

3.5 Board Assembly Diagram

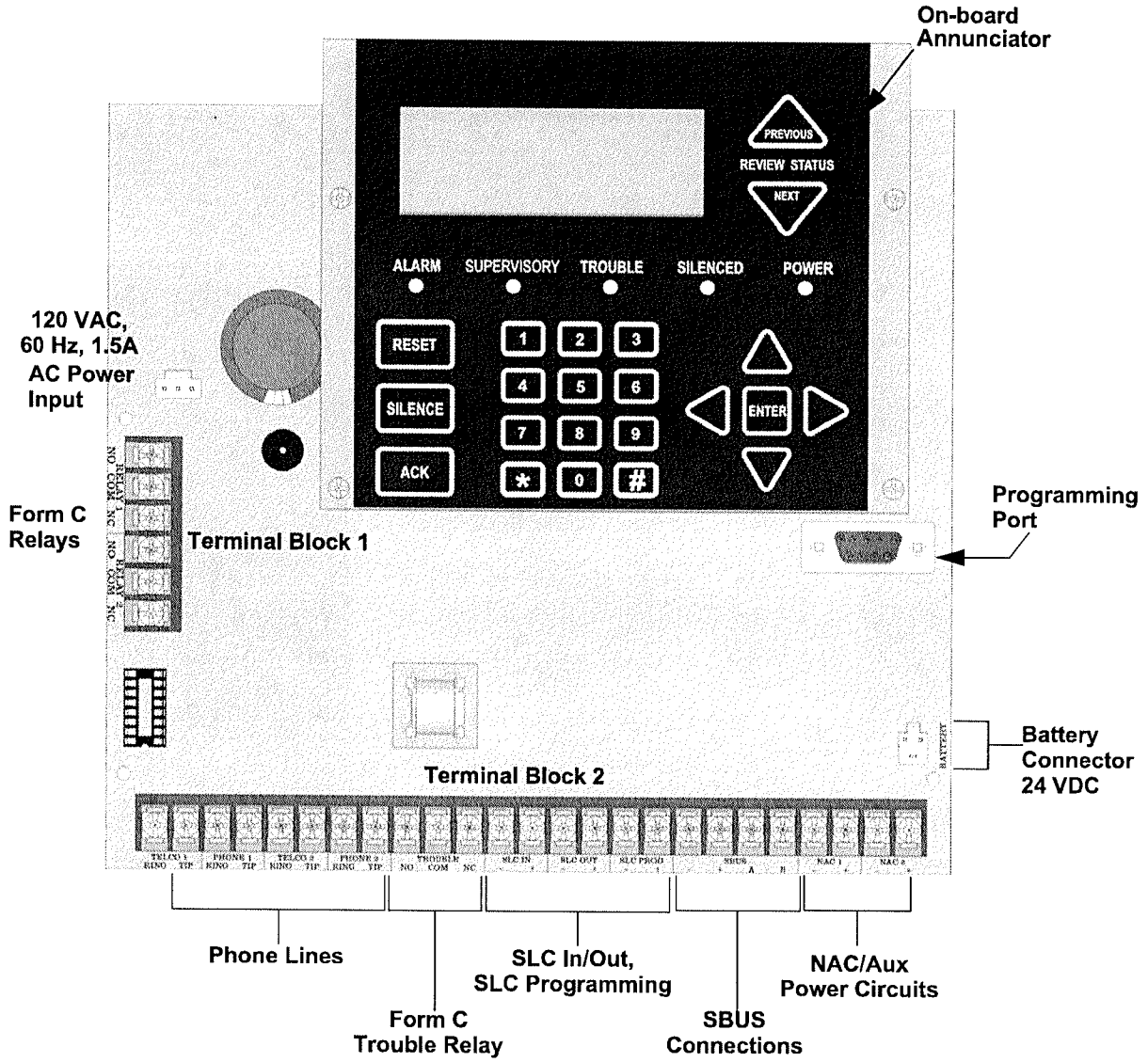


Figure 3-2 Model 5700 Assembly

Figure 3-2 shows the circuit boards, and annunciator. If you should need to remove the control board for repair, remove the three mounting screws which hold the control board in the cabinet. Then lift the control board out of the cabinet.

4.5 5860 Remote Annunciator Installation

The optional Model 5860 Remote Annunciator, shown in Figure 4-10, performs the same functions as the on-board annunciator as well as initiate and end fire drills with a single key press and view event history by alarms, supervisories, or troubles.

Up to 8 annunciators can be added to the 5700 system.

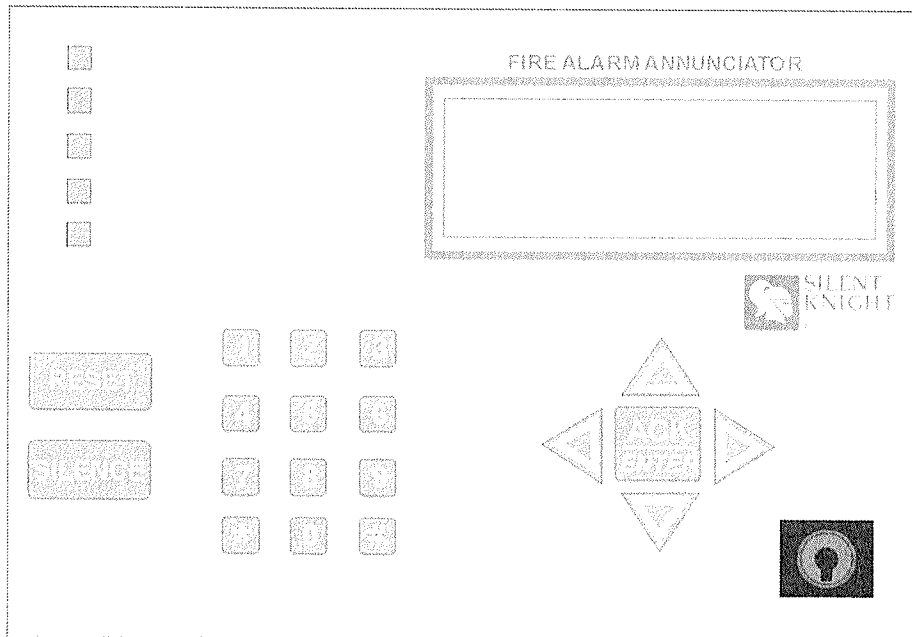


Figure 4-10 Model 5860 Remote Annunciator, Front View

5860 installation involves the following steps:

1. Make sure power is off at the panel.
2. Mount the 5860 in the desired location (see Section 4.5.1).
3. Connect the 5860 to the panel (see Section 4.5.2).
4. Use the dipswitches on the back of the 5860 to assign an ID# to the 5860 (see Section 4.9.1).
5. The new 5860 module must be added to the system through programming. JumpStart will add the module automatically (see Section 6.1). You can also add it manually (see Section 7.2.2). Select a name, if desired (see Section 7.2.1.1).

Section 8

System Operation

Operation of the control panel is simple. Menus guide you step-by-step through operations. This section of the manual is an overview of the operation menus. Please read this entire section carefully before operating the panel.

Press ENTER to view Main Menu: Select the desired menu option. Enter your access code if prompted.

Note: See Section 7.9 for information on how to modify user access code profiles.

8.1 Default Codes:

User Code (factory-programmed as 1111).

Installer Code (factory-programmed as 123456).

8.2 Annunciator Description

Figure 10-1 shows the annunciator that is part of the control panel board assembly.

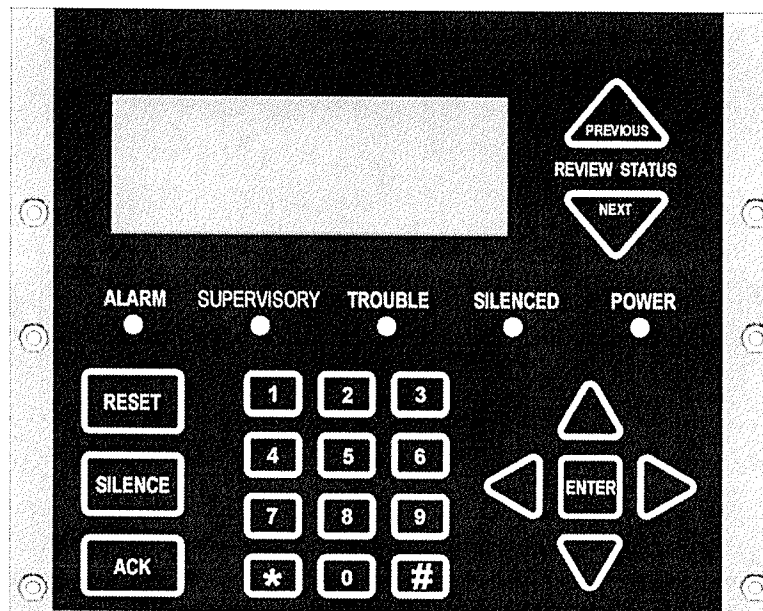


Figure 8-1 Control Panel Annunciator

8.2.1 LCD Displays

The control panel LCD displays system messages, annunciates alarms, supervisories and troubles; provides status information; and prompts for input. These messages can be up to 80 characters, displaying over four lines of 20 characters each. Annunciator keys beep when they are pressed.

8.2.2 Banner

The banner is the message that displays on the control panel when the system is in normal mode (no alarm or trouble condition exists and menus are not in use). You can create a customized message that will display instead

of the internal (default) message. See Section 7.6.7 for information on customizing the banner.

Text of Internal Banner.

Custom Banner example.

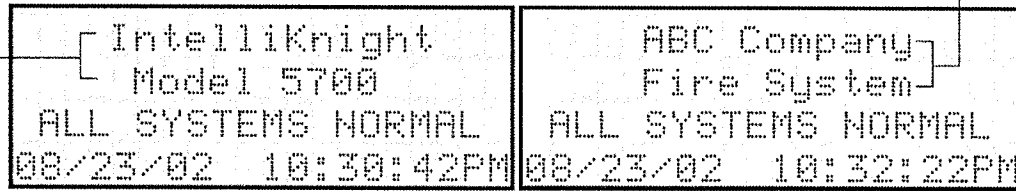



Figure 8-2 Banner Display Examples

8.3 Menu System

The control panel is easy to operate from Main Menu. To view the Main Menu press the ENTER or  button on the control panel or remote annunciator, then turn the firefighters key clockwise or enter your access code. The Main Menu will appear as shown in Section 8.3.1. Select the desired option. If you have entered a code or firefighters key does not have access to the menu item you have selected the following display message will appear:

```
-Access denied.-
Entered PIN does not
allow access to this
function.
```

You must enter an access code with the correct profile settings to gain access to that menu item.




The control panel supports up to 20 access codes. The profile for each access code (or user) can be modified through the programming menu option (see Section 7.9 for access code programming).

8.3.1 Main Menu Overview

The chart below is a brief overview of the Main Menu. These options are described in greater detail throughout this section of the manual.




Main Menu Options	Description
1- System Tests	From here you can access Fire Drill and Indicator Test.
2- Point Functions	From here you can enable / disable points.
3- Event History	Display event history on the LCD. See Section 8.4.6 for more information.
4- Set Time and Date	Set time and date for the system.
5- Printer Options	Options for controlling a printer if attached to the system. If a printer is used, the Model 5824 Serial/Parallel Interface must be used.
6- Reset Items	Cancel any attempt to call the central station. Any calls awaiting additional attempts will be aborted.
7- Program Menu	Brings up a set of menus for programming the panel, including changing access codes. These options are described in detail in Section 7.
8- System Info	View system information, including model and serial numbers and revision number and date.
9- Up/Download	Initiate communication from the panel site between the panel and a computer running the Silent Knight Software Suite.

8.3.2 Using the Menus



To move through the menus:	Use  and  to move through the options in a menu. Use  to move to a previous menu.
To select an option:	Enter the number of the option. -OR- Press ENTER if the option appears at the top of the menu (= symbol displays after the option number in this case).

8.4 Basic Operation



8.4.1 Setting Time and Date

1. From the Main Menu, select 4 for Set Date and Time.
2. Make changes in the fields on the screen. Use  to move through the fields. Use the  and  to select options in the fields.
3. When the date and time are correct, press ENTER.



8.4.2 Disable / Enable NACs by Group

1. From the Main Menu, select 2 for point functions.
2. Select 1 for Disable/Enable Point.
3. Select 3 to Disable NACs by group or 4 to Enable NACs by group.
4. Use  and  to move through the list of groups. Press ENTER to select the group highlighted.

8.4.3 Disable / Enable a Template




1. From the Main Menu, select 2 for Point Functions.
2. Select 1 for Disable/Enable Point.
3. Select 1 to Disable NACs by Template or 2 to Enable NACs by Template.
4. Use the  or  arrow key to select the Template and press ENTER.

8.4.4 Disable / Enable a Zone

1. From the Main Menu, select 2 for Point Functions.
2. Select 1 for Disable/Enable Point.
3. Select 5 to Disable Zone Points or 6 to Enable Zone Points.
4. Use the  or  arrow key to select the Zone and press ENTER.

8.4.5 Disable / Enable a Point

1. From the Main Menu, select 2 for Point Functions.
2. Select 1 for Disable/Enable Point.
3. Press 7 for Disable/Enable Pt.

4. Use  and  to move through the list. Press ENTER to select the module where the point you want to disable/enable is located. Select the point to disable or enable on the module. A description of the point should display. The fourth line of the screen should show "NORMAL" (meaning that the point is currently enabled) or "DISABLED" (the point is currently disabled). Press  to toggle between NORMAL and DISABLE.

8.4.6 View Event History

Use the View Event History feature to display events on LCD. From the Main Menu, press 3 to select Event History. Events will begin displaying with most recent events first.

The panel can store up to 1000 events. When it reaches its 1000-event capacity, it begins deleting, starting with the oldest events.

If a printer is attached to the system (via a Module 5824 Serial/Parallel Interface), you can print event history (see Section 8.4.19).

The 5660 SKSS can be used to retain more than 1000 events and to create event history reports.

8.4.6.1 To clear the event history

From the main menu select 1 for System Tests. From the test menu select 6 Clear History Buffer.

8.4.7 Conduct a Fire Drill

1. From the Main Menu, press 1 for System Tests.
2. Press 1 for Fire Drill. You will be prompted to press ENTER.
3. The drill will begin immediately after you press ENTER.
4. Press any key to end the drill. (If you do not press any key to end the fire drill manually, it will time out automatically after ten minutes.)

If a fire drill switch has been installed, activating the switch will begin the drill; deactivating the switch will end the drill.

8.4.8 Conduct an Indicator Test

The indicator test checks the annunciator LEDs and the PZT sounder.

1. From the Main Menu, press 1 for System Tests.
2. Press 2 for Indicator Test. The system turns on each LED and beeps the PZT. A problem is indicated if any of the following occurs:
 - An LED does not turn on
 - You do not hear a PZT beep

The test will time out after 15 minutes or you can press any key on the annunciator to end the test manually. When the test ends, you will be returned to the System Test Menu.

8.4.9 Conduct a Walk Test

1. From the Main Menu, press 1 for System Tests.

IMPORTANT!

If any alarm verification zones are being used, the user will be asked if they wish to disable alarm verification during walk test. This occurs for either walk test option.

2. Select 3 for Walk Test-No Rpt. The LCD will display “WALK TEST STOPPED” on Line 1 and “ENTER = start test” on Line 3. If you select this option, central station reporting will be disabled while the test is in progress.

Select 4 for Walk Test-with Rpt. The LCD will display “WALK TEST STOPPED” on Line 1 and “ENTER = start test” on Line 3. If you select this option, central station reporting will occur as normal during the walk test.

The panel generates a TEST report to the central station when the walk test begins. During a walk test, the panel’s normal fire alarm function is completely disabled, placing the panel in a local trouble condition. All zones respond as 1-Count zones (respond when a single detector is in alarm) during a walk test. Each alarm initiated during the walk test will be reported and stored in the event history buffer.

3. Enter the number of seconds you want the notification appliance circuits to sound. From 6 to 180 seconds.
4. Press ENTER to end the walk test. The system will reset. The panel will send a “TEST RESTORE” report to the central station.

If you do not end the walk test manually within four hours, it will end automatically. If an alarm or pre-alarm condition is occurring in the system, you will not be able to enter the walk test.

Note: the panel does not do a full 30 second reset on resettable power outputs. As soon as the device is back to normal, the panel is ready to go to the next device.

8.4.10 Conduct a Dialer Test

1. From the Main Menu, press 3 for System Tests.
2. Select 5 for Dialer Test. The screen will display “Manual dialer test started”. When the test is completed, you will be returned to the <Test Menu>.

8.4.11 Silence alarms or troubles

Press SILENCE and enter your code or rotate the key at the prompt. If an external silence switch has been installed, activating the switch will silence alarms or troubles. If you are already using system menus when you press SILENCE, you will not need to enter your code or rotate the key.

Note: Alarm and trouble signals that have been silenced but the detector remains un-restored will un-silence every 24 hours until it is restored.

8.4.12 Reset alarms

Press RESET and enter your code or rotate the key at the prompt. If an external reset switch has been installed, activating the switch will reset alarms. If you are already using system menus when you press RESET, you will not need to enter your code or rotate the key.

8.4.13 Check Detector Sensitivity Through Point Status

The control panel constantly monitors smoke detectors to ensure that sensitivity levels are in compliance with NFPA 72.

If sensitivity for a detector is not in compliance, the panel goes into trouble, generating a CAL TRBLE condition. A detector enters a CAL MAINT state to indicate that it is approaching an out of compliance condition (but is currently still in compliance).

When a CAL TRBLE condition occurs, the central station receives a detector trouble report (“373” and the zone or point for Contact ID format; “FT” and the zone or point in SIA format).

To check sensitivity for an individual detector, follow the steps below. Section 8.4.19 provides instructions for printing the status of all detectors in the system.

1. From the Main Menu, press 2 for Point Functions.

2. Press 2 for Point Status.
3. Select the module where the point you want to check is located.
4. Enter the number of the point you want to check and press ENTER.
5. A screen similar to those shown in Figure 8-3 will display.

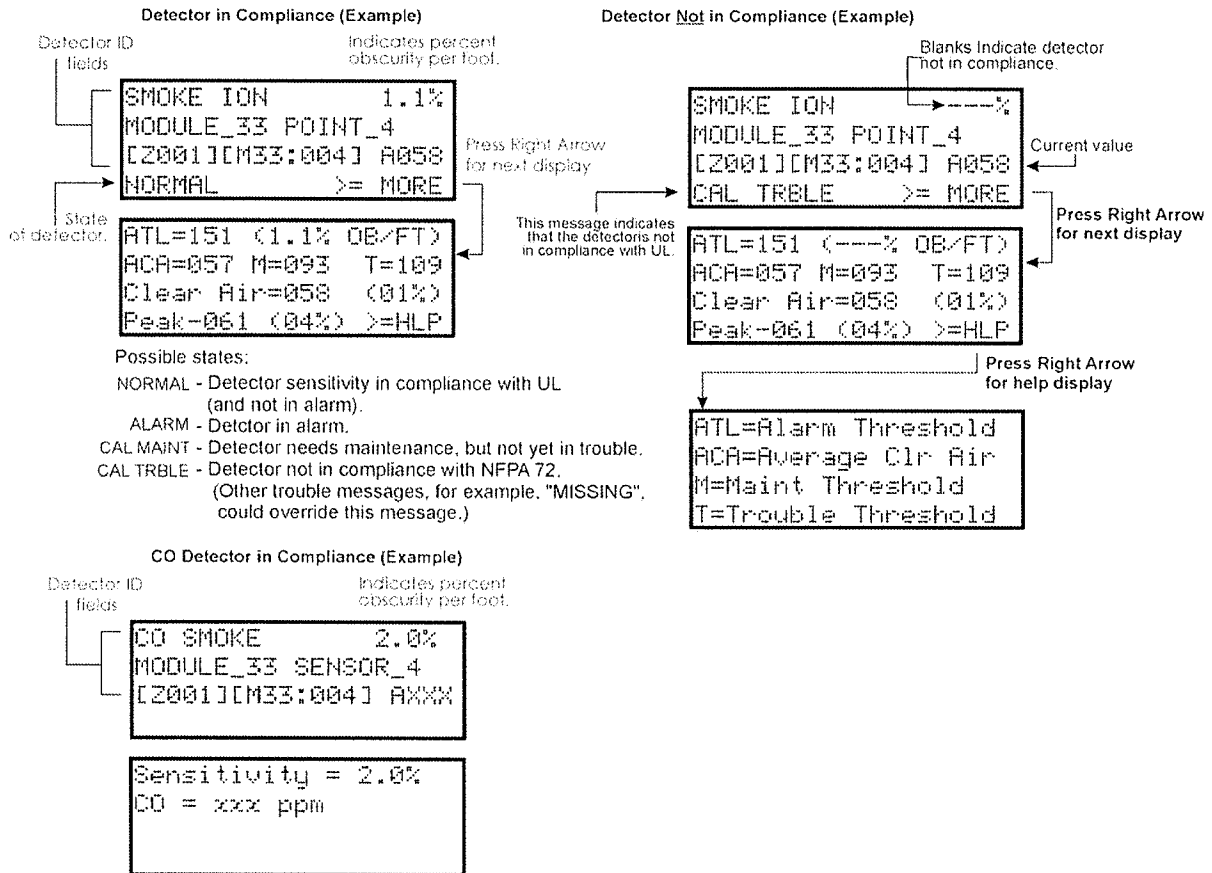



Figure 8-3 Checking Detector Sensitivity Compliance

If a printer is attached to the system (via a Module 5824 Serial/Parallel Interface), you can print detector status (see Section 8.4.19).

8.4.14 View Status of a Point

1. From the Main Menu, select 2 for Point Status.
2. From the list that displays, press ENTER to select the module where this point is located. The screen that displays will show you if the point has a trouble and will provide sensitivity compliance information. (See Section 8.4.13 for complete information about detector sensitivity compliance.)

8.4.15 View Alarms, Supervisories or Troubles

When the system is in alarm, supervisory or trouble, you can press  to view the location of an alarm, supervisories or trouble.

8.4.16 View System Information

Press 8 from the Main Menu to view the panel model and serial number and system version number and date. Press the left arrow to return.

8.4.17 Reset dialer

From the Main Menu, select 6. The LCD will display “Dialer reset in progress...”

” You will be returned to the Main Menu when the reset is completed.

8.4.18 Communicating with a Remote Computer

An installer at the panel site can initiate communications between the panel and a computer running the Silent Knight Software Suite. You can use this feature to upload a panel configuration. For example, if you have made programming changes to an installation on site using an annunciator, you can send your changes to the computer, so that the central station will have the latest data about the installation. To initiate communication, follow the steps below.

1. From the Main Menu, select 9 for Up/Download.
2. From the next screen that displays, select the communication device. Options are:

1 = Internal Modem	If you select this option, you will use the panel's built-in modem to call the computer.
2 = RS232 connection	If you select this option, the panel and a computer are both on-site connected via a 9-pin straight-through serial cable.
3. If you are using the panel's internal modem to communicate, you will be prompted to enter a phone number. If you are communicating via the RS232 connection, a phone number is not needed and this step will be skipped.

If the phone number you will be calling is already displayed, press ENTER. Continue with Step 4.

If the phone number you will be calling is not already displayed, enter the number and press ENTER. A phone number can be up to 24 digits long and can contain the following special characters.

#	Pound (or number) key on the telephone
*	Star key on the telephone
,	Comma (character for 2-second pause)

Use the number buttons on the annunciator or the up- and down-arrow keys to select special characters. Characters begin displaying after “9”.

4. You will be prompted to enter an account number. If the account number you want to use is already displayed, just press ENTER to begin communication.

If the account number displayed is not the correct one, enter the account number and press ENTER to begin communication or view the next screen.
5. If you are using the panel's internal modem to communicate, you will be prompted to select a modem speed. Press ENTER on a speed to begin communication.
6. The panel will attempt to communicate with the computer. If communication was established, the upload task you created will be placed on the Downloading Software job queue, awaiting processing. When processing is completed, an “Unsolicited Upload” task will appear in the queue.

8.5 Operation Mode Behavior

The control panel can be in one of seven conditions at any given moment: Normal, Alarm, Prealarm, Supervisory, Trouble, Silenced, and Reset. Table 8-1 describes the behavior of the panel in each of these modes.

Table 8-1: Operation Modes of FACP

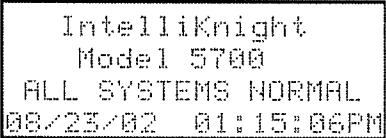


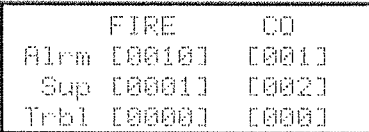

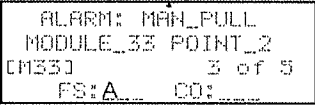
Operation Mode	Occurs When	System Behavior	In This Mode You Can
Normal	No alarm, supervisories or trouble condition exists and menus are not in use.	<p>SYSTEM POWER LED is on.</p> <p>The All Systems Normal display indicates that the system is in normal mode.</p>  <p>The current date and time display on the last line of the LCD.</p>	Enter the appropriate code, or rotate the key to activate the Main Menu.
Alarm	<p>A smoke detector goes into alarm or a pull station is activated.</p> <p>CO detector goes into alarm.</p> <p>If more than 3 categories are active at a single time screen will display as shown.</p>	<p>The dialer seizes control of the phone line and calls the central station.</p> <p>The on-board annunciator sounds a loud, steady beep (any notification devices attached to the system will also sound).</p> <p>GENERAL ALARM LED flashes.</p> <p>The LCD displays a screen similar to this one.</p> <p>Count of alarms in the Fire system In this example there are 5</p> <p>FS= Fire System</p>  <p>Press the down arrow to view the type and location of alarm. (Message alternates with the date/time display.)</p> <p>CO = CO Detector</p> <p>Count of CO Detectors in alarm on the system In this example there is 1</p>  <p>Press the down arrow to view the type and location of alarm. (Message alternates with the date/time display.)</p> 	<p>Press the down arrow to view the alarm. A screen similar to this one displays.</p> <p>Module and Point name Device type</p>  <p>Zone name</p> <p>Shows which event is currently being displayed. In this example, there are 5 alarms, the third is being displayed.</p> <p>Press SILENCE and enter an access code (or activate the key) to silence the annunciator (and any notification devices attached to the system).</p> <p>When the alarm condition clears, press RESET and enter a code (or activate the key) to restore the panel to normal.</p> <p>After sitting idle, events will display in a screen similar to this:</p> <p>Device type</p>  <p>3rd line Blinks between time/date & Mod/Amp</p> <p>Alarm Sur Trbl Alarm Sur Trbl</p> <p><i>Note: Alarm and Prealarm are combined into a single alarm count</i></p>

Table 8-1: Operation Modes of FACP

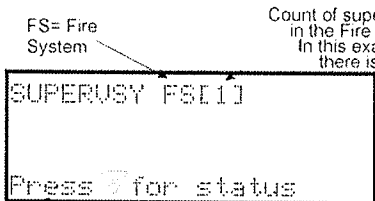
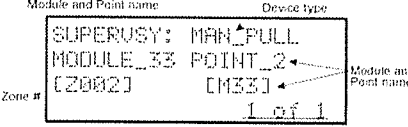

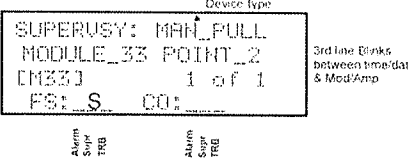
Operation Mode	Occurs When	System Behavior	In This Mode You Can
Supervisory	The system detects a supervisory condition.	<p>The dialer seizes control of the phone line and calls the central station.</p> <p>The on-board annunciator sounds a loud, pulsing beep in the sequence one second on, one second off.</p> <p>SUPERVISORY LED flashes.</p> <p>The LCD displays a screen similar to this one.</p> 	<p>Press down arrow to view the supervisory condition. A screen similar to this one displays.</p>  <p>Press SILENCE and enter an access code (or activate the key) to silence the annunciator.</p> <p>Once the supervisory condition has been corrected, the system will restore itself automatically.</p> <p>After sitting idle, events will display in a screen similar to this:</p>
	The system detects a supervisory condition with a CO detector	<p>Press the down arrow to view the type and location of alarm.</p>  <p>Press the down arrow to view the type and location of alarm. (Message alternates with the date/time display.)</p>	

Table 8-1: Operation Modes of FACP

Operation Mode	Occurs When	System Behavior	In This Mode You Can
Trouble	A system trouble condition occurs.	<p>The dialer seizes control of the phone line and calls the central station.</p> <p>The on-board annunciator sounds a loud, pulsing beep in the sequence one second on, nine seconds off.</p> <p>SYSTEM TROUBLE LED flashes.</p> <p>The LCD displays a screen similar to this one.</p> <div style="text-align: center;"> </div> <p>Press the down arrow to view the type and location of trouble condition. (This message alternates with the date / time display.)</p> <div style="text-align: center;"> </div> <p>Press the down arrow to view the type and location of trouble condition. (This message alternates with the date / time display.)</p>	<p>Press down arrow to view the trouble. A screen similar to this one displays.</p> <div style="text-align: center;"> </div> <p>Press SILENCE and enter an access code (or activate the key) to silence the annunciator.</p> <p>Once the trouble condition has been fixed, the system will restore itself automatically.</p> <p>After sitting idle, events will display in a screen similar to this:</p> <div style="text-align: center;"> </div>
Prealarm	A single detector trips in a 2-Count zone. (2-Count means two detectors must trip before an alarm is reported.)	<p>Touchpad PZT beeps.</p> <p>The LCD displays a screen similar to this one.</p> <div style="text-align: center;"> </div> <p>Press the down arrow to view the type and location of prealarm. (Message alternates with the date/time display.)</p>	<p>Press down arrow to view the prealarm. A screen similar to this one displays.</p> <div style="text-align: center;"> </div> <p>All system operations are available in this mode.</p> <p>After sitting idle, events will display on a screen similar to this:</p> <div style="text-align: center;"> </div> <p><i>Note: Alarm and Prealarm are combine into single alarm count.</i></p>

Table 8-1: Operation Modes of FACP

Operation Mode	Occurs When	System Behavior	In This Mode You Can
Reset	The RESET button is pressed followed by a valid code or rotation of the key.	All LEDs are on briefly then the LCD displays "ALARM RESET IN PROGRESS". If the reset process completes normally, the date and time normal mode screen displays.	Menus are not available during the reset process.
Silenced	An alarm or trouble condition has been silenced but still exists. To silence alarms and troubles, press SILENCE followed by the Installer or User Code or rotate the key.	SYSTEM SILENCE LED is on. SYSTEM TROUBLE, SUPERVISORY or GENERAL ALARM LED (depending on condition) is on. The annunciator (and any notification devices attached to the system) will be silenced.	Press down arrow to view the location of the alarm or trouble. When the condition no longer exists, the SYSTEM SILENCED and SYSTEM TROUBLE LED, SUPERVISORY or GENERAL ALARM LEDs turn off.

8.6 Releasing Operations

This control panel supports two types of releasing, Double Interlock Zone, and Single Interlock Zone. The Double Interlock Zone operation requires an interlock switch input in the system, and the Single Interlock does not. An interlock switch is typically a dry-contact pressure switch.

Important!

These releasing functions can only be done if the system has a 5496 intelligent power module included.

When a Single or Double Interlock Zone releasing is selected the system will automatically default the 5496 Intelligent Power Module in the following system parameters:

Note: The defaults created can be modified through programming if desired.

- Output Group 2 is created. Output Group 2 will be defaulted as an "Alarm" output group for all releasing zones. NAC [01:001] is assigned to Output Group 2.
- Output Group 3 is created. Output Group 3 will be defaulted as a "Pre-Alert" output group for all releasing zones. NAC [01:002] is assigned to Output Group 3.
- Output Group 4 is created. Output Group 4 will be defaulted as a "Release" output group for all releasing zones. NAC circuit [01:003] is assigned to Output Group 4.

Note: The installer must define which input points will be used for detectors, manual release switches, or interlock/pressure switches.