Advent Home Navigator, Commercial Burglary, & Commercial Fire

The Advent® family of products is an advanced residential and commercial burglary system. The commercial fire system is the first wireless commercial fire system. All three systems are designed to meet your market needs.

From advanced home security and home automation to large commercial burglary and fire applications, Advent is where power meets compliance for a new standard in electronic monitoring.

Advent Home Navigator

Advent Home Navigator is an integrated security and control system for the most demanding residential applications. The system accepts ITI wireless sensors and standard hardwire sensors, and controls lights and appliances for comfort and convenience.

Extensive if/then logic and scheduling capabilities allow Home Navigator to be specifically tailored to the homeowners' lifestyle. The scheduling function creates specific lighting scenarios and arming levels for specially created modes such as "Vacation" or "Workday."

A powerful home control system by itself, the Home Navigator 2-way serial automation interface module makes it interoperable with Panja PHAST home automation systems. Voice prompts and built-in help reassure the end-user of proper system operation and make Home Navigator easy to set up and change.

Standard Features

- 4 partitions
- 132 zones
- 100 user codes
- Up to 256 X-10 devices
- Up to 32 event schedules for lighting and arming
- Latchkey paging
- Network Buddy system
- Over 600-word vocabulary for voice and display
- Relay output programming
- Seamless integration with Panja PHAST home automation system

Advent Commercial Burglary

Advent Commercial Burglary is unmatched for compliance, expendability, and power. Advent Commercial offers wireless for convenience in retrofit applications and hardwire zones for new commercial/industrial installations. SnapCard™ and SuperBus® 2000 modules offer easy, economical expansion to meet any need — now or in the future.

Expansion SnapCards plug directly into the panel to provide flexibility for additional inputs, outputs, smoke loops, and combinations.

SuperBus 2000 Modules make it easy to include a dual phone line, printer or automation output, additional auxiliary power, addressable smoke loops and more.

Learn Mode® technology simplifies installation. Predefined zone types ease the zone programming. Voice and built-in prompts simplify end-user operation.

Two-way Telephone Control with built-in help offers remote control of the security system.

Network Buddy™ links up to five Advent Commercial panels for communication redundancy. If the land line fails, zone information is transferred to another panel in the network, then to the central monitoring station via wireless communication.

Standard Features

- 250 wireless or hardwire zones.
- 250 user codes with multiple arming levels.
- 8 partitions.
- 9 authority levels.
- Supervised voice siren, interior siren, relay outputs (NAC).
- 12/24-volt power.
- Attack-proof metal enclosure.
- 2,048-event history buffer.
- Contact ID to a central station.
- Up to 16 different alphanumeric pagers.
- 24-digit phone numbers.
- Automatic phone test.
- Programmable dialer delay.
- Designation of phone and priority.
- Open/close reports by exception and normal open/close.
- Built-in 25-watt voice driver.

Advent Commercial Fire

Advent Commercial Fire is the most advanced fire control panel in the industry. Designed for compliance today and well into the future, Advent Fire is an approved fire alarm signaling system with a megabyte of RAM, and 3.5 megabytes of flash memory for all the programming flexibility you'll need. The panel operating system is quick and easy to upgrade, so you can maintain compliance without replacing the panel.

The modular design and auto-configuring expansion modules of Advent Fire provide only the number of inputs and outputs required, so you don't have to buy more panel than you need.

Sophisticated software makes Advent Fire the flexible easy-to use choice in fire alarm signaling panels. The design-and-build capabilities take advantage of built-in features such as voice evacuation and agent release to save thousands of dollars in additional equipment expense.

Advent Fire has the power to cover high-rise buildings of any size with just one panel, decreasing installation and maintenance costs while providing the Authority Having Jurisdiction (AHJ) with a single-panel solution.

STANDARD FEATURES

- 250 zones.
- Conventional and analog addressable devices.
- Two 24-volt power supply expansion options: SnapCard and SuperBus 2000.
- Built-in voice evaluation system in four languages.
- Wireless PIV and waterflows.
- Fire Extinguishing Agent Release System.
- Multiple reporting methods.
- Dual phone lines.
- Alphanumeric paging.
- Supervised printer.
- Network Buddy.
- Reporting format.
- Contact ID.

Understanding Zones

The Advent system can learn a maximum of 250 zones (Home Navigator 132 zones), with each zone belonging to a specific partition. Four additional zones are used for buddy communication only. A zone is an individually identifiable point of input to the system, such as an RF sensor or touchpad, a hardwire input, or another alarm system. Bus devices such as alphanumeric touchpads or bus transceivers are not zones. A repeater is learned as a zone, but also passes along information from other zones. Outputs such as relay outputs, siren outputs, or X-10 devices are not zones. Unlike previous ITI panels, the Advent system learns all RF touchpads as zones. Any zone can be either an RF zone or a hardwire zone. Hardwire and Wireless zones can be learned as *normally open* or *normally closed*.

Zone Trip and Zone Restoral

The purpose of a zone is to monitor a specific point for certain conditions. When these conditions are met, the zone will communicate to the panel by sending an RF transmission or change-of-state for a hardwire loop. This action is called a *zone trip*. For example, when a door protected by an RF door/window sensor is opened, the sensor sends an RF transmission indicating that the door has been opened. Some sensors also send a transmission when the normal condition is restored, e.g. the door is closed again—this is called a *zone restoral*. The control panel only responds to zone restorals when the proper zone type is used.

Supervised Zone

A zone is *supervised* if the panel periodically checks for the proper operation of that zone, by either receiving supervisory transmissions from an RF sensor or checking for the integrity of a hardwire loop. Some zones as wireless panics may be unsupervised (able to be taken off premise) choose the proper zone type for unsupervised zones.

Zone Type

A *zone type* refers to the action the zone takes when activated. Zone types are assigned to each specific zone, types are preset and cannot be altered.

Arming Levels

A zone is *active* or *armed* in a certain arming levels if a zone trip causes an alarm. If the panel is set to ignore trips from a certain zone, then that zone is *bypassed*. Zones assigned to specific types cannot be bypassed. Zones can also be declared as *critical* zones, so that they require special authority in order to be bypassed. In addition to zone trips, the panel will ignore all keypresses from a bypassed zone. This is to ensure that a lost keychain touchpad or handheld touchpad can be disabled by the user and cannot be used to arm or disarm the system.

Programmable Zones

Zones must be learned in program mode using an alphanumeric touchpad. A partition, type, and zone number must be supplied and the zone must then be tripped for the panel to learn the sensor ID. During this process, the panel furnishes the next available sensor number.

Arming and Codes

Levels and Definitions

The Advent system can be armed to several levels, providing various degrees of protection. Each partition can be armed to any arming level independently.

LEVEL 1: OFF

The partition is disarmed. Only 24-hour sensors such as smoke detectors or panic sensors cause an alarm in the OFF level.

LEVEL 2: HOME/PERIMETER

Program Item # 17076

The user is on-site and only requires perimeter protection. In addition to 24-hour sensors, perimeter sensors such as those protecting exterior doors and windows cause an alarm in the HOME/PERIMETER level.

Commercial

Perimeter

Full

Residential

Home

Away

LEVEL 3: AWAY/FULL

The user is away and requires complete protection. 24-hour sensors, perimeter sensors, and interior sensors such as PIRs all cause an alarm in the AWAY/FULL level.

LEVEL 4: NIGHT

The user is on-site, and perimeter and 24-hour sensors are active. However, the user is not expected to move around the house, so that interior sensors except for those in the night groups are also active.

LEVEL 5: SILENT

This level is the same as Away/Full, however police alarms are silent.

Modifiers

Whenever a partition is armed to a closed level via the menu, the panel annunciates the new arming level. As soon as the annunciation starts, a post-arming period of about four seconds starts, during which an arming modifier may be entered. Whenever a modifier is entered, the four-second period restarts. The exit delay begins at the start of the modifier period. At the end of the modifier period, the panel either annunciates “OK To Exit” or starts exit beeps, depending on which exit beep option is set.

LATCHKEY

The Latchkey modifier activates the latchkey feature. If the latchkey time is reached while the latchkey feature is active, a latchkey alarm is generated.

NO DELAY

The No Delay modifier disables the entry delay for the current arming period.

Code Types

Program Item # 17107
Dealer Code
Default: None

DEALER

The dealer password gives extra protection to some programming fields; for example, phone numbers and account numbers.

When certain items are programmed in program mode, the installer is prompted for the dealer password before being allowed to access or change the information. The dealer password is always six digits long.

INSTALLER

Installers can enter program mode (if partitions are disarmed), gain remote access, conduct phone tests, conduct installer zone tests, initiate a downloader call, review status and event history, control lights and devices, change installer code, change arming level within one hour of exiting program mode.

Installers cannot change schedules or access codes (except own), bypass zones, extend arming levels, change arming levels except as stated above, and trigger a duress alarm. Installer code defaults to 0123.

Program Item # 17108
Downloader Code
Default: 12345

DOWNLOADER

The downloader access code must match the code programmed in the downloader program. This feature provides extra protection from unauthorized people gaining access to accounts via the downloader.

PRIMARY

The primary code type is setup for the primary user for that partition. There is exactly one primary code per partition. This code is permanent and cannot be restricted. The primary user can do everything except enter program mode, do an installer zone test, initiate a downloader call, and trigger a duress alarm.

Access Code Attributes

Each access code has a variety of attributes associated with it, including a unique user number, a value (with the number of digits defined by the access code length), a specific partition (except for installer code), an authority level, and certain code usage limitations.

User Number

The user number associated with an access code is its index into the access code table. There are nine pre-defined codes with the following user numbers and defaults:

User Number Codes and Defaults

User #	Authority Level	Partition	Default Value
0	Installer	All	0123
1	Primary	1	1234
2	Primary	2	2345
3	Primary	3	3456
4	Primary	4	4567
5	Primary	5	5678
6	Primary	6	6789
7	Primary	7	7890
8	Primary	8	8901

Whenever a new access code is added in program mode, the panel always searches for the lowest available user number. Thus, the first non-installer, non-primary access code added will be user 9, because users 0 to 8 can never be deleted.

When certain user-initiated events are reported, printed, or stored in the event log, the user number is used to identify the user.

The access code length defaults to 4 digits and is unchangeable by the user. The code must be programmed in Program Mode or using downloader. All access codes have the same length—when the access code length is changed, the existing access codes are altered.

Program Item # 50013
Access Code Length
Default: 4

When the access code length is increased, codes are padded with leading zeroes. For example, when the access code length is changed from 4 to 6 digits, a code of 2345 changes to 002345.

When the access code length is decreased, the beginning of the code is truncated. For example, when the access code length is changed from 6 to 4 digits, a code of 946017 changes to 6017. Note that code truncation may lead to duplicate codes. If this happens, the code with the lowest user number is effective. In general, decreasing the length of access codes in Program Mode should be avoided, especially when many codes are defined.

Access Code Partition

The installer code (user 0) can be used in all partitions. All other access codes belong to the partition in which they were added and cannot be used to control other partitions. The partition of an access code cannot be changed. However, the same access code may be programmed in more than one partition, with each instance of the code representing a unique user number. The panel does not allow the user to add a duplicate code within a partition or a user code which is equal to the installer code.

Global access codes cannot be used to control more than one partition. Also, every touchpad belongs to a partition and can only be used to control that partition. Touchpads cannot be redirected to control or get information from another partition or multiple partitions.

Authority Level

Each access code has an authority level which determines the authority that the user has to execute certain actions. There are four pre-defined authorities and eight configurable authorities:

Installer Authority	Enables entry to program mode (if partitions are disarmed), gain remote access, do phone test, do installer zone test, initiate a downloader call, review status and event history, control lights and devices, change installer code, change arming level within one hour of exiting program mode. Cannot change schedules or access codes (except own), bypass zones, extend arming levels, change arming levels except as stated above, and trigger a duress alarm. Installer code defaults to 0123.
Primary Authority	Primary user for that partition. There is exactly one primary code per partition. This code is permanent and cannot be restricted. Can do everything except enter program mode, do installer zone test, initiate a downloader call, and trigger a duress alarm. Primary codes default to 1234, 2345, ..., 8901.
Full Authority	Allows everything the primary user can do, except add/delete/change/list codes of equal or higher authority (except own).
Duress Authority	Same as full authority, except a duress code additionally triggers a duress alarm whenever it is used.
Authority 1 to 8	Configurable authorities. In general, authority 1 should be the highest of the configurable authorities and authority 8 the lowest.

CODE LIMITS

All non-installer, non-primary codes may be restricted in three ways:

Day Limit	Limits access code to N days, where N = 1 to 255
Use Limit	Limits access code to N uses, where N = 1 to 255
Schedules	Code can be tied to schedules. When any schedule is on, code is valid. When all schedules are off, code is invalid.

DAY LIMITS

A code can be programmed to be valid for a certain number of days (range 1 to 255). Once a day limit exists, the code cannot be made permanent again or switched to a use limit, but must be deleted or allowed to expire. When the code has existed for the programmed number of days, it is automatically deleted.

USE LIMITS

A code can be programmed to be valid for a certain number of uses (range 1 to 255). Once a use limit exists, the code cannot be made permanent again or switched to a day limit, but must be deleted or allowed to expire. When the code has been used the programmed number of times, it is automatically deleted.

ASSOCIATION WITH SCHEDULES

Access codes can be associated with time schedules, such that the code is valid only when at least one of its associated schedules is on. When the code is valid, it can be used according to its normal authority. However, when the code is invalid, the panel will ignore it completely as if it did not exist.

In the code schedule menu, as many schedules as desired may be associated with or disassociated from the code, but to activate the changes made, 0# must be entered when prompted for a schedule.

USER TEXT

Each access code can have up to 20 characters of user text assigned to it. This text is used when listing codes and when identifying a user during event printing. User text uses the same display tokens as static display text, except that special tokens, such as time, date, and flashing * are not allowed.

Outputs

The Advent system can provide outputs either **open collector** or **relay** to control specific devices. Each output type is either fixed, programmable, or menu controlled and then assigned to a physical location.

Types

Fixed

Each partition has 3 fixed outputs; interior siren, exterior siren, and strobe. After selecting the fixed output configuration choose the physical output.

Programmable

Programmable outputs allow you to specify how outputs react to certain situations, by providing the possible conditions, the desired response, and the physical location.

Menu Controlled

Menu outputs are outputs which can be controlled by the user in the Light or Device Menu. Each menu output is either pre-defined to control an X-10 module or is programmed to correspond to a programmable output.

Physical Locations

Physical outputs are the locations where output devices such as sirens or lights are attached. These outputs are what the panel controls at its lowest, most basic, level. The panel turns these outputs on and off in response to transitions in the programmable outputs which control the physical outputs. Examples include,

- Hardwire Output Modules (HOM)
- 4 Zone Input / 2 Output SnapCard
- 4 Output SnapCard
- Hardwire Output Module
- On-Board I/Os

SuperBus 2000

SuperBus 2000 is an advanced communication technology used in all Advent control panels and peripherals. The enhanced technology is more reliable and flexible than normal SuperBus communication.

By enhancing the Superbus® standard, ITI is now able to offer a number of new features on SuperBus 2000 compliant panels and peripherals. These features have been added to reduce installation costs, enable security panels to support a wide variety of devices, and ultimately allow ITI to offer an even wider variety of peripheral expansion devices to the security market

SB 2000 Features

AUTOMATIC ADDRESSING

The bus address of all Superbus® 2000 devices is automatically configured when connected to a Superbus® 2000 compliant security panel. This eliminates the need for the installation technician to set dipswitches on the device, or enter the bus address into the touchpad. It also eliminates bus address conflicts, which historically occurr when connecting a new component.

Each Superbus® 2000 device can be labled with a description and a physical location. The **automatic addressing** feature reduces installation time, eliminates costly installation errors, and greatly reduces recovery time.

SuperBus 2000 Devices

SuperBus Touchpads and Modules (62 maximum)

Part Number	Part Description	Minimum mA Draw	Maximum mA Draw
60-768	SuperBus 2000 Dual Phone Line Module	30 mA	60 mA
60-783, 60-783-01	SuperBus 2000 Printer SuperBus 2000 PHAST Module	60 mA	60 mA
60-803-1	SuperBus 2000 2-Line, LCD Alphanumeric Touchpad	15 mA	120 mA
60-804-1	SuperBus 2000 2-Line, VFD Alphanumeric Touchpad	15 mA	120 mA
60-810-4	SuperBus 2000 2-Line, VFD Alphanumeric Fire Touchpad	15 mA	120 mA
60-821-95	SuperBus 2000 RF Commercial Transceiver Module	50 mA	50 mA
60-774	Hardwire Input Module (HIM)	60 mA	60 mA
60-770	Hardwire Output Module (HOM)	180 mA	180 mA

Advent Home Navigator Installation

Control Panel Location

Consider the following when locating the control panel:

Type of Installation

hardwire, wireless, hybrid, home automation, and commercial.

Location of AC and Phone Lines

Locate the panel where ac and phone lines are easily accessible.

Wireless Devices

It is critical to locate the RF receiver so it can hear from all the wireless devices in the system. This is accomplished by using the zone-test feature during installation.

Home Automation

When using a home automation system, ensure the panel is located where information lines can easily be run to automation devices.

Control Panel Wiring Connections

Terminal	Name	Use for Connection
1	24 VAC	24 VAC, 100 VA power transformer connection.
2	24 VAC	24 VAC, 100 VA power transformer connection.
3	GND	Common ground connection for sirens, general purpose outputs 1-6, etc.
4	+12 VDC	Interior bell (+), and misc. DC power supply. 12 VDC @ 5.0A maximum load (includes SuperBus 1 and 2, and exterior siren). Current limited.
5	INT BELL	Negative (-) side of bell connection. 12 VDC @200 mA (sink) maximum. Positive (+) side to +12 VDC terminal 4. Connect multiple interior bells in parallel. **Note:** For supplementary use only.
6	EXT SIREN RTN	Negative (-) external siren drive return connection. **Note:** For supplementary use only.
7	EXT SIREN OUT	Positive (+) external siren drive output connection. 30 VDC @2.5A maximum load. **Note:** For supplementary use only.
8	EXT SIREN IN	Positive (+) external siren drive input connection. 30 VDC @2.5A or 70 VAC @ 500 mA maximum. Normally connected to +12 VDC terminal 4 or other siren voltage source. **Note:** For supplementary use only.
9	VOICE SIREN	One side of voice siren (speaker) connection. Other side to VOICE SIREN terminal 10. **Note:** Four ohm maximum load between terminals 9 and 10.
10	VOICE SIREN	Other side of voice siren (speaker) connection
11	ZONE COM	Common return connection for general purpose inputs 1-7, sensors, etc.
12	GPI/O 1	General purpose hardwire input/output 1 GPI/Os 1-6 can be programmed for use as a hardwire contact input (2.0K ohm EOL resistor) or a control relay driver output (200 mA sink at 12 VDC maximum).
13	GPI/O 2	General purpose hardwire input/output 2.
14	GPI/O 3	General purpose hardwire input/output 3.
15	GPI/O 4	General purpose hardwire input/output 4.
16	GPI/O 5	General purpose hardwire input/output 5.
17	GPI/O 6	General purpose hardwire input/output 6.
18	Input 7	Hardwire input 7.
19	Unused	
20	GND	Common ground connection.
21	+ SMOKE (+12V DC SW)	Positive (+) side of 2-wire, 12 VDC smoke loop. (Smoke and Rate-of-Rise heat sensor DC power supply.) Switched 12 VDC @ 94 mA maximum (in alarm).
22	- SMOKE	Negative (-) side of 2-wire, 12 VDC smoke loop.
Backup Battery 1	+ RED	Positive (+) side of panel backup battery one. 12V @ 1.6A source maximum. Source current limited.
	- BLACK	Negative (-) side of panel backup battery one.
Backup Battery 2	+ RED	Positive (+) side of panel backup battery two. Source current limited.
	- BLACK	Negative (-) side of panel backup battery two.

Power Supply Installation

Class I 24 VAC 100VA Transformer

To determine the proper transformer and backup batteries for your system, you must determine your power usage.

Primary Power

The primary power supply is a 24 VAC 100VA Class I or Class II transformer. The Class II option has an outlet plug for 120VAC 60Hz and the Class I option has flying leads.

The transformers are available as standard transformers or line carrier, which is required for any line carrier devices as X-10 and wireless sirens.

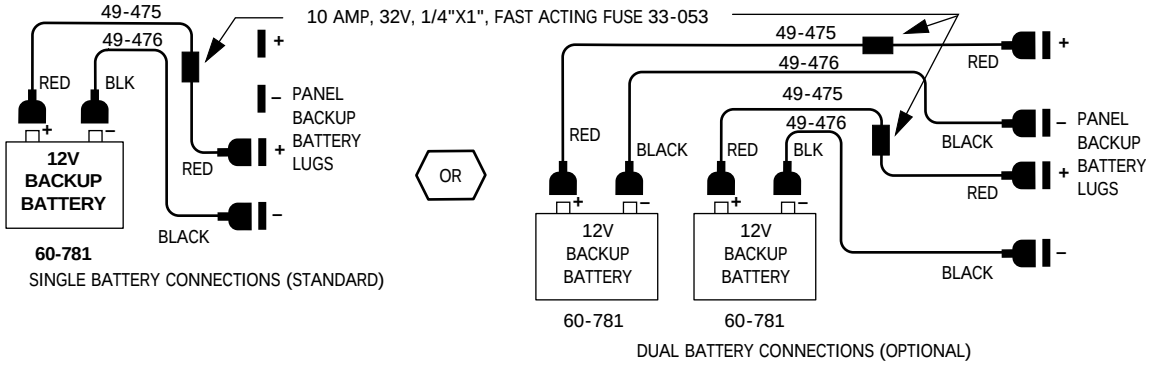
Primary power supplies provide 12VDC at 5 amps.

Secondary Power Supply

The secondary supply must have the capacity to operate the system in a non-alarm mode for 24 hours and then at the end of 24 hours operate all notification appliances for 5 minutes.

A formula must be used to ensure the proper battery size is used in the installation. First the total current draw of the control panel and all associated powered devices must be calculated, multiple this by the required standby time to figure out the required battery capacity.

The Home Navigator Panel has the connections on-board to support up to two back-up batteries.



Transformers and Batteries

Part No.	Description
60-823	24 VAC, 100 VA Class II Transformer (Line Carrier)
60-830	24 VAC, 100 VA Class I Transformer (Line Carrier)
60-778	24 VAC, 50 VA Class II Transformer
60-829	24 VAC, 100 VA, 220 VAC, 50 Hz Class I Transformer
60-781	12 VDC, 17.3 AH Battery
60-680	12 VDC, 7.0 AH Battery
49-475	Fused battery cable assembly Single Assembly
49-476	Fused battery cable assembly Double Assembly
60-779	24 VAC 50 VA (Line Carrier)

Selecting Proper Power Sources

Part No.	Description	Qty.	Max. Current Draw*	Idle Current Draw
Hardwire Sensors/Detectors				
13-082	PIR Motion Detector		10 mA	10 mA
	2-Wire Smoke/Heat Sensor		N/A	120 uA
60-798	Power Supervision Module (for 60-645)		20 mA	20 mA
	Fire Pull Station		N/A	N/A
Hardwire Sirens/Speaker				
13-046	Hardwire Exterior Siren		145 mA	N/A
13-060	8 Ohm, 15W Speaker		N/A	N/A
Panel Expansion Cards (2 maximum)				
60-756	4Z Input/2 Output Expansion SnapCard		185 mA	Note 1
60-757	8Z Input Expansion SnapCard		230 mA	Note 2
60-758	4 Relay Output Expansion SnapCard		130 mA	Note 3
SuperBus Touchpads and Modules (62 maximum)				
60-768	SuperBus 2000 Dual Phone Line Module		60 mA	60 mA
60-783, 60-854	SuperBus 2000 Printer or Automation Module. Note 4		100 mA	100 mA
60-803-1	SuperBus 2000 2-Line, LCD Alphanumeric Touchpad		120 mA	100 mA
60-804-1	SuperBus 2000 2-Line, VFD Alphanumeric Touchpad		120 mA	100 mA
60-810-4	SuperBus 2000 2-Line, VFD Alphanumeric Fire Touchpad		120 mA	100 mA
60-821-95, 60-856-95	SuperBus 2000 RF Commercial Transceiver Module. Note 4. Note: Metal enclosure required for commercial applications.		50 mA	50 mA
60-774	Hardwire Input Module (HIM)		60 mA	60 mA
60-770	Hardwire Output Module (HOM)		180 mA	180 mA
Totals*				

Notes:

* Total maximum DC power consumption from panel is 5.0A. (Including +12V Out, smoke loop, voice siren [1.3A max. into 8 ohm, 2.2A max. into 4 ohm], SnapCards, SuperBus 1 and 2 [650 mA max. each], and internal battery charger [1.6A max.].

1. 10 mA + (2.5 mA per zone used) + 7 mA per smoke loop used) + 34 mA per output relay energized).
2. 10 mA + (2.5 mA per zone used) + 7 mA per smoke loop used).
3. 6 mA + (34 mA per relay energized).

Bus Module Installation

Bus Module ID

"Northwest Hardwire Input Module"

The Home Navigator Control Panel has the capability of controlling up to 62 Bus Modules (31 per Superbus header).

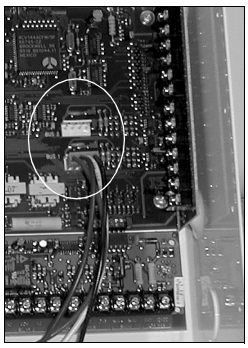
Bus Module Identification

Each bus module has a unique identification that is recognized by the control panel. This SuperBus 2000 feature allows you to enter custom descriptions, including physical location.

The panel has two separate Superbus headers on-board labeled Bus 1 and Bus 2. Each header can handle up to 31 bus devices.

Bus Module Devices

The following Bus devices can be connected to the Home Navigator Control Panel through any one of the two SuperBus headers.



SuperBus Headers Location

- RF Transceiver (60-821-95)
- SuperBus 2000 Printer Module (60-783)
- SuperBus 2000 Automation Module w/Phast (60-783-01)
- 8-Zone Input (60-757)
- 4-Relay Output (60-770)
- SuperBus 2000 VFD Alphanumeric Touchpad (60-804-01)
- SuperBus 2000 LCD Alphanumeric Touchpad (60-803-01)
- Panel SuperBus Wiring Harness (49-462)
- SuperBus 2000 Dual Phone Line Module (60-768)

WIRING BUS DEVICES

All Bus devices wire to the same termination point and are color coded for ease of installation.

Red – 12VDC, **Black** – Ground, **Green** – Bus A, **White** – Bus B

All Bus devices can be homerun to the panel and wire tied to the harness, or Bus devices can be wired in parallel from one device to the next not to exceed overall wire length.

You must use the proper wire size for the length of your wire run. See is used by using the following table:

Maximum Wire Length Recommendations* (Feet)

Total Device Current Draw (A)	22 Gauge (AWG)	18 Gauge (AWG)	16 Gauge (AWG)	14 Gauge (AWG)
0.1	308	781	1,243	1,968
0.2	154	391	622	984
0.3	103	261	415	657
0.4	77	196	311	491
0.5	62	157	250	396
0.6	52	131	208	329
0.7	44	112	178	282
0.8	39	98	156	246
0.9	35	87	139	219
1.0	31	78	125	197
1.1	28	71	113	179
1.2	27	65	104	165
1.3	24	60	96	152
1.4	22	56	89	141
1.5	21	52	83	132
1.6	20	49	78	123
1.7	18	46	73	116
1.8	17	44	69	108
1.9	16	41	66	104
2.0	15	39	63	99
2.1	14.5	37	60	94
2.2	14	36	57	90
2.3	13.5	34	54	86
2.4	13	33	52	82
2.5	12.5	32	50	79
2.6	12	30	48	76
2.7	11.5	29	46	73
2.8	11	28	45	70
2.9	10.5	27	43	68
3.0	10	26	42	66

RF Transceiver Module Installation (60-821-95) Plastic Case, (60-856-95) Metal Case

Need photo for 60-821-95

Up to five RF Transceiver Modules can be used per system.

The RF Transceiver is the module which receives and transmits all the wireless signals throughout the installation site, and through the data bus transfers them to the control panel. The module can be located up to 4000 feet from the main control panel.

Locating the RF Transceiver

When determining a location for an RF Transceiver, the overall environment of the installation site must be considered. Wireless devices must have a good transmission path from the device location to the RF Transceiver. Locate the RF Transceiver in a location free of metal objects such as duct work and large machinery.

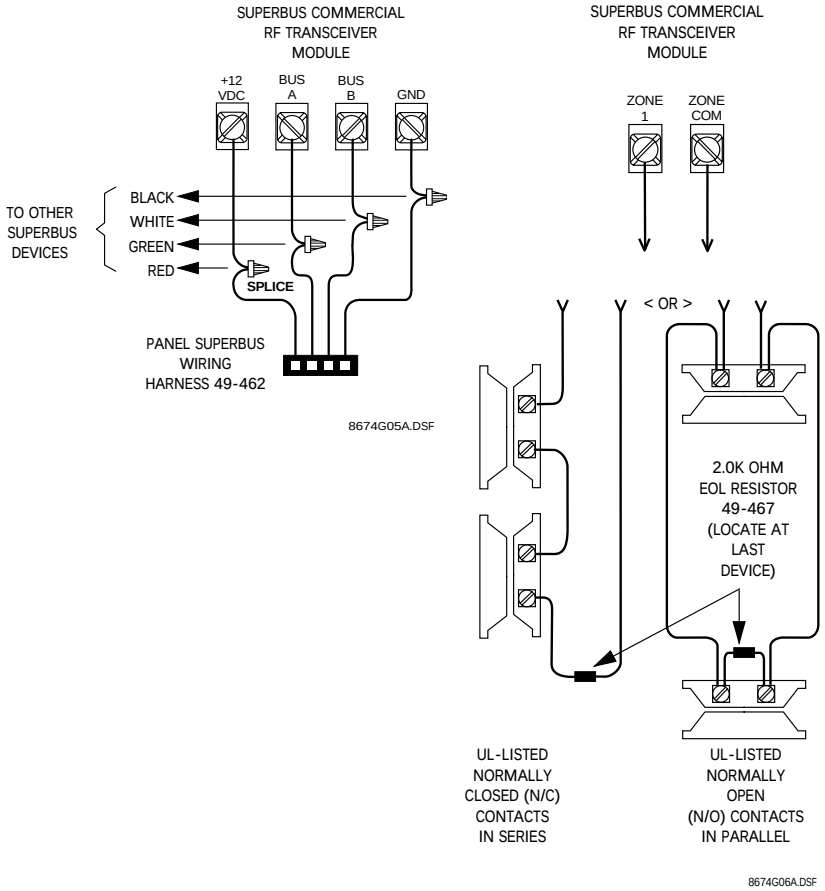
Allow at least 10 inches of space above the RF Transceiver for mounting of the antennas.

Wiring

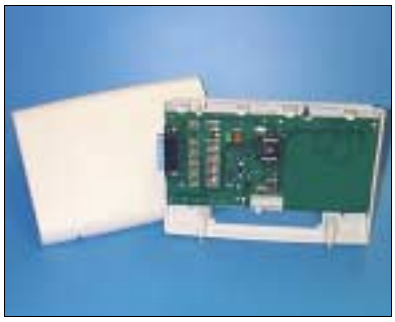
The RF Transceiver Module is a bus device; therefore, it connects to one of the two SuperBus headers on board the panel. The module can be wire directly to the panel or wired to another bus device.

Zone Wiring

The transceiver module has the capability of one supervised, fire rated, normally open or closed input. Wire input to terminals using a 2.0K ohm resistor in series for a normally closed loop or in parallel for a normally open loop.



SUPERBUS 2000 PRINTER MODULE (60-783) PLASTIC CASE, (60-854) METAL CASE



The printer module the connects the control panel to a parallel printer . The module contains one “Centronics” type parallel printer output.

Module Setup

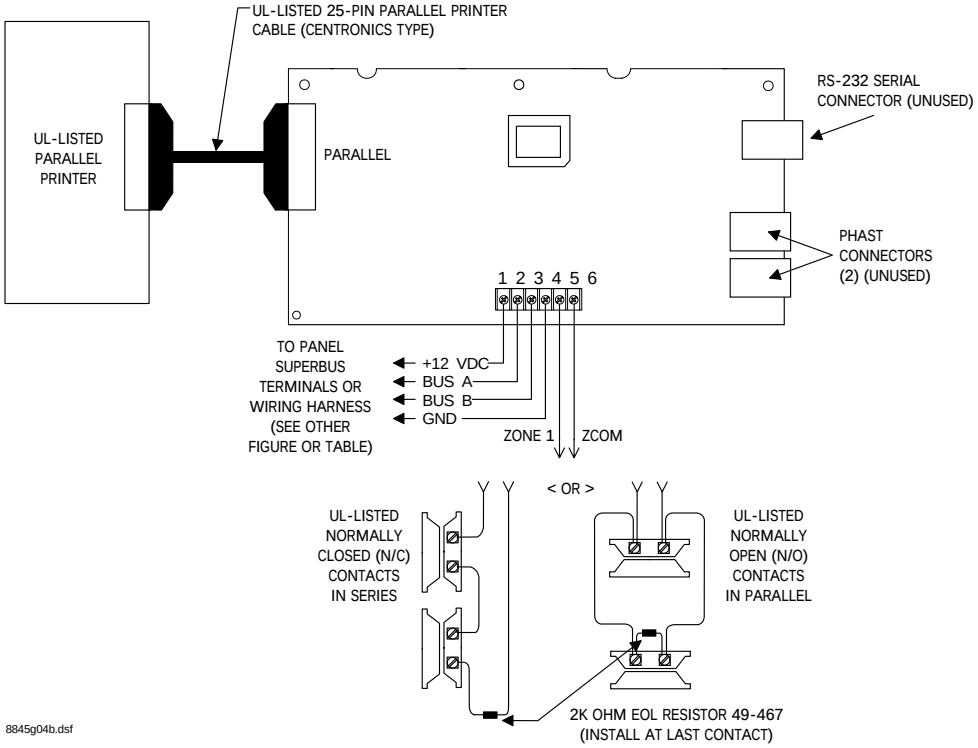
The module must be setup properly to work with either home automation or as a printer output (a single module cannot do both. Refer to the Advent Installation Instructions for information on the dip switches on-board for the output selection.

Wiring

The SuperBus 2000 Printer Module is a bus device; therefore, it connects to one of the two SuperBus headers on board the panel. The module can be wire directly to the panel or wired to another bus device.

Zone Wiring

The printer module has the capability of one supervised, fire rated, normally open or closed input. Wire input to terminals using a 2.0K ohm resistor in series for a normally closed loop or in parallel for a normally open loop.



SUPERBUS 2000 PHAST MODULE (60-783-01)

Need photo module

The PHAST Module allows the connection of the Advent Control Panel to a PHAST Landmark System.

Locating the PHAST Module

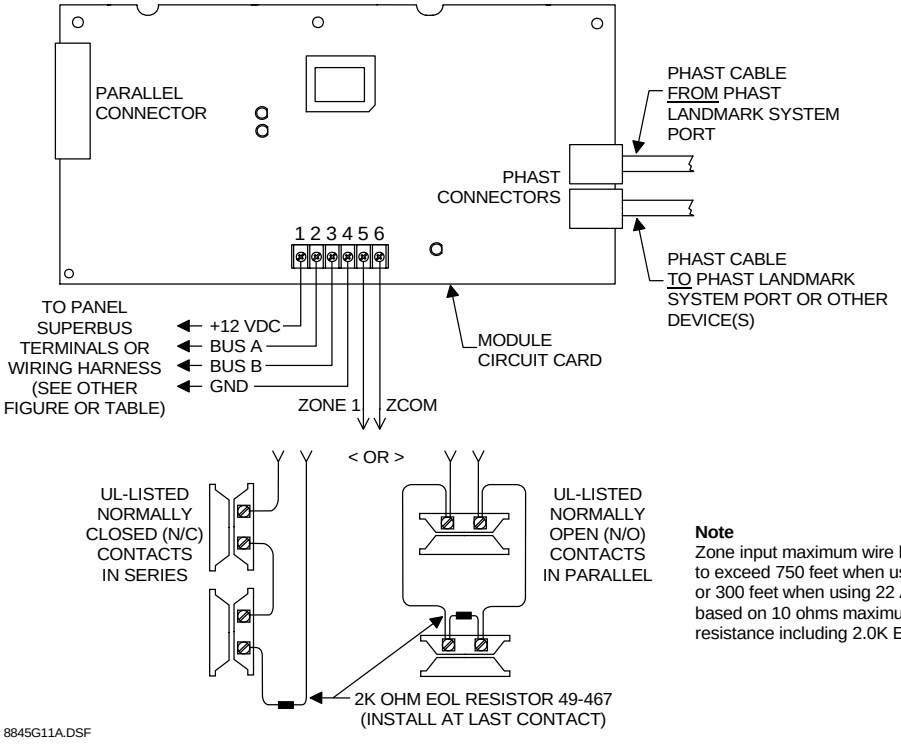
The module is hardwired to two different devices the control panel and the Landmark system, locate the module that best fits the application.

Wiring

The PHAST Module is a bus device; therefore, it connects to one of the two SuperBus headers on board the panel. The module can be wired directly to the panel or to another bus device. The module also has connections for hardwiring to the Landmark system.

Zone Wiring

The PHAST Module has the capability of one supervised, normally open or closed input. Wire input to terminals using a 2.0K ohm resistor in series for a normally closed loop and in parallel for a normally open loop.



Note
Zone input maximum wire length run not to exceed 750 feet when using 18 AWG wire or 300 feet when using 22 AWG wire. Wire run based on 10 ohms maximum wire and device resistance including 2.0K EOL resistor.

SUPERBUS 2000 8Z INPUT MODULE (60-774)

The 8-zone input module allows the expansion of 8 hardwire input zones per module, the system can handle up to 62 bus modules.

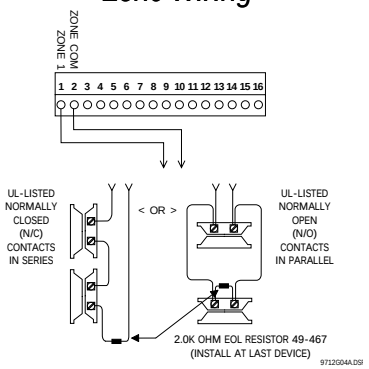
Module Setup
Each zone on the input module must be supervised by using a 2.0K ohm resistor, 8 are supplied with each module.

Wiring
The SuperBus 2000 8 Zone Input Module is a bus device; therefore, it connects to one of the two SuperBus headers on board the panel. The module can be wire directly to the panel or wired to another bus device.

Zone Wiring
Resistors are wired end of line in series for normally closed loops and parallel for normally open loops.

General Module Wiring

Zone Wiring



SUPERBUS 2000 4-RELAY OUTPUT MODULE (60-770)

The 4-Relay Output Module adds 4 programmable relay outputs to the control panel, examples include:

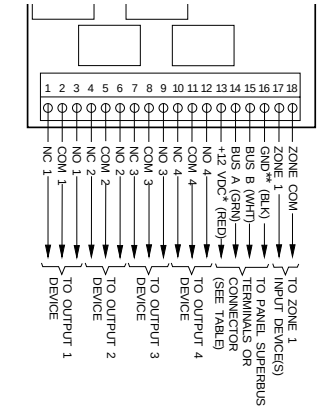
- Turning on a CCTV during a burglary alarm.
- Turning on lights during an alarm.
- Activating backup cellular phones or long-range radios.

Module Setup
Each relay provides a common, normally open or normally closed contact.

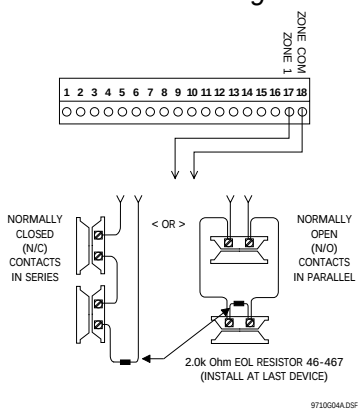
Wiring
The SuperBus 2000 4-Relay Output Module is a bus device; therefore, it connects to one of the two SuperBus headers on board the panel. The module can be wire directly to the panel or wired to another bus device.

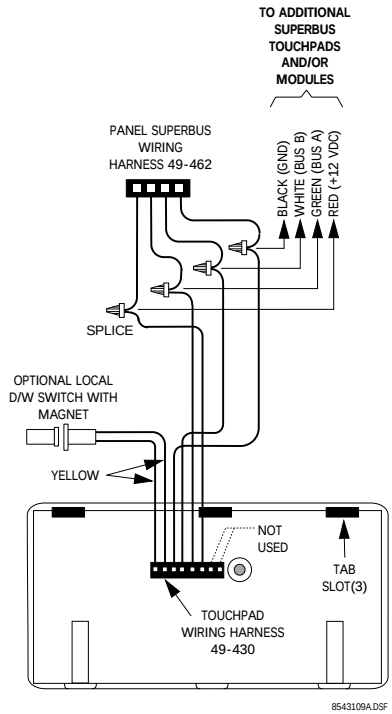
Zone Wiring
The transceiver module has the capability of one supervised, fire rated, normally open or closed input. Wire input to terminals using a 2.0K ohm resistor in series for a normally closed loop or in parallel for a normally open loop.

General Module Wiring



Zone Wiring





SuperBus 2000 2-Line VFD and LCD Touchpads (60-804, 60-803)

The touchpads give complete on-site programming and operational control of the system. The two-line, 20-character display provides visual status messages for the entire system, by displaying up to 40 characters (zone text) without scrolling. The touchpads also provide adjustable backlighting for the display and keys.

Wiring

The SuperBus 2000 VFD and LCD Touchpads are bus devices; therefore, it connects to one of the two SuperBus headers on board the panel. The module can be wire directly to the panel or wired to another bus device.

Zone Wiring

Each touchpad also has the capability of wiring a single hardwire zone to the wiring harness.

SnapCard Installation

Each Advent control panel provides space for two SnapCards. The cards simply connect to one of the two SnapCard headers on-board the panel.

No programming is required*—the system recognizes when a SnapCard is added or removed. Cards can be added or removed at any time without affecting the system. The following SnapCards are available:

8 Zone Input SnapCard (60-757)
- 6 hardwire input zones (no/nc)
- 2 dedicated 2-wire smoke loops
- 12 VDC @ 500 mA power supply

Output SnapCard (60-758)
- 4-form C relay outputs
- 12 VDC @ 500 mA power supply

4 Zone Input/2 Output SnapCard (60-756)
- 3 hardwire input zones (no/nc)
- 4-form C relay outputs
- 1 dedicated 2-wire smoke loop
- 12 VDC @ 500 mA power supply

Refer to the Advent installation manual for zone wiring.

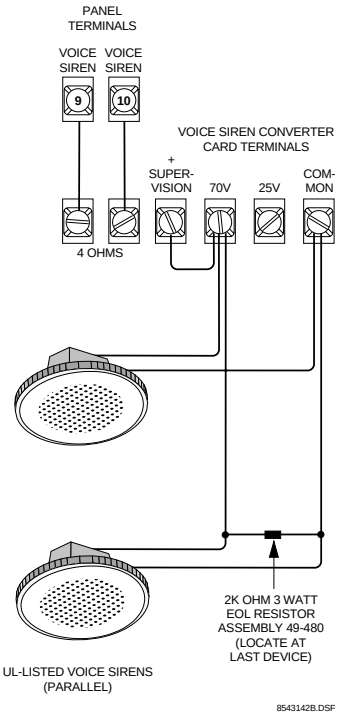
* No programming is required if replacing a SnapCard with another of the same type. If a different type is used, then the old one must be deleted. (See program item 50014, 50015).

VOICE SIREN 25/70-VOLT CONVERTER CARD (60-773)

The card mounts inside the fire/security system enclosure and is powered by the panel voice siren output. The card converts the panel 4-ohm, 25 watt voice supervised siren output to 25 or 70 volt, 25 watt supervised output.

The card adds versatility by letting you replace an existing hardwire system, or install one in new construction where the building has been pre-wired for fire/security or public address compatible speakers.

Panel Card Wiring



SUPERBUS 2000 DUAL PHONE LINE MODULE (60-768)

The Dual Phone Line Module allows the system to switch to a secondary phone line in case the primary line fails.

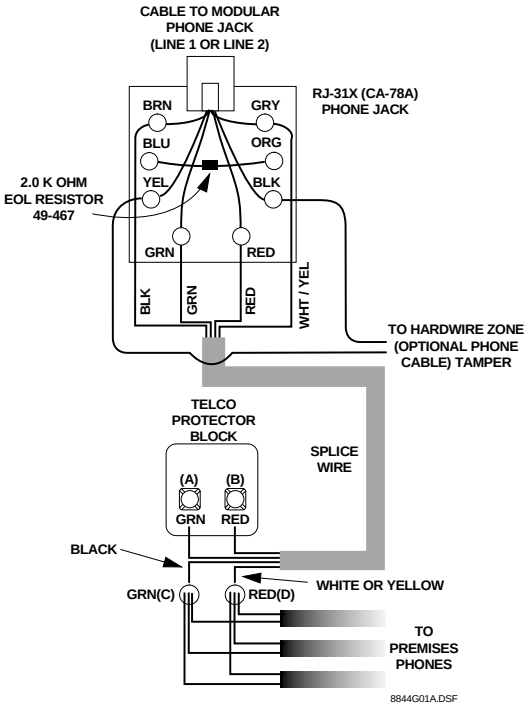
Module Setup

The module must be setup to operate with two independent phone lines.

Wiring

The Dual Phone Line Module is a bus device and wires to one of the two SuperBus headers. The module also provides a supervised hardwire loop.

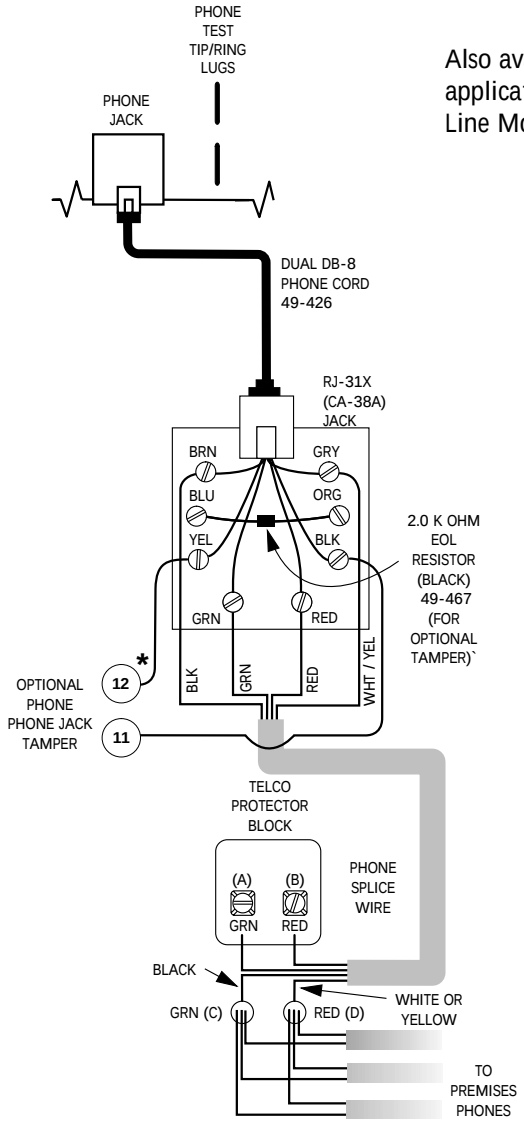
Phone Card Wiring



Phone Line Installation

The panel has a jack on-board for easy phone line connection. A DB-8 cord is required for wiring from the panel phone jack to a RJ31X jack.

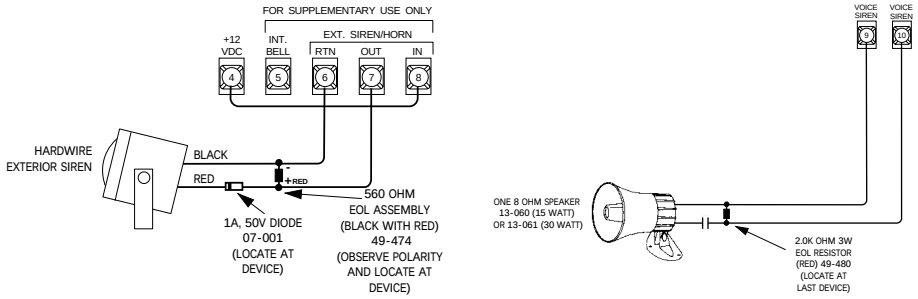
Located next to the phone jack on-board are two posts that can be used for monitoring the phone line with a butt-set.



Also available for commercial applications is a SuperBus Dual Phone Line Module (60-768).

Siren/Speaker Wiring

The Advent system supports a number of different sirens and speakers. Located on-board is an external siren relay which provides power to an external siren, also available is an audio output for speaker wiring.



Advent Programming Parameters

Account Numbers

The Advent system allows the programming of two account numbers per partition, two system account numbers, and one downloader account number. It is very important to understand the meaning and reporting capabilities of each account number location.

Program Item Numbers XX116, XX117

Partition Account Numbers (2 per partition) – Each partition has two reporting account numbers, one for each phone number. Partition account numbers report all partition-related information.

Program Item Numbers 17102, 17103

System Account Number (2 per system) – Reports all system-related functions. If no system account number is programmed the partition account number will report system events.

Program Item # 17109

Downloader Account Number (1 per system) – Used to verify the downloader is talking to the correct panel, these codes must match in the downloader and panel before downloading can take place.

Phone Numbers

The system reports events to off-premises destinations through the phone lines. Information concerning the phone numbers and formats is programmed during installation. Using this information, and the hardware configuration, the system will attempt to make reports when events require it.

Multiple alarm trips reported during a single call to the central station are reported in a priority manner, according to UL requirements. All communicator delayed reports are sent when any other partition event is required to report.

The system communicates with central stations, and provides alphanumeric messages to a pager. If the phone line is in use when the system requires it to report an alarm, alarm cancel, alarm restoral, or a system phone test, the system will speak/display 'PHONE REPORT TIME GOOD-BYE' and seize the phone line.

For other reports, the system will wait up to six hours before seizing the line. If the phone is idle for 10 seconds during the 6 hour window, the system will seize the line and send the report. If the line remains in use for the entire 6 hours, the system will speak/display 'PHONE REPORT TIME GOOD-BYE', seize the line, and send the report.

Phone Lines

The system may use two phone lines for reporting, depending on the installation. The simplest installation includes only one phone line. A two-line bus module will expand this to use two separate lines. Thus the system can switch to the secondary phone line the primary is not functioning.

PHONE NUMBER TYPES

The system uses a total of 22 phone numbers for communicating with central station receivers, pagers, and the Downloader. The phone numbers are separated into **Reporting**, **Pager**, and **Downloader** phone entries. Reporting phone numbers are used to report events to a central station. Pager phone numbers are used to report events to a pager. The Downloader phone numbers are used to call the Downloader.

Reporting Phones

There are 4 phone entries used for reporting to the central station:

Phone Number	Corresponding Entry
Phone 1	Primary Phone
Phone 2	Primary Backup Phone
Phone 3	Secondary Phone
Phone 4	Secondary Backup Phone

Primary phones are typically used to report events that need to be communicated to a central station receiver: alarms, alarm cancels, alarm restorals. Secondary phones are typically used to report trouble and supervisory condition events to a secondary central station receiver.

A backup phone number is normally dialed when an event has failed all attempts to report to the previous phone number. Optionally, the panel will alternate reporting attempts between the backup and its associated number after failing a programmed number of attempts. The system will continue to switch through the primary and backup numbers for the specified number of tries on each phone number.

Pager Phones

There is a pool of 16 pager phone numbers. Each pager can be programmed to receive system reports and reports from any number of partitions.

Alarms, alarm cancels, and alarm restorals are reported to pagers, but the number of reportable event types may be expanded in the future.

The event is reported using the phone entry assigned pager protocol (300 or 1200 bps). The paging terminal must support the alphanumeric TAP protocol—the message can not be sent to a pager service that only supports DTMF/Numeric messaging.

Downloader Phone

The system maintains two phone numbers for connecting to a remote downloader. The backup downloader number is only called when all attempts to the first downloader phone entry have failed.

Advent Programming

Programming the system can be accomplished through two different methods, touchpad or pc downloader.

Touchpad programming is accomplished by using any touchpad connected to the system, while programming the system no other system actions can be taken.

Touchpad Programming

Enter System Programming: 8 + 0 + Installer Code (0123)
Exit System Programming: * + *

The Installer Code on the system defaults at 0123 and can be changed in Access Code Programming. A Dealer Code is also available to provide protection to various programming fields. The system defaults the Dealer Code off, if entered the system will prompt the programmer for the code when trying to enter protected area.

While programming the system prompts for an item number, simply enter the number to view the programmed information, if changes are required enter new data and press # to enter the information.

Programming is broken down into sub-categories, the categories are defined as follows:

1. Partition Features (01 – 08)
2. System Features (17)
3. Phone Number Features (19 – 40)
4. Zone Features (47)
5. SuperBus Features (48)
6. Text Features (49)
7. Miscellaneous Features (50)

Each menu item is a 5-digit number consisting of the submenu number followed by a 3-digit specific number.

Programming Review: Enter Program: 8 + 0 + Installer Code (0123)
Enter Review: 00000
Enter Item Number: Touchpad scrolls programmed information, no changes can be made in this mode.

To simplify programming each submenu is also broken down into specific categories.

PROGRAMMING TIPS

To enter Yes or ON, Press 1 + #

To enter No or OFF, Press 0 + #

Partition Features (xx001 – xx129)

Partition specific options are programmed using the appropriate partition number, i.e. 01004 sets the Exit
Delay for partition 1, and 07004 sets the Exit Delay for partition 7.

The partition options can be broken down into 5 categories:

1. Arming Options
2. Alarm Options
3. Reporting Options
4. Output Options
5. Interface Options

ARMING OPTIONS

Standard Entry Delay (xx 003)

The standard entry delay is the time interval in seconds between when an active zone in a standard delay type is tripped and when an alarm is triggered. This delay gives the user time to disarm the partition after entering the armed premises.

Default: 32 seconds
Range: 24 to 120 seconds

Standard Exit Delay (xx 004)

The standard exit delay is the time interval in seconds between when the partition is armed and when a trip of a zone in a standard delay type causes an alarm. This delay gives the user time to exit the premises after arming.

Default: 32 seconds
Range: 24 to 120 seconds

Extended Delay (xx 005)

The extended delay is entered in minutes and is used by the panel as an extended entry delay or an extended exit delay. These delays act like the standard delays described above, except that extended delays are used for zones in extended delay types.

Default: 2 minutes
Range: 5 to 30 minutes

Fast Beep Time (xx 006)

The fast beep time is the time interval in seconds at the end of an exit delay for which fast exit beeps are annunciated to warn the user of an impending arming level change.

Default: 10 seconds
Range: 5 to 30 seconds

Exit Beeps at Start/End Only (xx 100)

This option determines whether exit beeps sound throughout the exit delay or only during the fast beep time.

Default: 1-yes
Range: 0 -no, 1-yes

Early Termination of Exit Delay (xx 101)

This option determines whether an exit delay is terminated when a perimeter zone is tripped and then restored during the exit delay, i.e. arm system to full perimeter, leave through a designated delay door, when the door is closed the system will fully arm. Do not use this option concurrently with the option xx102.

Default: 0-no
Range: 0-no, 1-yes

Exit Delay, One-Time Restart (xx 102)

This option determines whether an exit delay is restarted once when a perimeter zone is tripped during the exit delay i.e. After arming system and leaving the premises if reentered with the delay time the system will reset the exit delay to maximum time. Do not use this option concurrently with the option 101.

Default: 0 no
Range: 0-no, 1-yes

Entry Beeps, Standard Delay Only (xx 103)

This option selects whether entry beeps sound during the standard entry delay only or during all phases of the entry delay (standard, extended, twice extended).

Default: 1-no
Range: 0-no, 1-yes

Scheduled Arming Period (xx 007)

The scheduled arming period is the time interval in minutes from when auto pre-arming announcements start (warning occupants of an impending arming event) to when arming takes place. For example, if scheduled arming is set for 9:00 PM and the scheduled arming period is 10 minutes, then the announcement "SYSTEM SECURE IN xx MINUTES" will be annunciated every minute for nine minutes starting at 9:00 PM, then "SYSTEM SECURE IN 60 SECONDS" will be spoken and displayed at 9:09 PM, and finally arming will take place at 9:10 PM (unless extended, see option xx008).

Default: 10 minutes
Range: 5 to 30 minutes

Arming Extension Period (xx 008)

The arming extension period is the time interval in minutes for which scheduled arming can be suspended during the pre-arming period. Arming extension is accomplished by arming to the current arming level during the pre-arming period. For example, if a scheduled arm is about to occur in 3 minutes and the pre-arming period is already active, then arming from level 1 to level 1 will suspend the arming countdown for a time interval equal to the extension period. If this period is set to 30 minutes, then the arming countdown timer will stay at 3 minutes for 30 minutes, and then resume. In the example above, the partition would be armed at 9:40 PM instead of 9:10 PM.

Default: 30 minutes
Range: 15 to 120 minutes

Scheduled Arming Enabled (xx 094)

This option enables arming by schedule. If this option is disabled, no scheduled arming level changes take place.

Default: 1-yes
Range: 0-no, 1-yes

Quick Arming Enabled (xx 093)

This option enables arming to a higher arming level without an access code unless a protest condition exists. If this option is disabled, the user is always prompted for an access code.

Default: 1-yes
Range: 0-no, 1-yes

Sensor Test Period (xx 011)

Sets the time interval after which a sensor test automatically times out. The timer is reset every time the partition is armed to the sensor test level.

Default: 30 minutes
Range: 5 to 120 minutes

Keychain Touchpad Closed Level (xx 118)

The default closed level is the arming level that a partition is armed to when a closing is initiated via a keychain touchpad (if defined to arm to closed level) or a schedule. For example by default when the arm button on a keychain touchpad is pressed the system will arm to level 3.

Default: 3 (level)
Range: 2 to 5 (levels)

Keyswitch Closed Level (xx 120)

The default keyswitch closed level is the arming level that a partition is armed to during a keyswitch arm.

Default: 3 (level)
Range: 2 to 5 (levels)

Bypass Limit (xx 017)

The bypass limit is the maximum number of zones which may be bypassed at one time. Zones above the limit are inhibited (bypassed until restored) only, if they are attempted to be bypassed.

Default: 250 (HN=132)
Range: 0 to 250 (HN-0-132)

Swinger Count (xx 021)

The swinger count is the number of alarm reports (successful or not) for one zone during an arming period after which the zone is automatically bypassed until the next arming level change.

Default: 3 (trips)
Range: 1 to 8 (trips)

Swinger Bypass Enabled (xx 095)

This option enables the bypassing of zones with an excessive number of alarm trips (see Bypass Limit xx 017).

Default: 1-yes
Range: 0-no, 1-yes

Auto Force Arm Enabled (xx 092)

This option enables the force arming of a protesting partition and automatic bypassing of open zones at the end of the protest period. If disabled, the partition does not arm and no bypassing occurs. (The end of the protest period is reached if the user does not acknowledge the protest condition(s) manually.)

Default: 1-yes
Range: 0-no, 1-yes

Auto Unbypassing Enabled (xx 096)

This option enables the automatic unbypassing of indirectly bypassed zones when they are restored for 30 seconds.

Default: 0-no
Range: 0-no, 1-yes

Arming Verification on Exterior Siren (xx 097)

This option enables the sounding of arming level beeps over the exterior siren.

Default: 0-no
Range: 0-no, 1-yes

Arming Level Enabled (xx 025 to xx 028)

This option enables or disables arming levels 2 through 5.

Default: 1-yes
Range: 0-no, 1-yes

ALARM OPTIONS

Siren Time Out (xx 002)

The siren time out is the time interval in minutes after which alarm siren sounds will cease even if the alarm has not been canceled. Terminated siren sounds will not restart unless a new alarm is triggered.

Default: Commercial Fire & Burg = 16, Home Nav. = 8 (min)
Range: 1 to 30 minutes

Exterior Siren Instant (xx 113)

This option selects whether the exterior sirens sounds instantly or is delayed by 15 seconds in case of an alarm.

Default: 0-no
Range: 0-no, 1-yes

No Activity Time (xx 009)

The no-activity time is the time interval in hours for which there must be no activity in order to trigger a no-activity pre-alarm.

Default: 0
Range: 1 to 24 hours, 0 for inactive

Zone/Sensor Activity Fault (xx 018 to xx 020)

There are three Zone/Sensor Activity Fault threshold values. Each sensor (zone) can be assigned one of these three values or none (default). The threshold is the number of level changes without a zone trip from that sensor after which a sensor failure is suspected and a Zone/Sensor Activity Fault trouble is generated.

Default: 10, 30, and 50
Range: 1 to 255 for each

Keystroke Violation Alarm Enabled (xx 076)

This option selects whether a keystroke violation triggers an alarm or not. There are two types of keystroke violation: (i) if too many invalid keystrokes (4 times access code length) are entered by a single user during a single access code entry without a valid access code being seen, and (ii) if too many total invalid keystrokes (10 times access code length) are entered in a partition during all access code entries without a valid access code being seen.

Default: 0-no
Range: 0-no, 1-yes

Intrusion 2-Trip Option (xx 077)

This option selects whether the first trip of an intrusion zone causes a local alarm only and a second trip of an intrusion zone (not necessarily the same one) within 4 minutes is needed to cause a police alarm, or whether the first trip causes a police alarm.

Default: 0-no
Range: 0-no, 1-yes

Suspicion Alarm at Time Out (xx 078)

The first trip of a suspicion zone starts a countdown timer. If another trip of the same zone occurs while the timer is active, a suspicion alarm is triggered. A suspicion zone restoral clears the timer. This option selects whether a suspicion alarm is also triggered when the timer expires. The countdown period is equal to the suspicion delay time (see xx 015).

Default: 1-on
Range: 0-off, 1-on

Suspicion Delay Time (xx 015)

The suspicion delay time is the initial value in minutes of the suspicion trip timer (see xx 078).

Default: 5 minutes
Range: 1 to 120 minutes

Tamper Alarm (xx 079)

This option selects whether a zone tamper causes a tamper alarm in all arming levels or only when the zone is active.

Default: 0-no
Range: 0-no, 1-yes

2-Trip Local Alarm (xx 080)

This option selects whether the first zone trip in a two-trip (cross-zoned) type causes a local alarm or not. A second trip in the same type within 4 minutes always causes an alarm.

Default: 0-no
Range: 0-no, 1-yes

Fire Tamper Alarm (xx 083)

This option selects whether tampering a fire zone is an alarm or a trouble. **For Commercial and Residential Burglary only.**

Default: 0 (trouble)
Range: 0 (trouble), 1 (police alarm)

REPORTING OPTIONS

Local Annunciation Time (xx 001)

The local annunciation time (L-Time) is the time of day when all existing trouble conditions are spoken and displayed locally and trouble beeps are started (if L-Time trouble annunciation is enabled). If the commercial/residential option is set to commercial, then L-Time will occur every 4 hours instead of once a day. For example, if L-Time is set to 5:00 PM, then in a residential installation local troubles will be annunciated every day at 5:00 PM. In a commercial installation, the announcements would take place at 5:00 PM, 9:00 PM, 1:00 AM, 5:00 AM, 9:00 AM, and 1:00 PM every day.

In addition to being annunciated at L-Time, some troubles are also annunciated instantly as soon as they are detected.

Troubles are annunciated at L-Time in the following manner:

Troubles are always checked in the same order and are annunciated in the order they are found. Therefore, they are always annunciated in the same order, NOT chronologically and NOT by priority. (When an instant trouble is detected, it is annunciated immediately followed by all other current troubles.)

1. Only the first trouble is annunciated initially. After the user acknowledges (accepts) the trouble by pressing *, the second trouble (if any) is annunciated. After the second trouble is acknowledged, the third trouble is annunciated, and so on. Trouble annunciation will only stop (and trouble beeps will be silenced) after all troubles have been acknowledged. Only an alarm can override trouble annunciation.
2. Troubles are annunciated simultaneously at all touchpads in a given partition.

The L-Time is entered as four digits (HHMM) in 24-hour format.

Default: 1200
Range: 4 digits HHMM

L-Time Trouble Annunciation Enabled (xx 108)

This option enables or disables the annunciation of troubles at L-Time.

Default: 1-yes
Range: 0-no, 1-yes

Immediate RF Low Battery Trouble Enabled (xx 114)

This option can bypass the 7-day waiting period for the annunciation of RF sensor low battery trouble. If the 7-day wait is in effect, then annunciation takes place when at least one RF low battery condition has existed in the partition for the previous 7 days. For the panel to validate a low battery condition on an RF sensor, it must see RF low battery transmissions from the sensor for four hours without a restoral.

Default: 1-on
Range: 0-off, 1-on

Standard Communication Delay (xx 013)
The standard communication delay is the time interval in seconds for which a standard alarm report is delayed following alarm detection before being reported to the central station.

Default: 5 seconds
Range: 1 to 120 seconds

Panic Communication Delay (xx 012)
The panic communication delay is the time interval in seconds for which a panic alarm report is delayed following alarm detection before being reported to the central station.

Default: 5 seconds
Range: 1 to 120 seconds

Fire Communication Delay (xx 014)
The fire communication delay is the time interval in minutes for which a fire alarm report is delayed before being reported to the central station.

Default: 0 minutes
Range: 0 to 15 minutes

No Activity Delay (xx 010)
The no-activity delay is the time interval in minutes during which a local pre-alarm signal is sounded before the actual no-activity alarm is triggered. Activity during the pre-alarm period negates the pending alarm.

Default: 5 minutes
Range: 1 to 10 minutes

Partition Reports Enabled (xx 088)
This option selects whether reporting of partition events to the central station is enabled.

Default: 1-on
Range: 0-off, 1-on

Partition Event Printing Enabled (xx 091)
This option selects whether printing of partition events is enabled.

Default: 1-on
Range: 0-off, 1-on

Report Abort on Cancel Event (xx 089)
This option selects whether an alarm cancel can abort a central station report.

Default: 1-on
Range: 0-off, 1-on

Second Fire Alarm Ends Delay (xx 090)
This option selects whether a second fire alarm ends a current fire communication delay.

Default: 1-on
Range: 0-off, 1-on

All Restorals Reported (xx 112)

This option selects whether alarm restoral reports are generated for all types or only those that are defined to do so.

Default: 1-off
Range: 0-off, 1-on

Account Numbers (xx 116, xx 117)

Each partition has two reporting account numbers, one for each phone number. (Each partition has a primary and a secondary phone number.) Each account number has up to eight hex digits, filled with leading zeroes as necessary.

Default: 00000000
Range: Eight hex digits (0-F), entered as two keystrokes per digit (00 to 15)

OUTPUT OPTIONS

There are 40 menu-controllable outputs per partition. The first 32 of these are X-10 outputs (lamp or appliance modules). There are two house codes defined per partition, with 16 X-10 unit numbers available per house code. The X-10 All Lights On and All Units Off commands only control modules with the first house code.

There are 8 additional outputs per partition, which must be associated with one of the 100 programmable outputs in the system. These outputs can correspond to a variety of physical outputs, e.g. on-board outputs, bus module outputs, etc.

In case of an alarm, an All Lights On command is issued in the affected partition(s).

First X-10 House Code (xx 022)

This is the house code for menu outputs 1 to 16 in a given partition.

Default: Equal to partition number
Range: 1 to 16 (A-P)

Second X-10 House Code (xx 023)

This is the house code for menu outputs 17 to 32 in a given partition.

Default: Equal to partition number + 8 (Comm. Fire & Burg.)
Equal to partition number + 4. (Home Nav.)
Range: 1 to 16 (A-P)

Association With Programmable Outputs (xx 049 - xx 056)

Menu outputs 33 to 40 must each be associated with one of the 100 programmable outputs.

Default: 0-none
Range: 1 to 100, 0 for none

INTERFACE OPTIONS

These options let the user customize the interaction with the panel. These options include key assignments, whether an access code is needed for certain actions, etc.

Partition Enabled (xx 068)

This option enables or disables the partition. If a partition is disabled, it should not react to keystrokes, zone trips, schedule transitions, etc.

Default: 1=part 1
Range: 0-no, 1-yes

Keychain Touchpad Key Assignments (xx 057 - xx 066 except xx 062)

There are 9 keychain key strokes which may be associated with a variety of actions. The 9 key strokes and their defaults listed in the following table:

Keychain Touchpad Key Assignments

Keystroke	Default Action
Disarm	Arm to level 1 (OFF)
Arm	Arm to programmed closed level (default = 3)
Lights	All lights toggle
Star	Incremental arm, level 0 to 1, 1 to 2, and 2 to 3
Lights/Star	Auxiliary panic alarm
Direct Arm To Level 2*	Arm to level 2
Direct Arm To Level 3*	Arm to level 3
Arm/Star	Nothing
Disarm/Lights	Nothing

* These two key strokes are generated by the HomeLink module only.

The available actions which can be programmed are:

Keychain Touchpad Programming Actions

Number	Action
3	Auxiliary panic alarm**
4	Arm to level 1
5	Arm to level 2
6	Arm to level 3
7	Arm to level 4
8	Arm to level 5
9	Arm to closed level
10	Arm to closed + no delay
11	Arm to closed + latchkey
12	Incremental arm up
13	All lights on
14	All lights off
15	All lights toggle
16	Nothing

** This option is only available for the Lights/Star combination.

Aux/Medical Choice (xx 084)
This option selects whether an aux/medical panic alarm triggered from a touchpad or phone is considered an auxiliary panic or a medical panic.

Default: 1-aux
Range: 0 (medical), 1 (aux)

Touchpad Panic Keys Enabled (xx 085 - xx 087)
These three options enable or disable touchpad panic keys (police, aux/medical, fire in that order).

Default: 1 (enabled) for all
Range: 0-no, 1-yes

Access Code Needed (xx 069 - xx 071)
These three options select whether access codes for the following menu actions are required: (1) light control; (2) device control; (3) latchkey.

Default: 0 (not needed) for all
Range: 0-no, 1-yes

Chime Text (xx 110)
This option selects whether the text of a chime sensor is annunciated along with the chime sound.

Default: 0-no
Range: 0-no, 1-yes

Chime Restoral Sound (xx 111)

This option selects whether a chime sound is annunciated when a chime sensor is closed or only if it is opened.

Default: 0 (no sound)
Range: 0-no, 1-yes

Fire Touchpad Keys Protected (xx 082)

This option selects whether the fire touchpad keys are active without the use of a fire touchpad keyswitch or the entry of an access code. The fire touchpad keys are: Acknowledge, Silence, Fire Drill, and Reset Smoke Power. The first two keys only work during a fire alarm. The fire drill key must be held for two seconds.

When this option is enabled, a keyswitch connected to the external contact of the fire touchpad can be used to enable the fire keys or the panel will prompt for an access code.

Default: 1-yes
Range: 0-no, 1-yes

System Features (17001 – 17125)

The System Options are related to system wide parameters and can be broken down into 7 categories:

1. Phone Options (ring detect and DTMF)
2. Power Options
3. Global Input/Output Options
4. Global Alarm Options
5. Global Reporting Options
6. Time Options
7. Miscellaneous Options

PHONE OPTIONS

The phone ring detection and DTMF tone detection options listed below work just fine the way they are and **should not be touched unless absolutely necessary**. They are only programmable to take care of special situations, such as distinctive ring signals, non-US phone systems, PBXs, etc.

Maximum Ding Time (17 018)

A ding is one cycle of the ring signal, whose frequency is between 15Hz and 70Hz (in the United States). The maximum ding time is the maximum duration of one cycle of the ring signal to be considered a single ding.

Default: 67 ms
Range: 0 to 255 ms

Minimum Number of Dings in a Ring (17 054)

The minimum number of dings in a ring is the number of dings which must be detected at the proper time for a ring to be considered valid. This number must be larger than 1 and is mainly present to distinguish a ring from an off-hook condition, which produces a single isolated ding.

Default: 2 cycles
Range: 0 to 255

Minimum Ringlet Time (17 019)

A ringlet is a part of a ring signal consisting of a continuous string of dings. The minimum ringlet time is the minimum duration of a valid ringlet stored in units of 10 ms.

Default: 40 (400 ms)
Range: 3 to 300 (30 to 3000 ms)

Maximum Ringlet Time (17 020)

The maximum ringlet time is the maximum duration of a valid ringlet stored in units of 10 ms.

Default: 250 (2500 ms)
Range: 3 to 300 (30 to 3000 ms)

Ringlet Count (17 055)

The ringlet count is the number of ringlets in a ring. In the US, a standard ring consists of a single ringlet (except distinctive ringing), but in Europe a standard ring consists of two ringlets.

Default: 1 burst
Range: 1 to 5 burst

Minimum Ringlet Pause (17 021)
Minimum duration between valid ring burst in 10 msec increments.

Default: 0 ms
Range: 3 to 300 (30 to 3000 ms)

Maximum Ringlet Pause (17 022)
Maximum duration between valid ring burst in 10 msec increments.

Default: 0 ms
Range: 3 to 300 ms (30 to 3000 ms)

Minimum Ring Pause (17 023)
The minimum ring pause is the minimum duration of the pause between rings in a ring signal in order for the rings to be considered separate. This time is stored in units of 10 ms.

Default: 200 (2000 ms)
Range: 100 to 999 (1000 to 9990 ms)

Maximum Ring Pause (17 024)
The maximum ring pause is the maximum duration of the pause between rings in a ring signal in order for the rings to be considered part of the same incoming call.

Default: 450 (4500 ms)
Range: 100 to 999 (1000 to 9990 ms)

Minimum Time Between Ring-Pause-Ring CALLS (17 025)
The ring-pause-ring (RPR) silent time is the minimum time between two incoming calls for the panel to answer the second call in the ring-pause-ring method.

Default: 10 seconds
Range: 6 to 20 seconds

Maximum Time Between Ring-Pause-Ring CALLS (17 026)
The RPR pause time is the maximum time between incoming calls for the panel to answer the second call when using the ring-pause-ring method.

Default: 30 seconds
Range: 7 to 60 seconds

Ring Count For Ring-Pause-Ring Method (17 053)
The RPR ring count is the number of rings in the initial phone call at which a ring-pause-ring answer attempt is aborted. (For example, if the RPR ring count is 3, then the initial call should contain 1 or 2 rings.)

Default: 3 rings
Range: 2 to 10 rings

Normal Ring Count (non-RPR) (17 052)
The ring count is the number of rings after which a panel will answer an incoming call unless early pickup (toll saver) is enabled and there are troubles.

Default: 12 rings
Range: 1 to 12 rings

Remote Phone Toll Saver(17 090)

If early pickup is enabled, then the panel will answer up to 4 rings earlier than normal if there are current alarms or troubles.

Default: 1-yes
Range: 0-no, 1-yes

Remote Phone Enabled (17 086)

This option selects whether the panel will answer an incoming call. If not enabled, then neither the ring count method nor the ring-pause-ring method will work. Also, any Downloader communication would have to be initiated on-site.

Default: 1-yes
Range: 0-no, 1-yes

Zone Test from Phone (17 098)

This option selects whether a sensor test from a remote phone is allowed.

Default: 1-yes
Range: 0-no, 1-yes

Ring Count Method Enabled (17 087)

This option selects whether the panel answers an incoming call after the number of rings equal to the ring count. Remote access must be enabled.

Default: 1-yes
Range: 0-no, 1-yes

Ring-Pause-Ring Method Enabled (17 088)

This option selects whether the panel answers an incoming call using the ring-pause-ring method. The first call must have less than a certain number of rings (RPR ring count), then there must be a pause (minimum is RPR silent time, maximum is RPR pause time), then the panel answers after the first ring of the second call. Remote access must be enabled.

Default: 1 (enabled)
Range: 0, 1

Ring Validation (17 091)

This option selects whether a ring considered to be valid at the end of the current cycle or not until the beginning of the next cycle.

Default: 0 (end of current cycle)
Range: 0-end, 1-beginning

On Hook Before Hang-up Time (17 027)

The hang-up time is the time interval for which the phone is held on-hook in order to terminate a remote connection.

Default: 4 seconds
Range: 2 to 10 seconds

Off Hook Time for Sieze (17 028)

The local phone connect time is the maximum time allowed between the local phone going off-hook and the detection of a valid DTMF seize sequence for local phone control.

Default: 5 seconds
Range: 0 to 255 seconds

Maximum Answer Time (17 029)

The line answer time is the maximum time allowed between a ring signal and local phone off-hook detection for considering the off-hook condition the answer of an incoming call.

Default: 8 seconds
Range: 0 to 255 seconds

Time Between Phone Panic Keystrokes(17 030)

The local phone panic time is the maximum time allowed between DTMF tones in a panic sequence.

Default: 2 seconds
Range: 1 to 5 seconds

Minimum Tone Duration (17 031)

The DTMF on-time is the minimum duration of a valid DTMF tone stored in units of 10 ms.

Default: 3 (30 ms)
Range: 1 to 100 (10 to 1000 ms)

Maximum Tone Duration (17 032)

The DTMF off-time is the minimum pause between DTMF tones stored in units of 10 ms.

Default: 5 (50 ms)
Range: 1 to 100 (10 to 1000 ms)

Local Phone Control Enabled (17 085) (Partition 1 only)

This option enables or disables local phone control. When this option is enabled, a user can gain access to the panel by entering a Local Phone Seize Sequence from a local phone.

Default: commercial fire and burg. = 0, home nav. = 1
Range: 0-no, 1-yes

Local Phone Seize Sequence (17 056)

This DTMF sequence is entered on the local phone to gain access to the panel. It is comprised of up to 4 DTMF digits (0 to 9, *, #). This sequence should be different from the Remote Phone Seize Sequence. Also, it is recommended that this sequence be more than one digit, contain at least one * and/or one #, and not be similar to a phone number (such as 911) or the start of a phone number or a Telco sequence (such as *69).

Default: # *
Range: 0-9, *, #

Remote Phone Override Enabled (17 089)

This option enables or disables overriding of an answering machine via the remote phone.

When this option is enabled, a remote caller can enter a Remote Phone Seize Sequence and force the panel to seize the line.

Default: 1-yes
Range: 0-no, 1-yes

Phone Device Override Sequence (17 057)

This DTMF sequence is entered on the remote phone to gain access to the panel after a local device such as an answering machine (or a local user) has answered the incoming call. It is comprised of up to 4 DTMF digits (0 to 9, *, #). This sequence should be different from the Local Phone Seize Sequence.

Default: * * # #
Range: 0-9, *, #

No Phone Line Connected (17 069)

This option indicates whether or not a phone line is connected to the panel. If no phone line is connected, then the panel will not check for phone line failure.

Default: 1 (No phone line)
Range: 0-no, 1-yes

DTMF Dialing Enabled on Line 1 (17 094)

This option enables DTMF dialing on phone line 1. If disabled, pulse dialing occurs.

Default: 0-no
Range: 0-no, 1-yes

DTMF Dialing Enabled on Line 2 (17 095)

This option enables DTMF dialing on phone line 2. If disabled, pulse dialing occurs.

Default: 1-yes
Range: 0-no, 1-yes

Dial Prefix For Line 1 (17 105)

This dialing sequence is dialed before the phone number whenever phone line 1 is used. The sequence is up to 4 digits long. The allowed digits are the same as for a phone number (0-9, *, #, delay, wait for dial tone), entered as two keystrokes per digit. For no prefix, enter 0#.

Default: None
Range: 00 to 13

Dial Prefix For Line 2 (17 106)

This dialing sequence is dialed before the phone number whenever phone line 2 is used. The sequence is up to 4 digits long. The allowed digits are the same as for a phone number (0-9, *, #, delay, wait for Dalton), entered as two keystrokes per digit. For no prefix, enter 0#.

Default: None
Range: 00 to 13

Power Options

AC Delay Time (17 036)

The AC delay time is the length of time in seconds that AC power must be undetected before being flagged as missing or detected again after a failure before being flagged as restored.

Default: 8 seconds
Range: 1 to 200 seconds

CPU Battery Failure Low Threshold (17 037)

The CPU battery failure low threshold is the voltage at which a CPU battery failure trouble is flagged when the threshold is reached from above. The value stored is related to the actual voltage by the following formula: (voltage = value/17)

Default: 180 (10.6 V)
Range: 172 to 188 (10.1 V to 11.1 V)

CPU Battery Failure High Threshold (17 038)

The CPU battery failure high threshold is the voltage at which a CPU battery failure restoral is flagged when the threshold is reached from below. The value stored is related to the actual voltage by the following formula: (voltage = value/17)

Default: 196 (11.5 V)
Range: 188 to 204 (11.1 V to 12.0 V)

CPU Battery Low Threshold For Shutdown (17 039)

The CPU battery low threshold for shutdown is the voltage at which a shutdown is started when the threshold is reached from above. The value stored is related to the actual voltage by the following formula: (voltage = value/17)

Default: 159 (9.4 V)
Range: 151 to 167 (8.9 V to 9.8 V)

CPU Battery High Threshold For Shutdown (17 040)

The CPU battery high threshold for shutdown is the voltage at which a shutdown is canceled when the threshold is reached from below. The value stored is related to the actual voltage by the following formula: (voltage = value/17)

Default: 176 (10.4 V)
Range: 168 to 184 (9.9 V to 10.8 V)

AC Frequency Selection (17 123)

This option selects between 50 Hz and 60 Hz operation.

Default: 0 (60 Hz)
Range: 0-60 Hz, 1-50 Hz

GLOBAL INPUT/OUTPUT OPTIONS

General Input/Output Selection (17 063 to 17 068)

Six of the seven on-board I/Os can be selected to be either an input or an output. The seventh one is an input only.

Default: 0-input
Range: 0 (input) or 1 (output)

Input Response Times (17 006 to 17 017, 17 118 to 17 121)

Each of the seven on-board inputs (if selected as such) has a response time, meaning that the panel has to see a transition for at least that length of time in order to call it a trip or restoral. Also, there are eight response times for the on-board SnapCard inputs. The same time is used for each SnapCard, e.g. the response time for input #3 on SnapCard #1 is the same as the response time for input #3 on SnapCard #2. Finally, there is also a response time for the hardwire smoke input. All of these times are stored in units of 32 ms.

Default: 32 (0.512 seconds) for all
Range: 8 to 255 (0.128 to 4.08 seconds) for all

Zone Trip Alarm Delay (17 117)

The trip delay time is the time period between when a zone trip in a delayed zone is detected by the system and when it causes an effect in the system. If the zone is restored before the delay time has expired, then no zone trip is ever indicated.

Default: 10 seconds
Range: 1 to 255 seconds

Supervisory Time A and B (17 049, 17050) (See 47004)

Each RF sensor is assigned one of two supervisory times, supervisory time A or B, which is the time interval during which a supervisory transmission must be received from the sensor by the panel for it not to be indicated as missing.

Default: Sensor is assigned supervisory time A
Supervisory time A = 24 hours
Supervisory time B = 4 hours
Range: 2 to 24 hours for each

Output Delay (17 112)

The output delay is the time period by which the activation of a programmable output can be delayed.

Default: 30 seconds
Range: 1 to 999 seconds

One-Shot Times (17 113 to 17 116)

One of four one-shot times (A, B, C, and D) can be chosen as the time period for which a programmable output is turned on if it is momentary.

Default: 4, 30, 180, 900 seconds
Range: 1 to 999 seconds for each

GLOBAL ALARM OPTIONS

Siren Sounds (17 046 to 17 048)

There are four types of siren sounds which can be assigned a cadence: **Medical**, **Police**, and **Auxiliary**. There are six cadences to choose from: (1) **Temporal 3**, (2) **Modulated**, (3) **Alternate**, (4) **Fast Modulated**, (5) **Steady On**, and (6) **Programmable** (which is defaulted to Silent).

Default: Medical = 3
Police = 5
Auxiliary = 4
Range: See above

Note: The programmable cadence will NOT be played over the voice siren!

First Fire Alarm Disarm Silence (17 084)
This option enables the silencing of fire sirens without canceling the fire alarm. When a valid access code is entered the first time, the fire sirens are silenced. When a valid code is entered again during the silence, the alarm is canceled. When this option is disabled, the first code entry cancels the alarm. If the all partition fire option is set, then silencing the fire siren in the partition that the original alarm occurred silences the sirens in all partitions. If the siren has already timed out, then the first code entry always cancels the alarm.

Default: Commercial Fire=1, Comm. Burg & H. Nav.=0
Range: 0-no, 1-yes

Fire Siren Silence Time (17 111)
The fire siren silence time is the time period for which a fire siren is silenced when an access code is entered during a fire alarm and the fire silencing option is enabled.

Default: 30 seconds
Range: 15 to 999 seconds

Evacuation Message During Fire Alarm (17 083)
This option selects whether evacuation messages are annunciated during a fire alarm.

Default: Commercial Fire - 1, Comm. Burg & H. Nav. - 0
Range: 0-no, 1-yes

Number of Evacuation Messages (17 104)
This parameter determines how many evacuation messages are annunciated during a fire alarm, if enabled. The system will cycle through the selected messages until the alarm is canceled. Up to 4 messages can be stored in the system.

Default: 4
Range: 0 to 4

Phone Panics Enabled (17 080 to 17 082)
These three options select whether the three types of phone panics (police, aux/medical, fire) are enabled. To trigger a phone panic alarm, the user must first gain local phone control of the panel and then enter the proper panic sequence (aux/medical = 77777, police = 88888, fire = 99999).

Default: Commercial Fire and Burg.=0, Home Nav.=1 (for all)
Range: 0-no, 1-yes

Receiver Failure Detection Enabled (17 078)
This option selects whether receiver failure is checked for. If no RF sensors are learned in, this option should be disabled.

Default: 1 yes
Range: 0-no, 1-yes

Evacuation Message Languages

1. English 3. French
2. Spanish 4. Portuguese

Alarm High Volume (17 079)

This option selects whether alarms are sounded over the voice siren at high volume or at the status volume.

Default: 1-high
Range: 0-low, 1-high

Enable Unsilence (17 126)

Enables unsilencing of fire alarm after silencing period expires. If not set, a silenced alarm will not resound

Default: 0-no
Range: 1=yes, 2=no

GLOBAL REPORTING OPTIONS

These are reporting options which either apply to the system or to all partitions.

S-Time (17 004)

S-Time is the time of day when the panel makes S-Time reports to the central station. Every time the system time is changed, S-Time is changed indirectly. This is done to ensure that a report is made every 24 hours.

Default: 01:00
Range: 0000 to 2359

Phone Test Interval (17 034)

This parameter specifies the interval between automatic phone tests in days. A value of 0 means no automatic phone test. The test occurs at S-Time.

Default: Commercial Fire and Burg.=1, Home Nav.=7
Range: 0 to 255 days (0 is off)

System Reports Enabled (17 096)

This option selects whether system reports are sent to the central station.

Default: 1 yes
Range: 0-no, 1-yes

System Event Printing Enabled (17 099)
This option selects whether system events are printed.

Default: 1-yes
Range: 0-no, 1-yes (11=No Buddy Transmitter Request)

Buddy Dial Attempts (17 101)
This parameters sets the number of report attempts a panel makes until a fail-to-communicate (FTC) condition is generated. A value of 0 means that no FTC message is generated.

Default: 5
Range: 0 to 11

Downloader Callback Required (17 122)
This option selects whether a downloader can connect to the panel by calling in or whether the panel must call the downloader back to initiate the job.

Default: 0 no
Range: 0-no, 1-yes

Report Buffer Threshold (17 044)
This parameter specifies the percentage at which the report buffer is indicated to be close to full.

Default: 80
Range: 10 to 100

History Buffer Threshold (17 043)
This parameter specifies the percentage at which the history buffer is indicated to be close to full.

Default: 80
Range: 10 to 100

System ID For Pager Reports (17 058)
The system pager ID is sent with every pager report to identify the panel.

Default: 0
Range: 0 to 255

System Account Numbers (17 102, 17 103)
There are two account numbers for system reports, up to 8 hex characters each. They are entered with two keystrokes per digit (0 = 00, ..., F = 15). If no system account number is programmed, the partition 1 account numbers are used for reporting system events.

Default: 00000000
Range: Up to 8 hex characters, each character entered as 00 to 15

Account Number Entries

00=0	04=4	08=8	12=C
01=1	05=5	09=9	13=D
02=2	06=6	10=A	14=E
03=3	07=7	11=B	15=F

Downloader Account Number (17 109)
The Downloader account number is a eight-digit number (0 to 9 per digit).

Default: 00000000
Range: Any 8 decimal digits

Downloader Access Code (17 108)
The Downloader access code is a five-digit number (0 to 9 per digit).

Default: 12345
Range: Any 5 decimal digits

Printer Line Feed Enabled (17 097)
This option enables or disables the printing of a line feed character following a carriage return character. This option should be set if the printer does not have its auto-line feed option enabled. If the printer keeps printing all of its events on the same line, then either this option or the printer's auto-line feed option should be enabled.

If the printer double-spaces (i.e. prints two line feeds), then either this option or the printer's auto-line feed option should be disabled. The printer should, by default, have its auto-line feed option (if any) disabled and the panel should send a line feed (this option enabled). If the printer is powered up while connected to the printer module, the printer module will try to set the printer auto-line feed option to Off.

Default: 1-yes
Range: 0-no, 1-yes

Printer ESC/P Support (17 124)
This option selects whether the printer supports the Epson ESC/P format. If so, the panel will use bold and italic letters. Else, it will not.

Default: 1-yes
Range: 0-no, 1-yes

TIME OPTIONS

The following options relate to the time and date kept by the system.

System Date (17 001)
This parameter contains the current day, month, and the last two digits of the year. It is programmed as 6 digits in MMDDYY format.

Default: 1/1/00
Range: 6-digits mmddyy

System Time (17 002)
This parameter contains the current hour, minute, and second. It is programmed as 6 digits in HHMMSS format as military time.

Default: 12 00 00
Range: 000000 to 235959, with MM and SS less than 60

System Day Of Week (17 003)
This parameter specifies the current day of the week.

Default: 5-Saturday
Range: 0 to 6 (Monday to Sunday)

Daylight Savings Time Enabled (17 070)
This option selects whether the system time is adjusted for daylight savings time automatically, according to standard US rules.

Default: 1-yes
Range: 0-no, 1-yes

MISCELLANEOUS OPTIONS

Off-Hook Activity (17 092)
This option selects whether taking a phone off-hook is considered activity in partition 1 and should reset the no-activity timer.

Default: 1 on
Range: 0-off, 1-on

Commercial/Residential Option (17 076)
This option selects whether the installation is commercial or residential. This option determines whether L-Time is every 4 hours or every 24 hours and what the names of arming levels 2 and 3 are.

Default: Commercial Fire and Burg.=1, Home Nav.=0
Range: 0-Residential, 1-Commercial

Battery Test Interval (17 073)
This option selects whether a battery test is performed every 4 hours or only at S-Time (every 24 hours).

Default: 1 (4 hours)
Range: 0-(24 hours), 1-(4 hours)

Jam Detect (17 072)
This option selects whether RF jam detection is enabled.

Default: 1 yes
Range: 0-no, 1-yes

High Rise (17074)
This option indicates whether or not the premises are a high rise building with floor numbers programmed for sensors.

Default: 0-no
Range: 0-no, 1-yes

Dealer Password (17 107)
The dealer password gives extra protection to some programming fields. When certain items are programmed in program mode, the installer is prompted for the dealer password before being allowed to access or change the information. The dealer password is always six digits long. If the dealer password is not programmed, then it will not be prompted for.

Default: None
Range: Any 6 decimal digits

Partition Text Annunciation (17 125)
This option selects whether partition text is displayed on touchpads and spoken. This option should be turned off only when a single partition is enabled and no text is required for that partition.

Default: 1 yes
Range: 0-no, 1-yes

Non-UL-864 Enable (17 129)

Sets panel to a non UL-864 system. This allows various options which are otherwise not accessible.

Default: CB + HN = 1, CF = 0
Range: 1-Yes, 0-No

Phone Number Options (19xxx to 40xxx)

Phone number options are in submenus 19 to 40, with one submenu per phone number. The programmable phone numbers are: (i) reporting phone numbers (19 to 22); (ii) Downloader phone numbers (23 and 24); and (iii) pager phone numbers (25 to 40).

In each phone number submenu, the phone number itself and a variety of options associated with that phone number can be programmed.

Reporting and Downloader Phone Number Options

Reporting and Downloader phone number options are in submenus 19 to 24, with submenu numbers assigned as follows:

- 19 = primary reporting phone number
- 20 = backup for primary reporting phone number
- 21 = secondary reporting phone number
- 22 = backup for secondary phone number
- 23 = Downloader phone number
- 24 = backup for Downloader phone number

Phone Number Enabled (yy 001)

Each phone number can be individually enabled or disabled. If it is disabled, the panel will not use it when trying to make a phone report.

Default: 0-no
Range: 0-no, 1-yes

Phone Number (yy 002)

Each phone number consists of up to 24 characters, where the legal characters are 0-9, *, #, D (delay), and W (wait for dial tone). When programming a new phone number, each character is entered as two digits (0 = 00, 1 = 01, ..., 9 = 09, * = 10, # = 11, D = 12, and W = 13). Entering 0# clears the phone number.

Default: Blank
Range: 24 Characters; 0-9, *,#, Delay, Wait

00=0	05=5	10=*	12=delay (1-5 seconds)
01=1	06=6	11=#	13=wait for dial tone.
02=2	07=7		0=no data
03=3	08=8		
04=4	09=9		

Number of Communication Attempts (yy 003)

The number of communication attempts is the number of attempts the panel makes to dial the phone number before giving up (i.e. there is no valid response).

Default: 5
Range: 5 to 10

Communication Format (yy 004)

The communication format is the format used to exchange data with the central station. For a Downloader session, the format is fixed, so programming this field is meaningless for a Downloader phone number.

Default: 0 (CID)
Range: 0 - CID, 1- SIA2000 1200 bps, 2-SIA2000 at 300

PAGER PHONE NUMBER OPTIONS

Pager phone number options are in submenus 25 to 40, i.e. up to 16 pager phone numbers can be used. Each pager can be set up to receive event reports from any number of partitions.

Phone Number Enabled (zz 001)

Enables the pager phone number.

Phone Number (zz 002)

Up to 20 characters (use chart from yy002).

Number of Communication Attempts (zz 003)

Number of attempts to pager service.

Communication Format (zz 004)

The communication format is the format used to send data to the pager service.

Paging is alphanumeric.

Default: 1 TAP@1200bps (psk)
Range: 0 (TAP@300 bps) (FSK), 1 (TAP@1200 bps) (PSK)

Communication Character Format (zz 005)

The character format sets the number of data bits, parity, and number of stop bits for a serial byte.

Default: 1-7E1
Range: 0-8N1, 1-7E1

Partition Reports Enabled (zz 007 to zz 014)

For each pager, alarm and alarm cancel reports from each partition can be individually enabled or disabled. For example, pager #7 can receive reports from partitions 3 and 6.

Default: 0-no
Range: 0-no, 1-yes

System Reports Enabled (zz 006)

In addition to reports from individual partitions, each pager can also be set to receive system reports.

Default: 0-no
Range: 0-no, 1-yes

Pager PIN Number (zz 015)

Each pager has a PIN number which can be up to 15 digits (0 to 9) long.

Default: No Data
Range: Up to 15 digits, 0 to 9 each

Maximum Pager Message Length (zz 016)

Each pager has a maximum message length, which is the maximum number of ASCII characters which can be sent to the pager in a single report.

Default: 120 characters
Range: 0 to 255 characters

Zone Features (47001 – 47008)

The zone submenu is a multi-step procedure for programming zones and zone related functions:

- Add Zones
- Delete Zones
- List Zones
- Zone Attributes
- Test Buddies
- List Buddies
- Add Analog Zones
- Test Analog Zones

Learning a Zone (47001)

Learning zones is done via the Learn Mode process. The panel is put into Learn Mode, during which it expects to receive a special signal from the zone to be learned. This signal is triggered in some pre-determined way, depending on the device type. For example, for a hardwire zone, it is a zone trip, for an RF door/window sensor, it is a tamper trip, and for an RF touchpad, it is pressing the Bypass (#) key which learns the zone.

When entering the zone learning utility, the installer is first prompted for the partition number and then the type number of the new zone. Then, the panel will find the lowest available zone number and prompt the installer to either accept it as the new zone number or change it. Finally, the installer is prompted to trip the zone in order to learn it.

If, at any point, the installer enters an invalid value or the zone is not learned successfully, the panel indicates the error. If the panel learns the zone successfully, it echoes the zone parameters and then prompts for a new zone trip.

The new zone will have default attributes assigned to it (see Option 47004).

When being prompted to trip a new zone, pressing * will exit this utility and return to the top of the program menu. Pressing # causes the panel to prompt for a new type number (same partition).

Deleting a Zone (47002)

When deleting a zone, the installer is prompted for a zone number. Enter zone number and press # to delete.

Listing Zones (47003)

This utility lists all learned zones, including zone number, type number, and partition. Pressing * exits the listing and # skips forward.

Changing Zone Attributes (47004)

Each zone has ten programmable attributes in addition to the zone number, type number, and partition. They are listed below, along with the range of allowed values:

1. Critical sensor (0 = no, 1 = yes) default: 0-no
2. Supervisory time (0 = A, 1 = B) default: 0-A
   17049=4 Hours 17050=24 Hours
3. Zone threshold (0 = none, 1 = xx018 #1, 2 = xx019, 3 = xx020) default: 0-none
4. Hardwire smoke verification (0 = none, 1 = yes) default: 0-no
5. Delayed zone (0 = no, 1 = yes) default: 0-no
6. Floor number (1-20 = floors 1 to 20, 21-29 = floors -1 to -9 (below ground) default: 0-no
7. not used
8. not used
9. not used
10. Warning message index (0 to 5, 0 = none) default: 0-none

When entering this utility, the installer is first prompted for the zone number, then the attribute number. Then, the current value is echoed, which can either be accepted or changed.

The defaults for all attributes are 0.

Testing Buddies (47005)

This utility puts the panel into Buddy Test Mode, in which the communication between the panel and its buddies is tested. When done, the panel automatically enters Buddy List Mode (see below).

Listing Buddies (47006)

This utility lists all learned buddies of a panel and the RF signal strengths measured during the most recent buddy communication.

Learning Analog Smoke Sensors (47007)

This utility automatically learns in all analog smoke sensors attached to a given analog smoke module, except those which are already learned. The panel prompts for the partition, device ID of the module (already enrolled) and the starting zone number. The zone is automatically set to the proper fire type. (Deleting an analog smoke module will delete all analog devices attached to that module.)

Testing Analog Smoke Sensors (47008)

This utility tests all analog smoke heads in the system and prints applicable information on the printer.

Zone Programming Overview

The following information will provide a complete review of all zone programming parameters.

ZONE PROGRAMMING

Enter Program Mode: 8 + 0 + Installer Code (0123)

Enter Item Number: 47001 – Add (Learn) Zone

Enter Partition Number: 1 – 8 + #

The system will default partition 1 On if the system has multiple partitions ensure each is activated (On) at programming location xx068.

Enter Zone Type: 00 – 96 + #

The zone type refers to the action the zone takes when activated. Refer to the Zone Type Characteristics Chart when choosing a type number.

The type chart provides the following information:

No. – the number used when assigning a zone type

Name – type name

Application – brief description where type may be used

Active Levels – arming levels where type is active (add list of levels)

Alarm/Siren – type of signal generated and related siren sound

Delay – refers to the associated delay if any

Instant – immediate alarm

Standard – starts a delay time, defaults at 32 seconds

Extended Delay – starts a delay time, defaults at 2 minutes

Twice Extended – starts a delay time twice the extended

Follower – enters a delay time only if a delay type is activated otherwise instant (motions)

Supervisory – determines if control panel verifies check-in signals from wireless devices

Restoral – determines if the control panel requires a zone restoral before system can be armed

CS Alarm Report – determines if the devices reports to the central station or acts as a local only device

CS Cancel Report – does the device send a cancel report to the central station when the system is disarmed following an alarm

Bypassable – can the device be bypassed by an authorized user

Chime – will the device activate the interior sirens when the chime feature is on

Resets Activity Time – when activated device resets timer

Enter Zone Number: 01 – 250 + #

> The system will always provide you with the next available zone number, to select press # or enter new number followed by #. The system is flexible and allows the zone location either onboard, snapcard, input module, wireless zone, etc. to be any zone number you wish.

Trip Zone: Active zone

When the system prompts to trip zone it is looking for an activation either from a hardwire zone connected to the panel or the tamper of a wireless zone. The touchpad display must be monitored the while tripping zones to ensure other activations do not accidentally learn in. Tripping zones vary by the device—Hardwire or Wireless.

To trip a hardwire zone, ensure the zone is connected to the system and the end-of-line resistor in place, then activate the zone when the touchpad reads Trip Zone. Several different methods are used when tripping wireless devices.

HARDWIRE PROGRAMMING HINT

Remove a leg of the zone at the panel or module rather than walking around the install site.

When using a wireless device with a hardwire contact connected the hardwire contact must be in the alarm state before tripping the devices tamper. Again programming the zone at the panel before installation makes for an easier install.

- Crystal Door/Window - Remove cover
- SAW Door/Window - Push “Press to Program” Button
- Micro Door/Window - Remove cover then remove battery
- Recessed Door/Window - Gently apply pressure to the small slot on the end of the sensor
- Crystal Motion - Remove cover
- SAW Motion - Remove cover
- 2300 RF Smoke - Remove batteries and put them in with correct polarity
- Rate-of-Rise Heat - Trip the Learn Switch behind battery
- Single Technology Sound Sensor - Trip the tamper
- Glass Guard - Remove Cover
- IntelliSense Sound - Trip tamper by opening the cover
- SAW Water Sensor - Push “Press to Program” Button
- CO Detector - Press “Test/Reset” button (follow instructions)
- Freeze Sensor - Remove cover
- Water Resistant Pendant Panic - Press button
- Portable Pendant Panic Sensor - Press button
- Portable Panic - Press button
- Hi-Tech Wall Mount Wireless Touchpad - Press “Bypass”
- Handheld Wireless Touchpad - Press “Bypass”
- 4-Button Keychain - Press and hold “Lock” and “Unlock” buttons down simultaneously together
- 2-Button Keychain - Press and hold “Lock” and “Unlock” buttons down simultaneously together
- SAW Hi-Tech Handheld Wireless Touchpad - Press and hold both “Emergency” buttons down simultaneously together
- SWIS - See Install Instructions for appropriate panel

Zone programming is only limited to the zone count of the panel. Once a zone number is used it cannot be duplicated, i.e. once zone 1 is programmed you cannot program or even select zone 1 again. The system allows for maximum flexibility by allowing unlimited number of specific zone types, i.e. you can program 100 delay doors, 40 smokes, 10 perimeter instant, etc.

Zone Type Characteristics

No.	Name	Application	**Active Levels	Alarm/Siren	Delay	Supervisory	Restoral	CS Alarm Report	CS Cancel Report	By-passable	Chime	Resets Activity Timer
00	Fixed Panic	24-hour audible fixed emegency buttons.	1, 2, 3, 4, 5	Police/ Police	Instant	√		√	√	√		
01	Portable Panic	24-hour audible portable emergency buttons.	1, 2, 3, 4, 5	Police/ Police	Instant			√	√	√		
02	Fixed Panic	24-hour silent fixed emergency buttons.	1, 2, 3, 4, 5	Police/Silent	Instant	√		√	√	√		
03	Portable Panic	24-hour silent portable emergency buttons.	1, 2, 3, 4, 5	Police/Silent	Instant			√	√	√		
04	Fixed Auxiliary	24-hour auxiliary sensor, such as Pendant Panic or holdup button.	1, 2, 3, 4,	Auxiliary/ Auxiliary	Instant	√		√	√	√		
05	Fixed Auxiliary	24-hour auxiliary emergency buttons. Siren shut-off confirms CS alarm report.	1, 2, 3, 4, 5	Auxiliary/ Auxiliary	Instant	√		√	√	√		
06	Portable Auxiliary	24-hour portable auxiliary alert buttons.	1, 2, 3, 4, 5	Auxiliary/ Auxiliary	Instant			√	√	√		
07	Portable Auxiliary	24-hour portable auxiliary button. Siren shut-off confirms CS alarm report.	1, 2, 3, 4, 5	Auxiliary/ Auxiliary	Instant			√	√	√		
08	Special Intrusion	Special belongings, such as gun cabinets and wall safes.	1, 2, 3, 4, 5	Police/ Police	Instant	√	√	√	√	√		
09	Special Intrusion	Special belongings, such as gun cabinets and wall safes.	1, 2, 3, 4, 5	Police/ Police	Standard	√	√	√	√	√		
10	Entry/Exit Delay	Entry and exit doors that require a standard delay time.	2, 3, 4, 5	Police/ Police	Standard	√	√	√	√	√	√	√
11	Entry/Exit Delay	Garage doors and entrances that require an extended delay time. *	2, 3, 4, 5	Police/ Police	Extended	√	√	√	√	√	√	
12	Entry/Exit Delay	Driveway gates and entrances that require a twice extended delay time. *	2, 3, 4, 5	Police/ Police	Twice Extended	√	√	√	√	√	√	
13	Instant Perimeter	Exterior doors and windows.	2, 3, 4, 5	Police/ Police	Instant	√	√	√	√	√	√	√
14	Instant Interior	Interior doors.	2, 3, 4, 5	Police/ Police	Follower	√	√	√	√	√		√
15	Instant Interior	Interior PIR motion sensors. *	2, 3, 4, 5	Police/ Police	Follower	√		√	√	√		√
16	Instant Interior	Interior doors.	3, 4, 5	Police/ Police	Follower	√	√	√	√	√		√
17	Instant Interior	PIR motion sensors. *	3, 4, 5	Police/ Police	Follower	√		√	√	√		√
18	Cross Zone Instant Interior	PIR motion sensors subject to false alarms. * †	3, 4, 5	Police/ Police	Follower	√		√	√	√		√
19	Delayed Interior	Interior doors that initiate a delay before going into alarm.*	3, 4, 5	Police/ Police	Standard	√	√	√	√	√		√
20	Delayed Interior	PIR motion sensors that initiate a delay before going into alarm. *	3, 4, 5	Police/ Police	Standard	√		√	√	√		√
21	Local Instant Interior	24-hour local alarm zone protecting anything that opens and closes.	1, 2, 3, 4, 5	Police/ Police	Instant	√	√			√		√

Zone Type Characteristics (Continued)

No.	Name	Application	**Active Levels	Alarm/Siren	Delay	Supervisory	Restoral	CS Alarm Report	CS Cancel Report	By-passable	Chime	Resets Activity Timer
22	Local Delayed Interior	Same as type 21, plus activation initiates a delay before going into alarm.	1, 2, 3, 4, 5	Police/ Police	Standard	√	√			√		√
23	Local Instant Auxiliary	24-hour local alarm zone protecting anything that opens and closes. ‡	1, 2, 3, 4, 5	Auxiliary/ Auxiliary	Instant	√	√			√		
24	Local Instant Auxiliary	24-hour local alarm zone protects things that opens and closes. Sirens shut off at restoral.*	1, 2, 3, 4, 5	Auxiliary/ Auxiliary	Instant	√	√			√		
25	Local Special Chime	Notify the user when a door is opened. Sounds emit from a local annunciator. *	1, 2, 3, 4, 5	Special Chime	Instant	√	√			√	√	
26	Fire	24-hour audible fire emergency buttons, rate-of-rise heat, and smoke sensors.	1, 2, 3, 4, 5	Fire/ Fire	Instant	√	√	√	√			
27	Custom Output	Output, lamp control, or other customer feature. ‡	1, 2, 3, 4, 5	Silent	Instant	√	√			√		
28	Custom Output	Output, PIR motion sensor, sound sensor, or pressure mat. ‡	1, 2, 3, 4, 5	Silent	Instant	√				√		
29	Auxiliary	Auxiliary.	1, 2, 3, 4, 5	Auxiliary	Instant	√	√	√	√	√		
30 (A)	Report Police	24-hour audible police alarm in levels 2 and 3.	2, 3, 4, 5	Police/ Police	Instant	√	√	√	√	√		
30 (B)	Local Auxiliary	24-hour audible auxiliary alarm in level 1. Siren shut off at restoral.	1	Auxiliary/ Auxiliary	Instant	√	√			√		
32	Custom Output	Output, PIR motion sensor, sound sensor, or pressure mat. ‡	1, 2, 3, 4, 5	Silent	Instant					√		
50	Local Instant Interior	24-hour local alarm zone protecting anything that opens and closes.	2, 3, 4, 5	Police/ Police	Instant	√	√			√		√
51	Local Delayed Interior	24-hour local alarm zone protecting anything that opens and closes.	2, 3, 4, 5	Police/ Police	Standard	√	√			√		√
52	Local Indicator	24-hour local auxiliary alarm zone protecting anything that opens and closes. No voice. Sirens shut off at restoral. *	1, 2, 3, 4, 5	Auxiliary/ Auxiliary	Instant	√	√			√		
53	Local Indicator	24-hour local indicator zone protecting anything that opens and closes. Chime only.	1, 2, 3, 4, 5	None	Instant	√	√			√	√	
54	Fixed Medical	24-hour audible fixed medical emergency buttons.	1, 2, 3, 4, 5	Medical/ Medical	Instant	√		√	√	√		
55	Fixed Medical	24-hour audible fixed medical emergency buttons. Sirens shut off when reported.	1, 2, 3, 4, 5	Medical/ Medical	Instant	√		√	√	√		
56	Portable Medical	24-hour audible portable medical emergency buttons.	1, 2, 3, 4, 5	Medical/ Medical	Instant			√	√	√		
57	Portable Medical	24-hour audible portable medical emergency buttons. Sirens shut off when reported.	1, 2, 3, 4, 5	Medical/ Medical	Instant			√	√	√		
58	Suspicion	If not canceled within 1-5 min., alarm may optionally be generated. A second trip within 1-5 min. will cause an alarm.	1, 2, 3, 4, 5	Suspicion/ Silent	Instant	√		√	√	√		
59	Fire Keyswitch	Keyswitch used for enabling fire type touchpad.	1, 2, 3, 4, 5	Silent	Instant	√	√					

Zone Type Characteristics (Continued)

No.	Name	Application	**Active Levels	Alarm/Siren	Delay	Supervisory	Restoral	CS Alarm Report	CS Cancel Report	By-passable	Chime	Resets Activity Timer
60 (A)	Police	24-hour audible police emergency buttons.	3, 5	Police/ Police	Instant	√	√	√	√	√		
60 (B)	Fire	24-hour audible fire emergency buttons	1, 2, 4,	Fire/ Fire	Instant	√	√	√	√	√		
61	Local Indicator/Delay Perimeter	Local beeps only in Level -1.	2, 3, 4, 5	Police/ Police	Standard	√	√	√	√	√		√
62	Fire Panic	Fire Panic	1, 2, 3, 4, 5	Fire/ Fire	Instant	√	√	√	√			
63	Equipment Tamper	24-hour audible security system panel tamper alarm.	1, 2, 3, 4, 5	Equipment Tamper/ Police	Instant	√	√	√	√			
64	Equipment Tamper	24-hour silent security system panel tamper alarm.	1, 2, 3, 4, 5	Equipment Tamper/ None	Instant	√	√	√	√			
65	Siren Tamper	24-hour audible siren tamper alarm.	1, 2, 3, 4, 5	Siren Tamper/ Police	Instant	√	√	√	√			
66	Siren Tamper	24-hour silent siren tamper alarm.	1, 2, 3, 4, 5	Siren Tamper/ None	Instant	√	√	√	√			
67		Unused.										
68	Carbon Monoxide	Carbon Monoxide gas detectors. Note: For residential use only.	1, 2, 3, 4, 5	Carbon Monoxide/ Medical	Instant	√	√	√	√			
69	Touchpad disable keyswitch	Keyswitch for disabling touchpad.	1, 2, 3, 4, 5	None/ None	Instant	√				√		
70	Warning	Trip plays programmable evacuation message.	1, 2, 3, 4, 5	None/ None	Instant	√				√	√	
71	Keyswitch	Trip causes arm. Restoral causes a disarm.	1, 2, 3, 4, 5	None/ None	Instant	√	√					√
72	Live Evac. Mic.	Live evacuation microphone.	1, 2, 3, 4, 5	None/ None	Instant	√						
73	Fixed Holdup	24-hour silent fixed holdup emergency button alarm.	1, 2, 3, 4, 5	Holdup/ None	Instant	√		√				
74	Portable Holdup	24-hour silent portable holdup emergency button alarm.	1, 2, 3, 4, 5	Holdup/ None	Instant			√				
75	Night Interior	Disarmed in “night” level.	3, 5	Police/ Police	Follower	√	√	√	√	√		√
76	Night Interior	Disarmed in “night” level.	3, 5	Police/ Police	Follower	√		√	√	√		√
77	Cross Zone Night Delayed Interior	Disarmed in “night” level. †	3, 5	Police/ Police	Follower	√		√	√	√		√
78	Night Delayed Inteior	Disarmed in “night” level.	3, 5	Police/ Police	Standard	√	√	√	√	√		√
79	Night Delayed Inteior	Disarmed in “night” level.	3, 5	Police/ Police	Standard	√		√	√	√		√

Zone Type Characteristics (Continued)

No.	Name	Application	**Active Levels	Alarm/Siren	Delay	Supervisory	Restoral	CS Alarm Report	CS Cancel Report	By-passable	Chime	Resets Activity Timer
80	Smoke	24-hour audible smoke/fire alarm.	1, 2, 3, 4, 5, 6	Smoke/Fire	Instant	√	√	√	√			
81	Heat	24-hour audible heat/fire alarm.	1, 2, 3, 4, 5	Heat/ Fire	Instant	√	√	√	√			
82	Water Flow	24-hour audible sprinkler/fire alarm.	1, 2, 3, 4, 5	Sprinkler/ Fire	Instant	√	√	√	√			
83		Unused.										
84	Enhanced Buddy	Special enhanced “buddy system” function.	1, 2, 3, 4, 5	Buddy/ None	Instant	√						
85	Repeater	Wireless signal repeaters	1, 2, 3, 4, 5	None/ None	Instant	√						
86	Fixed Wireless Touchpad	Fixed (wall-mount) wireless touchpads	1, 2, 3, 4, 5	None/ None	Instant	√						
87	Portable Wireless Touchpad	Portable (hand-held) wireless touchpads Note: For residential use only.	1, 2, 3, 4, 5	None/ None	Instant							
88		Unused.										
89		Unused.										
90	Pump Active	Fire pump is active.	1, 2, 3, 4, 5	Fire/Fire	Instant	√	√	√	√			
91	Pump Failure	Fire pump has failed. #	1, 2, 3, 4, 5	Aux./Aux.	Instant	√	√					
92	Gate Valve Closed	Fire gate valve has been closed. #	1, 2, 3, 4, 5	Aux./Aux.	Instant	√	√					
93	CO2 Pressure	CO2 pressure is low. #	1, 2, 3, 4, 5	Aux./Aux.	Instant	√	√					
94	Liquid Pressure	Liquid pressure is low. #	1, 2, 3, 4, 5	Aux./Aux.	Instant	√	√					
95	Liquid Level	Liquid level is low. #	1, 2, 3, 4, 5	Aux./Aux.	Instant	√	√					
96	Fire Supervisory	A fire supervisory trouble has been detected. #	1, 2, 3, 4, 5	Aux./Aux.	Instant	√	√					

Note: Check marks (√) represent characteristics present in a type.

* This type is not certified as a primary protection circuit for UL-listed systems and is for supplementary use only.

† Sounds instant police siren if two or more sensors are tripped within 4 minutes; otherwise sensors are followers to delayed sensors. If central station Alarm Verification feature is on, type 18 functions like type 17.

‡ This type has not been investigated by UL.

Zone trip causes trouble, restoral causes trouble restoral.

SuperBus Features (48001 – 48008)

Submenu 48 contains SuperBus Features, which are multi-step procedures for programming various bus-related parameters and managing bus devices. Only SuperBus 2000 devices are supported. SuperBus 2000 devices have their bus address assigned to them by the panel. They have a pre-programmed ID printed on a label located on the back of each device.

- Add Bus Device
- Delete Bus Device
- List Bus Device
- Bus Partition
- Change Transmit Bus Device ID
- List Bus Device Text
- Change Bus Device Text ID
- Reset Analog Smoke

Learning Bus Devices (48001)

This utility scans the bus for new devices and learns any devices that are not enrolled. It then echoes various parameters for any new devices learned. Every time the panel resets and there are no functioning touchpads found, the panel will scan the bus automatically as well.

All new devices are initially assigned to partition 1. To change the partition of a device, see 48004.

Deleting Bus Devices (48002)

When entering this utility, the installer is prompted for the ID of the old device being replaced. If the ID is valid, the installer is then prompted for the ID of the new device replacing the old one. If 0# is entered here, the old device is just deleted.

Listing Bus Devices (48003)

This utility lists all enrolled bus devices, including address, ID, bus device text, and partition.

Setting Partition of Bus Device (48004)

This utility changes the partition of a bus device. It prompts the installer for a valid device ID and the new partition. The new partition must be enabled to be valid.

Selecting a Bus Transceiver (48005)

The panel uses a bus transceiver to send RF transmissions to its buddies. This utility prompts for the eight-digit ID of the bus transceiver to be used.

Listing Text Associated With Bus Device Ids (48006)

This utility lists the text associated with various device IDs. The text and IDs do not need to belong to valid, learned-in devices.

Change Bus Device Text ID (48007)

This utility changes an ID in the bus text table, where text is associated with the ID. The panel prompts for the old ID and the new ID, then replaces the old one with the new one in the table. This is useful when replacing bus devices.

Resetting an Analog Addressable Smoke Module (48008)

This utility prompts for the ID of the analog module to reset and then resets it.

Text Features (49001 – 49005)

Submenu 49 contains text Features, which are multi-step procedures for programming various text-related parameters. Text can be assigned to the following objects:

- Zones Text
- Bus Device Text
- Output Text
- Partition Text
- Static Display Text (Touchpad idle text)

Zone Text (49001)

There are up to 250 zones in the system, each of which can be assigned text. When programming zone text, the installer is prompted for a zone number and up to eight three-digit descriptor numbers. Enter 000# for no text.

Bus Device Text (49002)

Bus device text is associated with device IDs, not bus addresses. When programming bus device text, the installer is prompted for a device ID and up to eight three-digit descriptor numbers. Enter 000# for no text and 0# to delete the ID and the text.

Menu Output Text (49003)

There are 40 menu outputs per partition for a total of 320. Partition 1 has outputs 1-40, partition 2 has outputs 41-80, and so on. When programming output text, the installer is prompted for an output number and up to eight three-digit descriptor numbers. Enter 000# for no text.

Partition Text (49004)

There are up to eight partitions in the system, each of which can be assigned text. When programming partition text, the installer is prompted for a partition number and up to eight three-digit descriptor numbers. Enter 000# for no text.

Static Display Text (49005)

When a partition is disarmed and idle, the normal touchpad display text may be replaced by custom static display text. When programming static display text, the installer is prompted for a partition number and up to 64 two-digit display tokens. Enter 0# for no text.

No.	Text Descriptor
001	0
002	1
003	2
004	3
005	4
006	5
007	6
008	7
009	8
010	9
011	10
012	11
013	12
014	13
015	14
016	15
017	16
018	17
019	18
020	19
021	20
022	30
023	40
024	50
025	60
026	70
027	80
028	90
029	100
030	THOUSAND_
031	ONE_
032	0_
033	1_
034	2_
035	3_
036	4_
037	5_
038	6_
039	7_
040	8_
041	9_
042	10_
043	11_
044	12_
765	24_
045	Dash
046	Cursor
047	Space And 125 ms Pause
048	Space
049	Blink Next Token
050	Break Line (Return)
051	Period (Dot)
052	Apostrophe
053	AM_
054	PM_
055	125 ms Pause
056	250 ms Pause
057	500 ms Pause
058	125 ms Beep
059	250 ms Beep
060	500 ms Beep
061	125 ms Low Beep
062	250 ms Low Beep
063	500 ms Low Beep
064	Long Beep
065	Chime Ding
066	Chime Dong
067	A (display only)
068	A
069	A_ (short)
070	ABORT_
071	ABORTED_
072	ABOVE_
766	AC_ (A.C.)
073	ACCEPT_
074	ACCESS_
075	ACKNOWLEDGE_
076	ACKNOWLEDGMENT_
077	ACTIVE_
078	ACTIVITY_
079	ADD_
080	ADDED_
081	ADDRESS_
767	ADDRESSABLE_
082	ADVENT_
083	AGAIN_
084	AGENT_
085	AIR_
086	ALARM_
087	ALERT_
088	ALL_
089	ALLEY_
090	AN_
768	ANALOG_
091	AND_
092	ANNEX_
093	ANNUNCIATOR_
094	ANTENNA_
095	APARTMENT_
096	APPLIANCE_
097	APRIL_
098	ARE_
099	AREA_
100	ARM_
101	ARMED_
102	ARMING_
103	ART_
104	AS_
105	ASSEMBLY_
106	ATTIC_
107	ATTRIBUTE_
108	AUDIO_
109	AUGUST_
110	AUTHORITY_
111	AUTO_
112	AUTO ARMING_
113	AUTOMATIC_
114	AUTOMATION_
115	AUXILIARY_
116	AWAY_
117	B (display only)

No.	Text Descriptor
118	B
119	BABY'S_
120	BACK_
121	BACKUP_
122	BAD_
123	BADGE_
124	BALCONY_
125	BAR_
126	BARN_
127	BASEMENT_
128	BATH_
129	BATTERY_
130	BAY_
131	BEDROOM_
769	BELL_
132	BLACK_
133	BLOWER_
134	BLUE_
135	BOAT_
136	BOILER_
137	BOTTOM_
770	BOX_
138	BREAK_
139	BREAKER_
140	BREATHING_
141	BREEZEWAY_
142	BRIGHTEN_
143	BROWN_
144	BUDDY_
145	BUFFER_
146	BUILDING_
147	BUS_
148	BUSINESS_
149	BUSY_
150	BYPASS_
151	BYPASSED_
152	C (display only)
153	C
154	CABIN_
155	CABINET_
156	CAGE_

No.	Text Descriptor
771	CALL_
157	CALLER ID_
158	CAMERA_
159	CANCEL_
160	CANCELED_
161	CAR_
162	CARBON MONOXIDE_
163	CASH_
164	CCTV_
165	CEILING_
166	CELLAR_
167	CELLULAR_
168	CENTER_
169	CENTRAL_
170	CHANGE_
171	CHANGED_
172	CHECK IN_
173	CHECKSUM_
174	CHIME_
772	CIRCUIT_
175	CLASS_
176	CLEAR_
177	CLEARED_
178	CLOSE_
179	CLOSED_
180	CLOSET_
181	CLOSING_
182	CO_
183	CO2_
184	COAT_
185	CODE_
186	CODE'S_
187	CODES_
188	COLLECTION_
189	Colon
190	COMMON_
191	COMMUNICATION_
192	COMMUNICATOR_
193	COMPLETE_
194	COMPUTER_
195	CONFERENCE_

No.	Text Descriptor
196	CONFIGURATION_
197	CONSERVATORY_
198	CONTACT_
199	CONTINUE_
200	CONTROL_
201	COOLER_
202	CORRIDOR_
203	COTTAGE_
204	COUNT_
205	COUNTER_
206	CPU_
207	CRITICAL_
208	CUSTOM_
209	D (display only)
210	D
211	DAMPER_
212	DATA_
213	DAUGHTER'S_
214	DAY_
215	DAYLIGHT_
216	DAYS_
773	DEALER_
217	DECEMBER_
218	DECK_
219	DEGREES_
220	DELAY_
221	DELETE_
222	DELETED_
223	DEN_
224	DESCRIPTORS_
225	DESK_
226	DETECTOR_
227	DEVICE_
228	DEVICES_
229	DIAL_
230	DIFFERENT_
231	DIM_
232	DINING_
233	DIRECT_
234	DISABLE_
235	DISABLED_

No.	Text Descriptor
236	DISARM_
237	DISARMED_
774	DISPLAY_
238	DO_
775	DOCK_
239	DOES_ (long)
240	DOES_ (short)
241	DOOR_
242	DOWN_
243	DOWNLOAD_
244	DOWNSTAIRS_
245	DRILL_
246	DRIVEWAY_
247	DRUG_
248	DUAL_
249	DUCT_
250	DURESS_
251	E (display only)
252	E
253	EARLY_
254	EAST_
255	EIGHTH_
776	ELECTRICAL_
256	ELEVATOR_
257	ELEVENTH_
258	EMERGENCY_
259	EMPLOYEE_
260	ENABLE_
261	ENERGY SAVER_
262	ENERGY SAVERS_
263	ENTER_
264	ENTERED_
265	ENTRANCE_
266	ENTRY_
267	ENVIRONMENTAL_
268	EQUIPMENT_
269	ERROR_
270	EVACUATION_
271	EVENT_
272	EXECUTIVE_
273	EXERCISE_

No.	Text Descriptor
274	EXIST_
275	EXISTS_
276	EXIT_
277	EXPLOSIVE_
278	EXTEND_
279	EXTENDED_
280	EXTENSION_
281	EXTERIOR_
282	EXTINGUISHER_
283	F (display only)
284	F
285	FACTORY_
286	FAILED_
287	FAILURE_
288	FAMILY_
289	FAN_
290	FATHER'S_
291	FAULT_
292	FEATURE_
293	FEATURES_
294	FEBRUARY_
295	FENCE_
296	FIFTH_
297	FILE_
298	FIRE_
299	FIRST_
777	FLAME_
300	FLASH_
301	FLOOD_
302	FLOOR_
303	FLOW_
304	FOR_
305	FORCE_
306	FORMAT_
307	FOURTH_
308	FOYER_
309	FREEZE_
310	FREEZER_
311	FRIDAY_
312	FROM_
313	FRONT_

No.	Text Descriptor
314	FULL_
315	FURNACE_
316	G (display only)
317	G
318	GALLERY_
319	GAME_
320	GARAGE_
321	GARDEN_
322	GAS_
323	GATE_
324	GENERATOR_
778	GENERAL_
325	GLASS_
326	GLOBAL_
327	GOLD_
328	GOOD_
329	GOODBYE_
330	GRAY_
331	GREEN_
332	GROUND_
333	GROUP_
334	GUARD_
335	GUEST_
336	GUN_
337	H (display only)
338	H
339	HALL_
340	HALLWAY_
341	HARDWIRE_
342	HEAD_
343	HEAT_
344	HEATER_
345	HEATING_
346	HELLO_
347	HELP_
348	HIGH_
349	HISTORY_
350	HOLDUP_
351	HOLIDAY_
352	HOME_
779	HORN_

No.	Text Descriptor
353	HOT TUB_
354	HOUSE_
355	I (display only)
356	I
357	ID_
358	IN_
780	INDICATING_
359	INDIRECT_
360	INDOOR_
361	INFORMATION_
362	INFRARED_
363	INHIBIT_
781	INITIATING_
364	IN PROGRESS_
365	INPUT_
366	IN SERVICE_
367	INSIDE_
368	INSTANT_
369	INTEGRATION_
370	INTERCOM_
371	INTERIOR_
372	INTRUSION_
373	INVALID_
374	IS_
375	ITEM_
376	J (display only)
377	J
378	JACUZZI_
379	JAM_
380	JANITOR_
381	JANUARY_
382	JEWELRY_
383	JOFFRE_
384	JULY_
385	JUNE_
386	K (display only)
387	K
782	KEY_
388	KEYFOB_
389	KEYSTROKE_
390	KEYSWITCH_

No.	Text Descriptor
391	KITCHEN_
392	L (display only)
393	L
394	LADIES'_
395	LAKE_
396	LATCHKEY_
397	LATE_
398	LAUNDRY_
783	LED_ (L.E.D.)
399	LEARN_
400	LEFT_
401	LENGTH_
402	LEVEL_
403	LIBRARY_
404	LIGHT_
405	LIGHTING_
406	LIGHTS_
407	LIMIT_
408	LIMITS_
409	LINE_
410	LIQUID_
411	LIQUOR_
412	LIST_
413	LISTEN_
414	LIVING_
415	LOBBY_
416	LOCAL_
417	LOCKOUT_
418	LOG_
419	LONG_
420	LOOP_
421	LOT_
422	LOUNGE_
423	LOW_
424	LOWER_
425	LTIME_
426	M (display only)
427	M
428	MACHINE_
429	MAID'S_
430	MAILBOX_

No.	Text Descriptor
431	MAIN_
784	MAINTENANCE_
432	MALL_
433	MANAGER'S_
785	MANUAL_
434	MANUFACTURING_
435	MARCH_
786	MASK_
436	MASTER_
437	MAT_
438	MAY_
439	MECHANICAL_
440	MEDIA_
441	MEDICAL_
442	MEDICINE_
443	MEMORY_
444	MEN'S_
445	MENU_
446	MESSAGE_
447	MICROPHONE_
448	MICROWAVE_
449	MIDNIGHT_
450	MINUTES_
451	MODE_
452	MODIFIER_
453	MODIFY_
454	MODULE_
455	MONDAY_
456	MONEY_
457	MOTHER'S_
458	MOTION_
459	MOTOR_
460	N (display only)
461	N
787	NAC_ ("knack")
462	NEGATIVE_
463	NEW_
464	NIGHT_
465	NINTH_
466	NO_
788	NON_

No.	Text Descriptor
467	NON-REPORTING_
468	NOON_
469	NORMAL_
470	NORTH_
471	NOT_
472	NOVA ALERT_
473	NOVEMBER_
474	NOW_
475	NUMBER_
476	NUMBERS_
477	NURSERY_
478	O (display only)
479	O
480	OBSCURITY_
481	O'CLOCK_
482	OCTOBER_
483	OF_
484	OFF_
485	OFFICE_
486	0 (spoken as OH)
487	OK_
488	ON_
489	OPEN_
490	OPENING_
491	OPTION_
492	OR_
493	ORANGE_
494	OUT_
495	OUTDOOR_
496	OUTPUT_
497	OVER_
498	P (display only)
499	P
500	PAGER_
501	PAINTING_
502	PANEL_
503	PANIC_
504	PANTRY_
505	PARENTS'_
506	PARKING_
507	PARTITION_

No.	Text Descriptor
508	PATH_
509	PATIO_
510	PERIMETER_
511	PERIOD_
512	PERMANENT_
513	PHONE_
514	PHOTO_
515	PLACE_
516	PLANT_
517	PLEASE_
518	POLICE_
519	POOL_
789	PORCH
520	POSITIVE_
521	POUND_
522	#_ (spoken as Pound)
523	# (spoken as Pound)
524	POWER_
525	PREARM_
526	PRESS_
527	PRESS_ (on new line)
528	PRESSURE_
529	PRIMARY_
530	PRINTER_
531	PROGRAM_
532	PROGRAMMING_
533	PROTEST_
534	PULL STATION_
535	PUMP_
536	PURPLE_
537	Q (display only)
538	Q
539	QUAD_
540	QUIET_
541	QUIT_
542	R (display only)
543	R
544	RADIO_
545	RAMP_
546	RANGE_
547	READY_

No.	Text Descriptor
548	REAR_
790	RECALL
549	RECEIVER_
550	RECEIVING_
551	RECEPTION_
552	RECONNECT_
553	RED_
554	REDIRECT_
555	RELAY_
556	RELEASE_
557	REMOTE_
558	REMOVE_
559	REMOVED_
560	REPEATER_
561	REPORT_
791	REQUEST
562	RESET_
563	RESTORAL_
564	RESTORED_
565	RETURN_
566	REVIEW_
567	RF_
568	RIGHT_
569	RING_
570	ROOF_
571	ROOM_
572	S (display only)
573	S
574	SAFE_
575	SATURDAY_
576	SAUNA_
577	SCHEDULE_
578	SCHEDULES_
579	SCHOOL_
580	SCREEN_
581	SCRIPT_
582	SCRIPTS_
583	2ND_
584	SECOND_
792	SECONDARY
585	SECONDS_

No.	Text Descriptor
586	SECTION_
587	SECTOR_
588	SECURE_
589	SECURITY_
590	SELECTION_
793	SENSITIVITY
591	SENSOR_
592	SENSORS_
593	SEPTEMBER_
594	SERVANT_
595	SERVICE_
596	SET_
597	SETPOINT_
598	SETUP_
599	SEVENTH_
600	SHACK_
601	SHARED_
602	SHED_
603	SHEEP_
604	SHIPPING_
605	SHOCK_
606	SHOP_
607	SHORT_
794	SHUNT
795	SHUTDOWN
796	SIGNALING
608	SHUT OFF_
609	SIDE_
610	SIGNAL_
611	SILENCE_
612	SILENT_
613	SILVER_
614	SIREN_
615	SITE_
616	SIXTH_
617	SKYLIGHT_
618	SLIDING_
619	SMOKE_
797	SNAPCARD
620	SON'S_
621	SOUND_

No.	Text Descriptor
622	SOUTH_
623	SPEAKER_
624	SPECIAL_
798	SPECIFIC
625	SPRINKLER_
626	STAIR_
627	STAIRS_
628	STANDARD_
629	*_ (spoken as Star)
630	Flashing * -- do not use
631	* (spoken as Star)
632	START_
633	STARTING_
634	STATION_
635	STATUS_
636	STAY_
637	STIME_
638	STOP_
639	STORAGE_
640	STORE_
641	STORY_
642	STRIKE_
643	STRIP_
644	STROBE_
645	STUDY_
646	SUMP_
647	SUPERBUS_
648	SUPERVISORY_
649	SUSPICION_
650	SUNDAY_
651	SWIMMING_
652	SWINGER_
653	SWITCH_
654	SYSTEM_
655	T (display only)
656	T
657	TAMPER_
658	TAMPERED_
659	TANK_
660	TAPE_
661	TELCO_

No.	Text Descriptor
662	TELLER_
663	TEMPERATURE_
664	TEMPORARY_
665	TENTH_
666	TEST_
667	TESTED_
668	TEXT_
669	THE_ (short)
670	THEATER_
671	THE_ (spoken as short Thee)
672	THEN_
673	THERMOSTAT_
674	THIRD_
675	Dash (spoken as Through)
676	Dash_ (spoken as Through)
677	THURSDAY_
678	TIME_
679	TIMED_
680	TIMER_
681	TIMEOUT_
682	TO_
683	TONE_
684	TOOL_
685	TOOLBOX_
686	TOP_
687	TOUCHPAD_
688	TRAILER_
689	TRANSCEIVER_
690	TRANSMIT_
691	TRAP_
692	TRIES_
693	TRIP_
694	TROUBLE_
695	TRUCK_
696	TUESDAY_
697	TURN_
698	TWELFTH_
699	TWICE_
700	TYPE_
701	U (display only)
702	U

No.	Text Descriptor
703	A_ (spoken as Uh)
704	UNBYPASS_
705	UNDER_
706	UNIT_
707	UP_
799	UPLOAD
708	UPSTAIRS_
709	USE_
710	USED_
711	USER_
712	UserTokens -- do not use
713	USES_
714	UTILITY_
715	V (display only)
716	V
717	VALID_
718	VALUE_
719	VALVE_
720	VAULT_
800	VERIFICATION
721	VERSION_
722	VESTIBULE_
723	VIBRATION_
724	VIDEO_
725	VIEW_
726	VIOLATION_
727	VOICE_
728	EVAC MESSAGE 1
729	EVAC MESSAGE 2
730	EVAC MESSAGE 3
731	EVAC MESSAGE 4
732	EVAC MESSAGE 5
733	VOLTS_
734	VOLUME_
735	W (display only)
736	W
737	WAIT_
738	WALL_
739	WAREHOUSE_
740	WARNING_
741	WASH_

No.	Text Descriptor
742	WASHROOM_
743	WATER_
801	WEATHER
744	WEDNESDAY_
745	WEEK_
746	WEEKLY_
802	WELL
747	WEST_
748	WHITE_
749	WINDOW_
750	WINE_
751	WING_
752	WORKSHOP_
753	X (display only)
754	X
755	Y (display only)
756	Y
757	YARD_
758	YELLOW_
759	YES_
760	YOUR_
761	Z (display only)
762	Z
763	ZONE_
764	ZONES_

No.	Token Text
00	0
01	1
02	2
03	3
04	4
05	5
05	6
07	7
08	8
09	9
10	(undefined)
11	(undefined)
12	# *(pound)*
14	/ *(slash)*
15	? *(question mrk)*
16	. *(period)*
17	A
18	B
19	C
20	D
21	E
22	F
23	G
24	H
25	I
26	J
27	K
28	L

No.	Token Text
29	M
30	N
31	O
32	P
33	Q
34	R
35	S
36	T
37	U
38	V
39	W
40	X
41	Y
42	Z
43	_ *(space)*
44	‘ *(apostrophe)*
45	-- *(dash)*
46	__ *(underline)*
47	* *(star)*
48	(time)
49	(date)
50	(day and date)
51	_*(pseudo space)*
52	(return)
53	* (Flashing star) Trouble Indicator

Miscellaneous Features (50001 – 50013)

Miscellaneous features allow the changing specific system wide settings which include the following:

- Memory Clear and Reset
- List System Hardware Version
- Clear History Buffer
- Set Output Configuration
- Set Holiday Numbers
- Set Access Code Length

Resetting Memory (Warm Reset) (50001)

This utility causes a warm reset of the panel, similar to a watchdog reset. Checksum-controlled RAM data plus the arming levels and time of day are restored to values backed up in flash memory. Other data is restored to its defaults.

Clearing Memory (Cold Reset) (50002)

This utility causes a cold reset of the panel, resetting all RAM data to its default values. This action erases all data programmed since the previous cold reset, except some dealer data (such as phone numbers, Downloader code, account numbers, etc.).

Listing Version Information (50003)

This utility lists the current hardware and software revisions of the system.

Clearing History Buffer (50004)

This utility clears the contents of the history buffer and its mirror kept in flash memory.

Printing Various System Information (50012)

This utility initiates the printing of sensor and bus device information for the system (all partitions).

Access Code Length (50013)

This utility changes the length of access codes in the system in the range from 4 to 6 digits and adjusts the codes accordingly. If the length is decreased, codes are truncated at the beginning. If the length is increased, codes are padded with leading zeroes. For example, a code of 1234 changes to 001234 when the length is increased from 4 to 6 digits. A code of 123456 changes to 3456 when the length is changed from 6 to 4 digits.

Delete Primary SnapCard (50014)

Deletes the old primary snapcard if replaced with a different type. New card I/O must be programmed (not needed if replaced with the same type card).

Delete Secondary SnapCard (50015)

Deletes the old secondary snapcard if replaced with a different type. New card I/O must be programmed (not needed if replaced with the same type card).

Advent Programming Guide

To simplify the programming process, create a standard programming guide which allows you to program only those items related to your application. Refer to the complete programming guide if other options are required.

When programming specific system setting be aware of the system defaults, most programmable options are defaulted at system power-up and do not need to be changed.

To review any programmed item in the system simply enter program mode and enter 00000 the system will prompt you for a item number enter the number to view the information.

Programming Guide Example

Partition Features

All partition features are represented by a 3-digit number preceded by the specific partition number. For example 01002 Siren time out for partition 1, 04002 Siren time out for partition 4.

XX = Partition number 01 - 08

XX001 – The time of day trouble conditions are announced (to disable trouble beeps set option XX018 Off)

XX002 – Siren time out, defaults at 8 minutes

XX003 – Entry Delay time, defaults at 32 seconds

XX004 – Exit Delay time, defaults at 32 seconds

XX116 – Central Station Account Number 1, enter up to 15 digits

XX117 – Central Station Account Number 2, enter up to 15 digits

Each system allows 2 account numbers per partition to allow for split reporting purposes, if the system is using only a single reporting account number use option 17102.

System Features

These features are system or partition 1 specific.

17001 – Sets the system date

17002 – Sets the system time

17003 – Sets the system day of the week

17004 – Sets the time of day. An auto phone test is sent to the central station.

17034 – Sets the amount of time in days between auto phone test, defaults at 7 days.

17037 – Backup battery voltage where a low battery is detected, defaults at 11 VDC

17076 – Set to 0 for residential systems and 1 for commercial systems

17107 – Sets dealer access code. Important to remember this number

17108 – Sets downloader access code. Important to remember this number

Phone Options

These options set the numbers for central station, pager and downloader phone numbers, each option is a 3-digit number preceded by a 2-digit designator.

YY-19-22 – Central Station Numbers

YY-23-24 – Downloader Phone Numbers

ZZ-25-40 – Pager Phone Numbers

19001 – Enables reporting phone number

19002 – Enter up to 24 characters using two digits per number, for example: 01=1, 02=2

23001 – Enable downloader primary phone number.

23002 – Enter up to 24 characters using two digits per number, for example: 01=1, 02=2

25001 – Enable pager phone number.

25002 - Enter up to 20 characters using two digits per number, for example: 01=1, 02=2

Miscellaneous Options

These options are used for system functions; including, clearing memory and programming outputs.

50002 - Clears all memory in the system to factory defaults.

50003 - Displays the panel hardwire and software versions.

50013 – Sets the length of user access codes, 4,5 or 6 digits

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Testing Zones

It is recommended that you test all zones after programming is completed and whenever a zone related problem occurs.

Two different methods of zone testing are available, end user and installer tests.

End User Test (8 + 1 + Primary Code)– allows the end user a means of verifying that each zone is operating properly. During the zone test the system announces zone text and test good for each tested zone either hardwire or wireless.

Installer Zone Test (8 + 1 + Installer Code) – allows the installer a means of testing each zone after installation or during a service call. During the installer mode of zone testing the system will sound a long beep for each zone tested and if a wireless zone is tested the system will respond with a signal level that refers to the actual signal strength of the wireless transmission from the transmitter to the receiver. During wireless zone testing the following chart is used to determine proper zone location.

TESTING ZONES

End User Test – 8 + 1 + Primary Code

Installer Test – 8 + 1 + Installer Code

View Tested Zones – 8 + 2 (while in zone test mode)

List Untested Zones – 8 + 3 (while in zone test mode)

Wireless Signal Levels

Number	Signal Level
0 – 5	Weak
6 – 10	Fair
11 – 30	Good
31 - +	Excellent

TROUBLESHOOTING WIRELESS DEVICES:

1. Check that the wireless sensor battery is installed
2. Check that the sensor is programmed into the system, either use the List Zone option 47003 or Delete zone (47002) and Re-learn (47001).
3. If wireless signal strength is weak remove sensor from location and retest closer to receiver and verify if location has to be moved or a repeater added to the system.