



# Operators Manual

# SmartGraphics™



## Fire Alarm Control

“ Our aim is to provide ‘ *Consistently Excellent Service* ’ in the eyes of our customers ”



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## **Introduction**

*SmartGraphics* is a Graphics system that is totally user configurable. Although AMPAC have defined a number of preset pages, the majority of the pages are constructed by the user. This manual uses a sample project to outline the knowledge an Operator requires to use the system.

### **1.1 Purpose**

The purpose of this manual is to provide guidance and instruction to the Operators of the *FireFinder™ SmartGraphics* System.

### **1.2 Scope**

The information within this manual is only available to and for the use of personnel engaged in the installation, maintenance and operation of the *FireFinder™ SmartGraphics* System.

### **1.3 References**

***FireFinder™* System Manuals:**

*FireFinder™* Technical Manual.

*FireFinder™* Operators Manual.

***SmartGraphics* Manual:**

*SmartGraphics* Designers Guide

## 1.4 Hardware

**SmartGraphics** requires an RS232 communications interface between the Ampac **FireFinder™** panel and a compatible Personal Computer (PC). A 400Mhz computer with 24 Meg of Ram and a 1Gb Hard Drive is the minimum recommended computer that can be used to run the system.

The system may be used with either a mouse or a touch screen but not both at the same time. This manual is written as if the user were using a mouse, if a touch screen is being used substitute “press” where “click” appears.

The system is designed to display graphically the layout of the site where the **FireFinder™** is installed. The preferred method is to import maps in a CAD. DXF format and place the relevant detectors on these maps or alternatively the maps may be drawn from within the package.

**SmartGraphics** monitors the **FireFinder™** system and reports the status of the zones and/or detectors in the system. It can also be used to control and display the status of fans or other inputs & outputs in the system.

**SmartGraphics** has a number of advanced features that are not documented in this manual. These features are covered in the Referenced manuals ( see Section 1.3 )

## 1.5 Software Installation

Software Installation is not included in the scope of this manual as it is not a function of the Operator.

## 2 Getting Started

This Manual assumes that the user has access to the **SmartGraphics** demonstration mode as it is used as the basis for our definitions and operating instructions. Should the Demonstration mode not be available all controls and definitions still apply and virtually any project can be used to demonstrate most of the operator requirements.

### 2.1 The Site Map or Start-up Page

The site map is the first screen to be displayed when the system is running, it shows a map of the whole site which is split into several areas. From this map selecting an area causes the graphics screen to go to the next zoom level.

The system is configured to have multiple levels of zoom. A minimum of two levels of zoom is normally provided. Each zoom level is a separate map, and these maps are defined by the customer prior to the system being manufactured.

## 2.2 Log in

Before the user can access any of the system functions they are required to log in. Clicking on the Log In button will bring up the log in form. The user can then enter their name and password. In the case of the Demonstration Mode the user will be prompted through the process,

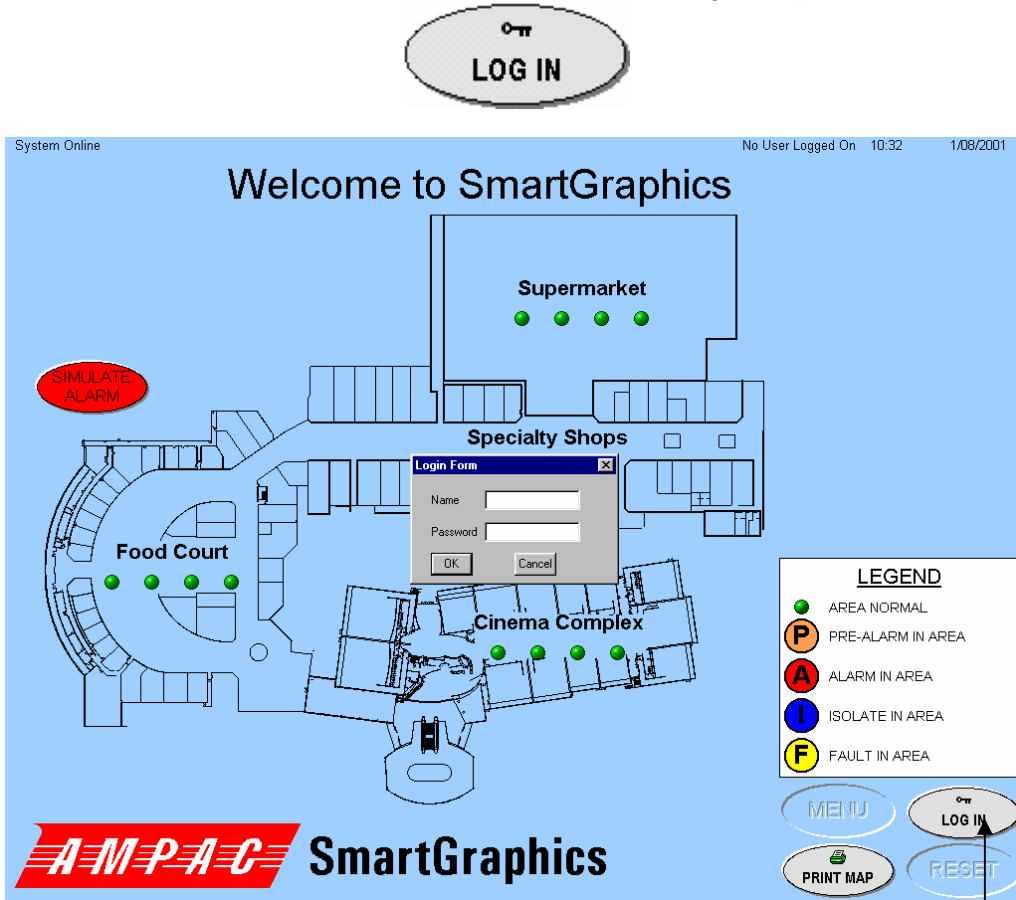
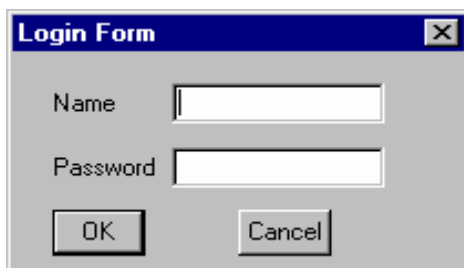


Figure 1: The Start up Page With Log in, Legend and Buttons



Click to Log in

**Note:** Log in access ability is pre-arranged at the Installation stage

Figure 2 The Login Form

At this time it is important to note the round icons under the names of the areas within the complex. These are directly related to those within the Legend and will change state to one of the legend icons should any one of areas meet the criteria of that icon.

### 2.3 Log in Levels

There are three levels of log-in in the **SmartGraphics** package. These are;

<b>Level 1</b>	( <b>Operator</b> )	allows access to view maps.
<b>Level 2</b>	( <b>Supervisor</b> )	allows access to all facilities except to erase logs and maintain passwords.
<b>Level 3</b>	( <b>Engineer</b> )	allows full access to the system.

### 2.4 Logout



Click here when you have finished using the system. This will return the system to Level 1 access and will be ready for the next user to login.

### 2.5 Print Map



Clicking on the print Map button will print the current screen to the selected printer.

### 2.6 Moving around the Project.

The operator can select which page in the system is required by simply clicking on the icons on each of the maps. The next map to be displayed is user defined when the project is created.

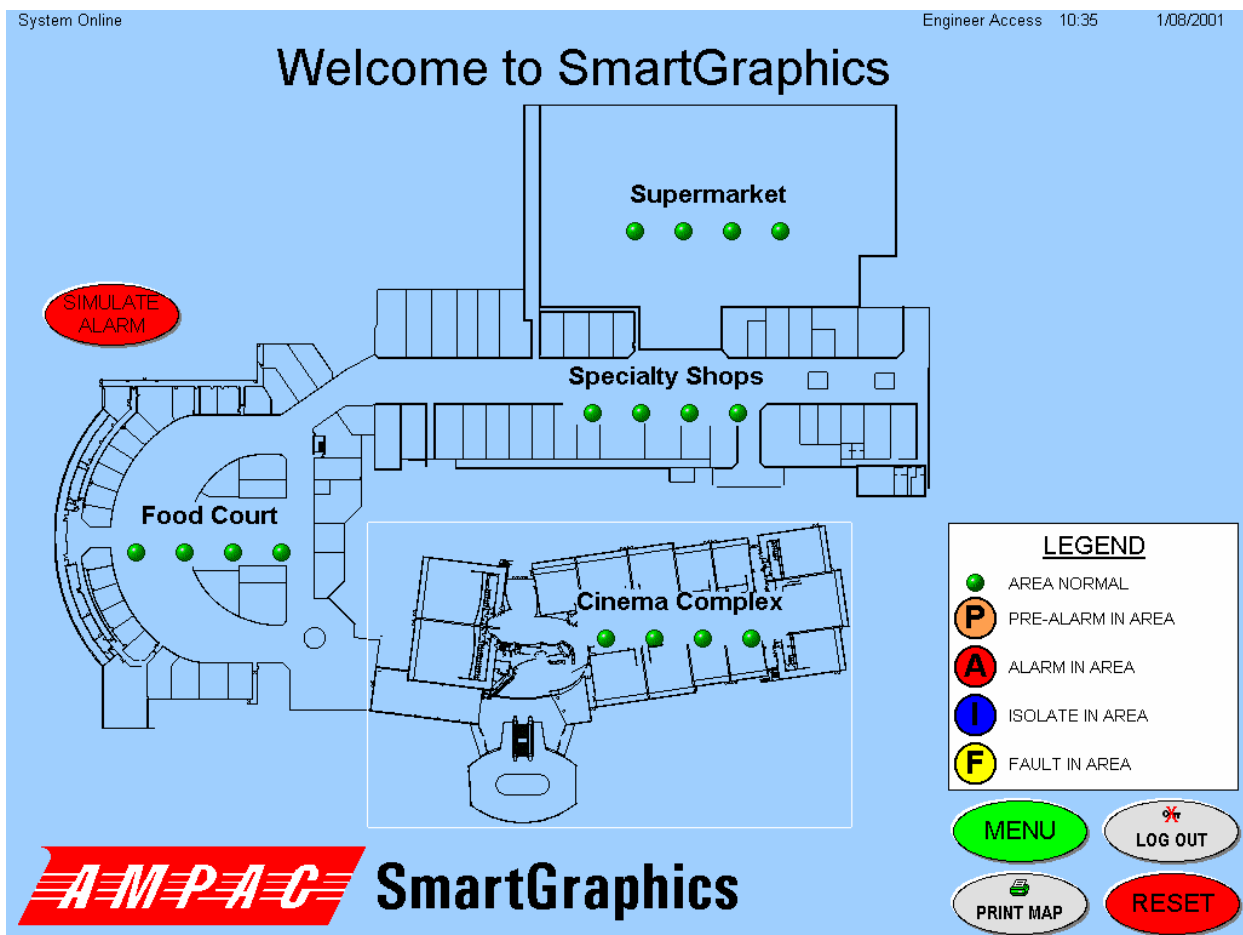
### 3 System Features

#### 3.1 The Site Map

To recap the Site Map is the first screen to be displayed when the system is run. The site is divided in to sections that can be enlarged by selecting the area name (eg. Cinema Complex or Food Court etc. and as described in Moving Around the Project ). Each section may have more than one level, or floor. The status of each section is indicated by the four indicators near the section name. These indicate the state in that particular area and change state accordingly. The legend below describes each state.

Other Display Options include:

1. Equipment status indicating Running, Fault or Stopped.
2. Similarly a " System On Line " icon to indicate the system is actually running. If the system loses communications with **FireFinder™** a message window will appear.



Note: The MENU and SHUTDOWN buttons are now active

Figure 3: User Logged On

### 3.2 Zooming to Multi-Levels

In the following example, in this case the Cinema Complex, clicking within the area surrounding the name of the section the operator will zoom in on the next level associated with that area. Clicking on LAST MAP returns the operator back to this screen.

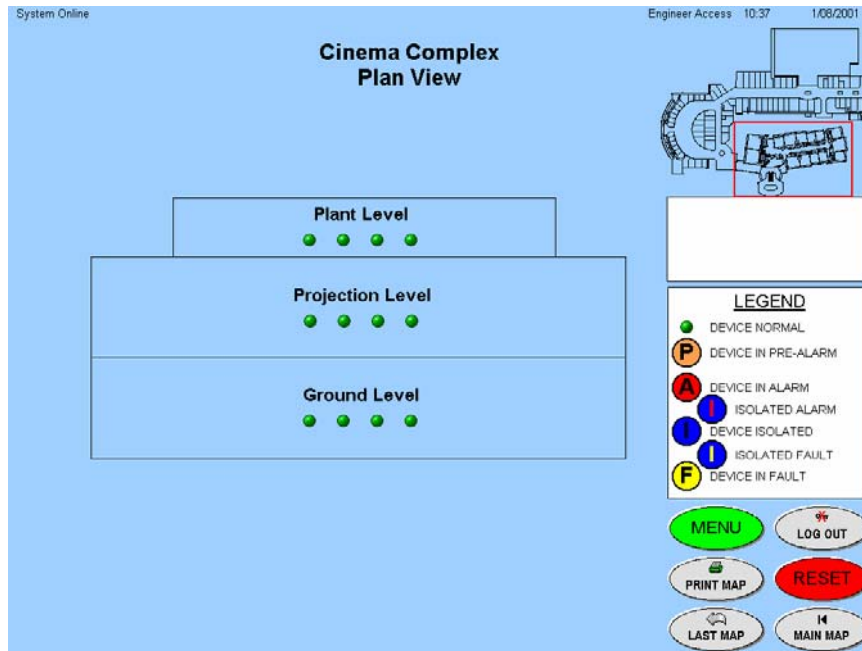


Figure 4: Cinema Complex First Screen

Clicking again within the confines of one of the above levels produces the Map associated with that level. This is shown in the following examples.

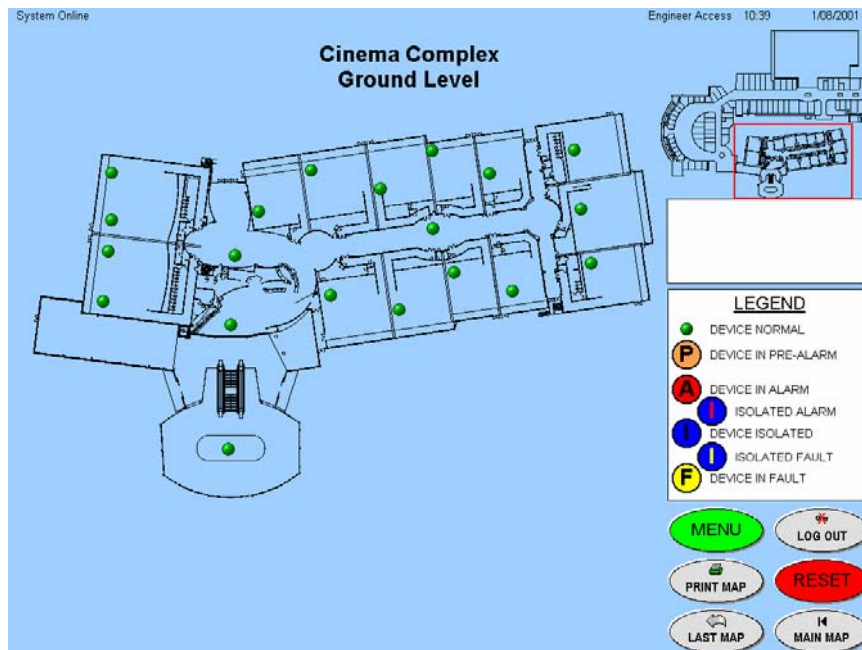


Figure 5: Cinema Complex Ground level

## Zooming to Multi-Levels cont.

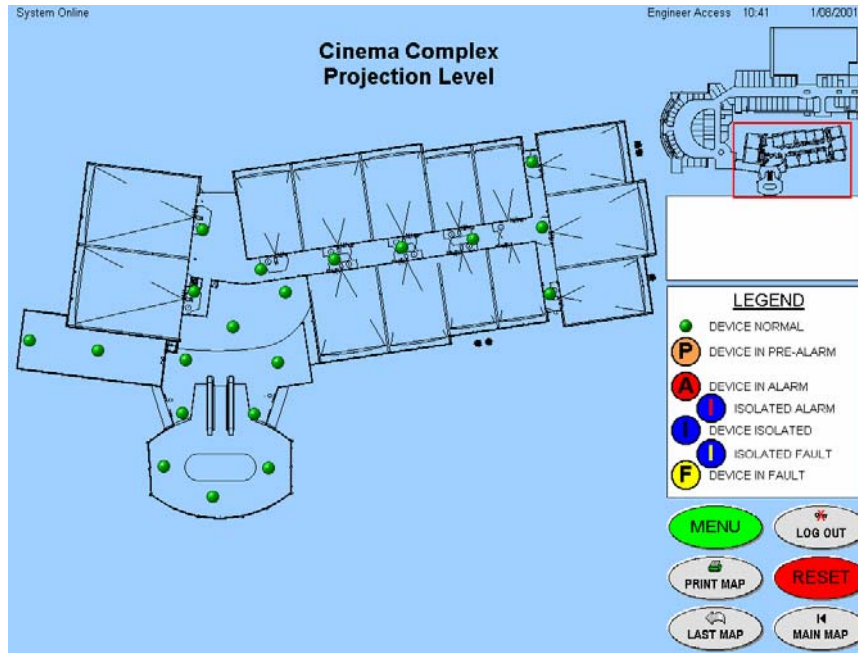


Figure 6: Cinema Complex Projection Level

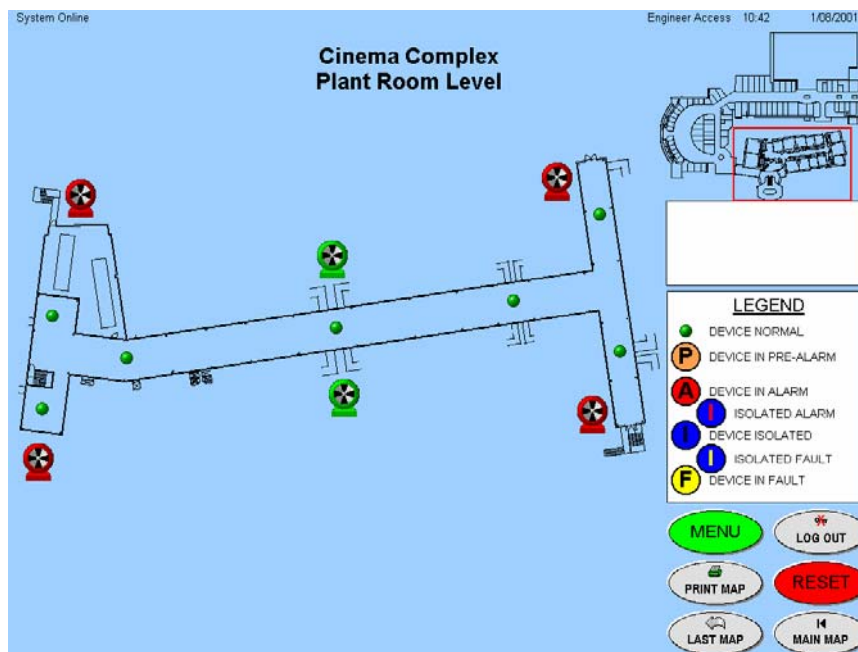


Figure 7: Cinema Complex Plant Room Level

### 3.3 Key Map

The key map is in the top right hand corner of each screen, it will show an overall view of the site with the area currently being viewed highlighted.

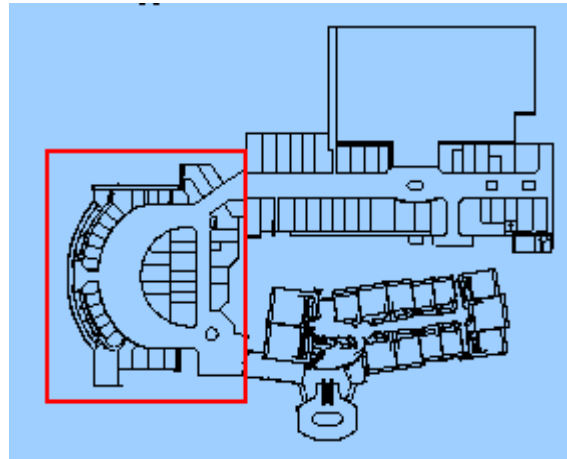


Figure 8: Example Of A Key Map

### 3.4 Title Block

The floor map incorporates a text box for detailing action to be taken in the event of an emergency, such as:

- Map Reference: The map reference number.
- Location: Tells the user where the map is.
- Brigade Access: Fire Brigade access route.
- Hazchem Details: Indicating the presence of any dangerous materials in the area
- Fire Fighting Equipment: Any special equipment in the area.
- Public Egress: The escape routes.
- Zone Warden: The identity of the area's

zone warden.

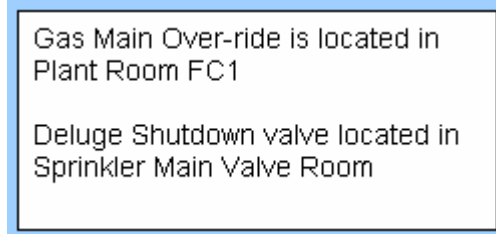
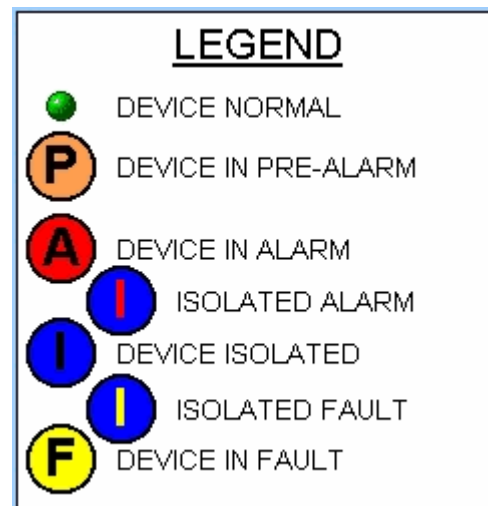


Figure 9: Example Of A Title Block

### 3.5 Symbol Key ( Legend )

The symbol key describes all the symbols which be found on the maps, including the static icons.



can

Figure 10:

Example Of A Symbol Key ( Legend )

### 3.6 The Floor Maps

Each floor map has an interactive icon for each detector / device connected to the fire system. The icon displays the current status of each device including alarm, pre-alarm, fault and isolated.

Static icons are also provided to pin point the location of emergency equipment, fire hydrants, fire extinguishers, warden intercom points etc..

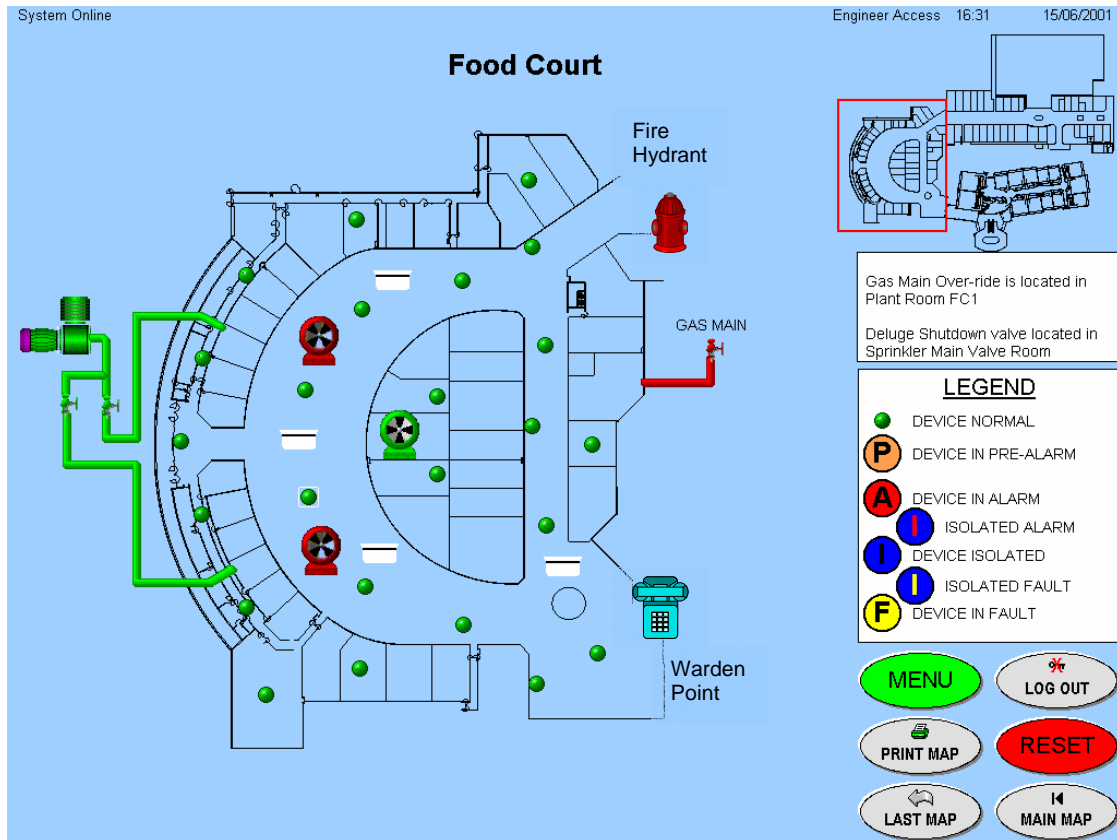


Figure 11: Example Of A Floor Map

## 4 Main Menu

Once the user is logged on at Level 2 or 3 all Menu Buttons become active and enable the user to access each function at their prescribed level.

Note: 1. The Main Menu functions are only available at either the **supervisor or engineer level**.

2. In Demonstration mode all functions are available.

### 4.1 Main Menu Functions

To access the Main **MENU** click on the MENU icon in the lower right hand corner of the Site Map screen. There are six selections available from this menu,

1. **System** Status,
2. Device **Control** ( Testing, Control and Isolation )
3. Device **Status**,
4. Device **Logs**,
5. Maintenance **Tools** and
6. **Close Menu**.

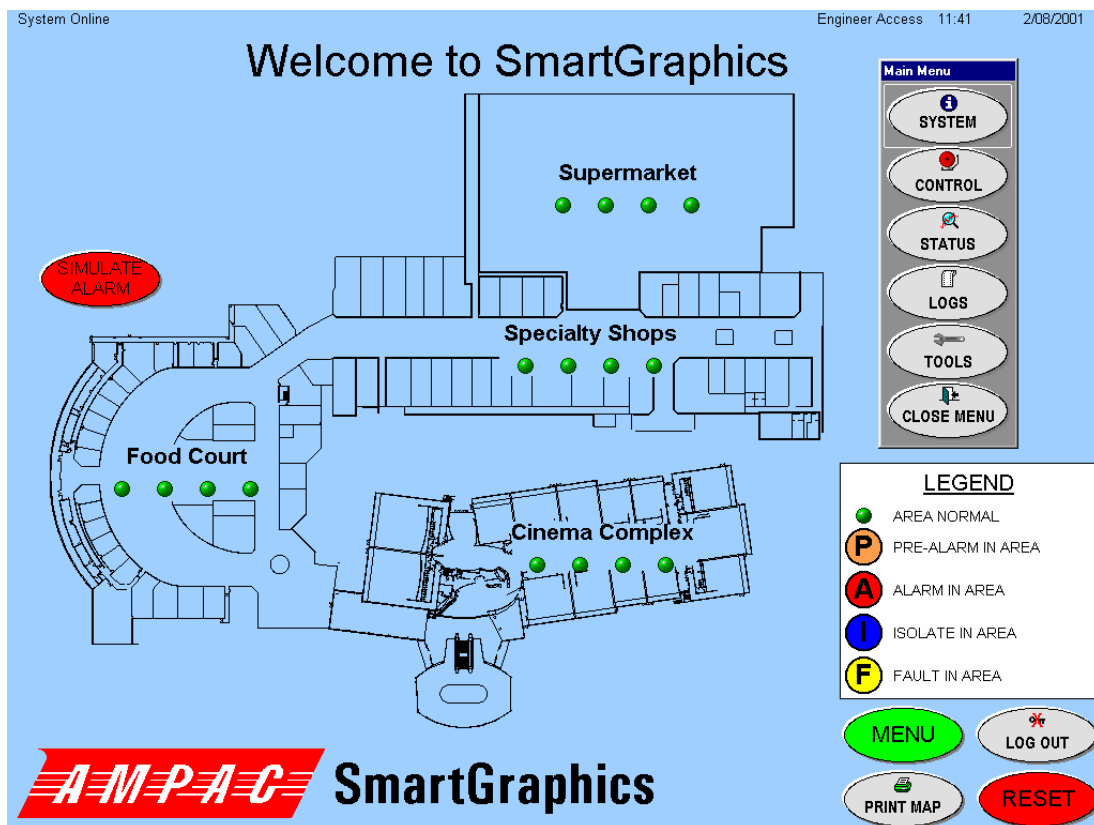


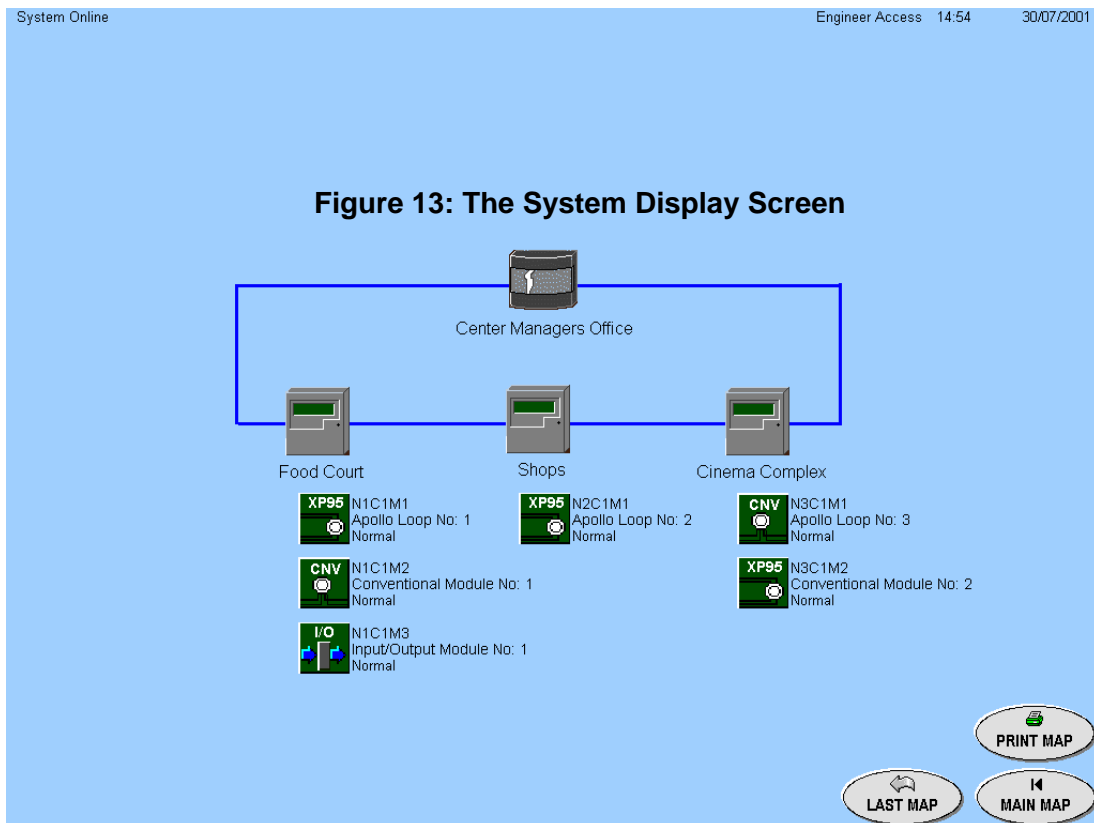
Figure 12: Main Menu Selected

## 4.2 Using the Main Menu

To select one of the options click on the appropriate button. Each menu list has a Close Menu button that allows the user to return to a previous screen.

### 4.2.1 Select System ( screen )

The graphics interface allows the current status of the fire system network to be viewed, as well as the status of the modules connected to each network node.



#### Note:

The above example System Display shows the connections and status of the panels and modules in a *FireFinder*<sup>TM</sup> system.

#### Clicking on;

1. **LAST MAP**, takes the screen back to the last one displayed;
2. **MAIN MAP**, takes the screen back to the first Map displayed or the default screen as it is also called,
3. **PRINT MAP**, prints the current screen

## 4.2.2 Select Control

The Device Control Window allows alarm testing, fault testing and isolation to be carried out on either a range of devices/zones or individual devices/zones.

For instance clicking “Zone”, “5”, then “Isolate” to isolate Zone 5, or

clicking “Loop”, “1”, “Sensor”, “10”, “To”, “25”, then “Alarm Test” to alarm test Loop 1 Sensor 10 through to 25.

The selected multiple device control information is displayed in this widow.

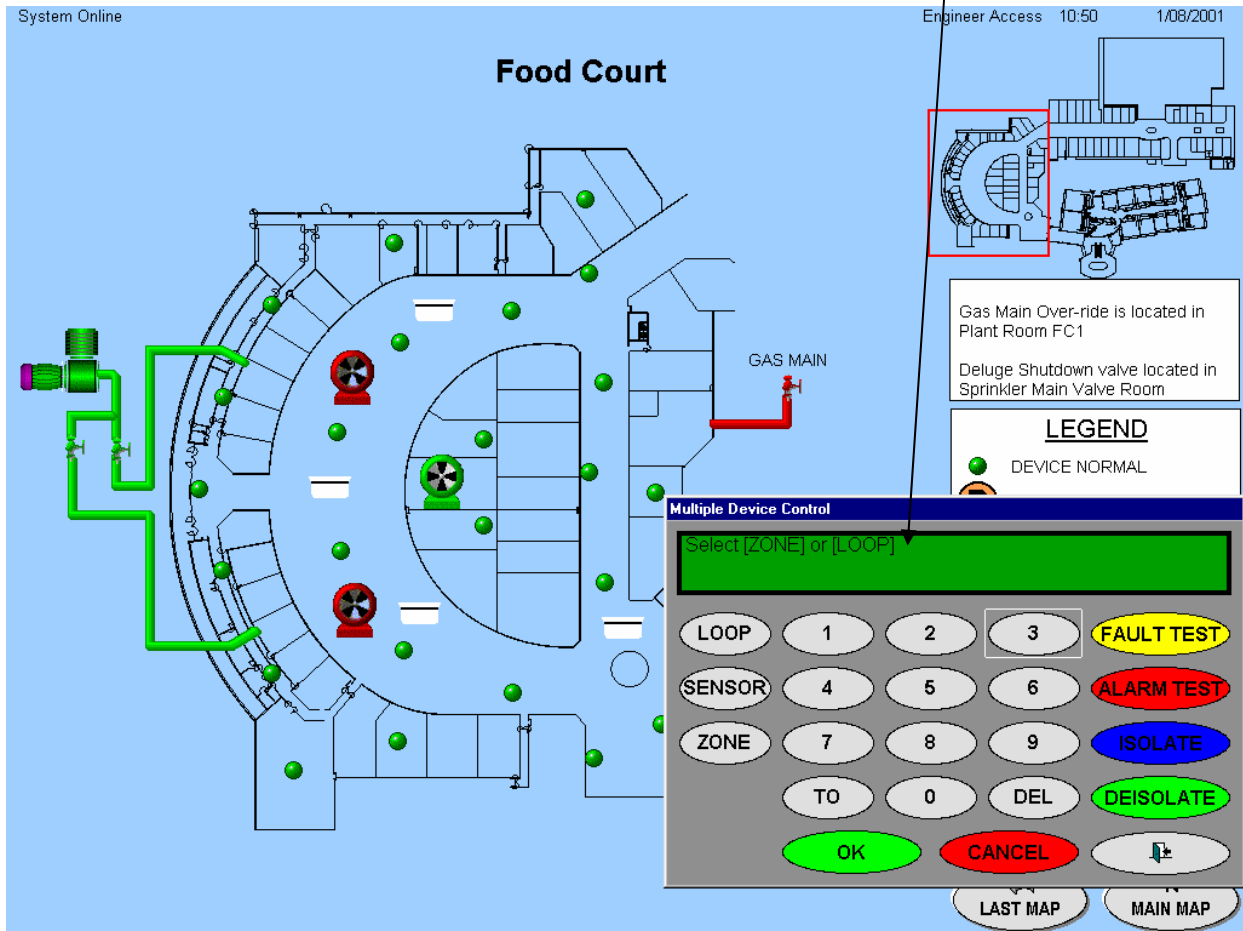


Figure 14: The Device Test Screen

The Multiple Device Control allows remote control of the fire panel(s) by allowing the operator to perform the following commands;

- Alarm Tests
- Fault Tests
- Isolating / De-isolating

### 4.3 Device Facilities

Devices may be identified/tested/isolated/acknowledged or de-isolated by means of clicking on the left mouse button. This causes a menu as shown below to pop up thereby allowing the operator access to the range of available commands to perform on that detector.

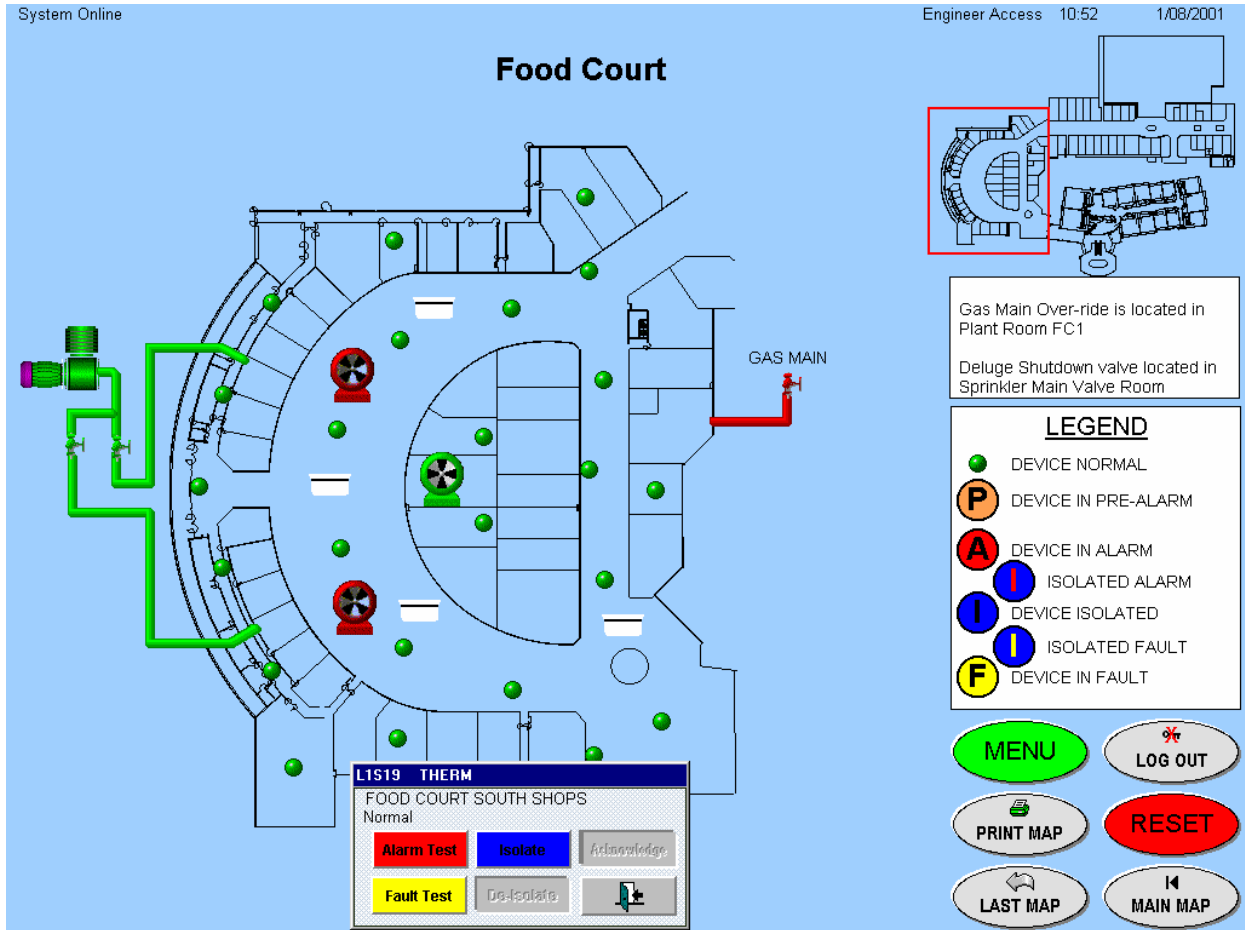


Figure 15: Devices in Alarm, Fault and Isolated

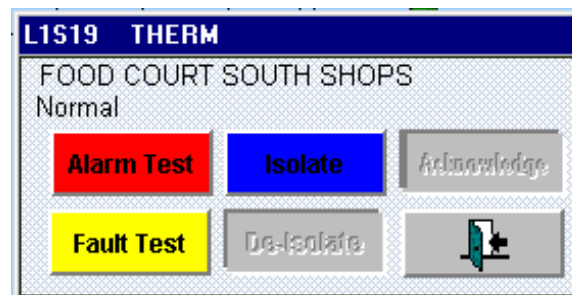


Figure 16: Detector Commands

## 4.4 Fan, Pump And Valve Controls

Double clicking a fan, pump or valve icon will bring up the control window. The switch and indicators mimic the functions of the controls on the fire panel. If the switch on the fire panel is in the auto position then the controls on the graphics are enabled. If the switch on the fire panel is turned to the off or on position then the graphics control is disabled and the buttons will be dulled to indicate that they are inactive.

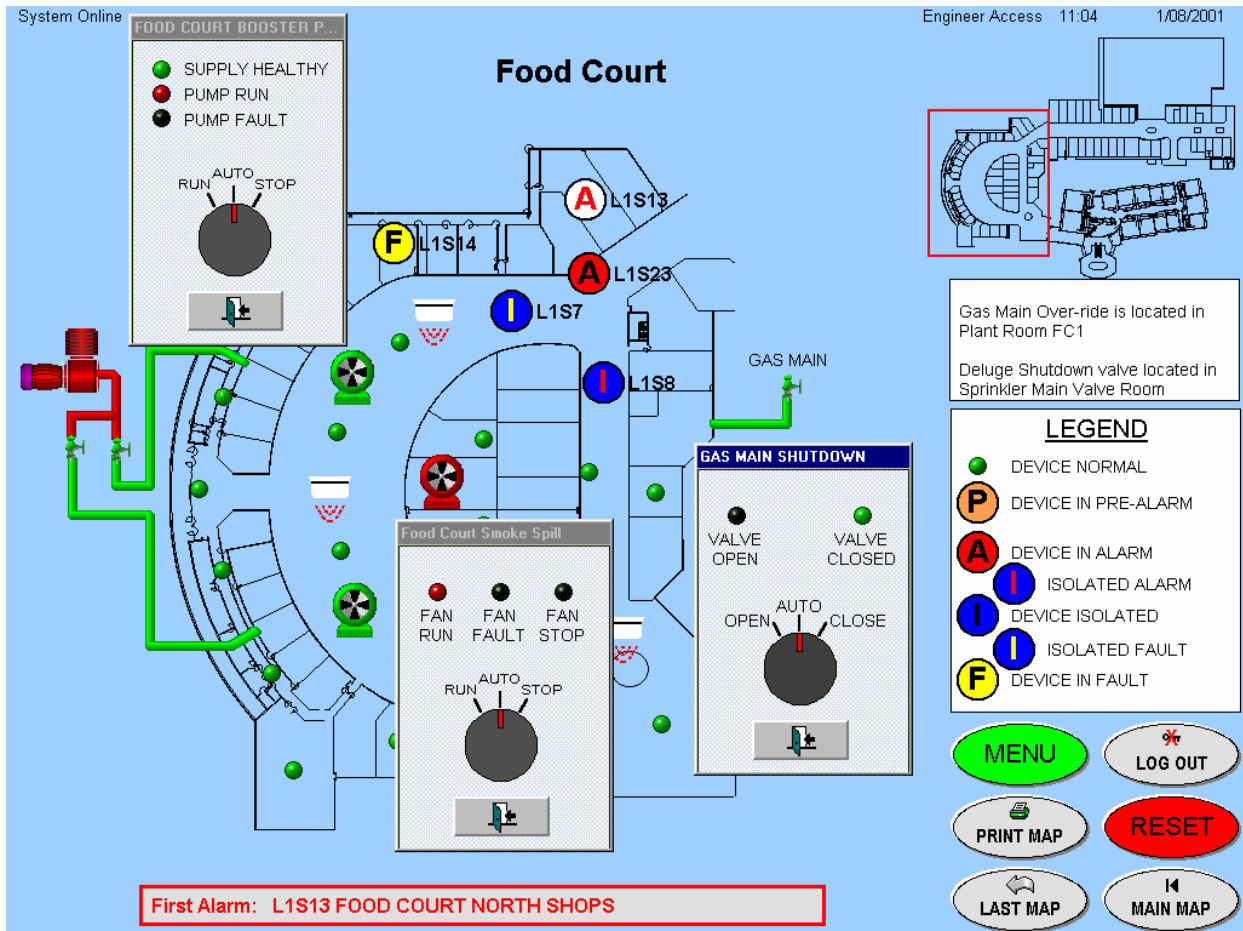


Figure 17: Example Of A Fan, Pump And Valve Control Mimic Window

## 4.5 Reset

Clicking on the Reset Button will return the fire system to its normal state. Any flashing areas on the site map shall also return to their normal state.



Figure 18: THE RESET BUTTON

## 4.6 Select Status

Engineer Access 13:15 17/08/2000

Date	Time	Device	Location	Map Name	Status
17/08/2000	13:15:46	L2S20	CINEHA 8 SEATING	Project	Alarm
17/08/2000	13:15:44	L2S16	CINEHA 6 SEATING	Project	Alarm
17/08/2000	13:15:43	L2S12	CINEHA 4 SEATING	Project	Alarm
17/08/2000	13:15:39	L2S6	CINEHA 2 SEATING	Project	Fault - device missing
17/08/2000	13:15:39	L2S7	CINEHA 2 SEATING	Project	Fault - device missing

The device Status window displays the list of all devices or only those in Alarm, Pre-Alarm, Fault or Isolated by clicking on the corresponding button below. The Print Status button will send the listing to the printer, "Close" goes back to the Main Map.

Figure 19: The Device Status

## 4.7 Select Logs

The Device Log window lists the history of devices that have been in Alarm, Fault or Isolate and can be and printed using the Print Log button. The logs can be cleared by clicking on:

**Menu                      Tools                      Erase Logs.**

System Online Engineer Access 15:04 30/07/2001

Date	Time	Device	Location	Map Name	Status
12/06/2001	12:41:29	L1S1	FOOD COURT SOUTH ENTRANCE	HAP1	Alarm
12/06/2001	12:41:29	L1S2	FOOD COURT SOUTH	HAP1	Alarm
12/06/2001	12:41:29	L1S3	FOOD COURT SOUTH	HAP1	Alarm
12/06/2001	12:41:29	L1S4	FOOD COURT SOUTH	HAP1	Alarm
12/06/2001	12:41:29	L1S5	FOOD COURT NORTH	HAP1	Alarm
12/06/2001	12:41:29	L1S6	FOOD COURT NORTH	HAP1	Alarm
12/06/2001	12:41:29	L1S7	FOOD COURT NORTH	HAP1	Alarm
12/06/2001	12:41:29	L1S8	FOOD COURT EAST	HAP1	Alarm
12/06/2001	12:41:29	L1S9	FOOD COURT EAST	HAP1	Alarm
12/06/2001	12:41:29	L1S10	FOOD COURT NORTH ENTRANCE	HAP1	Alarm
12/06/2001	12:41:44	L1S10	FOOD COURT NORTH ENTRANCE	HAP1	Alarm
12/06/2001	12:41:44	L1S6	FOOD COURT NORTH	HAP1	Alarm
12/06/2001	12:41:44	L1S9	FOOD COURT EAST	HAP1	Alarm
12/06/2001	12:41:44	L1S8	FOOD COURT EAST	HAP1	Alarm
12/06/2001	12:41:44	L1S7	FOOD COURT NORTH	HAP1	Alarm
12/06/2001	12:41:50	L1S5	FOOD COURT NORTH	HAP1	Alarm
12/06/2001	12:41:50	L1S4	FOOD COURT SOUTH	HAP1	Alarm
12/06/2001	12:41:55	L1S3	FOOD COURT SOUTH	HAP1	Alarm
12/06/2001	12:41:55	L1S2	FOOD COURT SOUTH	HAP1	Alarm
12/06/2001	12:42:00	L1S1	FOOD COURT SOUTH ENTRANCE	HAP1	Alarm
12/06/2001	12:42:19	Z1	FOOD COURT UESDA Z1	HAP1	Alarm
12/06/2001	12:43:32	Z1	FOOD COURT UESDA Z1	HAP1	Alarm
10/07/2001	10:04:41	Z1	FOOD COURT UESDA Z1	HAP1	Alarm

Figure 20: The Device Log

## 4.8 Select Tools

From the main Menu click on TOOLS and the Engineer Menu will become active. From the Engineer Menu a user can:

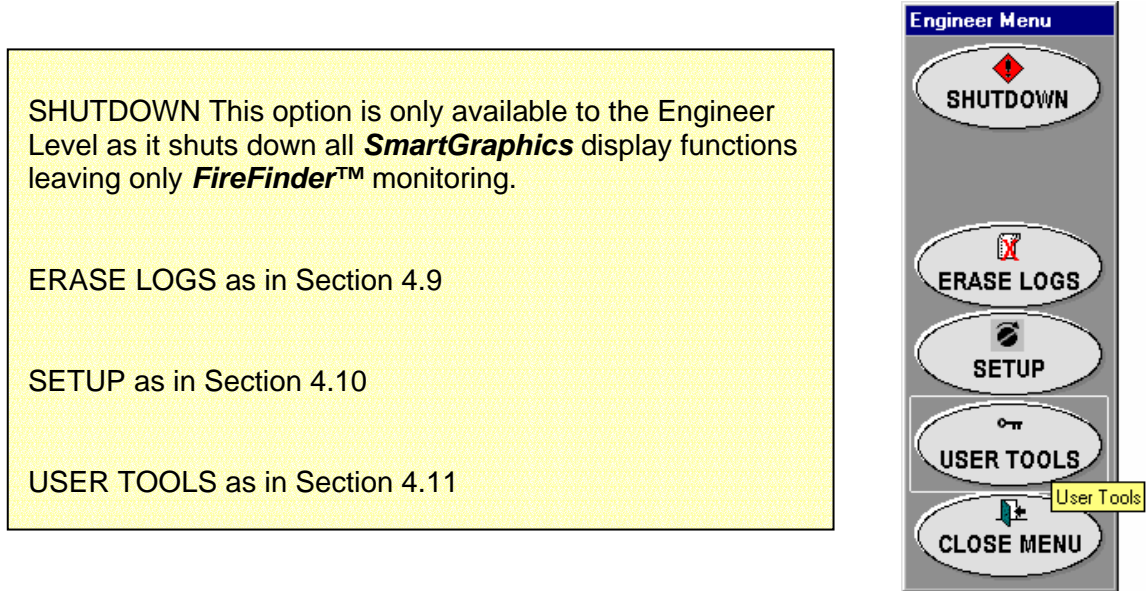


Figure 21: The Engineer & User Menus

## 4.9 Erase Logs Menu

To erase a Log file select either, User, Alarm, Fault, or Isolate from the Erase Log Menu and click OK in the confirmation box.

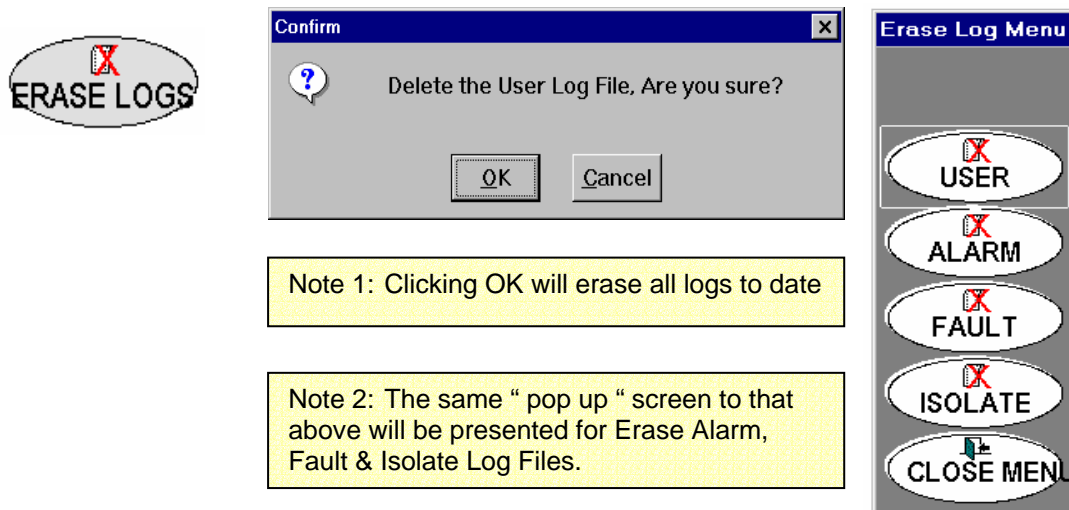




Figure 22: Erase Logs

## 4.10 Set Up Menu

**PRINT SETUP**  
Selecting PRINT SETUP brings up the normal windows style printer menu.

**AUTO PRINT**  
By selecting AUTO PRINT an Alarm will be automatically printed to the Map Printer as it occurs.

**AUTO DISPLAY**  
By selecting AUTO DISPLAY an Alarm will be automatically displayed on the screen as it occurs.


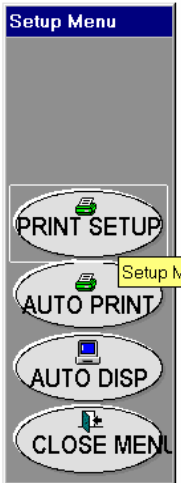





Figure 23: Set Up Menu

## 4.11 Select Add or Create a User

From the Engineers Menu select “ USER TOOLS “, then “ADD USER “. The menu below will appear. Enter the details, selecting the type of user from the drop down box ie Operator, Supervisor or Engineer.





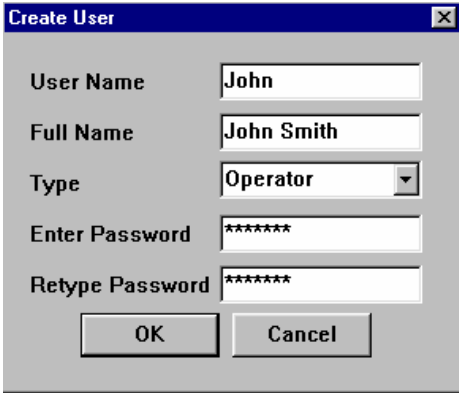


Figure 24: Add / Create A User

## 4.12 Select Edit a User

From the Engineers Menu select “ USER TOOLS “ then “ EDIT USER “. The menu below will appear. Enter the details by selecting the type of user from the drop down box, ie Operator, Supervisor or Engineer.

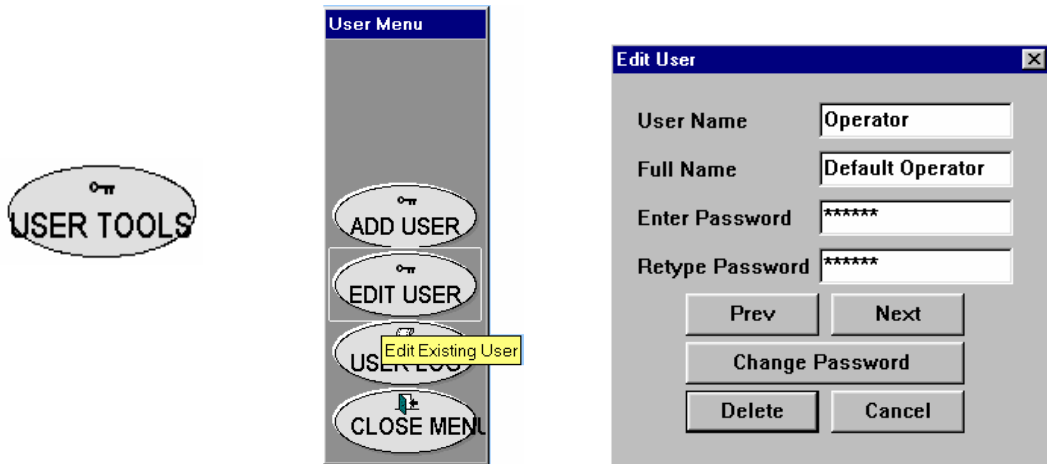


Figure 25:: Edit A User

### 4.12.1 Button Functions in Edit User:

#### Prev. ( Previous ) / Next

Functions as a goto the previous / next record on file.

#### Change Password

Changes the Password for the record shown.

## 4.13 Select User Log

The Security Access Log records all login / logout information for not only security reasons but also general user activity.

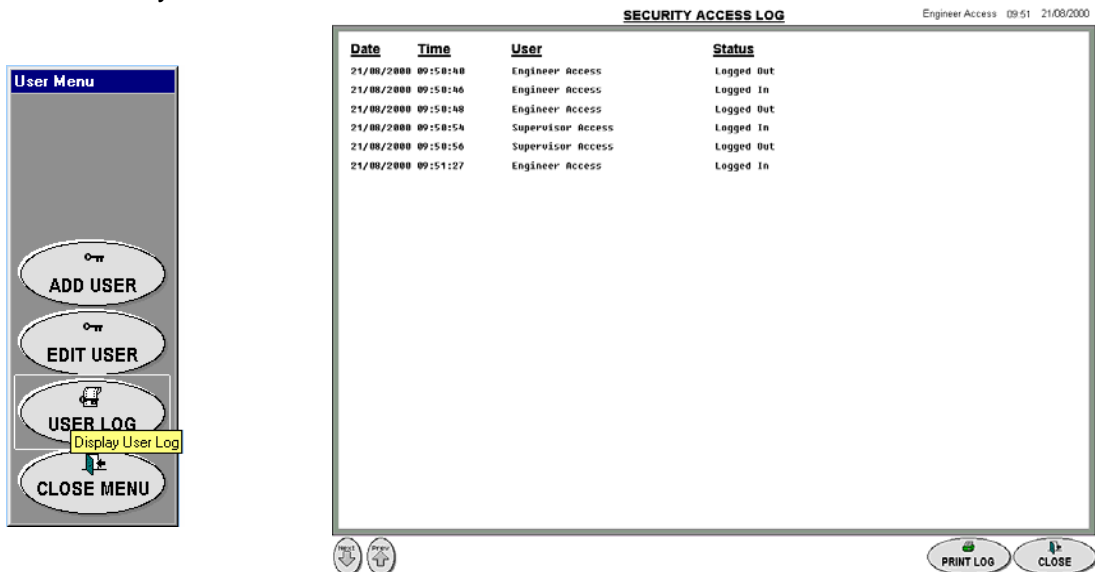


Figure 26: Operators Log

## 5 Summary of Section Map Facilities

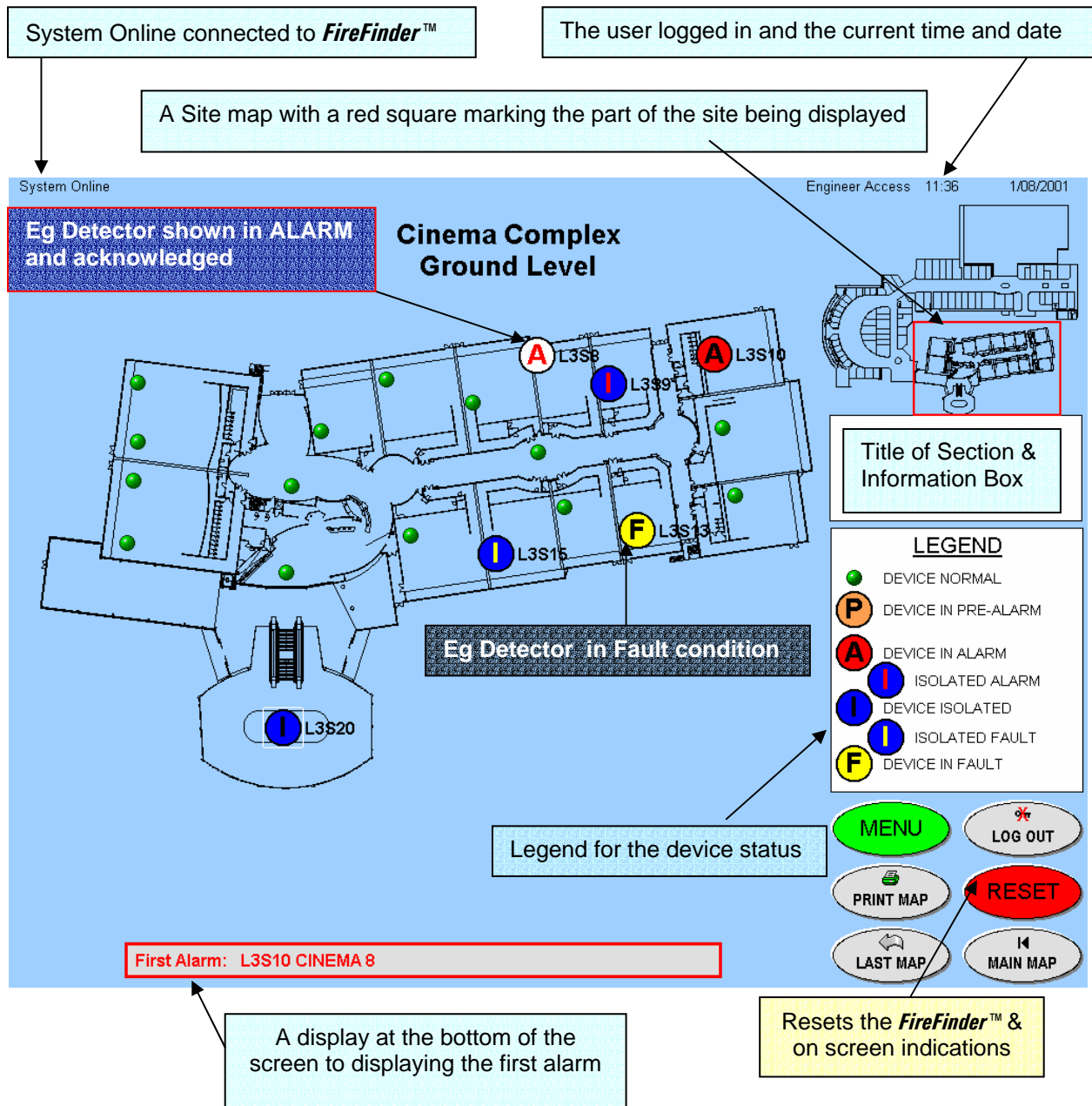
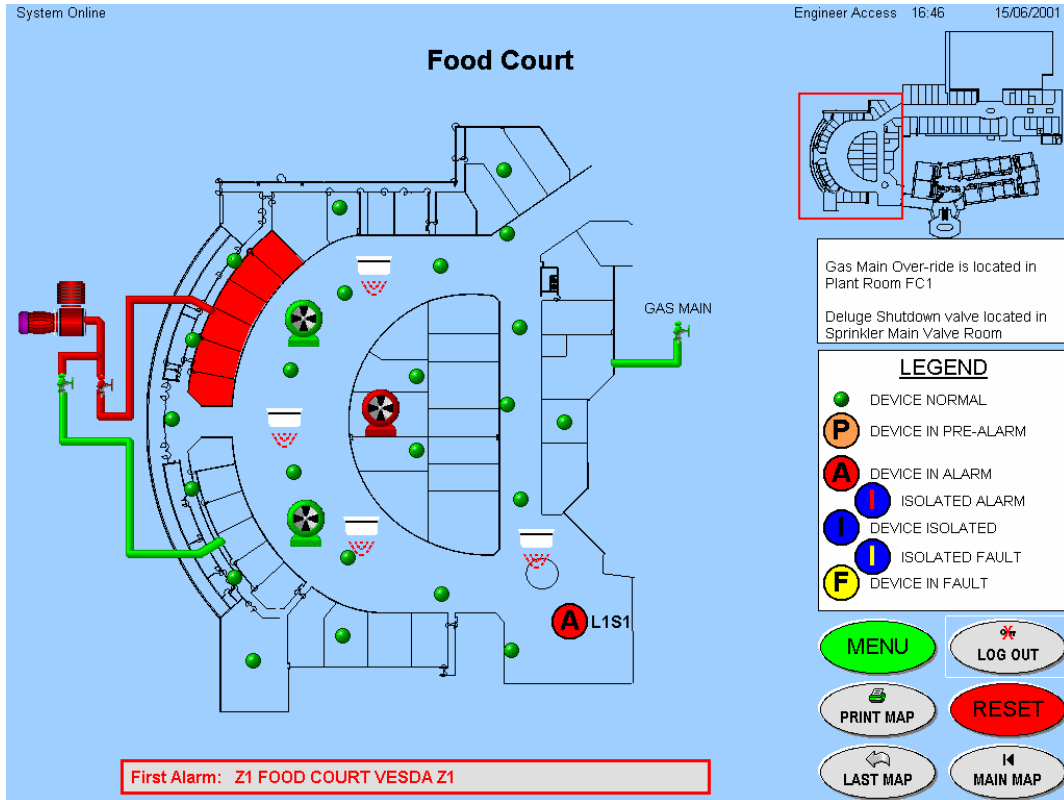


Figure 27:: Section Map

## 5.1 Processing Alarms

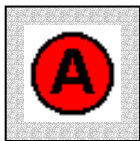
When the system receives an alarm, it is added to the events log and the system will be optionally configured to display and/or print the floor map upon which the alarm occurred, and if desired return to the Site Map.



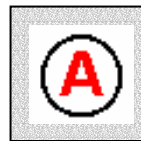
**Figure 28: Example Of A Map Displaying An Alarm**

The above example also shows:

- the Food Court in Alarm ( Loop 1 Sensor 1 ) and the deluge system in operation. The Alarm can be acknowledged by clicking on the detector. The icon will change state from

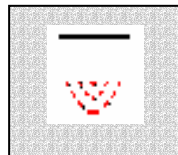


to



and,

- the sounders in operation



## 5.2 Site Status

By right clicking on an area the system shall display a status summary of all of the devices within that area.

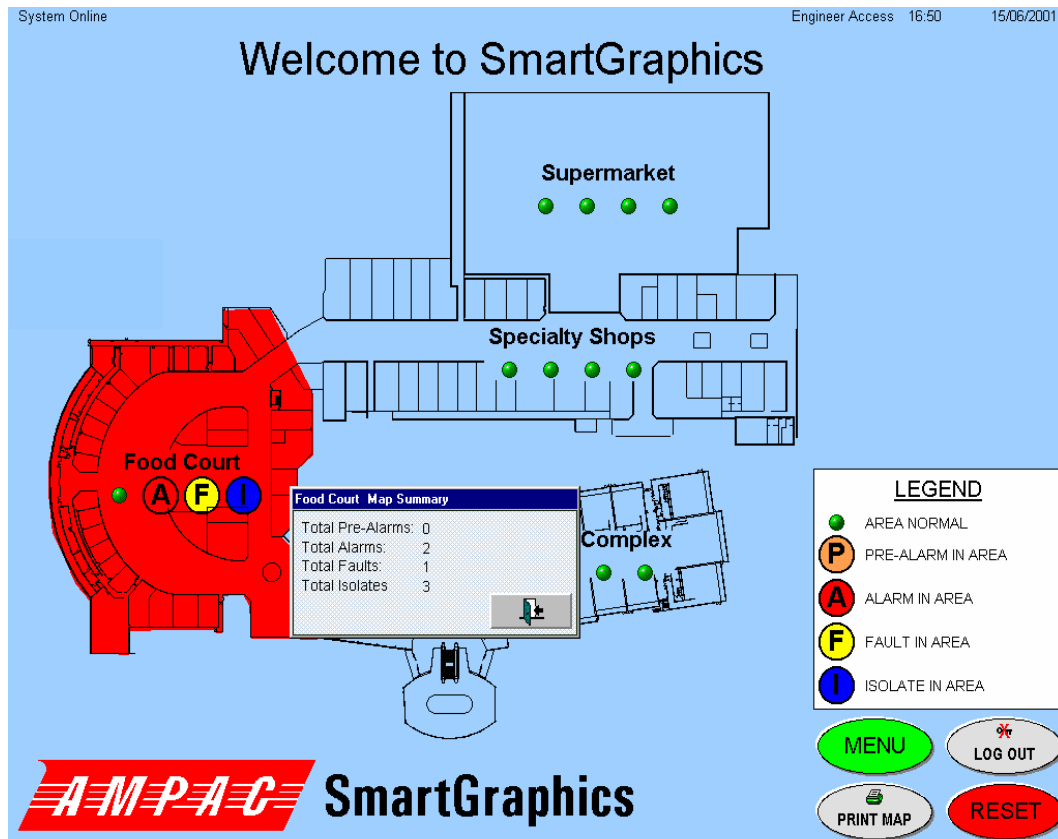


Figure 29: Example Of The Site Map Displaying An Alarm

## 6 System Operation










### 6.1 If an alarm occurs;

1. the device is identified;
2. automatically added to the Alarm & Device Status Log [ see Fig.14 ]; and
3. the Section Map containing that alarm is printed out on the Log/Map Printer if the auto print is selected.

### 6.2 Fault and Isolate

Faults and isolates are not normally printed but can be viewed from the log screens or by going to the section map. A print out can be obtained if necessary using the "Print Status" button on the "Current Status" screen .

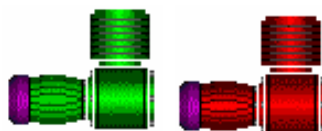
## Section Map Legend at a Glance

Icon Status	Meaning
	<b>Device Normal</b> Device is functioning within parameters
	<b>Device Fault</b> Detector has developed a fault which has been detected by FireFinder
	<b>Device Isolated</b> Detector has been isolated due to a fault condition
	<b>Device is in Pre Alarm</b> Device is not normal and is close to alarming
	<b>Device in Alarm</b> An Alarm has been activated
	<b>Alarm has been Acknowledged</b> Alarm has been manually acknowledged at the SmartGraphics terminal or FireFinder panel.
	<b>Device is Alarm and Isolated</b> Alarm has been isolated.
	<b>Device Isolated</b> Alarm has been isolated in the normal condition.
	<b>Concealed device.</b> Indicates a device is installed with in an enclosed space and is not visible under normal circumstances.

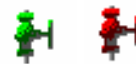
### Other Graphical Symbols



Fan Operation



Deluge Pump Operation



Water / Gas Valves



Sounder

**User Notes:**





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