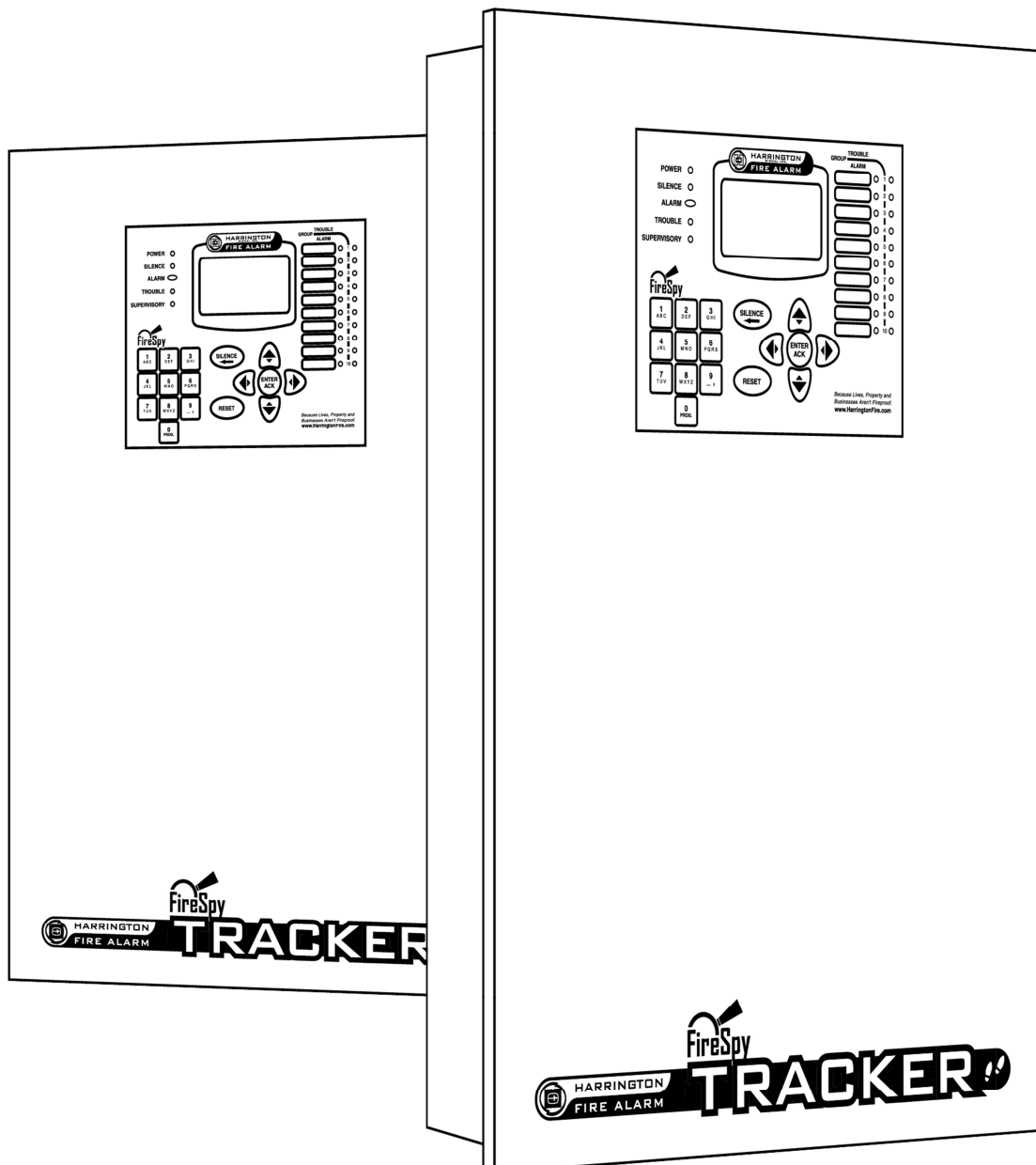


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Programming Manual **FireSpy® Tracker** **T1000, T2000, T8000** Fire Alarm Systems



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1 Preliminary Information

1.1 Safety messages – Please read before proceeding

People's lives depend on your safe installation of our products. It is important to read, understand and follow all instructions shipped with this product. The equipment described herein is listed by the NRTL only when installed and configured in the manner described herein

It is possible to install equipment incorrectly or arrange system components and installation wiring in such a manner that life safety functions are not properly performed and, as a result, lives may be lost. To minimize this possibility, become familiar with the system layout and operation of the entire Fire-Protective Signaling System. Do not alter any mechanical or electrical features of the equipment supplied. Become familiar with the Building Code and Fire Prevention Code or other authority having jurisdiction requirements in the area of the installation.

The Facilities Engineer and the Safety Engineer should make selection of mounting location for this equipment and routing of wiring. Listed below are some other important safety instructions and precautions you should follow:

- This unit must be installed by a qualified electrician in accordance with NFPA 72, and national and local electrical and fire codes, under the direction of the authority having jurisdiction.
- Only authorized and competent personnel must be allowed access to panel controls or panel power source, to limit the possibility of malfunction or failure.
- Do not connect this unit to system wiring when circuits are energized. Check field wiring lines to ensure that voltages are not present. Warranty is void if the equipment is damaged by improperly connected untested wiring or if fused improperly.
- The equipment must be connected to a dedicated source of reliable AC power adequate for the rating of the system as configured. The source must be secure and properly labeled "Fire Alarm Circuit Control".
- A suitable battery set must be used to assure required operation in case of primary power loss. The battery set must be replaced after 4 years, or earlier if capacity is excessively reduced. The batteries should be checked at least twice per year, or more often if required by local codes.
- Wiring used in the system must be adequate for the service and installed in accordance with applicable codes.
- Devices used in the system and connected to the control panel must be verified compatible with the panel.
- All effective warning speakers produce loud sounds which, in certain circumstances, may cause permanent hearing loss. Take appropriate precautions such as wearing hearing protection. Recommendations in OSHA Sound Level Standard (29 CFR 1910) should not be exceeded.
- After installation and completion of initial system test, provide a copy of this instruction sheet to all personnel responsible for operation, periodic testing and maintenance of this equipment.
- After installation, ensure that all bolts and threaded joints are tightened.
- After installation and completion of initial system test, a program for periodic testing of this device must be established. Proper periodic maintenance is required to assure operation through the life of the system, and to determine that point at which useful life of the system or of any of its components has been reached. Any malfunctioning units must be repaired or replaced immediately by competent, authorized personnel. Refer to NFPA 72, local Fire Codes and the authority having jurisdiction.
- Instructions for proper response by building occupants must be developed and distributed in accordance with the Building Code and Fire Prevention Code or other authority having jurisdiction.
- Unauthorized repair or servicing of equipment may result in degradation of performance and/or property damage, serious injury, or death to you or others. If a malfunctioning unit is encountered, do not attempt any field repair/retrofit of parts.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you and others.

The programming technician is ultimately responsible for conformance to the applicable codes and purchase order.

This manual cannot cover all details or contingencies which could exist in a system application. Refer to the authorized distributor if additional information is required.

Specifications are subject to change without notice.

1.2 Warranty

Harrington Signal products are covered by a limited warranty. See Harrington's warranty statement for more details (document #780-0762).

1.3 Support

If you have any questions or concerns about installation, operation, or programming of our equipment, please contact us at:

Harrington Signal Inc.
2519 – 4th Ave
Moline, IL 61265

Toll Free: (800) 577-5758
Phone: (309) 762-0731
Fax: (309) 762-8215
Email: techservices@harringtonsignal.com
Web:

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2 General programming concepts

Functional programming of the panel is accomplished through an annunciator or with the PC Programmer on a PC attached to the communication port of the motherboard. AutoLearn, an automatic programming mode, is provided to assure identification and application of all detectors and modules on the system, but detailed system programming is required for proper realization of the system's capabilities.

2.1 Settings not allowed by regulations

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES:

This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm System, UL864, certain programming features or options must be limited to specific values or not used at all as indicated below.

Table 2-1: Settings not allowed by regulations

Program feature or option	Regulation*	Settings not allowed	Settings allowed**
Control modules used for alarm notification and on the same SLC	UL864 51.4.3	Any that would allow a fault on the SLC to affect more than one alarm notification zone that uses addressable control modules intended for alarm notification	Assign all output devices on an SLC that are intended for alarm notification to the same group OR Use Style 7 wiring between output devices on a single SLC that are intended for alarm notification and that are assigned to different groups
Multiple detector operation Number of detectors	UL864 55.3	Requiring more than two detectors to cause an alarm	Requiring 1 or 2 detectors to cause an alarm
Multiple detector operation Use of timing features	UL864 55.3	Using a timing feature when more than one detector is required to cause an alarm.	Do not use any timing features (alarm verification, etc.) when more than one detector is required to cause an alarm.
Alarm verification Time limit	UL864 89.1.10	Using an alarm verification time of more than 60 seconds.	Set the alarm verification time to 60 seconds or less.
Alarm verification Time limit	CSFM	Using an alarm verification time of more than 30 seconds.	Set the alarm verification time to 30 seconds or less.
Time delay	36.1.7	An automatic delay provided prior to release operation by a system shall be a maximum of 60 seconds.	Verify that the time delay is set to 60 seconds or less.
Time delay	36.1.7	An automatic delay provided prior to release operation by a system shall be a maximum of 60 seconds.	Verify that the time delay is set to 60 seconds or less.

* Sections cited are from UL864 ninth edition

2.2 Standalone vs. networked panel

A networked panel provides the same local operations and features as a standalone panel, plus the operations and features offered by the network connection. A panel performs building monitoring of its location regardless of whether it is standalone or networked.

2

3

4

5

A

B

2.3 Preparation of the program

Standalone panel

Preparation of the program involves defining all detectors and modules, assigning software groups (zones), and assigning input and output devices to the groups. Each input and output device can be associated to 10 groups (for I/O modules, the input can be associated to 5 groups and the output can be associated to 5 groups). There are up to 250 groups available for use.

Network

Preparation involves determining the locations of all of the panels and devices which will affect other panels on the network. Each device can be assigned to up to 6 network groups.

2.4 Quick configuration with AutoLearn

Initial configuration with AutoLearn will give all devices their initial default parameters and assign input and control devices to group 201. Performing AutoLearn is recommended to assure that all accessories are as selected and at the assigned addresses.

The recommended initial AutoLearn consists of the following steps.

1. Scan the network
2. Browse the network devices and confirm that the system found all the devices it should have and verify the version number displayed for each. A label on the inside of the door indicates the factory version numbers.
3. Scan all installed loops. This includes SLCs and other types of circuits, such as CM, SRM and LDV. Loop scanning can be performed on all loops system wide or limited to a specific loop or a specific address.
4. Browse through the SLC devices found and change the parameters as needed.

Subsequent operation of the AutoLearn will verify, via user confirmation, those items that are different from the current operating configuration to assure complete programming. The user can then browse to the changed device to edit the device's parameters. Subsequent AutoLearn will not change properly programmed devices, but will assign new or non-conforming devices as above, and identify them.

2.5 Final configuration (manually)

The AutoLearn provides a good starting place, but the system provides many more options that may need to be configured based on the application. Final configuration is entered through the annunciator menu interface or through a PC connected to the communication port. Description labels of devices and groups can be entered using either method.

2.6 Making changes to the system

Perform a scan on the circuits that have devices added or removed. If only a few devices are going to change, it is quicker to scan only the affected addresses. The panel can scan for a single address or for changes on a single loop. After scanning and finding the changes, browse to the applicable addresses and program as needed.

3 Features and settings

Following is a presentation of the selections to be made in programming the panel. Full data should be prepared in advance to assure that programming may be completed when once started.

3.1 Using AutoLearn

AutoLearn is the fastest way to get started with a configuration and for adding or removing devices. See *2.4 Quick configuration with AutoLearn* for more information.

3.2 Factory default

Performing the factory default operation restores all programming options to their factory default state after which it will do an AutoLearn to find the modules and scan the devices.

3.3 Global settings

3.3.1 Customer text

The customer text (banner message) is displayed on the annunciator display screen when the system is in the normal standby condition. The customer text can be up to two lines of 20 characters in length.

3.3.2 Passcodes

The maintenance menus and the programming menus on the annunciator are passcode protected. The passcodes can be changed through programming. The passcodes are eight digits in length.

3.3.3 Clock

The clock can be displayed in 12 hour format or 24 hour format.

3.3.4 Network

The Tracker network can support up to 250 peer-to-peer panels in a ring topology. A network allows for the passing of system information and events between panels. An input on one panel is able to activate outputs on other panels, through the use of network groups. The network needs only one DACT to transmit events that occur on all panels.

3.3.5 Timers and schedules

Silence inhibit

The silence inhibit timer prevents an alarm from being silenced until the timer expires. The timer starts when an alarm condition is initiated. The silence inhibit timer can be set in 30 second increments from 0 (disabled) to 300 seconds.

Auto silence

The auto silence timer automatically silences output devices on the system after an alarm occurs. The timer can be set in 15 minute increments from 0 (disabled) to 60 minutes.

Trouble reminder

If a trouble is acknowledged/silenced, the trouble condition resounds after 24 hours if the trouble reminder is enabled. The trouble reminder can be enabled or disabled.

AC trouble delay

If the panel detects an AC trouble condition, the off-site reporting of the trouble is delayed. This prevents nuisance reports at the monitoring station when AC brownout conditions occur in the building's power. The delay can be set to 60 or 180 minutes.

Output delay

The output delay timer delays the activation of outputs until the timer expires. The timer can be set to 0 (disabled) to 99,999 seconds. Each group has a delay timer that applies to that group.

Day/night schedules

Up to four day/night schedules are available, each providing a “day” sensitivity level, a “night” sensitivity level, and a selection of which days of the week the schedule affects. Each applicable detector (see *Sensitivity adjustment* in section 3.7.1) can be mapped to one of the four schedules.

Holiday schedules

Up to 20 holidays are available to work in conjunction with the day/night schedule set for each applicable detector. The system applies the night sensitivity level for the duration of 24 hour periods that are defined as holidays to all detectors that use that schedule.

On/off schedules

Up to four on/off schedules are available to control outputs. Each output device can be activated and deactivated three times during a 24 hour day according to its schedule.

3.3.6 Trouble latching/nonlatching

Trouble events can be globally configured as either latching or nonlatching. Latching events cause the panel to stay in the trouble condition until manually reset. Nonlatching events restore the panel when the event is no longer active.

3.4 Local groups

The system operates using the concept of groups. The main purpose of groups is to define common output actions for a set of inputs. When an input becomes active, each group that is mapped to the input device performs its defined output action upon all of the output devices in the group. Each system input (detector, module or input NAC) and output device can be associated to up to 10 groups. For I/O modules, the input can be associated to 5 groups and the output can be associated to 5 groups. If an input goes active, the system activates all of the outputs that are in the same groups that the input is in. There are up to 250 groups available for use.

Each group can be individually configured for the settings below.

- **Description text label.** A 20 character description can be entered for each group.
- **Enabled or disabled.** A trouble condition exists on the control panel while a group is disabled.
- **PDC Alarm LED.** The alarm LED corresponding to the number entered illuminates on the annunciator when an alarm condition exists on the group.
- **PDC Trouble LED.** The trouble LED corresponding to the number entered illuminates on the annunciator when a trouble condition exists on the group.
- **Output trip count.** When the number of triggered inputs in the group reaches this number, the outputs are triggered. Can be set from 1 to 9.
- **Output delay.** The output delay timer delays the activation of outputs until the timer expires. The timer can be set to 0 (disabled) to 99,999 seconds.
- **Output action.** The setting of this option determines the action taken by output modules in the group when an input in the group is activated. The following options are available:
 - Output follows input
 - Latch output on
 - Latch output off
 - Toggle output on/off

See *Table 2-1: Settings not allowed by regulations* for important information.

3.5 Network groups The network groups are similar in concept to the local groups. Each system input and output device can be associated with up to 6 network groups. If an input goes active, each network panel activates all of its outputs that are in the same network group as the input. There are up to 250 network groups available for use. If a network is not in use, the network groups can be used to extend the number of local groups available to a point.

The same settings are available for network groups as for local groups.

3.6 Zones Each point can be mapped to a zone. Each zone can be mapped to six outputs on the T8000-LDV graphic annunciator. When a zone is assigned to an input point, it affects the alarm, supervisory, or trouble LDV output for sensors and switches on that zone. When an LED zone is assigned to an output point, it affects the on, off, or trouble LDV output for output devices on that zone.

When used in a smoke control application, the zones have additional purposes. Refer to *3.11 Smoke control* for details.

Up to 250 zones are available and up to 250 outputs on the LDV. The panel supports up to four LDVs, but each one operates in parallel (i.e. they mimic each other), so the system maximum is the same whether you have one LDV or four LDVs.

3.7 SLC devices

3.7.1 Fire detectors

Basic settings

The system supports the following types of SLC detectors: photo, ion, heat, and multisensor (photo/heat). Each can be individually configured (see the Installation manual for a list of compatible model numbers). Each detector can be assigned to up to 10 groups (1-250). Each detector can be enabled or disabled, but a trouble condition exists on the control panel while a detector is disabled. A two line by 20 character description can be entered for each detector.

Advanced detector features

The I-Spy and Discovery series offer the following additional advanced features.

- Sensitivity is set to one of five modes. Refer to the detector's documentation for details.
- Drift compensation is performed within the detector device.
- In the event of a protocol failure, the devices are still able to communicate an alarm condition via a conventional alarm mode.

Sensitivity adjustment

The sensitivity of smoke and heat detectors can be adjusted. Three levels of adjustment are available: low, medium, and high and are configurable per detector type.

Automatic sensitivity adjustment for day/night and holiday

The system can automatically adjust smoke and heat detectors to a lower sensitivity while a building is occupied and to a higher sensitivity while it is not occupied. The day/night and holiday schedules provide scheduling for the automatic adjustments (see *Day/night schedules* and *Holiday schedules* in section 3.3.5).

Drift compensation

Smoke detectors (ion, photo and multicriteria) slowly become dirty from contaminants in the air during normal use. I-Spy and Discovery smoke detectors have drift compensation built in, whereby the detector compensates for the contamination. Eventually, a detector will reach a point where it cannot compensate any more and will cause a service alert. Detectors set to the low sensitivity range will reach the limit of compensation sooner than detectors set to the high sensitivity range.

Automatic test and service alert

The panel performs a daily test to check the status of the smoke detectors. When a smoke detector becomes too dirty and fails the test, a service alert trouble occurs to notify building personnel that maintenance is required.

Pre-alarm

A detector with pre-alarm enabled causes a pre-alarm signal when the detector readings are above the pre-alarm threshold. A pre-alarm condition develops quickly in comparison to a maintenance alert and applies to all detectors. The pre-alarm threshold can be selected from 50% to 99% of alarm threshold.

Alarm verification

C-Spy, T-Spy and XP95 detectors can be configured for verification mode in which the control panel will reset an active detector and verify the alarm condition before sounding an alarm. Verification can prevent false alarms because two detector readings above the alarm threshold are required before the panel initiates the alarm condition. The alarm verification time is a global setting of 0 (disabled) to 60 seconds, in 10 second increments. See *Table 2-1: Settings not allowed by regulations* for important information.

3.7.2 Input modules

Each input module can be individually configured for the settings below.

- Input type. The input type can be assigned as one of the types in *Table 3-1: Input types*.
- Description text label. Up to two lines of 20 characters can describe the module.
- Enabled/disabled. A trouble condition exists on the control panel while a module is disabled.
- Groups. The module can be assigned to up to 10 groups.

Table 3-1: Input types

Type	Description
Alarm	Alarm is the normal type of input for automatic smoke detectors, heat detectors, etc. They activate building notification devices as well as the alarm light on annunciators. They can optionally operate relays and output modules in the system.
Manual pull station	Manual pull station inputs operate similar to alarm inputs, but are given higher communication priority so the panel can react faster to a manually activated alarm.
Waterflow	Waterflow inputs supervise water flow detectors. They activate building notification devices as well as the alarm light on annunciators. They can optionally operate relays and output modules in the system. Waterflow inputs can be programmed so that the outputs they activate are silenceable or nonsilenceable.
Supervisory	Supervisory inputs are for items such as shut-off valves and pressure detectors for sprinkler systems. They cannot operate building notification devices, but can optionally operate relays and output modules in the system.
Nonreporting	Nonreporting inputs do not report status changes through the DACT. They may be either latching or nonlatching.
FACP Restart	When an input of this type is activated, a reset is initiated on the FACP.
Releasing: Release*	Modules or detectors assigned to operate as a Release function initiate a sequence that will cause the associated releasing device to energize. The sequence includes the delay timer.
Releasing: Fast Release*	Modules or detectors assigned to operate as a Fast Release function energize the releasing device without performing the delay.
Releasing: Halt*	Modules assigned to operate as a Halt function are able to interrupt the releasing delay timer, thus preventing energization of the releasing device. Restoring the halt input does not allow the delay timer to restart; the releasing sequence remains halted. The halt function has no effect if it is activated after the delay time has expired.. The halt can only be cleared by resetting the panel.
Releasing: Abort*	Modules assigned to operate as an Abort function are able to stop the delay timer when it reaches 10 seconds, thus preventing energization of the releasing device. Restoring the abort input allows the delay timer to restart. Subsequent activation of the abort input will again stop the timer. The Abort function has no effect if the delay timer has timed out.

* See *Table 2-1: Settings not allowed by regulations* for important information

3.7.3 Input/output Modules

Each input/output (I/O) module can be individually configured for the settings below. See *Table 2-1: Settings not allowed by regulations* for important information.

- Input type. The input type can be assigned as one of the types in *Table 3-1: Input types*.
- Description text label. Up to two lines of 20 characters can describe the module.
- Enabled/disabled. A trouble condition exists on the control panel while a module is disabled.
- Silenceable or nonsilenceable output.

- Fire drill. The output can be included or not included when a user performs a fire drill test.
- Schedule. One or none of the four on/off schedules can be applied to the module's output.
- Output delay. The module's output can be included or not included when the system activates the output delay function.
- Groups. The module's input can be assigned to up to 5 groups and the output can be assigned to up to 5 groups.

3.7.4 Fan and Damper Control modules (FDCs)

FDCs are integral to a system that implements smoke control logic. The FDC's output controls a fan or damper motor and its inputs monitor the ON/OFF state of the fan or OPEN/CLOSED state of the damper.

3.8 NAC settings

Each NAC can be individually configured for the following settings:

- Input or output. The input is treated as a point in the system and is activated by a 24VDC voltage. When set as an output, the NAC acts as either a regular NAC or a power supply, depending on the pattern setting.
- Output pattern (see *Table 3-2: NAC output patterns*). The pattern only applies if the NAC is set as an output.
- Description text label. Up to two lines of 20 characters can describe the NAC.
- Enabled/disabled. A trouble condition exists on the control panel while a NAC is disabled.
- Silenceable or nonsilenceable.
- Fire drill. The NAC can be included or not included when a user performs a fire drill test.
- Schedule. One or none of the four on/off schedules can be applied.
- Output delay. The NAC can be included or not included when the system activates the output delay function.

Table 3-2: NAC output patterns

NAC Pattern	Description
Steady	The NAC is activated by an alarm condition. The output is continuous 24VDC.
Temporal coded	The NAC is activated by an alarm condition. The output pattern is American National Standards Institute's ANSI S3.41 audible emergency evacuation signal pattern: on, off, on, off, on, off, pause, repeat.
March time coded	The NAC is activated by an alarm condition. The output pattern is a simple repeating on, off, on, off.
Power supply, resettable	The NAC outputs 24VDC that may be used as a power supply. The output is 0V for approximately 20 to 30 seconds during panel reset
Power supply, non-resettable	The NAC outputs 24VDC that may be used as a power supply. The output remains 24V during a panel reset.
Synchronized (Gentex Commander 2/3/4, Wheelock, Amseco, or System Sensor)	The NAC is activated by an alarm condition. The NAC provides a synchronizing pulse for the supported synchronizable devices.

3.9 Accessory devices

3.9.1 Remote annunciators

The PDCR remote annunciators mimic the keypad on the main panel. However, the reset button on each can be disabled to prevent unauthorized resetting of the system.

LDV graphic annunciators provide programmable LED or incandescent lamp annunciation. The LDVs outputs are programmed via the panel's zone settings. All LDVs on the system use the same configuration for their display.

3.9.2 Relay cards

RC modules can be connected to the MB /MBC/MBCLC and to CM modules. The number of relay cards at each location is programmed into the panel.

SRM modules are connected to the panel's RS485 network. They have the settings below.

- Description text label. Up to two lines of 20 characters can describe the module.
- Enabled/disabled. A trouble condition exists on the control panel while a module is disabled.
- Silenceable or nonsilenceable output.
- Fire drill. The output can be included or not included when a user performs a fire drill test.
- Schedule. One or none of the four schedules can be applied to the module's output.
- Output delay. The module's output can be included or not included when the system activates the output delay function.
- Groups. The module can be assigned to up to 10 groups.

3.9.3 DACT

Enable the T-UDACT to allow it to make outgoing calls to a central station receiver. The UDACT may be disabled to keep it from making calls, but a trouble condition exists on the control panel while it is disabled. The primary phone number is used for dialing on the UDACT's primary line and the secondary phone number is used for dialing on the secondary line. The same account number is used for both lines. Set the test time to the hour and minute that the UDACT should attempt to make its daily line test report. The UDACT reports in SIA Level 1 or Ademco Contact ID format. Refer to the DACT manual for compatible receivers.

3.9.4 Network communication equipment

The NCA module is a gateway between a panel's local RS485 circuit and the network's RS485 bus. One panel on the network provides a master clock for synchronization. Each panel can be renamed or assigned a number on the network.

3.10 Releasing

The panel provides 16 releasing circuits. The interface to a releasing device consists of a power source, an Apollo / I-Spy input/output (IO) module, a URM relay, and a polarizing end-of-line device. The modules needed for the releasing function are available pre-assembled and pre-wired in a cabinet. The power source can be a NAC circuit on the Tracker panel set to continuous auxiliary power mode or any UL864 listed control unit with a power limited output rated Regulated 24 DC.

Setting up a system for releasing consists of two basic steps:

- a) setting up the releasing circuit (see *Menu 1.9: Release Circuit: Edit mode(reserved)* and
- b) setting up devices to work with the releasing circuit (see *Menu 1.6.4.1: Edit LC points: Edit mode*).

When setting up devices, select the appropriate releasing circuit. For input modules, set the device type for the desired releasing mode operation (see *Table 3-1: Input types*). Releasing types need to be set as non-reporting.

3.11 Smoke control

3.11.1 Overview

The smoke control interface relies heavily upon the following items.

Fan and Damper Control Module (FDC)

An FDC is an SLC addressable output device that has timed supervisory functions needed for smoke control operation. The FDC's output controls a fan or damper and the input monitors the state of the fan or damper. The first two of the FDC's group slots are special "smoke control" groups, so sets of FDCs can work in conjunction to turn on and turn off sets of HVAC components (intake and exhaust fans and dampers). For example, to exhaust a floor, the FDCs controlling the exhaust fans and exhaust dampers will turn on, while the FDCs controlling the intake fans and intake dampers will turn off.

Smoke detector control

Smoke detectors need to control both on and off states of fans and dampers in the building. This is accomplished through group settings, FDC modules, and zone settings. Each smoke detector that participates in smoke control is assigned to the special “smoke control” groups of several FDCs in order to turn on and off the correct set of fans and dampers (e.g. two groups for “same floor”, two groups for “floor above” and two groups for “floor below”).

Annunciation and control interface

The LDV provides outputs to drive lamps or LEDs which annunciate the status of fans and dampers in the smoke control system. The LDV can also use switch inputs for manually controlling the smoke control system.

Zones

Zone numbers are used to define the prioritization of actions. If an FDC is activated by multiple inputs in its smoke control groups, the one that has the same zone number as the FDC takes precedence (a “same floor” event takes precedence over a “floor above” or “floor below” event). Zone number 255 is a special zone number which overrides all other zone numbers and provides a means for manual control.

3.11.2 Programming

Every FDC point requires the following fields to be set up.

- First group number: This group's output must be defined as `Latch Output On`.
- Second group number: This group's output must be defined as `Latch Output Off`.
- LED zone: A unique zone number for each FDC for assigning on/off/fault outputs on an LDV.
- Priority zone: A zone number common to all FDCs on a given floor, region, area, etc.
- Manual latch reset: When a fire panel is reset, it typically resets all devices on the SLC. The Manual latch reset option allows FDCs to maintain their ON state through the panel reset.

The FDC should be the only output using the group numbers that are in its first or second group number slots, unless multiple FDCs are intended to operate in unison.

Manual control and overrides are programmed by setting up an LDV input. Set its groups to the smoke control groups used by the FDCs that you wish to control. Then set its zone number to 255. The input type should be `Non-reporting Unlatched`.

Fully programming a system for smoke control can be very complex. Please refer to the smoke control applications guide for more details

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4 Programming from the annunciator

4.1 Accessing the menu system

To access the menu system, press the **PROG** key and enter the access code for the desired level. The default code for Level 1 (maintenance functions) is 11111111. The default code for Level 2 (programming functions) is 22222222.

The panel must be in a normal operating condition before the menu system can be accessed. If the panel has off-normal events, press **RESET** and the panel will enter a normal operating condition for a few seconds after it restarts.

4.2 Exiting the menu system

The changes you make are saved after you press **ENTER** on each screen. There is no extra step to save changes before exiting the menu system. To leave the menu system at any time, press **RESET**.

4.3 About the numbering used

Each menu is given a number based on how to navigate to it starting from the main menu:

- A number means press the number to select an option.
- A letter indicates which "more" screen the option is chosen from (A is the first screen, press **▼** to get to B, the second screen).
- Levels are separated by periods.

So to navigate to Menu 1.2B from normal standby press **PROG**, enter the passcode for Level 2, press 1 for child menu 1, press 2 for child menu 2, then press **▼** to get to the second screen of options.

4.4 Menu navigation

Display

The display shows available menu options.

Available keys

- 0 to 9** go to child menu corresponding to number
← go back to parent menu (on the **SILENCE** key)
RESET exit the menu system

```
Program Menu:
1.Clock
2.System Options
3.RS-485 Modules
4.NAC/RC Settins
5.Detector Settins
6.Point Settins
7.Group Settins
```

4.5 Assign a setting

Display

When a screen shows some values to change, highlight the value you wish to change and then change it.

Available keys

- ▼ / ▲**: highlight the value you wish to change
◆ / ▤: change the highlighted value
← go back to parent menu
ENTER go back to parent menu and save changes
RESET exit the menu system

```
USB Port Config
Mode: PC Link
Dial Number:

Modem Init String:
```

4.6 Text and number entry

Entering text

Several places in the menu system ask for text to be entered.

Use alphanumeric keys to enter text. Press the key repeatedly until the desired letter appears. Use \blacktriangleleft or \blacktriangleright keys to move the cursor. For example, to select the letter C, press the **1** (A B C) key three times.

If there is more than one line available for the entry, move to the next or previous line by holding down or repeatedly pressing \blacktriangleleft or \blacktriangleright until the cursor moves to the desired location.

```
Banner Message
Harrington FireSpy
Tracker 1000
```

Available keys

(for numerical entries)

0 - 9 enter a number

\blacktriangleleft / \blacktriangleright move the cursor

(for alphanumeric entries)

0 - 9 cycles through the available characters for the key. Does not advance cursor.

\blacktriangleleft / \blacktriangleright move the cursor

\blacktriangleleft go back to parent menu

ENTER go back to parent menu and save changes

RESET exit the menu system

5 Programming menu

5.1 Level 2 main menu

This is the screen that is displayed after entering the level 2 passcode (22222222 by default). See 4.1 *Accessing the menu system*

```
Main Menu
1. Program
2. Status
```

5.2 Menu 1: Programming menu

Available keys

- 0 to 9** go to child menu corresponding to number
- ↕ / ↗** go to first or second screen of options
- ←** go back to parent menu
- RESET** exit the menu system

```
Program Menu:
1.Clock♦
2.System Options
3.RS-485 Modules
4.NAC/RC Settings
5.Detector Settings
6.Point Settings
7.Group Settings ↓
Program Menu: ↑
8.Zone Settings
9.Release Settings
0.Smoke Control
```

5.3 Menu 1.1: Clock

The date format is yyyy.mm.dd.

The time format is hh:mm or hh:mm am/pm

Available keys

- ↕ / ↗** highlight the value you wish to change
- ↔ / ↘** change the highlighted value
- ←** go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Set Clock
Date: 2000.01.01
Time: 00:00
```

5.4 Menu 1.2: System Options

Available keys

- 0 to 9** go to child menu corresponding to number
- ↔ / ↔** go to first or second screen of options
- ←** go back to parent menu
- RESET** exit the menu system

```
System Options:
1.Banner Message
2.Access Codes
3.Options & Timing
4.Day/Night Settings
5.On/Off Settings
6.Holidays
7.Peripheral Config ↓
```

```
System Options:
8.PC Communication
9.Factory ↓
```

5.5 Menu 1.2.1: Banner Message

Available keys

- 0 to 9** change the highlighted character (press the same key multiple times to select a different character on the key)
- ↔ / ↔** move the cursor
- ←** go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Banner Message

Harrington FireSpy
Tracker 1000
```

5.6 Menu 1.2.2: Change Access Codes

To highlight the level 2 passcode, move the cursor past the end of the line for level 1 passcode.

Available keys

- 0 to 9** change the highlighted digit
- ↔ / ↔** move the cursor
- ←** go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Change Access
Codes
Level 1: 11111111
Level 2: 22222222
Press <Enter>
```

5.7 Menu 1.2.3: Options and Timers

To get to the second screen, press \blacktriangleleft until the cursor goes past the bottom line of the first screen.

Available keys

- \blacktriangleleft / \blacktriangleright highlight the value you wish to change
- \blacktriangleleft / \blacktriangleright change the highlighted value
- \blacktriangleleft go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Options & Timers ↓
Latch Troubles: N
Trouble Reminder: Y
Auto Silence: 0min
Sil. Inhibit: 0sec
Alarm Verify: 0sec
<Reserved> 0
Hour Format: 24hours
Options and Timers ↑
AC Fail Delay: 60 min
```

5.8 Menu 1.2.4: Day/Night Settings

Up to four day/night schedules can be saved. To access a different schedule, move the cursor to the schedule number, then press \blacktriangleleft or \blacktriangleright .

Available keys

- \blacktriangleleft / \blacktriangleright highlight the value you wish to change
- \blacktriangleleft / \blacktriangleright change the highlighted value
- \blacktriangleleft go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Day/Night Sch #1
Days: SMTWTFS
Day Start: 00:00
Sensitivity: Low
Night Start: 00:00
Sensitivity Low
```

5.9 Menu 1.2.5: On/Off Settings

Up to four on/off schedules can be saved. To access a different schedule, move the cursor to the schedule number, then press \blacktriangleleft or \blacktriangleright .

Available keys

- \blacktriangleleft / \blacktriangleright highlight the value you wish to change
- \blacktriangleleft / \blacktriangleright change the highlighted value
- \blacktriangleleft go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
On/Off Sch #1
On=00:00 Off=00:00
On=00:00 Off=00:00
On=00:00 Off=00:00
```

5.10 Menu 1.2.6: Holidays

The format of the holiday date is mm/dd.

Available keys

- ◀ / ▶ highlight the value you wish to change
- ◀ / ▶ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Set Holidays
01. 00/00 02. 00/00
03. 00/00 04. 00/00
05. 00/00 06. 00/00
07. 00/00 08. 00/00
09. 00/00 10. 00/00
11. 00/00 12. 00/00
13. 00/00 14. 00/00
```

```
Set Holidays
15. 00/00 16. 00/00
17. 00/00 18. 00/00
19. 00/00 20. 00/00
```

5.11 Menu 1.2.7: Peripheral configuration

Available keys

- ◀ / ▶ highlight the value you wish to change
- ◀ / ▶ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Peripheral Config:
1. USB Port
2. UDACT Module
3. NETWORK Module
```

5.12 Menu 1.2.7.1: Serial port configuration

Options are: PC Link, Modem 57.6, Print 2400, Print 4800, Print 9600, Print 19.2, Print 57.6, Disabled

Available keys

- ◀ / ▶ change the highlighted value
- ← go back to parent menu
- ENTER** (if Y) go to DACT settings screen
- ENTER** (if N) go back to parent menu and save changes
- RESET** exit the menu system

```
USB Port Config
Mode: PC Link
Dial Number:

Modem Init Strings:
```


5.13 Menu 1.2.7.2: UDACT

Available keys

- 0 to 9** change the highlighted digit
- ◀ / ▶** highlight the value you wish to change
- ↔ / ↔** change the highlighted value
- ←** go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
UDACT (D)
Account No. 1234
Send NW Events? N
Primary Call #:
9,18001234567
Alternate Call #:
9,18001234567
↑more↓

Test Call Time:
Reportins: Detailed
```

5.14 Menu 1.2.7.3: Network

Available keys

- 0 to 9** change the highlighted digit
- ◀ / ▶** highlight the value you wish to change
- ↔ / ↔** change the highlighted value
- ←** go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Network Module (D)
FACP# (000-254) 000
FACP Name:

Master Clock? N
```

5.15 Menu 1.2.8: PC Communication

Connect a PC to the communication port and set the communication mode to Disabled (see 5.12 *Menu 1.2.7.1: Serial port configuration*) before entering the PC communication mode at this screen.

Enter this screen to begin communications mode with a PC. This is useful for programming the panel with software on a PC or laptop. If the hardware connection is present, the screen will say PC Connected.

Available keys

- ←** go back to parent menu and exit communications mode
- RESET** exit the menu system

```
Connected
PC Connected. Press
<SILENCE> to Exit
<RESET> to Restart
```

```
No connection found
Not Connected. Press
<SILENCE> to Exit
<RESET> to Restart
```

5.16 Menu 1.2.9: Auto-Program

Enter this screen and press **RESET** to begin auto programming. See 2.4 *Quick configuration with AutoLearn* for more information. If the **RESET** key is not pressed within a few seconds, the panel will return to the system options menu.

Available keys

- ← go back to parent menu
- RESET** begin AutoLearn

```
Press <RESET> Key
to Initialize and
Auto=Program FACP
WARNING! ALL USER
ENTERED INFORMATION
WILL BE LOST
```

5.17 Menu 1.3: RS485 modules

Available keys

- 0 to 9: go to child menu corresponding to number
- ← go back to parent menu
- RESET** exit the menu system

```
RS485 Network:
1. Find All Modules
2. List All Modules
3. Config Remote PDC
```

5.18 Menu 1.3.1: Find network modules

This screen will be displayed for 2 or more seconds while the system scans for network devices. When done, the previous screen will be displayed.

Available keys

(none)

```
Scanning . . .
```

5.19 Menu 1.3.2: List network modules

This information is for viewing only; it cannot be edited.

The type, address, enabled/disabled, and version is shown for each module. If the network scan did not find a device at the address shown, this screen will say Device Installed, Device Not Found.

Available keys

- ⬆ / ⬇ scroll through list of devices
- ← go back to parent menu
- ENTER** go back to parent menu
- RESET** exit the menu system

```
MCC Module #01
Device Installed
Version: 06.00.00
```

5.20 Menu 1.3.3: Remote reset enable/disable

This screen allows for enabling or disabling the RESET function of remote annunciators. The screen is only accessible if remote annunciators have been recognized on the system.

Available keys

- ◀ / ▶ scroll through list of devices
- ◀ / ▶ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
Remote RESET Option
Remote PDC No: 02
Reset Enabled? N
```

5.21 Menu 1.4: NAC/RC settings

Available keys

- 0 to 9** go to child menu corresponding to number
- ← go back to parent menu
- RESET** exit the menu system

```
NAC/RC Settings
1. Define NACs
2. Configure NACs
3. Config RCs on MCC
4. Config RCs on CMs
```

5.22 Menu 1.4.1: NACs Definition (Input/Output)

Select whether a NAC is an input or an output.

Available keys

- ◀ / ▶ highlight the value you wish to change
- ◀ / ▶ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

(T2000/T8000)

```
NACs Definition
NAC1: Output
NAC2: Output
NAC3: Output
NAC4: Output
```

(T1000)

```
NACs Definition
NAC1: Output
NAC2: Output
NAC3: Output
AXIO: Output
```

5.23 Menu 1.4.2: Configure NAC patterns

Each NAC can be set as follows:

Steady State	NAC steady output
Temporal	NAC temporal coding
March Time	NAC march time
Resettable Power	Power supply, resettable
Continuous Power	Power supply, non-resettable (continuous)
SYNC ***	Synchronization protocols for synchronizable devices

```
Configure NACs
NAC #
1. Steady State
2. Steady State
3. Continuous Power
4. Steady State
```

Available keys

- ◆ / ◆ highlight the value you wish to change
- ◆ / ◆ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

5.24 Menu 1.4.3: RCs on MCC

Change the value to match the number of RC modules attached to the MCC (up to 5).

Available keys

- ◆ / ◆ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
RCs Attached to MCC
No. of RCs: 0
```

5.25 Menu 1.4.4: RCs on CMs

Change the value to match the number of RC modules attached to each CM module (up to 5 each).

Available keys

- ◆ / ◆ highlight the value you wish to change
- ◆ / ◆ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

```
RCs Attached to CMs
#00: 0 #01: 0 #02: 0
#03: 0 #04: 0 #05: 0
```

5.26 Menu 1.5: Detector settings

Available keys

- 0 to 9:** go to child menu corresponding to number
- ← go back to parent menu
- RESET** exit the menu system

```
Detector Settings
1. Options
2. Sensitivity
```

5.27 Menu 1.5.1: Set detector options

Available keys

- ◀ / ▶ highlight the value you wish to change
- ◀ / ▶ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system



```
Det. LEDs Flash: Y
```

5.28 Menu 1.5.2: Set sensitivity

Available keys

- 0 to 9** go to child menu corresponding to number
- ← go back to parent menu
- RESET** exit the menu system



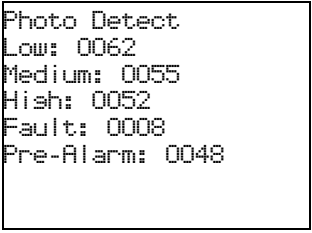
```
Set Sensitivity
1. Ion Detector
2. Photo Detector
3. Multi Detector
4. Heat Detector
```

5.29 Menu 1.5.2.x: Detector sensitivity

The screen for the photo detector is shown. The screens for ion, multi, and heat are similar.

Available keys

- 0 to 9** go change the highlighted digit
- ◀ / ▶ highlight the value you wish to change
- ◀ / ▶ change the highlighted value
- ← go back to parent menu
- ENTER** go back to parent menu and save changes
- RESET** exit the menu system

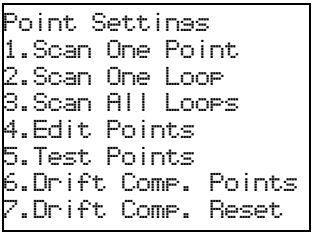


```
Photo Detect
Low: 0062
Medium: 0055
High: 0052
Fault: 0008
Pre-Alarm: 0048
```

5.30 Menu 1.6: Point settings

Available keys

- 0 to 9** go to child menu corresponding to number
- ← go back to parent menu
- RESET** exit the menu system



```
Point Settings
1.Scan One Point
2.Scan One Loop
3.Scan All Loops
4.Edit Points
5.Test Points
6.Drift Comp. Points
7.Drift Comp. Reset
```

5.31 Menu 1.6.1: Scan One Point

The panel scans the address entered and then displays the device found. The set of two digits are the loop number and the set of four digits are the point number on that loop. The resulting screens are similar to *Menu 1.6.3: Scan points: Change found*.

Available keys

ENTER go back to parent menu

RESET exit the menu system

```
Point: 01:0001
Press <ENTER>
```

5.32 Menu 1.6.2: Scan One Loop

The panel scans all points on the given loop. The resulting screens are similar to *Menu 1.6.3: Scan points: Change found*.

Available keys

ENTER go back to parent menu

RESET exit the menu system

```
Loop Scan address:
Loop: 01
Press <ENTER>
```

5.33 Menu 1.6.3: Scan All Loops

The panel scans all points on all LCU modules installed on the system. The scan may take a few minutes. The set of two digits are the loop number and the set of four digits are the point number on that loop.

Available keys

(none)

```
Auto-Scan Points
Point: 01:0001
Type:
    Unknown Device
```

5.34 Menu 1.6.3: Scan points: Change found

If the scan finds that a device does not match the previous address, it will ask whether you want to allow the change in the configuration. The scan will detect the following changes: device added, device removed, multiple devices at the same address.

Available keys

- 1** Apply the change to this device to the configuration
- 2** Do not change the configuration for this device
- 3** Apply changes found on all devices to the configuration
- 4** Do not change the configuration for any devices

RESET exit the menu system

```
Device Added?
1.Okay 3.Okay to All
2.No 4.No to All
```

5.35 Menu 1.6.4: Edit points

Available keys

- 0 to 9** go to child menu corresponding to number
- ENTER** go back to parent menu
- RESET** exit the menu system

```

Edit Points
1. LC
2. MCC
3. CM
4. RM
5. LDV
  
```

5.36 Menu 1.6.4.1: Edit LC points: Browse mode

Browses through the points one-by-one or at a specific address.

Available keys (while entering an address)

- 0 to 9** change the highlighted digit
- ◀ / ▶** move the cursor

Available keys (before or after entering an address)

- 0 to 9** to begin entering an address at the cursor
- ◀ / ▶** move the cursor
- ◆ / ◆** browse to the next/previous point

Available keys (for both of the above)

- ←** go back to parent menu
- ENTER** edit the currently displayed point
- RESET** exit the menu system

```

CKT:DEV 01:001 (E)
  Ion Detector
  Ckt 01 Dev 001

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000  ↑more↓
  
```

5.37 Menu 1.6.4.1: Edit LC points: Edit mode (detector)

The following items can be changed:

Enable/disable: (E) or (D)

Description text

Modes: See Table 3-1: Input types.

Groups: Set to 000 to remove from a group.

Sensitivity: select a schedule number

Alarm verify: Y to use alarm verification for this detector, otherwise N

Zone: The LDV zone that annunciates this point. Additionally, if using smoke control, see 3.11 Smoke control. Sensitivity: Schedule number or low/medium/high

Release circuit: The number of the releasing circuit affected

Available keys

- 0 to 9** change the highlighted digit (some fields)
- ◆ / ◆** highlight the value you wish to change
- ◀ / ▶** change the highlighted value
- ←** go back to parent menu
- ENTER** go back to browse mode and save changes
- RESET** exit the menu system

```

CKT:DEV 01:001 (E)
  Ion Detector
  Ckt 01 Dev 001

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000  ↑more↓

Zone: 000
Sensitivity: Sch #1
Alarm Verify: N
Release Circuit: ---
  
```

5.38 Menu 1.6.4.1: Edit LC points: Edit mode (I/O module)

The following items can be changed:

Enable/disable: (E) or (D)

Description text

Input mode: *See Table 3-1: Input types.*

Groups: 5 input groups and 5 output groups Set to 000 to remove from a group.

Opto input mode enable/disable

Fault logic: Voltage or No Voltage

Zone: The LDV zone that annunciates this point. Additionally, if using smoke control, see 3.11 *Smoke control*. Release circuit: The number of the releasing circuit affected

Network Groups: I/O modules have 3 input groups and 3 output groups Set to 000 to remove from a group.

Available keys

- 0 to 9** change the highlighted digit (some fields)
- ↕ / ↗** highlight the value you wish to change
- ↔ / ↔** change the highlighted value
- ←** go back to parent menu
- ENTER** go back to browse mode and save changes
- RESET** exit the menu system

```

CKT:DEV 01:002 (E)
  I/O Module
  Ckt 01 Dev 002

Mode: Alarm
Input Groups:
  000 000 000 000 000
Zone: 000      ↑more↓

Opto Input: Disable
Fault if No Voltage
Release Circuit: ---
Mode: Factory Rsvd

Network Groups:
Input:  000 000 000
Output: 000 000 000
  
```

5.39 Menu 1.6.4.2: Edit motherboard points: Browse mode

Browses through the points one-by-one or at a specific address.

Available keys (while entering an address)

- 0 to 9** change the highlighted digit
- ↔ / ↔** move the cursor

Available keys (before or after entering an address)

- 0 to 9** to begin entering an address at the cursor
- ↔ / ↔** move the cursor
- ↕ / ↗** browse to the next/previous point

Available keys (for both of the above)

- ←** go back to parent menu
- ENTER** edit the currently displayed point
- RESET** exit the menu system

```

CKT:DEV 17:001 (E)
  NAC Output

Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓
  
```


5.40 Menu 1.6.4.2: Edit motherboard points

The example shown is for a NAC output. Other outputs are similar.

The following items can be changed:

Enable/disable: (E) or (D)

Description text

Groups: Set to 000 to remove from a group.

LED Zone: The LDV zone that annunciates this point. Additionally, if using smoke control, see 3.11 *Smoke control*. Silenceable Alarm: Whether the output can be silenced

On for Drill Test: Whether the output will be activated during a drill test.

Manual latch reset: If set, this point will not reset when the panel is reset.

On/off schedule: The number of the schedule applied, if any.

Network groups: Which network groups affect this point. *Available keys*

0 to 9 change the highlighted digit (some fields)

◀ / ▶ highlight the value you wish to change

◀ / ▶ change the highlighted value

← go back to parent menu

ENTER go back to browse mode and save changes

RESET exit the menu system

NAC output

```

CKT:DEV 17:001 (E)
  NAC Output

Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓

Priority Zone: 000
Silenceable Alarm: Y
On for Drill Test: Y
Manual Latch Reset:N
On/Off Schedule: -
Network Groups:
  000 000 000
  000 000 000
  
```

5.41 Menu 1.6.4.3: Edit CM points

The following items can be changed:

Enable/disable: (E) or (D)

Description text

Groups: Set to 000 to remove from a group.

Zone: The LDV zone that annunciates this point. Additionally, if using smoke control, see 3.11 *Smoke control*. Releasing circuit and input mode

Network groups: Which network groups this point affects. *Available keys*

0 to 9 change the highlighted digit (some fields)

◀ / ▶ highlight the value you wish to change

◀ / ▶ change the highlighted value

← go back to parent menu

ENTER go back to browse mode and save changes

RESET exit the menu system

CM input

```

CKT:DEV 18:001 (E)
  Convent Zone

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000  ↑more↓

Zone: 000
Release Circuit: n/a
Mode: n/a
Network Groups:
  000 000 000
  000 000 000
  
```

5.42 Menu 1.6.4.4: Edit SRM points

RC points offer the same options.

The following items can be changed:

Enable/disable: (E) or (D)

Description text

Input mode

Groups: Set to 000 to remove from a group.

LED Zone: The LDV zone that annunciates this point.

Priority zone: See 3.11 *Smoke control*

Silenceable Alarm: Whether the output can be silenced

On for Drill Test: Whether the output will be activated during a drill test.

Manual latch reset: If set, this point will not reset when the panel is reset.

On/off schedule: The number of the schedule applied, if any.

Network groups: Which network groups affect this point. *Available keys*

0 to 9 change the highlighted digit (some fields)

◆ / ◆ highlight the value you wish to change

◆ / ◆ change the highlighted value

← go back to parent menu

ENTER go back to browse mode and save changes

RESET exit the menu system

SRM output

```

CKT:DEV 17:017 (E)
  UnSurv Relay

Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓

Priority Zone: 000
Silenceable Alarm: N
On for Drill Test: N
Manual Latch Reset: N
On/Off Schedule: -
Network Groups:
  000 000 000
  000 000 000
  
```

5.43 Menu 1.6.4.5: Edit LDV points (input)

The following items can be changed:

Enable/disable: (E) or (D)

Input or LDV Output: Press **ENTER** to apply

Description text

Groups: Set to 000 to remove from a group.

Zone: On a smoke control system, set this to 255 for the switch to assert manual control. See 3.11 *Smoke control*.

Releasing circuit and input mode

Network groups

Available keys

0 to 9 change the highlighted digit (some fields)

◆ / ◆ highlight the value you wish to change

◆ / ◆ change the highlighted value

← go back to parent menu

ENTER go back to browse mode and save changes

RESET exit the menu system

LDV input

```

CKT:DEV 31:001 (E)
  LDV Input

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000  ↑more↓

Zone: 000
Release Circuit: ---
Mode: Factory Rsvd
Network Groups:
  000 000 000
  000 000 000
  
```

5.44 Menu 1.6.4.3: Edit LDV points (output)

The following items can be changed:

Enable/disable: (E) or (D)

Description text

Output mode: B l i n k , S t e a d y , or A u t o

Available keys

◀ / ▶ highlight the value you wish to change

◀ / ▶ change the highlighted value

← go back to parent menu

ENTER go back to browse mode and save changes

RESET exit the menu system

LDV output

```
CKT:DEV 31:001 (E)
  LDV Output
```

```
Output Mode: Steady
```

5.45 Menu 1.6.5: Test point

Displays the analog value of the detector. When polling, the analog value continues being updated. To exit the poll mode, hold down **SILENCE** until the previous menu is displayed.

Available keys

◀ / ▶ change the address

← go back to parent menu

ENTER edit the displayed address

RESET exit the menu system

```
Point: 01:0001 (E)
```

```
Analog Value: 32
```

```
Press <Enter> Key to
Start Point Poll
```

5.46 Menu 1.6.6: Drift compensation

Select a point to display its drift compensation value and other information (varies by device manufacturer).

Available keys

0 to 9 go to child menu corresponding to number

← go back to select a different point

RESET exit the menu system

Select a point:

```
Discovery 01:001
```

```
Point: 01:0001
```

```
Press <Enter>
```

Selected point:

```
Discovery      01:001
Type: Photo Detect
Flash when Polled: Y
Sensitivity Level:04
Manufactured 07/2001
Drift:  00 List:EN54
Needs Servicing? N
Recompute Drift? N
```

5.47 Menu 1.7: Group settings

Available keys

- 0 to 9** go to child menu corresponding to number
- ↕ / ↗** go to first or second screen of options
- ←** go back to parent menu
- RESET** exit the menu system

```
Group Settings
1. Local Groups
2. Network Groups
```

5.48 Menu 1.7.1 and 1.7.2: Group settings: Browse mode

To browse through the groups...

Available keys (while entering an address)

- 0 to 9** change the highlighted digit
- ↕ / ↗** move the cursor

Available keys (before or after entering an address)

- 0 to 9** to begin entering an address at the cursor
- ↕ / ↗** move the cursor
- ↕ / ↗** browse to the next/previous group

Available keys (for both of the above)

- ←** go back to parent menu
- ENTER** edit the currently displayed group
- RESET** exit the menu system

```
Local Grp# 001 (E)
Local Group# 0001
PDC Group LEDs:
Alarm:00 Trouble:00
Output Trip Count: 1
Output Delay: 00000s
-Output Action-
Output follows Input
```

5.49 Menu 1.7.1 and 1.7.2: Group settings: Edit mode

The following items can be changed:

Enable/disable: (E) or (D)

Description text: one line of text

Alarm LED address

Trouble LED address

Output delay

Action: Select one of the following:

- Output follows Input
- Latch Output On
- Latch Output Off
- Toggle Output On/Off

Available keys

- 0 to 9** to begin entering an address at the cursor
- ↕ / ↗** highlight the value you wish to change
- ↕ / ↗** change the highlighted value
- ←** go back to parent menu
- ENTER** edit the currently displayed point
- RESET** exit the menu system

```
Local Grp# 001 (E)
Local Group# 0001
PDC Group LEDs:
Alarm:00 Trouble:00
Output Trip Count: 1
Output Delay: 00000s
-Output Action-
Output follows Input
```

5.50 Menu 1.8: LDV Zone: Browse mode

To browse through the LDV zones...

Available keys (while entering a zone number)

- 0 to 9** change the highlighted digit
- ◀ / ▶** move the cursor

Available keys (before or after entering an address)

- 0 to 9** to begin entering an address at the cursor
- ◀ / ▶** move the cursor
- ◆ / ◆** browse to the next/previous group

Available keys (for both of the above)

- ←** go back to parent menu
- ENTER** edit the currently displayed group
- RESET** exit the menu system

```
Zone #001      (E)

LDV LED# for Sensor
and Switch Events:
  Alarm:      000
  Supervisory: 000
  Trouble:    000
               ↑more↓
```

5.51 Menu 1.8: LDV Zone: Edit mode

The following items can be changed:

Enable/disable: (E) or (D)

Description text:

LED for sensor and switch events (Alarm, Supervisory, Trouble)

LED for output device actions (On, Off, Trouble)

Available keys

- 0 to 9** to begin entering an address at the cursor
- ◆ / ◆** highlight the value you wish to change
- ◀ / ▶** change the highlighted value
- ←** go back to parent menu
- ENTER** edit the currently displayed point
- RESET** exit the menu system without saving changes

```
Zone #001      (E)

LDV LED# for Sensor
and Switch Events:
  Alarm:      000
  Supervisory: 000
  Trouble:    000
               ↑more↓
```

```
LDV LED# for Output
Device Action:
  Off:        000
  On:         000
  Trouble:    000
               ↑more↓
```

5.52 Menu 1.9: Release Circuit: Browse mode

To browse through the releasing circuits...

Available keys (while entering a releasing circuit number)

- 0 to 9** change the highlighted digit
- ◀ / ▶** move the cursor

Available keys (before or after entering an address)

- 0 to 9** to begin entering an address at the cursor
- ◀ / ▶** move the cursor
- ◆ / ◆** browse to the next/previous group

Available keys (for both of the above)

- ←** go back to parent menu
- ENTER** edit the currently displayed group
- RESET** exit the menu system

```
Release Ckt #01 (E)
RELEASE CIRCUIT 01

Sensor Trip Count:00
Pressure Loss Sw? N
PDC Group LEDs: 00
LDV Zone: 000
               ↑more↓
```

5.53 Menu 1.9: Release Circuit: Edit mode

The following items can be changed:

Enable/disable: (E) or (D)

Description text: one line of text

Sensor trip count:

Pressure loss switch

PDC LED row

LDV zone

Release delay

Supv groups

Alarm groups

Available keys

0 to 9 to begin entering an address at the cursor

◆ / ◆ highlight the value you wish to change

◆ / ◆ change the highlighted value

← go back to parent menu

ENTER edit the currently displayed point

RESET exit the menu system without saving changes

```
Release Ckt #01 (E)
RELEASE CIRCUIT 01

Sensor Trip Count:00
Pressure Loss Sw? N
PDC Group LEDs: 00
LDV Zone: 000
↑more↓
```

```
Release Delay:
000 secs (0-180)
Assoc. Supv Groups:
000 000 000
Release Duration:
0000 secs (0-1800)
Assoc. Alarm Groups:
000 000 000
```

5.54 Menu 1.0: Smoke Control

Set up a weekly test for the smoke control system and an one time test for the next time the panel is reset.

Available keys

0 to 9 to begin entering an address at the cursor

◆ / ◆ highlight the value you wish to change

◆ / ◆ change the highlighted value

← go back to parent menu

ENTER edit the currently displayed point

RESET exit the menu system without saving changes

```
Smoke Ctrl Test (D)
```

```
Test Day: Sun
Test Time: 00:00
```

```
One-Time Test after
FACP restarted? N
```

5.55 Menu 2: Status

Available keys

0 to 9 go to child menu corresponding to number

← go back to parent menu

RESET exit the menu system

```
System Status
1. Event History
2. Device Status
```

5.56 Menu 2.1: Event history

This screen contains the following items.

- Event code
- Event number
- Circuit and device address (if applicable)
- Date and time
- Event type code and event type description
- Description of event

Available keys

◆ / ◆ go to next/previous event

◀ go back to parent menu

RESET exit the menu system

```
AL:0071      01:0001
01/01/11 Su 00:00:00
062-Device in Alarm
Photo Detector
  Ckt 01 Dev 00001
```

5.57 Menu 2.2: Device status

Available keys

◆ / ◆ go to next/previous event

◀ go back to parent menu

RESET exit the menu system

```
MCC Module #01

Device Installed
Version: 04.00
```

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Appendix A. Menus

A.1 Upper level menus and select screens

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<div>1.7.1 Group settings</div> <div>Local Grp# 001 (E) Local Group# 0001 PDC Group LEDs: Alarm:00 Trouble:00 Output Trip Count: 1 Output Delay: 00000s -Output Action- Output follows Input</div> <div>1.0 Smoke control</div> <div>Smoke Ctrl Test (D) Test Day: Sun Test Time: 00:00 One-Time Test after FACP restarted? N</div>		<div>1.8 LDV zone</div> <div>Zone #001 (E) LDV LED# for Sensor and Switch Events: Alarm: 000 Supervisory: 000 Trouble: 000 ↑more↓ LDV LED# for Output Device Action: Off: 000 On: 000 Trouble: 000 ↑more↓</div>	<div>1.9 Release circuit</div> <div>Release Ckt #01 (E) RELEASE CIRCUIT 01 Sensor Trip Count:00 Pressure Loss Sw? N PDC Group LEDs: 00 LDV Zone: 000 ↑more↓ Release Delay: 000 secs (0-180) Assoc. Supv Groups: 000 000 000 Release Duration: 0000 secs (0-1800) Assoc. Alarm Groups: 000 000 000</div>

A

B

Detector

CKT:DEV 01:001 (E)
Ion Detector
Ckt 01 Dev 001

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000 ↑more↓

Zone: 000
Sensitivity: Sch #1
Alarm Verify: N
Release Circuit: ---
Network Groups:
000 000 000
000 000 000

I/O module

CKT:DEV 01:001 (E)
I/O Module
Ckt 01 Dev 001

Mode: Alarm
Input Groups:
000 000 000 000 000
Zone: 000 ↑more↓

Output Groups:
201 000 000 000 000
Silenceable Alarm: Y
On for Drill Test: Y
Manual Latch Reset: N
On/Off Schedule: 1
↑more↓

Opto Input: Disable
Fault if No Voltage
Release Circuit: ---
Mode: Factory Rsvd

Network Groups:
Input: 000 000 000
Output: 000 000 000

Monitor module

CKT:DEV 01:001 (E)
Mini Monitor
Ckt 01 Dev 0001

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000 ↑more↓

Zone: 000
Release Circuit: ---
Mode: Factory Rsvd
Network Groups:
000 000 000
000 000 000

Control module

CKT:DEV 01:001 (E)
Sounder Ctl
Ckt 01 Dev 0001

Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓

Priority Zone: 000
Silenceable Alarm: Y
On for Drill Test: Y
Manual Latch Reset: N
On/Off Schedule: 1
Network Groups:
000 000 000
000 000 000

NAC input

CKT:DEV 17:001 (E)
NAC Input

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000 ↑more↓

Zone: 000
Release Circuit: n/a
Mode: n/a
Network Groups:
000 000 000
000 000 000

NAC output

CKT:DEV 17:001 (E)
NAC Output

Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓

Priority Zone: 000
Silenceable Alarm: Y
On for Drill Test: Y
Manual Latch Reset: N
On/Off Schedule: -
Network Groups:
000 000 000
000 000 000

RC output

CKT:DEV 17:017 (E)
UnSupv Relay

Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓

Priority Zone: 000
Silenceable Alarm: Y
On for Drill Test: Y
Manual Latch Reset: N
On/Off Schedule: -
Network Groups:
000 000 000
000 000 000

CM input

CKT:DEV 18:001 (E)
Convent Zone

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓

Zone: 000
Release Circuit: n/a
Mode: n/a
Network Groups:
000 000 000
000 000 000

SRM output

CKT:DEV 25:001 (E)
UnSupv Relay

Groups: 201 000 000
000 000 000 000 000
000 000 000
LED Zone: 000 ↑more↓

Priority Zone: 000
Silenceable Alarm: N
On for Drill Test: N
Manual Latch Reset: N
On/Off Schedule: -
Network Groups:
000 000 000
000 000 000

LDV input

CKT:DEV 31:001 (E)
LDV Input

Mode: Alarm
Groups: 201 000 000
000 000 000 000 000
000 000 000 ↑more↓

Zone: 000
Release Circuit: ---
Mode: Factory Rsvd
Network Groups:
000 000 000
000 000 000

LDV output

CKT:DEV 31:001 (E)
LDV Output

Output Mode: Steady

Appendix B. Default Settings

Clock	24 hour format	Sensitivity (photo)	
Banner message	Harrington FireSpy Tracker 1000	Low	0062
Access code, level 1:	11111111	Medium	0055
Access code, level 2:	22222222	High	0052
		Fault	0008
		Pre-alarm	0048
Latch troubles	N (non-latching)	Sensitivity (multisensor)	
Trouble reminder	Y (enabled)	Low	0055
Auto silence	0 min (disabled)	Medium	0055
Silence Inhibit	0 sec (disabled)	High	0055
Alarm verify	0 sec (disabled)	Fault	0008
Hour format	24hours	Pre-alarm	0048
AC fail delay	60 minutes	Sensitivity (heat)	
Day/night schedules		Low	0090
Days	SMTWTFS	Medium	0071
Day start	0:00 (midnight)	High	0055
Day sensitivity	Low	Fault	0008
Night start	0:00 (midnight)	Pre-alarm	0048
Night sensitivity	Low	NACs (all)	
On/off schedules		Input/output	Output
(All settings)	00:00	Type, pattern	NAC, steady
Holidays		SLC devices (after being added via scan)	
(none set)		Mode	Alarm
Peripheral		Groups	0201 (all others 0000)
RS232 port.	PC Prog/Remote	Sensitivity	Sch #1
Dial number	blank	Alarm verification	N
Init string	blank (ATZ recommended if using modem)	LED zone	0000
DACT		Discovery features (if applicable to device)	
DACT enabled	N (no DACT or disabled)	Sensitivity	03
Phone numbers	blank	Flash LED	OFF
Account	blank	(all other features are not set by the panel)	
Test time	blank	Sync sounder	
Network devices (after being added via scan)		(all LC modules)	N
Enable/disable	Enabled	Groups	
Sync module (LCs)	N (no synchronization)	Enable/disable	enabled
Input settings		Description	GROUP (number)
LEDs flash	Y	LED[A]	00
Sensitivity (Ion)		LED[T]	00
Low	0060	Alarm count	1
Medium	0060	Output delay	0 sec (disabled)
High	0060	Action	Output Follows Input
Fault	0008	Zones	
Pre-alarm	0048	Description	blank
		LED[A]	0000
		LED[S]	0000
		LED[T]	0000



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