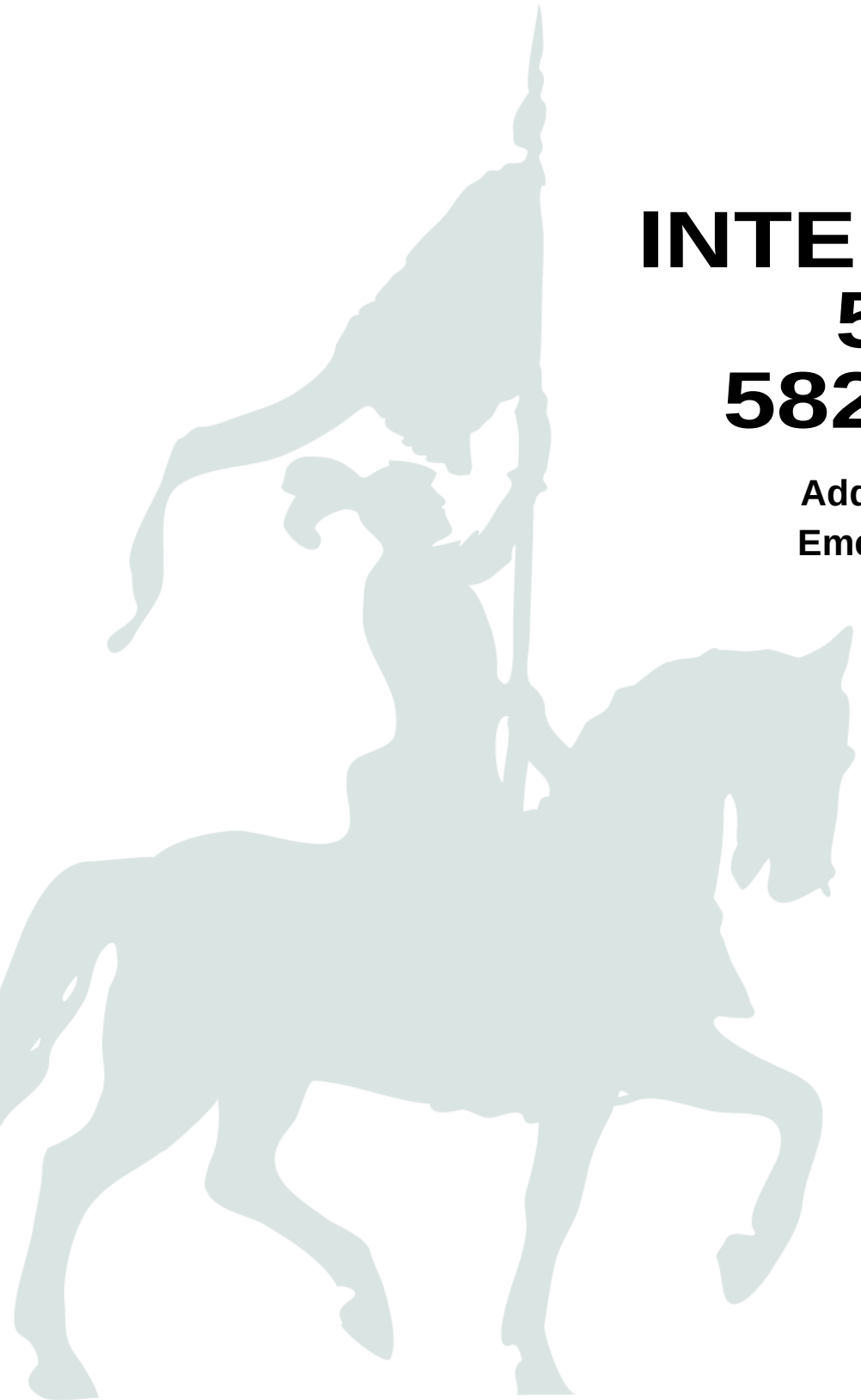
SILENT KNIGHT
by Honeywell

INTELLIKNIGHT 5820XL 5820XL-EVS

Addressable Fire System
Emergency Voice System



Installation and Operations Manual Sections 8 / 9 / 11

Document LS10061-001SK-E
01/29/2015 Rev: **F**

P/N LS10061-001SK-E:F ECN: 14-0574

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 User and Installer Default Codes

User Code (factory-programmed as 1111).

Installer Code (factory-programmed as 5820).

8.2 Annunciator Description

Figure 8-1 shows the annunciator that is part of the control panel board assembly.

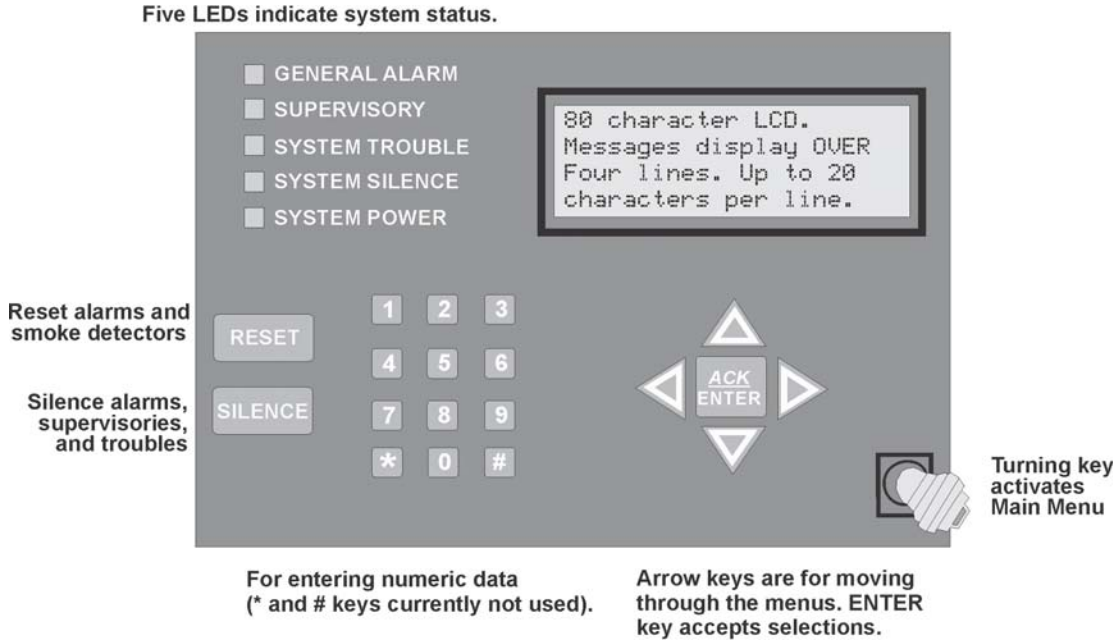


Figure 8-1 Control Panel Annunciator

8.2.1 LCD Display

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). A custom message can be created that will display instead of

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

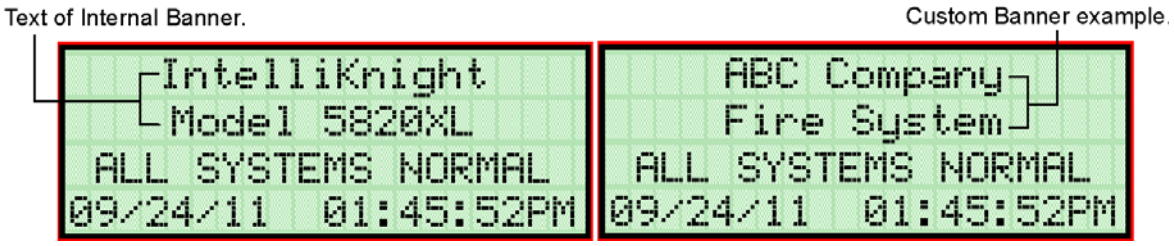


Figure 8-2 Banner Display Examples

8.3 Key Operation

The key on the control panel board assembly is for accessing the Main Menu. The key is activated when it is turned once to the right (clockwise). If the key has been used to activate the menu, it must be turned counter-clockwise to exit the menu.

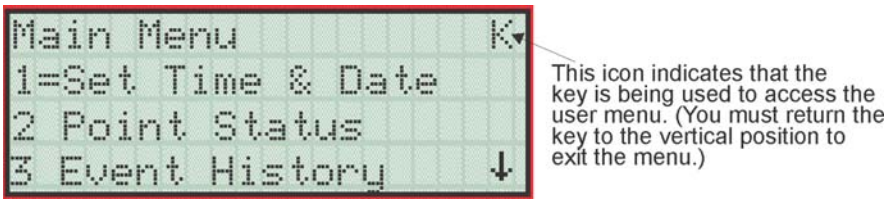


Figure 8-3 Using a Key to Access the Main Menu

8.4 Menu System

The control panel is easy to operate from the 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 8.4.1. 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).

8.4.1 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	Access to Fire Drill, Indicator Test, Walk Tests, Dialer Test, Clear History Buffer, and Manual Dialer Reset.
2- Point Functions	Enable/disable points, Point Status, Set SLC Address, Device Locator, and I/O Point Control.
3- Event History	Display event history on the LCD. See Section 8.5.4 for more information.
4- Set Time & 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 module 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 number, serial number, revision number and date.
9- Up/Download	Initiate communication between the panel and a computer running the Silent Knight Software Suite.

8.4.2 Using the Menus

To move through the menus:	Use the ▲ or ▼ to move through the options in a menu. Use the left arrow to move to a previous menu.
To select an option:	Enter the number of the option. –OR– Press ENTER (Enter key) if the option has the = symbol next to it.

8.5 Basic Operation

8.5.1 Setting Time and Date

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

8.5.2 Disable / Enable a Point

1. From the Main Menu, select 2 for Point Functions.
2. Select 1 for Disable/Enable Point. A list of modules displays.
3. Use the ▲ or ▼ arrow 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 the right arrow to toggle between NORMAL and DISABLE.

8.5.2.1 Disable / Enable NACs by Template

1. Press 1 for Disable NACs by Template, press 2 to Enable NACs by Template.
2. Use the ▲ or ▼ arrow to move through the list of templates. Press ENTER to select the current template.

8.5.3 Disable / Enable NACs by Group

1. Select 1 for Disable/Enable Pt.
2. Select 3 to Disable NACs by group or 4 to Enable NACs by group.
3. Use the ▲ or ▼ arrow to move through the list of groups. Press ENTER to select the group highlighted.

8.5.3.1 Disable / Enable Zone Points

1. Press 5 to Disable Zone Points, press 6 to Enable Zone Points.
2. Use the ▲ or ▼ arrow to move through the list of zones. Press ENTER to select the zone highlighted.

8.5.4 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 module), you can print event history (see Section 8.5.18).

The 5660 SKSS or 5670 SKSS can be used to retain more than 1000 events and to create event history reports.

8.5.5 To clear the event history

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

8.5.6 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.

8.5.7 Conduct an Indicator Test

The indicator test checks the annunciator LEDs, PZT, and LCD display.

1. From the Main Menu, press 1 for System Tests.
2. Press 2 for Indicator Test. The system turns on each LED several times, beeping the PZT as it does so. At the same time it scrolls each available character across the LCD. A problem is indicated if any of the following occurs:

- An LED does not turn on;
- You do not hear a beep;

- All four lines of the LCD are not full.

This test takes approximately 15 seconds to complete. You can press any key to end manually while the test is still in progress. When the test ends, you will be returned to the <Test Menu>.

8.5.8 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 Report. The LCD will display “WALK TEST STOPPED” on Line 1 and “ENTER = start test” on Line 3. Enter the time period you wish the NAC circuit to be active for each alarm (06 to 180 seconds). If you select this option, central station reporting will be disabled while the test is in progress.

   Or
   Select 4 for Walk Test-with Report. The LCD will display “WALK TEST STOPPED” on Line 1 and “ENTER = start test” on Line 3. Enter the time period you wish the NAC circuit to be active for each alarm (06 to 180 seconds). 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. 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.

8.5.9 Conduct a Dialer Test

1. From the Main Menu, press 1 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>.

8.5.10 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 the detector is restored.

Note: For EVS system, pressing silence at an LOC will only silence the System in Control. See Section 9.8.1.

8.5.11 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.

Note: For EVS Systems, pressing reset at an LOC will prompt asking which system to reset.

8.5.12 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 8.5.18 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 8-4 will display.

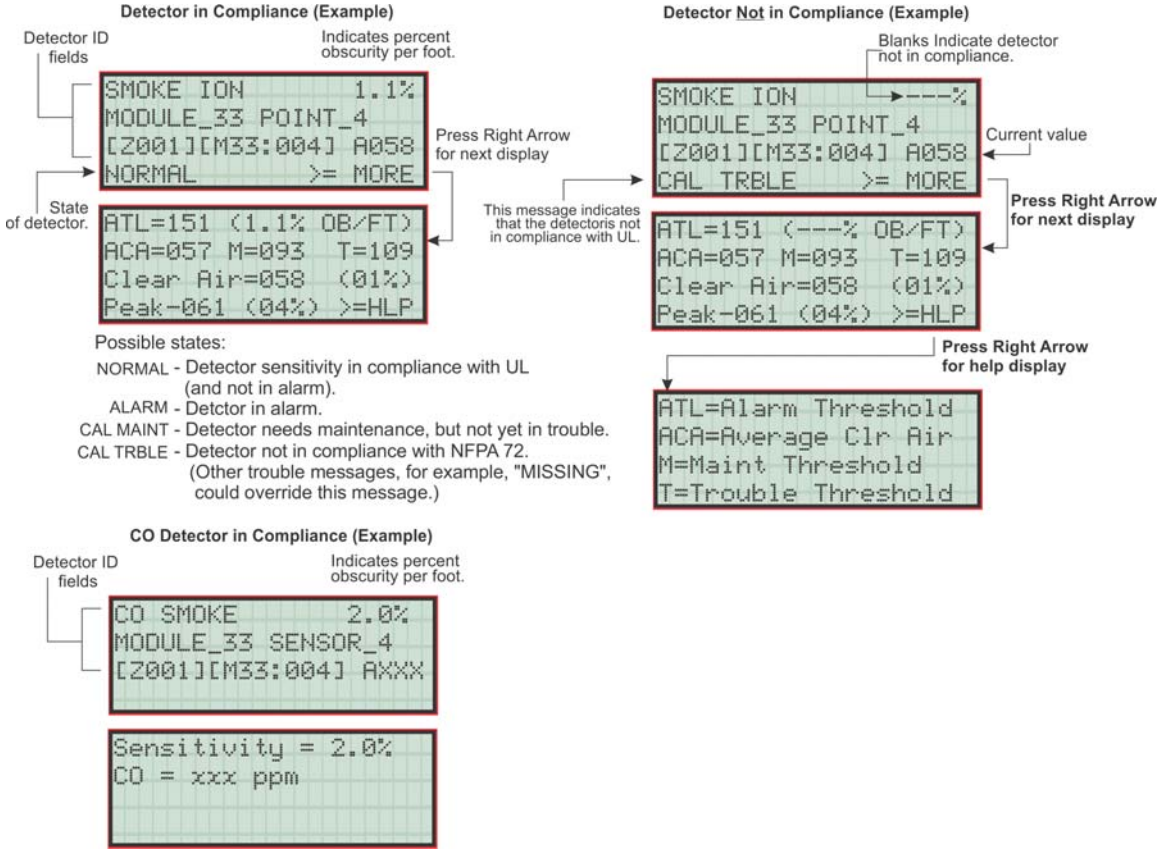


Figure 8-4 Checking Detector Sensitivity Compliance

If a printer is attached to the system (via a 5824 serial/parallel interface module), you can print detector status (see Section 8.5.18).

8.5.13 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. Next, enter the point to display. The screen that displays will show you if the point has a trouble and will provide sensitivity compliance information. (See Section 8.5.12 for complete information about detector sensitivity compliance.)

8.5.14 View Alarms, Supervisories or Troubles

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

8.5.15 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 to the main menu.

8.5.16 Reset Items

From the Main Menu, select 6 for Reset Items.

8.5.16.1 Reset Dialer

This options allows the user to Reset the Dialer. The LCD will display:

“Dialer Reset in progress… Please Wait“

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

8.5.16.2 Reset DSP USB

This options allows the user to reset both the DSP Controller and USB interface logic. The LCD will display:

“Dialer Reset in progress… Please Wait“

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

8.5.17 Communicating with a Remote Computer

An installer at the panel site can initiate communications between the panel and a computer running SKSS 5660. 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. See the software manual for more information (PN 151240).

To initiate communication:

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 40 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. Special 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 or view the next screen.

   If the account number displayed is not the correct one, enter the account number and press ENTER to begin communication.

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 in the SKSS 5660 job queue, awaiting processing. When processing is completed, an “Unsolicited Upload” task will appear in the queue.

8.5.18 Working with a Printer

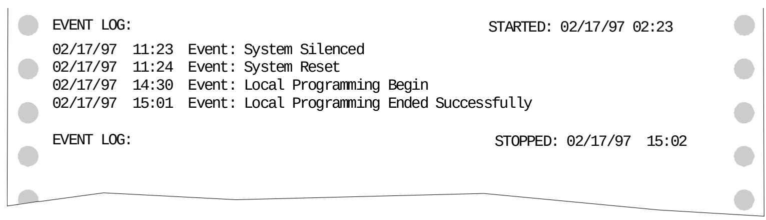
If you are using the Model 5824 serial/parallel interface module, several printing options are available. See Section 4.7 for information about installing the 5824.

1. From the Main Menu, select 5 Printer Options.
2. From the next screen, select the 5824 module where the printer is connected.
3. If the printer is not currently busy printing another report, a screen with the following options will be available. If the printer is busy, a message will display. You can press 1 to cancel the current print job. These options will then display.

1= Event Logging

Enables event logging, which causes the printer to continuously print events as they occur. The date/time will print in 24-hour military format. Once event logging is enabled, it will remain enabled until canceled by the installer. If you need to disable event logging, return to this option and press 1 to disable.

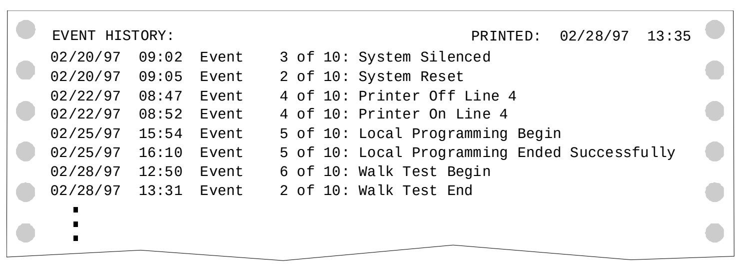
Sample Event Log



2 = Print Event History

Prints the up-to-1000 events currently stored in the panel's event history buffer. Events print starting with the newest. The date and time printed will be when the event actually occurred and will print in 24-hour military format.

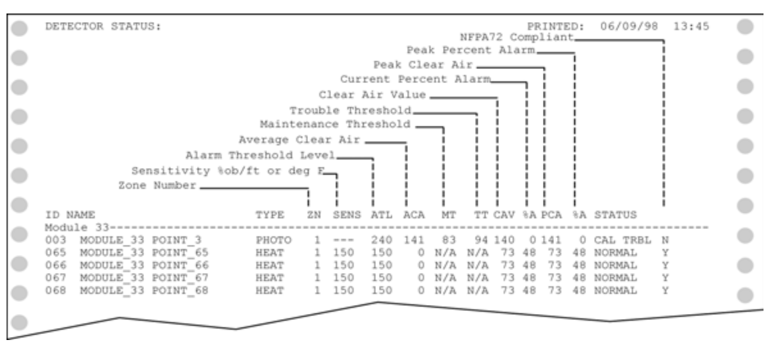
Sample Event History Print-Out



3 = Print Detector Status

Prints the current status of all detectors in the system. This is a method for finding out if any detectors are out of NFPA compliance or any detectors need maintenance (are approaching an out of compliance condition).

Sample Detector Status Print-Out



Note: Detector status can also be viewed and printed using the 5660 SKSS

4 = Print System Cfg

Prints the current system configuration of the panel. The entire configuration can be printed, or just specific sections.

8.6 Operation Mode Behavior

Table 8-1

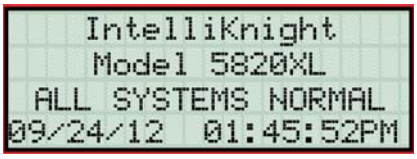
Operation Mode	Occurs When	System Behavior	In This Mode You Can
Normal	No alarm or trouble condition exists and menus are not in use.	SYSTEM POWER LED is on. The All Systems Normal display indicates that the system is in normal mode. 	Enter the appropriate code to activate the User or Installer Menu, or rotate the key to activate the User Menu.

Table 8-1

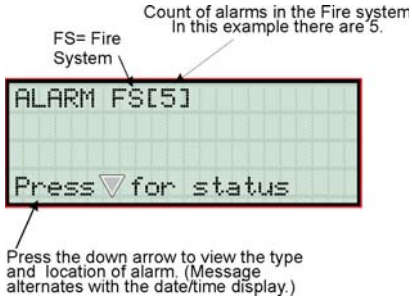
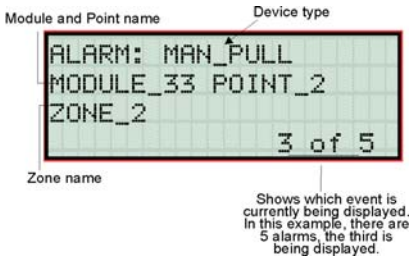
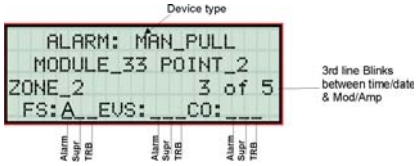
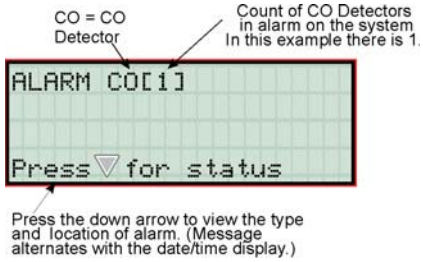
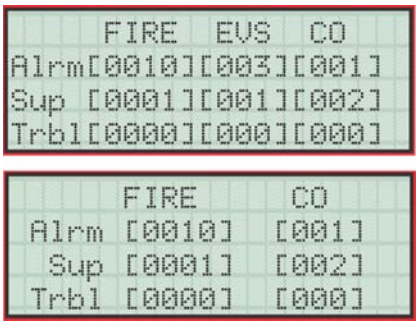
Operation Mode	Occurs When	System Behavior	In This Mode You Can
Alarm	A smoke detector goes into alarm or a pull station is activated.	The dialer seizes control of the phone line and calls the central station. The on-board annunciator sounds a loud, steady beep (any notification devices attached to the system will also sound). GENERAL ALARM LED flashes. The LCD displays a screen similar to this one. 	Press the down arrow to view the alarm. A screen similar to this one displays. .  Press SILENCE and enter an access code (or activate the key) to silence the annunciator (and any notification devices attached to the system). When the alarm condition clears, press RESET and enter a code (or activate the key) to restore the panel to normal. After sitting idle, events will display in a screen similar to this:  ***Note:*** Alarm and Prealarm are combines into single alarm count.
	CO Detector goes into Alarm.		
	EVS LOC or point alarm.		
	If more than 3 categories are active at a single time and EVS is enabled, top screen will display. If EVS in not enabled, it will look like bottom screen.		

Table 8-1

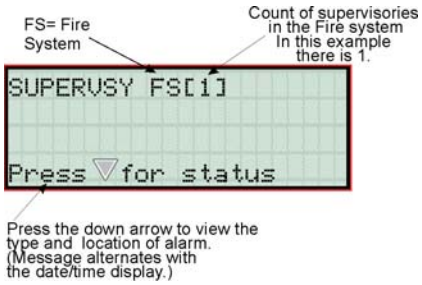
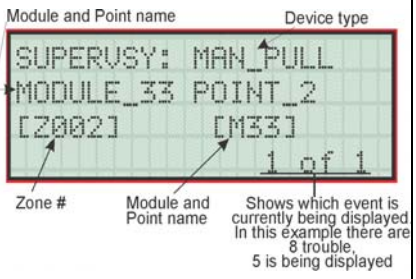
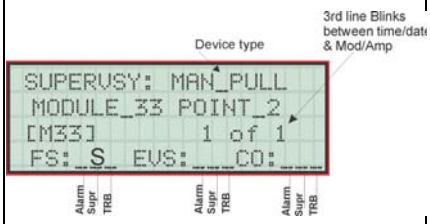
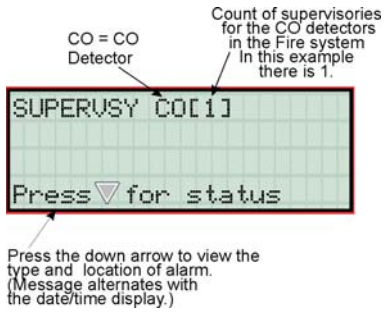
Operation Mode	Occurs When	System Behavior	In This Mode You Can
Supervisory	The system detects a supervisory condition.	The dialer seizes control of the phone line and calls the central station. The on-board annunciator sounds a loud, pulsing beep in the sequence one second on, one second off. SUPERVISORY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

Table 8-1

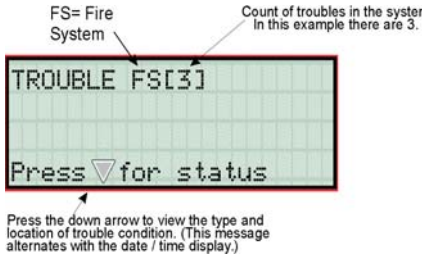
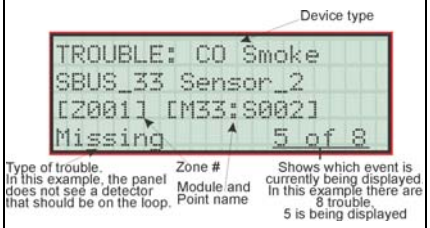
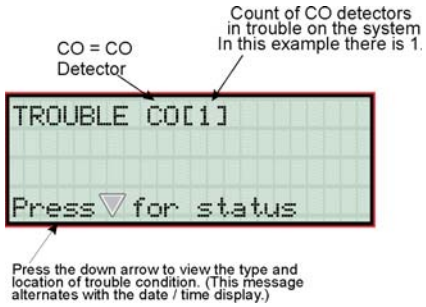
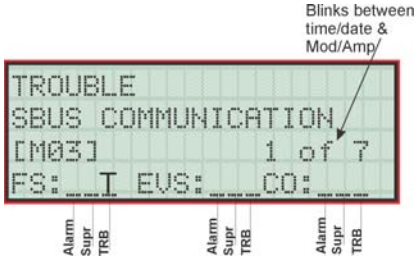
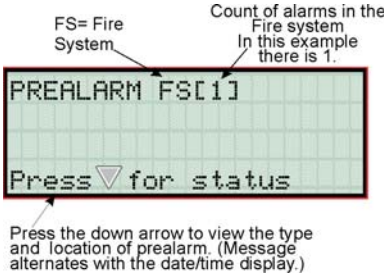
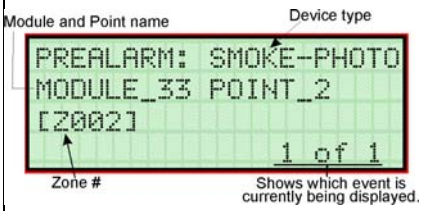
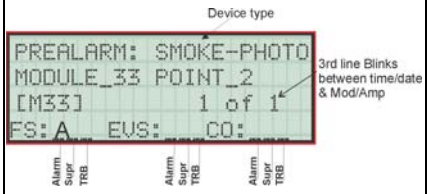
Operation Mode	Occurs When	System Behavior	In This Mode You Can
Trouble	A system trouble condition occurs.	The dialer seizes control of the phone line and calls the central station. The on-board annunciator sounds a loud, pulsing beep in the sequence one second on, nine seconds off. SYSTEM TROUBLE LED flashes. The LCD displays a screen similar to this one. 	Press down arrow to view the trouble, A screen similar tot his one display.  Press SILENCE and enter an access code (or activate the key) to silence the annunciator. Once the trouble condition has been fixed, the system will restore itself automatically. After sitting idle, events will display in a screen similar to this:
	Trouble condition with a CO detector		
	Trouble condition with the EVS system.		

Table 8-1

Operation Mode	Occurs When	System Behavior	In This Mode You Can
Prealarm	A single detector trips in a 2-Count zone. (2- Count means two detectors must trip before an alarm is reported.)	Touchpad PZT beeps. The LCD displays a screen similar to this one. 	Press down arrow to view the prealarm. A screen similar to this one displays.  All system operations are available in this mode. After sitting idle, evens will display on a screen similar to this: 
Reset (Fire Alarm Only)	The RESET button is pressed followed by a valid code or rotation of the key	All LEDs are on briefly then the LCD displays “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.
Reset (EVS and Fire)	The RESET button is pressed.	All LEDs are on briefly then the LCD displays “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 (EVS and Fire)	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.

8.7 Releasing Operations

The 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 zone does not. An interlock switch is typically a dry-contact pressure switch.

When Single or Double Interlock Zone releasing is selected, the system will automatically default the following system parameters:

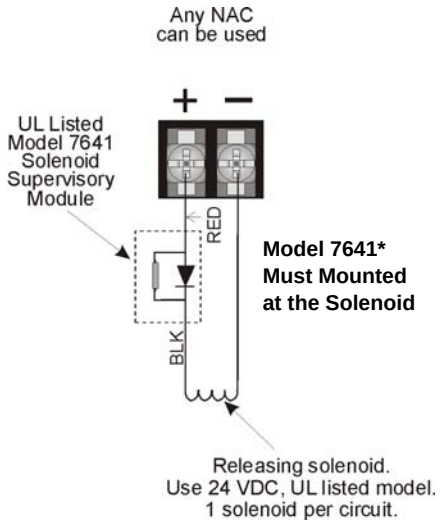
Note: The defaults created can be modified through programming if desired.

- Output Group 2 is created. Output Group 2 will be defaulted as an "Alarm" output group for all releasing zones. NAC [34:001] is assigned to Output Group 2.
- Output Group 3 is created. Output Group 3 will be defaulted as an “Pre-Alarm” output group for all releasing zones. NAC [34:002] 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 [34:003] 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.

Table 8-2: Approved Releasing Solenoids

Manufacturer	Part Number	Rating	Current	Freq
Asco	T8210A107	24 VDC	3A max	0 Hz
	8210G207	24 VDC	3A max	0 Hz



*Order as P/N 7641B

Figure 8-5 Wiring Configuration for Solenoid

Do not mix cross alarming zones with smoke verification zones. There must be at least two automatic detection devices in each protected space. Spacing must be reduced to 0.7 times the linear spacing in accordance with NFPA 72. See Section 7.3 for zone option programming.

8.7.1 Single Interlock Zone Releasing

A single interlock zone utilizes a minimum of two addressable detectors and a designated manual release switch.

Important!
Only addressable detectors can be used. No conventional detectors can be used.
Each Single Interlock Zone input requires at least one manual release switch.

Conditions Required for an Pre-Alarm Output Activation

If any single addressable detector is activated, the “Pre-Alarm” output will activate. This alerts the user that the initial stages required for a release condition are present. (Also refer to Table 8-3.)

Conditions required for an General Alarm and Release Output Activation

If two or more addressable detectors, or a manual release switch activate, the “Alarm” and the “Release” outputs will activate and the “Pre-Alarm” output will deactivate. (Also refer to Table 8-3.)

Table 8-3: Single Interlock Zone Operation

Inputs	Output Results							
1st Addressable Detector		x		x		x		x
2nd Addressable Detector			x	x			x	x
Manual Release Station					x	x	x	x
	Normal	**Pre-Alarm**	**Pre-Alarm**	Release and General Alarm	Release and General Alarm	Release and General Alarm	Release and General Alarm	Release and General Alarm

8.7.2 Double Interlock Zone Releasing

A Double Interlock Zone uses a minimum of two addressable detectors, a designated manual release switch, and an interlock switch input. An interlock switch is typically a dry-contact pressure switch and will be referred to as an interlock/pressure switch in this document.

Important!
Only addressable detectors can be used. No conventional detectors can be used.
Each Single Interlock Zone input requires at least one manual release switch.
Each Double Interlock Zone input requires at least one Interlock/pressure switch

Conditions Required for a Pre-Alarm Output Activation

If any single addressable detector is activated, the “Pre-Alarm” output will activate. This alerts the user that the initial stages required for a release condition are present. (Also refer to Table 8-3.)

Conditions Required for a General Alarm Output Activation

If two addressable detectors, a manual release switch is activated, or an interlock switch is active, the “Pre-Alarm”, and “General Alarm” outputs will activate.

Conditions Required for a Release Output Activation

Any release requires the activation of an interlock switch, and either a manual release switch or 2 activated addressable detectors. When these conditions are met, the “Release” and “General Alarm” outputs will activate, and the “Pre-Alarm” output will deactivate.

Table 8-4: Double Interlock Zone Operation

Inputs	**Output Results**															
1st Addressable Detector		x		x		x		x		x		x		x		x
2nd Addressable Detector			x	x			x	x			x	x			x	x
Manual Release Station					x	x	x	x					x	x	x	x
Interlock/Pressure Switch									x	x	x	x	x	x	x	x
	Normal	**Pre-Alarm**	**Pre-Alarm**	**Pre-Alarm and General Alarm**	**Pre-Alarm and General Alarm**	**Pre-Alarm and General Alarm**	**Pre-Alarm and General Alarm**	**Pre-Alarm and General Alarm**	**Pre-Alarm and General Alarm**	**Pre-Alarm and General Alarm**	**Pre-Alarm and General Alarm**	**Release and General Alarm**	**Release and General Alarm**	**Release and General Alarm**	**Release and General Alarm**	**Release and General Alarm**

8.8 Smoke Alarm Verification

Figure 8-6 illustrates how the Smoke Alarm Verification cycle operates.

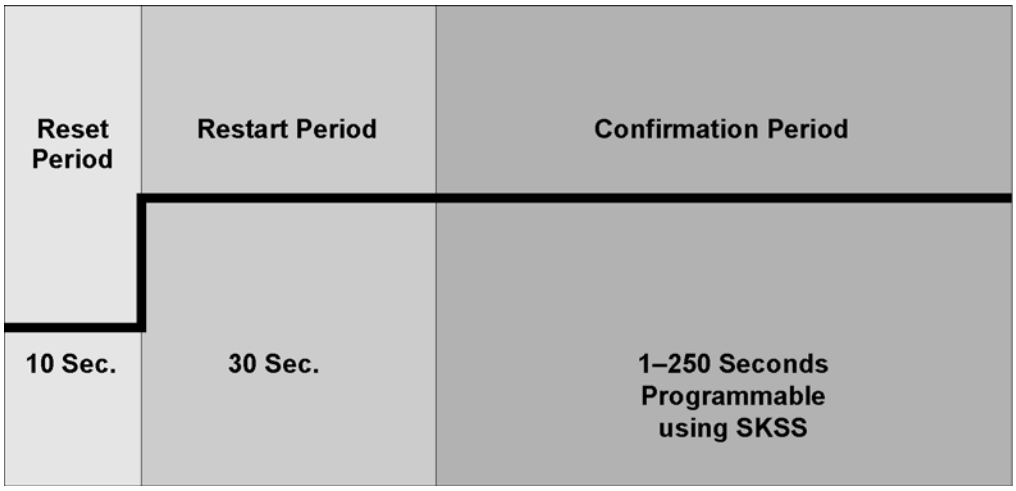


Figure 8-6 Smoke Verification Cycle

During the Confirmation Period if there is no alarm indication then the system will return to normal operation.

Section 9
Emergency Voice System Operation

9.1 Overview

The EVS series control panels and accessories provide features to meet the requirements for Mass Notification Systems as described in NFPA 72 and is compliant with the UL 2572 standard. These features are enabled through a programming option in the fire alarm control panel. EVS (Emergency Voice System) is integrated with the fire alarm and voice evacuation functions of the control panel.

Note: EVS installations are not FM approved.

To start this process, the user gains EVS control. This tells the system that a user is going to be making changes to the EVS; either by activating an EVS event, doing an EVS live page, or resetting EVS. Only one EVS device/ user can have EVS control at any given time and there are rules that will be explained that govern when a device/ user is able to gain control or pass control. Interface keypads are associated with the EVS-VCM or EVS-RVM that are installed together, will provide feedback as to the system's current state or why a user's request for changing the EVS might have been denied.

There are two ways for activating EVS in the 5820XL-EVS panel:

EVS Point Activations

EVS Point Activation involves using pre-determined EVS Alarm input points to activate EVS Alarm events. These events cause output areas to activate based on mapping that is programmed into the system at installation. This is very similar to the traditional mapping that the fire system has utilized to date.

Manual LOC Activations

Manual LOC Activation involves using the LOC EVS interface to activate EVS Events, choose output areas, and speak through a microphone. These selections are not pre-determined and allow the user to make system functionality decisions when the event is actually happening. This requires the activation of Manual EVS State which bypasses EVS Point Activations. See section 9.2.3.

9.2 LOC Functionality

An LOC consists of either the EVS Series panel (EVS-VCM Voice Control Module and the Fire Alarm Control Panel), or the EVS-RCU Remote Command Unit (EVS-RVM Remote Voice Module and its associated 5860 keypad). An LOC is created by adding a VCM or RVM to the system and associating a keypad to it. The LOC provides eight buttons for activating the EVS messages, a button to gain and relinquish EVS Control, and a microphone for live EVS paging. There can be up to five LOC devices in the system.

9.2.1 Keys and LEDs

This section outlines the functionality of the keys and LEDs on the EVS-VCM and EVS-RVM expander modules.

9.2.1.1 EVS Control Key

Pressing the EVS Control Key will do one of two things:

1. Enter Message Mode of the LOC EVS interface (including trying to gain EVSEVS Control if the user doesn't have it already).
2. Relinquish EVS Control if pressed while in Message Mode.

9.2.1.2 EVS Control LED

The EVS Control LED is used to indicate the status of EVS Control in the system. When the LED is on solid, the LOC has EVS Control within the system. When the LED is blinking, another LOC has gained EVS Control in the system.

9.2.1.3 ALL CALL Key

Used to deliver your verbal message to all voice groups.

1. Key the microphone, press the All Call Key, wait for the Ready-to-Talk LED to light, and then deliver your verbal message.

9.2.1.4 NON-ACTIVE CALL Key

Used to deliver your verbal message to all non-activated output groups.

1. Key the microphone, press the Non-Active Call Key, wait for the Ready-to-Talk LED to light, and then deliver your verbal message.

9.2.1.5 EVS Message Keys

EVS Message Keys are used in Message Mode to select which EVS Message is to be played. If pressed when the LOC does not have EVS Control, the system will automatically try to gain EVS Control before allowing the EVS Event to be activated. See section 9.2.2.

9.2.1.6 EVS Message LEDs

The red EVS Message LEDs indicate the active EVS Message and any previously active EVS messages. The green LEDs indicate the EVS Message was selected in message mode and that the LOC has EVS control.

1. For EVS Point Activation, the red EVS Message LEDs will illuminate on each LOC to indicate which EVS messages have been activated in automatic EVS state.
2. In Manual EVS State, the red EVS Message LEDs will indicate which EVS message has been activated at an LOC. See section 9.2.3.
3. The green EVS Message LEDs will activate for the LOC that activated the EVS Message.

9.2.1.7 Select Keys

The Select Keys are used to toggle which output areas are active.

1. If Message Mode is active (see Section 9.2.3), the Select Keys will toggle which areas the active message is distributed to (also toggles the red Select Key LED).
2. If Microphone Mode is active (see Section 9.2.3), the Select Keys will toggle which areas the microphone audio is distributed to (also toggles the green Select Key LED).

9.2.1.8 Select Key LEDs

The Select Key LEDs are used to indicate which output areas are active for a microphone page (see Section 9.9.5) or system events.

1. Green LEDs: active areas for microphone paging.

Note: These are only active when the microphone PTT is engaged.

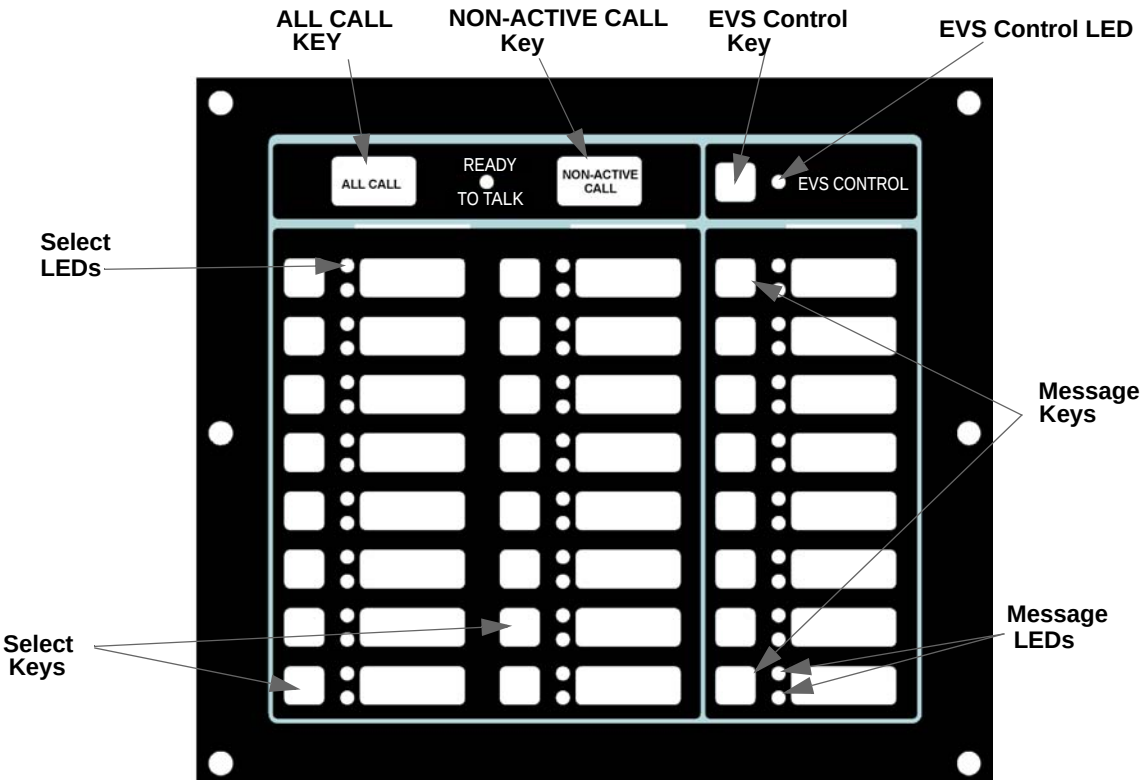


Figure 9-1 EVS Front View

9.2.2 Gaining EVS Control

When attempting to gain EVS Control, there are three things that govern whether or not EVS Control can be obtained:

1. LOC Priority.
2. LOC Lockout.
3. User profile access control.

9.2.2.1 LOC Priority

LOCs are assigned (through panel or SKSS programming of the EVS-VCM or EVS-RVM) an LOC priority of low, normal, or high. LOCs with a higher priority are always able to gain control from a lower priority LOC.

9.2.2.2 LOC Lockout

When LOCs are programmed to the same priority, the setting LOC lockout applies. LOC lockout will not allow an LOC to gain EVS Control from the LOC with EVS Control until one of three things happen:

1. The LOC lockout timer expires. Once the LOC lockout timer expires, an attempt to gain EVS Control can be made again.

Note: The lockout timer must be programmed to expire sometime other than Never.

2. The user at the second LOC requests EVS Control from the LOC with EVS Control and that LOC grants the request. (See Section 9.2.7). If the EVS lockout timer expires while an EVS Control request is in progress, the system will automatically pass EVS Control to the requesting LOC.
3. The user at the second LOC enters an access code with the EVS Super User profile option.

The LOC lockout timer can be set between immediate and 12 hours in increments of 1 second or it can be set to never expire. The default setting is 30 seconds. The LOC lockout timer is restarted upon any key press at the LOC with EVS control. The LOC lockout timer is cleared when EVS Control is relinquished.

9.2.2.3 User Profile Access Control

The user will need to enter an access code containing the EVS Control Request or EVS Super User profile option to gain EVS Control. EVS Control Request and EVS Super User profile options will be mutually exclusive to the system. If the access code has EVS Super User, the EVS Control Request is ignored and activations by that user are always as EVS Super User.

9.2.3 Manual EVS

After gaining EVS Control the system enters the LOC EVS interface which allows you to activate the Emergency System and allows for Emergency Paging. Once an emergency event has been activated the panel enters a Manual EVS State. In this state, all EVS Alarm programmed points that are currently in alarm in the system are changed to an active state. The display status screen reflects this when viewing the system for status. Any outputs that were activated by the EVS Alarm programmed points are deactivated until Manual EVS state is exited. Only an EVS Reset can exit the Manual EVS State. If a user gains EVS Control at an LOC and does not activate an EVS message, the system will automatically generate an EVS Supervisory indicating such. This prevents an LOC from being in an undesired state of EVS Control when an actual event emerges.

There are two modes for interacting with the LOC EVS interface when in Manual EVS State:

1. Message Mode
2. Microphone Mode

These two modes allow you to quickly toggle areas of output for a desired message and toggle output areas to speak to for microphone EVS Paging.

After gaining EVS Control, the system is in Message Mode of the Manual EVS State.

9.2.3.1 Switching between Microphone Mode and Message Mode

At any time while in EVS Control, you can switch between Microphone Mode and Message Mode. Microphone Mode is entered by simply engaging the microphone.

1. Message Mode: Use the EVS Message keys to select which message/event to output to the system. Use the Select Keys to toggle output areas to play the current EVS Message in. The Select Key's red LED will toggle on/off with the activation/deactivation of the EVS Message to the area. Any non-voice groups assigned to this Select Key will also toggle on/off with their Activation Cadence. See Section 9.2.3.2.
2. Microphone Mode: Use the Select Keys while the microphone is active to toggle which areas to do an EVS Microphone Page to. The Select Key's green LED will toggle on/off with the activation/deactivation of the EVS Microphone Page to the area.

9.2.3.2 Activating/Deactivating Output Groups Dynamically

This method allows the system to be setup with minimal or no system mapping. When in Manual EVS State and operating in Message Mode the user can dynamically activate/deactivate output areas for system notification to take place in. The Select Key red LED will become lit and the circuits in the output group(s) will become active and play the currently active EVS event message when activated. When deactivated, the Select Key red LED will become unlit and the circuits in the output group(s) will become inactive. Non-voice output groups can also be assigned to Select Keys and will toggle on/off using the activation cadence assigned to it in output group programming. This is available in the panel and in SKSS. See Section 7.4.1.2.

9.2.4 Microphone Mode

Microphone Mode allows the user to press the Select Keys to toggle which output areas to speak to over the

microphone. The green LEDs next to the Select Keys will activate or deactivate.

9.2.5 Message Mode

In Message Mode, the user is able to press the EVS Message Keys to choose a message and press the Select Keys to activate or deactivate which output areas the message will be played. This will activate or deactivate the green and red LEDs next to the EVS Message Keys and the red LEDs next to the Select Keys.

9.2.6 Custom EVS Event

Custom EVS events allows the user to generate an EVS event and speak a custom message using the microphone. Once the user is done speaking the message, the tone and any associated strobes will continue to be active in the output areas.

To generate a Custom EVS Event:

1. Gain EVS Control using the EVS Control Key when there is not an active Manual EVS State Event.
2. Activate the microphone.
3. Choose desired output areas using the Select Keys.
4. Speak custom message into microphone.

9.2.7 Passing EVS Control

Passing of EVS Control is allowed when two LOCs have the same priority. When it is possible to pass control, a prompt (similar to Figure 9-2) will display in which the user can: request control from the LOC with EVS Control, enter an access code with the EVS Super User profile option to override the other LOC, or wait for the lockout timer to expire (if applicable).

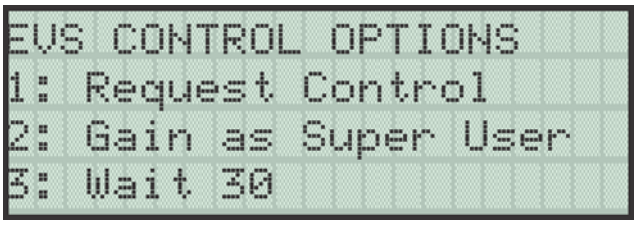


Figure 9-2 Request EVS Control with Lockout Timer Active

EVS Control lockout is programmable from immediate to 12 hours in increments of one second. You are also able to select never expire.

When passing EVS Control between two EVS Super Users, the user is not shown the prompt screen. Instead, a request for EVS Control is automatically made. Additionally, the lockout timer does not apply for EVS Super User.

When a request for EVS Control is made, the LOC with EVS Control will be shown a screen indicating that another LOC is requesting EVS Control.

Once EVS Control is passed to another LOC, the new user will assume the system AS IS. This means that the event that was set to be playing at the previous LOC and all output areas it was playing in do not change.

9.2.8 Exit EVS Control Menu

The user can exit the LOC EVS interface by pressing the  . The user will be returned to the idle screen.

9.2.9 Relinquish EVS Control

Relinquishing EVS Control is accomplished by pressing the EVS Control Key from within Message Mode. A screen will be displayed to ensure the user wants to relinquish EVS Control. EVS Control will be automatically

relinquished after a time-out on this screen. When EVS Control is relinquished, the system stays in the Manual EVS State. EVS Control can then be gained by another LOC or again at the same LOC.

9.2.10 EVS Reset

An EVS reset is accomplished by pressing the RESET button from an LOC. The user will be prompted to reset either the fire system or emergency system. After an EVS reset, the LOC will automatically exit the LOC EVS interface.

Note: In order to perform an EVS reset, the display must be associated with the EVS-VCM / EVS-RVM. See Section 9.6.2.2.

9.2.11 Access Control

By default, the fire fighter key user profile includes the EVS control request option. This is a programmable option for all user profiles. If the fire fighter key user profile is not specified to have the EVS control request option, upon EVS control request, the system will immediately display the “Enter Pin” dialog on the annunciator and the user will be required to enter the access code for a profile that does.

The second user profile option for the Emergency Voice System is the EVS Super User option. (See section 9.5). If a user at an LOC does something that requires EVS control or they are at the EVS status screen, if they enter the EVS Super User pin and there isn’t another EVS Super User already logged in, they will gain EVS Super User status.

9.3 EVS Super User

The EVS Super User access code profile function provides the ability to override all EVS Control rules and gain EVS Control. The EVS Super User is the highest priority user in the system. The EVS Super User has several features that differ from the normal user:

1. Any alarm activated while under EVS Super User Control needs to be reset using an EVS Super User function enabled access code.
2. LOC priority and LOC lockout timer are ignored when passing EVS Control between EVS Super Users at LOCs. If another EVS Super User attempts to gain EVS Control from an LOC, an EVS Control request is presented to the EVS Super User at the LOC that currently has EVS Control.

Note: Only one EVS Super User is allowed EVS control in the system at a time.

Figure 9-3 EVS Super User Window

9.4 EVS Point Functionality

Any EVS 5880 (5880 LED/Contact module with the EVS Trigger option enabled) can be used for EVS inputs. The Point EVS 1-8 Alarm input types can be used to trigger predetermined EVS events for output areas. EVS-VCM and EVS-RVM points can be programmed to trigger Voice Aux events that can allow external audio to be played through the emergency system.

9.4.1 EVS Point Activations

EVS points can only activate outputs and be placed into an alarm state if the system is not in Manual EVS State. EVS points have no priority and all are allowed to be activated. If the EVS point is a higher priority than the Fire

System, then the system will play the highest event message through all EVS mapped outputs.

For example: Emergency 1 Point Alarm is higher priority than Emergency 2 Point Alarm. Emergency 1 Point Alarm has message 1 mapped to through groups 1 and 2. Emergency 2 Point Alarm has message 2 playing through groups 2 and 3. If a point for Emergency 1 Point Alarm and a point for Emergency 2 Point Alarm are both active, the system will play message 1 through groups 1, 2, and 3.

Once Manual EVS State is active, points in Alarm state switch to an Active state. When the points are changed to the Active state, they do not activate any system mapping or turn any outputs on. Any points that are activated while in Manual EVS are also placed into the Active state and are not allowed to activate any mapping. The system idle screen will show an EVS Alarm counter for any points in the Active state, and the detailed description of the point will show the point as Active.

After an EVS Reset, any EVS points that are still active will again be put into Alarm.

9.4.2 EVS-VCM Points

The EVS-VCM and EVS-RVM modules contain two programmable input points. These also have the ability to be programmed as a trigger for bringing external audio into the system. These special point types are: Voice Aux EVS and Voice Aux Status. When activated, if the event has the highest Event Priority of all activated events, these points will activate the Aux In input to all outputs defined by the respective event program mapping.

9.5 EVS 5880

9.5.1 EVS (1-8) 5880 Module

An EVS 5880 is a 5880 LED/Contact module with the EVS Trigger option enabled. When this option is enabled, input points 41 through 48 on the 5880 are automatically assigned to EVS 1-8 functions respectively. See Section 9.4.1 for further information on EVS point activations. The dry-contacts can be setup as latching or non-latching and silenceable or non-silenceable in the 5880 module programming.

There can be eight EVS 5880s in the system.

Note: The system allows multiple EVS events be active at the same time. Only the highest priority event's message will play through the system.

9.5.2 Enable 5880 EVS

This option only applies to the 5880. Each module has a unique set of options that specifically applies to the functionality being edited.

1. Press ENTER on the Naming Module Screen (See section 7.2) to enter 5880 EVS setting and priority screen.
2. Screen will indicate:
   EVS Device: Yes or No
   EVS Latching: Yes or No
   EVS Silenceable: Yes or No

9.6 EVS LOC Programming

Device Priority is a programmable option for each of the EVS devices:

- EVS-VCM
- EVS-RVM

Each device is assigned a Priority level: Low, Normal, or High.

9.6.1 Adding an LOC

To add new LOCs to the system, follow these steps:

1. Enter the installer code. The panel will automatically go to the main menu.
2. Select 7 for Panel Program Menu.
3. Press 1 to enter Module menu.
4. Press 2 to add a module.
5. From the next screen, add either an *EVS-VCM or **EVS-RVM.

*Note: * Only 1 EVS-VCM may be installed per site.*

*Note: ** Up to 5 EVS-RVMs may be installed per site.*

The screen will display “Adding module [#]...” for a few moments. You will be returned to the <New Module Type> screen where you can select a name for the module if desired.

6. Add a 5860 LCD Annunciator, if desired, to associate with each EVS-VCM or EVS-RVM

You must save changes when you exit the Program Menu or the new module(s) will not be added. For more information see section 7.2.2.

Note: If you Add a Module that has not been physically connected, the panel will go into trouble after it re-initializes (when you exit the Program Menu). When the new module is attached, the trouble will restore automatically the next time you power up the system.

9.6.2 Editing an LOC

When editing EVS LOCs, the features that may be edited are: module ID, module name, number of switch expanders installed, extended features, microphone type, microphone gain, auxiliary gain, tone gain, message gain, keypad priority, and associated keypad

To edit an existing module:

1. Enter the installer code.
2. Select 7 for Program Menu.
3. Press 1 to enter module menu.
4. Press 1 to edit a module.
5. Use the ▲ or ▼ arrow to select the module you wish to edit.
6. Press the ▶ or ENTER to move to next selection.

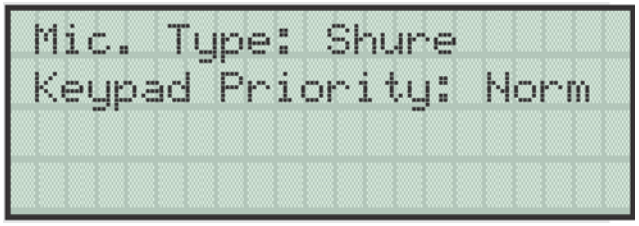


Figure 9-4 Edit Module Mic Type and Device Priority

9.6.2.1 LOC Priority

Each device is assigned a Priority level: Low, Normal, or High. This is modified by editing the LOC’s EVS-VCM or EVS-RVM module. By default, the EVS-VCM has a high LOC priority. The EVS-RVM is defaulted to normal LOC priority.

9.6.2.2 LOC Association

In order to created an LOC, an annunciator must be associated to an EVS-VCM or EVS-RVM. This done by editing the EVS-VCM or EVS-RVM module and selecting the correct annunciator for the associated device.

During JumpStart, the EVS-VCM is automatically associated with the internal annunciator. The association for other LOCs in the system must be performed in programming.

9.7 Amplifier Programming

9.7.1 Adding an Amplifier

To add a new amplifier to the system, follow these steps:

1. Enter the installer code. The panel will automatically go to the main menu.
2. Select 7 for Program Menu.
3. Press 1 to enter Module menu.
4. Press 2 to add a module.
5. From the next screen, select desired amplifier.

   The screen will display “Adding module [#]...” for a few moments. You will be returned to the <New Module Type> screen where you can select another module if desired.

   You must save changes when you exit the Program Menu or the new module will not be added. For more information see section 7.2.2.

   If you Add a Module that has not been physically connected, the panel will go into trouble after it re-initializes (when you exit the Program Menu). When the new module is attached, the trouble will restore automatically the next time you power up the system.

9.7.2 Editing an Amplifier

When editing amplifiers, the features that may be edited are (dependent upon amplifier model): module ID, module name, CE4 Exp installed (Yes or No), output voltage, and amp mode. To edit an existing module:

1. Enter the installer code. The panel will automatically go to the main menu.
2. Select 7 for Program Menu.
3. Press 1 to enter Module menu.
4. Press 1 to edit a module.
5. Use the  or  arrow to select the module you wish to edit.
6. Press the  or ENTER to move to the next selection.

9.8 Event Priority

This section goes over how event activations are handled by the control panel with regards to priority.

9.8.1 System Control

The 5820XL-EVS control panel integrates both a fire and emergency system into one. When events are active from both systems the control panel makes intelligent decisions to determine which system should be controlling outputs. This is called System Control. This manual will refer to the fire or emergency systems having System Control, this means that the system has an active alarm or supervisory event that has a higher event priority than an active alarm or supervisory event from the other system. For this consideration, the control panel looks at the highest priority event active on each system. When both systems are active, the system with control will activate System Override. System Override is activated on the lower priority, non-System Control panel system (fire or emergency system.)

9.8.2 System Override

System Override temporarily disengages output group activations from the system being overridden. This is done to not provide conflicting messages and signaling and help with reducing confusion of the building occupants.

When output groups are supposed to be active but are not because System Control has activated System Override, they are re-activated every 30 seconds for several seconds to indicate to the building occupants that there is still an event active. This will only occur when the system with System Control is not using the output group. The System Override option is programmable for non-voice output groups on a per output group basis through the panel output group programming menus and in SKSS. In these places the option is called Allow System Override and defaults to YES. It is also possible to not reactivate the output groups every 30 seconds when System Override is active on a per system basis. This option is programmable in SKSS.

There are times when you would not want to allow System Override for an output group. For example: fire is programmed to an elevator relay to bring the elevator to the bottom floor for fire only. If fire and EVS are active with EVS being the higher priority event, you still need the elevator to move to the bottom floor and only audible and visual notification appliances must be overridden. In this case, the output group assigned to the relay would be set to NO on the Allow System Override setting. See Section 7.4.1.2 to edit group properties.

9.8.3 EVS Event Priority

Each event type (see Table 9-2) has a priority level assigned to it. When more than one event type is active, the panel uses this priority to determine which is most important. One is the highest event priority. The panel will activate output groups according to the highest priority active event. These event priorities, with some restrictions, can be changed to allow EVS and fire events to interact. The lower priority event will be ignored until the higher priority event is reset. See section 7.10.3.2 to edit command priority.

Since the system has both fire alarm and EVS functions, a determination must be made as to which will be higher priority when both types of events occur. For each installation a risk assessment must be done to decide the priority of events.

9.8.4 View Active Alarms, Troubles and Supervisory Signals

When looking at the LCD display, the screen will display FS for the "Fire System" and EVS for "Emergency Voice System" after the condition. The highest priority event will display first. (See Figure 9-5). Press the down arrow to view location and type of alarm or trouble. After sitting idle for two minutes, events will display on line 4 of display. (See Figure 9-6).

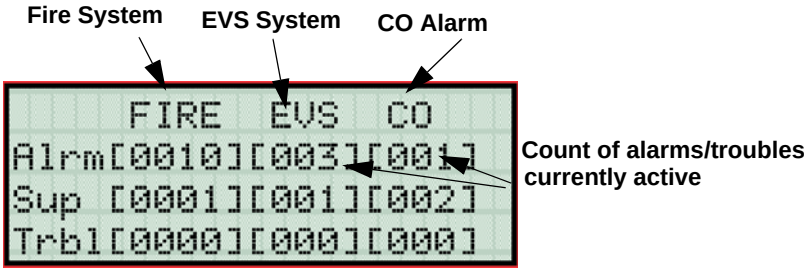


Figure 9-5 Highest Priority Event Display

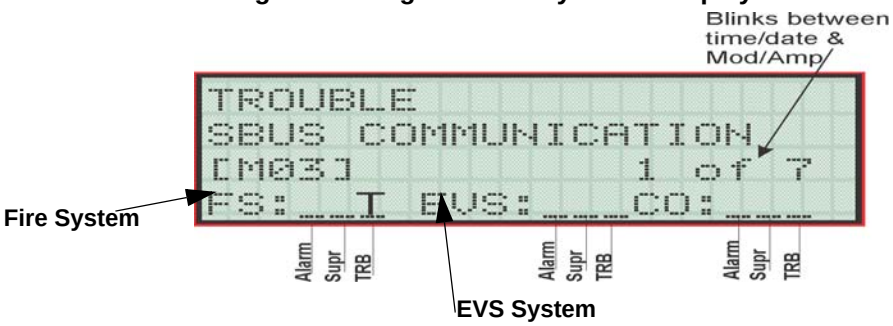


Figure 9-6 Event Screen After Two Minutes Sitting Idle

9.9 Using the Microphone

9.9.1 Microphone Functionality

Each microphone in the system is capable of providing live fire system or EVS paging.

The microphones are housed within the EVS-Series panel enclosure and the EVS-RCU cabinets. A maximum of 8 microphones can be installed in the system.

9.9.2 Custom EVS Event

This event is activated by gaining EVS control at an LOC and using the microphone without any EVS event already active. In this case, the custom EVS mapping and general EVS mapping will be activated and stay activated until a different EVS event is activated at the LOC or the user resets the Emergency Voice System.

9.9.3 Fire Page

A fire page can only occur when:

1. Only the fire alarm is active.
2. Both fire and EVS are active and the fire alarm is programmed to be of higher priority than the active EVS alarm.
   - If the fire alarm has the highest active priority and EVS is also active, any LOC can do a fire page given LOC device priority rules are followed. If the user is at the LOC with EVS Control, and the fire page is of higher priority that the EVS event, the LOC will automatically relinquish EVS Control to do the fire page when the user engages the microphone.
3. Only the fire alarm is active, the user has gained EVS Control and custom EVS event is a lower priority than the fire alarm.
   - In this case, if any LOC has EVS Control, the LOC will automatically relinquish control to allow for the fire page.
4. If both the fire alarm and EVS are active and the active EVS event is programmed for higher priority than fire alarm; the user must also have gained EVS control.
   - In this case a fire page is NOT allowed at all and the LOC must gain EVS control in order to do any live voice.

9.9.4 Emergency Page

An emergency page can occur when:

1. Only the emergency system is active and the user has gained EVS Control.
2. Only fire alarm is active, custom EVS is higher priority than fire alarm and the user has gained EVS Control.
   - This will trigger the EVS system and enable mapping for 'Custom EVS' and 'General EVS'.

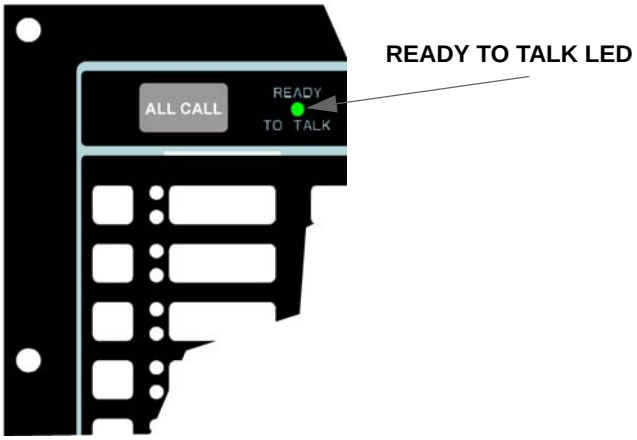
9.9.5 Paging

If there are no active emergency or fire system events, the microphone at an LOC can be used for paging by following these steps:

1. Remove the microphone from its cradle.
2. Press the push-to-talk button on the microphone.
3. Use the Select Keys on the LOC to toggle the output areas to page to with the microphone (illuminates the green LEDs).

Note: The Ready to Talk LED will illuminate after an output area has been activated.

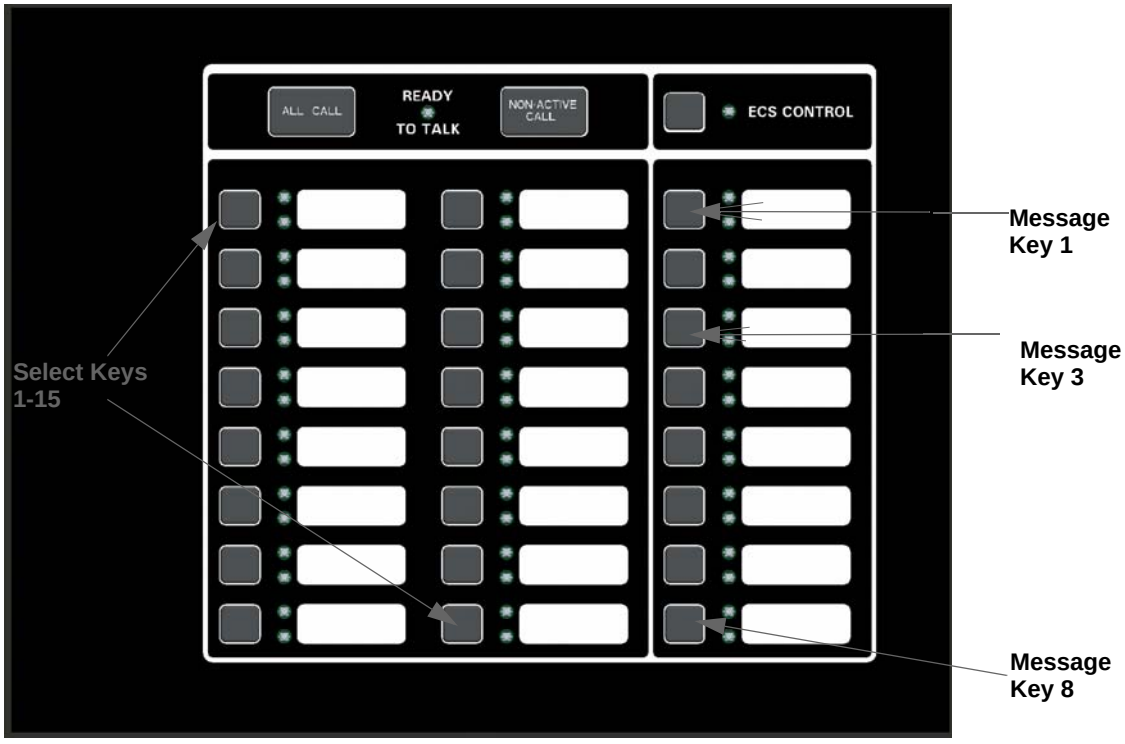
4. Speak into the microphone.
5. Release PTT button when finished.Page.



9.10 Recording Custom Messages

The EVS-Series controls come with 15 recordable message slots. (See http://www.silentknight.com/products/Pages/5820XL-EVS-Voice-Files.aspx for voice message downloads). Message 1-15 can be recorded from the microphone, Aux Input or by using the EVS Message Manager software. All messages can be a maximum of one minute.

When in the record mode the EVS-VCM switches will function as follows:



Key	Function
EVS Message Key 1	Select message slot to record to
EVS Message Key 3	Start and stop recording from Aux Audio Input
EVS Message Key 8	Erase user message 1-15
Select Keys 1-15	Message slot 1-15

While in the Local Record mode, select keys 1-15 will be used to reference message slots 1-15. The associated green Select Key will indicate that a message is currently programmed in the corresponding slot. When there is no message recorded (or the message is erased), the associated green Select Key LED will be off. While recording a particular message, the red Select Key will turn on until recording is completed. The Select Key 1-15 will be used to playback a recorded message or to select a message slot to record to or erase.

When in the Local Record mode, the EVS-VCM LEDs will function as follows:

Table 9-1: LED Functions During Programming

Switch LED	Active LED Status	Meaning
Select Key 1-15 Green LED	On	Message is currently programmed in this slot
Select Key 1-15 Red LED	On	Message recording is in progress
Select Key 1-15 Green/Red LED	Off/Off	Message slot is empty
Select Key 1-15 Red LED	Flashing	Message is being played back or message is selected for recording

9.10.1 Recording Messages 1-15 Using Aux Audio Input

Recording messages from the Aux Audio Input enables you to load customized, pre-recorded messages into an EVS message location.

Follow these steps to record user message using Aux Audio Input:

Note: Refer to the Section 7 for detailed programming information.

1. Wire a speaker cable with 1/8" mini plug (Radio Shack Cat. No. 42-2454) to the Aux AUDIO GND and IN terminals. Refer to Figure 9-7.

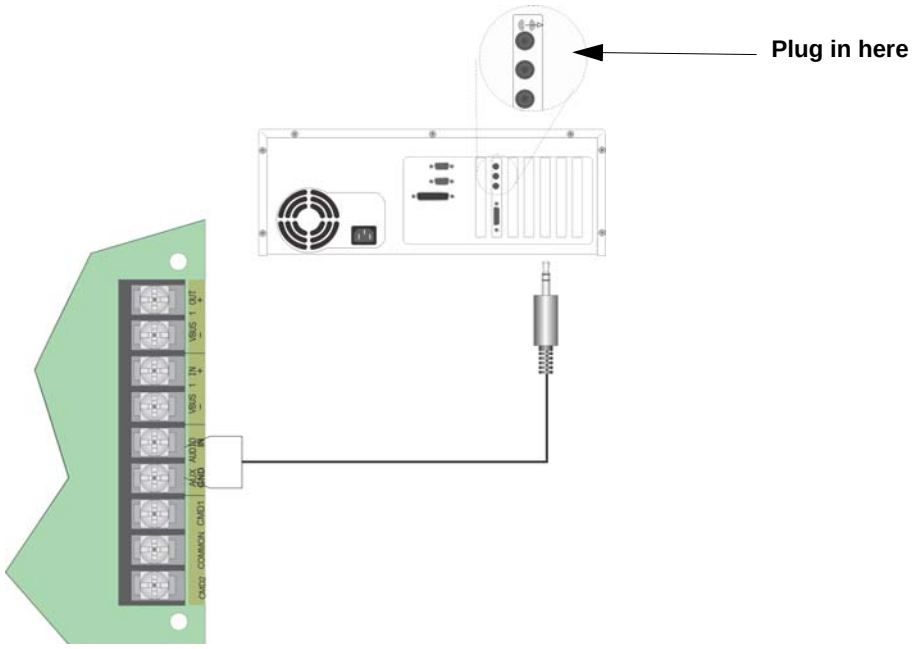


Figure 9-7 AUX Audio Connection for Recording

2. Plug the mini plug into the Line Out/Headphone jack on a PC or laptop. See Figure 9-7.
3. Enter programming mode at main control panel.
4. Select option 9 Voice Options.
5. Select option 1 VCM Maintenance.

6. Select option 2 Local Recording.

Note: The VCM will light the green Select Key LED for message slots that are occupied. If a message is already stored in the desired slot, then you must erase the message first. (see 9.10.3).

7. Select the amplifier and circuit for the audio to play through during programming. A user would generally pick the audio circuit that is in closest proximity to them.
8. Press EVS Message Key 1 to enter the message slot selection mode. Then, press the Select Key 1-15 that corresponds to the message slot that you wish to record to. The associated Select Key red LED will begin flashing, indicating that the message slot is ready for recording.
9. Simultaneously press EVS Message Key 3 and start playing the audio source on the PC or laptop.
10. When the audio file from the PC is finished playing, press EVS Message Key 3 again to stop the recording. The Select Key green LED will come on.
11. To playback the recorded message, press the Select Key 1-15 that was just recorded to.

Recording with Aux Audio Input Example:

The user wants to record into memory slot 2 via the Aux Audio Input channel.

Upon entering the Local Recording mode via the keypad menu, the VCM will light the Select Key green LEDs 1-15 for each occupied message slot.

If a message already exists in message slot 2, it must first be erased. Press EVS Message Key 8, then press Select Key 2, (see Section 9.10.3). When the message has been erased Select Key 2's green LED will turn off.

To record a message, press EVS Message Key 1, then press Select Key 2 (this will use message slot 2 for the recording). Select Key 2's red LED will begin flashing.

Press EVS Message Key 3 while simultaneously pressing play on the PC to start recording the Aux Audio Input. When the PC message is done, press EVS Message Key 3 to stop recording. Select Key 2's red LED will stay on until processing is completed. Select Key 2's green LED comes on after the recording is completed.

Pressing Select Key 2 will start a playback of the recorded message.

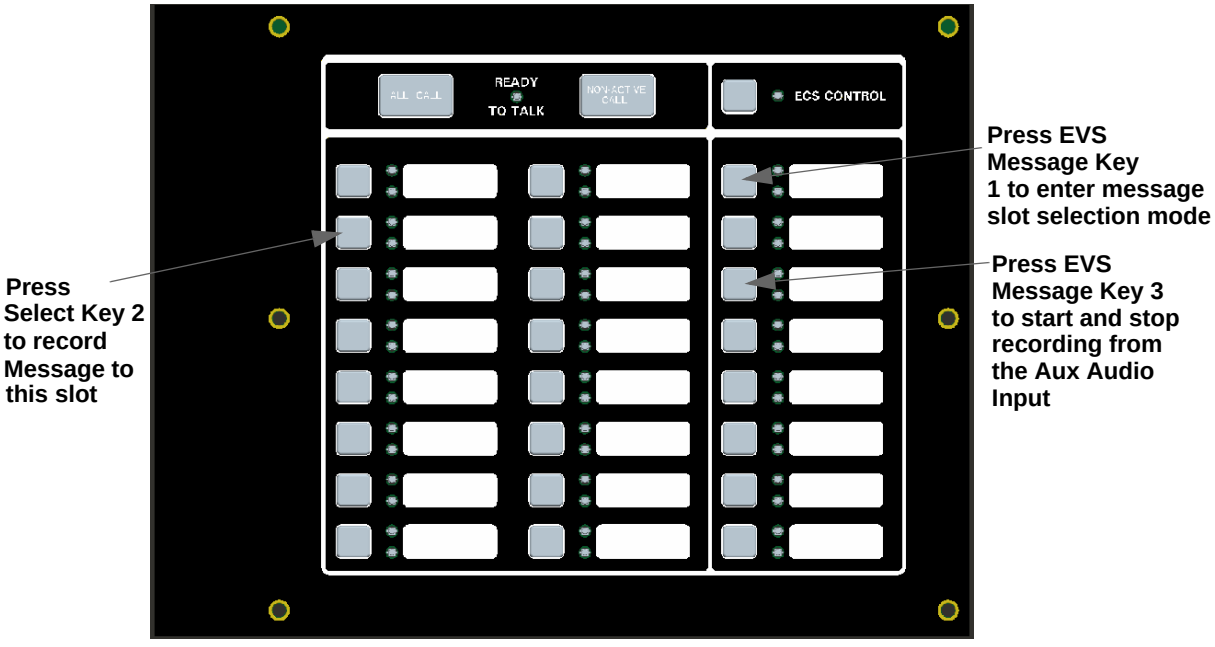


Figure 9-8 Aux Audio Input Example

9.10.2 Recording Messages 1-15 Using the Microphone

Messages can be recorded into the EVS system by using the on board microphone.

Follow these steps to use the microphone to record your message:

1. Enter programming mode at main control panel.
2. Select option 9 Voice Options.
3. Select option 2 Local Recording.

Note: The VCM will light the green Select Key LED for message slots that are occupied. If a message is already stored in the desired slot, then you must erase the message first. (see Section 9.10.3).

4. Select the amplifier and circuit for the audio to play through during programming. A user would generally pick the audio circuit that is in closest proximity to them.
5. Press EVS Message Key 1 to enter the message slot selection mode. Then, press the Select Key 1-15 that corresponds to the message slot that you wish to record to. The associated Select Key red LED will begin flashing, indicating that the message slot is ready for recording.
6. Press the push-to-talk (PTT) button on the microphone and speak your message.
7. Release the PTT button on the microphone to save your message. The Select Key green LED for this location will turn on.
8. To playback the recorded message, press the Select Key 1-15 that was just recorded to.
9. If you are not satisfied with the recorded message, erase it (see Section *9.10.3*) and then repeat steps 1 through 7.

Recording with Microphone Example:

User wants to record a message to message slot 5 via the microphone.

Upon entering the Local Recording mode via the keypad menu, the VCM will light the Select Key green LEDs for 1-15 for each occupied message slot.

If a message already exists in message slot 5, it must first be erased. Press EVS Message key 8, then press Select Key 5, (see Section 11.8.3). When the message has been erased Select Key 5's green LED will turn off.

To record a message, press EVS Message Key 1, press Select Key 5 (this will use message slot 5 for the recording). Select Key 5's red LED will begin flashing.

Press the push-to-talk button on the microphone and speak your message. Release the PTT button to save your message. Select Key 5's red LED stays on until processing is completed. Select Key 5's green LED comes on after the recording is completed.

Pressing Select Key 5 will start a playback of the recorded message.

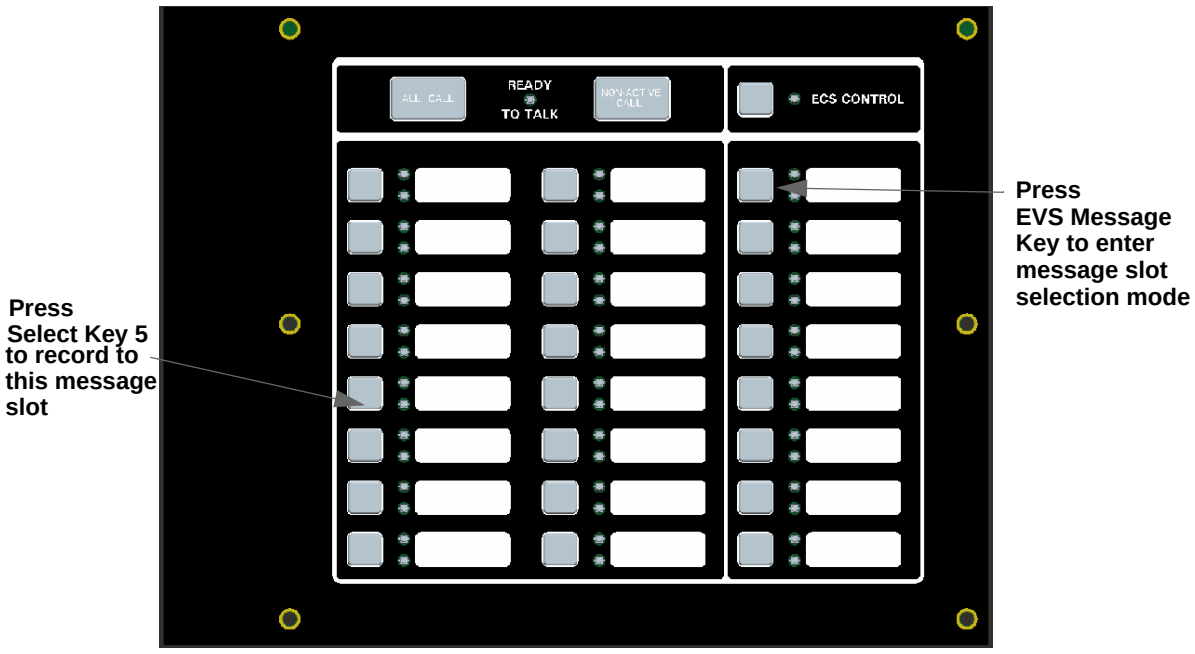


Figure 9-9 Recording with Microphone Example

9.10.3 Erasing User Message

To erase the message stored in switch 1-15 memory location follow these steps:

1. Enter programming mode at main control panel.
2. Select option 9 Voice Options.
3. Select option 1 VCM Maintenance.
4. Select option 2 Local Recording. Once in this mode, the VCM/RVM will light all the green LEDs for switches 1-15 indicating which message slots are occupied.
5. Select the amplifier and circuit for the audio to play through during programming. A user would generally pick the audio circuit that is in closest proximity to them
6. Press EVS Message Key 8 on the EVS-VCM, press the Select Key 1-15 that you wish to erase. The Select Key red LED will stay on until the erase is done. When erased, the Select Key green LED by corresponding to the message slot you erased will go off.

9.10.4 Using EVS Message Manager Software

The EVS Message Manager software is a software support utility that is used to download recorded messages (in .SKE1 format stored on your PC hard drive) to the various message locations of the EVS-Series controls. Messages can be uploaded from the EVS-Series control, stored, and used again in similar installations. The EVS Message Manger software can also be used to move messages to different message locations. For example, move message 1 to message 3 memory location.

To read/write .SKE1 formatted messages to and from the main panel, follow these steps:

1. Make sure that panel is in Normal mode.
2. Connect the PC to the panel using a standard USB cable. See Figure 9-10.

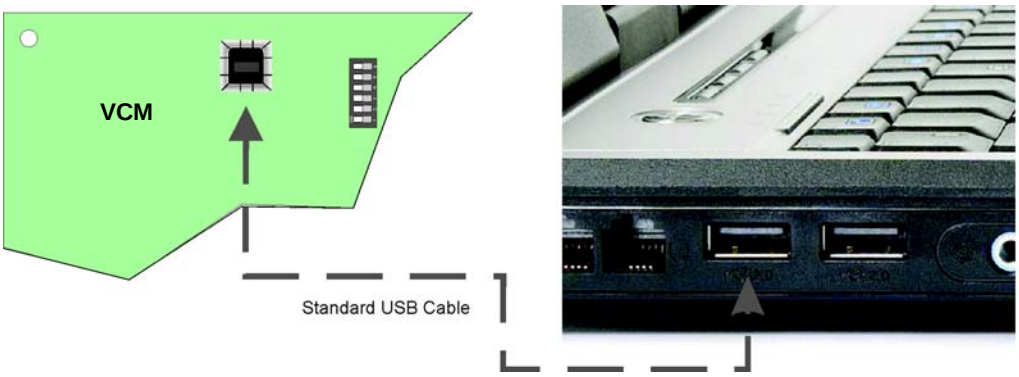


Figure 9-10 USB Cable Connections

3. Run the EVS Message Manager software.
4. Select “Read from Panel” to read a message and store onto your hard drive, or “Write to Panel” to transfer a .SKE1 formatted message to the panel.
5. Select the appropriate message location you wish to read/write.
6. Enter the file name you wish to transfer (Press “Browse” to display a list of files.)
7. Press “Start” to start the transfer.

9.11 EVS Priority

EVS command priority table will contain the following voice events:

Table 9-2: EVS Priority Table

Fire Alarm
Fire Aux 1
Fire Aux 2
CO Alarm
EVS LOC Activations
EVS 1 PT Activation
EVS 2 PT Activation
EVS 3 PT Activation
EVS 4 PT Activation
EVS 5 PT Activation
EVS 6 PT Activation
EVS 7 PT Activation
EVS 8 PT Activation
Emerg Voice Aux 1
Emerg Voice Aux 2
Emerg Voice Aux 3
Emerg Voice Aux 4
Emerg Voice Aux 5

9.11.1 Priority Rules

1. Fire Alarm priority contains zoned manual pull, waterflow, and detector as well as fire drill events.
2. Fire Aux 1-2 priorities contain both zone and system Fire Aux 1-2 events. Additionally, Fire Aux 2 includes zone interlock release.
3. EVS LOC Activations is always higher than all other EVS events.
4. EVS events do not need to be in order by EVS number.
5. General Emergency Comm will always be lower priority than the lowest of all Emergency Communication events.
6. Zone Fire Pre-Alarm and Interlock Alert events will be lower priority than the lowest of all alarms
7. Fire, CO, and Emergency Supervisories will be added in the same order as the corresponding system's alarms at a lower priority than Fire Pre-Alarm and Interlock Alert.
8. Troubles will always follow supervisories in the priority list.
9. Voice Aux Status will be always follow troubles in the priority list.
10. Microphone Engaged, Zoned Status Point, Alarm Silenced, and Trouble Silenced will always follow Voice Aux Status in the priority list.

- In addition to the standard setting for voice events, the EVS and Voice Aux In events will have a 20 character event text associated with it. This will be displayed on display status and in the EVS Control menu.
- Any of the 15 messages are selectable for each standard event.

Note: For instructions to enable EVS system see Section 7.10.3.1.

9.12 Defining Output Group Type

Each output group is defined as either a voice output group or a non-voice output group. Output points that are audio circuits (all circuits on the EVS-50W, EVS-125W, EVS-100W, EVS-INT50W and EVS-CE4) can only be assigned to voice output groups. Output points that are non-voice circuits (all other points and circuits that are on all modules except the EVS-50W, EVS-125W, EVS-100W, EVS-INT50W and EVS-CE4) are assigned to non-voice output groups.

Each of the output groups defined as voice can be mapped to a particular switch and LED on the EVS-VCM,EVS-RVM and EVS-SW24. This allows the user to see the state of the voice groups assigned to the switches. This also lets the user individually select which areas they want to do a live page into.

Output groups not defined as voice groups can also be assigned to these switches as long as there is a voice group already assigned to the group. This allows for dynamically activating/deactivating both voice and strobes/other outputs in an area with a single button press. See section 9.2.3.2.

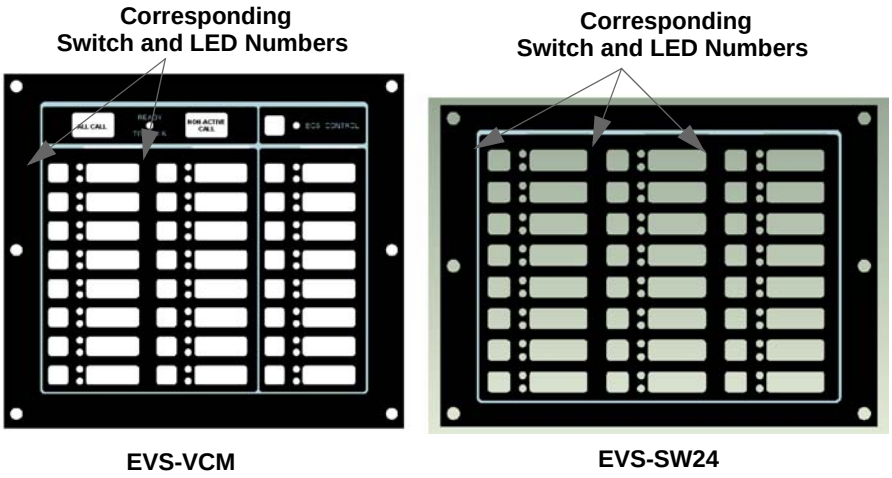


Figure 9-11 Corresponding Switch and LED for Mapping Output Groups

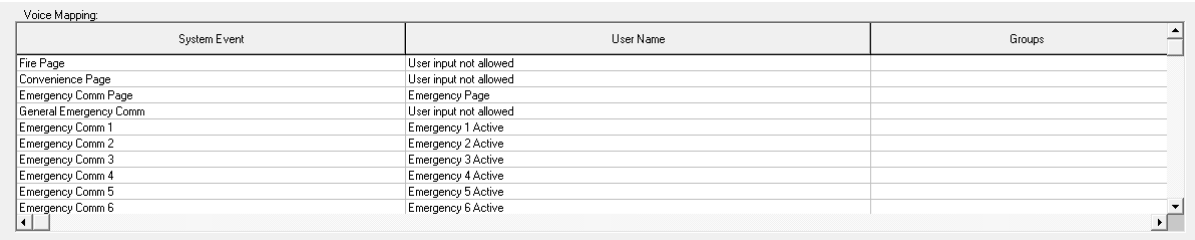
1. To get to this menu item repeat steps 1 through 6 of Section 7.4.1.
2. To edit group properties, press 2.
3. Press the ▲ or ▼ arrows to select the desired latching option.
4. Press ENTER.
5. Press the ▲ or ▼ arrows to select the desired silencing option. Refer to Table 7-2.
6. Press ENTER.
7. Press the ▲ or ▼ arrows to select the desired reverse polarity option
8. Press ENTER.
9. Enable group activation for a condition (see Table 7-4) by pressing the ▲ or ▼ arrows to select Y (yes) or N (no).
10. Press ENTER.
11. Repeat steps 9 and 10 for all the activation options.

9.13 Voice Command Mapping

Where an EVS event is playing can be configured automatically or manually. The automatic method is through voice system mapping and the manual method is using output group override.

9.13.1 Voice System Mapping

Mapping EVS events to activate output groups is just like mapping events for the fire system. These are located under the voice tab of SKSS.


Voice Mapping:

System Event	User Name	Groups
Fire Page	User input not allowed	
Convenience Page	User input not allowed	
Emergency Comm Page	Emergency Page	
General Emergency Comm	User input not allowed	
Emergency Comm 1	Emergency 1 Active	
Emergency Comm 2	Emergency 2 Active	
Emergency Comm 3	Emergency 3 Active	
Emergency Comm 4	Emergency 4 Active	
Emergency Comm 5	Emergency 5 Active	
Emergency Comm 6	Emergency 6 Active	

Figure 9-12 Voice System Mapping in SKSS

9.13.2 EVS Voice Aux Inputs (Dynamic with VCM/RVM in the system)

Voice Aux inputs are in the priority table dynamically based on the number of EVS-VCM and EVS-RVMs in the system. If the system contains the one EVS-VCM and three EVS-RVMs the priority table will show ‘EVS Aux Voice In 1’ through 4. This is the same with voice mapping except voice mapping doesn’t have the EVS tag in front of the event. See Table 9-2.

Note: With the EVS release, we are introducing status points to the system. The priorities associated with these and non-EVS voice aux in are always added (internal to the system) after trouble.

Zone Mapping to Voice Output Groups

When a voice output group is selected to be activated by a zone, the cadence pattern choice listed in Section 7.3.1.4 do not apply. For voice output groups, one of 18 plus all “Aux Voice In” system wide voice commands will activate instead of the cadence pattern. Which command is determined by the event type selected for that zone. The voice commands are programmable by the installer (see Section 7.10 for more information). Table 9-3 lists the voice commands and the associated event type.

Table 9-3: Event Types for Voice Commands

Priority*	Name	Comments
1	Fire	It will sound whenever a request is made to activate a voice output group that was triggered from a manual pull, detector, or water flow event.
2	Fire Aux1	Fire Command
3	Fire Aux 2	Fire Command
4	Fire Pre Alarm	Fire Command
5	Fire Supervisory	Fire Command
6	CO Alarm	CO Command
7	CO Supervisory	CO Command
8	Custom Emergency Comm	Custom EVS command (Microphone triggered EVS)
9	Emergency Communication 1	EVS Message 1
10	Emergency Communication 2	EVS Message 2
11	Emergency Communication 3	EVS Message 3
12	Emergency Communication 4	EVS Message 4
13	Emergency Communication 5	EVS Message 5
14	Emergency Communication 6	EVS Message 6
15	Emergency Communication 7	EVS Message 7
16	Emergency Communication 8	EVS Message 8
17	Aux Voice In 1	First EVS-VCM/RVM configured as lowest SBUS Address.
18 - XX	Aux Voice in 2 - XX	Remaining EVS-VCM/RVM configured as next lowest SBUS Address.
XX	General Emergency Communication	General EVS - Active when any other EVS is active in system
XX	Trouble	Fire Command

*The priorities are not set, the are configurable by the user. For each installation a risk assessment must be done to decide the priority of events.

9.13.3 Edit Command Mapping

Up to 8 groups or templates can be assigned to each voice system event. See Table 9-4.

Table 9-4: Voice Commands Mapping

System Event
Custom Emergency Communication
Emergency Communication 1
Emergency Communication 2
Emergency Communication 3
Emergency Communication 4
Emergency Communication 5
Emergency Communication 6
Emergency Communication 7
Emergency Communication 8
Aux Voice In 1
Aux Voice In 2 - XX
General Emergency Communication
Microphone Engaged

9.13.3.1 Mapping for Voice Commands

To Edit CMD Mapping see Section 7.10.3.3. Select the EVS message for items described. See Table 9-4.

Eight groups or templates can be entered in the following screen

GXXX -CXX GXXX - CXX

GXXX -CXX GXXX - CXX

GXXX -CXX GXXX - CXX

GXXX -CXX GXXX - CXX

If a voice group is entered in the GXXX field, the cadence field will be filled with a CVC and the filed is not able to be edited.

If a non-voice group is entered in the GXXX field, the user will be allowed to enter a cadence value. See example: G004 -CVC G001 - C03.

9.14 EVS Timer Options

9.14.0.2 Timers include

- EVS Control Lockout
  - Immediate
  - Never
  - Timer. (If timer is selected, a range of 1-720 minutes and 0-59 seconds are allowed. Default is 30 seconds).
- EVS Event Auto Reset Time (including Custom Emergency Communication 0 and Emergency Communication 1-8).
  - Event Disabled (the event can not be generated)
  - Never
  - Timer (If timer is selected, a range of 0-240 minutes is allowed. Default is Never Reset).

9.14.0.3 EVS Timer Menu

Table 9-5 EVS Timer Menu

EVS Timer	Option
Control Lockout	Immed/Timer/Never
Auto Reset EC0 (Custom EVS Event)	Disabled/Never/Timer (Min XXX)
Auto Reset EC1	Disabled/Never/Timer (Min XXX)
Auto Reset EC2	Disabled/Never/Timer (Min XXX)
Auto Reset EC3	Disabled/Never/Timer (Min XXX)
Auto Reset EC4	Disabled/Never/Timer (Min XXX)
Auto Reset EC5	Disabled/Never/Timer (Min XXX)
Auto Reset EC6	Disabled/Never/Timer (Min XXX)
Auto Reset EC7	Disabled/Never/Timer (Min XXX)
Auto Reset EC8	Disabled/Never/Timer (Min XXX)

Note: Auto Reset settings only apply to the EVS Events when activated from an LOC interface.

Section 11
Testing and Troubleshooting

11.1 Troubleshooting

This section of the manual offers suggestions for troubleshooting hardware problems. Please read this section if you encounter a problem when installing the control panel. If these suggestions do not solve your problem or if you encounter a problem that is not listed here, contact Silent Knight Technical Support at 800-446-6444 for assistance.

11.2 Common Problems

Problem	Possible Cause / Suggested Actions
Trouble message "DBL ADDR" (Double Address) displays on LCD.	An address has been assigned to more than one detector. Correct the address following the procedure described in Section 5.8 if using SD devices or Section 5.6 if using SK devices.
Auxiliary power or notification circuits have incorrect polarity.	Correct polarity. For notification and auxiliary power circuits: When in alarm or powered, terminals labeled "X" are positive, terminals labeled "O" are negative.
SLC devices are not being recognized (trouble message "Missing" displays).	Check hardware connections. If devices are physically connected, make sure wiring is correct (see Section 5.7 if using SD devices or Section 5.5 if using SK devices). For the main panel, the positive side of device must be connected to terminal 34; the negative side must be connected to Terminal 33. For 5815XL devices, make sure the device connects to the 5815XL via the SLC OUT terminals. There can be only one SLC loop on the main panel and on each 5815XL module. Do not connect devices to terminals labeled SLC IN.
	Make sure SLC devices have been addressed properly following the procedure described in Section 5.7 if using SD devices or Section 5.5 if using SK devices. For contact monitor modules, which are addressed using DIP switches, the DIP switch must be set to the correct address before power is applied to the SLC loop. If this procedure is not followed, the device will have an incorrect address.
	Make sure correct polarity has been observed for SLC device wiring. See Section 5.7 if using SD devices or 5.5 if using SK devices.

Problem	Possible Cause / Suggested Actions
SLC devices are not being recognized (trouble message “Missing” displays on the annunciator).	Check that SLC loop impedance is within the required range. To measure impedance, use the following procedure: 1. Disconnect both wires from the terminal block at the panel (SLC devices can remain connected). 2. Measure the impedance from positive to negative and from negative to positive. Both measurements should be greater than 500 K ohms. If the installation uses T-taps, test each T-tap individually. 3. Temporarily connect the positive wire to the negative wire of the SLC loop at the point farthest from the panel (SLC devices can remain connected). 4. Measure the impedance from positive to negative and from negative to positive wires that were disconnected from the panel in step 1. Both measurements must be less than 50 ohms.
The panel indicates a ground fault trouble condition (trouble message “GROUND FAULT” displays).	An earth ground fault occurs when the panel senses an unexpected flow of current from one or more of its terminals to the earth connection (Terminal 2). Isolate the wiring that is causing the fault by removing wiring connections one at a time until the earth fault is no longer present. Pause at least five seconds after removing a wire before removing the next one. The panel will also go into ground fault if a computer is connected to the panel via a serial cable attached to the panel’s 9-pin connector. This is a correct method for on-site communication between a panel and a computer. Ignore the ground fault message in this case. The trouble will clear automatically when you disconnect the computer from the cable
5815XL module that has been physically connected to the panel but is not being recognized.	Check the status of the 5815XL green LED. If it flashes in the pattern .5 sec. on / .5 sec. off, it is likely that the 5815XL has not been added to the system through programming. JumpStart will add any 5815XLs connected to the panel. If you have already run JumpStart, 5815XLs can be added manually (see Section 7.2.2). Check that the correct ID for the 5815XL module has been set through the DIP switches. Assign ID#1 to the first 5815XL and ID#2 to the second 5815XL. See Section 4.10.1 for complete details. If the wiring between the 5815XL and the panel is correct, measure the voltage from 5815XL Terminal (+) to Terminal (-). Voltage should be in the range 27.2-27.4V when AC power is present. If the green LED is not flashing, the likely cause is incorrect wiring from between the 5815XL and the panel. See Section 4.6.1 for wiring details.

11.3 Periodic Testing and Maintenance

To ensure proper and reliable operation, it is recommended that system inspection and testing be scheduled monthly or as required by national and/or local fire codes. Testing should be done by a qualified service representative if a malfunction is encountered.

Before Testing:

1. Notify the fire department and/or central alarm receiving station.
2. Notify facility personnel of a test so that alarm sounding devices are ignored during the test period.

Testing: Conduct a fire drill

1. Rotate the key or enter a code then press ENTER to access the menu.
2. Press 1.
3. Press 1 to select Fire Drill.
4. Press any key to begin the drill. To end the drill, press any key.

To conduct a fire drill from a remote fire drill switch:

Activate the switch to begin the drill; de-activate the switch to end the drill.

Measure battery voltage while the Notification Appliances are sounding. Replace any battery with terminal voltage less then 85% of rating. Reapply AC power and press RESET.

Note: Replace Battery every 5 years.

Return all switches to their normal outward positions. Notify fire department, central station and/or building personnel that the test is complete.

11.4 Event History

The event history can be useful for tracking or recalling a trouble condition.

11.5 Built-in Troubleshooting and Testing Tools

The fire control panel has several built-in testing and troubleshooting tools that can be utilized to save time while testing and troubleshooting points and SLC devices.

11.5.1 SLC Device Locator

SLC device locator can be used to locate a device on a SLC loop.

Follow these steps to locate a particular SLC device:

1. Select 2 (Point Functions) from the Main Menu.
2. Select 4 (SLC Dev Locator).

A message similar to the one shown in Figure 11-1 will display.

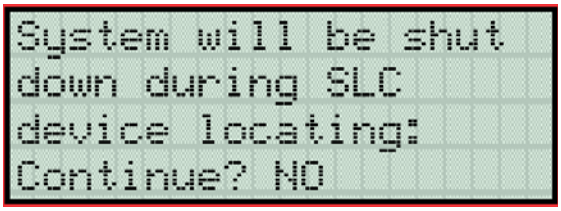


Figure 11-1 Shut Down Warning

3. Press the ▲ or ▼ arrow to toggle NO to YES then press ENTER.

   If NO is chosen you will exit back to the Point Function menu.
   If Yes is chosen the system will cease normal operation leaving the premise unprotected.

4. Select the SLC loop.
5. Enter the SLC address of the device you wish to locate.

   The LED on the selected device will start flashing.

6. Press the left arrow to exit the SLC Device Locator.

Note: Once you exit, the system will resume normal operation.

11.5.2 SLC Multiple Locator

This feature is the same as SLC Device Locator, except you can locate up to 8 devices on a single search.

Follow these instructions to locate multiple SLC devices:

1. Select 2 (Point Functions) from the Main Menu.
2. Select 5 (SLC Multiple Device Locator).

   A message similar to the one shown in Figure 11-1 will display.

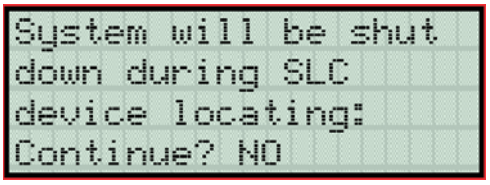


Figure 11-2 Shut Down Warning

3. Press the ▲ or ▼ arrow to toggle **NO** to **YES** then press ENTER.

   If NO is chosen you will exit back to the Point Function menu.
   If Yes is chosen the system will cease normal operation leaving the premise unprotected.

4. Select the SLC loop.
5. Enter up to 8 SLC addresses for the devices you wish to locate.

   The LEDs on the selected devices will start flashing.

6. Press the left arrow to exit SLC Multiple Device Locator.

Note: Once you exit, the system will resume normal operation.

11.5.3 I/O Point Control

This feature allows you to toggle any output on or off and trip any input device. This can be useful to test a point's output mapping.

Follow these steps to control a I/O point:

1. Select 2 (Point Functions) from the Main Menu.
2. Select 6 (I/O Point Control).
3. Select the module the point is on.
4. Use the ▲ or ▼ arrow to select the point you wish to test.
5. Press ENTER to generate an alarm for an input point or activate an output point.
6. To exit press the left arrow.

11.5.4 Earth Fault Resistance

Table 11-1 lists the earth fault resistance detection for each applicable terminal on the FACP.

Table 11-1: Earth Fault Resistance Values by Terminal

Function	Terminal Number	Terminal Label (Values in Ohms)		Low Biased		High Biased	
				High Trip	High Restore	Low Trip	Low Restore
Flexput™ Notification Circuits	4	X	I/O 6	-	-	0	0
	5	O		0	0	-	-
	6	X	I/O 5	-	-	0	0
	7	O		0	0	-	-
	8	X	I/O 4	-	-	0	0
	9	O		0	0	-	-
	10	X	I/O 3	-	-	0	0
	11	O		0	0	-	-
	12	X	I/O 2	-	-	0	0
	13	O		0	0	-	-
	14	X	I/O 1	-	-	0	0
	15	O		0	0	-	-
SBUS Communication	16	B	SBUS OUT	-	-	0	0
	17	A		-	-	0	0
SBUS Power	18	+		0	0	-	-
	19	-		-	-	0	0
SBUS Communication	20	B	SBUS IN	-	-	0	0
	21	A		-	-	0	0
SBUS Power	22	+		0	0	-	-
	23	-		-	-	0	0
SLC Terminals	33	SC-	SLC OUT	-	-	0	0
	34	S+		0	0	-	-
	35	SC-	SLC IN	-	-	0	0
	36	S+		0	0	-	-

Silent Knight Fire Product Warranty and Return Policy

General Terms and Conditions

- All new fire products manufactured by Silent Knight have a limited warranty period of 36 months from the date of manufacture against defects in materials and workmanship. See limited warranty statement for details.
- This limited warranty does not apply to those products that are damaged due to misuse, abuse, negligence, exposure to adverse environmental conditions, or have been modified in any manner whatsoever.

Repair and RMA Procedure

- All products that are returned to Silent Knight for credit or repair require a RMA (Return Authorization) number. Call Silent Knight Customer Service at 800-328-0103 or 203-484-7161 between 8:00 A.M. and 5:00 P.M. EST, Monday through Friday to obtain a return authorization number.
- Silent Knight Technical Support is available at 800-446-6444 between 8:00 A.M. and 5:00 P.M. CST, Monday through Friday.
- All returns for credit are subject to inspection and testing at the factory before actual determination is made to allow credit.
- RMA number must be prominently displayed on the outside of the shipping box. See return address example under Advanced Replacement Policy.
- Included with each return should be: a packing slip that has the RMA number, a content list, and a detailed description of the problem.
- All products returned to Silent Knight must be sent freight pre-paid. After product is processed, Silent Knight will pay for shipping product back to customer via UPS ground.
- Return the Silent Knight product circuit board only. Products that are returned in cabinets will be charged an additional $50 to cover the extra shipping and handling costs over board only returns. **Do not return batteries**. Silent Knight has the authority to determine if a product is repairable. Products that are deemed un-repairable will be returned to the customer.
- Product that is returned that has a board date code more than 36 months from date of manufacture will be repaired and the customer will be assessed the standard Silent Knight repair charge for that model.

Advanced Replacement Policy

- Silent Knight offers an option of advance replacement for fire product printed circuit boards that fail during the first 6 months of the warranty period. These items must be returned with transportation charges prepaid and must be accompanied by a return authorization.
- For advance replacement of a defective board, contact your local Silent Knight distributor or call Silent Knight at 800-328-0103 to obtain a RMA (Return Authorization) number and request advanced replacement.
- A new or refurbished board will be shipped to the customer. The customer will initially be billed for the replacement board but a credit will be issued after the repairable board is received at Silent Knight. All returned products must comply with the guidelines described under “General Terms and Conditions” and “Repair and RMA Procedure”.
- The defective board must be returned within 30 days of shipment of replacement board for customer to receive credit. No credit will be issued if the returned board was damaged due to misuse or abuse.
- Repairs and returns should be sent to:
  Silent Knight / Honeywell
  Attn: Repair Department / RA Number_____
  12 Clintonville Road
  Northford, CT 06472 USA

Manufacturer Warranties and Limitation of Liability

Manufacturer Warranties. Subject to the limitations set forth herein, Manufacturer warrants that the Products manufactured by it in its Northford, Connecticut facility and sold by it to its authorized Distributors shall be free, under normal use and service, from defects in material and workmanship for a period of thirty six months (36) months from the date of manufacture (effective Jan. 1, 2009). The Products manufactured and sold by Manufacturer are date stamped at the time of production. Manufacturer does not warrant Products that are not manufactured by it in its Northford, Connecticut facility but assigns to its Distributor, to extent possible, any warranty offered by the manufacturer of such product. This warranty shall be void if a Product is altered, service repaired by anyone other than Manufacturer or its authorized Distributors. This warranty shall also be void if there is a failure to maintain the Products and the systems in which they operate in proper working conditions.

MANUFACTURER MAKES NO FURTHER WARRANTIES, AND DISCLAIMS ANY AND ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS,TRADEMARKS, PROGRAMS AND SERVICES RENDERED BY MANUFACTURER INCLUDING WITHOUT LIMITATION, INFRINGEMENT, TITLE, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE. MANUFACTURER SHALL NOT BE LIABLE FOR ANY PERSONAL INJURY OR DEATH WHICH MAY ARISE IN THE COURSE OF, OR AS A RESULT OF, PERSONAL, COMMERCIAL OR INDUSTRIAL USES OF ITS PRODUCTS.

This document constitutes the only warranty made by Manufacturer with respect to its products and replaces all previous warranties and is the only warranty made by Manufacturer. No increase or alteration, written or verbal, of the obligation of this warranty is authorized. Manufacturer does not represent that its products will prevent any loss by fire or otherwise.

Warranty Claims. Manufacturer shall replace or repair, at Manufacturer's discretion, each part returned by its authorized Distributor and acknowledged by Manufacturer to be defective, provided that such part shall have been returned to Manufacturer with all charges prepaid and the authorized Distributor has completed Manufacturer's Return Material Authorization form. The replacement part shall come from Manufacturer's stock and may be new or refurbished. THE FOREGOING IS DISTRIBUTOR'S SOLE AND EXCLUSIVE REMEDY IN THE EVENT OF A WARRANTY CLAIM.

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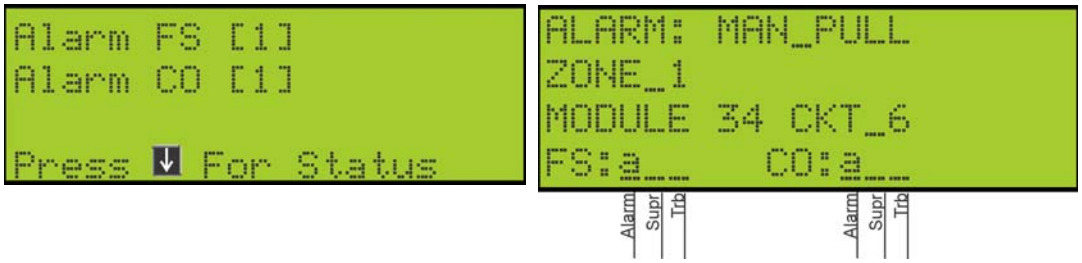
IntelliKnight 5820XL Basic Operating Instructions

These instructions must be framed and displayed next to the 5820XL panel in accordance with NFPA 72 fire code for Local Protected Fire Alarm Systems.

Operation	Keystrokes
Silence Alarms and Troubles	Press silence then rotate the key or enter a code
Reset alarms	Press reset then rotate the key or enter a code.
Conduct a fire drill	1. Rotate the key or Enter the installer code. The panel will automatically go to the main menu. Press 1. 2. Press 1 to select Fire Drill. 3. Press ENTER to begin the drill. To end the drill, press any key. To conduct a fire drill from a remote fire drill switch: Activate the switch to begin the drill; de-activate the switch to end the drill.
View alarms and troubles	When the system is in alarm or trouble, press ▼ to view location and type of alarm or trouble. 
View status of point	1. Rotate the key or Enter the installer code. The panel will automatically go to the main menu. Press 2. 2. Press 2 for Point Status. 3. From the list that displays, select the 5815XL module where the point you want to view is located. The screen that displays tells the status of the point including whether detector sensitivity is in compliance (see below).
Check detector sensitivity	1. Rotate the key or enter a code then press ENTER to access the menu. Press 2. 2. Press 2 for Point Status. 3. From the list that displays, select the 5815XL module where the point you want to view is located. 4. The fourth line of the display shows the sensitivity status. "NORMAL" means the detector is in compliance with NFPA 72. "CAL MAINT" means the detector is in compliance with NFPA 72 but maintenance should be performed soon. "CAL TRBLE" means the detector is not in compliance with NFPA 72.
Set time and date	1. Rotate the key or enter a code then press ENTER to access the menu. Press 4. 2. Make changes in the fields on the screen as necessary. 3. When the time and date are correct, press ENTER.
Enable / Disable point	1. Rotate the key or enter a code to access to access Main Menu. 2. Press 2 to select Point Functions. 3. Press 1 for Disable / Enable Pt. 4. Press 7 for Disable / Enable Pt. 5. Use the ▼ or ▲ to move through the list. Then press ENTER to select the module where the point you want to disable/enable is located 6. Enter the point or circuit number that you want to disable/enable. 7. Press the right arrow key to toggle between NORMAL (enable) or DISABLE.
View event history	Rotate the key or enter a code then press ENTER to access the menu, then press 3 to select Event History. Events will display in date order, with most recent events displaying first.
For Service Call:	

5820XL-EVS Basic Operating Instructions

These instructions must be framed and displayed next to the 5820XL-EVS panel in accordance with NFPA 72 fire code for Local Protected Fire Alarm Systems.

FS= Fire System EVS = Emergency Voice System

Operation	Task to Perform
Silence Alarms and Troubles (FS and EVS)	Press SILENCE then rotate the key or enter a code if prompted. Silence LED will light.
Reset Alarms (Fire Only)	Press RESET then rotate the key or enter a code.
Reset Alarms (EVS & Fire)	1. Press RESET. 2. Press 1 to Reset Fire System. 3. Press 2 to Reset Emerg. System. *Note: To reset EVS at an LOC, the user must gain EVS Control. (See Figure 1).*
Conduct a fire drill	1. Rotate the key or enter a code then press ENTER to access the menu. 2. Press 1 for System Test. 3. Press 1 to select Fire Drill. 4. Press ENTER to begin the drill. To end the drill, press any key. To conduct a fire drill from a remote fire drill switch: Activate the switch to begin the drill; de-activate the switch to end the drill.
Acknowledge Alarms and Troubles	Press ACK then enter a code if prompted. When the Alarm or Trouble is acknowledged an A will appear in the annunciator display as shown Below. TROUBLE: SMOKE-ION MODULE_33 POINT_1 [Z001] [M33:001] A MISSING 1 OF 1 Acknowledge Mark
View all active alarms, troubles, and supervisory signals	The highest priority event will display first. Press ▽ to view location and type of alarm or trouble. After 2 minutes of sitting idle, events will display on line 4. Alarm ECS [1] Alarm FS [2] Alarm CO [1] Press ↓ For Status ALARM: MAN_PULL ZONE_1 MODULE 34 CKT_6 ECS:a__ FS:a__ CO:a__ Alarm Supr Trb Alarm Supr Trb Alarm Supr Trb
Set Time and Date	1. Rotate the key or enter a code then press ENTER to access the menu. 2. Press 4 for Set Time and Date. 3. Make changes in the fields on the screen as necessary. 4. When the time and date are correct, press ENTER.
Enable / Disable point	1. Rotate the key or enter a code to access the Main menu. 2. Press 2 for Point Functions. 3. Press 1 for Disable / Enable point. 4. Press 7 for Disable / Enable point. 5. Use the △ or ▽ to move through the list. Then press ENTER to select the module where the point you want to disable/enable is located 6. Enter the point or circuit number that you want to disable/enable. 7. Press ▷ key to toggle between NORMAL (enable) or DISABLE
To Gain / Request EVS Control	1. Press the ECS CONTROL Button and follow the on-screen Instructions. *Note: When EVS Control LED is blinking, another LOC has EVS Control. EVS Control LED is on steady when the LOC has EVS Control.*
For Service Call:	

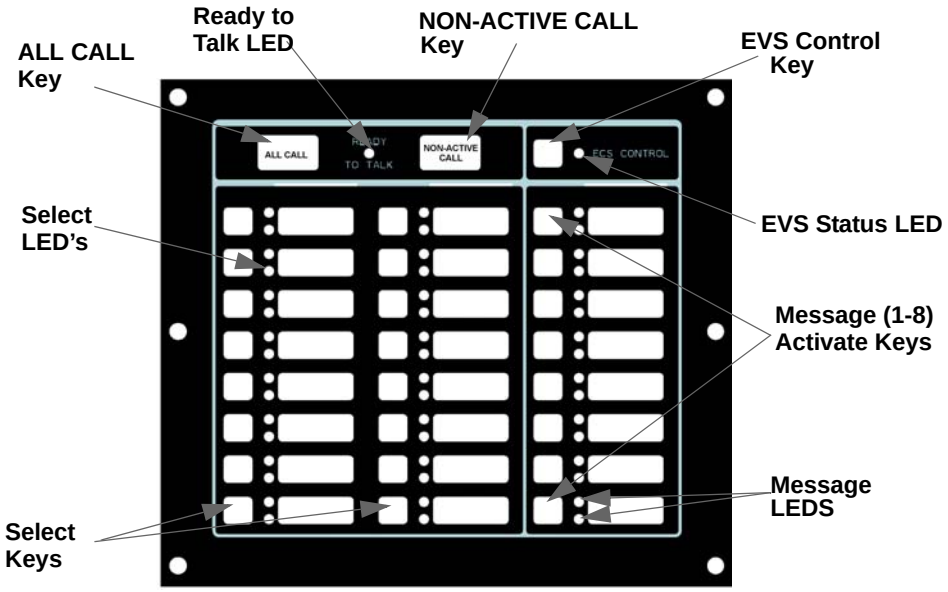


Figure 1: EVS-VCM Front View

Table 1: LED Conditions

LED	Color	States	Meaning
Select Keys	Red	On	The corresponding area is active for the currently playing EVS message.
		Off	The corresponding area is not active.
	Green	On	The corresponding area is active for the microphone.
		Off	The corresponding area is not active for the microphone.
EVS Control LED	Green	On	LOC has EVS Control and the user is able to make changes to the EVS.
		Off	LOC does not have EVS Control.
		Blinking	Another LOC has ECS Control
EVS Message LED	Red	On	The corresponding EVS event was activated by an EVS device.
		Off	The corresponding EVS event is not active.
	Green	On	The corresponding EVS event is active and was generated from the LOC (or was activated from another LOC, but this LOC now has EVS Control).
		Off	The corresponding ECS event was not activated from this LOC or this LOC does not have ECS Control.

Table 2: EVS Control Request

Operation	Task
Gain EVS Control at an LOC	Press the EVS Control Key and enter a code if prompted. If EVS Control is available, the EVS Control LED will illuminate. If another LOC has EVS Control, the display will be similar to the one shown. Press 1 to request control. The LOC with EVS Control will then be able to allow or deny the request.
Gain EVS Control as EVS Super User at an LOC (only one EVS Super User is allowed EVS Control in the system at a time).	From the idle screen, enter an EVS Super User access code and then press the EVS Control Key. If EVS Control as Super User is available, the EVS Control LED will illuminate. If another LOC has Super User EVS Control, a request for Super User EVS Control will automatically be made to the LOC with control. The LOC with Super User EVS Control will then be able to allow or deny the request. (See Figure 1-2 for screen display example).
Select all output group for microphone override	Key the microphone, press the All Call Key, wait for the Ready-to-Talk LED to light, and then deliver your verbal message.
Select all non-activated output groups for microphone override	Key the microphone, press the Non-Active Call Key, wait for the Ready-to-Talk LED to light, and then deliver your verbal message.

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