16 and the instructions packaged with the smoke sensor for complete placement information. |
| Carbon monoxide (CO) alarm (60-652-95) ^a | The Learn Mode™ CO alarm alerts users to hazardous levels of carbon monoxide gas. If dangerous concentrations of gas are present, the red indicator light comes on, the internal siren goes off, and an alarm is transmitted to the panel. The panel sounds its own alarm and reports to the central station. |
| Keyfob (60-659) ^a | The keyfob (keychain touchpad) lets you turn the system on and off from right outside the home or activate a panic alarm if there is an emergency. If you have X10 lamp modules, you can use keyfobs to turn all system controlled lights on and off. |
| ELM (encrypted learn mode) keyfob (60-832) ^a | The ELM (encrypted learn mode™) 2-button keyfob is an alkaline battery-powered, wireless touchpad that allows users to arm and disarm their system, and activate a police or auxiliary panic alarm. Random encrypted signal transmissions provide high security to help prevent signal copying. |

Table 1. Supported devices (continued)

| Device | Description |
|--|--|
| Remote handheld touchpad (60-671) | The remote handheld touchpad lets you turn the system on and off while in the home, turn system controlled lights on and off (all or individual lights), or activate a panic alarm if there is a nonmedical emergency. |
| Water-resistant personal help button (60-906-95) a | The water-resistant personal help button is a wireless device used for activating police, medical or auxiliary alarms through your system. When the help button is pressed, the light mounted under the cover will blink and an alarm signal is transmitted. |

a. Devices noted have not been investigated for use in UL installations.



CAUTION: Do not use outdoor motion sensors for intrusion protection.

Standard panel

Table 2 describes the basic panel (out-of-box) hardware capabilities.

Table 2. Panel hardware capabilities

| Hardware | Capability |
|---|--|
| Power | Input for an AC step-down, plug-in style transformer. |
| One siren output, up to two zone inputs | Terminals for connecting hardware sirens or normally closed (NC) loop switch circuits. |
| Phone line connection | Allows panel to communicate with central monitoring station and/or remote phone. |

Inspect the package and contents for visible damage. If any components are damaged or missing, do not use the unit; contact the supplier immediately. If you need to return the unit, you must ship it in the original box. n

Chapter 2 Planning

This chapter provides information to help you plan your installation to reduce time and costs.

In this chapter:

| | |
|--|----|
| <i>Planning the installation</i> | 6 |
| <i>Control panel location</i> | 6 |
| <i>Planning sensor types and locations</i> | 6 |
| <i>System configuration</i> | 11 |
| <i>Emergency planning</i> | 16 |

Planning the installation

This section describes system capabilities to help you get familiar with your system. The planning sheets contain tables that let you record the hardware and programming configuration of your system. Complete all of the information ahead of time to help prepare for system installation. Refer to *Sensor names* on page 72 for sensor name segments listed alphabetically and by index number.

Control panel location

Locate the panel where alarm sounds can be heard and where the panel will be easily accessible for operation. Do not install the panel near a window or door where it can be reached easily by an intruder.

Planning sensor types and locations

The first step to an easy and successful installation is to decide what areas or items to protect, which lights or appliances to operate, and the best location for the panel, touchpad, sensors, and sirens.

Metal objects, mirrors, and metallic wallpaper can block signals sent by the wireless sensors. Make sure there are no metal objects in the way when installing the system.

Use *Table 3, Recommended sensor groups* on page 7 and *Table 4, Sensor group characteristics* on page 7 to determine the appropriate sensor type for the sensors you will be adding. Use *Table 5, Sensor assignments/locations* on page 9 to document the planned sensor information. You will need to understand the application for each sensor. For example, keyfobs are typically programmed as sensor group 01 (portable panic) and used to send an intrusion alarm to a central monitoring station. This sensor type is instant intrusion, it does not require restoral or supervisory communication with the panel and it is active in four arming levels:

1. Disarm.
2. Arm doors and windows.
3. Arm motion sensors.
4. Arm doors/windows and motion sensors.

Table 3. Recommended sensor groups

| Device | Recommended sensor group |
|--------------------------|----------------------------|
| Indoor motion sensor | 17 (intrusion), 25 (chime) |
| Outdoor motion sensor | 25 (chime only) |
| Entry/exit door | 10 |
| Interior door | 14 |
| Window sensor | 13 |
| Smoke Sensor | 26 |
| Keyfob | 01, 03, 06, 07 |
| ELM keyfob | 01, 03, 06, 07 |
| Remote Handheld Touchpad | 01, 03, 06, 07 |
| CO Alarm | 34 |
| Freeze Sensor | 29 |
| Water Sensor | 38 |
| Personal Help Button | 01, 03 |

Table 4. Sensor group characteristics

| Type | Name/application | Siren type | Delay | Restoral | Supervisory | Active In arming levels |
|------|---|------------|-------|----------|-------------|-------------------------|
| 00 | Fixed panic: 24-hour audible fixed emergency button. | Intrusion | I | N | Y | 1234 |
| 01 | Portable panic: 24-hour audible portable emergency buttons. | Intrusion | I | N | N | 1234 |
| 02 | Fixed panic: 24-hour silent fixed emergency buttons. Status light will not blink. | Silent | I | N | Y | 01234 |
| 03 | Portable panic: 24-hour silent portable emergency buttons. Status light will not blink. | Silent | I | N | N | 01234 |
| 04 | Fixed auxiliary: 24-hour auxiliary sensor. | Emergency | I | N | Y | 01234 |
| 05 | Fixed auxiliary: 24-hour emergency button. Siren shut off confirms CS report. | Emergency | I | N | Y | 01234 |
| 06 | Portable auxiliary: 24-hour portable auxiliary alert button. | Emergency | I | N | N | 01234 |
| 07 | Portable auxiliary: 24-hour portable auxiliary button. Siren shut off confirms CS report. | Emergency | I | N | N | 01234 |
| 08 | Special intrusion: such as gun cabinets and wall safes. DTM (tamper only). | Intrusion | I | Y | Y | 1234 |
| 09 | Special intrusion: such as gun cabinets and wall safes. | Intrusion | S | Y | Y | 1234 |
| 10 | Entry/exit delay: A delay that requires a standard delay time. chime. | Intrusion | S | Y | Y | 24 |
| 13 | Instant perimeter: Exterior doors and windows. chime. | Intrusion | I | Y | Y | 24 |
| 14 | Instant interior: Interior doors. | Intrusion | F | Y | Y | 234 |

Table 4. Sensor group characteristics (continued)

| Type | Name/application | Siren type | Delay | Restoral | Supervisory | Active In arming levels |
|------|---|---------------|-------|----------|-------------|-------------------------|
| 15 | Instant interior: Interior PIR motion sensors. ^a | Intrusion | F | Y | Y | 234 |
| 16 | Instant interior: Interior doors. | Intrusion | F | Y | Y | 34 |
| 17 | Instant interior: PIR motion sensors and Sound sensors. ^a | Intrusion | F | N | Y | 34 |
| 18 | Instant interior: Cross-zone PIR motion sensors. | Intrusion | F | N | Y | 34 |
| 19 | Delayed interior: Interior doors that initiate a delay before going into alarm. | Intrusion | S | Y | Y | 34 |
| 20 | Delayed interior: PIR motion sensors that initiate a delay before going into alarm. ^a | Intrusion | S | N | Y | 34 |
| 21 | Local instant interior: 24-hour local alarm zone protecting anything that opens and closes. No report. | Intrusion | I | Y | Y | 1234 |
| 22 | Local delayed interior: same as group 21, plus activation initiates a delay before going into alarm. No report. ^a | Intrusion | S | Y | Y | 1234 |
| 23 | Local instant auxiliary: 24-hour local alarm zone protecting anything that opens and closes. No report. ^b | Emergency | I | Y | Y | 01234 |
| 24 | Local instant auxiliary: 24-hour local alarm zone protecting anything that opens and closes. Sirens shut off at restoral. No report. ^a | Emergency | I | Y | Y | 01234 |
| 25 | Local special chime: notify the user when a door is opened. ^b | Three beeps | I | N | Y | 01234 |
| 26 | Fire: 24-hour fire, rate-of-rise heat, and smoke sensors. ^c | Fire | I | Y | Y | 01234 |
| 27 | Lamp control or other customer feature. No report. ^b | Silent | I | Y | Y | 01234 |
| 28 | PIR motion sensor, sound sensor, or pressure mat. RF thermostat. No report. ^b | Silent | I | N | Y | 01234 |
| 29 | Auxiliary: freeze sensors. ^b | Trouble beeps | I | Y | Y | 01234 |
| 32 | PIR motion sensor or sound sensor. No report. ^b | Silent | I | N | N | 01234 |
| 34 | Carbon monoxide alarm. ^b | Emergency | I | Y | Y | 01234 |
| 35 | Entry/exit delay interior PIR motion. | Intrusion | S | N | Y | 234 |
| 36 | Special Intrusion: such as gun cabinets and wall safes. Reports as tamper if tripped. ^b | Intrusion | I | Y | Y | 1234 |
| 37 | Light switch control: X10 modules turn either on or off when a door is opened. ^b | Silent | I | N | Y | 01234 |
| 38 | Auxiliary: water sensors. ^b | Trouble beeps | I | Y | Y | 01234 |
| 39 | Local instant interior: 24-hour local alarm zone protecting anything that opens and closes. No report. | Intrusion | I | Y | Y | 1234 |
| 40 | Local special chime. | Three beeps | I | Y | Y | 01234 |

- a. This type is not certified as a primary protection circuit for UL-listed systems and is for supplementary use only.
- b. This type has not been investigated by UL.
- c. This type is required for UL-listed residential fire alarm applications.

Table 5. Sensor assignments/locations

| Sensor # | Device | Sensor group | Sensor name/location | Notes |
|----------|--------|--------------|----------------------|-------|
| 01 | | | | |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |
| 06 | | | | |
| 07 | | | | |
| 08 | | | | |
| 09 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
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| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
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| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
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| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |

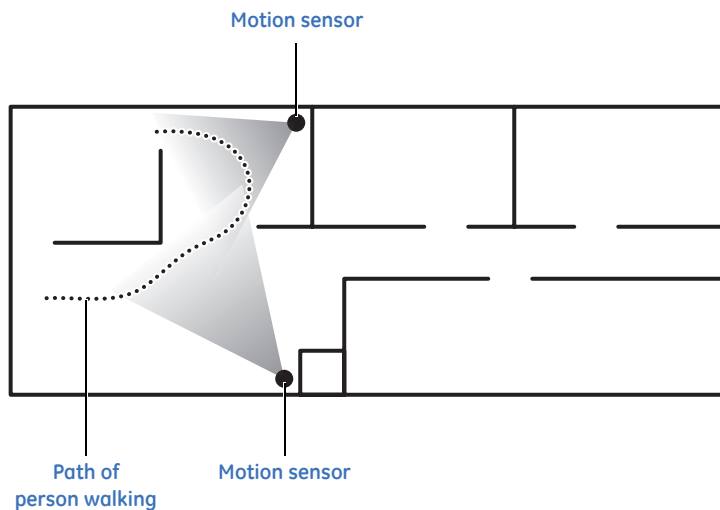
Table 5. Sensor assignments/locations (continued)

| Sensor # | Device | Sensor group | Sensor name/location | Notes |
|----------|--------|--------------|----------------------|-------|
| 31 | | | | |
| 32 | | | | |
| 33 | | | | |
| 34 | | | | |
| 35 | | | | |
| 36 | | | | |
| 37 | | | | |
| 38 | | | | |
| 39 | | | | |
| 40 | | | | |

Cross-zoning

Cross-zoning (two-trip) refers to two different group 18 sensors that must be tripped within two minutes of each other to report an alarm to the central station. *Figure 2* shows the path of a person walking from the kitchen to the living room. When the person is detected walking through the kitchen, the motion sensor in the kitchen is tripped, sounding a local alarm. If motion is detected by the living room motion sensor within two minutes, an alarm report will be sent to the central station.

Figure 2. Cross-zone diagram



Note: We do not recommend cross-zoning for exit/entry zones. Each zone can individually protect the intended area.

System configuration

Table 6 is a worksheet for you to record the desired values for each programming option. For each option, the default value, effect of deletion (pressing **DISARM** while editing), range, and programming privilege are also listed. Each option is described in more detail in on page 33.

Table 6. System programming menu options

| Function | Default | Delete | Range | Access code ^a | Installer settings |
|--------------------------|-----------------------------|--------|---------------|--------------------------|--------------------|
| Access codes menu | | | | | |
| Dealer code | 654321, 54321, 4321, or 321 | None | 3 to 6 digits | D | |
| Installer code | 654321, 54321, 4321, or 321 | None | 3 to 6 digits | D, I | |
| Master code | 123456, 12345, 1234, or 123 | None | 3 to 6 digits | D, I, M | |
| User code 1 | None | None | 3 to 6 digits | D, I, M | |
| User code 2 | None | None | 3 to 6 digits | D, I, M | |
| User code 3 | None | None | 3 to 6 digits | D, I, M | |
| User code 4 | None | None | 3 to 6 digits | D, I, M | |
| User code 5 | None | None | 3 to 6 digits | D, I, M | |
| User code 6 | None | None | 3 to 6 digits | D, I, M | |
| User code 7 | None | None | 3 to 6 digits | D, I, M | |
| User code 8 | None | None | 3 to 6 digits | D, I, M | |
| Duress code | None | None | 3 to 6 digits | D, I, M | |
| Code length | 4 | 4 | 3 to 6 | D | |

Table 6. System programming menu options (continued)

| Function | Default | Delete | Range | Access code ^a | Installer settings |
|---|----------------|---------------|----------------|--------------------------|--------------------|
| Security menu | | | | | |
| Account number | 00000 | 00000 | 0 to FFFFFFFF | D, I | |
| Downloader code ^b | 12345 | 12345 | 00000 to 99999 | D | |
| Phone lock | Off | Off | On/Off | D | |
| Autoarm (must be added for UL listed systems) | On | Off | On/Off | D, I | |
| Exit extension (must be deleted for UL listed systems) | On | Off | On/Off | D, I | |
| Secure arming | Off | Off | On/Off | D, I | |
| No arm low battery | Off | Off | On/Off | D, I | |
| Quick exit (must be disabled for UL listed systems) | Off | Off | On/Off | D, I | |
| Downloader enable ^b | On | Off | On/Off | D, I, M | |
| Supervisory protest ^b | Off | Off | On/Off | D, I | |
| Phone # menu | | | | | |
| Phone #1 | None | None | 26 digits | D | |
| Phone #2 | None | None | 26 digits | D | |
| Phone #3 | None | None | 26 digits | D, I | |
| Phone #4 | None | None | 26 digits | D, I, M | |
| Downloader number ^b | None | None | 26 digits | D, I | |
| Phone options menu | | | | | |
| Manual phone test | On | Off | On/Off | D, I | |
| Fail to communicate (must be added for UL listed systems) | On | Off | On/Off | D, I | |
| DTMF | On (Touchtone) | Off (Pulse) | On/Off | D, I | |
| 300 bps baud rate | On (300 bps) | Off (110 bps) | On/Off | D, I | |
| Ring/hang/ring ^b | 1 | Off | 1 to 7, Off | D, I | |
| Dial delay | 30 seconds | 15 sec. | 15 to 45 sec. | D, I | |
| Call waiting code | None | None | 26 digits | D, I | |

Table 6. System programming menu options (continued)

| Function | Default | Delete | Range | Access code ^a | Installer settings |
|--|---------|--------|---|--------------------------|--------------------|
| Sensors menu | | | | | |
| Learn sensors | | | | D, I | |
| Delete sensors | | | | D, I | |
| Edit sensors | | | | D, I | |
| Reporting menu | | | | | |
| Report options | | | | | |
| Opening reports | Off | Off | On/Off | D, I | |
| Closing reports | Off | Off | On/Off | D, I | |
| Forced armed | Off | Off | On/Off | D, I | |
| AC power failure report (must be added for UL listed systems) | Off | Off | 5 to 254 minutes, Off | D, I | |
| Low CPU battery report (must be added for UL listed systems) | On | Off | On/Off | D, I | |
| Sensor alarm restoral report | Off | Off | 1 to 3, Off | D, I | |
| 24-hour sensor tamper report | Off | Off | On/Off | D, I | |
| Supervisory/tamper report ^b | Off | Off | On/Off | D, I | |
| No usage ^b | Off | Off | 2 to 254 days, Off | D, I | |
| Swinger shutdown | On | Off | On/Off | D, I | |
| Programming report | Off | Off | On/Off | D, I | |
| Fire alarm verification | Off | Off | On/Off | D, I | |
| Report communication modes | | | | | |
| Phone 1 report mode | Off | Off | ALL SIA | D | |
| Phone 2 report mode | Off | Off | ALL CID | D | |
| Phone 3 report mode | Off | Off | Alarms SIA Alarms CID | D, I | |
| Phone 4 report mode | Off | Off | Nonalarms SIA Nonalarms CID Backup SIA Backup CID Voice dialer Off | D, I | |

Table 6. System programming menu options (continued)

| Function | Default | Delete | Range | Access code ^a | Installer settings |
|--|------------|------------------|----------------------------------|--------------------------|--------------------|
| Timers menu | | | | | |
| Latchkey time ^b | None | None | 12:00 midnight to 11:59 PM, None | D, I, M | |
| Entry delay (must be 45 seconds for UL listed systems) | 30 sec. | 30 sec. | 30 to 240 sec. | D, I | |
| Exit delay (must be 60 seconds for UL listed systems) | 60 Seconds | 45 sec. | 45 to 254 sec. | D, I | |
| No activity timeout ^b | Off | Off | 2 to 24 hours | D, I | |
| Auto phone test (must be set to 1 for UL listed systems) | Off | Off | 1 to 254 days | D, I | |
| Supervisory time | Midnight | None | 12:00 midnight to 11:59 PM, None | D, I | |
| Alarm cancel | 6 minutes | Off | 6 to 255 minutes, Off | D, I | |
| RF timeout (supsync) (must be set to 4 for UL 985 & 1635 listed systems, or 24 for UL 1023 listed systems) | 12 hours | 12 hours | 2 to 36 hours | D, I | |
| Fail to open time ^b | Off | Off | 12:00 midnight to 11:59 PM, Off | D, I | |
| Fail to close time ^b | Off | Off | 12:00 midnight to 11:59 PM, Off | D, I | |
| Siren timeout (must be greater than 4 minutes for UL listed systems) | 5 minutes | Off - No timeout | 2 to 254 minutes, Off | D, I | |
| Arming LED shutdown | Off | Off | On/Off | D, I | |
| Unvacated premises | On | Off | On/Off | D, I | |
| Smoke supervision (must be disabled for UL listed systems) | Off | Off | On/Off | D, I | |
| Touchpad options menu | | | | | |
| Keyfob no delay ^b | Off | Off | On/Off | D, I | |
| Panic alarms ^b | On | Off | On/Off | D, I | |
| Remote touchpad arming ^b | Off | Off | On/Off | D, I | |

Table 6. System programming menu options (continued)

| Function | Default | Delete | Range | Access code ^a | Installer settings |
|---|---------|--------|--|--------------------------|--------------------|
| System options menu | | | | | |
| RF Jam detect (must be added for UL listed systems) | Off | Off | On/Off | D, I | |
| Demo mode ^b | Off | Off | On/Off | D, I | |
| HW1 function | 1 | Off | 1 - Interior siren output 2 - Output activated when armed 3 - Output activated when disarmed 4 - FTC output (FTC must be on) 5 - Output activated for alarm Off - No output | D | |
| 24-hour clock | Off | Off | On/Off | D, I | |
| Siren options menu | | | | | |
| Panel piezo beeps (must be on for UL listed systems) | On | Off | On/Off | D, I, M | |
| Panel voice | On | Off | On/Off | D, I, M | |
| Panel piezo alarms (must be added for UL listed systems or a siren must be connected) | On | Off | On/Off | D, I, M | |
| Trouble beeps (must be added for UL listed systems) | On | Off | On/Off | D, I | |
| Voice chime | Off | Off | Off - No voice chime 1 - Voice chime (sensor name) 2 - Chime bell 3 - Soft chime bell | D, I | |
| Status beeps volume | 7 | 7 | 1 - 10 | D, I, M | |
| Hardwired siren supervision | Off | Off | On/Off | D, I | |
| Speaker volume | 8 | 8 | 1 to 8 | D, I, M | |
| Panel silent police panic | Off | Off | On (silent), Off (audible) | D, I | |
| Panel tamper alarm | Off | Off | On/Off | D, I | |
| Alarm report verification | Off | Off | On/Off | D, I | |

Table 6. System programming menu options (continued)

| Function | Default | Delete | Range | Access code ^a | Installer settings |
|---------------------------------|---------|--------|--|--------------------------|--------------------|
| Audio verify menu | | | | | |
| Audio mode ^b | Off | Off | Off - Audio mode disabled 1 - Instant mode 2 - Callback mode | D, I | |
| Fire shutdown ^b | Off | Off | On/Off | D, I | |
| Panic talk ^b | Off | Off | On/Off | D, I | |
| Vox receiver gain ^b | 6 | 6 | 1 to 32 | D, I | |
| Vox mic gain ^b | 24 | 24 | 1 to 64 | D, I | |
| Vox mic gain range ^b | 64 | 64 | 1 to 64 | D, I | |
| Manual mic gain ^b | 64 | 64 | 1 to 64 | D, I | |
| Light control menu | | | | | |
| Set entry lights ^b | Off | Off | On/Off for each unit number from 1 to 8 | D, I, M | |
| Sensor light ^b | Off | Off | 1 to 8, Off | D, I, M | |
| Light schedule ^b | None | None | HH:MMx for start and stop times, None | D, I, M | |
| Housecode ^b | A | A | A to O | D, I, M | |
| Lock interval ^b | None | None | HH:MMx for start and stop times, None | D, I, M | |
| System test menu | | | | | |
| Sensor test | | | | D, I, M | |
| Communication test | | | | D, I, M | |
| System download ^b | | | | D, I, M | |

a. This column tells what type of access code is allowed to make changes: D = dealer code, I = installer code, M = master code.

b. Not investigated for use by UL.

Emergency planning

Use these guidelines when drawing an emergency floor plan for the homeowner:

- Show all building levels.
- Show exits from each room. (We recommend two exits per room.)
- Show the locations of all security system components.
- Show the locations of any fire extinguishers.

Chapter 3 Installing the system

This section describes how to open the panel for mounting, mount the panel, connect sirens, connect hardwired contacts, and connect the AC power transformer.

In this chapter:

| | |
|--|----|
| <i>Opening panel cover and chassis</i> | 22 |
| <i>Mounting the panel</i> | 23 |
| <i>Connecting hardwired devices</i> | 24 |
| <i>HW1 I/O, HW2 in, and HW1&2 DC out terminals</i> | 24 |
| <i>Interior sirens</i> | 24 |
| <i>LD105 hardwired interior siren</i> | 25 |
| <i>Hardwired contacts</i> | 25 |
| <i>Wiring a phone line to the panel</i> | 27 |
| <i>Full line seizure</i> | 27 |
| <i>Wiring the power transformer</i> | 30 |
| <i>Powering up the panel</i> | 30 |
| <i>Installing X10 modules</i> | 32 |

UL listed installations

Some installations may require configurations dictated by city/state codes, insurance, or Underwriter's Laboratories (UL). This section describes the various component and configuration listings.

Basic system:

- Control panel: backup battery 6 V 1.2 Ah (34-025) (Portalac model # PE6V1.2)
- Standard class 2, 9 VAC, 3.34 A power transformer (GE model # 22-153).
- Hardwired siren (13-374)

Household burglary alarm system unit (UL 1023), basic system plus the following:

- Hardwired magnetic contact (13-068 or 13-071) or wireless learn mode door/window sensor (60-670)
- Panel piezo beeps set to on
- Entry delay set to 45 seconds or less
- Exit delay set to 60 seconds or less
- RF time-out set to 24 hours
- Control panel alarms turned on
- Autoarm set to on
- Siren timeout set to five minutes or more
- Trouble beeps set to on
- RF jam detect set to on
- Hardwired siren supervision set to on
- Exit extension set to off
- Quick exit set to off

Household fire warning system (UL 985), basic system plus the following:

- Wireless smoke sensor 60-848-95 learned into sensor group 26
- Panel piezo beeps turned on
- Control panel alarms set to on
- Siren timeout set to four minutes or more
- Trouble beeps set to on
- RF jam detect set to on
- Hardwired siren supervision set to on
- Smoke supervision must be set to on

UL 1023 & 985 24-hour backup:

- For 24-hour backup, the total current draw for all connected devices is limited to 250 mA (during normal standby conditions) using a 1.2 AH battery.

UL 1635 digital alarm communicator system:

- Same as UL 1023 & 985, plus:

The following settings are in addition to UL 1023 and 985 and are required only if the system is set up for central station reporting.

- Phone mod 1 set to zero or one.
- Automatic phone test set to 001.
- RF timeout set to four hours.
- AC power failure report set to on.
- CPU low battery report set to on.
- Fail to communicate set to on.
- Entry delay plus the dialer delay must not exceed 60 seconds.

SIA system requirements

SIA system requirements are the same as those described for a UL listed basic system on page 1, plus:

- If multiple annunciation is required, use hardwired siren part no.13-046.

Note: UL requirements take priority over SIA requirements. Entry delay must not exceed 60 seconds.

SIA setting requirements

Table 7 describes programming requirements to meet ANSI-SIA CP-01 (see *System programming* on page 39).

Note: Call waiting services should be disabled to prevent interrupting panel communication to the central monitoring station..

Table 7. SIA setting requirements

| Function | Programming page reference | Default setting | Required setting |
|--------------------|--------------------------------|-----------------|--|
| Entry delay | <i>Table 20</i> on page 49 | 30 seconds | 30 to 240 seconds |
| Exit delay | <i>Table 20</i> on page 49 | 60 seconds | 45 to 240 seconds |
| Dialer delay | <i>Table 15</i> on page 43 | 30 seconds | 15 to 45 seconds |
| Autoarm | <i>Table 13</i> on page 41 | On | On |
| Unvacated premises | <i>Table 20</i> on page 49 | On | On |
| Call waiting | <i>Table 15</i> on page 43 | Off | On if reporting to central station and customer has call waiting service |
| Exit extension | <i>Table 13</i> on page 41 | On | On |
| Swinger shutdown | <i>Table 18</i> on page 47 | On (one trip) | On (one trip) |
| Fire alarm verify | <i>Table 18</i> on page 47 | Off | On |
| Duress/panic code | <i>Table 23</i> on page 52 | Disabled | Disabled |
| Cross zone | <i>Cross-zoning</i> on page 10 | Disabled | Disabled for zones with high probability of false alarms. |

Table 8 describes nonprogrammable (hard-coded) system operation, as required to meet ANSI-SIA CP-01, and is provided only for your reference.

Table 8. Nonprogrammable (hard coded) system operation

| Function | Operation |
|---|---|
| Silent exit | All annunciators enabled |
| Remote arming exit time and progress annunciation | All annunciators enabled |
| Abort annunciation | Enabled |
| Cancel report annunciation | Enabled |
| Recent closing | Enabled (2 minute window) |
| Exit error | Enabled |
| Restoration of power | Panel resumes operation in same arming state and disregards alarm signals from sensors for the first 60 seconds after power restoration |
| Cancel alarm | Enter code only. |

Central station reporting

The panel has been tested with the following central station receivers using SIA and Contact ID reporting formats:

Note: Before beginning installation, installers must verify compatibility with the following central station receivers.

- Radionics D6600 central station receiver
- Sur-Gard central station receiver with models SG-DRL2A and SG-CPM2
- CS5000 digital alarm communicator receiver

UL Canada listed installations

This section describes the requirements for CUL (UL Canada) listed installations.

Canadian standards CSA certified accessories

Standard Class 2, 9 VAC, 3.34 A power transformer (GE Security model 22-153-CN).

Residential burglary alarm system unit (ORD-C1023-1974)

Basic system as described for UL 1023 listed installations plus:

- Hardwired magnetic contact (13-068 or 13-071) or wireless learn mode door/window sensor (60-670)
- Siren timeout set to six minutes or more

Residential fire warning system control unit (ULC-S545-M89)

Basic system as described for UL 985 listed installations plus:

- Wireless smoke sensor 60-848-95 learned into sensor group 26
- Siren timeout set to six minutes or more
- For 24-hour backup, the total current draw for all connected devices is limited to 250 mA (during normal standby conditions) using a 1.2 AH battery.

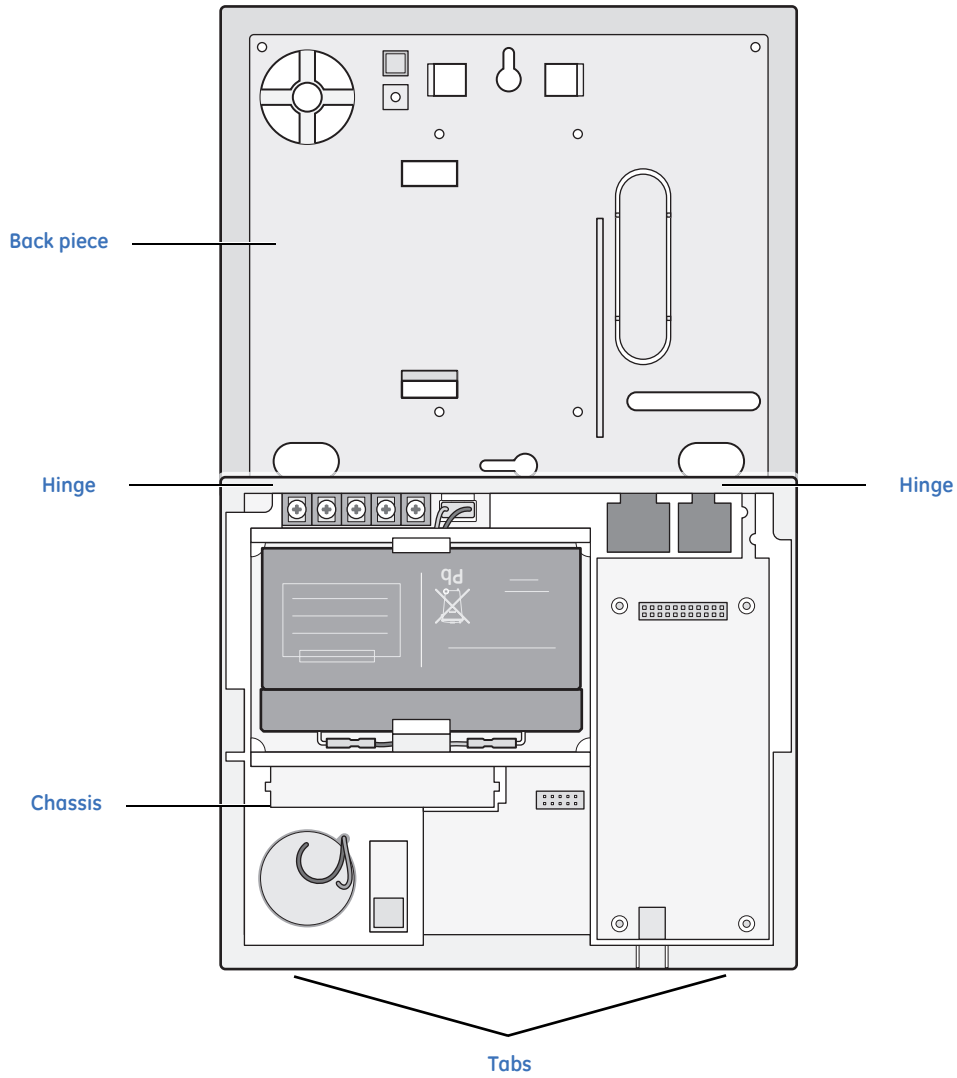
California state fire marshal listed installations

Applied for.

Opening panel cover and chassis

Tabs at the top of the panel secure and release the front cover and the chassis. The plastic hinges on the panel bottom allow the cover and chassis to swing down and out of the way (*Figure 3*).

Figure 3. Opening the panel cover and chassis



Mounting the panel

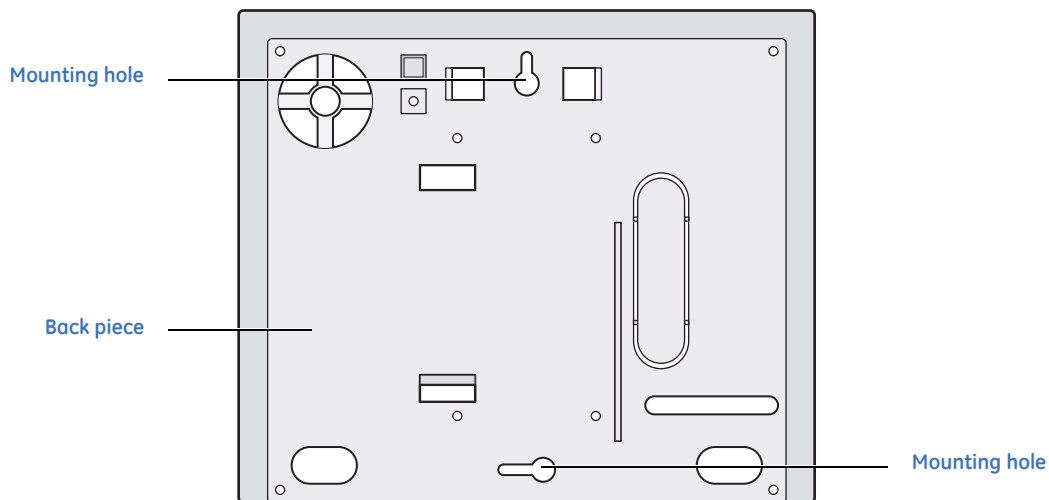
To mount the panel on a wall, do the following:

1. Choose a panel location.
2. Run all necessary power, phone, siren, and hardwired contact wires to the desired panel location.

Note: When choosing the AC outlet location for the AC power transformer, make sure the outlet is not controlled by a switch or that it is not part of a ground fault circuit interrupt (GFCI).

3. Hold the panel against the wall and mark the mounting hole locations with a pencil.
4. Mount the back piece to the wall through the two horizontally centered mounting holes near the top and bottom using the supplied mounting hardware. Use wall anchors if no studs are present (*Figure 4*).

Figure 4. Panel mounting hole locations



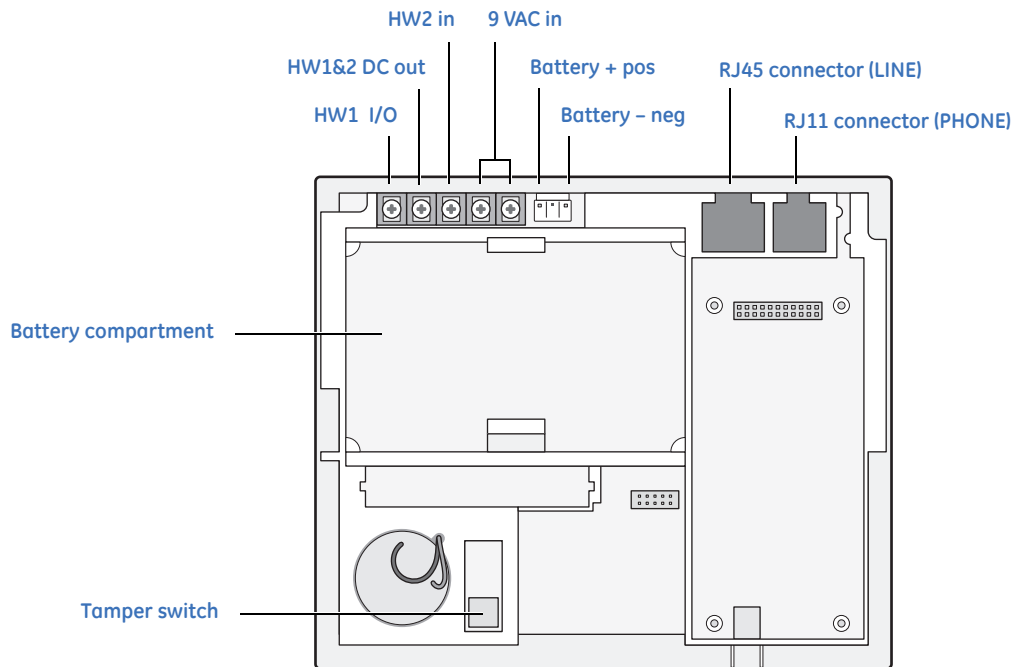
5. Connect the chassis assembly to the mounted back piece and let it hang down. This makes the terminal strip accessible for wiring various hardwired components to the panel.
6. Feed wires through openings in the back piece to be ready to attach them to the screw terminals or the phone connectors.
7. Install all screws and tighten gently.

Connecting hardwired devices

The panel has seven screw terminals and two telephone connections (*Figure 5*). The screw terminals connect AC power, sirens, and/or hardwired detectors.

Program sensors and devices before you install them. Follow the instructions in [to add the sensors to panel memory](#).

Figure 5. Simon XT terminal connections



HW1 I/O, HW2 in, and HW1&2 DC out terminals

The *HW1 I/O* terminal is dual purpose and can be used for either siren or hardwired contact connections. The *HW2 in* terminal is an input only.

Interior sirens

From the factory, the *HW1 I/O* input is set up for interior siren operation (status and alarm sounds). *HW1&2 DC out* provides the positive (+) voltage.

Note: The total current available from the *HW1&2 DC out* terminal is 250 mA at up to 120°F (49°C). A 24-hour battery standby for UL Requirements will be met with a maximum load of 250 mA.

With *Hardwired Siren Supervision* turned on, sirens connected to *HW1 I/O* are supervised and require a 4.7 kohm resistor in the circuit. If this terminal is not used, turn *Hardwired Siren Supervision* off.

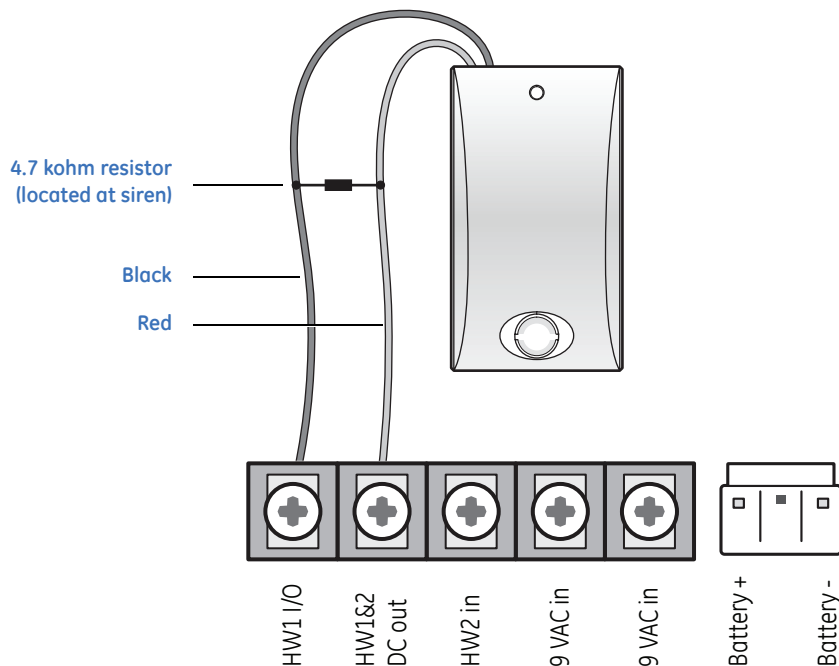
LD105 hardwired interior siren

Interior sirens must always be wired with a resistor in the circuit. For circuit supervision which allows the panel to detect if the siren wire is cut (open), *Hardwired Siren Supervision* must be turned on. (See on page 33).

Note: Do not install the resistor at the panel terminals. This does not provide supervision of the wire.

Connect the LD105 hardwired interior siren (13-374) to the panel using a 4.7 kohm resistor (included with the siren) as shown in *Figure 6*. The resistor must be connected across the siren wires as close to the siren as possible.

Figure 6. Hardwired interior siren with supervision



Hardwired contacts

To set up *HW1 I/O* and/or *HW2 in* for hardwired contacts, make the required connections as described under below, then proceed to the *Programming* on page 33 to add (learn) them into panel memory.

You can connect hardwired reed switches (normally closed loop only) to *HW1 I/O* (if not being used for a hardwired siren) and/or *HW2 in*.

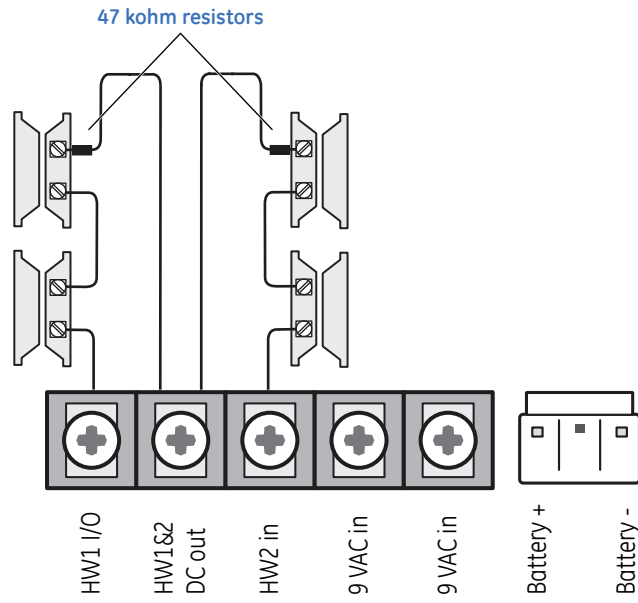
Note: Connect only normally closed (NC) reed switches to *HW1 I/O* and/or *HW2 in*. Other types of hardwired detectors should not be used.

The total resistance of the wire loop must not exceed 3 ohms. This allows you to use up to 200 ft. (61 m) of two-conductor, 22-gauge stranded wire.

Connect hardwired reed switches to the panel using a 47 kohm resistor (not a 4.7 kohm resistor) as shown in *Figure 7*. The resistor must be connected at the last switch in the circuit.

Note: Do not install the resistor at the panel terminals. This does not provide supervision of the wire.

Figure 7. Connecting normally closed hardwired reed switches



Wiring a phone line to the panel

You can connect a phone line to the panel for systems monitored by a central monitoring station or systems that notify users by a voice event notification.

DSL (digital subscriber line) allows the use of multiple devices on a single phone line simultaneously. For DSL environments, connect the panel line-in jack to an available phone jack on the premises. You might also need an inline filter to ensure panel reporting is successful.

Note: Avoid connecting the panel to a standard phone (voice) line in this manner. Other devices in use at the same time the panel is using the line can prevent reports from going through.

Full line seizure

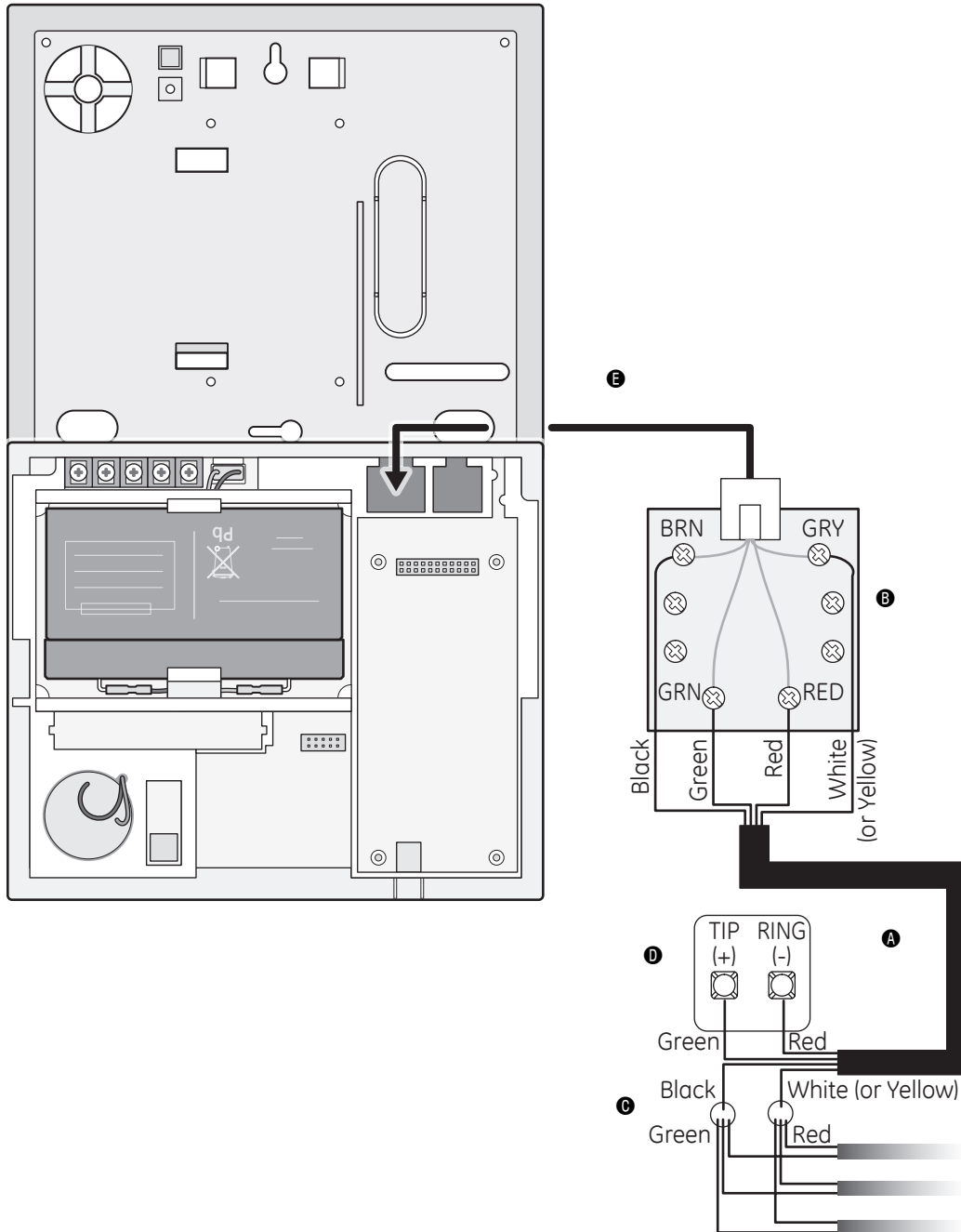
Full line seizure allows the panel to take over (seize) the phone line, even if another device on the line is in use. This method requires that the panel be wired before all other phones, answering machines, computers, or other devices on the phone line. You may need to verify line seizure for UL installations.

Use the RJ31X (CA-38A) jack (*Figure 8* on page 28) when wiring for full line seizure. This lets the user quickly and easily disconnect the panel from the phone line in case the panel disables the phone line due to a malfunction.

Full line seizure wiring with an RJ31X

1. Run a four-conductor cable **A** from the premises Telco block **D** to the RJ31X **B**.
2. Connect the four-conductor cable **A** wires to the RJ31X **B**.
3. Disconnect the green and red premises phone jack wires from the Telco block **D** and splice them **C** to the four-conductor cable **A** black and white (or yellow) wires. Use weatherproof wire connectors for these splices.
4. Connect the four-conductor cable **A** green and red wires to the Telco block **D** TIP (+) and red to RING (-) posts.
5. Connect the phone cord **E** included with the panel to the RJ31X **B** and the panel LINE jack.

Figure 8. Full line seizure wiring with RJ31X



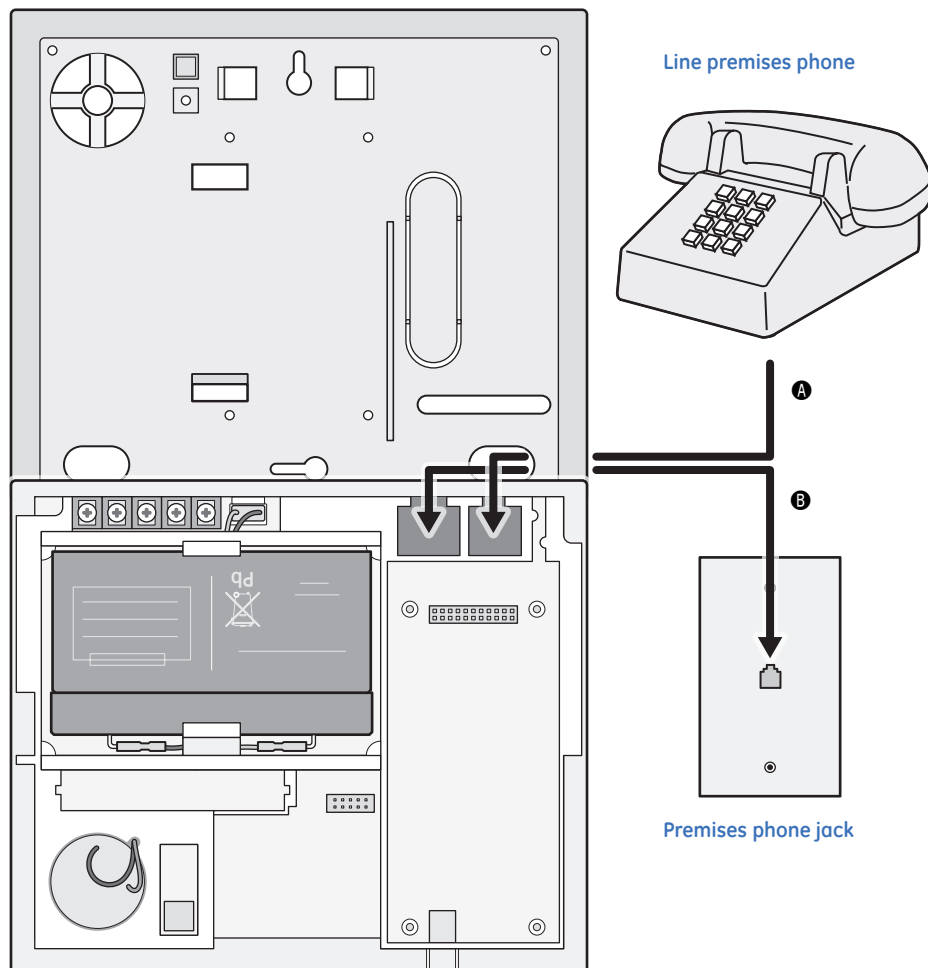
Full line seizure wiring with one premises phone

If a single phone is all that exists on the premises, full line seizure can be accomplished without an RJ31X (Figure 8 on page 29).

1. Disconnect the phone from the premises phone jack and plug it into the panel PHONE jack **A**. This jack is disconnected automatically whenever the panel reports.
2. Connect the included phone cord to the panel LINE jack and the premises phone jack **B**.

Note: If customers add phones or other phone devices to another phone jack, full line seizure no longer exists. Inform them to contact you if they want to add a phone or other device so that you can rewire for full line seizure by adding an RJ31X.

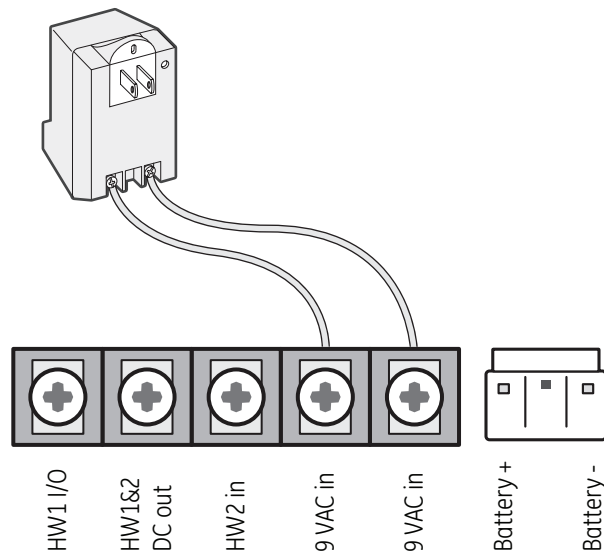
Figure 9. Full line seizure wiring with single landline phone



Wiring the power transformer

Connect the power transformer to the panel AC terminals as shown in *Figure 10*.

Figure 10. Transformer connections



Note: Do not plug in the transformer at this time

Powering up the panel

When applying power to the panel connect the battery first, then plug in the AC power transformer. This sequence prevents a battery fault condition.

Note: Maximum battery charge current is 60 mA. It may take up to 24 hours for a new battery to fully charge.

Installing the backup battery

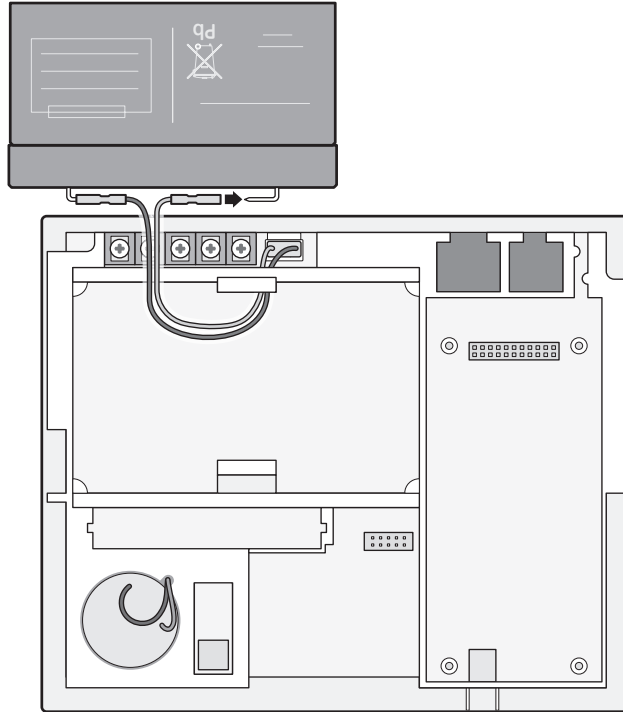
To install the backup battery (6 VDC, 1.2 Ah), do the following:

1. Connect the lug end of the red battery lead to the red battery tab.
2. Connect the lug end of the black battery lead to the black battery tab.
3. Align the red (+) battery terminal with the right end of the terminal strip. The logo and specification information should be readable.
4. Insert the front end of the battery under the forward battery compartment latch.
5. Push forward and rotate the battery downward until it seats beneath the rear battery compartment latch.



CAUTION: Do not connect the battery until you are ready to power up the panel. See [Powering up the panel](#) on page 30.

Figure 11. Installing the panel backup battery



Applying AC power

Make sure the outlet is not controlled by a switch or that it is not part of a ground fault circuit interrupt (GFCI).

1. Remove the center screw from the outlet cover plate and hold the cover plate in place.



WARNING: Use extreme caution when securing the transformer to a metal outlet cover. You could receive a serious shock if a metal outlet cover drops down onto the prongs of the plug.

2. Plug the transformer into the lower receptacle of the outlet so that the hole in the transformer tab lines up with the outlet cover screw hole.
3. Insert the cover plate screw through the transformer tab and the outlet cover plate. Tighten the screw.

Installing X10 modules

To install lamp and appliance modules, do the following:

1. Set the unit code dial to a unit number between 1 and 8.
2. Set the housecode for the installation.
3. Plug the module into a wall outlet.
4. Plug the lamp/appliance into the module.



CAUTION: Do not plug in appliances or lamps with 300-watt or larger bulbs into Lamp Modules

To install universal modules, do the following:

1. Set the unit code dial to a unit number different from all other X10 modules (between 1 and 8).
2. Set the housecode for the installation.
3. Set the module switches to momentary and relay only.
4. Connect the module terminals to the desired device terminals.
5. Plug the universal module into a wall outlet.

Chapter 4 Programming

This chapter provides steps on how to program your unit.

In this chapter:

| | |
|---|----|
| <i>Programming overview</i> | 34 |
| <i>Entering and exiting the system menu</i> | 35 |
| <i>Menu navigation</i> | 36 |
| <i>Set clock</i> | 38 |
| <i>Revision</i> | 38 |
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| <i>Phone options</i> | 43 |
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| <i>System options</i> | 51 |
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| <i>Piezo beep options</i> | 53 |
| <i>Audio verification options</i> | 54 |
| <i>Light control (optional)</i> | 54 |
| <i>System tests</i> | 57 |
| <i>Resetting memory to the factory defaults</i> | 58 |

Programming overview

The control panel *Figure 12* provides the main processing unit for all system functions. The programming of system options and features is menu-driven. All installer options are set in the *System Programming* menu, except for setting the system time. *Table 9* on page 35 explains the panel keys and features shown in *Figure 12*.

Figure 12. Simon XT self-contained panel

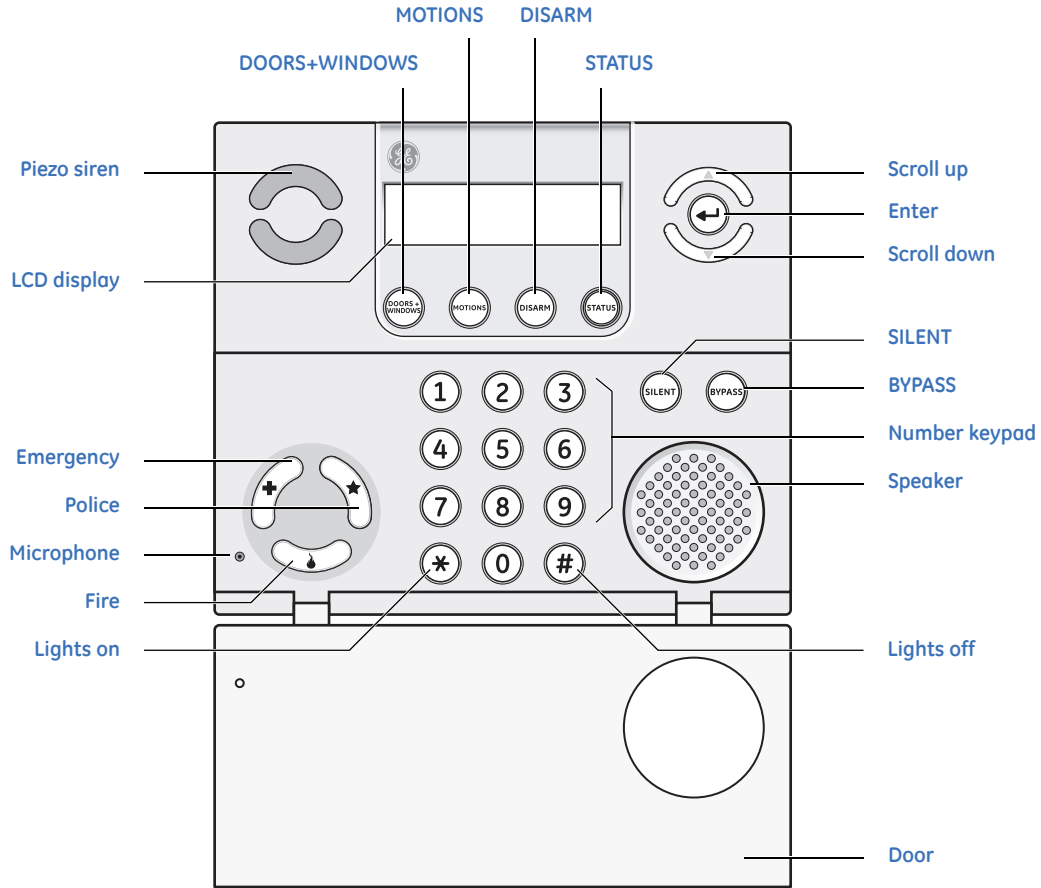





Table 9. Simon XT panel keys and features

| Control | Description |
|--|---|
| Piezo siren | The piezo siren makes alarm beeps and status beeps. Fire and intrusion alarm beeps are always played at high volume, while the volume of status beeps (such as trouble or chime beeps, entry and exit delay beeps, or auxiliary alarm beeps) is programmable. |
| LCD display | The LCD module has a 2 × 16 character array that displays a variety of phrases and icons. |
| DOORS + WINDOWS | Press to arm perimeter sensors. |
| MOTIONS | Press to arm interior sensors. |
| DISARM | Press to turn off intrusion/burglary protection for your system. Only intrusion/burglary sensors such as doors, windows, and motion sensors are disarmed. Environmental sensors, such as smoke and carbon monoxide, stay active at all times. |
| STATUS | Press to determine system status. |
| SILENT | Press to silence exit beeps when arming. |
| BYPASS | Press to bypass a sensor. |
| Police  | Press and hold the Police button for two seconds (or press twice quickly) to call the central monitoring station and notify them of a nonmedical call for help. |
| Emergency  | Press and hold the Emergency button for two seconds (or press twice quickly) to call the central monitoring station and notify them of a nonmedical call for help. |
| Fire  | Press and hold the Fire button for two seconds (or press twice quickly) to call the central monitoring station and notify them of a nonmedical call for help. |
| Microphone | Used to communicate with central monitoring station after an alarm. |
| Scroll up/scroll down | Press to scroll through lists of similar items. |
| Enter | Press to select a particular menu item or commit to memory a menu item that has just been programmed. |
| Numeric keypad | Twelve-key telephone-type keypad (0 through 9, *, #) for entering access codes or other numerical data. |
| Speaker | Provides voice output and sounds key beeps. The panel speaks arming level changes, system status, and voice chime sensor trips. The panel voice is also used for voice reporting and remote phone control. |
| Door | Covers the lower panel. |
| * | Lights on. |
| # | Lights off. |

Entering and exiting the system menu

To enter the system menu, press either the scroll up/down or enter buttons in the upper right of the panel.

Press the **STATUS** button to exit a menu or option edit mode and navigate up one level. Pressing the **STATUS** button while in the top menu level exits the system menu level. The panel automatically exits the system menu after a few seconds of inactivity if no access code has been entered yet. After an access code has been entered to access a code-protected area of the system menu, the timeout is 4 minutes.

Menu navigation

Each menu contains a list of options and/or submenus. Press the scroll up/down buttons to navigate up and down the list of options and submenus in that menu. Pressing the **Enter** key after navigating to an option selects that option for editing and flashes the current value. Pressing the **Enter** key after navigating to a submenu enters that submenu, making a new list of options accessible. Pressing **STATUS** exits a menu and goes to the next higher level.

Programming options are arranged in a menu structure as outlined in *Table 10*. The top menu contains several features, as well as the *System programming* menu. When accessing the *System programming* or *System tests* menu, the panel prompts you to enter an access code. To continue, enter the *dealer code* or *installer code*, then press **Enter**.

To program an option, first navigate to that option until it is displayed, then press **Enter**. The option value will start flashing, indicating that it is ready to be changed. Use the scroll keys or enter a numerical value to change the option, then press the **Enter** key to save the change.

Table 10. Simon XT menu structure

| | |
|--------------------------------|-----------------------------|
| System time | |
| Enable scheduled lights | |
| Enable sensor-activated lights | |
| Enable chime | |
| Enable special chime | |
| System tests | |
| Sensor test | |
| Communication test | |
| Initiate download call | |
| System programming | |
| Access codes | |
| Dealer code | |
| Installer code | |
| Master code | |
| User code 1 | |
| User code 2 | |
| User code 3 | |
| User code 4 | |
| User code 5 | |
| User code 6 | |
| User code 7 | |
| User code 8 | |
| Duress code | |
| Code length | |
| | Security |
| | Account number |
| | Downloader code |
| | Phone lock |
| | Autoarm |
| | Exit extension |
| | Secure arming |
| | No arm on panel low battery |
| | Quick exit |
| | Downloader enable |
| | Supervisory protest |
| | Phone #s |
| | Phone #1 |
| | Phone #2 |
| | Phone #3 |
| | Phone #4 |
| | Downloader phone number |
| | Phone options |
| | Manual phone test |
| | Fail to communicate |
| | DTMF dialing |
| | 300 bps baud rate |
| | Ring/hang/ring |
| | Dialer delay |
| | Call waiting code |

Table 10. Simon XT menu structure (continued)

| | |
|------------------------------|--|
| Sensors | |
| Learn sensor | |
| Delete sensor | |
| Edit sensor | |
| Reporting | |
| Report options | |
| Opening report | |
| Closing report | |
| Force armed report | |
| AC power failure report | |
| Panel low battery report | |
| Sensor alarm restoral report | |
| 24-hour sensor tamper | |
| Supervisory/tamper report | |
| No usage report | |
| Swinger shutdown | |
| Programming report | |
| Fire alarm verification | |
| Communication modes | |
| Phone 1 reports | |
| Phone 2 reports | |
| Phone 3 reports | |
| Phone 4 reports | |
| Timers | |
| Latchkey time | |
| Entry delay | |
| Exit delay | |
| No activity timeout | |
| Auto phone test | |
| Supervisory time | |
| Alarm cancel window | |
| RF timeout | |
| Fail to open time | |
| Fail to close time | |
| Siren timeout | |
| Arming LEDs shutdown | |
| Unvacated premises | |
| Smoke sensor supervision | |
| Touchpad options | |
| Keyfob no delay | |
| Panel panic alarms | |
| Remote touchpad arming | |

| | |
|-----------------------------|--|
| System options | |
| RF jam detect | |
| Demo mode | |
| HW1 I/O | |
| 24-hour clock format | |
| Siren options | |
| Panel piezo beeps | |
| Panel voice | |
| Panel piezo alarms | |
| Trouble beeps | |
| Voice chime | |
| Status beep volume | |
| Hardwired siren supervision | |
| Speaker volume | |
| Panel silent police panic | |
| Panel tamper | |
| Alarm report verification | |
| Audio verification | |
| Audio mode | |
| Fire shutdown | |
| Panic talk | |
| VOX receiver gain | |
| VOX microphone gain | |
| VOX gain range | |
| Manual microphone gain | |
| Light control | |
| Set entry lights | |
| Sensor lights | |
| Light schedules | |
| Housecode | |
| Lock interval | |
| System tests | |
| Sensor test | |
| Communication test | |
| Initiate download call | |
| Revision | |
| Contrast | |

Set clock

If the panel loses both AC and battery power, then upon restoring power the system time will reset to midnight and blink, indicating it has not been set correctly. You can set the system time to display in either 12-hour or 24-hour format.

Time of day format is HH:MMx, where:

HH = 01 to 12 (12-hour format) or 00-23 (24-hour format)

MM = 00 to 59

x = a or p (12-hour format) or none (24-hour format)

To reset the clock:

1. Scroll up/down until the display shows *Set clock*.
2. Press **Enter**.
3. The display shows *Enter code*.
4. Enter your code with numeric keys. Press **Enter**.
5. Press **Enter**. The display now flashes the hours.
6. Scroll up/down to set the hours.
7. Press the **Enter** key to accept. The display now flashes the minutes.
8. Scroll up/down to set the minutes.
9. Press the **Enter** key to accept. The display is now flashing the AM/PM.
10. Scroll up/down to set the AM/PM.
11. Press **Enter** to accept. The display now shows the current time, and stops flashing.
12. Press the **STATUS** button twice to exit.

Revision

To display the firmware revision of the system:

1. Scroll up/down to *Revision*.
2. Press the **STATUS** button to exit.

Contrast

To adjust the *Contrast* of the display:

1. Scroll up/down to *Contrast*.
2. Press the **Enter** button.
3. Scroll up/down to increase and decrease the contrast setting.
4. Press the **STATUS** button to save the setting and exit.

Note: Changes in contrast are more noticeable when not looking at the display straight-on.

System programming

To enter system programming mode, do the following:

1. Press the scroll buttons until the panel displays *System programming*.
2. Press **Enter**. The system prompts for an access code.
3. Enter the access code from the codes listed in *Table 11*. The system displays each entered access code digit as an asterisk.
4. Press **Enter**. The panel is now in program mode.

Note: Do not remove panel power while in program mode.

Table 11. Simon XT programming codes

| Code | Description |
|----------------|--|
| Dealer code | You can use the dealer code to program all system options, including high-security options that are not accessible with the installer code if it is different from the dealer code. Depending on how the access code is set, the default dealer access code is 654321, 54321, 4321 (factory default), or 321. This code can be used for all programming. |
| Installer code | Depending on how the access code is set, the default installer code is 654321, 54321, 4321 (factory default), or 321. This code is limited to changing all but the following: Dealer code, Code length, Downloader code, Phone lock, Phone #1, Phone #2, Phone 1 report mode, Phone 2 report mode, HW 1 function. |

Access codes

Table 12. Access codes

| Function | Default | Description |
|-------------------|-------------|---|
| Dealer code | 4321 | <p>You can use the dealer code to program all system options, including high-security options that are not accessible with the installer code if it is different from the dealer code. Changing the dealer code to differ from the installer code will prevent the installer from viewing certain fields.</p> <ol style="list-style-type: none"> 1. Change the dealer code. 2. Enter program mode with the installer code. 3. Installer should no longer be able to see the following: Code length, Downloader code, Phone lock, Phone #1, Phone #2, Phone 1 report mode, Phone 2 report mode, HW1 function. |
| Installer code | 4321 | You can use the installer code to program most installer options, except for high-security dealer options. |
| Master code | 1234 | <p>Master arm/disarm code.</p> <p>Master code able to enter user programming and bypass sensors.</p> |
| User codes 1 to 8 | Blank | Regular arm/disarm code. |
| Duress code | Blank | Use in place of master or user code to cause a silent alarm. |
| Code length | Four digits | Code can be three to six digits long. |

Security

Table 13. Security

| Function | Default | Description |
|------------------------------|---------|---|
| Account number | 00000 | Lets you program up to a 10-character alphanumeric account number or delete an existing account number by pressing DISARM . You can enter numerical digits sequentially. To enter letters (A to F only), use the scroll buttons to select A to F then press Enter . To select next digit, press another number key. When finished press Enter . The CID format only supports account numbers with letters B through F, or numbers 0 through 9 (or a combination of those letters and numbers). |
| Downloader code ^a | 12345 | Lets you set a unique five-digit code that is required for initiating Enterprise Downloader sessions. The code must be five digits long and can range from 00000 to 99999. The downloader code must match the downloader access code in the Enterprise account to perform Enterprise sessions. |
| Phone lock | Off | Prevents resetting of phone/reporting related options when a memory clear is performed (on) or resets these options to their default values when a memory clear is performed (off). The following are not reset when on: <ul style="list-style-type: none"> • Account number • Dealer code • Code length • Call wait cancel • Phone numbers 1 and 2 • Phone report modes 1 to 4 • Phone lock • Downloader phone number • Downloader code |
| Autoarm | On | Determines how long the system protests (announces open/failed sensors) when attempting to arm with open/failed sensors, before bypassing these sensors and automatically arming the rest of the system. Note: The panel protests an arming attempt when it has not received a restore (close) signal from sensors learned into restore-specific sensors groups. Sensors learned into group 26 (fire) cannot be bypassed. When this option is on, the panel announces all open/failed sensors repeatedly for 4 minutes, then automatically bypasses the open sensors and arms the rest of the system. If a sensor is opened during the exit delay and then left open, the panel will go into alarm after the exit delay has expired. This option must be on for <i>Unvacated premises</i> and <i>Exit extension</i> to work correctly. When this option is off, the panel displays all open/failed sensors once, then automatically bypasses the open sensors and arms the rest of the system after the exit delay has expired. If other sensors are opened during the exit delay, they will also be bypassed if left open. Note: If group 13 (Instant Perimeter) sensors are opened during the exit delay, the panel goes into immediate alarm. |

Table 13. Security (continued)

| Function | Default | Description |
|--------------------------------|---------|---|
| Exit extend | On | Determines whether the panel restarts the exit delay time if the user enters the armed premises during the initial exit delay period (on), or not (off). Turning on this feature allows users to reenter during the exit delay period, without disarming and then rearming the system. Turning off this feature requires the user to disarm and rearm the system. Note: <i>Autoarm</i> must be on for this option to work. |
| Secure arming | Off | Determines whether an access code is required when arming the system (on) or not (off). This option does not affect keyfob arm/disarm operation. |
| No arm on low battery | Off | Determines whether the system protests arming if a low CPU battery condition exists (on) or not (off). |
| Quick exit | Off | Determines whether pressing DISARM when the system is armed activates the exit delay time to allow exit and reentry without disarming the system (on) or not (off). This feature is useful if the user wants to step outside briefly and return, such as to get the paper. If the system is armed and the user presses DISARM , the panel announces <i>Exit time is ON</i> and sounds exit delay beeps. This allows a designated entry/exit door to be open for up to 2 minutes without causing alarm. When the door is closed, the beeps stop and the door is armed again. Note: For UL listed systems, Quick Exit must be Off. |
| Downloader enable ^a | On | Enables programming of system options with downloader software. |
| Sup protest ^a | Off | Determines whether the panel protests arming if it has not received a supervisory signal from any sensor 15 minutes before arming (on) or not (off). Note: This feature must be turned off for US installations. |

a. Not investigated for use by UL.

Phone numbers

Table 14. Phone numbers

| Function | Default | Description |
|---------------------------|---------|---|
| Phone # 1 | Blank | Lets you program up to a 26-digit central monitoring station receiver/voice event notification phone number for monitored systems. Phone digits can be 0-9, *, #, or a pause (P). To delete the phone number, press DISARM while editing a phone digit. To add a pause to the phone number press BYPASS . Pressing Enter is required if you enter fewer than 26 digits. |
| Phone # 2 | Blank | |
| Phone # 3 | Blank | |
| Phone # 4 | Blank | |
| Downloader # ^a | Blank | Lets you program up to a 26-digit phone number for the Enterprise Downloader. |


a. Not investigated for use by UL.

Phone options

Table 15. Phone options

| Function | Default | Description |
|-----------------|---------|--|
| Man phone test | On | Determines whether the user can perform a manual communication test to verify communication to a central station/voice dial (on), or not (off). If you have all 4 phone # programmed it should send a test report to all 4 before showing that test is okay. |
| FTC | On | Determines whether the panel and interior sirens sound trouble beeps if it is unable to successfully send a report to a central station (on) or not (off). |
| DTMF dial | On | Determines whether the panel uses DTMF (on) or pulse (off) for dialing programmed phone numbers. |
| 300 bps enabled | On | Determines whether the baud rate used by the panel for central station communication is 300 bps (on) or 110 bps (off). |

Table 15. Phone options (continued)

| Function | Default | Description |
|-----------------------------|------------|--|
| Ring hang ring ^a | 1 | <p>Determines when the panel answers a remote phone access or Enterprise call. Depending on whether an answering machine exists at the panel location, offsite access to the panel can be done with a series of phone calls or just one. For offsite access where an answering machine does not exist, the user or Enterprise operator simply calls the panel location once and listens for 10 rings. The panel should answer after the tenth ring.</p> <p>For offsite access where an answering machine exists, the user or Enterprise operator must perform the following steps:</p> <ul style="list-style-type: none"> • Call the panel location. • Let the phone ring once, then hang up. • Wait at least 10 seconds but not more than 40, then call the panel location again. The panel should answer on the first ring. <p>Ring/hang/ring setting number and sequence of rings after which the panel answers:</p> <ol style="list-style-type: none"> 1 Ring/hang/ring or ten rings 2 Ring/hang/ring/hang/ring or ten rings 3 Ring/hang/ring/hang/ring/hang/ring or ten rings 4 Ten rings 5 Ring/hang/ring 6 Ring/hang/ring/hang/ring 7 Ring/hang/ring/hang/ring/hang/ring <p>Off Disabled—no remote (offsite) access</p> |
| Dial delay | 30 seconds | <p>Determines whether the panel delays dialing programmed phone numbers before sending reports (on).</p> <p>If Opening (Disarming) Reports is on, the panel does not delay dialing if the system is disarmed before the delay time expires. The panel dials immediately for both the alarm and opening report.</p> <p>Note: Regardless of this option setting, the panel always dials immediately for fire alarms, AC power failure and low battery reports.</p> <p>The combined dialer delay and entry delay cannot exceed 60 seconds for a UL Listed installation.</p> |
| Call wait code | Off | <p>The call waiting code is dialed by the panel before a phone number to disable call waiting. Verify that the end-user has call waiting with his phone service provider before changing this option from its default.</p> <p> CAUTION: Changing this option from its default without call waiting will prohibit the panel from calling the central station.</p> <p>The call waiting code is programmed the same way as a phone number.</p> |

a. Not investigated for use by UL.

Sensors

These instructions tell how to add (learn) sensors, touchpads, and other system devices into panel memory. The panel recognizes a sensor when you press a sensor program button, press and release a tamper switch, press a sensor test button, or put a sensor into alarm. *Table 16* describes the programming method for each device.

Note: If you are installing a sensor on a gun case, jewelry box, or a similar case, and the sensor is active in level one, you must subdisarm to avoid putting the panel into alarm when the sensor and the magnet are separated.

Table 16. Device programming

| Device | To program |
|--------------------------|---|
| Door/window sensor | Press the button on the top of the sensor (cover removed) or trip the tamper. |
| Motion sensor | Press the button on the back of the sensor (mounting plate removed) or trip the tamper. |
| Smoke detector | Trip the tamper, press the test button, remove the detector from its base, or put the smoke detector in alarm. |
| Hardwired sensor | Separate the sensor from its magnet. |
| CO alarm | Plug in the module wait 5 to 7 seconds press and hold the test button for nine beeps |
| Freeze and water sensor | Trip the tamper or press and hold the button on the top of the sensor (cover removed) until the control panel confirms programming. If you do not hold the button down long enough, the system will report the sensor as open. |
| Personal help button | Press the help button until the light blinks. |
| Remote handheld touchpad | Press the emergency buttons. |
| Keyfob | Press the lock and unlock buttons at the same time. |
| ELM keyfob | Do the following: <ol style="list-style-type: none"> 1. Press the unlock button twice and hold it the third time. The light button flashes three times. 2. Press the unlock button once and hold it the second time. The light button flashes twice. 3. Press and hold the unlock button. The light button flashes once. Hold the button until the flashing stops. |

When learning sensors, the panel uses an ascending number sequence starting with 1. You can override this by entering the desired sensor number using the number keys.

Learning sensors

To learn a sensor:

1. Press the scroll buttons until the panel displays *System programming*.
2. Press **Enter**. The system prompts for an access code.
3. Enter the dealer or installer code and press **Enter**. The panel displays *Access codes*.
4. Press the scroll buttons until the panel displays *Sensors*.
5. Press **Enter**. The panel displays *Learn sensor*.

6. Press **Enter**. The panel displays *Trip sensor ##*, with the number signs flashing.

Note: If you wish to use a sensor number other than the next one available, use the number keys to enter a two-digit sensor number immediately.

7. Press the sensor program button or release the sensor tamper switch. The panel displays *Sn ## Grp 10 <Front Door>*, with the *Grp 10* flashing. Use the number or scroll buttons if you want to enter a new group number; press **Enter** to accept the group number displayed.

8. The sensor text is now flashing. Use the scroll buttons to scroll through the text list or enter the three-digit shortcut. (See *Table 38* on page 72 and *Table 39* on page 73 for these three-digit codes). Press **Enter** to accept the first text segment. You may enter more text or press **Enter** again to finish adding the sensor.

9. The panel displays *Trip sensor ##* (with the next available sensor number). Press **STATUS** repeatedly to exit.

Deleting sensors

To delete a sensor:

1. Press the scroll buttons until the panel displays *System programming*.
2. Press **Enter**. The panel displays *Enter code*.
3. Enter your access code and press **Enter**. The panel displays *Access codes*.
4. Press the scroll buttons until the panel displays *Sensors*.
5. Press **Enter**. The panel displays *Learn sensor*.
6. Press the scroll buttons until the panel displays *Delete sensor*.
7. Press **Enter**. The panel displays *Sn ## Grp ## <Text>*.
8. Press the scroll buttons until the panel displays the sensor you want to delete.
9. Press **Enter**. The panel displays *Deleted*, then shows *Delete sensor*.
10. Press **STATUS** twice to exit.

Editing sensors

You can use this feature to change the group or name of a sensor that is already in panel memory. The procedure is very similar to the procedure used to program sensor information after a sensor is learned in. Pressing **DISARM** while editing sensor text deletes all text for that sensor.

Table 17. Sensors

| Function | Default | Description |
|----------------|---------|---|
| Learn sensors | | Adds (learns) sensors to panel memory. |
| Delete sensors | | Deletes sensors from panel memory. |
| Edit sensors | | Edits sensor information in panel memory. |

Reporting

Table 18 and Table 19 on page 49 provide report option details.

Table 18. Reporting options

| Function | Default | Description |
|------------------|---------|--|
| Opening reports | Off | <p>Determines whether the panel sends opening reports to a central station whenever the system is disarmed (on), or not (off). User number will be reported as zone number. Keyfobs learned into zone 1 to 40 will report as zone they are learned into.</p> <p>Dealer code = 44 Installer code = 45 Master code = 46 User code 1 = 47 User code 2 = 48 User code 3 = 49 User code 4 = 50 User code 5 = 51 User code 6 = 52 User code 7 = 53 User code 8 = 54 Duress code = 55</p> |
| Closing reports | Off | <p>Determines whether the panel sends closing reports to a central station whenever the system is armed (on), or not (off). User number will be reported as zone number. Keyfobs learned into zones 1 through 40 will report as the zone they are learned into.</p> <p>Dealer code = 44 Installer code = 45 Master code = 46 User code 1 = 47 User code 2 = 48 User code 3 = 49 User code 4 = 50 User code 5 = 51 User code 6 = 52 User code 7 = 53 User code 8 = 54 Duress code = 55</p> |
| Force armed | Off | <p>Determines whether the panel sends a force armed report to a central station if the user bypasses protesting sensors (indirect bypass) when arming the system (on) or not (off).</p> |
| AC power failure | Off | <p>Determines whether or not the panel sends AC power failure reports to a central station after the programmed time expires. The time can be set from 005-254 minutes.</p> <ul style="list-style-type: none"> • When the panel is without AC power for 30 seconds, the panel LEDs turn off. • When the panel is without AC power for the programmed time, an AC power failure is reported. • The panel reports an AC power restoral when AC power returns to the panel. |

Table 18. Reporting options (continued)

| Function | Default | Description |
|---------------------------------|---------|--|
| Low CPU battery | On | Determines whether the panel sends a low CPU battery report to the central station when the panel backup battery voltage drops |
| Sen alarm restore | Off | Determines whether the panel reports sensor alarm restorals (on) or not (off). Setting when restorals are reported: <ol style="list-style-type: none"> 1. Immediately after sensor is closed or restored after dial delay. 2. After siren timeout expires if sensor is restored. 3. When system is disarmed if sensor is restored. |
| 24-hour sensor tamper | Off | Determines whether the system (armed or disarmed) goes into and reports an alarm anytime a sensor tamper switch is tripped (on), or only when the system is armed and a tamper switch of an armed sensor is tripped (off). |
| Supervisory tamper ^a | Off | Determines whether the panel sends supervisory reports to a central station as a tamper (on) or a supervisory (off). This option is typically used only in Europe where a supervisory condition is required to report as a tamper. |
| No usage ^a | Off | Determines whether the panel sends a No Usage report to the central station if the user has not operated the system before the programmed time expires (on) or not (off). The timer starts each time the system is disarmed. This is a customer service feature that alerts the central station if a customer is not using their security system. The service provider can then contact the customer to find out why the system is not being used, and help correct any problems for the customer. |
| Swinger shutdown | On | Determines whether the panel prevents the same sensor from activating an alarm more than once in a single arming period (on) or not (off). Note: Swinger Shutdown does not affect smoke and fire sensors. |
| Program report | Off | Determines whether the panel sends a report to the central station anytime the programming mode is entered/exited (on) or not at all (off). The panel sends a report whenever the dealer (Utility 1) or installer (Utility 2) code is used to enter programming mode and another report is sent when the programming session ends. |
| Fire verify | Off | If this option is off, the panel immediately reports to the central station when a smoke detector goes into alarm. With this option on, if a single smoke detector goes into alarm the panel will not report for 60 seconds unless another smoke detector goes into alarm. If the first smoke detector is cleared of alarm within the first 60 seconds, no report will be sent to the central station unless it or a second smoke detector goes into alarm within the panel siren timeout period (5 minutes). |

a. Not investigated for use by UL.

Table 19. Communication modes

| Function | Default | Description |
|---------------------|---------|---|
| Phone 1 report mode | Off | All SIA All CID |
| Phone 2 report mode | | Alarm SIA Alarm CID |
| Phone 3 report mode | | Nonalarm SIA Nonalarm CID |
| Phone 4 report mode | | Backup SIA (phone failure backup) Backup CID (phone failure backup) Voice dialer Off |

Note: UL has only verified reporting compatibility with the CS5000 Digital Alarm Communicator Receiver. For UL listed systems, Phone 1 Report Mode must be set to All SIA or All CID.

Alarms include: Fire, Intrusion, Emergency, Silent, and Alarm Cancels.

Nonalarms include: Latchkey, No Activity, Openings, Closings, Fail to Open, Fail to Close, Force Armed, AC Power Failure, CPU Low Battery, and Trouble Restorals.

Timers

Table 20 provides timer option details.

Table 20. Timers

| Function | Default | Description |
|----------------------------|-------------|--|
| Latchkey time ^a | Off | Determines whether the panel reports a latchkey alarm if the system is not disarmed at a preset time between midnight and 11:59 P.M. (on). If the latchkey feature is disabled (off), the panel will not report a latchkey alarm. The system clock must be set for the latchkey feature to work. |
| Entry delay | 030 seconds | Determines how much time the user has to disarm the system after entering the armed premises through a designated delay door, before an alarm occurs. Beeps sound during the entire delay time to remind the user to disarm the system. When turned on, the Entry Delay can be set from 030 to 240 seconds. |
| Exit delay | 060 seconds | Determines how much time the user has to leave the premises through a designated delay door after arming the system. Beeps sound after arming the system to remind the user to leave the armed premises. If a delay door is opened after the Exit Delay expires, the Entry Delay begins. If the user arms the system with No Delay and opens a delay door after the Exit Delay expires, an alarm occurs. When turned on, the combined dial and entry delay cannot exceed 60 seconds for a UL Listed installation. |

Table 20. Timers (continued)

| Function | Default | Description |
|---------------------------------|-------------|--|
| No activity tm ^a | Off | Determines whether the panel sends a No Activity report to a central station when the programmed time period elapses (on), or if the feature is disabled (off). No activity means control panel, remote handheld, and key-chain touchpad buttons have not been pressed and sensors have not been tripped within a specified period of time (except sensors in group 25). The timeout can be set from 02 to 24 hours. |
| Autophone test ^b | Off | Determines whether the panel automatically performs a periodic phone test (on) or not (off). The test interval can be from 001 to 254 days. The time of day the panel performs the test is determined by Supervisory Time, which must be turned on for this feature to work. |
| Supervisory time | 12:00am | Determines when the panel reports supervisory conditions (sensor failures) and automatic phone tests to the central station. The panel clock must be set to the correct time for this option and the automatic phone test to work correctly. |
| Alarm cancel | 006 | Sets the time frame that determines whether the panel reports an alarm cancel message to the central station. If the system is disarmed from an alarm state within the programmed time, the panel sends an alarm cancel message to the central station. An alarm cancel message is not reported if the system is disarmed after the programmed time expires. The time can be set from 006 to 255 minutes. When set to 255, the panel always reports alarm cancel messages. Turning off this option disables alarm cancel reporting. |
| RF time-out | 12 hours | Determines the time period the panel must receive at least one supervisory signal from learned sensors before identifying a sensor failure and sounding trouble beeps. Any sensor failure is reported immediately and again at the supervisory time (Supervisory Time). The timeout can be set from 02-36 hours. Entries must be two digits. |
| Fail-to-open time ^a | Off | Determines whether the panel sends a <i>Fail to open</i> report to a central station if the system has not been disarmed by the programmed time (on), or not (off). System time must be set correctly for this feature to work. |
| Fail-to-close time ^a | Off | Determines whether the panel sends a Fail to Close report to a central station if the system has not been armed by the programmed time (on), or not (off). System time must be set correctly for this feature to work. |
| Siren time-out | 005 minutes | Determines how long sirens sound alarms if no one is present to disarm the system. The time can be set from 002 to 254 minutes. When this feature is turned off, sirens sound alarms until the alarm is canceled (system is disarmed). |
| Arm LED shutdown | Off | Determines whether the panel LEDs (buttons) turn off 30 seconds after the last button press (on) or remain on for the entire arming period (off). |
| Unvacated premises | On | Determines whether the system automatically arms down to level 2 (doors and windows) if the user arms the system to level 4 (doors, windows, and motion sensors) without leaving the premises (on), or remains at the armed level chosen by the user (off). This feature does not work from a keyfob. Autobypass must be on for this feature to work. |

Table 20. Timers (continued)

| Function | Default | Description |
|-------------------|---------|---|
| Smoke supervision | Off | Determines how often the panel must receive supervisory signals from the smoke sensors. If this option is on, the panel must receive at least one supervisory signal from smoke sensors every four hours or it will identify a sensor failure and sound trouble beeps. If this option is off, the time for receiving supervisory signals is determined by RF Timeout. |

- a. Not investigated for use by UL.
 b. For UL installations, auto phone test must be turned on and set to 24 hours (1 day).

Touchpad options

Table 21 provides touchpad option details.

Note: These options have not been investigated by UL..

Table 21. Touchpad options

| Function | Default | Description |
|-----------------|---------|--|
| Keyfob no delay | Off | Determines whether a keyfob arms the system with no delay (on) or not (off). When this feature is on, you must disarm the system before entering the premises, since it is disabling the entry delay. If <i>Remote touchpad arming</i> is on, keyfobs cannot disarm the system and will cause an alarm upon entering. |
| Panic alarms | On | Determines whether the panel panic buttons (police, auxiliary, and fire) activate alarms when pressed (on) or not (off) |
| Remote TP arm | Off | Determines whether keyfobs and remote touchpads can disarm the system only during exit and entry delays (on) or arm and disarm the system anytime (off). If this option and <i>Keyfob no delay</i> are on, users cannot enter and/or disarm using remote touchpads without causing an alarm. |

System options

Table 22 provides system option details.

Table 22. System options

| Function | Default | Description |
|------------------------|---------|--|
| RF jam detect | Off | Determines whether the panel checks for and reports RF interference/jam to the central station (on) or not (off). If this option is on and the panel receives a constant 319.5 MHz signal, the panel reports the condition to the central station. If this option is off, the panel does not detect an RF jam. |
| Demo mode ^a | Off | Determines whether the panel operates as a demonstration model (on) or a standard panel (off). Turning on this feature disables low battery supervision and allows the microphone to remain on continuously during an AVM session. With option on panel is not testing battery supervision. |

Table 22. System options (continued)

| Function | Default | Description |
|---------------|---------|---|
| HW 1 function | 1 | The setting for this option determines how the HW1 I/O output will function. Off = No output. 1 = Interior siren output. 2 = Output activated when armed. 3 = Output activated when disarmed. 4 = Fail to communicate output; activates when fail to communicate condition occurs (Fail to communicate must be on) two. 5 = Alarm output activated when panel is in alarm |
| 24-hour clock | Off | Determines whether the panel uses a 24-hour clock (on) or 12-hour clock (off). |

a. Not investigated for use by UL.

Siren options

Table 23 provides siren option details.

Table 23. Siren options

| Function | Default | Description |
|-------------------|---------|---|
| Piezo beeps | On | This option determines whether the panel piezo produces beeps based on system activity (on) or is silent (off). |
| Panel voice | On | When On, arming level changes will be spoken. |
| Panel piezo alarm | On | Determines whether the panel piezo emits alarm sounds (on) or not (off). |
| Trouble beeps | On | Determines whether the panel, X10, and hardwired interior sirens sound six beeps every minute when a trouble condition occurs (on) or not (off). The following conditions cause trouble beeps: AC power failure (when AC power failure report is on) low CPU battery Sensor failure (supervisory) Sensor trouble (low battery, tamper, etc.) Fail to communicate Restoration of power No Activity timer has timed out. Trouble beeps continue for 5 minutes and if the panel does not see activity, trouble beeps stop and the panel reports the no activity to the central station. Trouble beeps can be silenced by arming or disarming the system or by pressing the STATUS button. Trouble beeps resume 4 hours later if the trouble condition is not cleared. |
| Voice chime | Off | Determines whether the panel announces the sensor name. 1 = Sensor name 2 = Loud ding-dong bell 3 = Soft ding-dong bell Off = No sound |

Table 23. Siren options (continued)

| Function | Default | Description |
|---------------------|---------|--|
| Status beeps vol. | 7 | Determines the panel piezo volume level for status sounds such as arming, trouble, and status beeps. Volume range is 1 (lowest) to 10 (highest). |
| HW siren sup. | Off | Determines whether the panel monitors hardwired sirens for open conditions (on) or not (off). If this option is turned on, sirens connected to the panel terminals require an EOL resistor in the wire circuit. (See on page 17 for siren wiring.) If this option is turned off, EOL resistors are not required whether sirens are connected or not. |
| Speaker volume | 8 | Sets the volume of voice messages from the panel speaker. Volume range is 1 (lowest) to 8 (highest). |
| Silent police panic | Off | Determines whether pressing the panel police panic button causes an audible (off) or silent (on) alarm. |
| Panel tamper alarm | Off | Determines whether the panel activates a tamper alarm anytime the cover is opened (On) or only when the system is armed (Off). |
| Alarm report verify | Off | This option determines whether the panel verifies successful alarm reports to the central station by displaying <i>Phone comm is OK</i> (On), or not (Off). |

Piezo beep options

Table 24 provides piezo beep option details

Table 24. Panel piezo beeps

| Activity | Piezo beep response |
|---------------------------------------|---|
| Arm doors and windows | Exit delay—two beeps sound every five seconds and two times per second during the last ten seconds. Silent exit—two beeps sound at the beginning of the exit delay and two more sound just before the exit delay expires. Entry delay—two beeps sound every five seconds and two times per second during the last ten seconds. |
| Arm motion sensors | Exit delay— three beeps sound every five seconds and three times per second during the last ten seconds. Silent exit— three beeps sound at the beginning of the exit delay and three more sound just before the exit delay expires. Entry delay— three beeps sound every five seconds and three times per second during the last ten seconds. |
| Arm doors/ windows and motion sensors | Exit delay— four beeps sound every five seconds and four times per second during the last ten seconds. Silent exit— four beeps sound at the beginning of the exit delay and four more sound just before the exit delay expires. Entry delay— four beeps sound every five seconds and four times per second during the last ten seconds. |
| Disarm | One beep |
| Chime | Two beeps (when programmed) |
| Special chime | Three beeps (when programmed) |
| Trouble beeps | Six beeps every minute. Press STATUS to stop beeps for four hours. |
| No activity ^a | Twenty beeps every minute for five minutes (when programmed) |

a. Not investigated for use by UL.

Audio verification options

Table 25 provides audio verification option details.

Note: These options have not been investigated for use by UL.

Table 25. Audio verification

| Function | Default | Description |
|------------------|---------|--|
| Audio mode | Off | 1 = Instant. Panel stays online with central station for an instant audio session. 2 = Callback. Panel hangs up and waits for a callback from the central station operator before starting an audio session. Off = No audio verification. |
| Fire shutdown | Off | Determines whether system Fire sirens are silenced during a two-way audio session (on) or not (off). Beeps sound every 10 seconds while sirens are silenced. |
| Panic talk | Off | Determines whether the central station operator can talk to the user during a silent alarm (off) or just listen in on the premises (on). Silent alarms occur when sensors learned into groups 02 or 03 are tripped, when the duress code is entered, or when the panel Police button is pressed and the Silent Panel Police Panic option is turned on. |
| Vox Rx gain | 06 | Determines the receiver gain level during two-way audio sessions. If the VOX is switching the speaker on when the central station operator is not talking, lower both this setting and the VOX mic gain setting. If the VOX is not switching the speaker on when the central station operator is talking, raise this setting and lower VOX Mic Gain setting. Changing this setting does not affect speaker volume. |
| Vox mic gain | 24 | Sets the mic gain (sensitivity) that triggers the voice-activated switching (VOX). Room size, acoustics, and furnishings where the panel or Interrogator 200 are located will influence the setting. Gain range is 01 (lowest) to 64 (highest). |
| Vox mic gain rng | 64 | Sets the gain range for voice-activated switching (Vox). Range is 01 (lowest) to 64 (highest). For best results, this option should be set equal to or greater than Vox mic gain. Note: This option works in conjunction with Vox mic gain. It is important to follow the setting recommendations as described to achieve acceptable operation. |
| Manual mic gain | 64 | Determines the gain level (sensitivity) during two-way audio sessions when audio mode is set to 0 or 1 (speak). Room size, acoustics, and furnishings where the panel is located will influence the setting. Gain range is 01 (lowest) to 64 (highest). |

Light control (optional)

If your system uses optional X10 modules, you can program them to control lights.

Note: This feature has not been investigated for use by UL.

X10 module operation

Use the following procedure to program X10 module operations into panel memory.

To program the housecode:

1. Press the scroll buttons until the panel displays *System programming*.

2. Press **Enter**. The panel displays *Enter code*.
3. Enter your access code and press **Enter**. The panel displays *Access codes*.
4. Press the scroll buttons until the panel displays *Light control*.
5. Press **Enter**. The panel displays *Set entry lights*.
6. Press the scroll buttons until the panel displays *Housecode <A-O>*.
7. Press **Enter**. The letter flashes.
8. Press the scroll buttons until the letter you want displays.
9. Press **Enter** to accept the new housecode. The panel displays *Housecode <new housecode>*.
10. Press **STATUS** twice to exit program mode.

To program an entry-activated light:

1. Press the scroll buttons until the panel displays *System programming*.
2. Press **Enter**. The panel displays *Enter code*.
3. Enter your access code and press **Enter**. The panel displays *Access codes*.
4. Press the scroll buttons until the panel displays *Light control*.
5. Press **Enter**. The panel displays *Set entry lights*.
6. Press **Enter**. The panel displays *Entry light unit 1 on/off*.
7. Press the scroll buttons until the unit number you want to program displays.
8. Press **Enter**. The panel displays *Off*, which will be flashing.
9. Press the scroll buttons until the panel displays *On*, then press **Enter**.
10. Press **STATUS** three times to exit program mode.

To program a sensor-activated light:

1. Press the scroll buttons until the panel displays *System programming*.
2. Press **Enter**. The panel displays *Enter code*.
3. Enter your access code and press **Enter**. The panel displays *Access codes*.
4. Press the scroll buttons until the panel displays *Light control*.
5. Press **Enter**. The panel displays *Set entry lights*.
6. Press the scroll buttons until the panel displays *Sensor light*.
7. Press **Enter**. The panel displays *Sn ## <Text> X-10 unit = on/off*.
8. Press the scroll buttons until the panel displays the sensor number you want to activate.
9. Press **Enter**. The panel displays *On/off*, which will be flashing.
10. Press the scroll buttons until the panel displays *On*.
11. Press **Enter**.
12. Press **STATUS** three times to exit.

Note: You can also program a keyfob button to control a light or appliance module.

To program a light schedule:

1. Press the scroll buttons until the panel displays *System programming*.
2. Press **Enter**. The panel displays *Enter code*.
3. Enter your access code and press **Enter**. The panel displays *Access codes*.
4. Press the scroll buttons until the panel displays *Light control*.
5. Press **Enter**. The panel displays *Set entry lights*.
6. Press the scroll buttons until the panel displays *Set entry lights*.
7. Press **Enter**.
8. Press the scroll buttons until the panel displays *Light schedules*.
9. Press **Enter**. The panel displays *Light schedule 1 <--:-- - -:-->*.
10. Press the scroll buttons until the panel displays the unit number you want to program.
11. Press **Enter**. The *HH* of the start time will flash.
12. Press the scroll buttons to set the hours.
13. Press **Enter**. The *MM* of the start time will flash.
14. Press the scroll buttons to set the minutes.
15. Press **Enter**. The *AM/PM* of the start time will flash.
16. Press the scroll buttons to set the AM/PM setting.
17. Press **Enter**. The end time starts to flash.
18. Follow the same instructions to set the hour, minute, and AM/PM settings for the end time.
19. Press **STATUS** repeatedly to exit.

Lock interval

Note: This feature has not been investigated for use by UL.

Sets the start and stop times that determine when the panel prevents the sensor-activated lights feature from turning on sensor-activated lights.

Note: System time must be set correctly for this feature to work.

When a time value is set (on) and the sensor-activated lights feature is on, the panel prevents sensor-activated lights from turning on between the programmed start time (this option) and the programmed stop time.

Note: Both sensor-activated light lockout start time and sensor-activated light lockout stop time must have a time programmed for this feature to work correctly.

When both sensor-activated light lockout start time and sensor-activated light lockout stop time are turned off and the sensor-activated lights feature is on, sensor-activated lights turn on at all times.

Table 26. Light control

| Function | | Default | Description |
|-------------------------|-------------------------------|---------|---|
| Set entry lights: | Entry light unit, 1 through 8 | Off | This menu allows the user to set X-10 lights with unit numbers from 1 to 8 as entry lights (On). |
| Sensor light # 01 to 40 | | | In this menu, each enrolled sensor can be associated with an X-10 light with unit number from 1 to 8 (or Off for no association). |
| Light schedules | Light schedule, 1 through 8 | Off | In this menu, a light schedule can be programmed for each X-10 module with unit number from 1 to 8. |
| Housecode | | A | |
| Lock interval | (Light) lock interval | Blank | This option sets the daily lockout time during which sensor trips do not activate associated X-10 lights |

System tests

Table 27. System tests

| Function | | Default | Description |
|--------------|------------------------------|---------|--|
| System tests | Comm test | | The communication test is used to check the phone communication between the panel and the central station or voice report destination. |
| | Sensor test | | The sensor test is used to check proper sensor operation. |
| | System download ^a | | This feature initiates a phone call from the panel to the Enterprise Downloader. |

a. Not investigated for use by UL.

Resetting memory to the factory defaults

To reset the panel to its factory defaults, do the following:

1. Open the panel cover.
2. Unplug the transformer and disconnect the battery.
3. Press and hold the four arming/status buttons (**DOORS+WINDOWS**, **MOTIONS**, **DISARM**, and **STATUS**) on the front of the panel and the tamper switch on the inside of the panel (see *Figure 5* on page 24).
4. Restore power to the panel with the battery while holding the four buttons and tamper switch.
5. Release the buttons.
6. Plug in the transformer to the outlet.

Note: The procedure to reset memory to factory defaults is meant to be difficult. It is also possible to restore power to the panel by plugging in the transformer first, which allows the panel to be closed so that the tamper switch does not need to be pressed. If you do this, be sure to reconnect the battery.

Program the panel in this order:

1. Set the panel clock.
2. Add (learn) sensors.
3. Set the housecode and light and appliance controls (entry/exit activated lights, sensor-activated lights, time-activated lights).
4. Change options as needed.

Note: If phone lock is on, phone numbers 1 and 2, downloader phone number, account number, phone lock, downloader code, phone report mode 1, phone report modes 1 to 4, access code length, and call waiting and dealer code will not reset to their defaults.

Chapter 5 Testing

This section describes how to perform various test procedures. You should test the system after installing, after servicing, and after adding or removing devices from the system.

In this chapter:

| | |
|--|----|
| <i>Control panel</i> | 60 |
| <i>Sensor testing</i> | 61 |
| <i>If a sensor fails the sensor test</i> | 62 |
| <i>Phone communication</i> | 63 |
| <i>Offsite phone operation</i> | 63 |
| <i>Central station communication</i> | 64 |
| <i>Two-way voice operation</i> | 65 |
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| <i>Manual lamp module control</i> | 66 |
| <i>X10 siren and lamp module functions</i> | 66 |

Control panel

Test the panel by pressing the buttons as described in *Table 28*. *Table 29* provides a list of the arming levels.

Note: An access code is required when arming if the *Secure arming* option is on..

Table 28. Control panel test sequence

| Button | Function tested | Test | Correct result |
|-----------------|--|---|---|
| DOORS + WINDOWS | The panel arms door and window sensors. | Press DOORS + WINDOWS a second time to eliminate the programmed entry delay. | The button will blink when <i>No entry delay</i> is on. |
| MOTIONS | The panel will arm motion sensors. | Press MOTIONS a second time to turn <i>latchkey</i> on. | The button blinks when <i>latchkey</i> is on. |
| DISARM | The panel will prompt you to enter an access code. | Enter the appropriate code. | The panel will disarm doors, windows, and motion sensors. |
| STATUS | | Press STATUS button for panel to display and speak the system status. | |
| POLICE | | Press and hold or press button twice quickly to activate a nonmedical, police, or fire emergency alarm. | |
| FIRE | | Press and hold or press button twice quickly to activate a nonmedical, police, or fire emergency alarm. | |
| EMERGENCY | | Press and hold or press button twice quickly to activate a nonmedical, police, or fire emergency alarm. | |

Note: Forty key presses for invalid codes (ten invalid 4-digit codes, for example) will cause a system access alarm. The alarm locks all touchpads, except keyfobs, for 90 seconds.

Table 29. Arming levels

| Arming level | Description | Indication |
|--------------|--|--|
| 0 | Subdisarms (master access and duress codes only), and bypasses 24-hour intrusion sensors (master access code only). Fire sensors (group 26) cannot be subdisarmed. | One beep indicates the system is subdisarmed. The panel displays and speaks <i>Subdisarmed</i> . The DISARM button blinks. |
| 1 | Disarm the system | One beep indicates the system is disarmed. The panel displays and speaks <i>Disarmed</i> . The DISARM button lights. |
| 2 | Arm doors and windows | Two beeps verify that door/window sensors are armed. The panel displays Doors + Windows and speaks <i>Doors and windows on</i> . The DOORS+WINDOWS button lights. |
| 3 | Arm motion sensors | Three beeps verify that motion sensors are armed. The panel displays Motions and speaks <i>Motions On</i> . The MOTIONS button lights. |
| 4 | Arm doors, windows, and motion sensors | Four beeps verify that door/window and motion sensors are armed. The panel displays Doors + Windows & Motions and speaks <i>Doors and windows on, Motions on</i> . The DOORS+WINDOWS and MOTIONS buttons light. |

Sensor testing

Test the sensors after all programming is completed and whenever a sensor-related problem occurs.

Note: While the sensor test is a valuable installation and service tool, it only tests sensor operation for the current conditions. You should perform a sensor test after any change in environment, equipment, or programming.

Notify the central station you will be performing a test prior to starting the test. To test the sensors, do the following:

1. Place all sensors in their secured (no alarm) state.
2. Go to the *Sensor Test* option under the *System tests* menu, then press **Enter**.

The panel will prompt you to trip each sensor one at a time. You may follow the panel prompting or test the sensors in any order. Use *Table 30* to trip sensors.

Table 30. Sensor tripping instructions

| Sensor | Do this |
|----------------------------|---|
| Door/window | Open the secured door or window. |
| Freeze | Remove the sensor cover. Apply ice in a plastic bag to the sensor (for 10 to 15 minutes). Do not allow the sensor to get wet. |
| Water | Press a wet rag or wet finger over both of the round, gold-plated terminals on the underside of the sensor. |
| Carbon monoxide alarm | Unplug the CO Alarm. Plug it back in, wait 5 seconds, then press the TEST/RESET button until the unit beeps 8 times. |
| Glassbreak | Tap the glass 3 to 4 in. (8 to 10 cm) from the sensor. |
| Motion sensor | Avoid the motion sensor field of view for five minutes, then enter its view. |
| Rate-of-rise heat detector | Rub your hands together until warm, then place one hand on the detector for 30 seconds. |
| Shock | Tap the glass twice, away from the sensor. Wait at least 30 seconds before testing again. |
| Smoke | Press and hold the test button until the system sounds transmission beeps. |
| Personal help button | Press and hold the appropriate help button until the light blinks and the panel sounds for at least seven beeps. |
| Keyfob | Press and hold LOCK and UNLOCK simultaneously for three seconds. |
| Remote handheld touchpad | Press and hold the two EMERGENCY buttons simultaneously for three seconds. |

3. Interior sirens sound transmission beeps, and the display identifies the tripped sensor and the number of RF packets received. Each beep represents one RF packet. Count the number of beeps and refer to *Table 31* for minimum requirements. After the beeps, the panel displays *Sn # Packets=XX Name* (where *XX* equals the number of RF packets and *Name* equals the sensor name). The system will continue to prompt for sensors that have not yet been tested. When all sensors have been tested, the panel will display *Sn test complete Press Status*.

Note: If a sensor does not meet the minimum transmission beep requirements, see *If a sensor fails the sensor test* on page 62.

Table 31. Minimum beeps

| Type of sensor | Number of beeps |
|--|-----------------|
| Wireless intrusion sensors | 7-8 |
| Wireless smoke and heat sensors | 7-8 |
| Wireless environmental/panic buttons | 7-8 |
| Hardwired loops | 1 |
| Emergency buttons (remote handheld touchpads only) | 7-8 |

4. Press **STATUS**. The panel displays *Sensor Test Ok*.
5. If you press **STATUS** and the panel has not heard from all sensors, the panel will display *Sn test fail or aborted*.

If a sensor fails the sensor test

If sirens do not beep when a sensor is tripped, use an RF Sniffer (60-401) test tool to verify that the sensor is transmitting. Constant beeps from the RF Sniffer indicate a runaway (faulty) sensor. Replace the sensor.

If possible, locate sensors within 100 feet (30 meters) of the panel. While a sensor may have a range of 500 feet (152 meters) or more out in the open, the environment at the installation site can have a significant effect on transmitter range. A change in sensor location may help overcome adverse wireless conditions and can be accomplished by the following:

- Reposition the sensor
- Relocate the sensor
- If necessary, replace the sensor

To reposition a sensor:

1. Rotate the sensor and test for improved sensor communication at 90 and 180 degrees from the original position.
2. If poor communication persists, relocate the sensor.

To relocate a sensor:

1. Test the sensor a few inches from the original position.
2. Increase the distance from the original position and retest until an acceptable location is found.
3. Mount the sensor in the new location.
4. If no location is acceptable, replace the sensor.

To replace a sensor:

1. Test a known good sensor at the same location.
2. If the transmission beeps remain below the minimum level, avoid mounting a sensor at that location.
3. If the known-good sensor functions, contact GE Security for repair or replacement of the problem sensor.

Phone communication

Perform a communication test to check the phone communication between the panel and the central station.

To perform a communication test:

1. Go to the *Comm test* option under the *System tests* menu.
2. Press **Enter**. The panel confirms that a communication test has begun. When the communication test is complete, the panel will display *Comm test is OK* within 3 minutes.

If the test is unsuccessful, the **STATUS** button will light and the panel will display *Comm failure* within 10 minutes.

If the panel displays *Comm failure*:

1. Check that the panel is connected to the phone jack.
2. Check the phone number programmed into the panel.
3. Perform the communication test again.
4. If the communication test fails again, check the phone connection wiring.

Offsite phone operation

Test the system from a remote phone by calling the panel and using the commands in *Table 32*.

Note: This feature has not been investigated by UL.

Table 32. Phone commands

| System function | Phone command |
|--|---|
| Disarm | 1 |
| Arm doors/windows | 2 |
| Arm motion sensors | 3 |
| Arm doors/windows with no entry delay | ② - ② |
| Arm motion sensors with latchkey | ③ - ③ |
| Arm doors/windows and motion sensors | ② - ③ |
| Arm doors/windows with no entry delay and motion sensors with latchkey | ② - ② - ③ - ③ |
| Specific light on | * - <unit_num>. |
| Specific light off | # - <unit_num>. |
| All lights on | * _ * |
| All lights off | # - # |
| System status | 0 |
| Audio verification | ⑤ + X (X = a command from Audio Verification Set) |
| Terminate session | 9 |

Central station communication

After performing sensor and communication tests, check that the system is reporting alarms successfully to the central station. *Table 33* provides a list of sensor/user report codes.

To test communication with the central station:

1. Call the central station and tell the operator that you will be testing the system.
2. Arm the system.
3. Test each of the wireless panic buttons and trip at least one sensor of each type (fire, intrusion, etc.) to verify that the appropriate alarms are working correctly.
4. When you finish testing the system, call the central station to verify that the alarms were received.

Table 33. Sensor/user report codes

| Arm or disarm from | Reports as user |
|-----------------------------------|-------------------------|
| Panel or remote handheld touchpad | 0 |
| Keyfob | 1 to 40 (sensor number) |
| Panel aux panic | 41 |
| Panel tamper | 42 |
| Panel police panic | 43 |
| Panel fire panic | 44 |
| Dealer access code | 44 |
| Installer access code | 45 |
| Master code | 46 |
| Access codes 1 to 8 | 47 to 54 |
| Duress code | 55 |

Two-way voice operation

For the central station operator to initiate an audio session:

Note: Panel voice announcements are silenced during AVM sessions. If the operator does not terminate the session correctly, panel announcements may not occur for up to 90 seconds after the operator hangs up.

1. After the panel has completed reporting the alarm, pick up the CS phone and press the * button to start the audio session.
2. Press 1 or 0 to speak, 2 for VOX operation, and 3 or 6 to listen.
3. Press 99 to terminate the session.

Table 34. Audio verification set

| Phone buttons | Function |
|---------------|--|
| 0-1 | Speak |
| 2 | VOX operation |
| 3 or 6 | Listen |
| 7 | Extend session for 90 more seconds |
| 88 | Terminates session with call back (the panel answers on the first ring if called within 5 minutes) |
| 99 | Terminates session with no call back |

Voice event notification

Testing this feature requires two people; one at the alarm site and the other at the location the panel is programmed to call.

1. Contact the central monitoring station (if system is monitored) to inform them you are testing the system and not to dispatch authorities.
2. At the system site, put the system into an alarm condition.
3. At the calling location, pick up the phone after it starts ringing. You should hear the panel voice announce *Press star for alarm*.
4. Press * and the panel voice identifies the alarm. If there is more than one alarm in progress, the user must press * for the panel voice to identify them.

Note: You must terminate the call by pressing #. Otherwise, the panel may not disconnect from the phone line for up to 2 minutes.

5. After all alarms have been identified, the panel announces *Press # to exit*.
6. Press # to terminate the call.

X10 operation

The following sections describe how to test X10 lamp, siren, appliance, and universal module operation.

Manual lamp module control

- **Control panel:** Press the asterisk button (*) and the unit number of the lamp module using the numeric buttons to test individual lamp modules 1 through 8. The panel responds with *Light # on/off*. Press the asterisk button (*) twice to turn on all lamp modules. Press the pound button (#) twice to turn off all lamp modules.
- **Keyfob:** Press the **Light** button repeatedly to turn all lights on and off. The panel responds with *Lights on/off*.
- **Remote handheld touchpad:** Press the **Lights on** button and the unit number of the lamp module using the numeric buttons to test individual lamp modules 1 through 8. The panel responds with *Light # on/off*. Pressing the **Lights on** or **Lights off** button twice turns all the lights on or off.

X10 siren and lamp module functions

All sirens turn off when the system is disarmed or when the siren timeout expires. Siren priority is fire (highest priority), intrusion, and emergency. *Table 35* identifies the light information for each of these siren types.

Table 35. Alarm siren and X10 light information

| | Fire | Intrusion | Emergency |
|--------------------------|------------|-----------|-------------|
| X10 lights | Steady | Flashing | Steady |
| X10 siren | Steady | Steady | Alarm beeps |
| Interior and panel Siren | Temporal 3 | Steady | Fast on/off |

If an alarm of greater priority occurs during an alarm of lower priority, the greater priority alarm sirens sound. Fire alarms sound a temporal 3 pattern (0.5 seconds on, 0.5 seconds off for three beeps then 1.5 seconds off).

Note: The X10 siren must be set to unit #9 to “hear” emergency alarms and status beeps. To hear emergency alarms only, set to unit #10.

Chapter 6 Troubleshooting and support

This chapter provides information to help you troubleshoot problems, perform simple preventive maintenance procedures, and contact technical support in case you need assistance with your GE equipment.

In this chapter:

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| <i>Contacting us</i> | 70 |
| <i>Online resources</i> | 70 |

Troubleshooting

This section provides information to help you diagnose and solve various problems that may arise while configuring or using your GE product and offers technical support contacts in case you need assistance. (See [Contacting us](#) on page 70.)

System status

To clear STATUS (alarm memory), do the following:

From a disarmed state press **STATUS**, listen to the status message, then press **DISARM**.

The panel displays and announces *Siren 1 failure*.

- Turn the *Hardwired Siren Supervision* option off if a hardwired siren or sensor is not connected.
- Check for the correct end-of-line resistor in *HW1 I/O* circuit.

Panel displays and announces *Low battery*.

- Check that panel backup battery is connected.
- Check panel backup battery voltage. If less than 5.4 volts, replace battery and clear system status message.
- Run sensor test.

The panel displays and announces *RF jam*.

- The control panel has detected RF interference.

The panel displays and announces that a sensor is open.

- See [Sensors](#) on page 69.

The panel displays *Set Time* and announces *System time is not set*.

- Set the system time.

Control panel

The panel displays and announces *Invalid*.

- This sensor is already programmed. Delete sensor if not correctly programmed.

Options (programmable by the homeowner)

The panel does not beep.

- Turn on *Piezo Beeps* option.

Latchkey does not function.

- Latchkey time is not set. Set latchkey time.
- Latchkey is not enabled. Enable latchkey by pressing **MOTIONS** twice.
- The phone number is not programmed properly. Reprogram the phone number.
- System time is not set. Set system time.

Sensors

A sensor does not work.

- Make sure the battery is good and installed correctly.
- Check for interference from metal objects. Move or rotate the sensor.
- Move the sensor to a new location.

Door or window is closed, but the panel announces it is open.

- Be certain the arrow on the magnet and the guide line on the transmitter are aligned and within 1/4 inch of each other.
- The sensor tamper switch may be open (cover off).

Motion sensors go off continuously.

- Be sure the sensor is mounted on a solid surface and the viewing field is free from sources of changing temperature.

Motion sensor does not respond to motion.

- Make sure the sensor battery is good and installed correctly. Wait 2 minutes after installing a new battery to test the sensor.
- Adjust the sensor mounting.
- Leave the area for 3 minutes, then retest.
- The environment is too hot or too cold. Outdoor sensors operate between 32 and 120°F (0 and 49°C).
- Dirt or dust may be causing the problem. Wipe the sensor with a clean, damp cloth.

X10 modules

All lamp modules or siren not working.

- Be sure the panel transformer is plugged into an outlet that is not controlled by a switch.
- Check that the panel is powered using the line carrier power transformer.
- Housecode was programmed incorrectly.

One lamp module or siren is not working.

- Unplug nearby equipment that may be causing interference (light dimmer switches, televisions, appliances with older motors).
- Check that the switch on the lamp or appliance is turned on and remains on.
- Make sure the lamp has a working bulb.
- Make sure the lamp or appliance is plugged into the Lamp/Appliance Module, the Module is plugged into the outlet and the outlet is not controlled by a switch.
- Make sure the House and Unit Codes are correct.
- Move the Module to a different outlet that is on the same phase (branch) of the household electrical circuit as the panel.

Time- or sensor-activated light not working.

- Make sure you have programmed the light to be activated by a timer or sensor.
- Make sure the system clock is set.
- Make sure these functions have been enabled. The functions are enabled if the appropriate icon is shown on the display.

Contacting us

For help installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided. If you still have questions, contact us during business hours (Monday through Friday, excluding holidays, between 5 a.m. and 5 p.m. Pacific Time).

Table 36. Technical support

| North America | Latin America |
|--|---|
| T: 888 GE Security (888.437.3287). Toll-free in the US, Puerto Rico, and Canada. 503.885.5700 outside the toll-free area. F: 888.329.0332 (Tualatin tech support) 561.998.6232 (Boca Raton tech support) E: nstechsrv@ge.com (tech support) gesecurity.customerservice@ge.com (customer service) | T: 305.593.4301 F: 305.593.4300 E: InfraSec.TechnicalServicesLatinAmerica@ge.com (técnica) InfraSecCustomerService.LatinAmerica@ge.com (cliente) |
| Europe, Middle East, and Africa | |
| | W: At www.gesecurity.eu , select <i>Customer Support</i> . |

Note: Be ready at the equipment before calling.

Online resources

Here are some useful links on our website www.gesecurity.com:

Online library. From the *Customer Support* menu, select the [Resource Library](#) link. After you register and log on, you may search through our online library for the documentation you need.¹

Training. To view any available online training for GE Security products, select the [Training](#) link. (Online training is not available for all products.)

Warranty and terms information. From the *Customer Support* menu, select [Return and Warranty Policy Statement](#) or [Terms and Conditions Policy Statement](#).

Customer service and technical support. From the *Customer Support* menu, select [Customer Service](#) or [Technical & Application](#). Select the appropriate product category for the contact information or use the dropdown menu to select a location outside the US.

1. Many GE documents are provided as PDFs (portable document format). To read these documents, you will need Adobe Reader, which can be downloaded free from Adobe's website at www.adobe.com.

Appendix A Specifications and tables

This appendix provides a couple lists of sensor names and a quick reference chart for operating the Simon XT system with various peripheral devices.

In this appendix:

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| <i>Sensor names</i> | 72 |
| <i>Simon XT system quick reference</i> | 74 |

Specifications

Table 37. Simon XT specifications

| Requirement | Description |
|-----------------------------|--|
| Power | 9 VAC, 60 Hz, 3.34 A transformer |
| | Rechargeable battery: 6.0 VDC, 1.2 Ah lead-acid. The battery will last 24 hours with no AC and specified standby load of 250 mA. Maximum battery charging current is 45 mA. With loss of AC panel will continue to operate normally to a minimum of 5.1 VDC. |
| Radio frequency | 319.5 MHz |
| Storage temperature range | -29 to 140°F (-34 to 60°C) |
| Operating temperature range | 32 to 120°F (0 to 49°C) |
| Maximum humidity | 85% relative humidity, noncondensing |
| Auxiliary power | Unregulated 5.3 to 12.3 VDC, with a maximum of 250 mA |
| Size (L x W x D) | 7 x 5.75 x 2.125 in. (178 x 146 x 54 mm) |

Sensor names

Table 38 below and Table 39 on page 73 provide alphabetical and numerically sequential lists of the sensor name segments.

































Table 38. Alphabetical list of sensor name segments

| # | Phrase | # | Phrase | # | Phrase |
|-----|---------------------|-----|-----------------------|-----|-----------------|
| 039 | Attic | 003 | Front window | 041 | Module |
| 004 | Back door | 028 | Garage | 024 | Office |
| 005 | Back window | 006 | Garage door | 025 | Office window |
| 030 | Basement | 007 | Garage window | 023 | Patio door |
| 031 | Basement window | 012 | Guest room | 042 | Phone module |
| 010 | Bedroom | 013 | Guest room window | 021 | Porch |
| 011 | Bedroom window | 036 | Hallway | 022 | Porch window |
| 014 | Child's room | 000 | Keyfob (keychain) | 029 | Special chime |
| 015 | Child's room window | 019 | Kitchen | 040 | System panic |
| 038 | Closet | 020 | Kitchen window | 001 | Touchpad |
| 026 | Den | 017 | Living room | 032 | Upstairs |
| 027 | Den window | 018 | Living room window | 033 | Upstairs window |
| 034 | Downstairs | 008 | Master bedroom | 016 | Utility room |
| 035 | Downstairs window | 009 | Master bedroom window | | |
| 002 | Front door | 037 | Medicine cabinet | | |

Table 39. Sensor name segments by index number (in scrolling order)

| # | Phrase | # | Phrase | # | Phrase |
|-----|-----------------------|-----|--------|-----|---------|
| 000 | Keyfob (keychain) | 043 | A | 086 | & |
| 001 | Touchpad | 044 | B | 087 | * |
| 002 | Front door | 045 | C | 088 | (|
| 003 | Front window | 046 | D | 089 |) |
| 004 | Back door | 047 | E | 090 | " |
| 005 | Back window | 048 | F | 091 | - |
| 006 | Garage door | 049 | G | 092 | _ |
| 007 | Garage window | 050 | H | 093 | + |
| 008 | Master bedroom | 051 | I | 094 | = |
| 009 | Master bedroom window | 052 | J | 095 | { |
| 010 | Bedroom | 053 | K | 096 | } |
| 011 | Bedroom window | 054 | L | 097 | |
| 012 | Guest room | 055 | M | 098 | . |
| 013 | Guest room window | 056 | N | 099 | < |
| 014 | Child's room | 057 | O | 100 | > |
| 015 | Child's room window | 058 | P | 101 | ? |
| 016 | Utility room | 059 | Q | 102 | [space] |
| 017 | Living room | 060 | R | 103 | a |
| 018 | Living room window | 061 | S | 104 | b |
| 019 | Kitchen | 062 | T | 105 | c |
| 020 | Kitchen window | 063 | U | 106 | d |
| 021 | Porch | 064 | V | 107 | e |
| 022 | Porch window | 065 | W | 108 | f |
| 023 | Patio door | 066 | X | 109 | g |
| 024 | Office | 067 | Y | 110 | h |
| 025 | Office window | 068 | Z | 111 | i |
| 026 | Den | 069 | 0 | 112 | j |
| 027 | Den window | 070 | 1 | 113 | k |
| 028 | Garage | 071 | 2 | 114 | l |
| 029 | Special chime | 072 | 3 | 115 | m |
| 030 | Basement | 073 | 4 | 116 | n |
| 031 | Basement window | 074 | 5 | 117 | o |
| 032 | Upstairs | 075 | 6 | 118 | p |
| 033 | Upstairs window | 076 | 7 | 119 | q |
| 034 | Downstairs | 077 | 8 | 120 | r |
| 035 | Downstairs window | 078 | 9 | 121 | s |
| 036 | Hallway | 079 | / | 122 | t |
| 037 | Medicine Cabinet | 080 | ' | 123 | u |
| 038 | Closet | 081 | ! | 124 | v |
| 039 | Attic | 082 | @ | 125 | w |
| 040 | System panic | 083 | # | 126 | x |
| 041 | Module | 084 | \$ | 127 | y |
| 042 | Phone module | 085 | % | 128 | z |

Table 40. Simon XT system quick reference ^a

| | Control panel | Remote touchpad | Keyfob | Telephone |
|--------------------------------------|--|---|---|-----------------|
| Level 0: Subdisarm the system | Enter the master code while the system is disarmed. | | | 1 |
| Level 1: Disarm the system | DISARM , <access_code>. | Disarm  |  | 1 |
| Level 2: Arm doors and windows | DOORS+WINDOWS , <access_code> (if required). | ARM Doors & Windows  |  | 2 |
| Level 3: Arm motion sensors | MOTIONS , <access_code> (if required). | ARM Motion Sensors  | | ③ |
| Level 4: Arm doors, windows, motions | DOORS+WINDOWS , <access_code> (if required), MOTIONS . | ARM Doors & Windows  - ARM Motion Sensors  |  -  | ② - ③ |
| Activate no delay | DOORS+WINDOWS , DOORS+WINDOWS . Appends <i>-No Delay</i> to arming level text. | ARM Doors & Windows  - ARM Doors & Windows  |  | ② - ② |
| Activate latchkey | MOTIONS , <access_code> (if required), MOTIONS . | ARM Motion Sensors  - ARM Motion Sensors  |  -  -  | ③ - ③ |
| Activate panic alarm | Press Fire , Emergency , or Police twice within 3 sec. or hold it for 2 sec. |  +  Hold both for 3 sec. |  +  Hold both for 3 sec. | |
| Check system status | STATUS | SYSTEM STATUS  | | 0 |
| Toggle chime or special chime mode | Scroll to <i>Chime</i> or <i>Special Chime</i> , Enter , toggle <i>On/Off</i> , Enter . | | | |
| Bypass a sensor | BYPASS , <master_code>, scroll to the sensor, BYPASS . | | | |
| Time-activated lights on/off | Scroll to <i>Light Schedules</i> , Enter , toggle <i>On/Off</i> , Enter . | | | |
| Sensor-activated lights on/off | Scroll to <i>Sensor Lights</i> , Enter , toggle <i>On/Off</i> , Enter . | | | |
| Specific light on | Press *, <unit_num>. |  - <unit_num>. |  | * - <unit_num>. |
| Specific light off | Press #, <unit_num>. |  - <unit_num>. |  | # - <unit_num>. |
| All lights on | To turn on all lights controlled by lamp modules, press * twice. The panel displays <i>All Lights On</i> . |  -  |  | * - * |
| All lights off | To turn off all lights controlled by lamp modules, press # twice. The panel displays <i>All Lights Off</i> . |  -  |  | # - # |

a. A minus sign (-) between buttons means **press one then the next**; a plus sign (+) between buttons means **press both simultaneously**.

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