

FIRE

## 4007ES and 4007ES Hybrid Fire Alarm Systems



Programmer's  
Manual

579-1167  
Rev. A

 **Simplex**



# Copyrights, Trademarks, Cautions, Warnings, and Regulatory Info

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**FCC RULES AND REGULATIONS – PART 15 -** This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**SYSTEM REACCEPTANCE TEST AFTER SOFTWARE CHANGES -** To ensure proper system operation, this product must be tested in accordance with NFPA-72, after any programming operation or change in site-specific software. Reacceptance testing is required after any change, addition or deletion of system components, or after any modification, repair or adjustment to system hardware or wiring.

All components, circuits, system operations, or software functions known to be affected by a change must be 100% tested. In addition, to ensure that other operations are not inadvertently affected, at least 10% of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, must also be tested and proper system operation verified.

**IMPORTANT: Verify FACP System Programmer, Executive, and Slave Software compatibility when installing, or replacing system components. Refer to the Technical Support Information and Downloads website for compatibility information.**



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# Chapter 1.

## Getting Started

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**Introduction** The 4007ES Panel Programmer is a software program designed to create “jobs” that are used to configure and program the 4007ES and 4007ES Hybrid Fire Alarm Control Panel (FACP). The 4007ES Panel Programmer must be installed on a computer that can be either physically or remotely connected to the panel.

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**In this chapter** Requirements and Compatibility ..... 1-1      Installing the Software ..... 1-2  
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**Requirements and Compatibility**

**Computer requirements:**

The Programmer must be installed on a Computer that has the following requirements:

- Windows XP with SP3 or a more recent operating system.
- Removable media for job archives and backups.
- 1 CD-ROM drive, for access to the documentation CD.
- 1 Ethernet port or optionally 1 serial port & assorted cable for communication with the ES Panel.

**Programmer Requirements:**

To install and open the Programmer, the user must have the following:

- Internet access in order to download the software.
- 

**Downloading the Software**

To download the 4007ES panel programmer software:

1. Connect to Internet.
  2. Connect to the simplex-fire.com Tech Support website (registration is required).
  3. Navigate to the 4007ES product page.
  4. Once in the 4007ES directory, click on the software to download. This should be the latest revision of the ES Programmer.
  5. Once the file is loaded a security warning will ask you if you wish to proceed. Click **Run**.
  6. An authorization request to copy the file to your computer’s C Drive appears. Click **OK**. The file *4100ESProg* will then start to download to the C directory of your computer.
-

## Getting Started

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### Installing the Software

#### To install the software:

1. Go to the computer C Drive and open the *4100ESProg* folder.
  2. Double click on the ES programmer execute file (.exe).
  3. The Software Licensing agreement appears. Read the agreement and click **Next** to continue the installation.
  4. A prompt window requesting the user to specify the destination folder for the programmer files appears.
    - Click on the **Next** button to accept the default destination. It is recommended that you choose the default folder Simplex. When the correct entry is specified, click on **Next** to continue.
    - To install the files in a directory other than the default one, click the **Browse** button to select the directory, and then click on **Next** to proceed.
  5. Progress indicators appear, displaying the progress of the file copy operations.
  6. The next prompt request the user to restart the computer.
 

**Note:** Before restarting the computer be sure that all open files have been saved.
  7. Click on **Finish** to restart and to complete the installation.
- 

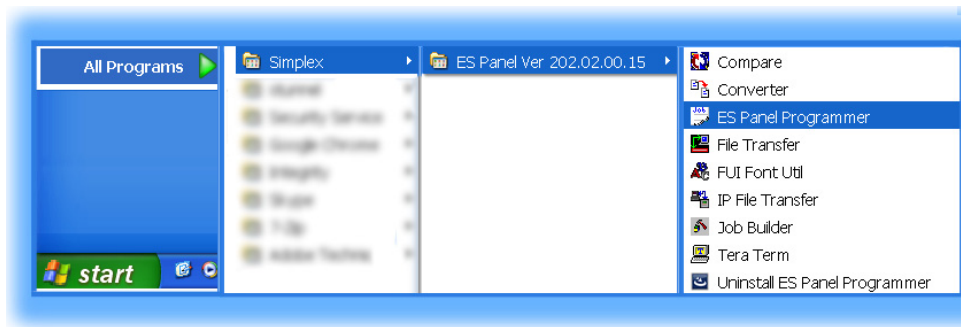
### Starting the Programmer

#### To Start the ES Panel Programmer:

1. Open the Window's Start menu.
2. Click on the All Programs menu.
3. Click on the Simplex menu item.
4. Click on the version of the ES Panel Programmer you want to open and a menu will appear.
5. To start the Programmer select *ES Panel Programmer* from the menu.

**Note:** The following options are also available from the ES Panel Programmer menu:

- Compare: This option allows the user to compare job revisions.
- IP File Transfer: This option opens the IP File Transfer menu.
- Job builder: Select this option to build a Job.
- Tera Term: This option opens the Tera Term connection.
- Uninstall ES Panel Programmer: Click on this option to uninstall the ES Panel Programmer.



**Figure 1-1. Starting the ES Panel Programmer**

See page 3-1 for information on how to create a new job.

# Chapter 2.

## User Interface

### Introduction

The user interface is made up of menus, icon, tabs, sub-tabs, and a status bar that help the user navigate through the programmer and create jobs.

The following sections will detail the user interface and the options associated with each item.

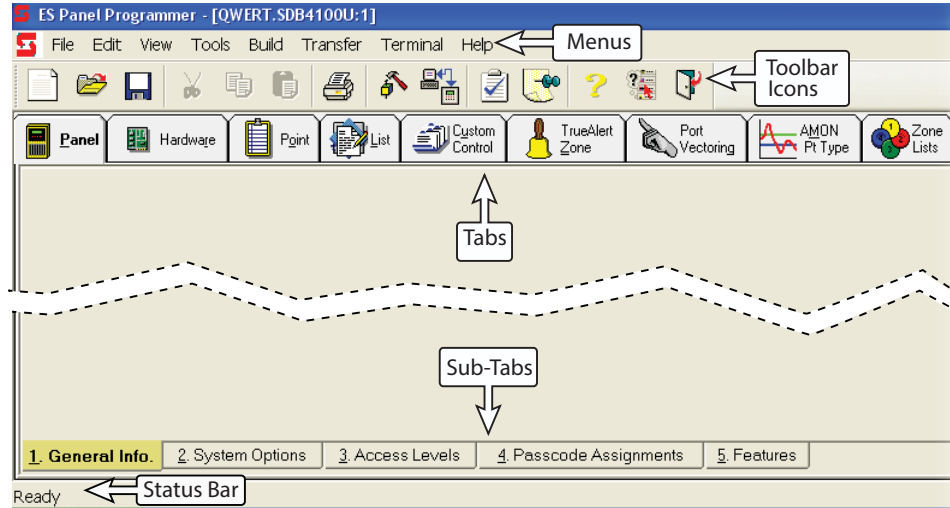


Figure 2-1. 4007ES Programmer Interface

### In this chapter

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Tabs and Sub-Tabs .....	2-5	Status bar .....	2-5

### Menus

The menus are located at the top of the ES Panel Programmer:  
Consult the following tables for the description of the menu items.

Table 2-1. File Menu

Menu Item	Description	Menu Item	Description
<b>New</b>	Creates a new job.	<b>Archive</b>	Archives the job.
<b>Open</b>	Opens an existing job.	<b>Backup</b>	Backs up the job.
<b>Close</b>	Closes the current job.	<b>Restore</b>	Restore the previous saved version of the job.
<b>Save</b>	Saves the current job.	<b>Export</b>	Allows the user to: • Export data to service sales tools • Export user points to text file • Export XLG point data
<b>Save as</b>	Allows you to copy or rename the current job.		
<b>Reports</b>	Generates a digital job report.	<b>Import</b>	Allow the importation of user points from another file.
<b>View report</b>	Brings up the latest report.	<b>DB Compare</b>	Compare the job to previous revisions of itself.
<b>Print set up</b>	Configures the hard copy print specifications.	<b>Current Job</b>	The name of the current job.
<b>Print Label</b>	Prints labels for the FACP cards.	<b>Exit</b>	Exits the current job.

*Continued on next page*

## User Interface

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### Menus

**Table 2-2. Edit Menu**

Menu Item	Description
<b>Cut</b>	Copies and deletes the selected content.
<b>Copy</b>	Copies the selected content.
<b>Paste</b>	Inserts the previously cut or copied material into the selected area.
<b>Preferences</b>	Allows the user to configure certain aspect of the programmer.

**Table 2-3. View Menu**

Menu Item	Description
<b>Revision History</b>	Allows the user to enter notes.
<b>*Tab List*</b>	Click on the option to open the corresponding tab. The choices are: <ul style="list-style-type: none"> <li>• Panel</li> <li>• Hardware</li> <li>• Point</li> <li>• List</li> <li>• Custom Control</li> <li>• TrueAlert Zone</li> <li>• Port Vectoring</li> <li>• AMON Pt Type</li> <li>• Zone Lists</li> </ul>
<b>Checklist</b>	Displays a mandatory and an optional checklist that lets the user know which steps have been completed in the programming process.
<b>Toolbar</b>	Click in the checkbox to make the tool bar icons visible.
<b>Status Bar</b>	Click in the checkbox to make the status bar visible.

**Table 2-4. Tools Menu**

Menu Item	Description
<b>Notes</b>	Click to open a note pad where the user can type in notes on the job.

**Table 2-5. Build Menu**

Menu Item	Allows the user to:
<b>Build Job</b>	Build the job.
<b>View Build Log</b>	Click to view the log of previous builds for this job.

*Continued on next page*

## User Interface, *Continued*

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### Menus

**Table 2-6 Transfer Menu**

Menu Item	Allows the user to:
<b>USB</b>	Transfer the job data from the computer to the USB key
<b>Network</b>	Click on To Panel to transfer the job data to the panel

**Table 2-7. Terminal Menu**

Menu Item	Allows the user to:
<b>Serial</b>	Click to enable a connection between the computer and the FACP through the computer's serial port.
<b>Network</b>	Click to enable a network connection between the computer and the panel
<b>Settings</b>	Click to access the service port connection settings.

**Table 2-8. Help Menu**














Menu Item	Description
<b>Help Topics</b>	Click to access the 4007ES Programmer Help.
<b>About Programmer</b>	Click to access basic information, copyrights of the programmer software, and the revision of the programmer being used.

## User Interface, *Continued*

### Toolbar Icons

The toolbar icons are shortcuts to popular programmer commands. Table 2-9 explains each icon and the command it is attached to.

**Table 2-9 Icons and Commands**









Icon	Name	Allows the user to:
	New	Click to create a new job.
	Open	Click to open an existing job.
	Save	Click to save the current job.
	Copy	Click to copy the selected information and delete it from its current location.
	Paste	Click to paste cut or copied data.
	Print	Click to print the current job.
	Build Job	Click to build the current job.
	File Transfer	Click to initiate a file transfer.
	Checklist	Click to make the checklists appear.
	Note	Click to add a note to the job.
	About	Click to access basic information and copyrights of the programmer software.
	Help Topics	Click to access the 4007ES online help.
	Exit	Click to exit the programmer.

## User Interface, *Continued*

### Tabs and Sub-Tabs

Each tab represents a specific component or feature of the job that must be configured. The tabs are placed in sequential order and should be completed in that order. Certain tabs are made up of multiple sub-tabs that are found at the bottom of the page. All sub-tabs must be opened and configured to complete the job.

**Table 2-10. Tab list**

Icon	Name	Sub-Tabs	Allows the user to:
	<b>Panel</b>	• General Info	Enter the general panel and branch information.
		• System Options	Set the system options for the job.
		• Access Levels	View the default user levels for specific tasks. Right click on the user level to view and edit its properties.
		• Passcode Assignments	View and edit the passcode assigned to each user level.
		• Features	Enable or disable certain feature with specific dongles and codes.
	<b>Hardware</b>	• Tree View	Display the panel components in a branch structure.
		• Grid View	Display the panel components in a grid structure.
	<b>Point</b>	-NA-	Display the list of all the points in the FACP. Double click on any of the points to view and edit their properties.
	<b>List</b>	• General list	View all the Panel lists.
		• Latching Supervisory Verification	View and edit the items on Latching Supervisory Verification list.
		• Alarm Verification	View and edit the items on Alarm Verification list.
		• WALKTEST	View and edit the items on the WALKTEST list.
		• Elevator Recall	View and edit the items on the Elevator Recall list.
	<b>Custom Control</b>	• Custom Control	Create custom control equations which allow operations to be customized per job.
		• Floor Above/Floor Below Wizard	Control the areas in which the NACs are activated.
		• Selective Signaling Wizard	Control the NACs that are activated.
		• Sounder/Relay Base Operation Wizard	Customize the default operation of select smoke detectors
	<b>TrueAlert Zone</b>	-NA-	View the points in each TrueAlert zone.
	<b>AMON Point Type</b>	-NA-	View the analog monitor (AMON) points.
	<b>Zone Lists</b>	-NA-	View the lists sorted by zone.

### Status bar

The Status bar is found at the bottom of the Programmer window and indicates the:

- Programmer status
- Time





# Chapter 3.

## Working with Jobs

---

### Introduction

A job is a file that contains specific programming and configuration information for the FACP. This chapter explains the basics surrounding creating and saving jobs, however, it is important to consult the following chapter in this document, *Panel Information and Configuration*, for crucial information on how to configure and program the job.

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Creating Jobs .....	3-1	Opening Existing Jobs .....	3-2
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### Creating Jobs

When the programmer is opened on a computer for the first time, a prompt window will appear automatically requesting that the user create a job. If a job has been previously saved on the programmer it will automatically open when the programmer is started.

#### To create a new job:

1. Start the ES Panel Programmer:
  - If this is the first job saved for the FACP, the New Job window will open automatically.
  - If a previous job opens, click on the New icon or select New from the File menu to open the New Job window.
2. In the New Job window, select the job type: 4007, Small Panel.
3. Enter the job number. The job name should be 8 characters long and start with a number.
  - **Year.** This is a two-digit field. Use the last two digits of the current year to indicate the year in which the job was programmed.
  - **Month.** This is a single character field. Use the numbers and letters shown in the example below to indicate the month in which the job was programmed. See Table 3-1.
  - **File Type.** This field is a single letter, used to indicate the panel type. There is currently only a single supported type.
  - **Number.** This is a three-digit field used to track how many of a specific job type have been programmed during the month. For example, if the File type is 4100ES, enter the number of 4100ES jobs programmed during the month.
  - **Job Version.** When archiving a job, you can use letters to differentiate the jobs once they have been archived. For example, once job 103E123A is archived, new edits should be saved to 103E123B.

## Working with Jobs

---

### Creating Jobs

Table 3-1 describes the naming convention format.

**Table 3-1. Job Naming Convention**

YEAR	MONTH	FILE TYPE	NUMBER	JOB VERSION
	1 = Jan	E=4100ES		
	2 = Feb			
	3 = Mar			
	4 = Apr			
	5 = May			
	6 = Jun			
	7 = Jul			
	8 = Aug			
	9 = Sep			
	A = Oct			
	B = Nov			
	C = Dec			
00	5	E	001	A

- Select the path to the file in which the job will be stored.

**Note:** It is preferable that the default folder C:\4100UJOBS be used for job storage.

---

### Opening Existing Jobs

#### To open an existing job:

- Start the ES Panel Programmer.
  - Click on the Open icon or select Open from the File menu to access the Open window.
  - If the FACP jobs are not stored in the default directory, navigate the folder where the jobs are stored.
  - Open the job's folder. It will have the same name as the job.
  - Once in the folder, open the ".SDB4100U" file.
- 

### Setting Job Preferences

#### To set the job preferences:

- Once in the job, open the Edit menu and select Preferences.
  - The Preference window opens and allows the user to configure the following options:
    - Job: Click on the **Reload Job** checkbox to automatically reload the last saved job each time you start the programmer.
    - Toolbar Icon Size: Use to select large or small icons for the programmer toolbar.
    - Checklist: Two preference settings exist for this option.
      - Reminder: If this box is selected, the programmer generates a reminder dialog each time you exit a screen whose corresponding entry in the Programmer Task Checklist has not been marked as complete. For example, if you view the General Information tab and its checklist entry is not marked as complete, the programmer will ask whether you want to mark the task as complete when you exit the screen.
      - Build Warning. Attempting to build a job when all mandatory checklist tasks are not marked as complete causes the programmer to generate warning messages in the job builder screen.
    - Default Central Station Email Address: This option allows you to set the default central station email address used by a per point SDACT. The address that you enter here will automatically appear in the email address field of the SDACT card's programming screen.
    - Report Print Cover page: Select this box so that a cover page is printed with every report.
    - Editing Allow mixed case labels (non-English jobs only): This option is made to accommodate languages' characteristics.
  - Click on **OK** once all the options are set.
-

## Working with Jobs

---

### Job Notes

#### To leave a note for the job on the programmer:

1. Once in the job, either click on the Notes icon or open the Tool menu and select Notes.
  2. The Notes window opens and the user can type in relevant job notes. These notes will be saved with the job for future reference.
- 

### Saving Jobs

There are two saving options in the programmer, Save and Save As. The Save option is used to save the job in progress, the Save As option is used to save the job with a new name.

#### To save a job with Save:

- Click on the Save icon.
- Open the Edit menu and click on the Save option.

**Note:** When you click on the save option, the programmer overwrites the previous information and there is no way to backtrack to the previous job.

#### To save a job with Save As:

1. Open the Edit menu and click on the Save As option.
2. Select either the Copy option or the Rename option:
  - Copy: This option saves a copy of the currently open job under a new name in a new directory. This option allows you to open and reuse the previous version.
  - Rename: This option saves the job under a new name and deletes the content of the previous job folder. For example, if a user renames job 333 as job 444, a new job folder named 444 will appear and the job folder 333 will be empty.

**Note:** Conventionally, performing a Save As > Copy will be the first action a technician will take when opening an existing job to create a new revision. This way if complications arise, the technician can always return to the previously saved revision.

---

### Building a Job

A job needs to be “built” before it can be downloaded. This process transforms the .SDB file into a CFG file that is compatible with the FACP.

**Note:** All configuration options and panel information must be complete before building the job. Any errors detected during the build will abort the process.

#### To build a job:

1. Open the job.
  2. Start the build by either clicking on the Build icon or by selecting the Build item from the Build menu.
  3. The Revision History window appears and the user must enter:
    - Their name.
    - A brief description of the edits that were made to the current revision.

Once the information has been entered click on **OK**.
  4. The Job Builder window then appears and displays all the elements in the job and their build status. Once the compilation is complete, the final dialogue in the window will read either:
    - Build Complete: This means the build has been successful and the job is ready to be downloaded to the FACP.
    - Build Aborted: This means that errors were found while the job was being built and that the job build was aborted. The errors that caused the job to abort are listed in the Job Builder window.
-

## System Requirements

---

### Archiving a Job

Once a job is archived, it is saved as a read-only .SDA4100U file that can no longer be opened for editing.

#### To archive a job:

1. Save the job.
2. Open the Edit menu and click on the Archive menu item.
3. The Programmer Archive Utility window opens and requests that the user name the file and select the directory to which the file will be saved.
4. Click on **Archive**. A progress meter appears, showing the progress of the operation. When this bar disappears, the archive operation is complete. The archived file is saved as .SDA4100U.

#### To open an archived file:

1. Open the File menu and click on the Restore menu item.
  2. The Programmer Restore Utility window opens. Use the Look In search box to locate the archived file.
  3. Once the file is located, click on it so that its name appears in the File Name box.
  4. Click on **Continue**.
  5. The Browse for Folder window appears and requires that the user select the directory and file to which the file will be restored. It is recommended to use the 4100UJOB Folder.
  6. If a file with that name already exists, the user will be prompted to:
    - Overwrite the existing file
    - Rename the file
    - Cancel the operation: This will result in an error file and the programmer will return to the last saved job.
  7. The archived file will then open as a read-only job. To save the job as different version in the 4100U folder, the user must use the Save As function.
- 

### Backing Up a Job

Backing up a job creates a compressed version of the job and stores it as a read/writable .SDC4100U file on either a removable storage medium or a remote disk.

#### To back up a job:

1. Open the File menu and select the Backup menu item.
2. The Programmer Backup Utility window opens and requests that the user name the file and select the directory to which the file will be saved.
3. Click on **Backup**. A progress meter appears, showing the progress of the operation. When this bar disappears, the backup is complete.

#### To restore a Backup file:

1. Open the File menu and click on the Restore menu item.
  2. The Programmer Restore Utility window opens. Use the Look In search box to locate the backup file.
  3. Once the file is located, click on it so that its name appears in the File Name box.
  4. Click on **Continue**.
  5. The Browse for Folder window appears and requires that the user select the directory and file to which the file will be restored.
  6. If a file with that name already exists, the user will be prompted to:
    - Overwrite the existing file
    - Rename the file
    - Cancel the operation
  7. The backup file will then open as normal job.
-

# Chapter 4.

## Panel Information and Configuration

**Introduction** This section focuses on items found in the Panel tab. Information in this section must be completed and the options must be configured before the job is successfully built.

<b>In this chapter</b>	Notice to users, Installers, Authorities Having Jurisdiction, and other Involved Parties ...4-1	Panel Information ..... 4-1
	Passcode Configuration .....4-8	System Options ..... 4-2
	Features Configuration .....4-8	User Access Level Configuration ..... 4-7

**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 Standard for Control Units and Accessories for Fire alarm systems, UL864, certain programming features or options must be limited to specific values or not used at all as indicated in Table 4-1.

**Table 4-1. Programming Features and Options**

Program Feature or Option	Permitted in UL864? (Y/N)	Possible Settings	Settings Permitted by UL
Editing group properties DC group tab	Yes	ON until completion ON until RESET ON until SILENCE	ON until completion
Editing Custom Control equations that change sensitivity levels (set Alarm Thresholds) for ISN- 550 Photo smoke detectors	Yes	3.1 2.6 2.2 1.8 1.4 1.0	3.1 2.6 2.2
LVSUPV - Latching Verified Supervisory Smoke Detector	No		
LVSDUCT - Latching Verified Supervisory Duct Smoke Detector	No		
MACOFIRE - Carbon Monoxide Fire Algorithm	Yes	COFIRE, COPRI2 COSUPV, UTILITY	COSUPV UTILITY

**Panel Information** Panel information provides identification reference for the technicians who created the jobs.

**To enter the panel information:**

1. Click on the Panel tab and select the General Information sub-tab.
2. Fill out the information requested on the page:
  - Panel Information: This section requests information about the panel itself.
  - Branch Information: This section requests information on the branch of the company and other useful information.
  - Programmed by: This section requests information on the people who programmed the FACP.
  - Hardware Edit Lock: When this option is checked, the user cannot add or remove any hardware.
  - Comment: Enter any comments about this specific FACP.

## Panel Information and Configuration

### System Options

ES Panel System Options are global attributes that allow the user to configure specific application options as well as configure certain elements of the panel's display.

#### To access the System Options screen:

1. Click on the Panel tab and select the System Options sub-tab.
2. Configure the options that appear on the page. The following tables list and define the different options.

**Table 4-2. General System Options**

Option	Description (“dflt” indicates the default setting)
<b>Date Format</b>	<ul style="list-style-type: none"> <li>• Select <b>MM-DD-YY</b> <i>dflt</i> for the panel to display the date by month, day, and year (example: January 4th 2013 = 01-04-13).</li> <li>• Select <b>DD-MM-YY</b> for the panel to display the date by day, month, and year (example: January 4th 2001 = 04-01-13).</li> </ul>
<b>Time Format</b>	<ul style="list-style-type: none"> <li>• Select <b>12 Hour</b> <i>dflt</i> for the panel to display the time as “a.m.” and “p.m.” (example: 6:00 a.m., 6:00 p.m.)</li> <li>• Select <b>24 Hour</b> for the panel to display the time on a 24h clock (example: 6:00, 18h00.)</li> </ul>
<b>Unit Format</b>	<ul style="list-style-type: none"> <li>• Select <b>Fahrenheit</b> <i>dflt</i> for the panel to display Imperial units. (example: 96 °F, 6 ft)</li> <li>• Select <b>Centigrade</b> for the panel to display Metric units. (example: 36 °C, 1.83 m)</li> </ul>
<b>Acknowledge Option</b>	<ul style="list-style-type: none"> <li>• Select <b>Global acknowledge</b> <i>dflt</i> to allow every point reporting the same alarm state (alarm, trouble, priority 2, or supervisory condition) to be acknowledged at once by pressing the according Acknowledge button. (Example: If 5 Trouble conditions are present on the system and global acknowledge is enabled, one press of the <b>Trouble Ack</b> button acknowledges all five Troubles at the same time.)</li> <li>• Select <b>Individual Acknowledge</b> to ensure that each point reporting an alarm state must be acknowledged individually. (example: If five Trouble conditions are present, you will have to acknowledge each one individually.)</li> </ul>
<b>Standard</b>	<p>Select the system listing standard. The options are:</p> <ul style="list-style-type: none"> <li>• None <i>dflt</i></li> <li>• UL (US)</li> <li>• ULC (Canada)</li> </ul>
<b>Service Reset</b>	<p>Select <b>Service Reset</b> to allow an operator to reset the system even though the device causing the alarm has not restored to normal.</p> <p>The typical application for this would be when a malfunctioning initiating device (detector or sensor consisting of a base and removable head) causes an alarm, but will not reset even though the off-normal condition is no longer present. With this option enabled, the head can be removed and the system (including the local energy masterbox, if provided) can be reset. Without this option enabled, removing the head will cause the system to abort the reset because it will not have seen the alarmed point/zone having restored to a normal state, and it will not be possible to reset the local energy masterbox. The default setting for this option is disabled.</p>

## Panel Information and Configuration

### System Options

Table 4-2. General System Options (Continued)

Option	Description ("dflt" indicates the default setting)
<b>Combined Alarm and Hardware Reset</b>	If checked, pressing the <b>Reset</b> button performs an alarm reset followed by a hardware reset. If this option is not selected, an alarm reset is performed if there are fire alarms or supervisories in the system. Otherwise, a hardware reset is performed.
<b>Display First Alarm</b>	When this option is selected, the display alternates between the summary screen (with the number of active alarms, troubles, etc.) and the screen showing detailed information on the first alarm received by the system.  If this option is not selected, the screen indicating the number of alarm conditions on the system is displayed.
<b>Language of Use</b>	The pull down list contains two options, Primary and Alternate. Use Alternate only when you download an alternate msglib file, containing alternate language text, to the panel. If no alternate msglib file is downloaded, you must use the English option.
<b>Non Steady Audible Evac</b>	<p>When enabled, this option allows you to select the type of operation for Non Steady Audible Evacuation Signals. The term Non Steady Audible Evacuation Signal refers to any Notification Appliance capable of sounding a coded signal. The default setting for this option is not enabled. Choices are:</p> <ul style="list-style-type: none"> <li>• <b>California Code 1.</b> A coding pattern consisting of 12 beats within a 10 seconds span of time, followed by a 2 and ½ second pause. This sequence repeats four times (four rounds) and then terminates (i.e., the total coding pattern lasts approximately one minute).</li> <li>• <b>California Code 3.</b> Same coding pattern as California Code 1, however the sequence repeats 12 times (12 rounds) and then terminates (i.e., the total coding pattern lasts approximately three minutes).</li> <li>• <b>Fast March Time.</b> A coded signal that uses 120 beats per minute. Each beat consists of ¼ second pulse on, ¼ second off. Pattern repeats until alarm silence.</li> <li>• <b>March Time.</b> A coded signal that uses 60 beats per minute. Each beat consists of ½ second pulse on, ½ second off. Pattern repeats until alarm silence.</li> <li>• <b>Slow March Time.</b> A coded signal that uses 20 beats per minute. Each beat consists of 1.5 second pulse on, 1.5 second off. Pattern repeats until alarm silence.</li> <li>• <b>Temporal 4.</b> A CO gas warning that is a repeated sequence of four cycles of 100 msec on with 100 msec off, followed by 5 seconds off.</li> <li>• <b>Temporal.</b> A three-pulse coding pattern consisting of three ½ second pulses, each separated by a ½ second silence. Each three pulse group is separated by 1 ½ seconds of silence. Pattern repeats until alarm silence.</li> <li>• <b>On Steady.</b></li> </ul> <p><b>Note:</b> If the coding pattern selected here is not supported by the notification appliance, it will be replaced by a default one.</p>

*Continued on next page*

## Panel Information and Configuration

### System Options

Table 4-2. General System Options (Continued)

Option	Description ("dflt" indicates the default setting)
<b>Non Steady Visual Evac</b>	<p>When enabled, this option allows you to select the flash pattern output by Non Steady Visual Signals. The term Non Steady Visual Signal refers to any Visual Notification Appliance capable of emitting a pattern of flashes (such as incandescent visuals). The default setting for this option is not enabled.</p> <p>Choices are:</p> <ul style="list-style-type: none"> <li>• <b>March Time.</b> A coded signal that uses 120 beats per minute. Each beat consists of ¼ second pulse on, ¼ second off.</li> <li>• <b>Slow March Time.</b> A coded signal that uses 20 beats per minute. Each beat consists of 1.5 second pulse on, 1.5 second off.</li> <li>• <b>Temporal.</b> A three-pulse coding pattern consisting of three ½ second pulses, each separated by a ½ second silence. Each three pulse group is separated by 1 ½ seconds of silence.</li> </ul> <p><b>Note:</b> This option cannot be used for public mode signaling as defined in Section 4-4 of NFPA 72-99.</p>
<b>Alarm Cutout Timer</b>	<p>This option allows you to set a duration (up to 60 minutes) that specifies how long signals sound following an alarm. For example, with this option set at 2 minutes, building signals sound for two minutes and then automatically stop. After the signals stop, the alarm condition remains active at the panel.</p> <p>If Alarm Silence/Reset Inhibit option is active, it takes precedence over this option. See description of Alarm Silence/Reset Inhibit below for more information</p> <p>The range for this option is 60-3600 seconds. The default setting for this option is not enabled. Set the point type for visual NACS to SVISUAL to have them turn off at the same time as the audible signals.</p>
<b>Alarm Silence/Reset Inhibit</b>	<p>This option disables the <b>Alarm Silence</b> and <b>System Reset</b> buttons for a user-definable duration that ranges from 1 to 60 minutes. The timer is activated only by the first alarm (i.e., subsequent alarms do not reset the timer).</p> <p>If this option and the Alarm Cutout Timer are both enabled, this option takes precedence. For example, if the Alarm Cutout Timer is set to one minute and this option is set to 2 minutes, signals continue to sound after one minute.</p> <p>The default setting is not enabled.</p> <p><b>Note:</b> This option must be enabled for Canadian jobs.</p>
<b>Door Drop on AC Fail</b>	Option is grayed out
<b>Door Drop on Alarm</b>	Option is grayed out
<b>AC Failure Delay</b>	Specifies the time delay (HH:MM) in reporting an AC failure trouble to the city circuit (if AC fail is the only trouble) or Central Station if an SDACT is installed.
<b>Auto Set Panel Time and Date</b>	The time and date that appeared on the panel before the CFGI DOWNLOAD are automatically set after download is complete. This option will not work if the time/date was not set prior to the download (i.e. system time/date invalid trouble at the panel).



## Panel Information and Configuration

### System Options

**Table 4-3. Active Status Reminder System Options**

Option	Description
<b>Fire Reminder</b>	<p>The Fire Reminder option programs the system to periodically sound the piezo if an uncleared Alarm condition exists at the panel, thereby reminding system operators about the uncleared condition.</p> <p><b>By default, this option is enabled and the Resound Time is set to 8:00.</b></p> <p>To modify the Active Status Reminder settings, do the following:</p> <ol style="list-style-type: none"> <li>1. Make sure the box labeled <b>Enabled</b> is checked.</li> <li>2. Set the interval at which the piezo should sound. The range is from 0 to 18 hours. The default is 8 hours.</li> </ol>
<b>Pri2 Reminder</b>	<p>The Pri2 Reminder option programs the system to periodically sound the piezo if an uncleared Priority 2 Alarm (security) condition exists at the panel, thereby reminding system operators about the uncleared condition.</p> <p>By default, this option is enabled and the Resound Time is set to 8:00.</p> <p><b>To modify the Active Status Reminder settings, do the following:</b></p> <ol style="list-style-type: none"> <li>1. Make sure the box labeled <b>Enabled</b> is checked.</li> <li>2. Set the interval at which the piezo should sound. The range is from 0 to 18 hours. The default is 8 hours.</li> </ol>
<b>Supv. Reminder</b>	<p>The Supv Reminder option programs the system to periodically sound the piezo if an uncleared supervisory condition exists at the panel, thereby reminding system operators about the uncleared condition.</p> <p>By default, this option is enabled and the Resound Time is set to 8:00.</p> <p><b>To modify the Active Status Reminder settings, do the following:</b></p> <ol style="list-style-type: none"> <li>1. Make sure the box labeled <b>Enabled</b> is checked.</li> <li>2. Set the interval at which the piezo should sound. The range is from 0 to 18 hours. The default is 8 hours.</li> </ol>
<b>Trbl. Reminder</b>	<p>The Trbl Reminder option programs the system to periodically sound the piezo if an uncleared trouble condition exists at the panel, thereby reminding system operators about the uncleared condition.</p> <p><b>By default, this option is enabled and the Resound Time is set to 8:00.</b></p> <p>To modify the Active Status Reminder settings, do the following:</p> <ol style="list-style-type: none"> <li>1. Make sure the box labeled <b>Enabled</b> is checked.</li> <li>2. Set the interval at which the piezo should sound. The range is from 0 to 18 hours. The default is 8 hours.</li> </ol>
<b>Local Annunciation</b>	<p>If there is a per point serial DACT in the system, this setting specifies whether the piezo on the local panel will sound. This option is useful in situations where the panel is located in a public area (such as a lobby) and the occupant does not want the piezo repeatedly sounding.</p>

## Panel Information and Configuration

### System Options

**Table 4-4. Recurring Trouble Filter System Options**

<b>General Description:</b> These options will stop a recurring trouble event from continuously dialing the central station or from generating SafeLINC email events if the programmed criteria are met (number of occurrences of that point in the trouble log within the specified elapsed time frame).	
Option	Description
<b>Occurrences</b>	Number of times the point is found in the trouble log (0=no filtering; default for pre-existing jobs upgraded to 12.06). Value is selectable from 0 and 2 to 10. By default, it is set to 3.
<b>Elapsed Time</b>	Number of minutes in which the troubles must be found. Value is selectable from 1 to 1440 minutes. By default, it is set to 60.

**Table 4-5. Addressable Appliances Preferred Default System Options**

<b>General Description:</b> This option allows TrueAlert ES appliances that can be configured identically or independently through the ES Programmer software.	
To use the System Options to configure TrueAlert ES appliances:	
<ul style="list-style-type: none"> <li>• The appliance's jumpers and configuration switches must be set to the correct setting. For example, if a specific candela value is selected in the system options, the device should be set to FACP. On the other hand, if system option is set to "Hardware", the candela flag at the device should be set to any other position than FACP.</li> <li>• The appliance's candela and coding type in the power supply's Point Editing tab in the programmer must be set to "System Default".</li> </ul>	
When a specific candela value is selected, that value will be applied to all compatible appliances that have their configuration switches set to FACP*.	
When Hardware Specified is selected, it is the appliance's locally configured candela value that will be used.	
Option	System Options
<b>Candela</b>	<ul style="list-style-type: none"> <li>• 15 cd</li> <li>• 20 cd</li> <li>• 30 cd</li> <li>• 75 cd</li> <li>• 110 cd</li> <li>• 135 cd</li> <li>• 185 cd</li> <li>• Weather Proof 75 cd</li> <li>• Weather Proof 185 cd</li> <li>• Hardware Specified</li> </ul>
<p><b>*Note:</b> When a specific candela value is selected, a warning window will appear to notify the user that in the event that an appliance cannot be set to the selected Preferred Default System Option, a compatible default value will be assigned to the device by the programmer.</p> <p>For example: If the System Option is set to 20 cd and there is a UL Weatherproof device (that has no 20 cd setting), the Programmer will assign a value of WP75 cd to the UL weatherproof device.</p>	

*Continued on next page*

## Panel Information and Configuration

### System Options

**Table 4-5. Addressable Appliances Preferred Default System Options (Continued)**

Assigned Candela Value	Value for Indoor Appliances	Value for Weatherproof, UL	Value for Weatherproof, ULC
15 cd	15 cd	15 cd	20 cd
20 cd	30 cd	WP75 cd	20 cd
30 cd	30 cd	WP75 cd	30 cd
75 cd	75 cd	75 cd	75 cd
110 cd	110 cd	WP185 cd	75 cd
135 cd	135 cd	WP185 cd	75 cd
185 cd	185 cd	WP185 cd	75 cd
WP75 cd	75 cd	WP75 cd	75 cd
WP185 cd	185 cd	WP185 cd	75 cd
<b>HARDWARE</b>	Device candela jumper setting determines the output.		

**Table 4-6. Compatible Alert Tone Value**

Assigned Tone	Compatible Tone for Appliances
Broadband / 520HZ/ Slow Whoop/ Bell/ Siren/ Hi/Lo / Chime/ Hardware Specified	Temporal coding and Broadband tone.

### User Access Level Configuration

User access levels can be configured on the programmer for display functions to determine their access level.

Each access level automatically has access to the level below it. For example, if a technician is authorized for level 1, he will only be able to access functions that are tagged as level 1. A technician with a level 3 authorization level however, will have access to functions tagged as levels 1, 2 and 3.

**Note:** Passcodes can be attributed to user levels 2, 3, and 4 to restrict the access to certain functions. For more information consult the Passcode Configuration section.

#### To associate user levels with a display function:

1. Click on the Panel tab and select the Access Levels sub-tab.
2. Double-click on the table entry to open its Object Properties window.
3. Select one of four user levels for the display function. Basic display functions, such as System Reset and Change Time and Date, are usually assigned to user level 1. More sensitive display functions, such as Remote Download, are typically assigned to user level 2, 3, or 4.
4. Click on **OK** to confirm the selection.

## Panel Information and Configuration

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### Passcode Configuration

Numeric passcodes can be created to grant specific access level to up to 20 different operators. Each access level automatically has access to the level below it. For example, if a technician is authorized for level 1, he will only be able to access functions that are tagged as level 1. A technician with a level 3 authorization level however, will have access to functions tagged as levels 1, 2, and 3.

#### To create a passcode:

1. Click on the Panel tab and select the Passcode Assignments sub-tab.
2. Double-click on a table entry to open Object Properties window.
3. Enter a passcode, composed of up to ten numbers.
4. Assign the access level to the passcode.
5. Click on **OK** to confirm the selection.

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### Features Configuration

The Features sub-tab provides information on the functionalities of the ES Panel Programmer which can be used with the software key currently plugged into the Programmer PC.

#### To configure the functionalities:

1. Click on the Panel tab and select the Features sub-tab. The usable features are listed in the Programmer/Runtime Features window.
2. To enable the options under Programmer and Runtime on the left panel, enter the software key provided by an authorized Simplex representative with the appropriate access codes.
3. Click on **Update Access Codes** to complete the action.

**Note:** This sub-tab also prompts the user to enter the CPU Number. To get the CPU number, from the panel, press on Menu > System info > Panel Serial Number. Enter the number in the designated box.

# Chapter 5.

## Specifying Hardware Components

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### Introduction

The hardware components that are part of the FACP must be entered into the programmer so that the user can configure their properties according to the job requirements.

This chapter explains how to add and remove the hardware elements that are entered into the programmer.

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### In this chapter

Hardware Tab Overview.....	5-1	Adding Hardware.....	5-2
Adding a Zone/Relay Card.....	5-3	Adding the Additional IDNet Loops .....	5-3
Removing Hardware.....	5-3	Editing Properties .....	5-3
Annunciator Numbers.....	5-4	Annunciator Number Sharing Rules.....	5-4
Editing Basic Card Properties.....	5-5		

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### Hardware Tab Overview

The Hardware Tab Window uses a drag and drop interface, consisting of a palette of available icons on the right hand side of the screen and a work area on the left hand side of the screen.

There are two available views:








- **Tree View:** This view displays the hardware in a branch structure. The hardware appears linked to the bay into which it is installed.
- **Grid View:** This view displays the hardware in a grid structure and groups the hardware by type. This view also features search and sorting options for elements already added to the FACP.

## Specifying Hardware Components

### Hardware Tab Overview

Table 5-1 list the available hardware icons and their descriptions.

**Table 5-1. Hardware Tab Icons**

Icon	Meaning
	<p>This is a non-editable icon that permanently resides in the top left corner of the work area. The panel icon represents all of the non-networked, RUI-linked components controlled by a single CPU. A single panel may, for example, actually be multiple boxes, some residing at one location and some at another location.</p> <p>Highlighting this icon and hitting Shift-Right Arrow at the same time expands the entire hardware tree.</p>
	<p>The unit icon does not actually represent equipment. It corresponds to a location at which the box resides.</p> <p>Click on the + sign to expand the contents of a unit and see the box.</p>
	<p>The box icon typically represents a standard bay box. There is also an option that represents a custom box.</p> <p>Click on the + sign to expand the contents of the box.</p>
	<p>Logical cards are not hardware; instead they represent all of the analog pseudo points, digital pseudo points, or lists used on the system.</p> <p>Double-click on the card to access its properties.</p>
	<p>Physical cards are actual hardware, including: monitor, signal, relay, annunciator, display, interface, audio, and power cards.</p> <p>Double-click on the card to access its properties.</p>
	<p>This icon represents a legacy-style card that extends perpendicular from the back plane in the panel called &lt;slots&gt;. These cards mount into a card edge connector.</p> <p>Double-click on the card to access its properties.</p>
	<p>This icon represents the fixed-48 LED Module. The module is installed directly in a recess of the dress panel.</p> <p>Double-click on the card to access its properties.</p>

### Adding Hardware

There are two ways to add a hardware component to the programmer:

- Drag and drop
- Right-click + add

#### To add a hardware component to the programmer using drag and drop:

1. Locate the hardware component that you want to add from the Available Hardware window on the right of the programmer screen.
2. Click on the hardware and drag it into the Hardware Configuration window on the left of the programmer screen, into the proper directory:
  - Units must be placed in panel icons.
  - Boxes must be placed in units
  - Cards must be placed in boxes.
3. When the component is in the proper place, release the mouse. If the component was successfully added, it will appear in the Hardware Configuration menu. If the component cannot be added to the configuration, an error message will appear with the problem diagnosis.

## Specifying Hardware Components, *Continued*

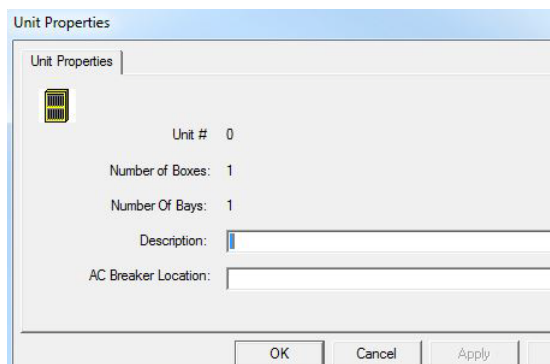
- Adding Hardware**    **To add a hardware component to the programmer using click + add:**
1. Right-click in the Hardware component window. An action list appears.
  2. Select the type of hardware you want to add to the programmer from the action list:
    - Add Unit: The Unit Properties box automatically opens.
    - Add Box: The Add Box window opens and displays the available boxes.
    - Add Card: The Add Card window opens. Use the drop-down menus to select the card you want to add. If the card cannot be added to the configuration, an error message will appear with the problem diagnosis.
- To add multiple boxes or cards at one time, use the right-click method. Specify the number of boxes/cards to add in the Quantity field.

- Adding a Zone/Relay Card**    **To add a Zone/Relay card:**
1. In the Hardware Configuration window, double-click on the IDNAC or the NAC power supply component.
  2. Click on the Data Entry tab.
  3. Select the radio button that corresponds to the card you want to add (City connect or Relay).

- Adding the Additional IDNet Loops**    **To add a the addition loops in the IDNet expansion loop card:**
1. In the Hardware Configuration window, double-click on IDNAC power supply, then click on IDNet+ Multiloop.
  2. Click on the Loop Editing tab.
  3. Select the first unused card 2: loop B isolator.
  4. Change the device type to Isolator/Expanded point capacity.
  5. Repeat steps 3 and 4 with the second unused card 2: loop C isolator.

- Removing Hardware**    **To remove hardware components from the programmer:**
1. Locate the hardware component in the Hardware Configuration window.
  2. Right-click on the hardware to open the action list.
  3. Select **Delete**.
  4. A warning message will appear warning you that deleting a hardware component deletes all references to that component. Click **Yes** if you wish to continue. If the component cannot be deleted, a second warning will appear with the specifics of why the component cannot be deleted.
- Note:** Before deleting a hardware component it is important to evaluate that component's role in the programmer and make sure that all other elements attached to that component have been redirected.

- Editing Properties**    To access the Properties dialog, right click on a Unit icon in the work area and then click on **Properties**. For more information on the cards and modules' Properties window, refer to chapter 6. For the Box Properties window, refer to Figure 5-1.
- Description: Enter descriptive text for the unit.
  - AC Breaker Location: Enter the location of the breaker to which the power supplies within the unit's boxes connect.



**Figure 5-1. Box Properties Window**

## Specifying Hardware Components, *Continued*

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### **Annunciator Numbers**

Every card in a 4007ES Panel job must have an associated annunciator number, whether it is an annunciator or not. Annunciator numbers are assigned in the following manner. When a new unit is added to a job, the unit is assigned the next available annunciator number.

When the first annunciator card is added to such a unit, it also assumes the unit's annunciator number.

As additional annunciators are added to the unit, there are several cases where the annunciators will share their annunciator numbers. Any additional annunciator cards of the same type added to the same unit also share this number.

When an additional annunciator card of a different type is added to the unit, that annunciator card is given an annunciator number distinct from the number assigned to the earlier annunciator type.

A card's annunciator number is important for a correct LED Switch operation. For example, a lamp test switch will only light lamps/LED on cards with the same annunciator number.

Exception to the rules above:

- Internal and external LCD Annunciators require their own annunciator number and will not share numbers even with their own kind.

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### **Annunciator Number Sharing Rules**

These rules apply to the annunciator sharing arrangement:

**AN Rule 1** - The CPU is annunciator number 0.

**AN Rule 2** - Annunciators of the same type in the same unit share annunciator numbers.



## Specifying Hardware Components, *Continued*

### Editing Basic Card Properties

All cards, regardless of whether they are the standard system cards (such as the system power supply) or an option card - include the basic properties. The basic card properties are listed below.

- **Card Address.** A unique number used to identify the card within the system. This number must correspond to the card address dip switch settings on the card.
  - Address 001 IDNAC/NAC power supply
  - Address 002 IDNet and multiloop
  - Address 003 Color user interface

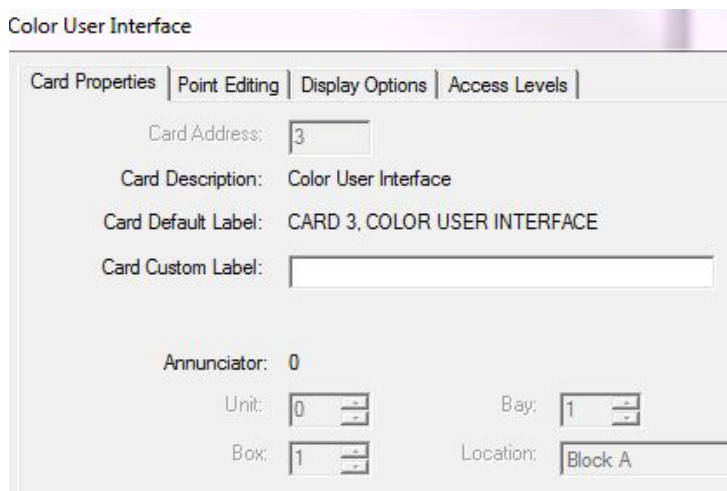
**Note:** It is usually easier to first add the card to the job with the programmer and then set the dip switches with the address automatically assigned by the programmer.

- **Card Custom Label.** This field describes the card's function, location, or some other descriptive text.
- **Card Alternate Custom Label.** This label will be displayed when the alternate language is displayed.
- **Unit, Box, Bay, and Slot (location).** The values shown in the fields reflect the location in which the card icon was placed when you added it with the programmer. It is possible to change these values; however, the new values must reflect the new physical location of the card.

To gain access to the Card Properties dialog, do *either* of the following:

- Double-click on any card icon in the work area.
- Right-click on any card in the work area. When the list of choices appears, click on **Properties**.

A window similar to Figure 5-2 appears.



**Figure 5-2. Card Properties Window - Color User Interface shown as example**

Edit these fields as follows:

- Enter a descriptive name in the Card Custom Label field.
- Use the Unit, Box, Bay, and Location (slot) fields to change this information if necessary. If you specify invalid information (for example, attempt to assign a card to a fully populated bay), the programmer outputs an error message to indicate the problem.



# Chapter 6.

## Editing Standard Component Properties

**Introduction** 4007ES panels come equipped with a standard set of hardware components. This chapter details the programming for those cards.

<b>In this chapter</b>	Accessing Properties.....6-1	Editing the Unit Properties ..... 6-1
	Editing the CPU.....6-1	Editing the Color User Interface..... 6-3
	Editing the IDNAC Power Supply .....6-4	Editing the IDNET Multiloop..... 6-6
	Editing the NAC Power Supply.....6-8	Editing the Zone/Relay Card ..... 6-10
	Editing the Serial DACT Card Per Point6-12	Editing the Event DACT Card..... 6-14
	48-LED Module.....6-16	

**Accessing Properties** b

1. Open the Hardware tab.
2. Select the hardware component from the Hardware Configuration window and double-click on it to open the editing window.

**Editing the Unit Properties** Each 4007ES panel set-up automatically requires a unit in the programmer.  
**To edit the unit:**  
 The Unit Window requests that the user enters the following information:

- Description: Enter a description that identifies the particular FACP.
- AC Breaker Location: Enter the location of the breaker that powers the unit’s power supply.

**Editing the CPU** The 4007 CPU window has three main tabs to edit. The Card Properties tab, the Service Port tab, and the Ethernet tab.

**To edit the Card Properties tab (Figure 6-1):**

Enter the card’s custom label. This label should make the card easily identifiable.

The following fields in the tab are filled by the programmer and cannot be edited:

- Card address
- Card description
- Card default label
- Annunciator address
- Unit number
- Box number
- Bay number
- Location

**To edit the Service Port tab:**

1. Configure the communication settings by selecting the Baud Rate, Parity, Data Bits, and Stop Bits fields to the values required by the attached device. It is recommended that you use the following default settings whenever possible.

- Baud Rate: 115,200
- Data Bits: 8
- Stop Bits: 1
- Parity: None

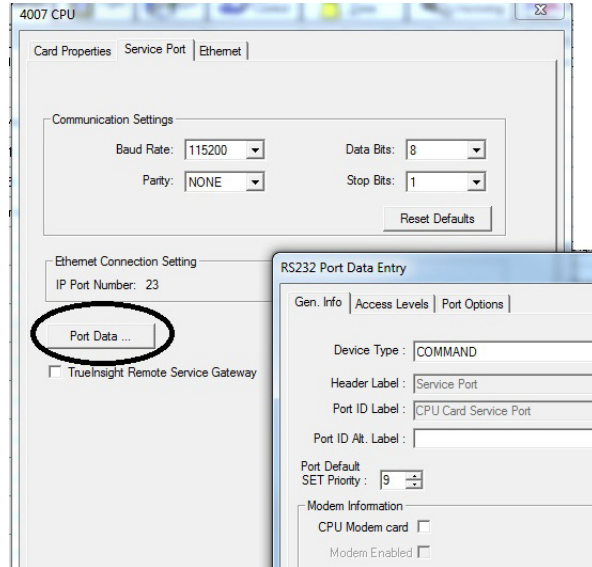
2. Click on the **Port Data** button. The RS323 Port Data Entry window opens (Figure 6-1).

*Continued on next page*

## Editing Standard Component Properties, *Continued*

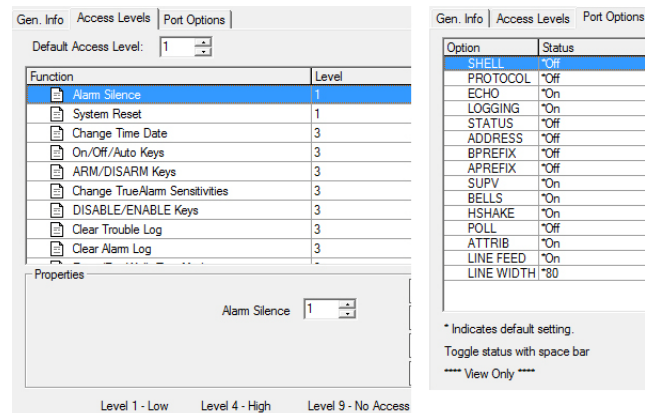
### Editing the CPU

- Click the Gen. Info tab. Enter the information requested. Click on **Apply** and then **OK** to confirm the selection (Figure 6-1).
  - Device Type:** For a CPU card service port, this field is permanently set to **COMMAND**.
  - Header Label:** This field specifies the first line of banner text that appears at the top of the CRT screen.
  - Port ID Label:** This field specifies the second line of banner text that appears at the top of the CRT screen. It is typically used to designate the port connection. For example, "Port 2, Command Center."



**Figure 6-1 4007 CPU - Gen Info Tab**

- Port Default SET Priority CPU Card Only:** This is the system priority level assigned to commands issued from the service port. The range is 2 to 15 and the default is 9.
- Click on the Access Level tab in the RS232 Port Data Entry window (Figure 6-2). This tab allows you to set the access level for the various system operations that can be carried out via the service port. To set an access level for one of the service port operations, scroll through the list of functions and highlight the function. Use this control to associate an access level with the function. Click on **Apply** and then **OK** to confirm the selection.



**Figure 6-2. 4007 CPU Access Levels and Port Options**

**Note:** These access levels apply only to actions performed through the service port, not for operations made at the panel display.

- Click on the Port Options tab in the RS232 Port Data Entry window. This tab contains options that apply to the way data appears on the display connected to the service port. These are read-only fields. Click **OK** to return to the Service Port tab.
- Click in the TrueInsight Remote Service Gateway box to enable the use of the Remote Service Gateway.

#### To edit the Ethernet tab:

- Click the Use Default box or enter the name that the building network has attributed to the FACP.
- Click on **Open > Apply** to confirm the selection.

## Editing Standard Component Properties, *Continued*

### Editing the Color User Interface

The Color User Interface window has four main tabs to edit. The Card Properties tab, the Point Editing tab, the Display Options tab, and the Access Level tab.

#### To edit the Card Properties tab:

1. Enter the card's custom label. This label should make the card easily identifiable.
2. Enter an alternate custom label for the card. This label will be displayed when the alternate language is displayed.

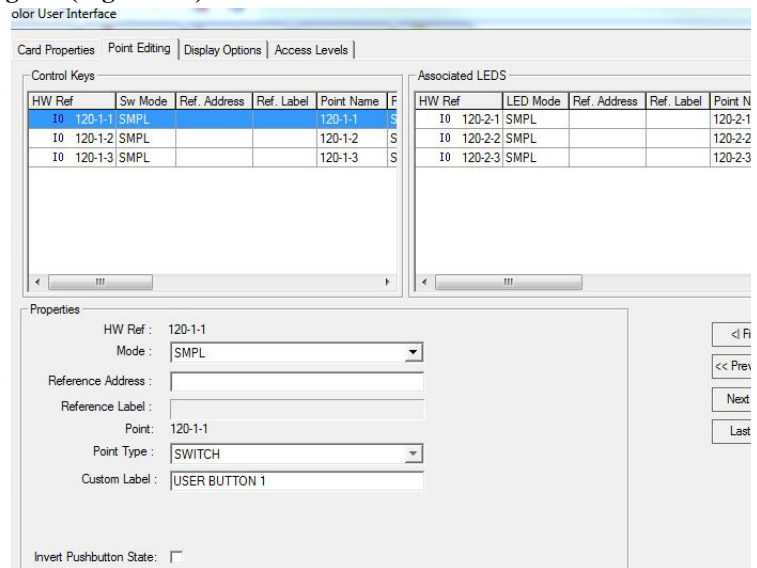
The following fields in the tab are filled by the programmer and cannot be edited:

- Card Address
- Card description
- Card default label
- Annunciator address
- Unit number
- Box number
- Bay number
- Location

#### To edit the Point Editing tab (Figure 6-3):

For each control key:

1. Select a switch mode from the drop-down list.
2. Enter a reference address. Press F9 to access the TagList window.
3. Edit the point's custom label if required. This label should make the point easily identifiable.
4. Check the Invert Pushbutton State box to switch down the point.



**Figure 6-3. Color User Interface - Point Editing Tab**

The following fields in the tab are filled by the programmer and cannot be edited:

- Reference Label
- Point
- Point Type

For each LED:

1. Select the appropriate mode from the drop-down list.
2. Enter a reference address.

**Note:** Depending on the switch mode, a LED can be associated to a control key. To do so, the reference address of the LED must be the same as the reference address of the control key.

3. Select the appropriate point type from the drop-down list.
  - a. The default point type for the first two LED points are LEDRED
  - b. The default point type for the third LED point is LEDGREEN
4. Edit the point's custom label if required. This label should make the point easily identifiable.

The following fields in the tab are filled by the programmer and cannot be edited:

- Reference Label
- Point
- Invert Pushbutton State (grayed out)

## Editing Standard Component Properties, *Continued*

### Editing the Color User Interface

To edit the **Display Options** tab (Figure 6-4): If needed, check the Reverse Display of custom label and status line. To use custom external files for the primary and/or the alternate MsgLib:

1. Click on **Import**.
2. Browse to import the appropriate MsgLib.
3. Click on **Open**.
4. Edit the Name and Date fields.

By default, the *System is Normal* image is displayed. To edit this image:

1. Check the Enable Custom Image check box.
2. Click on **Import Image...**
3. Browse to select the appropriate image.
4. Click on **Open > Apply**.

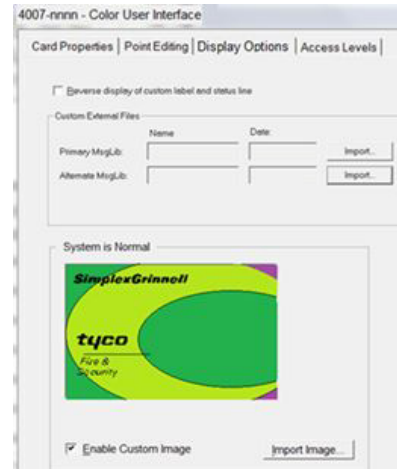


Figure 6-4. Color User Interface - Display Options

### To edit the Access Levels tab:

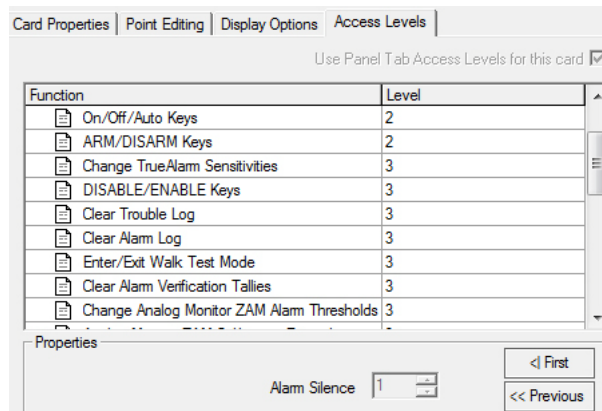


Figure 6-5. Color User Interface - Access Levels

The Access Level tab of the color user interface card cannot be edited. You can view the access level for the various functions in the system, but cannot change them.

### Editing the IDNAC Power Supply

The IDNAC Power Supply is part of the 4007ES Hardware Configuration. It has five main tabs to edit. The Card Properties tab, the Data Entry tab, the AuxNAC tab, the Aux Relay tab, and the Point Editing tab. For more information on the 4007ES Hybrid power supply, refer to the *Editing the NAC Power Supply* section.

#### To edit the Card Properties tab:

1. Enter the card's custom label. This label should make the card easily identifiable.

The following fields in the tab are filled by the programmer and cannot be edited:

- Card address
- Card description
- Card default label
- Annunciator address
- Unit number
- Box number
- Bay number
- Location

## Editing Standard Component Properties, *Continued*

### Editing the IDNAC Power Supply

#### To edit the Data Entry tab (Figure 6-6):

1. Configure the Depleted Battery Cutout option. If selected, the power supply card will shut itself off after detecting a depleted battery condition when no AC power is present. If this option is selected, a jumper must be installed on the power supply (on S527), for Canadian operation. It is unselected by default.
2. Select the optional cards that are connected to the power supply card. The choices are:
  - None
  - City Connect; OR
  - Relay
3. Click in the 25V Regulator box if a 25V regulator card, 4007-9802, will be used with the FACP.
4. Click **OK** to confirm the selection.

**Figure 6-6. IDNAC - Data Entry Tab**

HW Ref	Point Name	Device Type	Point Type	Custom Label
SIG3	1-4	SIGB	AUXPWR	SIGNAL CARD 1 CIRCUIT SIG3

#### To edit the AuxNAC tab (Figure 6-7):

1. Select a point type from the drop-down menu.
2. Edit the AuxNAC point type custom label. This label should make the point easily identifiable.
3. Click on **Apply > OK** to confirm the edits.

**Figure 6-7. IDNAC - AuxNAC Tab**

#### To Edit the Aux Relay tab (Figure 6-8):

1. Select a point type from the drop-down menu.
2. Edit the Aux Relay point type custom labels. This label should make the point easily identifiable.
3. Click on **Apply > OK** to confirm the edits.

HW Ref	Point Name	Device Type	Point Type	Custom Label
AUX3	1-10	RELAY	RELAY	AUX RELAY CARD 1 RELAY CKT
AUX4	1-11	RELAY	RELAY	AUX RELAY CARD 1 RELAY CKT

**Figure 6-8. IDNAC - Aux Relay Tab**

## Editing Standard Component Properties, *Continued*

### Editing the IDNAC Power Supply

#### To edit the Point Editing tab (Figure 6-9):

Select the card options you want to apply to the devices added to the IDNAC Power Supply.

- The choice are:
  - Code Candela Rating on Magnet with Test Mode off
  - LEDs Blink when polled
- Configure the devices that are attached to the IDNAC Power Supply.

HW Ref	Point Name	Device Type	Point Type	Custom Label	Coding Types	Candela Rating	Current I
1-1-1	1-1-1	UNUSED			N/A	N/A	0.0000
1-1-2	1-1-2	VO	VO		N/A	SYSTEM DEF...	0.0000
1-1-3	1-1-3	UNUSED			N/A	N/A	0.0000
1-1-4	1-1-4	UNUSED			N/A	N/A	0.0000
1-1-5	1-1-5	UNUSED			N/A	N/A	0.0000
1-1-6	1-1-6	UNUSED			N/A	N/A	0.0000
1-1-7	1-1-7	UNUSED			N/A	N/A	0.0000
1-1-8	1-1-8	UNUSED			N/A	N/A	0.0000
1-1-9	1-1-9	UNUSED			N/A	N/A	0.0000

Select Device: 1-1-2  
 VO (Visual Only) [v]  
 Copy Paste Paste Special...

Properties  
 Custom Label:   
 Style: INDOOR [v]  
 Operation: GENERAL EVAC [v]

**Figure 6-9. IDNAC - Point Editing Tab**

- Depending on the selected device, enter the required information in the Properties section. Consult chapter 7 for the details on how to edit points for TrueAlert devices.
  - ISO: Custom label
  - Repeater: Custom label, Depleted battery cutout, Repeater operation (Class B Spur, Class A Spur, Class A Loop)
  - DCAI: Custom label, Loop 1 address (filled by the programmer), Loop 2 address
  - Unused: Custom label
  - TrueAlertES Appliances: AV (Audible/Visual), VO (Visual Only), AO (Audible Only)
  - TrueAlert Appliances: STRB, Horn, A/V, ASTRB

### Editing the IDNET Multiloop

The IDNet Multiloop can contain up to 250 points. The card has three main tabs to edit. The Card Properties tab, the Point Editing tab, and the Loop Editing tab.

#### To edit the Card Properties tab:

- Enter the card's custom label. This label should make the card easily identifiable.
- Click in the box beside the following functions to activate them:
  - Only activate TrueAlarm device LEDs
  - Activate Signal IAM LEDs

The following fields in the tab are filled by the programmer and cannot be edited:

- Card address
- Card description
- Card default label
- Annunciator address
- Unit number
- Box number
- Bay number
- Location
- Total of configured points
- Total of available points



## Editing Standard Component Properties, *Continued*

### Editing the IDNET Multiloop

#### To edit the IDNet Point Editing tab (Figure 6-10):

The Point Editing tab is used to define the points on the IDNet loop. Once the Verification points are defined, they must be associated to a zone. The other type of points can also be associated to a zone, but it is not mandatory.

1. Select an IDNet point to configure in the table at the top of the tab.
2. Assign a device type to the IDNet point.
3. Assign a point type to the IDNet point.
4. Enter a custom label. This label should make the IDNet point easily identifiable.

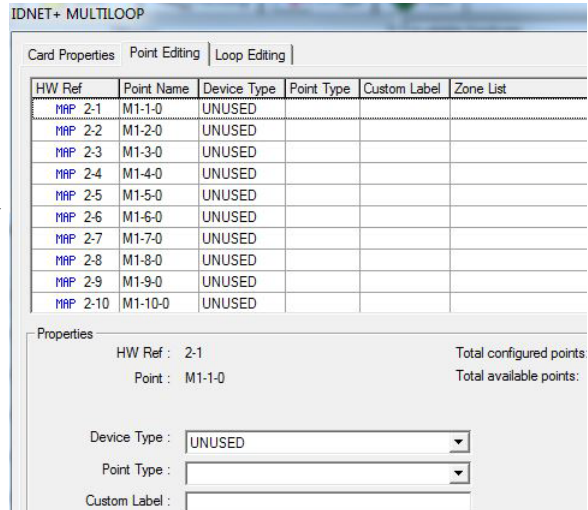


Figure 6-10. IDNet Multiloop - Point Editing Window

5. Tag the IDNet point to a Zone by clicking on **Zone List**. The TagList window is displayed (Figure 6-11).
  - a. Scroll through the list and select the zone to populate.
  - b. Press the space key. A “>>” symbol appears to the left of each point to indicate that it is selected.

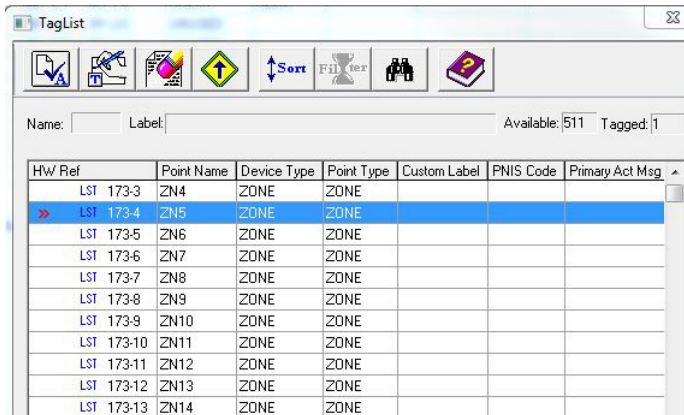


Figure 6-11. TagList Window

6. Click **OK**. If an error message is displayed, click **OK** and make the appropriate modifications.
7. Click **Apply > OK** to confirm the edits.

#### To edit the Loop Editing tab (Figure 6-12)

The Loop Editing tab is used to define the loops on the IDNet Multiloop card. Once they are defined, they can be associated to a zone. To edit the loops, follow the same steps as for the Point Editing tab, but skip step 3, since there is no point type for loops.

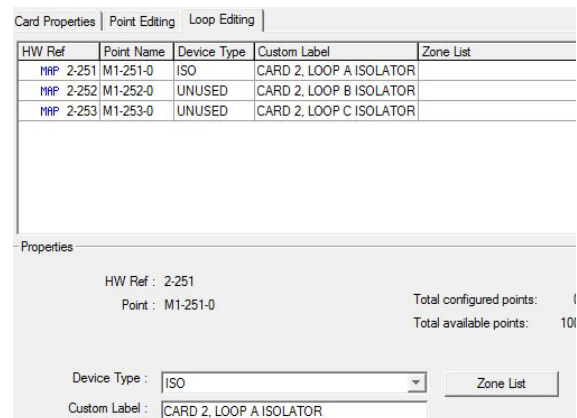


Figure 6-12. IDNet Multiloop - Loop Editing Window

## Editing Standard Component Properties, *Continued*

### Editing the NAC Power Supply

The NAC Power Supply is part of the 4007ES Hybrid Hardware Configuration. The card has four main tabs to edit. The Card Properties tab, the Data Entry tab, the Nacs tab, and the AuxNAC tab.

#### To edit the Card Properties tab:

1. Enter the card's custom label. This label should make the card easily identifiable. The following fields in the tab are filled by the programmer and cannot be edited:

- Card address
- Card description
- Card default label
- Annunciator address
- Unit number
- Box number
- Bay number
- Location

#### To edit the Data Entry tab (Figure 6-13):

1. Configure the Depleted Battery Cutout option. If selected, the power supply card will shut itself off after detecting a depleted battery condition when no AC power is present. If this option is selected, a jumper must be installed on the power supply (on S527), for Canadian operation. It is unselected by default.
2. Select the optional cards that are connected to the power supply card. The choices are:
  - None
  - City Connect
  - Relay
3. Select the NAC options for the wiring. The choices are:
  - 4 Class B
  - 4 Class A
4. Click in the Wheelock Devices (Code 3) box if a Wheelock device will be used with the FACP.
5. Click in the 25V Regulator box if a 25V regulator card will be used with the FACP.
6. Click **Apply** > **OK** to confirm the edits.

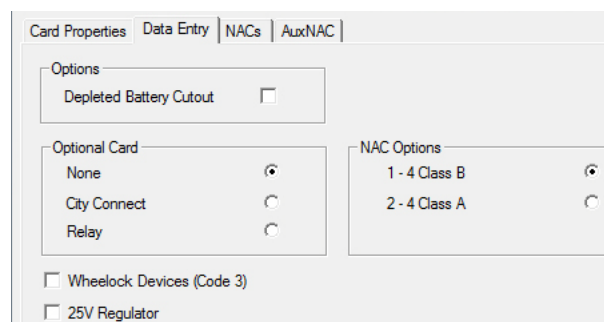


Figure 6-13. NAC - Data Entry Tab

## Editing Standard Component Properties, *Continued*

### Editing the NAC Power Supply

To edit the NACs tab (Figure 6-14):

1. Select a point to configure in the table.

HW Ref	Point Name	Device Type	Point Type	Custom Label	EOLR
SIG 1-1	SIG3	SIGB	SSIGNAL	SIGNAL CARD 1 CIRCUIT SIG3	10k
SIG 1-2	SIG4	SIGB	SSIGNAL	SIGNAL CARD 1 CIRCUIT SIG4	10k
SIG 1-3	SIG5	SIGB	SSIGNAL	SIGNAL CARD 1 CIRCUIT SIG5	10k
SIG 1-4	SIG6	SIGB	SSIGNAL	SIGNAL CARD 1 CIRCUIT SIG6	10k

Properties

HW Ref : 1-1

Point : SIG3

Point Type : SSIGNAL

Custom Label : SIGNAL CARD 1 CIRCUIT SIG3

EOL Resistance : 10k

Navigation buttons: < First, << Previous, Next >>, Last >

**Figure 6-14. NAC - NACs Tab**

2. Select a point type from the Point Type drop-down list.
3. Enter a custom label. This label should make the point easily identifiable.
4. Select the EOL resistance from the EOL Resistance drop-down list.
5. Click **Apply** > **OK** to confirm the edits.

To edit the AuxNAC tab (Figure 6-15):

1. Select a point to configure in the table.

HW Ref	Point Name	Device Type	Point Type	Custom Label	EOLR
SIG 1-5	SIG7	SIGB	AUXPWR	SIGNAL CARD 1 CIRCUIT SIG7	10k

Properties

HW Ref : 1-5

Point : SIG7

Point Type : AUXPWR

Custom Label : SIGNAL CARD 1 CIRCUIT SIG7

EOL Resistance : 10k

Navigation buttons: < First, << Previous, Next >>, Last >

**Figure 6-15. NAC - AuxNAC Tab**

2. Select a point type from the Point Type drop-down list.
3. Enter a custom label. This label should make the point easily identifiable.
4. Click **Apply** > **OK** to confirm the edits.

## Editing Standard Component Properties, *Continued*

### Editing the Zone/ Relay Card

The 4007-9801 Zone/Relay card allows monitoring of up to eight Class B zones or four Class A zones, or control up to eight relay contacts. Up to four cards can be used. The card has two main tabs to edit. The Card Properties tab and the Point Editing tab.

#### To edit the Card Properties tab:

1. The panel assigns an address when a Zone/Relay card is added. Set the card address to match the programmer assigned address.
2. Enter the card's custom label. This label should make the card easily identifiable.
3. Select the location for each Zone/Relay card. By default, the selected block is F (bottom left corner). The other choices are block E, block G, and block H.

The following fields in the tab are filled by the programmer and cannot be edited:

- Card description
- Card default label
- Annunciator address
- Unit number
- Box number
- Bay number

#### To edit the Point Editing tab (Figure 6-16):

1. Select the device type. The choices are:

- MONA Class A Monitoring Device

**Note:** If MONA is selected for a point, a confirmation window is displayed explaining that the next point will be reserved for the system and the next point's device type, point type, and labels will automatically change. These fields will become non-editable.

- MONB Class B Monitoring Device
- Relay device

2. Select the point type.
3. Enter the card's custom label. This label should make the card easily identifiable.
4. Select the EOL resistance from the EOL Resistance drop-down list.
5. Click **Apply** > **OK** to confirm the edits.

HW Ref	Point Name	Device Type	Point Type	Custom Label	EOLR	Zone L
I0 4-1	IO1	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO1		
I0 4-2	IO2	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO2		
I0 4-3	IO3	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO3		
I0 4-4	IO4	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO4		
I0 4-5	IO5	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO5		
I0 4-6	IO6	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO6		
I0 4-7	IO7	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO7		
I0 4-8	IO8	RELAY	RELAY	ZONE / RELAY CARD 4 POINT IO8		

Properties

HW Ref : 4-1  
Point : IO1

Device Type : RELAY

Point Type : RELAY

Custom Label : ZONE / RELAY CARD 4 POINT IO1

EOL Resistance:

**Figure 6-16. Zone/Relay Card / Point Editing Tab**

6. Tag each point to a Zone by clicking on **Zone List**. The TagList window is displayed (Figure 6-11).
  - a. Scroll through the list and select the zone to populate.
  - b. Press the space key. A “>>” symbol appears to the left of the point to indicate that it is selected. Click **OK**. If an error message is displayed, click **OK** and make the appropriate modifications.
7. Click **Apply** > **OK** to confirm the edits.

## Editing Standard Component Properties, *Continued*

### Editing the Zone/ Relay Card

#### Auto Fill Window (Figure 6-17)

The auto fill function allows you to fill up the information for one point and then use this information to automatically fill the information for the other points. To invoke this function, select a point in the Point Editing tab grid and press F4. The Auto Fill window appears.

The following fields in the Auto Fill window are pre-filled with the values from the highlighted point (from the Point Editing tab):

- Device Type
- Point Type
- Custom Label

1. Select to which point you want to apply the auto fill from the Auto Fill drop-down menu. The choices are:

- All (programmer will change all the points on the card to match the auto fill selection)
- Point Forward (programmer will change the highlighted point and all subsequent points on the card to match the auto fill selection)
- Selected (programmer will change the highlighted point to match the auto fill selection)

2. To apply the same custom label to other points, check the Custom Label check box.

3. To add an identification number after the label, check the Automatically increment last number in custom labels check box.

4. To add a number after the custom label, check the Automatically increment last number in custom labels check box.

**Figure 6-17. Zone / Relay Point Editing - Auto Fill Window**

5. If the highlighted point in the Point Editing window is a MONB or a Relay, select a device type and a point type in the Device & Point Type drop-down menus.

6. The following fields are grayed out:

- Reference Address
- Coding Type
- Candela Rating
- Mode

7. Click on **OK** to confirm the edits.

**Note:** If the point selected is a MONA, the Auto Fill will affect only the primary points (1, 3, 5, or 7) for the custom label since the second points (2, 4, 6, or 8) are reserved. However, if the Alt Custom Label is checked, both the first and the second point of a MONA will be affected.

## Editing Standard Component Properties, *Continued*

### Editing the Serial DACT Card Per Point

The 4007-9806 serial DACT interface card can be programmed per point or by event.

The 4007-9806 serial DACT per point has six main tabs to edit. The Card Properties tab, the Basics tab, the Event Codes tab, the Local Points tab, the Point Types tab, and the Points tab.

#### To edit the Card Properties tab per point:

1. The panel assigns an address when a DACT card is added. Set the card address to match the programmer assigned address.
2. Enter the card's custom label. This label should make the card easily identifiable.
3. Select a card address, from 0 to 31.

The following fields in the tab are filled by the programmer and cannot be edited:

- Card description
- Card default label
- Annunciator address
- Box number
- Bay number
- Location

#### To edit the Basics tab (Figure 6-18):

The Basics tab can be used to set up the basic communication information of the DACT to DACR link. The following fields in the tab can be edited:

- Phone and Account Numbers
  - Primary (1)#:
  - Secondary (2)#:
  - Account (1)#:
  - Account (2)#:
- Central Station Line #
- Dial Mode
  - Tone
  - Pulse
  - Tone else Pulse
- Miscellaneous
  - Report AC Failure Delay
  - Test Report Time:
  - Send Unmapped Points
  - IP Communicator
- Central Station Email Address. Check the box to enter an email address and the .CSV file will automatically be sent to Central Station. Only for Per Point DACTs and needs to be set up with Central Station.

Figure 6-18. DACT Card - Basics Tab

#### To edit the Event Codes tab (Figure 6-19):

The Event Codes tab allows to edit the event codes associated with each of the 4007ES Panel point types.

1. Click on the Point Types drop-down list box and select the point type whose event codes needs to be changed. (The Next and Previous buttons allow to scroll through the list without clicking on the drop-down list box.)
2. Click on the Enable Edit checkbox at the top left of the window.
3. A warning window appears. Click on **Yes**.

	EVENT	RESTORAL
Fire :	110	110
Priority 2 :		
Supervisory :		
Trouble :	330	330
Utility :		
Control :		

Figure 6-19. DACT - Event Codes Tab

**Note:** Do not edit event codes without prior authorization and direction from the central station.

4. The non-edible fields remain grayed out. Define the appropriate event codes for both the Event and the Restoral columns.
5. Click **Apply** > **OK** to confirm the edits.

## Editing Standard Component Properties, *Continued*

### Editing the Serial DACT Card

#### To edit the Local Points tab (Figure 6-20):

The Local Points tab allows to edit the local points associated with each of the 4007ES Panel point types.

1. Click on the Enable Edit checkbox at the top right of the window.
  2. A warning window appears. Click on **Yes**.
- Note:** Do not edit local points without prior authorization and direction from the central station.
3. The non-edible fields remain grayed out. Define the appropriate local points for both the Event and the Restoral columns.
  4. Click **Apply** > **OK** to confirm the edits.

Figure 6-20. DACT - Local Point Tab

#### To edit the Point Types tab (Figure 6-21):

The Point types tab allows to add new point types, delete, or edit existing point types.

##### To edit an existing point:

1. Click on a point in the grid.
2. Edit the appropriate fields for both the Event and the Restoral columns.
3. Edit the SDACT point type name and the SDACT point type description if necessary.
4. Click **Apply** to confirm the edits

##### To delete an existing point:

1. Click on a point in the grid.
2. Click on **Delete**.
3. Click on **Apply** to confirm the edits.

Figure 6-21. DACT - Point Types Tab

##### To add a point:

1. Click on **Add**.
2. Edit the SDACT point type name and the SDACT point type description. These labels should make the points easily identifiable.
3. Edit the appropriate fields for both the Event and the Restoral columns.
4. Click **Apply** > **OK** to confirm the edits.

**Note:** Do not edit local points without prior authorization and direction from the central station.

## Editing Standard Component Properties, *Continued*

### Editing the Serial DACT Card

#### To edit the Points tab (Figure 6-22):

1. To edit a point, click on the point or use the up and down arrow with the <space bar> to toggle point selection.
2. Depending on the point, edit the fields as necessary. The non-edible fields remain grayed out.

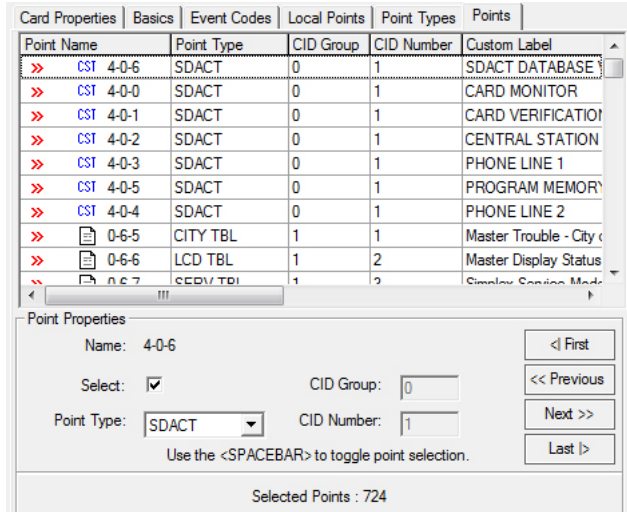


Figure 6-22. DACT - Points Tab

### Editing the Event DACT Card

The 4007-9806 DACT “per event” has five main tabs. To edit the Card Properties tab, the Basics tab, the Event Codes tab, the Local Points tab, and the Points tab.

#### To edit the Card Properties tab per event:

1. The panel assigns an address when a DACT card is added. Set the card address to match the programmer assigned address.
2. Enter the card’s custom label. This label should make the card easily identifiable.
3. Select a card address, from 0 to 31.

The following fields in the tab are filled by the programmer and cannot be edited:

- Card description
- Card default label
- Annunciator address
- Box number
- Bay number
- Location



## Editing Standard Component Properties, *Continued*

### Editing the Event DACT Card

#### To edit the Basics tab (Figure 6-23):

The Basics tab can be used to set up the basic communication information of the DACT to DACR link. The following fields in the tab can be edited:

- Phone and Account Numbers
  - Primary (1)#:
  - Secondary (2)#:
  - Account (1)#:
  - Account (2)#:
- Central Station Line #:
- Communications Format
  - SIA
  - 3/1
  - 4/2
  - BFSK
- Pulse Communication Format (available when 3/1, 4/2 or BFSK is selected)
  - Format rate 10 PPS or 20 PPS
  - Communication Format Frequency 1.9KHz Data/1.4KHz ACK or 1.8KHz Data/2.3KHz ACK
- Dual Mode
  - Tone
  - Pulse
  - Tone else Pulse
- Miscellaneous
  - Report AC Failure Delay
  - Test Report Time:
  - Send Unmapped Points
  - IP Communicator

**Figure 6-23. DACT Event Reporting - Basics Tab**

#### To edit the Event Codes tab (Figure 6-19):

The Event Codes tab allows to view the Point type information, but cannot be edited.

## Editing Standard Component Properties, *Continued*

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### Editing the Event DACT Card

The Local Points tab allows the editing for the local points associated with each of the 4007ES Panel point types.

#### To edit the Local Points tab (Figure 6-20):

1. Select the Enable Edit checkbox at the top right of the window.
2. A warning window appears. Click on **Yes**.

**Note:** Do not edit local points without prior authorization and direction from the central station.

3. Define the appropriate local points for both the Event and the Restoral columns.
4. Click **Apply** > **OK** to confirm the edits.

#### To edit the Points tab (Figure 6-22):

1. To edit a point, click on the point or use the up and down arrow with the <spacebar> to toggle point selection.
  2. Depending on the point, edit the fields as necessary. The non-edible fields remain grayed out.
- 

### 48-LED Module

The 48-LED Module has two main tabs to configure. The Card Properties tab and the Point Editing tab.

#### To edit the Card Properties tab:

1. Enter a card address for the 48-LED Module.
2. Enter the card's custom label. This label should make the card easily identifiable.

The following fields in the tab are filled by the programmer and cannot be edited:

- Card description
- Card default label
- Annunciator address
- Unit number
- Box number
- Bay number
- Location

## Editing Standard Component Properties, *Continued*

### 48-LED Module

**To edit the Point Editing tab:**

From the Point Editing tab, two view choices are available.

**High Level Modes:** organizes the LEDs in pairs. Under this view, the Mode options are more limited:

- OO | On/Off
- TFA | Trouble/Fire Alarm w/Alert
- TO | Trouble/On

**Low Level Modes:** shows each LED as individually configurable.

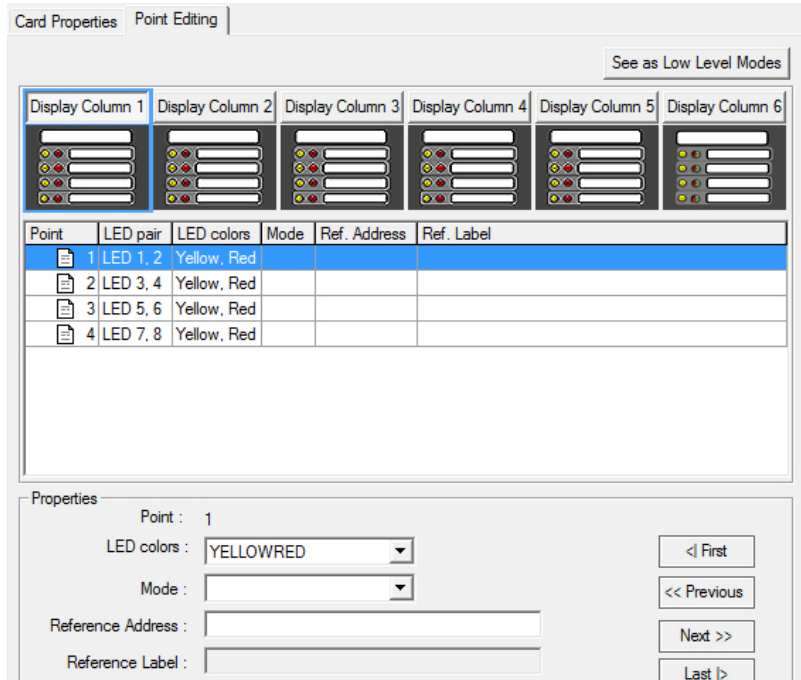


Figure 6-24. 48-LED Module High Level

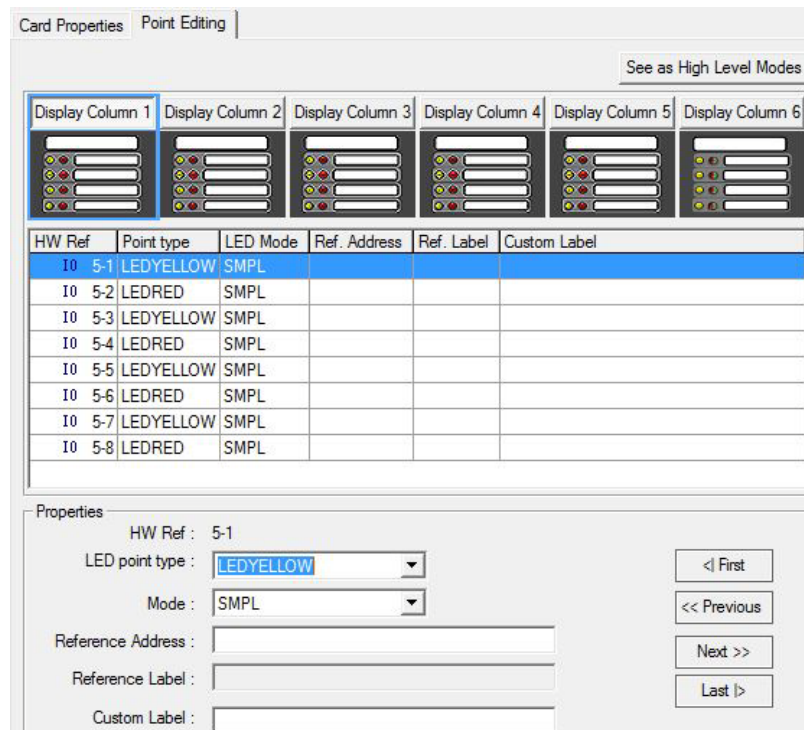


Figure 6-25. 48-LED Module Low Level

## Editing Standard Component Properties, *Continued*

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### 48-LED Module

#### In High Level Mode:

1. Select a column and then a point that needs to be edited. Point type:
  - For the even-numbered points, the default LED point type is LEDRED.
  - For the odd-numbered points 1 through 40, the default LED point type is LEDYELLOW.
2. Select the Mode from the Mode drop-down list. Under this mode, only three options are available. If an error is detected, a red “X” will be displayed in the HW Ref column. Pass the mouse over the row to display the tool tip describing the problem.
  - OO : On/Off
  - TFA: Trouble Fire Alarm w/alert
  - TO: Trouble On
3. Create Reference Address for the points by pressing F9.
  - Select an address from the table. Scroll through the list and press the space key to select an address. A “>>” symbol appears indicate that it is selected.
4. Enter a point custom label. This label should make the point easily identifiable.
5. When editing the 8 points of the Display Column 6:
  - For the even-numbered points, the default LED point type is LEDRED. The address of the point depends on the LED point type selected.
  - For the odd-numbered points, the default LED point type is LEDYELLOW.
6. Repeat for each point that needs to be edited.

#### In Low Level Mode:

1. Select a column and then a point that needs to be edited. Point type:
  - For the even-numbered points, the default LED point type is LEDRED.
  - For the odd-numbered points 1 through 40, the default LED point type is LEDYELLOW.
2. Select the Mode from the Mode drop-down list.
3. Create Reference Address for the points by pressing F9.
  - Select an address from the table. Scroll through the list and press the space key to select an address. A “>>” symbol appears indicate that it is selected.
4. Enter an alternate custom label for the points. This label is displayed when the alternate language is displayed.
5. When editing the 8 points of the Display Column 6:
  - For the even-numbered points, the default LED point type is LEDRED. The address of the point depends on the LED point type selected.
  - For the odd-numbered points, the default LED point type is LEDYELLOW.
6. Repeat for each point that needs to be edited.

# Chapter 7.

## Editing Standard Component Properties

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**Introduction** TrueAlert devices are edited through the Point Editing tab on the IDNAC Power Supply.

**To access this tab:**

1. Go to the Hardware Configuration window.
2. Double-click on the IDNAC Power Supply icon.
3. Click on the Point Editing tab.

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TrueAlert ES AV Appliance Point Editing .....	7-4	ISO Options .....	7-6
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## Point Editing for TrueAlert Device

### TrueAlert ES AO Appliance Point Editing

Use this device type to edit TrueAlert ES Audible (AO) appliances.  
The following editing options are available for this appliance:

**Table 7-1. TrueAlert ES AO Point Editing Options**

Option	Description	
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.	
<b>Style</b>	Select the Style that corresponds to the appliance or device you are programming.	
	Available settings:	<ul style="list-style-type: none"> <li>• Indoor</li> <li>• Weatherproof UL</li> <li>• Weatherproof ULC</li> </ul>
<b>Horn Type</b>	Broadband	Multitone
<b>Tone</b>	BROADBAND	BROADBAND, 50 HZ, BELL, SLOW WHOOP, SIREN, HILO, CHIME, HARDWARE
<b>Coding Type</b>	Select the Coding Type that will determine the cadence of the audible signal.	
	System Default	This will set the coding to the value determined in the System Option tab.
	Temporal	A three-pulse coding pattern consisting of three ½ second pulses, each separated by a ½ second silence. Each three pulse group is separated by 1 ½ seconds of silence. Pattern repeats until alarm silence.
	March 20	A coded signal that uses 20 beats per minute. Each beat consists of 1.5 second pulse on, 1.5 second off. Pattern repeats until alarm silence.
	March 60	A coded signal that uses 60 beats per minute. Each beat consists of ½ second pulse on, ½ second off. Pattern repeats until alarm silence.
	March 120	A coded signal that uses 120 beats per minute. Each beat consists of ¼ second pulse on, ¼ second off. Pattern repeats until alarm silence.
	On Steady	On steadily.
	Temporal 4	A CO gas warning that is a repeated sequence of four cycles of 100 msec on with 100 msec off, followed by 5 seconds off.
<b>Volume</b>	Set the appliance volume:	
	High	To use this option the appliance's configuration control must be set to Panel.
	Low	To use this option the appliance's configuration control must be set to Panel.
	Hardware	Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.
<b>Note:</b> The "Copy/Paste/ Special Paste" feature can be used to configure multiple devices identically.		

## Point Editing for TrueAlert Device, *Continued*

### TrueAlert ES VO Appliances Point Editing

Use this device type to edit TrueAlert ES Visual (VO) appliances.  
The following editing options are available for this appliance:

**Table 7-2. TrueAlert ES VO Point Editing Options**

Option	Description																						
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.																						
<b>Current Draw (Amps)</b>	This information is not available.																						
<b>Style</b>	Select the Style that corresponds to the appliance or device you are programming. <table border="1"> <tbody> <tr> <td rowspan="8">• Indoor. Available candela options:</td> <td>System Default. Sets the candela value to the one selected in the System Option tab.</td> </tr> <tr> <td>15 candela</td> </tr> <tr> <td>30 candela</td> </tr> <tr> <td>75 candela</td> </tr> <tr> <td>110 candela</td> </tr> <tr> <td>135 candela</td> </tr> <tr> <td>185 candela</td> </tr> <tr> <td>Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.</td> </tr> <tr> <td rowspan="6">• Weatherproof UL. Available candela options:</td> <td>System Default. Sets the candela value to the one selected in the System Option tab.</td> </tr> <tr> <td>15 candela</td> </tr> <tr> <td>75 candela</td> </tr> <tr> <td>WP 75 candela</td> </tr> <tr> <td>WP 185 candela</td> </tr> <tr> <td>Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.</td> </tr> <tr> <td rowspan="5">• Weatherproof ULC. Available candela options:</td> <td>System Default. Sets the candela value to the one selected in the System Option tab.</td> </tr> <tr> <td>20 candela</td> </tr> <tr> <td>30 candela</td> </tr> <tr> <td>75 candela</td> </tr> <tr> <td>Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.</td> </tr> </tbody> </table>	• Indoor. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.	15 candela	30 candela	75 candela	110 candela	135 candela	185 candela	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.	• Weatherproof UL. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.	15 candela	75 candela	WP 75 candela	WP 185 candela	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.	• Weatherproof ULC. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.	20 candela	30 candela	75 candela	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.
• Indoor. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.																						
	15 candela																						
	30 candela																						
	75 candela																						
	110 candela																						
	135 candela																						
	185 candela																						
	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.																						
• Weatherproof UL. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.																						
	15 candela																						
	75 candela																						
	WP 75 candela																						
	WP 185 candela																						
	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.																						
• Weatherproof ULC. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.																						
	20 candela																						
	30 candela																						
	75 candela																						
	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.																						
<b>Operation</b>	Select the type of operation the appliance will signal. <table border="1"> <tbody> <tr> <td>General Evac.</td> <td>The strobe will be automatically associated with the "ALL VISUAL" VNAC by default. The "alarm/alert" switch on the device must be set to "Alarm".</td> </tr> <tr> <td>Alert</td> <td>The strobe will be automatically associated with the "ALL ALERT" VNAC by default. The user must select this option to configure the strobe as a "Mass notification" device. The "alarm/alert" switch on the device must be set to "Alert".</td> </tr> <tr> <td>Other</td> <td>When this mode is selected the user is confirming that the strobe will not have a default assignment to a particular VNAC and that the VNAC must be specified by the user.</td> </tr> </tbody> </table>	General Evac.	The strobe will be automatically associated with the "ALL VISUAL" VNAC by default. The "alarm/alert" switch on the device must be set to "Alarm".	Alert	The strobe will be automatically associated with the "ALL ALERT" VNAC by default. The user must select this option to configure the strobe as a "Mass notification" device. The "alarm/alert" switch on the device must be set to "Alert".	Other	When this mode is selected the user is confirming that the strobe will not have a default assignment to a particular VNAC and that the VNAC must be specified by the user.																
General Evac.	The strobe will be automatically associated with the "ALL VISUAL" VNAC by default. The "alarm/alert" switch on the device must be set to "Alarm".																						
Alert	The strobe will be automatically associated with the "ALL ALERT" VNAC by default. The user must select this option to configure the strobe as a "Mass notification" device. The "alarm/alert" switch on the device must be set to "Alert".																						
Other	When this mode is selected the user is confirming that the strobe will not have a default assignment to a particular VNAC and that the VNAC must be specified by the user.																						
<b>Candela</b>	Select the candela output of the appliance. The selection varies according to the appliance style.																						
<b>Note:</b> The "Copy/Paste/ Special Paste" feature can be used to configure multiple devices identically.																							

## Point Editing for TrueAlert Device, *Continued*

### TrueAlert ES AV Appliance Point Editing

Use this device type to edit TrueAlert ES Audible/Visual (AV) appliances.  
The following editing options are available for this appliance:

**Table 7-3. TrueAlert ES AV Point Editing Options**

Option	Description
Custom Label	This field can be used to describe the appliance's function, location, or other descriptive information.
Current Draw (Amps)	This information is not available.
<b>Style</b>	Select the Style that corresponds to the appliance or device you are programming.
	<ul style="list-style-type: none"> <li>• Indoor.</li> <li>• Available candela options:</li> </ul>
	System Default. Sets the candela value to the one selected in the System Option tab.
	15 candela
	30 candela
	75 candela
	110 candela
	135 candela
	185 candela
	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.
	<ul style="list-style-type: none"> <li>• Weatherproof UL.</li> <li>• Available candela options:</li> </ul>
	System Default. Sets the candela value to the one selected in the System Option tab.
	15 candela
	75 candela
	WP 75 candela
	WP 185 candela
	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.
	<ul style="list-style-type: none"> <li>• Weatherproof ULC.</li> <li>• Available candela options:</li> </ul>
	System Default. Sets the candela value to the one selected in the System Option tab.
	20 candela
	30 candela
75 candela	
Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.	

*Continued on next page.*



**Table 7-3.TrueAlert ES AV Point Editing Options (Continued)**

Option	Description	
<b>Operation</b>	Select the type of operation the appliance will signal.	
	General Evac.	The strobe will be automatically associated with the "ALL VISUAL" VNAC by default. The "alarm/alert" switch on the device must be set to "Alarm".
	Alert	The strobe will be automatically associated with the "ALL ALERT" VNAC by default. The user must select this option to configure the strobe as a "Mass notification" device. The "alarm/alert" switch on the device must be set to "Alert".
	Other	When this mode is selected the user is confirming that the strobe will not have a default assignation to a particular VNAC and that the VNAC must be specified by the user.
<b>Candela</b>	Select the candela output of the appliance. The selection varies according to the appliance style.	
<b>Horn Type</b>	Broadband	Multitone
<b>Tone</b>	BROADBAND	BROADBAND, 50 HZ, BELL, SLOW WHOOP, SIREN, HILO, CHIME, HARDWARE
<b>Coding Type</b>	Select the Coding Type that will determine the cadence of the audible signal.	
	System Default	This will set the coding to the value determined in the System Option tab.
	Temporal	A three-pulse coding pattern consisting of three ½ second pulses, each separated by a ½ second silence. Each three pulse group is separated by 1 ½ seconds of silence. Pattern repeats until alarm silence.
	March 20	A coded signal that uses 20 beats per minute. Each beat consists of 1.5 second pulse on, 1.5 second off. Pattern repeats until alarm silence.
	March 60	A coded signal that uses 60 beats per minute. Each beat consists of ½ second pulse on, ½ second off. Pattern repeats until alarm silence.
	March 120	A coded signal that uses 120 beats per minute. Each beat consists of ¼ second pulse on, ¼ second off. Pattern repeats until alarm silence.
	On Steady	On steadily.
	Temporal 4	A CO gas warning that is a repeated sequence of four cycles of 100 msec on with 100 msec off, followed by 5 seconds off.
<b>Volume</b>	Set the appliance volume:	
	High	To use this option the appliance's configuration control must be set to Panel.
	Low	To use this option the appliance's configuration control must be set to Panel.
	Hardware	Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.
<b>Note:</b> The "Copy/Paste/Special Paste" feature can be used to configure multiple devices identically.		

## Point Editing for TrueAlert Device, *Continued*

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### ISO Options

Use this device type to edit TrueAlert Isolators.

The following editing options are available for this device:

**Table 7-4. TrueAlert Isolator Editing Options**

Option	Description
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.

---

### Repeater Options

Use this device type to edit Repeaters.

The 4009 IDNAC Repeater is a TrueAlert ES Addressable device that extends the maximum wiring distance supported by the IDNAC Signaling Line Circuit (SLC).

Consult the 4009 IDNAC Repeater manual 579-1019 for more information.

The following editing options are available for this device:

**Table 7-5. Repeater Editing Options**

Option	Description
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.
<b>Current Draw (Amps)</b>	This information is not available.
<b>Depleted Battery Cutout</b>	When this option is selected the Repeater will shut itself off after detecting a depleted battery condition when no AC power is present. This option is de-selected by default.
<b>Repeater Operation</b>	Select the option that corresponds to the Repeater's wiring style.
	• For local Class B Wiring select "Class B Spur"
	• For local Class A Loop Wiring select "Class A Spur"
	• For extended Class A Loop Wiring select "Class A Loop"

## Point Editing for TrueAlert Device, *Continued*

### DCAI Options

Use this device type to edit DCAI cards.

**Note:** A warning will appear if the number of DCAI cards added to the Point Editing table does not correspond to the number of cards added to the job.

The 4100-6103 Dual Class A Isolator (DCAI) card converts the Class B output of an IDNAC into two isolated Class A outputs. Consult the DCAI manual 579-1029 for more information.

The following editing options are available for this device:

**Table 7-6. DCAI Editing Options**

Option	Description
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.
<b>Current Draw (Amps)</b>	This information is not available.
<b>Loop 1 Address</b>	The Loop 1 Address is automatically set by the programmer.
<b>Loop 2 Address</b>	When the second loop is used, the programmer will assign it a virtual address. This virtual address does not need to be adjacent to the loop 1 hardware address.

### TrueAlert STRB Appliances Point Editing

Use this device type to edit TrueAlert Strobe (STRB) appliances.

The following editing options are available for this appliance:

**Table 7-7. TrueAlert STRB Point Editing Options**

Option	Description												
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.												
<b>Current Draw (Amps)</b>	This information is not available.												
<b>Style</b>	Select the Style that corresponds to the appliance or device you are programming. <table border="1" data-bbox="613 1234 1409 1598"> <tbody> <tr> <td>• Indoor. Available candela options:</td> <td>System Default. Sets the candela value to the one selected in the System Option tab.</td> </tr> <tr> <td></td> <td>15 candela</td> </tr> <tr> <td></td> <td>30 candela</td> </tr> <tr> <td></td> <td>75 candela</td> </tr> <tr> <td></td> <td>110 candela</td> </tr> <tr> <td></td> <td>Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.</td> </tr> </tbody> </table>	• Indoor. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.		15 candela		30 candela		75 candela		110 candela		Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.
• Indoor. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.												
	15 candela												
	30 candela												
	75 candela												
	110 candela												
	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.												
<b>Operation</b>	Select the type of operation the appliance will signal. <table border="1" data-bbox="613 1650 1409 1719"> <tbody> <tr> <td>General Evac.</td> <td>The strobe will be automatically associated with the "ALL VISUAL" VNAC by default.</td> </tr> </tbody> </table>	General Evac.	The strobe will be automatically associated with the "ALL VISUAL" VNAC by default.										
General Evac.	The strobe will be automatically associated with the "ALL VISUAL" VNAC by default.												
<b>Candela</b>	Select the candela output of the appliance.												
<b>Note:</b> The "Copy/Paste/Special Paste" feature can be used to configure multiple devices identically.													

## Point Editing for TrueAlert Device, *Continued*

### TrueAlert Horn Appliance Point Editing

Use this device type to edit TrueAlert Horn appliances.

The following editing options are available for this appliance:

**Table 7-8. TrueAlert Horn Point Editing Options**

Option	Description	
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.	
<b>Current Draw (Amps)</b>	This information is not available.	
<b>Style</b>	Select the Indoor Style	
<b>Coding Type</b>	Select the Coding Type that will determine the cadence of the audible signal.	
	System Default	This will set the coding to the value determined in the System Option tab.
	Temporal	A three-pulse coding pattern consisting of three ½ second pulses, each separated by a ½ second silence. Each three pulse group is separated by 1 ½ seconds of silence. Pattern repeats until alarm silence.
	March 60	A coded signal that uses 60 beats per minute. Each beat consists of ½ second pulse on, ½ second off. Pattern repeats until alarm silence.
	March 120	A coded signal that uses 120 beats per minute. Each beat consists of ¼ second pulse on, ¼ second off. Pattern repeats until alarm silence.
	On Steady	On steadily.
<b>Volume</b>	Set the appliance volume:	
	High	To use this option the appliance's configuration control must be set to Panel.
	Low	To use this option the appliance's configuration control must be set to Panel.
<b>Note:</b> The "Copy/Paste/Special Paste" feature can be used to configure multiple devices identically.		

## Point Editing for TrueAlert Device, *Continued*

### TrueAlert AV Appliances Point Editing

Use this device type to edit TrueAlert Strobe Audible/Visual (AV) appliances.

The following editing options are available for this appliance:

#### Point Editing for TrueAlert Device

**Table 7-9. TrueAlert AV Point Editing Options**

Option	Description	
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.	
<b>Alternate Label</b>	This label is displayed when the alternate language is used.	
<b>Current Draw (Amps)</b>	This information is not available.	
<b>Style</b>	Select the Style that corresponds to the appliance or device you are programming.	
	Indoor. Available candela options:	System Default. Sets the candela value to the one selected in the System Option tab.
		15 candela
		30 candela
		75 candela
		110 candela
	Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.	
<b>Operation</b>	The strobe and horn appliances will be automatically associated respectively with the "ALL VISUAL" and "ALL AUDIBLE" VNAC by default.	
<b>Candela</b>	Select the candela output of the appliance.	
<b>Coding Type</b>	Select the Coding Type that will determine the cadence of the audible signal.	
	System Default	This will set the coding to the value determined in the System Option tab.
	Temporal	A three-pulse coding pattern consisting of three ½ second pulses, each separated by a ½ second silence. Each three pulse group is separated by 1 ½ seconds of silence. Pattern repeats until alarm silence.
	March 60	A coded signal that uses 60 beats per minute. Each beat consists of ½ second pulse on, ½ second off. Pattern repeats until alarm silence.
	March 120	A coded signal that uses 120 beats per minute. Each beat consists of ¼ second pulse on, ¼ second off. Pattern repeats until alarm silence.
	On Steady	On steadily.
<b>Volume</b>	Set the appliance volume:	
	High	To use this option the appliance's configuration control must be set to Panel.
	Low	To use this option the appliance's configuration control must be set to Panel.
<b>Note:</b> The "Copy/Paste/Special Paste" feature can be used to configure multiple devices identically.		

## Point Editing for TrueAlert Device, *Continued*

### TrueAlert ASTRB Appliances Point Editing

Use this device type to edit TrueAlert Alert Strobe (ASTRB) appliances.

The following editing options are available for this appliance:

**Table 7-10. TrueAlert ASTRB Point Editing Options**

Option	Description
<b>Custom Label</b>	This field can be used to describe the appliance's function, location, or other descriptive information.
<b>Current Draw (Amps)</b>	This information is not available.
<b>Style</b>	Select the Style that corresponds to the appliance or device you are programming.
	Indoor. Available candela options:
	System Default. Sets the candela value to the one selected in the System Option tab.
	15 candela
	30 candela
	75 candela
110 candela	
Hardware. Selecting this option will set the appliance to the setting indicated on the appliance's configuration switch or jumper.	
<b>Operation</b>	Alert. The strobe will be automatically associated with the "ALL ALERT" VNAC by default. The user must select this option to configure the strobe as a "Mass notification" device.
<b>Candela</b>	Select the candela output of the appliance.
<b>Note:</b> The "Copy/Paste/Special Paste" feature can be used to configure multiple devices identically.	

## Point Editing for TrueAlert Device, *Continued*

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### Copy and Pasting Properties

The standard copy and paste as well as the special paste, allow you to copy the properties of a device and paste them into the properties of a similar device by using the "Copy" and "Paste" buttons.

#### Standard Copy and Paste:

There are two ways to perform a Copy and Paste.

- Device by device:
  1. Select the point to be copied.
  2. Select the device type
  3. Enter the required information in the Properties section (the options differ depending on the selected device).
  4. Click on the "Copy" button located above the properties window.
  5. Select the next point to be programmed and click on the "Paste" or "Paste Special" button.

#### Special Paste:

The Special paste essentially works like the regular paste but gives you more options and more control over the content you paste. The special paste gives you four advanced paste options:

- Auto Increment last number in labels: Selecting this options will automatically increase the existing number on the label by 1. For example: Label DEVICE1 would be pasted as label DEVICE2. This option can be added to the "Paste All Properties" option and the "Paste Label Only" option.
  - Paste All Properties: This option pastes all properties of the copied device, including labels.
  - Paste Labels Only: This option only pastes the copied labels.
6. Paste Exclude Labels: Pastes all copied properties of the device except the labels.
  7. All of the properties from the first device will now be copied into the new device's properties.
  8. Make any editing adjustments required and repeat if necessary.
- By multiple selection:
    1. Select the point to be copied.
    2. Select the device type.
    3. Enter the required information in the Properties section (the options differ depending on the selected device).
    4. Click on the "Copy" button located above the properties window.
    5. Go to the Point Editing spreadsheet and select all the points you want filled with the pasted properties.
    6. Once all the points are selected, click on the "Paste" button.
    7. All of the properties from the first device will now be copied into the properties of all the selected devices.





# Chapter 8.

## Viewing, Adding, and Editing Lists

---

### Introduction

A *list* is a group of similar points, sharing a common name, that can be monitored or controlled as if they were a single point. For example, when you use a switch to turn on a list populated with control points, all of the points in the list turn on. The 4007ES FACP includes the following types of lists.

- **Automatically Generated, Read-Only System Lists.** These lists are created based on the point type assigned to the point. Points cannot be manually added or deleted from these lists.
- **Automatically Generated, Editable System Lists.** These are lists created based on the point types you assign to the point. These lists are only editable after the automatic list generation property is turned off for the list.
- **User-Defined Lists.** Switches, LEDs, and Custom Control equations all make use of these types of lists. Switches typically control lists made up of control points (relays), audio NACs, or standard NACs (horns/strobes). LEDs can be programmed to monitor a list and turn ON when any point in the list activates. Custom Control equations typically use lists of monitor points to indicate when a specific output action should occur, and the points affected by the output action are typically specified in a user-defined list of control points.
- **Zone Lists.** This option allows you to create up to 512 lists grouping together points in one defined zone.

This chapter describes the programming of the four list categories, General Lists, WalkTest Lists, Latching Supv Verification Lists, and Elevator Recall Lists, used by the Panel FACP.

**Note:** The Alarm Verification Tab can still be accessed through the List Tab, but it cannot be used.

For information on using lists for the Install Mode feature, consult the *4007ES Operator's Manual* (579-1165).

### In this chapter

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## Viewing, Adding, and Editing Lists

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### List Tab

Select the List Tab to display the List Tab window. By default when you select the List Tab, the General List subtab, located on the bottom left of the window, is selected. This window contains an entry for every list in the system.

The subtabs running across the bottom of the window allow you to display only the lists associated with a specific system category. For example, clicking on the alarm verification subtab displays only the lists associated with alarm verification.

### Sort Function

The Sort function allows you to sort and display lists in ascending or descending order based on list-specific criteria (the criteria shown in the Sort Dialog is different for each type of list). To sort lists, do one of the following:

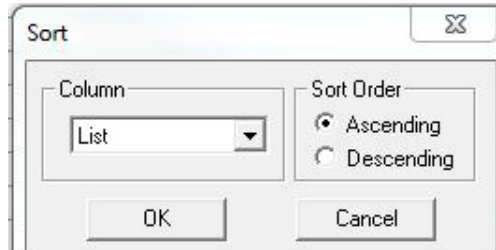


Figure 8-1. Sort Window

- **Press F5 function key.** When the Sort Dialog (shown below) appears, click on the Column drop-down list box to select the criteria to use for the sort operation. Next, select whether the sort should be in Ascending or Descending order and click on **OK**.
- **Click on a column title.** Clicking on one of the column titles in the List Tab window automatically sorts the list in descending order. Clicking on the same column title again sorts the lists in ascending order.
- **Right-click in the list window.** Right Click in the list window. When the list of options appears, select Sort. Click on the Column drop-down list box to select the criteria to use for the sort. Next, select whether the sort should be in Ascending or Descending order and click on **OK**.

### Custom Label Spell Check

Spell Check allows you to validate the spelling of custom labels. Using Spell Check, incorrectly spelled words can then be automatically corrected or suggested alternatives can be substituted.

1. Position the pointer in the point list and press the F7 button. (Alternatively, you can right-click in the List window and select Spell Check when the list of options appears.)
2. Correct the misspelled word in any of the following ways. (Use the Ignore and Ignore All buttons to ignore the misspelled word.)
  - Click on the Change or Change All button to accept the suggested spelling in the “Change to” field.
  - Type the correct spelling in the “Change to” field and press the Change or Change All button.
  - Scroll through the Suggestions drop-down list, click on one of the entries, and then click on the Change or Change All field.

The Search and Find functions allow you to specify a specific search criteria (such as a specific custom label) and then search the List Window for the selected data.

1. Position the pointer in the List Window and press the CTRL + F key combination. (Alternatively, you can right click in the List Window and select Search or Find from the list that appears.)
2. Enter the Search text in the Search What field. Click on the Search in Column field and select the column in which to search. Click on **Search Next** to start the search.
3. Press the F3 key to continue searching the List Window for another occurrence of the item you are searching.


## Viewing, Adding, and Editing Lists, *Continued*


### Managing Points

Default custom control programming within the system automatically adds points to system lists based on their point type, a process known as auto list generation, or autogen. For example, adding a signal point with the SSIGNAL point type automatically adds the point to system list L8, Fire Alarm Points Off on Silence.


In some applications, however, you need to turn a system list's autogen property off, so that you can manually move points into or out of the system list. This is particularly true when editing WalkTest, Latching Supv Verification, and Elevator Recall groups.

Be aware that when working with the system lists, four icons are used to indicate the status of the system list.

 This symbol represents an auto-generated list with the autogen property turned on. When autogen is turned on, points cannot be manually moved into or out of the list.

 This symbol represents an auto-generated list whose autogen property cannot be altered. The list is permanently set to autogen on and cannot be edited.

This symbol represents an auto-generated list with the autogen property turned off.

 Indicates that the list is not automatically generated.

A system list's autogen property can be turned on and off in one of two places:

- **General List Tab.** Clicking on the General List tab displays all lists (system and user) currently defined on the panel. Refer to “Turning Autogen Off and On from the General List Tab” for specific information on doing this.
- **WalkTest, Latching Supv Verification, Elevator Recall Tabs.** Each of these tabs displays a window that allows you to move points into the appropriate lists. Within each window, you can toggle the autogen property to allow points to be moved into and out of the lists. Refer to the specific section for information on turning off autogen for Latching Supv Verification, WalkTest, or elevator recall.

### Turning Autogen Off and On from the General List Tab

1. Click on the List tab at the top of the programmer.
2. Click on the General List subtab at the bottom of the window.
3. Right-click on the list whose autogen property you want to change. Select Properties from the list that appears. A dialog similar to Figure 8-2 appears.

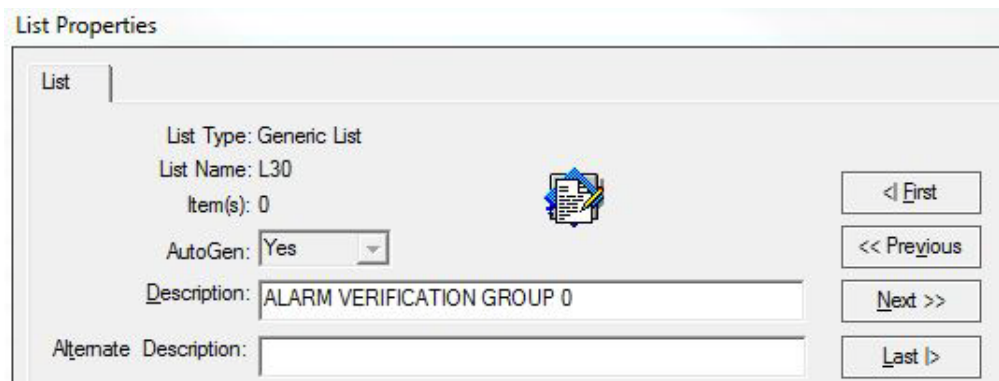


Figure 8-2. List Properties Window

4. Click on the AutoGen field and change the setting.

## Viewing, Adding, and Editing Lists, *Continued*

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**Basic Operations** User-defined lists allow a range of points to be controlled (turned on or off, for example) by turning a switch on, or via a Custom Control command. Lists associated with LEDs allow the status of system attributes or components to be monitored.

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### Adding a User-Defined List

#### To add a general-purpose list and populate it with points:

1. Open the List Window by selecting the List Tab at the top of the Programmer.
  2. Open the TagList window by either pressing the Insert key or right-clicking in the List Window and selecting Add List.
  3. You can select points for the list using a combination of the following three methods. When you select points, the TagList window adds the “>>” character to the left of the point to indicate that the point is tagged.
    - Use the spacebar to select/deselect specific points. Click on the point you want to select and then press the spacebar once to tag the point; press it again to deselect the point.
    - Click on the Tag All icon, located at the top of the TagList window. This selects every point in the Taglist.
    - Click on the Tag by Type dialog to tag points based on their point type or device type.
    - Click on Clear All Tags (eraser) to erase all the tags.
    - Click on Tags Up to sort the tagged points to the top of the list.
    - Click on Sort to sort either HW Ref, Point Name, Device Type, Point Type or Custom Label columns in the TagList window in ascending or descending order
    - Click on Filter to sort points according to predefined criteria, such as: Device Type, Point Type and Custom Label.
    - Click on Search to look for a point in one of the five columns in the TagList window.
    - Click on Help to open the ES Panel Online Help.
  4. Click on the **OK** button in the TagList window. The dialog shown below appears, prompting you to name the list. Enter descriptive text and click on **OK**.
- 

### Editing an Existing User-Defined List

#### To edit an existing list (i.e., add additional points or delete points from the list):

1. Open the list's Tag List by either right-clicking on the list and selecting Tag List from the menu that appears, or click on the list and press the F9 key.
2. When the tag list appears, click on the point you want to add or delete. Press the spacebar to toggle whether the point is tagged (included in the list) or not. Tagged points are identified by the “>>” to the left of the point name.

## Viewing, Adding, and Editing Lists, *Continued*

### Latching Supv Verification

The ES Panel's Latching Supv Verification (LVS DUCT and LVSUPV) feature activates a supervisory condition when a device crosses the threshold. This means that the supervisory condition on the panel does not clear until the point restores to normal and a system reset is performed.

The ES Panel FACP supports both Domestic (United States) and Canadian versions of supervisory verification. Refer to “Selecting Canadian or Domestic (US) Operation” for information on enabling the Canadian or domestic version of alarm verification.

#### Moving Points between Groups

By default, initiating devices with a latching verification point type are initially put in Supv Verification Group 0.

#### To put points into other Supv Verification groups:

1. Open the List Window by selecting the List Tab at the top of the Programmer.
2. Click on the Latching Supv Verification tab at the bottom of the List Window.
3. Click on the Supv Verification group into which you want to move points. Right-click and select Tag List.
4. Use the mouse or arrow keys to highlight each point you want to move into the group. A point is selected when a “>>” appears to the left of the point. Repeat this step to select other points.

#### Selecting Canadian or Domestic (US) Operation

Canadian alarm verification works somewhat differently from the domestic (US) version.

When you select Canadian operation for the alarm verification feature, the system operates as follows:

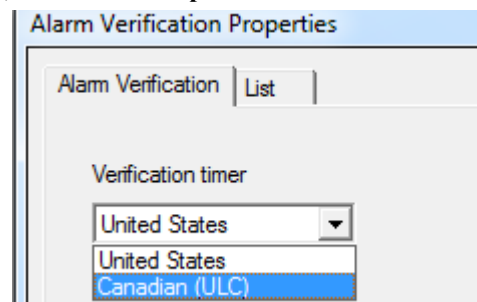
**Table 8-1. Canadian/Domestic Operation**

Type	Operation
Canadian Operation	<b>Retard Stage.</b> If a point specified within one of the alarm verification lists enters an alarm state, the system delays the annunciation of the alarm for 15 seconds
	<b>Reset Stage.</b> When the 15 second timer expires, the system attempts to reset the initiating device for five seconds.
	<b>Confirmation Stage.</b> After the five second timer expires, the system evaluates the state of the initiating device for 10 additional seconds. After 10 seconds, if the device is still in alarm, the system immediately annunciates the alarm.
Domestic (US) Operation	<b>Retard Stage.</b> If a point specified within one of the alarm verification lists enters an alarm state, the system delays the annunciation of the alarm for 30 seconds
	<b>Reset Stage.</b> When the timer expires, the system attempts to reset the initiating device for five seconds.
	<b>Confirmation Stage.</b> After the timer expires, the system evaluates the state of the initiating device for up to 120 additional seconds. After this duration, if the device is still in alarm, the system immediately annunciates the alarm.

#### To select Canadian or Domestic (US) operation, follow these steps.

1. Right click on one of the groups and select Properties. The Alarm Verification Properties dialog shown below appears.
2. Click on the Alarm Verification tab.
3. Click on the drop-down list box and select Canadian or Domestic operation.

**Note:** You only need to set the Verification Timer field for one of the alarm verification groups. The programmer sets this field to the same value for all other groups.



**Figure 8-3. Alarm Verification Properties Dialog**

## Viewing, Adding, and Editing Lists, *Continued*

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### Latching Supv Verification

#### Renaming a Group

The default names for the groups are Supv Verification Group 0 through Supv Verification Group 7.

**To add a more descriptive name to the group, follow these steps.**

1. Right-click on the group whose name you want to change and select Properties. The Alarm Verification Properties dialog appears.
  2. Click on the List tab in the dialog.
  3. Enter a name for the group in the Description field.
  4. Click the **Apply** button, followed by the **OK** button to close the dialog.
- 

### WalkTest

WalkTest allows the function of the system's initiating devices and signals to be tested by a single person. Conducting a WalkTest requires you to perform the following general steps.

- **Step 1.** Create WalkTest Groups. The ES Panel supports up to eight WalkTest™ groups. This allows the building to be divided into small portions for the WalkTest™, and allows the rest of the building to be protected by the fire alarm panel. Each group has a list of monitor points (initiating devices) and a list of the signal circuits that activate when one of the monitor points within the group activates.
- **Step 2.** Enable WalkTest Options from Front Panel. These options include the following. Refer to the *4007ES Operator's Manual (579-1165)* for information on setting these options.
  - Which WalkTest Group is enabled.
  - Whether the group's signals turn on when a monitor point in the same group activates. Turn this option off to perform a silent WalkTest on the system.
  - Whether logging of WalkTest information is enabled or not. (Enable this option to perform a silent WalkTest.)
- **Step 3.** Manually Activate Initiating Devices in Each Group and Interpret Signals. Individually activate each initiating device in the group, using the manufacturer's recommended test equipment. Make sure to proceed in a logical manner (i.e., start with the lowest IDNet address and work toward the highest). Each time you activate an initiating device, the system's signals pulse a code that allows you to verify exactly which initiating device triggered the signals. For hardwired monitor zones, the signal code corresponds to the number of the zone. (For example, if the zone number is eight, the signals pulse eight times to indicate zone eight.) For IDNet devices, the first set of pulses from the signals correspond to the channel. The signals then pause momentarily and the next set of pulses corresponds to the number of the device on the channel. For example, if you activate an IDNet smoke detector with an address of M1-25, the signals would sound once to indicate channel one, pause for a short duration, and then sound two pulses followed by a pause and then five pulses to indicate device 25. In some cases, immediately after verifying the function of an initiating device, you may also want to verify its ability to generate a trouble condition. To do this, cause a trouble on the device and then listen to the signals. The signals sound steady for 4 seconds to indicate trouble conditions, and then reset.

## Viewing, Adding, and Editing Lists, *Continued*

### WalkTest

#### Moving Points between Groups

The WalkTest list consists of eight groups. The purpose of these groups is to allow a technician to conduct a WalkTest in a specific area of a building (or different buildings), and limit the activation of the building signals to only the intended area.

WalkTest Group 0 initially contains all of the monitor points and all of the signal points wired to the panel. Each WalkTest group consists of two lines: one for monitor zones and one for signal/relays.

Follow these steps to move points from WalkTest Group 0 (where they are initially placed) into other WalkTest groups. Signal/relay points can exist in multiple groups, but monitor points can be in only one group at a time.

1. Open the List Window by selecting the List Tab at the top of the Programmer.
2. Click on the WalkTest tab at the bottom of the List Window. A screen similar to the one shown in Figure 8-4 appears.

Walktest Groups	Monitor Points	Control points
Walktest Group 0		
LST WALK TEST GROUP 0	1	
LST WALK TEST GROUP 0 - SIGNALS/RELAYS		5
Walktest Group 1		
LST WALK TEST GROUP 1	0	
LST WALK TEST GROUP 1 - SIGNALS/RELAYS		1
Walktest Group 2		
LST WALK TEST GROUP 2	0	
LST WALK TEST GROUP 2 - SIGNALS/RELAYS		1
Walktest Group 3		
LST WALK TEST GROUP 3	0	
LST WALK TEST GROUP 3 - SIGNALS/RELAYS		1

Figure 8-4. WalkTest Tab

3. Right-click on WalkTest Group 0 and select Properties. A properties dialog appears. Click on the WalkTest tab in the dialog. Remove the checkmarks from the Monitor and Control checkboxes. Click the **Apply** button, followed by the **OK** button to close the dialog.
4. Select the monitor points to move as follows:
  - a. Right-click on the WalkTest group into which you want to move the points (for example, using Figure 8-4, right-click on the line called LST WALKTEST GROUPX). When the list of options appears, select Tag List. In the example below, the points are being moved into WalkTest Group 4.
  - b. In the Tag List, use the mouse or arrow keys to highlight each monitor point you want to move into the group. Press the space bar to tag or un-tag points to be added or deleted. A point is selected when a ">>" symbol appears to the left of the point.
  - c. Repeat these steps to move other monitor points into the group. When you move points, the points are automatically unselected in WalkTest Group 0 - Monitor Points and moved into the group you chose.
5. Select the signal/relay points to move as follows:
  - a. Right-click on the WalkTest group into which you want to move the signal/relay points (for example, using Figure 8-4, right-click on the line called LST WALKTEST GROUPX - SIGNALS/RELAYS). When the list of options appears, select Tag List.
  - b. In the Tag List, use the mouse or arrow keys to highlight each signal/relay point you want to move into the group. Press the spacebar to tag or un-tag points to be added or deleted. A point is selected when a ">>" symbol appears to the left of the point.
  - c. Repeat these steps to move other signal/relay points into the group.
  - d. The points that you selected in Step b above are not automatically deleted from WalkTest Group 0 - Signals/Relays list. If you do not want these points to be in both groups, you need to open up the WalkTest Group 0 - Signals/Relays list and delete the points. To do this, right-click on WalkTest Group 0 - Signals/Relays list. Select Tag List. When the list of points appears, use the mouse or arrow keys to highlight each point you want to unselect from WalkTest Group 0. Press the spacebar to deselect the highlighted point. Points do not have the ">>" symbol to their left when they are unselected.

## Viewing, Adding, and Editing Lists, *Continued*

### WalkTest

#### Editing Group Properties

Each WalkTest group includes a set of properties that allow you to control the way in which points within the group operate.

#### To edit the properties for a group:

1. Click on the WalkTest tab at the bottom of the List Window.
2. Double-click on one of the WalkTest groups to view its properties window. (Alternatively, you can right-click on the group and select Properties from the menu that appears.)
3. Use the guidelines listed below to set the properties for the WalkTest group.

**Table 8-2. WalkTest Group Property Guidelines**

Tab	Properties
WalkTest	<p>Setting the properties in this tab affects all WalkTest groups.</p> <p><b>Monitor.</b> A check in this box means monitor points are automatically inserted in Group 1 - Monitor Zones. If you uncheck this box, you can move points from one group to another. However, at a later point, if you recheck this box, the points you previously moved to other groups will be moved back to Group 1.</p> <p><b>Control.</b> A check in this box means control points (signals/relays) are automatically inserted in Group 0 - Signals/Relays. If you uncheck this box, you can move points from one group to another. However, at a later point, if you recheck this box, the points you previously moved to other groups will be moved back to Group 1.</p> <p><b>On.</b> Allows you to set the duration of each tone within the PNIS code.</p> <p><b>Off.</b> Allows you to set the duration of silence between tones of the PNIS code.</p>
Group	<p>Setting the properties in this tab affects only the selected group.</p> <p><b>Monitor.</b> A counter that tracks the number of devices in the group.</p> <p><b>Control.</b> A counter that tracks the number of devices in the group.</p> <p><b>Reset Delay.</b> Allows you to shorten or lengthen the reset time used by the monitor device. For example, increase the delay in cases where canned smoke does not clear from a smoke detector quickly enough.</p>
List	<p><b>Description.</b> Allows you to change the description of the group's monitor or control lists. For example, you can change the name of the WalkTest Group 0 - Signals/Relays to a more descriptive name, if necessary.</p>

4. After making changes to the WalkTest Group properties, click on the **Apply** button to apply the changes and then click on **OK** to close the window.



## Viewing, Adding, and Editing Lists, *Continued*

### Elevator Recall List

The Elevator Recall list is made up of five groups, each corresponding to an elevator shaft numbered from one to five. Each shaft group contains three lists - one for the primary recall points, one for the alternate recall points, and one for the shutdown points. The Elevator Shaft 1 group initially contains all of the system's monitor points and all relays with the following point types - PRIMARY, ALTERN, and SHAFT (shutdown).

Elevator Recall Groups		Monitor Points	Control points
[-] Elevator Shaft 1			
[-] Primary Recall			
[-] LST ELEVATOR SHAFT 1 PRIMARY MONITOR ZONES	0		
[-] LST ELEVATOR SHAFT 1 PRIMARY RELAY			0
[-] Alternate Recall			
[-] LST ELEVATOR SHAFT 1 ALTERNATE MONITOR ZONES	0		
[-] LST ELEVATOR SHAFT 1 ALTERNATE RELAY			0
[-] Shutdown			
[-] LST ELEVATOR SHAFT 1 SHUTDOWN MONITOR ZONES	0		
[-] LST ELEVATOR SHAFT 1 SHUTDOWN RELAY			0
[-] Elevator Shaft 2			
[-] Primary Recall			
[-] LST ELEVATOR SHAFT 2 PRIMARY MONITOR ZONES	0		
[-] LST ELEVATOR SHAFT 2 PRIMARY RELAY			0
[-] Alternate Recall			
[-] LST ELEVATOR SHAFT 2 ALTERNATE MONITOR ZONES	0		
[-] LST ELEVATOR SHAFT 2 ALTERNATE RELAY			0
[-] Shutdown			
[-] LST ELEVATOR SHAFT 2 SHUTDOWN MONITOR ZONES	0		

**Figure 8-5. Elevator Recall Tab**

#### Moving Between Points:

Follow these steps to move points from Elevator Shaft 1 group (where they are initially placed) into other elevator shaft groups. Signal/relay points and monitor points can exist in multiple groups at the same time.

1. Open the List Window by selecting the List Tab at the top of the Programmer.
2. Click on the Elevator Recall tab at the bottom of the List Window.
3. Select the monitor points to move:
  - a. Right-click on the Elevator Shaft group into which you want to move monitor points (for example, using Figure 8-5, right click on the line called LST ELEVATOR SHAFTX PRIMARY MONITOR ZONES). When the list of options appears, select Tag List.
  - b. In the Tag List, use the mouse or arrow keys to highlight each monitor point you want to move into the group. Press the spacebar to tag or un-tag points to be added or deleted. A point is selected when a ">>" symbol appears to the left of the point.
  - c. Repeat these steps to move other monitor points into the group.
  - d. Points that you move from Elevator Shaft 1 Primary Monitor Zones list to another group are not automatically deleted from Elevator Shaft 1 Primary Monitor Zones list. To delete points from this list, you need to highlight the Elevator Shaft 1 Primary Monitor Zones list, press F9 to see the tag list, and then highlight the point you want to delete and hit the space bar.
4. Select the signal/relay points to move as follows:
  - a. Right-click on the Elevator Shaft group into which you want to move the signal/relay points (for example, using Figure 8-5, right-click on the line called LST ELEVATOR SHAFTX PRIMARY RELAY). When the list of options appears, select Tag List. When the list of options appears, select Tag List.
  - b. In the Tag List, use the mouse or arrow keys to highlight each signal/relay point you want to move into the group. Press the space bar to tag or un-tag points to be added or deleted. A point is selected when a ">>" symbol appears to the left of the point.
  - c. Repeat these steps for the Alternate and Shaft lists within the selected group.
  - d. If you want to delete relay points from the Elevator Shaft 1 Primary Relay list, you need to first right-click on the Elevator Shaft 1 Primary Relay list, select Properties, and set the AutoGen field to No. Next, press F9 to see the tag list, and then highlight the point you want to delete and hit the space bar.

## Viewing, Adding, and Editing Lists, *Continued*

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### **Elevator Recall List**

#### **Editing Group Descriptions**

Each Elevator Recall group includes a description property that allows you to change the label of the group. To edit the group's description.

1. Click on the Elevator Recall tab at the bottom of the List Window. Double-click on the appropriate Elevator Recall list.
  2. Edit the description field and click on the **Apply** button. Click **OK** to close the screen.
- 

### **Zone Lists**

The Zone List tab provides a way to group alarm conditions into zones (up to 512 zones).

When grouped into zone, when an alarm occurs, a list of affected zones is displayed on the panel's touchscreen. It is then possible to touch the zone in alarm to display all the points that are in alarm in that particular zone.

#### **To create a Zone List:**

1. Open the Zone List tab in the programmer.
2. Double-click on an empty Zone List. The Zone List Properties window opens.
3. Enter a custom label to describe the Zone List.
4. Enter an alternate custom label to describe the Zone List.
5. Click on the **Select Point** button, the Tag List window opens.
6. Select the points that you want to include in the list.
7. Click on **OK** to confirm the selection.

# Chapter 9.

## Custom Control

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### Introduction

Custom control allows the components of the ES Panel FACP—hardware points, pseudo points, and lists—to be controlled with user-definable custom control “equations.”

This chapter describes using Custom Control to create custom programming applications for the ES Panel FACP.

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### Custom Control Overview

ES Panel Custom Control—which is a wizard-based application used to create Custom Control Equations -- provides a way to override the ES Panel’s default operation and allows the ES Panel to function in a facility-specific way. Each Custom Control equation has a similar form: one half of the equation, called the input side, is used to monitor the state of specific system inputs (initiating devices, for example). The other half of the equation, called the output side, is used to control specific system outputs (relays, notification appliances, etc.). The output side executes only when the state of the input side is true. Another way to think about Custom Control equations is to consider them as If/Then commands. If the input side of the equation is true, then execute the output side.

The following examples help explain the way custom control is typically used with a ES Panel FACP.

- **Selective Signaling.** Selective signaling replaces the system's general alarm NAC operation - which activates all NACs in response to any alarm condition -- with selective NAC control. This type of control allows you to program the system so that only specific NACs respond to specific initiating devices.
- **Fan and Damper Control following an Alarm.** Controlling a building's HVAC system following an alarm condition prevents supply fans from feeding a potential fire and also allows the HVAC system to exhaust smoke from the area in alarm. In this case, custom control equations are used to monitor the initiating devices in a given area and control the HVAC system’s dampers and air handling units to provide the correct supply and exhaust pressurization.

## Custom Control

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### Role of Lists and Pseudo Points

Using lists and pseudo points (both user-defined and system) improves the efficiency of Custom Control equations and allows a range of facility-specific operations to be programmed.

- **Digital Pseudo Points.** Digital pseudo points store a value of ON or OFF.
- *System Digital Pseudo Points* allow you to track when common actions (such as a system reset, for example) have occurred and activate facility-specific output(s) as necessary.
- *User-defined digital pseudo points* can be used to signal that a specific event has occurred. (For example, turn on a user-defined pseudo point to indicate when a water tank is full.)
- **Analog Pseudo Points.** Analog Pseudo Points store analog values that can be used in Custom Control equations.
- *System Analog Pseudo Points* store analog values (the number 128, for example), and can be used as a threshold value within a Custom Control equation. (For example, perform some output action when the value of the Number of System Troubles analog pseudo point (A2) reaches a specific value.)
- *User Analog Pseudo Points* store user-defined analog values. The exact function of an analog user pseudo depends on its point type—counter, timer, or analog value.
- **List Pseudo Points.** User-Defined Lists allow you to refer to a specific group of devices using a single reference. For example, creating a user-defined list called “Floor 1 Pull Stations,” and populating it with only the pull stations from floor 1 provides a way to monitor all of the pull stations on the floor without writing an equation for each pull station.

### Anatomy of a Custom Control Equation

As mentioned above, every Custom Control equation has an input side, consisting of input statements, and an output side, consisting of output statements.

**Input Statements** are typically used to monitor the status of a point or list, or perform an action such as delay, cycle, compare two values, or save/recall values. Every input statement begins with an Opcode, which is the action that the input is performing (for example, monitor point status, recall memory register, etc.). The Custom Control wizard then displays a series of opcode-specific dialogs. For example if the Opcode is Point Status, the dialogs prompt the user for Qualifier about the condition (alarm, trouble, etc.) and point being monitored.

```
[INPUTS]
STATUS FIRE
ZN1 | MONB | FIRE | MONITOR CARD 3 ZONE ZN1
```

**Output Statements** are the actions that occur only when the input side of the equation is true. Every output statement begins with an Opcode, which is the general action that occurs when the input side is true. The opcode is followed by a series of opcode-specific dialogs, which allow you to specify exactly how the selected opcode functions. For example, if you are using the Set Opcode, the wizard displays a series of dialogs that allow you to specify a qualifier (on, off, etc.) and the point (a signal, for example) on which you want the output action to execute.

```
[OUTPUTS]
HOLD ON PRI=9.9
SIG3 | SIGB | SIGNAL | SIGNAL CARD 1 CIRCUIT SIG3
```

## Custom Control, *Continued*

### Anatomy of a Custom Control Equation

Logical Operators (AND, OR, NOT) allow you to link multiple input statements to form logical expressions. Logical operators are only used with input statements and are not used with Output statements. ES Panel Custom Control uses the following logical operators.

- **AND Operator.** The AND logical operator allows you to put a group of points in series so that only the activation of all points at the same time causes the Output side of the equation to occur. In the following example, Zone1 and Zone2 must both be in alarm (FIRE) before the output (Hold ON SIG3) executes.

```
[INPUTS]
STATUS FIRE
  ZN1 | MONB | FIRE | MONITOR CARD 3 ZONE ZN1
AND STATUS FIRE
  ZN2 | MONB | FIRE | MONITOR CARD 3 ZONE ZN2
[END INPUTS]
[OUTPUTS]
HOLD ON PRI-9.9
  SIG3 | SIGB | SIGNAL | SIGNAL CARD 1 CIRCUIT SIG3
[END OUTPUTS]
```

- **OR Operator.** The OR operator allows you to put a group of points in parallel, meaning the activation of any one of the points causes the output side of the equation to execute. In the following example, if either Zone1 or Zone2 enters an alarm state, the output (Hold ON SIG3) executes.

```
[INPUTS]
STATUS FIRE
  ZN1 | MONB | FIRE | MONITOR CARD 3 ZONE ZN1
OR STATUS FIRE
  ZN2 | MONB | FIRE | MONITOR CARD 3 ZONE ZN2
[END INPUTS]
[OUTPUTS]
HOLD ON PRI-9.9
  SIG3 | SIGB | SIGNAL | SIGNAL CARD 1 CIRCUIT SIG3
[END OUTPUTS]
```

- **NOT Operator.** Use the NOT Operator to specify that a condition must not be true in order for the output to execute. In the following example, the output side of the equation (print message “Smoke not dirty”) executes only if the condition of M1-1 is NOT dirty.

```
[INPUTS]
NOT STATUS DIRTY
  M1-1 | PHOTO | SMOKE | LAB1-SMOKE1
[END INPUTS]
[OUTPUTS]
PRINT ALL "SMOKE NOT DIRTY"
[END OUTPUTS]
```

### Using a Ladder Logic Diagram to Evaluate an Equation

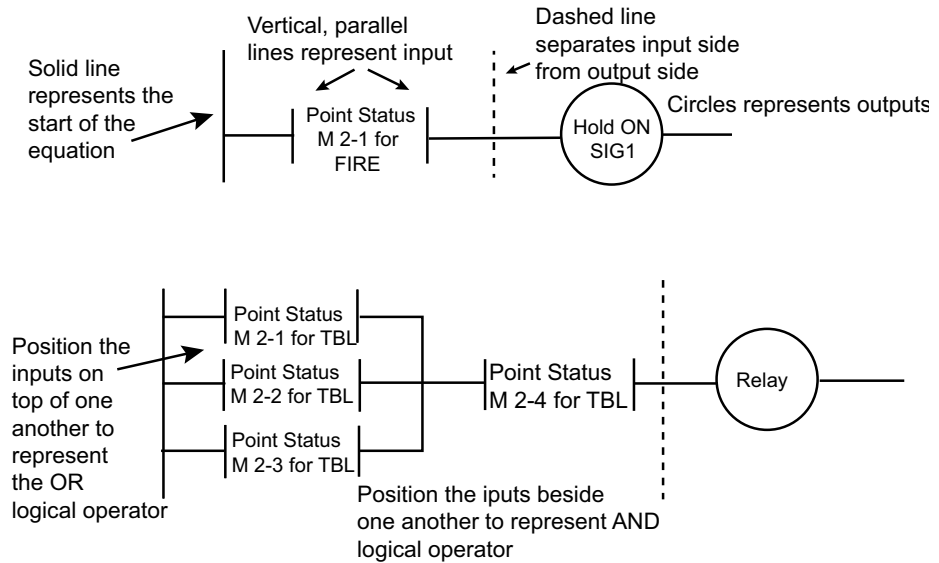
A ladder logic diagram is a “sketch” of the equation used to evaluate (predict the outcome) of a custom control equation before it is entered into the programmer. Use the following conventions when creating ladder logic diagrams.

- Draw a solid, vertical line on the left side of the sketch to represent the starting point for the equation. Use a vertical dashed line to divide the sketch into an input side and an output side.
- Use two vertical, parallel lines to represent each input statement. Add text between the lines to describe the input statement.

## Custom Control, *Continued*

### Using a Ladder Logic Diagram to Evaluate an Equation

- Use a circle to represent each output statement. Add text within or beside the circle to describe the output statement. In the following example, the output side of the equation contains a single output statement, HOLD ON SIG 1. This action only occurs if the input side of the equation, which monitors point M 2-1 for the presence of a fire condition, is true.
- Represent the OR logical operator by positioning inputs on top of one another as shown in the example below. Represent the AND logical operator by positioning the inputs beside one another.



The example shown above can be interpreted as: If point M2-1 or M2-2 or M2-3 and M2-4 are in a trouble state, hold on Relay 1. M2-4 is the key here. At least one of the three on the left (M2-1, M2-2, and M2-3) must be in a trouble state AND M2-4 must also be in a trouble state.

## Custom Control, *Continued*

### Custom Control Window

Selecting the Custom Control tab from the main programmer window displays the Custom Control Window shown in Figure 9-1. This window contains two halves.

- The left half lists user-defined and system-only (non-editable) programs. Click on the + sign to the left of an entry to expand the contents of that entry.
- The right half of the window is used for creating user-defined Custom Control equations. The Equation Comment text entry box allows you to enter descriptive text explaining the operation of the equation. The Equations Area contains a text entry box for creating and editing an equation's input and output statements. The **Add** button starts the Custom Control Wizard and is used to create new equations. The **Edit** button is used to edit existing equations. The **Taglist** button starts a taglist that can be used for selecting/deselecting points in an existing equation.

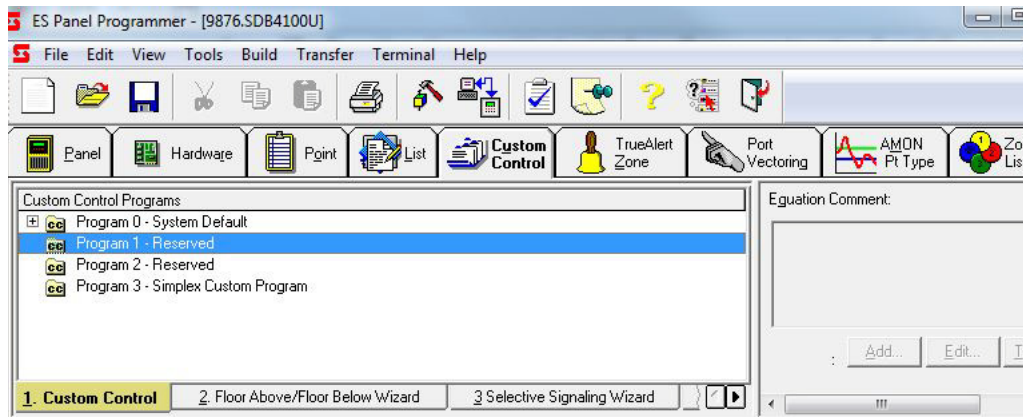


Figure 9-1. Custom Control Window

## Custom Control, *Continued*

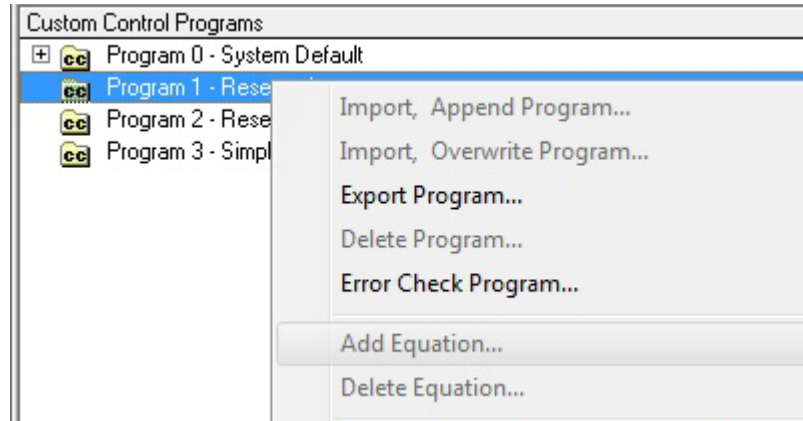
### Step 1. Select User Program

**Note:** You cannot write custom control on InfoAlarm switches and LEDs.

The first step in defining a new custom control equation is to add the equation to the User Programs 3.

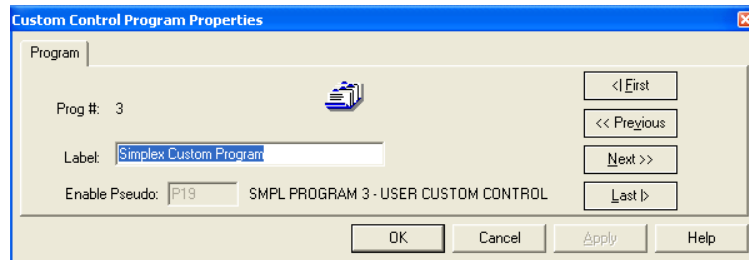
#### To add a new custom control equation:

1. Right-click on one of the user programs (Program 3 through Program 55), located at the bottom of the program list, and select Add Equation from the list of options.



**Figure 9-2. Add Equation**

2. The Custom Control Program Properties dialog (Figure 9-3) appears. Enter a name for the equation in the Label field and click on **OK**.



**Figure 9-3. Equation Properties**

The Equations section of the Custom Control window updates to include the [INPUTS], [END INPUTS], etc. entries.

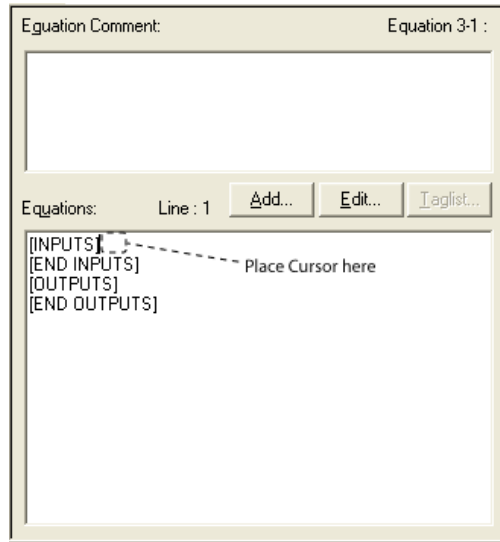


## Custom Control, *Continued*

### Step 2. Add Input Statements

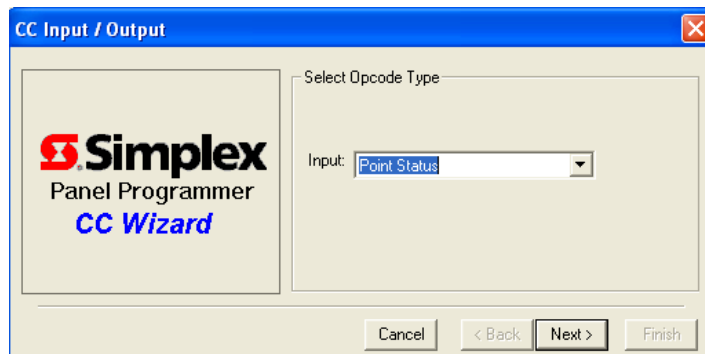
The second step in creating a new Custom Control equation is to add input statements to the equation. Repeat the steps in this section until all input statements in the equation have been defined.

1. In the Equations box, position the cursor just to the right of [INPUTS].



**Figure 9-4. Positioning the Cursor**

2. Click on the **Add** button. The dialog shown in Figure 9-5 appears.



**Figure 9-5. Select Input Opcode Dialog**

3. Click on the drop down-list box, select one of the Opcodes, and click the **Next** button.
4. The next dialogs displayed by the wizard depend on the Opcode you selected in Step 3. Follow the Wizard's windows to create input for the equation.
5. The **Finish** button becomes available when all dialogs related to the input Opcode have appeared. Click it to finish defining the input statement.

## Custom Control, *Continued*

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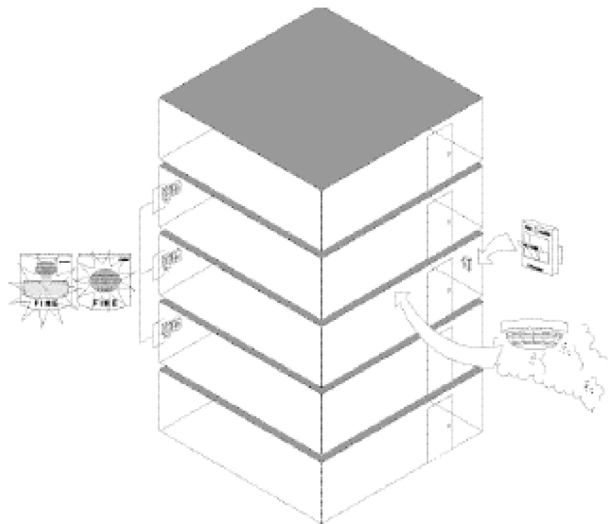
### Step 3. Add Output Statements

The third step in creating a new Custom Control equation is to add output statements to the new equation. Repeat the steps in this section until all output statements in the equation have been defined.

1. In the Equations box, position the cursor just to the right of [OUTPUTS].
  2. Click on the **Add** button. The dialog shown in Figure 9-5 appears.
  3. Click on the drop-down list box, select one of the output Opcodes, and click the **Next** button.
  4. The next dialogs displayed by the wizard depend on the Opcode you selected in Step 3. Follow the Wizard's windows to create the output for the equation.
  5. The **Finish** button becomes available when all dialogs related to the output Opcode have appeared. Click it to finish defining the output statement.
- 

### Floor Above/Floor Below Wizard

This application limits the activation of NACs to the floor on which the activated initiating device is located, referred to as the fire floor, and the floors immediately above and below the fire floor.



**Figure 9-6. Floor Above/Below**

In Figure 9-6, an activated smoke detector or pull station on Floor 3 activates the NACs on Floors 2, 3, and 4.

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## Custom Control, *Continued*

### Step 1. Select Floor Tab

1. Start the Floor Above/Below Wizard by clicking on the Floor Above/Floor Below Wizard tab, which is located along the bottom left part of the Custom Control window.
2. Right-click in the blank area above the tab. When the list of options appears, select Create Floor Group. (The ES Panel refers to each set of floor above/below equations as a Floor Group. This is the name of the group or area that the floor above/below program has control over.) Enter a name for the Floor Group in the dialog that appears.

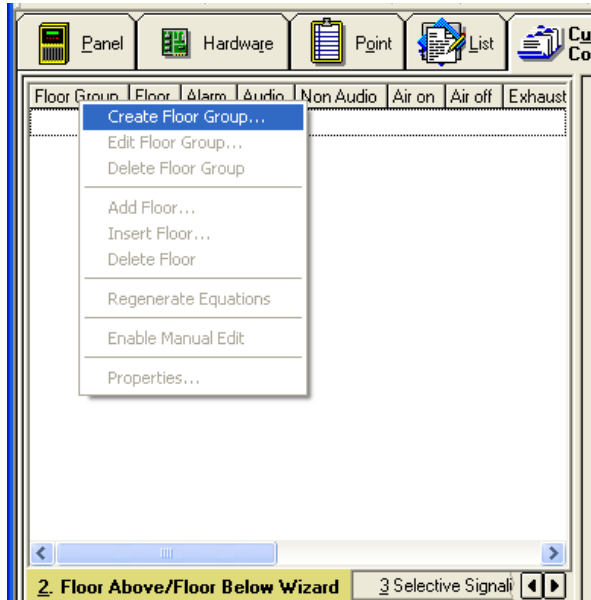


Figure 9-7. Create Floor Group



Figure 9-8. Select Group

## Custom Control, *Continued*

### Step 2. General Information

After you enter a name for the floor group, click the **Next** button. A dialog appears, allowing you to specify general information about the application.

**Figure 9-9. Floor Above/Below Data**

Specify this information as follows:

- **Program #.** Use this entry to specify the Custom Control user program in which this application is to be stored. Three programs are available for user programs.
- **Number of Floors.** This specifies the total number of floors controlled by the floor above/below equations.
- **Control # of Floors Above.** When a fire occurs, this setting determines how many floors above the fire floor are notified.
- **Control # of Floors Below.** When a fire occurs, this setting determines how many floors below the fire floor are notified.
- **Type (select all that apply)**
  - **Audio.** Select if using speaker circuits
  - **Non-Audio.** Select if using non-audio notification appliances
  - **Smoke.** Select this option to control smoke control (damper/AHU) points.

Click **Next** when you are finished.

## Custom Control, *Continued*

### Step 3. Specify Floor Names

The Floor drop-down list box contains an entry for all floors (i.e., if you set number of floors to 10 in the previous screen, there are 10 entries). To enter a floor's name, first click on the drop-down list box to select the floor and then enter a descriptive label in the Floor Label text box. Enter any comments in the Comment box at the bottom of the dialog.

Figure 9-10. Specify Floor Names

### Step 4. Specify Input and Static Points.

Enter information for the other fields in this screen as follows:

- Alarm Points. Identifies the floor's input points (detectors, pull stations, etc.).
- Audio Points. Identifies the floor's audio speaker points.
- Non-Audio Points. Identifies the floor's non-audio (horns, strobes) notification points.
- Air ON Points. Identifies the pressurization fan and damper ON points.
- Exhaust ON Points. Identifies the exhaust fan and damper ON points.
- Air OFF Points. Identifies the pressurization fan and damper OFF points.
- Exhaust OFF Points. Identifies the exhaust fan and damper OFF points.

For each of these selections, when you click on the button, a taglist appears, allowing you to select specific points. Press the space bar to select a point. A “>>” symbol appears to the left of the point to indicate that it is selected.

Figure 9-11. Input and Static Points

Note: List numbers L256 and L257 are the next available lists. They are not specifically L256 and L257. Click **Next**. A dialog containing the Custom Control equations generated by the wizard appears. Click **Finish**.

## Custom Control, *Continued*

### Using the Selective Signaling Wizard

Selective Signaling is typically used to limit the activation of NACs to the area or floor on which an activated initiating device(s) is located. In the following example, an activated initiating device on Floor 2 triggers only the NACs located on Floor 2.

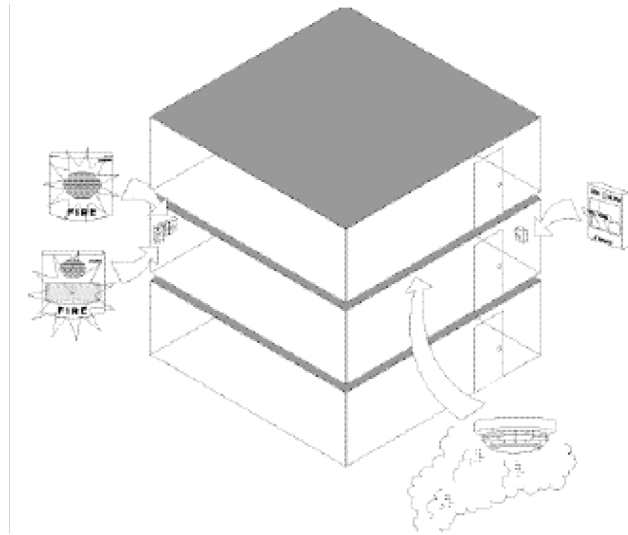


Figure 9-12. Selective Signaling

### Step 1. Select Selective Signaling Wizard Tab

Start the Selective Signaling Wizard by clicking on the Selective Signaling Wizard tab, which is located along the bottom left part of the Custom Control window.

Right-click in the blank area above the tabs. When the list of options appears, select Create Group. (See Figure 9-13.)

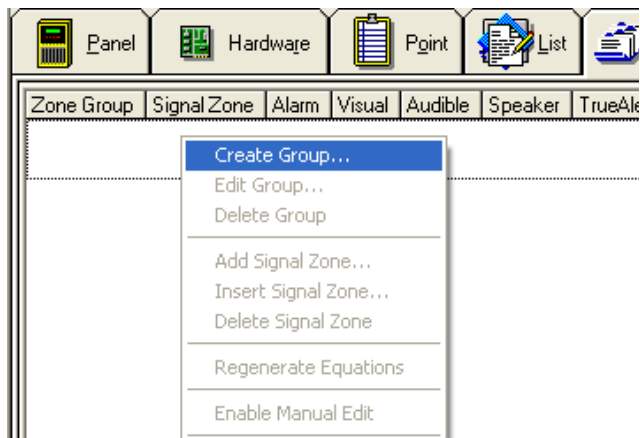


Figure 9-13. Create Selective Signaling Group

The dialog shown in Figure 9-14 appears, prompting you for the name of the area/group. Enter a name for the group in the dialog and press **Next**.

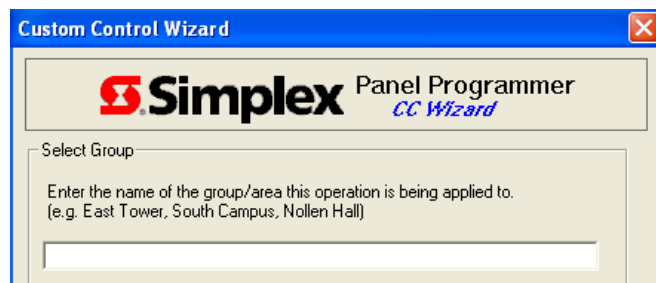
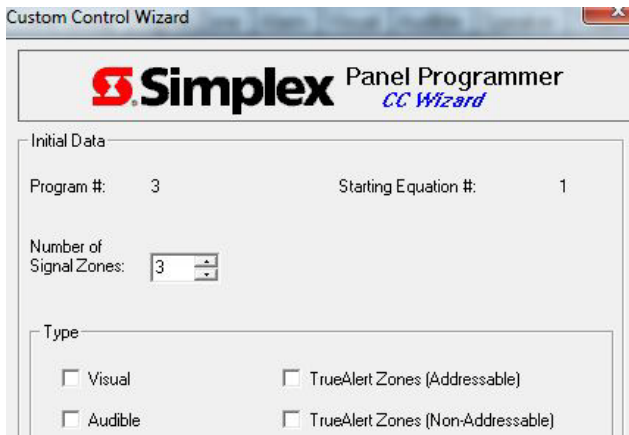


Figure 9-14. Naming Group

## Custom Control, *Continued*

### Step 2. Set General Options

After you enter a name for the group, click the **Next** button. A dialog appears, allowing you to specify general information about the application.



**Figure 9-15. General Information**

Specify the following:

- Program #. If necessary, specify an alternate program number for the selective signaling application.
- Number of Signal Zones. Enter the total number of signal zones affected by the application.
  - Type (select all that apply).
  - Visual. Select to use visual notification appliances in the application.
  - Audible. Select to use audible notification appliances in the application.
  - Speaker. Select to use speaker circuits in the application.
  - TrueAlert Zones (Addressable). Select to use addressable TrueAlert zones (wired to 4009T or TrueAlert Power Supply) in the application.
  - TrueAlert Zones (Non-Addressable). Select to use non-addressable TrueAlert appliances (2-wire with independent control of audibles and visuals) in the application.

### Step 3. Set Zone Names

Click on the Zone drop-down list box and select the zone number. Enter a label for the zone in the Signal Zone Label box. Click on **Next** to continue.

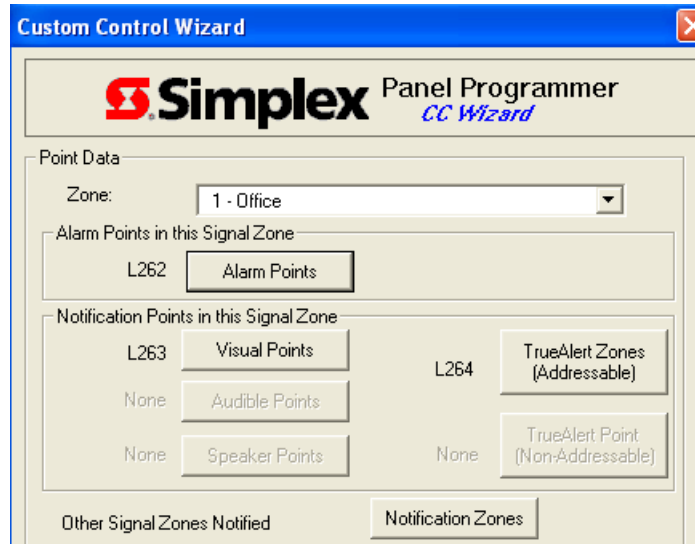


**Figure 9-16. Zone Names**

## Custom Control, *Continued*

### Step 4. Link Initiating and Notification Points

The screen shown below allows you to link initiating and notification points to one another. If one of the specified initiating devices activates, only the notification appliances linked to the initiating device will activate.



**Figure 9-17. Linking Initiating and Notification Devices**

Note: List numbers L262, L263, and L264 are the next available lists. They are not specifically L262, L263, and L264.

1. Click on the button labeled **Alarm Points**. A tag list appears. Use the up and down arrow keys to move through the list. Use the spacebar to tag (select) a point. A “>>” symbol appears to the left of the point when it is selected. Click **OK** to continue. The previous screen appears.
2. In the “Notification Points in this Signal Zone” area of the screen, click on the button corresponding to the type of notification appliance you want to turn on when the tagged initiating devices activate. The choices are: Visual Points, Audible Points, Speaker Points, TrueAlert Zones (Addressable), and TrueAlert Zones (Non-Addressable). A tag list appears. Use the up and down arrow keys to move through the list. Use the spacebar to tag (select) a point. A “>>” symbol appears to the left of the point when it is selected. Click **OK** to continue. The previous screen appears.
3. You can also activate other notification signal zones when a tagged initiating device activates. To do this, click on the **Notification Zones** button to the right of the “Other Signal Zones Notified” label. A tag list appears. Use the up and down arrow keys to move through the list. Use the spacebar to tag (select) a point. A “>>” symbol appears to the left of the point when it is selected. Click **OK** to continue. The previous screen appears.
4. Click **Next** to continue. A screen showing the equations created by the wizard appears. Click **Finish**.

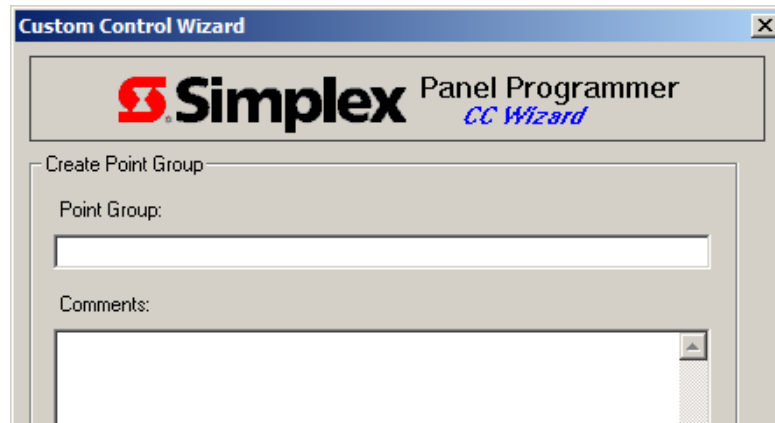


## Custom Control, *Continued*

### Using the Sounder/Relay Base Wizard

The Sounder/Relay Base Wizard allows you to change the default operation of single station smoke detectors. Note that the default operation—sounder activates when the alarm threshold is passed and deactivates when the smoke level drops back below the threshold—is programmed using the TPHOTO device type. To use the wizard to change the default operation, you must assign a device type of SPHOTO or RPHOTO to the device. The wizard allows two types of custom operations—Activate the Base on Alarm and Activate the Base Prior to Alarm (Alert).

1. Start the Sounder/Relay Base Wizard by clicking on the Sounder/Relay Base Operation Wizard tab, which is located along the bottom left part of the Custom Control window.
2. Right-click in the blank area above the tabs. When the list of options appears, select Create Point Group. A figure similar to Figure 9-18 appears.



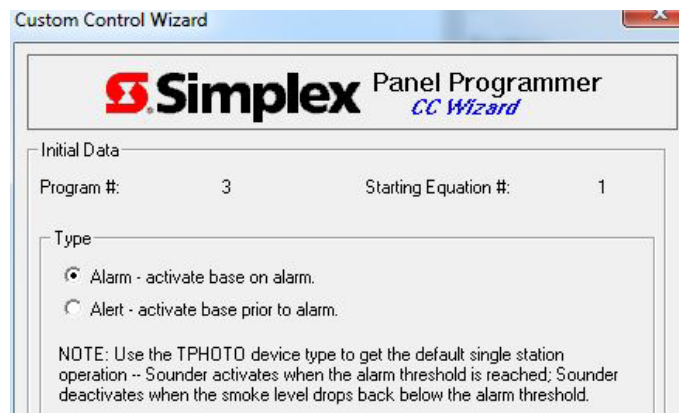
**Figure 9-18. Creating Point Group**

3. Enter a Name for the group in the Point Group field and enter any comments in the Comments box. Click **Next** to continue. The screen that appears contains two choices—Activate the Base on Alarm and Activate the Base Prior to Alarm (Alert). Refer to the appropriate section below for specific information.

### Activate Base on Alarm

Activate base on Alarm configures the single station detectors to activate when the alarm threshold is reached and to turn off on either reset or silence.

1. To select this option, select the radio button labeled “**Alarm—Activate Base on Alarm.**”
2. If necessary, you can select a different Custom Control user program. To do this, click on the control to the right of Program # and select the appropriate program number. Click **Next** to continue.

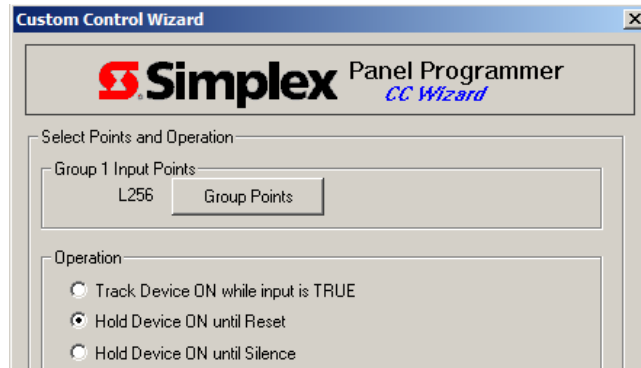


**Figure 9-19. Sounder/Relay Base Information**

## Custom Control, *Continued*

### Activate Base on Alarm

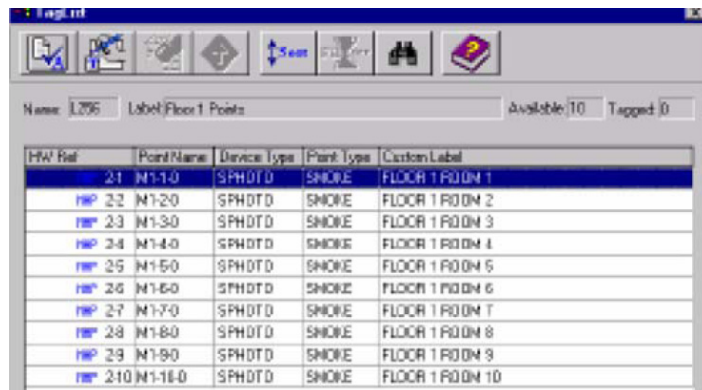
3. A dialog similar to the following appears. Select the operation for the device as either “Hold Device ON until Reset” (sounder or relay remains activated until reset) or “Hold Device on until Silence” (sounder or relay remains activated until signal silence).



**Figure 9-20. Specifying Device Operation**

Note: List number L256 is the next available list. It is not specifically L256.

4. Click on the **Group Points** button. A tag list, containing single station points appears. Use the up and down arrow keys to move through the list. Use the spacebar to tag (select) a point. A “>>” symbol appears to the left of the point when it is selected.



**Figure 9-21. Tagging Points**

5. Click **OK** to continue. The previous screen appears. Press **Next** to continue. A screen showing the Custom Control statements appears. Click **Finish**.

## Custom Control, *Continued*

### Alert—Activate Base Prior to Alarm

If you select the radio button labeled “**Activate base prior to alarm**,” the sounder or relay on the single station detector activates when the detector passes a threshold below the alarm level.

1. To select this option, select the radio button labeled “**Alert—Activate Base Prior to Alarm**.”
2. If necessary, you can select a different Custom Control user program. To do this, click on the control to the right of Program # and select the appropriate program number.
3. Press **Next** to continue.

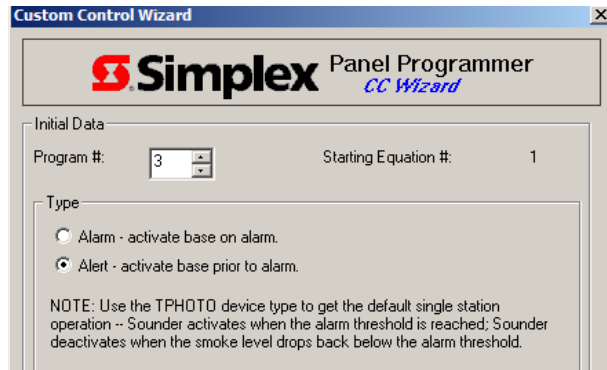


Figure 9-22. Activate Base Prior to Alarm

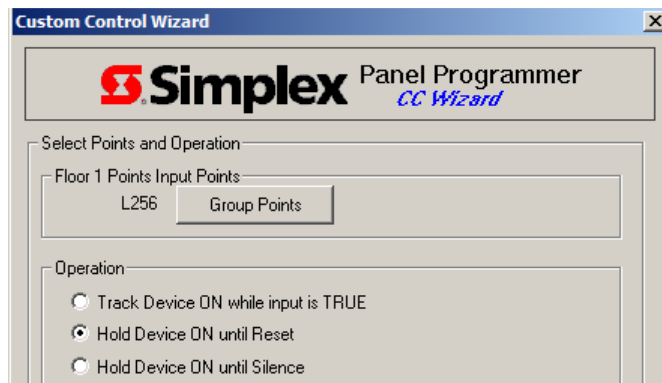


Figure 9-23. Operation

**Note:** List number L256 is the next available list. It is not specifically L256.

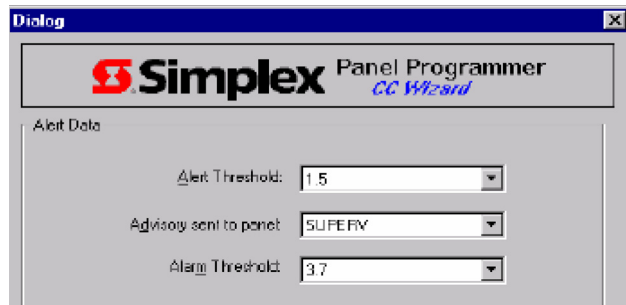
4. Click on one of these options to configure the operation of the single station device:
  - **Track Device On while input is TRUE.** The sounder or relay remains active while the smoke condition is above the threshold, but turns off when the condition drops below the threshold.
  - **Hold Device ON until Reset.** The sounder or relay remains activated until a system reset occurs.
  - **Hold Device ON until Silence.** The sounder or relay remains activated until a Signal Silence occurs.
5. Click on the **Group Points** button. A tag list, containing single station points appears. Use the up and down arrow keys to move through the list. Use the spacebar to tag (select) a point. A “>>” symbol appears to the left of the point when it is selected.

## Custom Control, *Continued*

---

### Alert—Activate Base Prior to Alarm

6. Press **Next**. A dialog similar to the following appears.



**Figure 9-24. Options**

7. Select these options as follows:

- **Alert Threshold.** This is the smoke obscuration value at which the alert is generated and the device activates.
- **Advisory Sent to Panel.** The setting of this option determines the type of event (Fire, None, Priority 2 Alarm, Supervisory, or Trouble) sent to the panel when the alert condition occurs.
- **Alarm Threshold.** Specifies the smoke obscuration level that must be present at the single station detector to trigger an alarm condition.

8. Press **Next** to continue. A screen showing the Custom Control statements generated by the wizard appears. Click **Finish**.

---

# Chapter 10.

## File Transfer

### Introduction

This chapter describes features associated with IP and USB File Transfer.

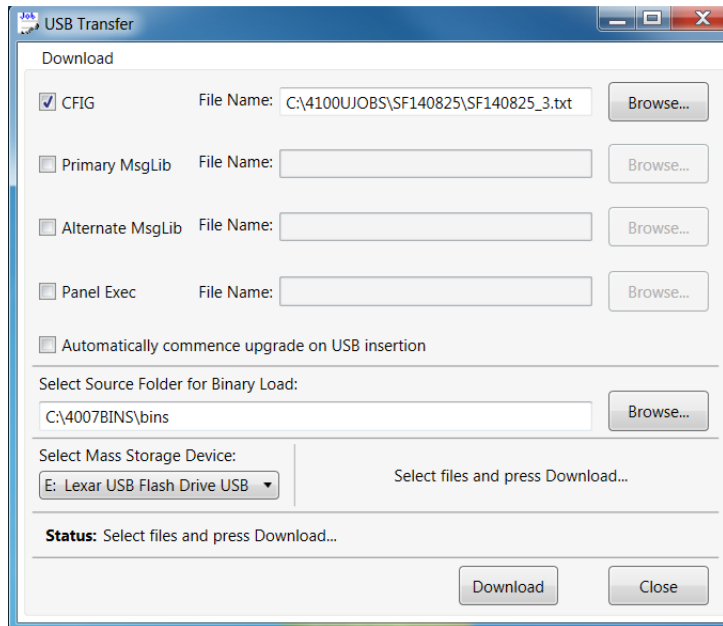
### In this chapter

USB File Transfer.....	10-1	IP File Transfer .....	10-2
File Transfer Connection to the PC .....	10-2	Starting the IP File Transfer Utility .....	10-2
IP Communication Parameter Settings... ..	10-3	Downloadable Files .....	10-3
Download Tab.....	10-4	Upload/Reports Tab .....	10-6
Type of Transfer .....	10-7	Mass Storage Tab.....	10-8
History/Undo Tab .....	10-9		

### USB File Transfer

**To transfer a job using a USB memory key:**

1. Build the job you want to transfer.
2. Insert the USB memory key
3. Click on Transfer > USB
4. In the USB Transfer window, select the CFG checkbox and make sure the file is attached
5. Select the boxes of the other files you want to transfer and click on their browse button to attach them.



**Figure 10-1. USB Transfer Window**

6. Make sure the source folder for binary load is included and points to the binary folder that contains the binary loads
7. Select the appropriate mass storage device
8. Click on **Download**. Wait until “Download completed” is displayed in the Status section of the USB Transfer window
9. Correctly eject the USB memory key from the PC

## IP File Transfer

### IP File Transfer

The IP file transfer operates exclusively over the Ethernet service port and provides a faster and more fully featured file transfer. The files are directly copied to the file system and activated. New Slave Exec data is then downloaded by the master once it is running.

### File Transfer Connection to the PC

The Ethernet service port connects to the front panel Ethernet connection through a standard straight (non-crossover) Ethernet Patch Cable. The service technician should connect his PC to the CPU card through this front panel connection with a standard straight Ethernet cable (see Figure 10-2). If this connection is not available, you may plug directly into the CPU Card connector J1 to the PC with a standard straight Ethernet cable.

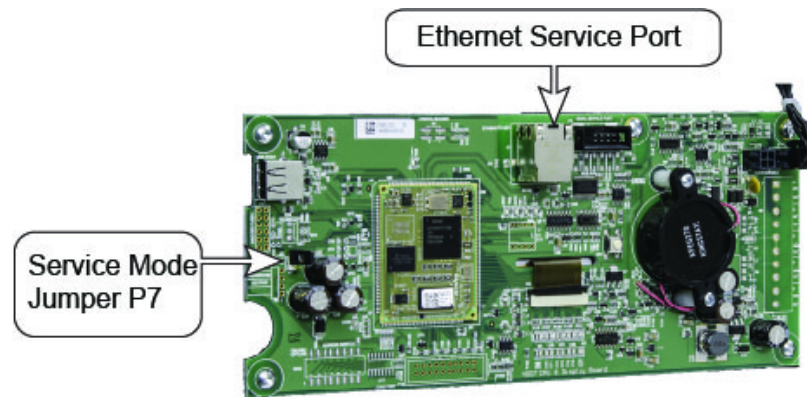


Figure 10-2. Front Panel Ethernet Service Port

### Starting the IP File Transfer Utility

This feature enables a user to download all Fire Alarm Control Panel (FACP) software features (Panel Exec, Slave Exec, etc.). All files are first downloaded to the Compact Flash Memory card on the Master Controller card before being activated. This provides a means for recovering previous configurations (via the File Transfer “History/Undo” tab). It also allows the FACP to continue operating during file download operation. FACP down-time is minimal. This feature allows for file transfers speeds between 60 kbps and 100 kbps. Job configuration files are typically between 1 MB and 2 MBs.

The ES Panel IP File Transfer utility can be started from within the ES Panel Programmer or from the Windows Start menu. To start the File Transfer:

- **From within the Programmer.** While the programmer is already running, click on the Transfer icon, located along the menu bar at the top of the programmer window. When the options appear, click on **Local Panel**.

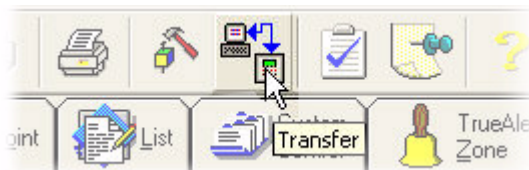


Figure 10-3. Transfer Icon

- **From the Start Menu.** Click the **Start** button. Move the pointer to the Programs option. When the list of choices appears, move the pointer to the Simplex option and click on the option containing the programmer. A list of options appears. Click on IP File Transfer.

When either one of the start-up procedures has been completed, the File Transfer Utility appears.

## IP File Transfer

**IP Communication Parameter Settings** Click on the **Settings** button near the top of the IP File Transfer Window to access the Settings Window. The settings window shows you the IP address the program is currently using and allows you to change it if necessary.



**Figure 10-4. File Transfer Settings Window**

Click on **OK** to confirm your selection or **Cancel** to erase any modification you made.

### Downloadable Files

The following types of files can be downloaded to the ES Panel FACP through its file transfer utility.

- **CFIG File.** This is the built job file, consisting of all programming definitions in a binary format, that the panel's CPU can execute.
- **Slave Exec.** Module-specific slave Exec files execute on intelligent slave modules (listed below) and define the way in which the slave module operates. Occasionally, changes to the functionality of a slave module may require you to download a new slave Exec file. (For example, a change to the IDNet Slave Exec file may be necessary to provide support for new, additional device types.) The following 4007ES modules are “intelligent” slave devices that use a module-specific Slave Exec file.

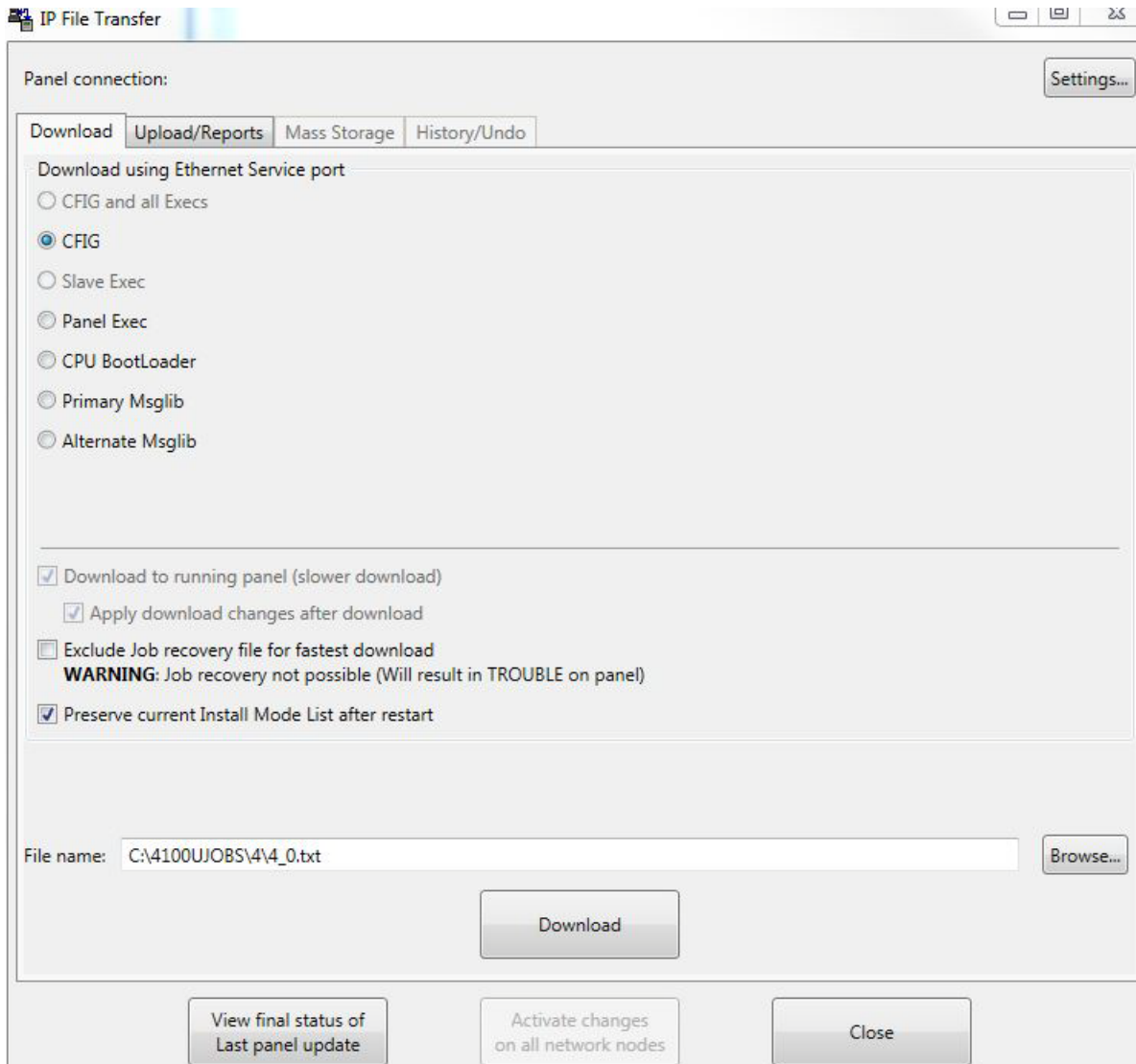
- |                     |                         |
|---------------------|-------------------------|
| - 25 Volt Regulator | - IDNet+ Expansion Card |
| - Zone/Relay Card   | - CPU Bootloader Files. |
| - SCU/RCU           |                         |
| - SDACT             | - LES Module            |

**Note:** To make a blank system operational, load both a CFIG text file (job containing programming definitions) and a Panel Exec file.

- **CFIG Text File.** A panel with a missing or corrupt CFIG file can be restored to proper operation by downloading a CFIG text file to the panel. The CFIG text file is automatically built and placed in the same job directory as the “executable” CFIG file (file ending in .CFG extension).
- **Panel Exec (Master).** The Panel Exec file is the “operating system” that runs on the panel’s CPU module. It manages interactions between system components. Occasionally, changes to the functionality of the operating system may require that a new Panel Exec file be downloaded.

## IP File Transfer, *Continued*

**Download Tab** By default, the IP File Transfer window will open to the Download tab.



**Figure 10-5. IP File Transfer Download Tab**



## IP File Transfer, *Continued*

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### Download Tab

1. To download a software feature, make sure the Service Mode (Jumper 7) is enabled and select the type of file you want to download by clicking on the radio button next to the file you want to download. The options are:
  - CFG and all Execs
  - CFG
  - Slave Exec
  - Panel Exec
  - CPU Bootloader
  - Primary Msglib
  - Alternate Msglib
2. Once the selection has been made, use the checkboxes to select the download options:
  - **Download to a running panel:** Select this option to download the file to a running panel. Once this option is selected, there are 3 ways in which the changes can be applied:
    - Automatically after the download. Select the "Apply download changes after download" box to have the downloaded changes applied immediately after the download. This is the program's default setting.
    - When the system reboots: If the "Apply download changes after download" button is not selected, the downloaded changes will be saved and applied once the system is rebooted.
    - When you click on the "activate changes on all network nodes" button. To use this function, leave "Apply download changes after download" box unselected and click on the button when you are ready to apply the changes. It is not necessary to reboot when using this option. See the "Additional Download Tab Functions" section below.
  - **Exclude the recovery file.** This box option can be used when downloading a CFG, it will result in a faster download.

**IMPORTANT: Checking this box will render job recovery impossible and will create a trouble on the panel.**

- **Preserve current Install mode list:** Select this box to keep all the points you have placed in install mode in install mode once downloaded changes have been applied. This is highly recommended.
3. Use the File name box to select the file you want to download to the panel.
  4. Click on the **Download** button to start the process.

The following are additional functions accessible from the Download tab:

- **View Final Status of Last Panel Update:** Click on this button to bring up the final status of the last panel update.
- **Activate changes on all Network Nodes:** Click on this button at any point to apply all previously downloaded files.

**Note:** All inactive files, including job configuration files download via IP File Transfer and/or the serial file transfer utility, will be applied when the button is clicked and the user confirms the activation.

## IP File Transfer, *Continued*

### Upload/Reports Tab

The default option for this feature is to upload the job that is currently running in the FACP. The file that is uploaded is a compressed image of the programmer job file. Therefore, there is no need for an “unbuild.” The file is uploaded to its default location. (C:\4100UJOBS\JobName). This tab also has options for uploading all FACP reports. The reports are uploaded to the “reports” subdirectory of the current job directory. The report file is given a descriptive name, appended with the current date (e.g., AlarmLog\_2010\_3\_11.txt).

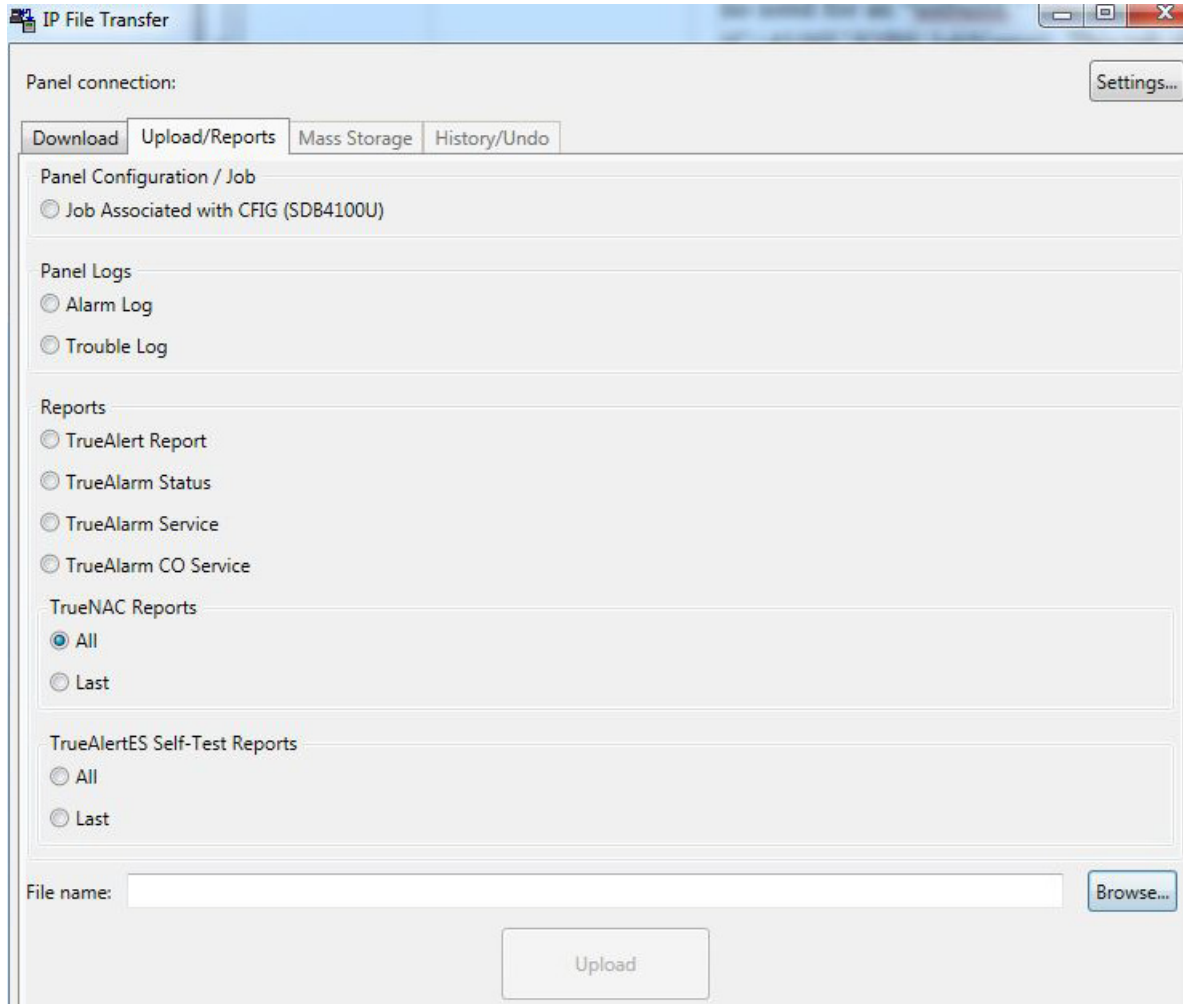


Figure 10-6.Upload/Reports Tab

#### To upload a file or a report:

1. Click on the Upload/Reports tab near the top of the IP File Transfer window. See Figure 10-6.
2. Select the type of file you want to upload by clicking on the radio button next to the item.
3. Chose one of the following:

Panel Configuration/Job		TrueNAC Reports	
• Job Associated with CFG (SDB4100U)		•All	• Last
Panel Logs		Self-Test	
• Alarm Log	• Trouble Log	•All	• Last
Reports			
• TrueAlert Report	• TrueAlarm Status	• TrueAlarm Service	• TrueAlarm CO Service

4. Use the File name box to select the directory on your PC you want to upload the report to.
5. Click on the **Upload** button to start the upload.

## IP File Transfer, *Continued*

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- Type of Transfer** In addition to the upload of the CFG file, other types of information from the Panel can also be uploaded to the ES Panel Programmer.
- **TrueAlert Report:** It is a report generated by the panel. It provides information such as Point ID, Device Type, and Candela rating for all TrueAlert devices.
  - **TrueNAC Report:** It is a report generated by the panel following the completion of a TrueNAC diagnostic test. The report indicates all devices' pass or fail status along with nominal current, predicted worst case current and predicted worst case voltage threshold at the minimum TPS operating voltage. Selecting this option allows one to choose between downloading the report for All TrueAlert devices on all TPSs or only for the Last TrueNAC diagnostics performed on a specific TPS and SLC.
  - **Panel Logs:** It is a selection which allows one to select between uploading an Alarm Log or the Trouble Log, produced as a result of Alarm or Trouble conditions reported to the Control Panel, onto the ES Panel Programmer.
  - **TrueAlarm Status Report:** A report providing the following information for each point:
    - Device Number
    - Custom Label
    - Current Sensitivity of the Point
    - Point Status: Normal, Trouble, Alarm
    - Almost Dirty Status: Points that are almost dirty have an asterisk in this field to denote this status.
  - **TrueAlarm Service Report:** A report providing the following information for each point:
    - Device Number
    - Custom Label
    - Alarm Level (sensitivity level of the device)
    - Average Value
    - Current Value
    - Percent of Alarm: Shows the current value for the sensor. Value is shown as a percentage of 100 percent (alarm). For example, if the value shown is 9%, it means that the sensor is currently at 9% of the value required to trigger an alarm.
    - Peak Value: Shows the highest value that the sensor has reached. Value is shown as a percentage of 100 percent (alarm). For example, if the value shown is 9%, it means that the peak value experienced by the sensor was 9% of the value required to trigger an alarm.
    - Current State: Possible values include Normal, Trouble, Dirty, Excessively Dirty, and Almost Dirty.
  - **TrueAlarm CO Service Report:** This report provides the following information regarding the CO devices:
    - Device Number (on the network)
    - Custom Label (custom description of device)
    - Current Device Value (PPM)
    - End-of-Life Date
  - **Device Status (Normal, Trouble)**

## IP File Transfer, *Continued*

**Mass Storage Tab** This feature allows a user to copy job related files to the 4100ES Master Controller Card's Compact Flash Memory. It also allows the user to copy files from the Panel to the PC and from the PC to the Panel easily.

**To use the Mass Storage:**

1. Open the ES Programmer and perform a File Backup – creating an .SDC file. The .SDC file is then stored in the Jobs folder.
2. Open File Transfer software and click the Mass Storage.
3. Browse the PC files or the panel files and select the appropriate .SDC file:
  - The upper portion of the window displays the Panel files.
  - The lower portion of the window displays the PC files.
4. Click the **Copy FROM PC** to copy a selected file from the PC to the Panel or click on **Copy TO PC** to copy a selected file from the Panel to the PC.
5. Follow District Procedures for storing backup copies of job(s).

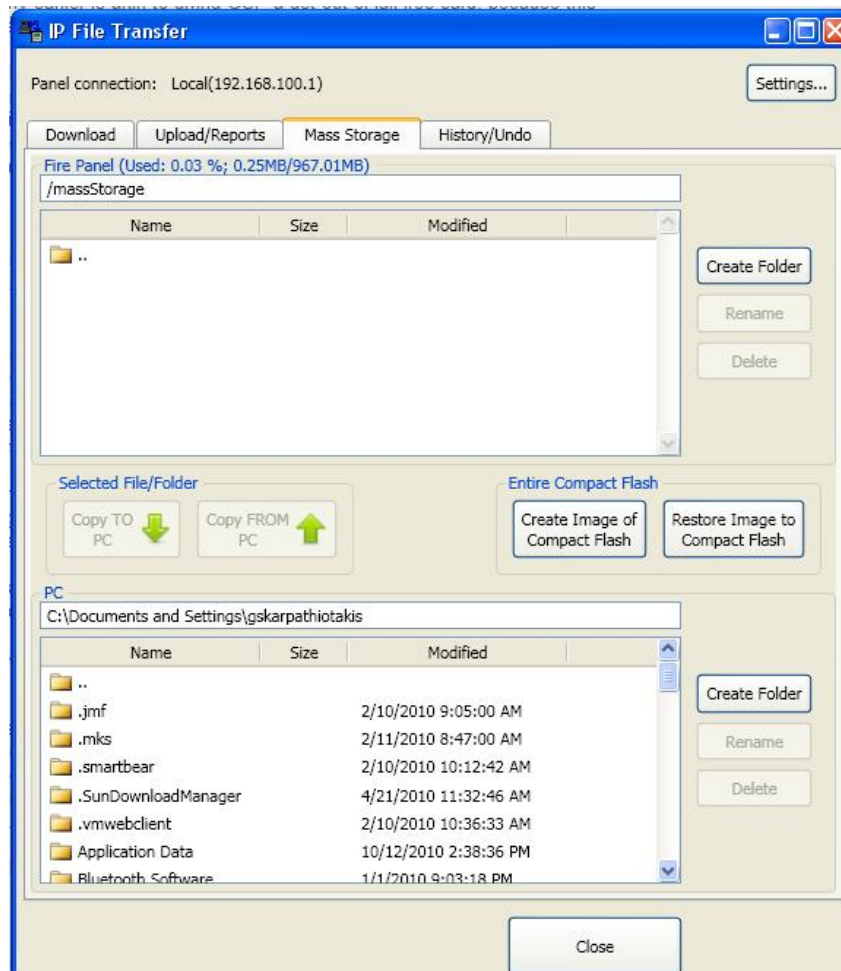


Figure 10-7.Mass Storage Tab

**To copy the Entire Compact Flash:**

- Click on the **Create Image of Compact Flash**. It will copy the entire content of your Compact Flash to a .zip file.

**To return previously saved Compact Flash contents to the pane:**

- Click on the **Restore Image to Compact Flash**, and select the Compact Flash file you want to restore to the panel.

## IP File Transfer, *Continued*

**History/Undo Tab** Each time an FACP initializes, it checks versions of any active software (e.g., Panel Exec, Slave Exec, CFGI). If a new software version is detected, a snapshot of the current configuration is taken. File Transfer software retrieves the FACP snapshots and displays a list of the configuration snapshots within the History/Undo tab. You can manage the number of snapshots – with a limit of 1 GB available memory.

By selecting a snapshot from the list, the user is shown an overview of the differences from the active configuration. For a detailed description of job configuration changes, the user has the option of uploading the job configurations and automatically running the Compare utility. An option also exists to restore the FACP to any of the listed snapshots.

### To use this option:

1. Open File Transfer Software and click the History/Undo tab.
2. Click the revision of the job file you want to compare with the active revision. If you want to use another revision for you compare, click on the **Select Compare Base File** button.
3. The bottom half of the screen highlights the differences between the two job revisions
4. Verify what has changed between revisions at a high level – i.e., (Slave Execs, Panel Execs, and CFGI).

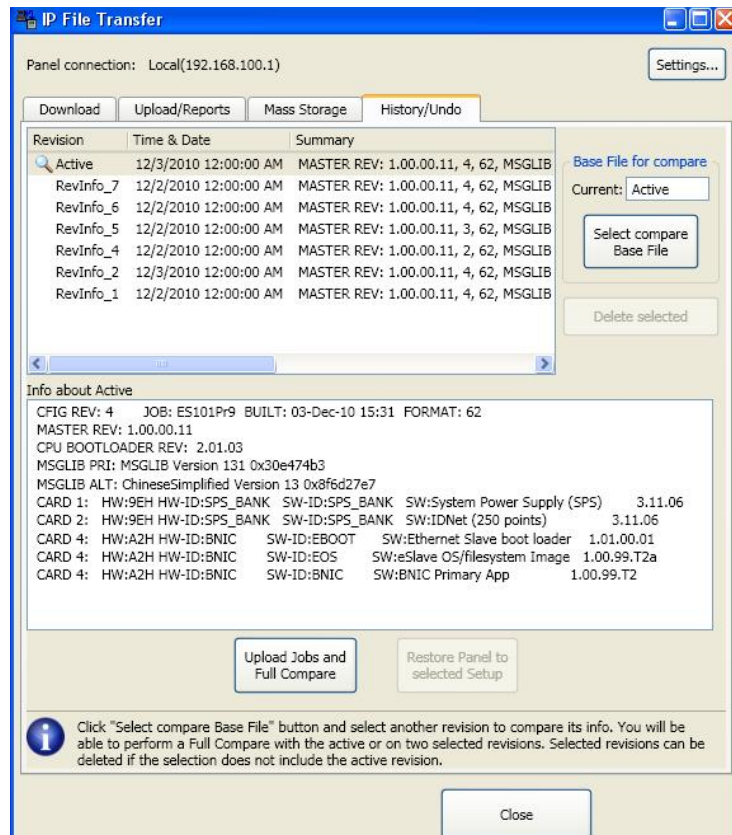


Figure 10-8. History/Undo Tab

### To upload a job to your PC and perform a full compare:

1. Click on the **Upload Jobs and Full Compare** button. This will upload the File to the PC and will launch the Database compare tool that comes with the programmer.

### To Restore an earlier revision of the job file to the panel:

1. Select the revision you want to restore from the top window.
2. Click on the **Restore Panel to Selected Setup** button.



# Chapter 11.

## Port Vectoring

### Introduction

The term port vectoring refers to the way in which certain cards can be programmed to output only specific groups of events. This section describes programming the ES Panel's port vectoring option.

**Note:** User editing of the DACT port vectoring is not permitted in UL 864.

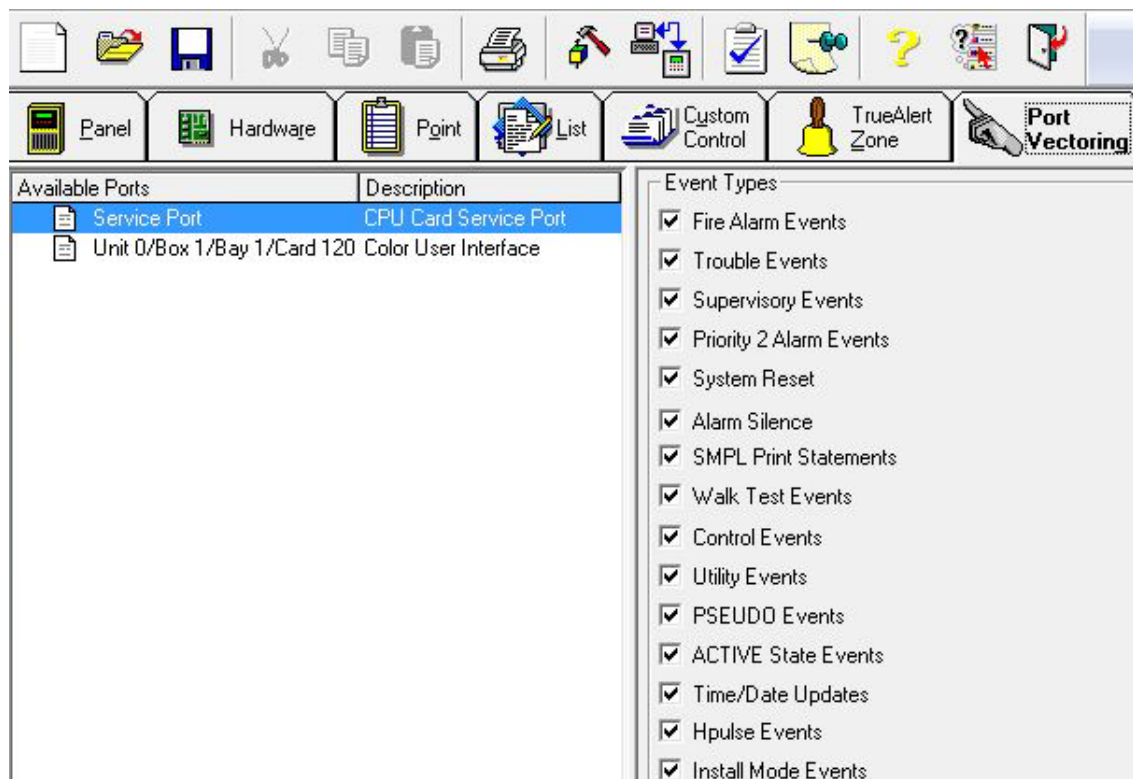
### In this chapter

Choosing Event Groups to Route .. 11-1

### Choosing Event Groups to Route

To choose event groups to route:

1. Click on the Port Vectoring tab, located just beneath the row of icons, to view the window used to route events to the RS-232 port or the DACTs. A window similar to the one shown in Figure 11-1 appears.



**Figure 11-1. Port Vectoring Tab**

2. In the Available Ports list, located on the left side of the window, click on the line containing the port you want to program. If you choose RS-232, all of the event types shown in the figure are available for routing. If you choose one of the DACTs, the following event types are not available:
  - System Reset
  - Alarm Silence
  - SMPL Print Statements
  - Walk Test Events
  - ACTIVE State Events
  - Time/Date Updates
3. In the Event Types list, located on the right side of the window, select the checkboxes corresponding to the event types that you want to route to the device selected in Step 1.





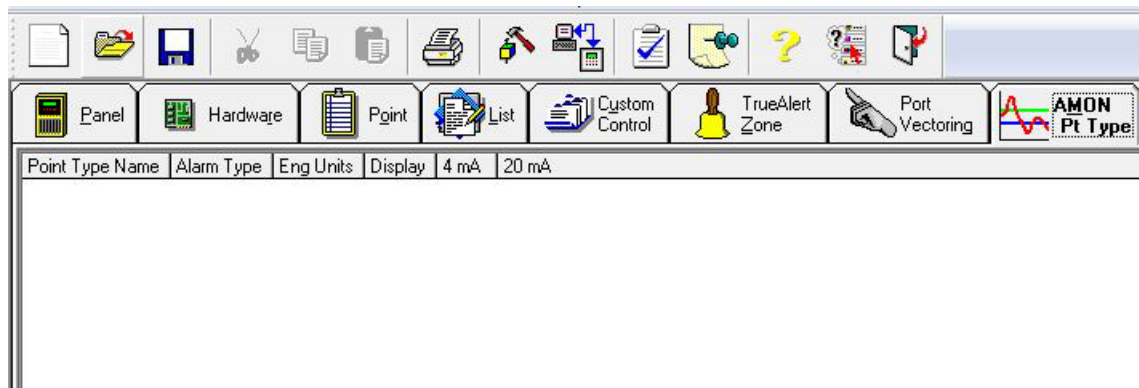
# Chapter 12.

## AMON Point Type

**Introduction** This chapter describes creating custom point types (referred to as AMON point types) for use with analog monitor ZAMs. These point types allow descriptive text and device-specific settings to be associated with a point name.

<b>In this chapter</b>	AMON Pt Type Tab.....	12-1	Adding a Point Type .....	12-2
	Editing a Point .....	12-4	Deleting a Point .....	12-4

**AMON Pt Type Tab** The AMON Pt Type tab (Figure 12-1) is for use only with IDNET analog monitor ZAMs. It allows you to create a custom point type that specifies how the ES Panel system should interpret (i.e., react to) incoming analog data from the device attached to the ZAM. This point type can then be assigned to the ZAM using the IDNET point editing screen, which is accessible through either the Hardware or Point tab. For example, if you have an analog device that measures the amount of liquid within a tank, you can use this tab to create a point type that specifies what the unit of measurement is (gallons, for example) and what the threshold value(s) for an alarm should be (generate an alarm when the tank is half empty, for example).



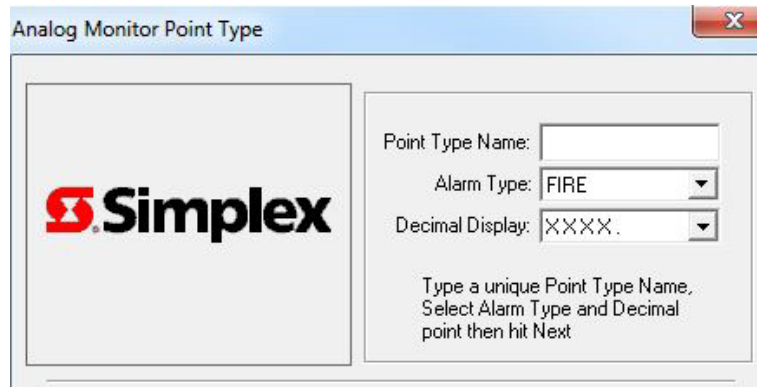
**Figure 12-1. AMON Point Type Tab**

## AMON Point Type

### Adding a Point Type

The AMON Point Type Tab uses a wizard-style interface that guides you through the process of creating an AMON point type.

1. To start this wizard, right-click in the blank space just below the Point. When the menu appears, click on **Add**. A dialog similar to the one shown in Figure 12-3 appears.



**Figure 12-2. Initial AMON Point Type Dialog**

2. Enter data in the initial dialog's fields, as follows:

- **Point Type Name.** Enter a seven-character name for the point in this text entry field. This point name can then be assigned to the analog ZAM point editing screen. The point editing screen is accessible through either the Hardware Tab or the Point Tab.
- **Alarm Type.** The alarm type you choose determines how the ES Panel reacts when the device attached to the ZAM crosses the threshold that you define for it. (The threshold is defined in a step described below.) Choices for this field are as follows:

**Table 12-1. Alarm Type**

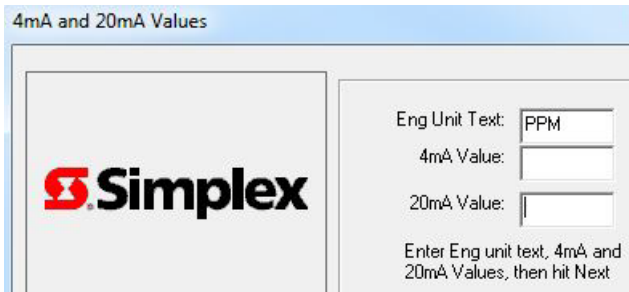
Alarm Type	Description
FIRE	Causes the system to generate a fire alarm when the device crosses the threshold.
LATSUPV	Creates a latching supervisory condition when the device crosses the threshold. This means that the supervisory condition on the panel does not clear until the point restores to normal and a system reset is performed.
MPR12	Generates a priority 2 alarm when the device crosses the threshold.
SUPERV	Generates a Supervisory condition when the device crosses the threshold.
TROUBLE	Generates a trouble condition when the device crosses the threshold.
UTIL	Defines the point to be a pseudo point, having a value of either ON or OFF. Typically used as a trigger for custom control (i.e., perform some action if the point turns ON).

- **Decimal Display.** This field specifies the degree of precision for the device reporting data (how many digits after the decimal place the device report). If the device reports data one unit at a time, choose the XXXX. option. If the device reports data in 10ths of a unit, choose the XXXX.X option. If the device reports data in 100ths of a unit, choose the XXXX.XX option.

## AMON Point Type, *Continued*

### Adding a Point Type

- Click the **Next** button to view the dialog shown in Figure 12-3.



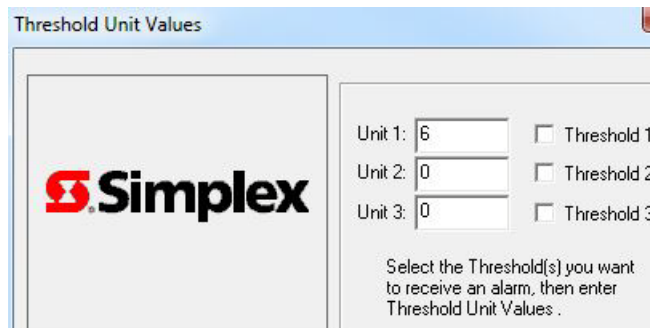
**Figure 12-3. 4mA and 20mA Values Dialog**

- Enter data in the 4mA and 20mA Values dialog (refer to Table 12-2).

**Table 12-2. 4mA and 20mA Values**

Field	Description
Eng Unit Text	The “unit” (ppm, gal, psi, etc.) text that appears on the front panel display when you display the current value of the device via the front panel. For example, if a monitor device with a monitoring capability of parts per million is attached to the ZAM, you might put ppm in this field.
4mA Value	This is the lowest value that the device reports. When the device is at this value, it draws 4mA of current from the ZAM.
20mA Value	This is the highest value that the device reports. When the device is at this value, it draws 20mA of current from the ZAM.

- Click the **Next** button. A dialog similar to the one shown in Figure 12-4 appears.



**Figure 12-4. Threshold Unit Values Dialog**

- In the Threshold Unit Values Dialog, you can specify up to three thresholds:
  - **Threshold Checkbox.** Select this box if you want the system to generate an event (the specific type of event depends on what you chose for Alarm Type in Step 2) when the device being measured goes above the value that you specify in the Unit field.
  - **Unit Field.** This is the value that the device must pass to trigger the alarm condition.
- Click **Finish**.

## AMON Point Type, *Continued*

---

### Editing a Point

#### To edit an existing point:

1. Right-click on the point you want to modify.
2. Click on **Properties**.
3. Modify the AMon Properties as required.

Analog Monitor Point Type

AMon Properties

Point Type Definition

Point Type Name: 123321 Alarm Type: FIRE Eng. Unit Text: PPM

Display: XXXX. Unit Range: 4 mA: 5 20 mA: 7

Threshold Definitions

Alarm Thresholds:	Units:	milli Amps:	Sensor Counts:
Threshold 1 <input type="checkbox"/>	5	4.0	0
Threshold 2 <input type="checkbox"/>	5	4.0	0
Threshold 3 <input type="checkbox"/>	5	4.0	0

<| First  
<< Previous  
Next >>  
Last >

Figure 12-5. Editing an AMON Point Type

4. Click **Apply** > **OK**.
- 

### Deleting a Point

#### To delete an existing point:

1. Right-click on the point you want to delete.
2. Click on **Delete**.
3. Click on **Yes** to confirm.



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