FIRE·LITE® ALARMS
by Honeywell

Supplement to the ES-50X Manual #LS10129-000FL-E Revision E dated 5/23/2022 for ES-50XP Applications

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Fire Alarm & Emergency Communication System Limitations

While a life safety system may lower insurance rates, it is not a substitute for life and property insurance!

An automatic fire alarm system—typically made up of smoke detectors, heat detectors, manual pull stations, audible warning devices, and a fire alarm control panel (FACP) with remote notification capability—can provide early warning of a developing fire. Such a system, however, does not assure protection against property damage or loss of life resulting from a fire.

An emergency communication system—typically made up of an automatic fire alarm system (as described above) and a life safety communication system that may include an autonomous control unit (ACU), local operating console (LOC), voice communication, and other various interoperable communication methods—can broadcast a mass notification message. Such a system, however, does not assure protection against property damage or loss of life resulting from a fire or life safety event.

The Manufacturer recommends that smoke and/or heat detectors be located throughout a protected premises following the recommendations of the current edition of the National Fire Protection Association Standard 72 (NFPA 72), manufacturer's recommendations, State and local codes, and the recommendations contained in the Guide for Proper Use of System Smoke Detectors, which is made available at no charge to all installing dealers. This document can be found at http://www.systemsensor.com/appguides/. A study by the Federal Emergency Management Agency (an agency of the United States government) indicated that smoke detectors may not go off in as many as 35% of all fires. While fire alarm systems are designed to provide early warning against fire, they do not guarantee warning or protection against fire. A fire alarm system may not provide timely or adequate warning, or simply may not function, for a variety of reasons:

Smoke detectors may not sense fire where smoke cannot reach the detectors such as in chimneys, in or behind walls, on roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level or floor of a building. A second-floor detector, for example, may not sense a first-floor or basement fire.

Particles of combustion or "smoke" from a developing fire may not reach the sensing chambers of smoke detectors because:

- Barriers such as closed or partially closed doors, walls, chimneys, even wet or humid areas may inhibit particle or smoke flow.
- Smoke particles may become "cold," stratify, and not reach the ceiling or upper walls where detectors are located.
- Smoke particles may be blown away from detectors by air outlets, such as air conditioning vents.
- Smoke particles may be drawn into air returns before reaching the detector.

The amount of "smoke" present may be insufficient to alarm smoke detectors. Smoke detectors are designed to alarm at various levels of smoke density. If such density levels are not created by a developing fire at the location of detectors, the detectors will not go into alarm.

Smoke detectors, even when working properly, have sensing limitations. Detectors that have photoelectronic sensing chambers tend to detect smoldering fires better than flaming fires, which have little visible smoke. Detectors that have ionizing-type sensing chambers tend to detect fast-flaming fires better than smoldering fires. Because fires develop in different ways and are often unpredictable in their growth, neither type of detector is necessarily best and a given type of detector may not provide adequate warning of a fire.

Smoke detectors cannot be expected to provide adequate warning of fires caused by arson, children playing with matches (especially in bedrooms), smoking in bed, and violent explosions (caused by escaping gas, improper storage of flammable materials, etc.).

Heat detectors do not sense particles of combustion and alarm only when heat on their sensors increases at a predetermined rate or reaches a predetermined level. Rate-of-rise heat detectors may be subject to reduced sensitivity over time. For this reason, the rate-of-rise feature of each detector should be tested at least once per year by a qualified fire protection specialist. Heat detectors are designed to protect property, not life.

IMPORTANT! Smoke detectors must be installed in the same room as the control panel and in rooms used by the system for the connection of alarm transmission wiring, communications, signaling, and/or power. If detectors are not so located, a developing fire may damage the alarm system, compromising its ability to report a fire.

Audible warning devices such as bells, horns, strobes, speakers and displays may not alert people if these devices are located on the other side of closed or partly open doors or are located on another floor of a building. Any warning device may fail to alert people with a disability or those who have recently consumed drugs, alcohol, or medication. Please note that:

- An emergency communication system may take priority over a fire alarm system in the event of a life safety emergency.
- Voice messaging systems must be designed to meet intelligibility requirements as defined by NFPA, local codes, and Authorities Having Jurisdiction (AHJ).
- Language and instructional requirements must be clearly disseminated on any local displays.
- Strobes can, under certain circumstances, cause seizures in people with conditions such as epilepsy.
- Studies have shown that certain people, even when they hear a fire alarm signal, do not respond to or comprehend the meaning of the signal. Audible devices, such as horns and bells, can have different tonal patterns and frequencies. It is the property owner's responsibility to conduct fire drills and other training exercises to make people aware of fire alarm signals and instruct them on the proper reaction to alarm signals.
- In rare instances, the sounding of a warning device can cause temporary or permanent hearing loss.

A life safety system will not operate without any electrical power. If AC power fails, the system will operate from standby batteries only for a specified time and only if the batteries have been properly maintained and replaced regularly.

Equipment used in the system may not be technically compatible with the control panel. It is essential to use only equipment listed for service with your control panel.

Alarm Signaling Communications:

- **IP connections** rely on available bandwidth, which could be limited if the network is shared by multiple users or if ISP policies impose restrictions on the amount of data transmitted. Service packages must be carefully chosen to ensure that alarm signals will always have available bandwidth. Outages by the ISP for maintenance and upgrades may also inhibit alarm signals. For added protection, a backup cellular connection is recommended.
- **Cellular connections** rely on a strong signal. Signal strength can be adversely affected by the network coverage of the cellular carrier, objects and structural barriers at the installation location. Utilize a cellular carrier that has reliable network coverage where the alarm system is installed. For added protection, utilize an external antenna to boost the signal.
- **Telephone lines** needed to transmit alarm signals from a premise to a central monitoring station may be out of service or temporarily disabled. For added protection against telephone line failure, backup alarm signaling connections are recommended.

The most common cause of life safety system malfunction is inadequate maintenance. To keep the entire life safety system in excellent working order, ongoing maintenance is required per the manufacturer's recommendations, and UL and NFPA standards. At a minimum, the requirements of NFPA 72 shall be followed. Environments with large amounts of dust, dirt, or high air velocity require more frequent maintenance. A maintenance agreement should be arranged through the local manufacturer's representative. Maintenance should be scheduled as required by National and/or local fire codes and should be performed by authorized professional life safety system installers only. Adequate written records of all inspections should be kept.

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Installation Precautions

Adherence to the following will aid in problem-free installation with long-term reliability:

WARNING - Several different sources of power can be connected to the fire alarm control panel. Disconnect all sources of power before servicing. Control unit and associated equipment may be damaged by removing and/or inserting cards, modules, or interconnecting cables while the unit is energized. Do not attempt to install, service, or operate this unit until manuals are read and understood.

CAUTION - System Re-acceptance Test after Software Changes: To ensure proper system operation, this product must be tested in accordance with NFPA 72 after any programming operation or change in site-specific software. Re-acceptance testing is required after any change, addition or deletion of system components, or after any modification, repair or adjustment to system hardware or wiring. All components, circuits, system operations, or software functions known to be affected by a change must be 100% tested. In addition, to ensure that other operations are not inadvertently affected, at least 10% of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, must also be tested and proper system operation verified.

This system meets NFPA requirements for operation at 0-49º C/32-120º F and at a relative humidity 93% ± 2% RH (non-condensing) at 32°C ± 2°C (90°F ± 3°F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15-27º C/60-80º F.

Verify that wire sizes are adequate for all initiating and indicating device loops. Most devices cannot tolerate more than a 10% I.R. drop from the specified device voltage.

Like all solid state electronic devices, this system may operate erratically or can be damaged when subjected to lightning induced transients. Although no system is completely immune from lightning transients and interference, proper grounding will reduce susceptibility. Overhead or outside aerial wiring is not recommended, due to an increased susceptibility to nearby lightning strikes. Consult with the Technical Services Department if any problems are anticipated or encountered.

Disconnect AC power and batteries prior to removing or inserting circuit boards. Failure to do so can damage circuits.

Remove all electronic assemblies prior to any drilling, filing, reaming, or punching of the enclosure. When possible, make all cable entries from the sides or rear. Before making modifications, verify that they will not interfere with battery, transformer, or printed circuit board location.

Do not tighten screw terminals more than 9 in-lbs. Over-tightening may damage threads, resulting in reduced terminal contact pressure and difficulty with screw terminal removal.

This system contains static-sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. Use static suppressive packaging to protect electronic assemblies removed from the unit.

Units with a touchscreen display should be cleaned with a dry, clean, lint free/microfiber cloth. If additional cleaning is required, apply a small amount of Isopropyl alcohol to the cloth and wipe clean. Do not use detergents, solvents, or water for cleaning. Do not spray liquid directly onto the display.

Follow the instructions in the installation, operating, and programming manuals. These instructions must be followed to avoid damage to the control panel and associated equipment. FACP operation and reliability depend upon proper installation.

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FCC Warning

WARNING: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause interference to radio communications. It has been tested and found to comply with the limits for class A computing devices pursuant to Subpart B of Part 15 of FCC Rules, which is designed to provide reasonable protection against such interference when devices are operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his or her own expense.

Canadian Requirements

This digital apparatus does not exceed the Class A limits for radiation noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la classe A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

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Software Downloads

In order to supply the latest features and functionality in fire alarm and life safety technology to our customers, we make frequent upgrades to the embedded software in our products. To ensure that you are installing and programming the latest features, we strongly recommend that you download the most current version of software for each product prior to commissioning any system. Contact Technical Support with any questions about software and the appropriate version for a specific application.

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Your feedback helps us keep our documentation up-to-date and accurate. If you have any comments or suggestions about our online Help or printed manuals, you can email us.

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Send email messages to:

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This symbol (shown left) on the product(s) and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, contact your local authorities or dealer and ask for the correct method of disposal.

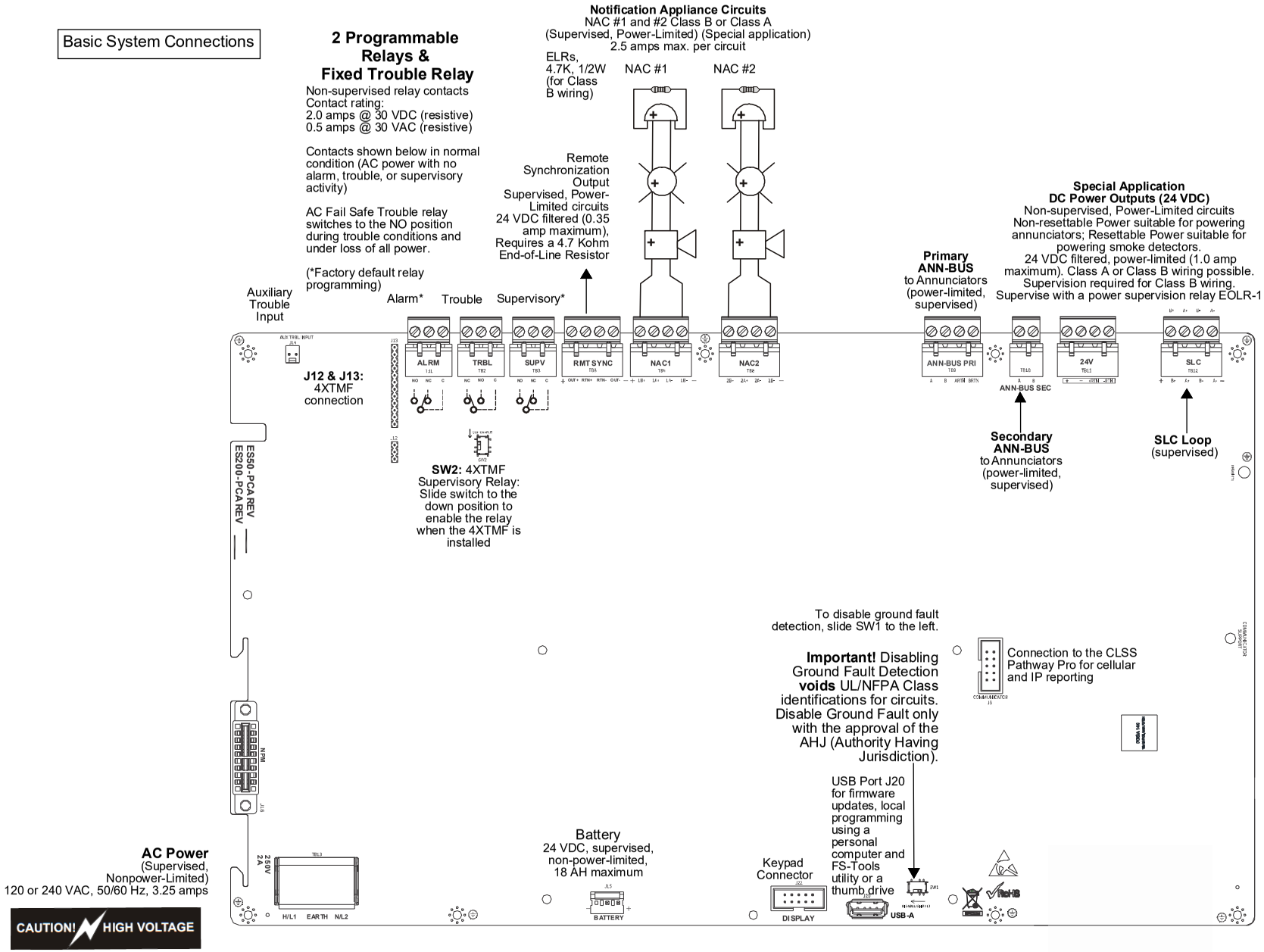
Electrical and electronic equipment contains materials, parts and substances, which can be dangerous to the environment and harmful to human health if the waste of electrical and electronic equipment (WEEE) is not disposed of correctly.

NOTE: Use this text to update the ES-50X Series Manual for ES-50XP applications. This text is a supplement of the original document and should be used in conjunction with it. All references to sections, titles, figures, and page numbers will be to the original document, LS10129-000FL-E.

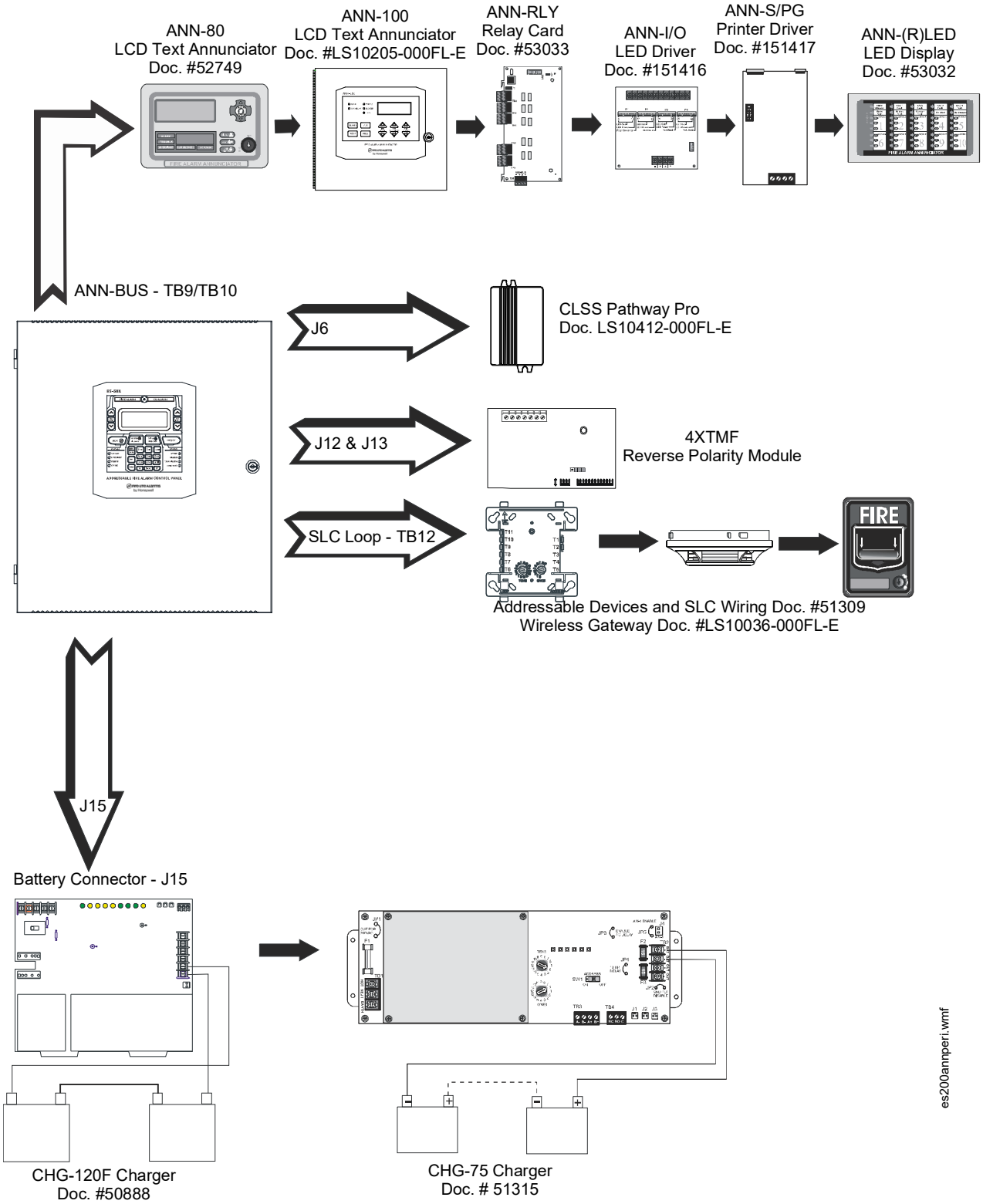
Fire-Lite Documents:

HW-AV-LTE-M-FL CLSS Pathway Pro	Document #LS10412-000FL-E

Basic System Connections



Peripheral Devices and Their Documents:



1.1 Features and Options

- Pre-installed CLSS Pathway Pro

1.4 Components

CLSS Pathway Pro Communicator

The pre-installed CLSS Pathway Pro is a dual-path cellular communicator which runs on 24VDC power from the panel. It supports both AT&T and Verizon LTE networks, and uses either of them with a stronger signal. It transmits Contact ID data from the fire panel to the central monitoring station.The communicator transmits system status (alarms, troubles, AC loss, etc.) via ethernet or cellular network.

1.8.4 FCC Compliance

Contains FCC ID: RI7ME310G1WW

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including, an interference that may cause undesired operation.

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This device complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The antenna should be installed and operated with minimum distance of 8" (20 cm) between the radiator and your body.

2.6 UL Power-limited Wiring Requirements

Power-limited and non-power-limited circuit wiring must remain separated in the cabinet. All power-limited circuit wiring must remain at least 0.25" (6.35 mm) away from any non-power-limited circuit wiring and non-power-limited circuit wiring must enter and exit the cabinet through different knockouts and/or conduits. When connecting the ground cables, be sure that the AC mains ground is the first one installed, closest to the backbox. The antenna must be mounted 8 in (20cm) from the display/keypad. A typical wiring diagram for the ES-50XP is shown below.

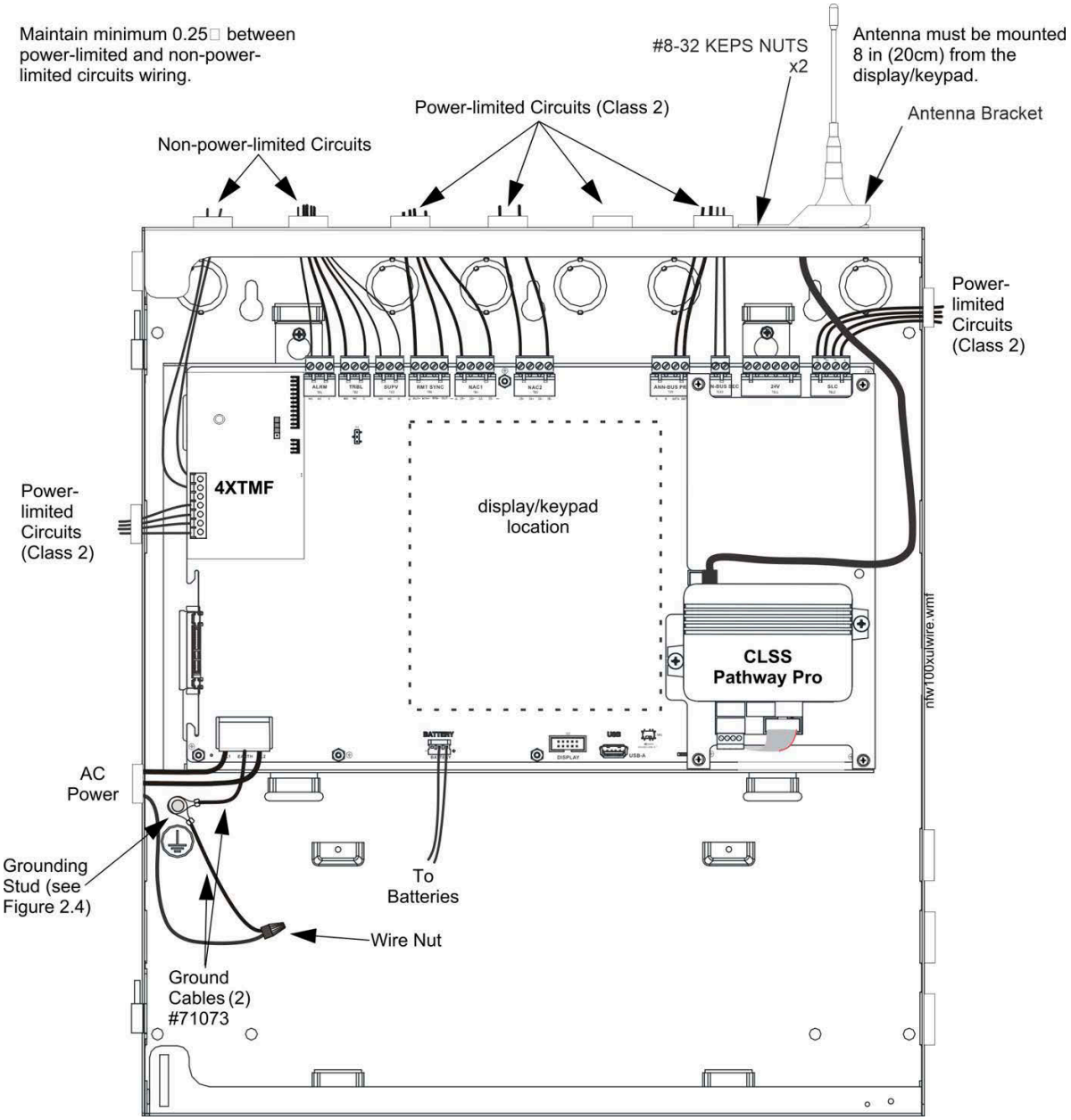


Figure 2.10 Typical UL Power-limited Wiring Requirements

2.8 CLSS Communicator

The CLSS Pathway Pro comes pre-installed and wired in the cabinet. The antenna must be mounted 8” (20cm) away from the display/keypad. Refer to Figure 2.10 above.

2.8.1 Configuration

After programming the panel via FS-Tools or the keypad, a CLSS account must be created and used to finalize communication from the Pathway Pro to the central station. Use either the CLSS Site Manager or CLSS Mobile app to configure the CLSS Pathway Pro.

Configuration must be done using a PC along with FS-Tools or the panel, and CLSS Site Manager. Follow the steps below.

1. Configure the panel via the keypad or FS-Tools.
2. Request a CLSS account and sign in.

   Navigate to www.fire.honeywell.com. Click *Request Access* and follow the on-screen instructions.
3. Build the customer site in CLSS.

   In the CLSS Site Manager, go to the *Quick access Menu* or *Feature Activation Screen* and click *Install Pathway Pro*. Follow the on-screen instructions to install the device.
4. Configure the Central Station.
5. Activate the CLSS Pathway Pro.
6. Upload the device list from panel/FS-Tools and download the Central Station Report.

3.5.2 Point Program

```
PROGRAMMING
1=AUTOPROGRAM
2=POINT PROGRAM
3=ZONE SETUP
```

Programming Screen #1

The Point Program option allows the programmer to add a new addressable device to the SLC loop, delete an existing device from the loop or change the programming for an existing device. Pressing *2*, while viewing Programming Screen #1, will select the Point Program option and display the following screens:

```
POINT PROGRAM
SELECT TYPE
1=DETECTOR
2=MODULE
```

Point Program Screen

Detector Programming

Pressing *1*, while viewing the Point Program Screen, will allow the programmer to add, delete or change the programming of an addressable detector. The following screen will be displayed by the control panel:

```
DETECTOR
1=ADD
2=DELETE
3=EDIT
```

Detector Screen

■ Add Detector

Pressing *1* while viewing the Detector Screen will display the following screen which allows the programmer to add a new detector address to programming:

```
ADD DETECTOR
ENTER DETECTOR#
***
```

Add Detector Screen

A flashing cursor will appear in the position of the first asterisk to the left. The programmer keys in the three digit detector address, such as 005. The screen will then ask whether the detector being added is wireless.

```
ADD DETECTOR
1=DETECTOR
2=DETECTOR:WIRELESS
```

Add Detector Screen

Select *1* for wired detector or *2* for wireless detector. When the choice is selected, the following screen will be displayed:

```
DETECTOR TYPE
1=SMOKE(PHOTO)
2=USER-DEFINED-1
3=SMOKE(ION)
```

through

```
DETECTOR TYPE
1=PHOTO CO
2=USER-DEFINED-13
```

Press the down arrow key to view additional choices. Press the number corresponding to the desired selection to program that type to the newly added detector. If the selected detector is a multi-criteria Fire (Photo)/CO detector, select *1* for *Fire CO.* When the type has been selected, the following screen will be displayed:

```
 ADD DETECTOR
DETECTOR#      005
IS ADDED
```

NOTE: The system *must* be monitored by a Supervising Station when using carbon monoxide detection per The Requirements for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment, NFPA 720.

The programmer can continue adding detectors by pressing the ESC key which will return the display to the Add Detector Screen.

■ Delete Detector

```
 DETECTOR
1=ADD
2=DELETE
3=EDIT
```

Detector Screen

Pressing *2* in the Detector Screen will display the Delete Detector Screen which allows the programmer to delete a specific detector:

```
 DELETE DETECTOR
ENTER DETECTOR#
***
```

Delete Detector Screen

A flashing cursor will appear in the position of the first asterisk to the left. The programmer keys in the three digit detector address, such as 005. When the last digit is keyed-in, the following screen will be displayed:

```
 DELETE DETECTOR
DETECTOR#      005
IS DELETED
```

The programmer can continue deleting detectors by pressing the *ESC* key which will return the display to the Delete Detector Screen.

■ Edit Detector

The programmer can change a detectors existing or factory default programming by pressing *3* in the Detector Screen. The following screen will be displayed:

```
 EDIT DETECTOR
ENTER POINT ADDRESS
***
```

Edit Detector Screen

A flashing cursor will appear in the position of the first asterisk to the left. The programmer keys in the three digit detector address, such as 017.

When the last digit is keyed-in, if the selected address has not been added to programming, a screen showing information about a device that is installed with a lower address, closest to the selected address, will be displayed.

If no detectors have been installed on the loop, the following will be displayed:

```
 NO DETECTOR
 INSTALLED
```

Edit Detector Screen #1

If the selected address has been added to programming, device summary screens will be displayed. These screens allow the programmer to view all device settings at a single glance. Pressing the left or right arrow keys will allow the programmer to rapidly view the devices at the previous or next address (if installed).

If a detector (such as a photoelectric detector) with the selected address is not physically installed on the SLC or has a communication fault but the address is programmed in the system, the following screen will be displayed:

```
TROUBL SMOKE(PHOTO)
<ADJ><NOUN>
        ZNNN
    *   1D017
```

Edit Detector Screen #1

If the selected address has been added to programming and a detector (such as a photoelectric detector) with the selected address is physically installed on the SLC and is communicating with the control panel, the following will be displayed:

```
NORMAL SMOKE (PHOTO)
<ADJ><NOUN>
        ZNNN
    *V *  1D017
```

Edit Detector Screen #1

To change the programming for the displayed detector, press the keypad 'down' arrow key to view the Edit Detector screens.

In the preceding example:

Normal - indicates that the detector with the selected address is physically installed on the SLC and communicating with the control panel (enabled)

<ADJ><NOUN> - represents the adjective and noun, which have been programmed, describing the location of the displayed device

ZNNN - represents the first of five possible software zones that the detector is assigned to (NNN = the three digit zone number from 000 - 049)

V or * - indicates whether or not alarm verification is enabled (V = alarm verification enabled and * = alarm verification disabled)

W or * - indicates whether or not walktest is enabled (W = walktest enabled and * = walktest disabled)

X or * - indicates whether or not the detector is wireless (X = wireless detector and * = wired detector)

1D017 - represents the Loop, Device type and Device address (1=SLC Loop, D=Detector and 017=Detector Address 017)

The following examples show the editing of a photoelectric smoke detector with address 017, located on the SLC loop:

```
EDIT DETECTOR 1D017
1=ENABLED      YES
2=TYPE SMOKE(PHOTO)
3=VERIFICATION  OFF
```

Edit Detector Screen #2

```
EDIT DETECTOR 1D017
1=WALKTEST      YES
2=PAS           NO
3=PRE-SIGNAL    NO
```

Edit Detector Screen #3

```
EDIT DETECTOR 1D017
1=ZONE ASSIGNMENT
 000 *** *** *** ***
```

Edit Detector Screen #4

```
EDIT DETECTOR 1D017
WIRELESS        NO
2=SOUNDER BASE
```

Edit Detector Screen #5

```
EDIT DETECTOR 1D017
1=NOUN/ADJECTIVE
2=DESCRIPTION
****************
```

Edit Detector Screen #6

Enable/Disable Detector

```
 EDIT DETECTOR
1=ENABLED
2=TYPE
3=VERIFICATION
```

Edit Detector Screen #2

To Enable or Disable the detector, press the *1* key while viewing the Edit Detector Screen #2. Each press of the key will toggle the screen between *Enabled Yes* and *Enabled No*. If *Enabled No* is selected, the detector will not be polled by the control panel, preventing the detector from reporting alarms and troubles to the panel. The control panel will display the device type and address which has been disabled and will turn on the Trouble LED and Disable LED.

Type

To select the type of detector being programmed, press the *2* key while viewing the Edit Detector Screen #2. This will cause the control panel to display the following Detector Type Screens:

```
 EDIT DETECTOR
1=ENABLED
2=TYPE
3=VERIFICATION
```

Edit Detector Screen #2

```
 DETECTOR TYPE
1=SMOKE(PHOTO)
2=USER-DEFINED-1
3=SMOKE(ION)
```

through

```
 DETECTOR TYPE
1=PHOTO CO
2=USER-DEFINED-13
```

Pressing the down arrow key will display additional detector types as indicated in the following table.

Detector Type	Action When Activated
Smoke Photo	Fire Alarm
User-Defined-1	same as previous (Smoke Photo)
Smoke (Ion)	Fire Alarm
User-Defined-2	same as previous (Smoke Ion)
Heat Detect	Fire Alarm
User-Defined-3	same as previous (Heat Detect)
Smoke Duct-P	Fire Alarm
User-Defined-4	same as previous (Smoke DuctP)
Photo w/Heat	Fire Alarm
User-Defined-5	same as previous (Photo w/Heat)
CO	CO Alarm
User-Defined-6	same as previous (CO Alarm)
Duct Superv	Supervisory, latching

User-Defined-7	same as previous (Superv DuctP)
Photo Super AR	Supervisory, nonlatching (works only in LiteSpeed)
User-Defined-8	same as previous (Photo-SupervAR)
CO Supervisory	Supervisory, latching
User-Defined-9	same as previous (CO Supervisory)
ADAPT	Fire Alarm
User-Defined-10	same as previous (ADAPT)
Beam	Fire Alarm
User-Defined-11	same as previous (Beam)
Fire/CO	response is programmable (Alarm, Supv, or None)
User-Defined-12	same as previous (Fire/CO)
Photo/CO	response is programmable (Alarm, Supv, or None)
User-Defined-13	same as previous (Photo/CO)

While viewing either Detector Type screen, select the type of detector being programmed by pressing the corresponding keypad number key. The display will return to Edit Detector Screen #2 and indicate the selection next to the Type option.

NOTE: If a detector is selected to be a DUCT SUPERV type, it will function like a supervisory point not a fire alarm point. The supervisory LED and supervisory relay will activate, not the fire alarm LED or alarm relay, if the detector senses smoke.

If the selected detector is a multi-criteria Fire/CO or Photo/CO detector, select *1* for *Fire CO* or *Photo CO* on the last screen and the following will display:

```
DETECTOR RESPONSE
1=CO        ALARM
2=HEAT      ALARM
3=PHOTO     ALARM
```

In this screen, select the action performed by the detector when it is activated. Press *1* to change the response for the *Photo* element of the detector, *2* for the *Heat* element, and *3* for the *CO* element. The detector response will toggle between *Alarm* (sends an Alarm signal to the FACP), *Supervisory* (sends a Supervisory signal to the FACP, and *None* (no signal sent to the FACP).

Verification

```
EDIT DETECTOR
1=ENABLED
2=TYPE
3=VERIFICATION
```

Edit Detector Screen #2

Alarm verification is used to confirm that a smoke detector activation is a true alarm condition and not a false alarm. This feature is selected by pressing *3* while viewing the Edit Detector Screen #2 so that the display reads *Verification On*. Each time the *3* key is pressed, the display will toggle between *Verification On* and *Verification Off*. For a detailed description, refer to "Alarm Verification (None or One Minute)" on page 113.

Walktest

```
EDIT DETECTOR
1=WALKTEST
2=PAS
3=PRE-SIGNAL
```

Edit Detector Screen #3

The Walktest feature allows one person to test the system devices without the necessity of manually resetting the control panel after each device activation. To enable a device for the Walktest feature, press *1* while viewing the Edit Detector Screen #3 until the display reads *Walktest Yes*. Each press of the *1* key will cause the display to toggle between *Walktest Yes* and *Walktest No*. Refer to "Walktest" on page 113.

PAS

The PAS (Positive Alarm Sequence) option will program an automatic, addressable detector to delay panel activation (including alarm relay and communicator) for a period of 15 seconds plus a programmable time of up to 3 minutes. Zone 047, however, will activate immediately and may be used to connect a signaling device to indicate PAS activation *(do not use a Notification Appliance Circuit for this purpose)*. To enable the PAS feature, press *2* while viewing the Edit Detector Screen #3 until the display reads *PAS Yes*. Each press of the *2* key will cause the display to toggle between *PAS Yes* and *PAS No*. Refer to "Positive Alarm Sequence" on page 112.

For example, if a detector with address 005 is to be configured for PAS operation:

Select *PAS Yes* when editing the detector set to address 005

Program the desired zone or zones to be activated by this detector, in this example Z001

Program an output, such as a control module that is to be activated by detector 005 by assigning the same zone to it; in this example Z001

Program an output, such as a control module, for PAS activation by assigning zone Z047 to it. This control module may be connected to a signaling device used to indicate a PAS condition *(do not use a Notification Appliance Circuit for this purpose)*

Enable zones Z001 and Special Purpose Zone PAS 047 and set the PAS delay timer to some value

With the preceding program settings, when the detector with address 005 is activated, zone Z047 will cause its associated control module to activate immediately, sounding the connected PAS signaling device. Following the PAS delay time, zone Z001 will cause its associated control module to activate and the control panel will initiate an alarm condition.

Note that a detector can be enabled for either PAS or Pre-signal but not both.

Pre-signal

```
EDIT DETECTOR
1=WALKTEST
2=PAS
3=PRE-SIGNAL
```

Edit Detector Screen #3

The Pre-signal option programs the detector to delay panel activation for a preprogrammed time delay of up to three minutes while allowing for visual verification by a person. Note that the alarm relay and communicator will respond to the initial alarm immediately. In addition, Zone 18 will activate. This zone can be programmed to a control module which may be used to activate a sounder or indicator which the installer designates as a Presignal indication *(do not use a Notification Appliance Circuit for this purpose)*. To enable the Pre-signal feature, press *3* while viewing Edit Detector Screen #3 until the display reads *Pre-signal Yes*. Each press of the *3* key will cause the display to toggle between *Pre-signal Yes* and *Pre-signal No*. Refer to "Presignal" on page 112.

For example, if a detector with address 005 is to be configured for Pre-Signal operation:

Select *Pre-signal Yes* when editing the detector set to address 005

Program the desired zone or zones to be activated by this detector, in this example Z001

Program an output, such as a control module that is to be activated by detector 005 by assigning the same zone to it; in this example Z001

Program an output, such as a control module, for Pre-signal activation by assigning zone Z048 to it. This control module may be connected to a signaling device used to indicate a Pre-signal condition *(do not use a Notification Appliance Circuit for this purpose)*

Enable zones Z001 and Special Purpose Zone Pre-signal 048 and set the Pre-signal delay timer to some value

With the preceding program settings, when the detector with address 005 is activated, zone Z048 will cause its associated control module to activate immediately, sounding the connected signaling device to indicate the Pre-signal condition. Following the Pre-signal delay time, zone Z001 will cause its associated control module to activate and the control panel will initiate an alarm condition.

Note that a detector can be enabled for either PAS or Pre-signal, but not both.

Zone Assignment

```
EDIT DETECTOR
1=ZONE ASSIGNMENT
 000 *** *** *** ***
```

Edit Detector Screen #4

A maximum of five zones can be programmed to each addressable detector. Pressing *1* while viewing Edit Detector Screen #4 displays the following screen:

```
ZONE ASSIGNMENT
Z000 Z*** Z*** Z***
```

Zone Assignment Screen

Note that Z*** represents the Zone Number(s) corresponding to this device. The factory default for an unprogrammed device is Z000 for general alarm zone. A flashing cursor will appear on the first *0* to the right. Enter the three digit number corresponding to the zone that is to be assigned to this device. The cursor moves to the next Z*** designation. Continue entering zone assignments or the remaining zones can be left blank or programmed as general alarm zone Z000. When all desired changes have been made, press the Enter key to store the zone assignments. The display will return to the Edit Detector Screen #4. Note that the left and right arrow keys can be used to navigate through the zones and the *CLEAR* key can be used to quickly clear a zone.

If the selected detector is a multi-criteria detector, the following screen will display respectively before the Zone Assignment Screen allowing the user to program the zones independently.

```
EDIT DETECTOR
1=PHOTO ZONES
2=HEAT ZONES
3=CO ZONES
```

Multi-Criteria Detector Zones Screen

```
EDIT DETECTOR
WIRELESS      NO
2=SOUNDER BASE
```

Edit Detector Screen #5

Wireless

The Wireless selection will update automatically if the system recognizes a wireless device. A wireless device operates as part of the SWIFT® wireless network. If the detector is wireless, the display reads *Wireless Yes*. If the device is wired, the display will read *Wireless No*. Fore more information on the SWIFT wireless network, *refer to the SWIFT manual*, #LS10036-000FL-E.

Sounder Base

The Sounder Base selection allows the programmer to enter different values if the selected detector is mounted in an addressable sounder base. Pressing *2* while viewing Edit Detector Screen #5 will display the following:

```
SOUNDER BASE
1=INSTALLED     NO
2=SILENCEABLE   NO
3=CODING      STEADY
```

Sounder Base Screen #1

```
SOUNDER BASE
1=ZONE ASSIGNMENT
000 000 000 000 000
2=VOLUME       LOW
```

Sounder Base Screen #2

If the selected detector has been installed in a sounder base, press *1* while viewing Sounder Base Screen #1 until the display reads *Installed Yes*. Each press of the *1* key will cause the display to toggle between *Installed Yes* and *Installed No*.

The Silenceable selection allows the programmer to select whether the selected sounder base can be silenced, either by pressing the Alarm Silence key or by enabling Autosilence. Pressing the *2* key while viewing Sounder Base Screen #1 will enable the Silenceable feature causing the display to read *Silenceable Yes*. Repeated presses of the *2* key will cause the display to toggle between *Silenceable Yes* and *Silenceable No*. When set to Canadian mode of operation, a third silenceable option appears, Silenceable Auto. When set to *Silenceable Auto*, the intelligent sounder base will automatically silence after the Control Module Auto Silence timer expires.

The Fire Coding feature allows the programmer to select the type of output that the sounder base will generate when activated. Pressing *3* while viewing Sounder Base Screen #1 will cause the following displays to appear:

```
   CODING
1=STEADY
2=TEMP-3
3=TEMP-4
```

Coding Screen #1

The programmer can select the sounder base output by pressing the number corresponding to the desired output. The coding selections are:

- Steady - a continuous output with no coding
- Temporal 3 - ½ Second On, ½ Second Off, ½ Second On, ½ Second Off, ½ Second On, 1½ Seconds Off
- Temporal 4 - ½ Second On, ½ Second Off, ½ Second On, ½ Second Off, ½ Second On, ½ Second Off, ½ Second On, 1½ Seconds Off

```
SOUNDER BASE
1=ZONE ASSIGNMENT
*** *** *** *** ***
2=VOLUME      LOW
```

Sounder Base Screen #2

The sounder base volume has two settings: Low, or High. Press *1* while viewing Sounder Base Screen #2 until the display reads Low or High as desired. Each press of the *1* key will cause the display to toggle between *Volume Low* and *Volume High*.

A maximum of five zones can be programmed to each sounder base. Pressing *2* while viewing Sounder Base Screen #2 displays the following screen:

```
 ZONE ASSIGNMENT
Z*** Z*** Z*** Z***
```

Zone Assignment Screen

Note that Z*** represents the Zone Number(s) corresponding to this device. The factory default for an unprogrammed device is Z000 for general alarm zone. A flashing cursor will appear on the first *0* to the left. Enter the three digit number corresponding to the zone that is to be assigned to this sounder base. The cursor moves to the next Z*** designation. Continue entering zone assignments or the remaining zones can be left blank or programmed as general alarm zone Z000. When all desired changes have been made, press the Enter key to store the zone assignments. The display will return to the Sounder Base Screen #2. Note that the left and right arrow keys can be used to navigate through the zones and the *CLEAR* key can be used to quickly clear a zone.

CAUTION: VERIFY SOUNDER BASE MODEL NUMBER

USE OF THE SOUNDER BASE PROGRAMMING OPTIONS REQUIRES THE USE OF THE **B200S** SOUNDER BASE. WHILE THE **B200SR** SOUNDER BASE IS COMPATIBLE, IT DOES NOT ALLOW FOR SPECIAL PROGRAMMING OPTIONS. IF USING THE B200SR, SET THE SOUNDER BASE OPTION TO “NO”. IF SET TO “YES”, AN ERROR WILL OCCUR AND THE SYSTEM WILL DISPLAY AN INVALID REPLY. CODING OPTIONS FOR THE B200SR ARE ACHIEVED MANUALLY WITH JUMPER SETTINGS ON THE DEVICE.

Noun/Adjective

```
 EDIT DETECTOR
1=NOUN/ADJECTIVE
2=DESCRIPTION
***************
```

Edit Detector Screen #6

The Noun/Adjective selection allows the programmer to enter specific descriptors about the detector currently being programmed. Pressing *1* while viewing Edit Detector Screen #6 will cause the following screen to be displayed:

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```

Noun/Adjective Screen

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```

Noun/Adjective Screen

Pressing *1* while viewing the Noun/Adjective Screen will cause the following screen(s) to be displayed. Note that the keypad *down* arrow key must be pressed to see all the Adjective screens. Press the number corresponding to the adjective that is to be used as a descriptor for the location of the detector currently being programmed. When an adjective has been selected, it will appear at the top of the display as indicated by the asterisks.

```
********************
1=NORTH
2=SOUTH
3=EAST
```

Adjective Screen #1

```
********************
1=WEST
2=FRONT
3=CENTER
```

Adjective Screen #2

```
********************
1=REAR
2=UPPER
3=LOWER
```

Adjective Screen #3

```
********************
1=MAIN
2=FIRST
3=2ND
```

Adjective Screen #4

```
********************
1=3RD
2=4TH
3=5TH
```

Adjective Screen #5

```
********************
1=FLOOR1
2=FLOOR2
3=FLOOR3
```

Adjective Screen #6

```
********************
1=FLOOR5
2=FLOOR6
3=ROOM
```

Adjective Screen #7

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```
Noun/Adjective Screen

Pressing *2* while viewing the Noun/Adjective Screen will cause the following screen(s) to be displayed. Note that the keypad *down* arrow key must be pressed to see all the Noun screens. Press the number corresponding to the noun that is to be used as a descriptor for the location of the detector currently being programmed. When a noun has been selected, it will appear at the top of the display as indicated by the asterisks.

```
********************
1=BASEMENT
2=BOILER RM
3=CLASSROOM
```
Noun Screen #1

```
********************
1=CLOSET
2=CORRIDOR
3=ELECTRIC RM
```
Noun Screen #2

```
********************
1=ELEVATOR
2=ENTRANCE
3=FLOOR
```
Noun Screen #3

```
********************
1=GARAGE
2=HALLWAY
3=HVAC RM
```
Noun Screen #4

```
********************
1=KITCHEN
2=LOBBY
3=OFFICE
```
Noun Screen #5

```
********************
1=PATIENT
2=RESTROOM
3=ROOM
```
Noun Screen #6

```
********************
1=STAIRWAY
2=STOREROOM
3=WING
```
Noun Screen #7

```
********************
1=ZONE
```
Noun Screen #8

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```
Noun/Adjective Screen

Pressing *3* or *4* while viewing the Noun/Adjective Screen will display screens similar to the previous Adjective and Noun Screens. The new screens will list custom Adjectives and Nouns which have been programmed into the control panel using the FS-Tools utility. These descriptors are selected as described in the previous sections.

Description

```
 EDIT DETECTOR
1=NOUN/ADJECTIVE
2=DESCRIPTION
```
Edit Detector Screen #5

The Description selection allows the programmer to enter additional information about the detector currently being programmed. This information will be displayed as part of the device label on the display. Pressing *2* while viewing Edit Detector Screen #5 will cause the following screen to be displayed:

```
DESCRIPTION    1D002
NOUN-ADJECTIVE
********************
```
Adjective/Noun Screen

A flashing cursor will appear at the first asterisk to the left. The programmer can enter additional descriptive information about the device being programmed. This information will appear on the display along with the standard device label information.

A maximum of 20 characters (including spaces) can be entered. To enter alphanumeric characters from the keypad, repeatedly press the appropriate key until the desired character is displayed in the first position. For example, to enter the letter *B*, press the *2* (ABC) key three times to toggle through the characters *2*, *A* and *B*. Press the right arrow key to move the cursor one position to the right and repeat the process to enter the next character. To enter a space, press the * *(QZ)* key four times until a blank appears in the desired position. When all characters have been entered, press the Enter key to store the information. The display will return to the Edit Detector Screen #5, displaying the new information at the bottom of the screen.

Module Programming

```
 POINT PROGRAM
 SELECT TYPE
1=DETECTOR
2=MODULE
```
Point Program Screen #2

Pressing *2*, while viewing Point Program Screen #2, will allow the programmer to add, delete or change the programming of an addressable module. The following screen will be displayed by the control panel:

```
    MODULES
1=ADD
2=DELETE
3=EDIT
```
Modules Screen

■ Add Module

Pressing *1* while viewing the Modules Screen will display the following screen which allows the programmer to add a new module address to programming:

```
   ADD MODULE
ENTER MODULE#
***
```
Add Module Screen #1

A flashing cursor will appear in the position of the first asterisk to the left. The programmer keys in the three digit module address, such as *005*.

When the last digit is keyed-in, the following screen will be displayed:

```
ADD MODULE
1=CON        3=MON
2=CON:WL     4=MON:WL
```

Add Module Screen #2

Pressing *1* for Control Module, *2* for Wireless Control Module, *3* for Monitor Module, or *4* for Wireless Monitor Module will cause the following screen to be displayed:

```
ADD MODULE
MODULE#        005
IS ADDED (WIRELESS)
```

Add Module Screen #3

The programmer can continue adding modules by pressing the *ESC* or left arrow key which will return the display to the Add Module Screen #1.

■ Delete Module

```
MODULES
1=ADD
2=DELETE
3=EDIT
```

Modules Screen

Pressing *2* in the Modules Screen will display the Delete Module Screen which allows the programmer to delete a specific module:

```
DELETE MODULE
ENTER MODULE#
***
```

Delete Module Screen

A flashing cursor will appear in the position of the first asterisk to the left. Using the panel keypad, key in the module address such as *005*. When the last digit is keyed in, the following confirmation that the module has been deleted will be displayed:

```
DELETE MODULE
MODULE#        005
IS DELETED
```

■ Edit Module Screen for Monitor Module

The programmer can change a modules existing or factory default programming by pressing *3* in the Modules Screen. The following screen will be displayed:

```
EDIT MODULE
ENTER MODULE ADDRESS
***
```

Edit Module Screen

A flashing cursor will appear in the position of the first asterisk to the left. The programmer keys in the three digit module address, such as *012*. When the last digit is keyed-in, if the selected address has *not* been added to programming, a screen showing information about a device that <u>is</u> installed with a lower address, closest to the selected address, will be displayed. If no modules are installed on the loop, the following screen will be displayed:

```
NO MODULE
INSTALLED
```

Edit Module Screen

If the selected address has been added to programming but a module (such as a monitor module) with the selected address is not physically installed on the SLC or has a communication fault, the following screen will be displayed:

```
TROUBL MONITOR
<ADJ><NOUN>
ZNNN
* * 1M012
```

If the selected address has been added to programming and a module (such as a monitor module) with the selected address is physically installed on the SLC and is communicating with the control panel, the following screen will be displayed:

```
NORMAL MONITOR
   <ADJ><NOUN>
        ZNNN
      W  1M012
```

To change the programming for the displayed module, press the keypad down arrow key to view the following Edit Monitor screens. In the preceding example:

Normal - indicates that the module with the selected address is physically installed on the SLC and communicating with the control panel (enabled)

<ADJ><NOUN> - represents the adjective and noun, which have been programmed, describing the location of the displayed device

ZNNN - represents the first of five possible software zones that the module is assigned to (NNN = the three digit zone number from 000 - 049)

1M012 - represents the Loop, Device type and Device address (1 = SLC Loop, M = Module and 012 = Module Address 012)

W or * - indicates whether or not the device is programmed for Walktest (W = programmed for walktest, * = not programmed for walktest).

X or * - indicates whether or not the device is wireless (X = wireless, * = wired).

If the selected address corresponds to a control module, a screen displaying information about the control module with the selected address will be displayed as shown in "Edit Module Screen for Control Modules" on page 20.

If the selected address corresponds to a monitor module, a screen displaying information about the module with the selected address will be displayed as illustrated in the following:

```
NORMAL MONITOR
   <ADJ><NOUN>
        ZNNN
       1M012
```

```
EDIT MONITOR  1M012
1=ENABLED      YES
2=TYPE MONITOR
```

Edit Monitor Screen #2

```
EDIT MONITOR  1M012
1=PRE-SIGNAL   NO
WIRELESS       NO
```

Edit Monitor Screen #3

```
EDIT MONITOR  1M012
1=WALKTEST     YES
2=ZONE ASSIGNMENT
 000 *** *** *** ***
```

Edit Monitor Screen #4

```
EDIT MONITOR  1M012
1=ADJECTIVE/NOUN
2=DESCRIPTION
********************
```

Edit Monitor Screen #5

Enable/Disable Module

To Enable or Disable the monitor module, press the *1* key while viewing the Edit Module Screen #2. Each press of the key will toggle the screen between *Enabled Yes* and *Enabled No*. If *Enabled No* is selected, the module will not be polled by the control panel, preventing the module from reporting alarms and troubles to the panel. The control panel will indicate a system trouble condition and the Disable LED with turn on if any devices are disabled.

Type Monitor

```
EDIT MONITOR
1=ENABLED
2=TYPE MONITOR
```

Edit Monitor Screen #2

Using the FS-Tools Upload/Download utility, unique user-defined monitor types can be created and loaded into the FACP for later use. The FACP response to the activation of a user-defined type is the same as most previous standard types in the list, thus allowing a variety of user-defined types and responses. To select the type of monitor module being programmed, press the *2* key while viewing the Edit Monitor Screen #2. This will cause the control panel to display the following Monitor Type Screens:

```
MONITOR TYPE
1=PULL-STATION
2=USER-DEFINED-1
3=WATERFLOW
```

Monitor Type Screen #1

Pressing the down arrow key will display additional Monitor Type screens. While viewing one of the Monitor Type screens, select the type of monitor module being programmed by pressing the corresponding keypad number key. The display will return to the Edit Monitor Screen #2 which will show the new type selection.

Table lists the Monitor Types and their respective functions.

Monitor module type selection will affect the function of the point as follows:

Monitor Type	Action When Activated
Pull-Station	Fire Alarm
User-Defined-1	same as previous (Pull-Station)
Waterflow	Fire Alarm Delayed
User-Defined-2	same as previous (Waterflow)
Monitor	Fire Alarm
User-Defined-3	same as previous (Monitor)
Future	not used
Future	not used
Smoke-Conventional	Fire Alarm
User-Defined-5	same as previous (Smoke-Conventional)
Heat Conventional	Fire Alarm
User-Defined-6	same as previous (Heat-Detector)
Medic Alert [1,4]	General Purpose Signaling, latching
User-Defined-7	same as previous (Medic-Alert)
Hazard Alert [1,4]	General Purpose Signaling, latching
User-Defined-8	same as previous (Hazard-Alert)
Tornado Alert [1,4]	General Purpose Signaling, latching
User-Defined-9	same as previous (Tornado-Alert)
Phone	Active Phone (LCD display only)
User-Defined-10	same as previous (Phone)
Tamper	Supervisory, nonlatching (tracking)
User-Defined-11	same as previous (Tamper)
Supervisory	Supervisory, latching
User-Defined-12	same as previous (Supervisory)
Supervisory AR [2]	Supervisory, nonlatching (tracking)
User-Defined-13	same as previous (Supervisory-AR)
HVAC OVRRIDE [3,4]	Switch Supervisory, nonlatching (tracking)
Power Monitor	Power Fault
User-Defined-14	same as previous (Power Monitor)
Trouble Monitor	Trouble
User-Defined-15	same as previous (Trouble Monitor)
Process Monitor[4]	General Purpose Signaling, latching
User-Defined 16 [1]	same as previous (Process-Monitor)
Process Monitor AR [1,2,4]	General Purpose Signaling, nonlatching (tracking)
User-Defined-17	same as previous (Process-Monitor-AR)
Future	not used
Future	not used
Ack Switch	Acts like panel Acknowledge Key
Sil Switch	Acts like panel Silence Key
Reset Switch	Acts like panel Reset Key
Drill Switch	Acts like panel Drill Key
PAS Bypass	PAS Disable
HVAC RESTART [3,4]	Switch (see note 2)
Drill Switch AR [2]	Acts like panel Drill Key, non-latching (tracking)
Wireless Gateway	SWIFT gateway needs this type to display wireless troubles at the FACP

Table 3.1 Monitor Types

1 Combination systems employing these non-fire monitor types require the SLC loop to be programmed by the installer for Class B operation and isolator modules must be employed on each non-fire branch of the SLC as shown in the SLC Wiring Manual (document number 51309). Fire and non-fire devices must not be used on the same SLC branch. For UL2017 compliance, The ANN-LED annunciator must be used to indicate the active, dedicated zone or device.
2 For entries ending in AR, AR refers to AutoResettable.
3 For HVAC RESTART and HVAC OVRRIDE descriptions, refer to “Monitor Module Operation” on page 145.
4 When these signals are transmitted from CLSS Pathway Pro over CLSS Software Receiver, HON-CLSS-SWRCVR, these signals are considered supplementary at the supervising station.

Pre-signal

```
EDIT MONITOR
1=PRE-SIGNAL   NO
WIRELESS       NO
```

Edit Monitor Screen #3

To enable the Pre-signal feature, press *1* while viewing Edit Monitor Screen #3 until the display reads *Pre-signal Yes*. Each press of the *1* key will cause the display to toggle between *Pre-signal Yes* and *Pre-signal No*. Refer to"Presignal" on page 112 for additional information.

Wireless

```
EDIT MONITOR
1=PRE-SIGNAL     NO
WIRELESS         NO
```

Edit Monitor Screen #3

The Wireless selection will update automatically if the system recognizes a wireless device. If the module is wireless, the display reads *Wireless Yes*. If the module is wired, the display will read *Wireless No*. Fore more information on the SWIFT wireless network, *refer to the SWIFT manual*, #LS10036-000FL-E.

Walktest

```
EDIT MONITOR
1=WALKTEST
2=ZONE ASSIGNMENT
 000 *** *** *** ***
```

Edit Monitor Screen #4

The Walktest feature allows one person to test the system devices without the necessity of manually resetting the control panel after each device activation. To enable devices, which are connected to a monitor module, for the Walktest feature, press *1* while viewing the Edit Monitor Screen #4 until the display reads *Walktest Yes*. Each press of the *1* key will cause the display to toggle between *Walktest Yes* and *Walktest No*. Refer to "Walktest" on page 113 for additional information.

Zone Assignment

A maximum of five zones can be programmed to each addressable monitor module. Pressing *2* while viewing Edit Monitor Screen #4 displays the following screen:

```
ZONE ASSIGNMENT
Z000 Z*** Z*** Z*** Z***
```

Zone Assignment Screen

Note that Z*** represents the Zone Number(s) corresponding to this device. The factory default for an unprogrammed device is Z000 for general alarm zone. A flashing cursor will appear on the first *0* to the left. Enter the three digit number corresponding to the zone that is to be assigned to this device. The cursor moves to the next Z*** designation. Continue entering zone assignments or the remaining zones can be left blank or programmed as general alarm zones Z00. When all desired changes have been made, press the Enter key to store the zone assignments. The display will return to the Edit Monitor Screen #4.

Noun/Adjective

```
EDIT MONITOR
1=NOUN/ADJECTIVE
2=DESCRIPTION
****************
```

Edit Monitor Screen #5

The Noun/Adjective selection allows the programmer to enter specific descriptors about the monitor module currently being programmed. Pressing *1* while viewing Edit Monitor Screen #5 will cause the following screen to be displayed:

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```

Noun/Adjective Screen

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```

Noun/Adjective Screen

Pressing *1* while viewing the Noun/Adjective Screen will cause the following screen(s) to be displayed. Note that the keypad *down* arrow key must be pressed to see all the Adjective screens. Press the number corresponding to the adjective that is to be used as a descriptor for the location of the monitor module currently being programmed.

```
********************
1=NORTH
2=SOUTH
3=EAST
```

Adjective Screen #1

```
********************
1=WEST
2=FRONT
3=CENTER
```

Adjective Screen #2

```
********************
1=REAR
2=UPPER
3=LOWER
```

Adjective Screen #3

```
********************
1=MAIN
2=FIRST
3=2ND
```

Adjective Screen #4

```
********************
1=3RD
2=4TH
3=5TH
```

Adjective Screen #5

```
********************
1=FLOOR 1
2=FLOOR 2
3=FLOOR 3
```

Adjective Screen #6

```
********************
1=FLOOR 4
2=FLOOR 5
3=ROOM
```

Adjective Screen #7

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```
Noun/Adjective Screen

Pressing *2* while viewing the Noun/Adjective Screen will cause the following screen(s) to be displayed. Note that the keypad *down* arrow key must be pressed to see all the Noun screens. Press the number corresponding to the noun that is to be used as a descriptor for the location of the monitor module currently being programmed.

```
********************
1=BASEMENT
2=BOILER RM
3=CLASSROOM
```
Noun Screen #1

```
********************
1=CLOSET
2=CORRIDOR
3=ELECTRIC RM
```
Noun Screen #2

```
********************
1=ELEVATOR
2=ENTRANCE
3=FLOOR
```
Noun Screen #3

```
********************
1=GARAGE
2=HALLWAY
3=HVAC RM
```
Noun Screen #4

```
********************
1=KITCHEN
2=LOBBY
3=OFFICE
```
Noun Screen #5

```
********************
1=PATIENT
2=RESTROOM
3=ROOM
```
Noun Screen #6

```
********************
1=STAIRWAY
2=STOREROOM
3=WING
```
Noun Screen #7

```
********************
1=ZONE
```
Noun Screen #8

Pressing *3* or *4* while viewing the Noun/Adjective Screen will display screens similar to the previous Adjective and Noun Screens. The new screens will list Custom Adjectives and Nouns which have been programmed into the control panel using the FS-Tools utility.

Description

```
EDIT MONITOR
1=NOUN/ADJECTIVE
2=DESCRIPTION
*****************
```
Edit Monitor Screen #5

The Description selection allows the programmer to enter additional information about the monitor module currently being programmed. This information will be displayed as part of the device label on the LCD display. Pressing *2* while viewing Edit Monitor Screen #5 will cause the following screen to be displayed:

```
DESCRIPTION    1M012
NOUN/ADJECTIVE
********************
```
Noun/Adjective Screen

A flashing cursor will appear at the first asterisk to the left. The programmer can enter additional descriptive information about the device being programmed. This information will appear on the LCD display along with the standard device label information.

A maximum of 20 characters (including spaces) can be entered. To enter alphanumeric characters from the keypad, repeatedly press the appropriate key until the desired character is displayed in the first position. For example, to enter the letter *B*, press the *2 (ABC)* key three times to toggle through the characters *2*, *A* and *B*. Press the right arrow key to move the cursor one position to the right and repeat the process to enter the next character. To enter a space, press the * *(QZ)* key four times until a blank appears in the desired position. When all characters have been entered, press the Enter key to store the information. The display will return to the Edit Monitor Screen #4, displaying the new information at the bottom of the screen.

Edit Module Screen for Control Modules

```
MODULES
1=ADD
2=DELETE
3=EDIT
```
Modules Screen

The programmer can change a module's existing or factory default programming by pressing *3* in the Modules Screen. The following screen will be displayed:

```
  EDIT MODULE
ENTER MODULE ADDRESS
***
```
Edit Module Screen

A flashing cursor will appear in the position of the first asterisk to the left.

The programmer keys in the three digit module address, such as *002*. When the last digit is keyed-in, if the selected address corresponds to a *control* module, a screen displaying information about the control module with the selected address will be displayed as illustrated in the following:

```
NORMAL     CONTROL
   <ADJ><NOUN>
       ZNNN
   * **  1M002
```
Edit Control Screen #1

In the preceding example:

Normal - indicates that the module with the selected address is physically installed on the SLC and communicating with the control panel (enabled)

ugh.<ADJ><NOUN> - represents the adjective and noun, which have been programmed, describing the location of the displayed device

Control - indicates that the selected module is a control module

S or * - represents Silenceable (S) or Nonsilenceable (*)

W or * - represents Waterflow Timer Delay (W = Waterflow Timer Delay enabled, * = Waterflow Timer Delay disabled)

ZNNN - represents the first of five possible software zones that the module is assigned to (NNN = the three digit zone number from 000 - 049)

1M002 - represents the Loop, Device type and Device address (1=SLC Loop, M=Module and 002 = Module Address 02)

To change the programming for the displayed module, press the keypad *down* arrow key to view the following Edit Control screens:

```
EDIT CONTROL
1=ENABLED      YES
2=TYPE CONTROL
3=SILENCEABLE   YES
```

Edit Control Screen #2

```
EDIT CONTROL
1=WALKTEST     YES
2=ZONE ASSIGNMENT
 000 *** *** *** ***
```

Edit Control Screen #3

```
EDIT CONTROL
1=NOUN/ADJECTIVE
2=DESCRIPTION
********************
```

Edit Control Screen #4

```
EDIT CONTROL
1=CTRL MOD DLY   NO
WIRELESS        NO
```

Edit Control Screen #5

Enable/Disable Module

```
EDIT CONTROL
1=ENABLED
2=TYPE CONTROL
3=SILENCEABLE
```

Edit Control Screen #2

To Enable or Disable the control module, press the *1* key while viewing the Edit Control Screen #2. Each press of the key will toggle the screen between *Enabled Yes* and *Enabled No*. If *Enabled No* is selected, the module will not be polled by the control panel, preventing the module from activating its output devices. The control panel will indicate a system trouble condition and the Disable LED will turn on if any devices are disabled.

Control Type

```
EDIT CONTROL
1=ENABLED
2=TYPE CONTROL
3=SILENCEABLE
```

Edit Control Screen #2

To select the type of control module being programmed, press the *2* key while viewing the Edit Control Screen #2. This will cause the control panel to display the following Control Type Screens. Press the down arrow key to view additional screens and selections.

```
  CONTROL TYPE
FUTURE USE
2=BELL-CIRCUIT
3=HORN-CIRCUIT
```

Control Type Screen #1

While viewing one of the Control Type screens, select the type of control module being programmed by pressing the corresponding keypad number key. The display will return to the Edit Control Screen #2 and indicate the new type selection.

NOTE: A control relay module set to the Resettable Power type will follow the main circuit board 24 VDC resettable power unless the control relay module is disabled.

The following table contains control module type codes and their functions which are displayed in the Control Type screens:

Control Type	Special Function
Bell Circuit	NAC Type - supervised
Horn Circuit	NAC Type - supervised
Sounders	NAC Type - supervised
Relay	Ignore Open Circuit
Strobe Circuit	NAC Type - supervised
Control	NAC Type - supervised
Resettable Power [1]	Relay Type - Ignore Open Circuit
HVAC Shutdown RLY [2]	Relay Type - Ignore Open Circuit
HVAC Shutdown NAC [2]	NAC Type - supervised

1 When using a control relay module to supply resettable power to conventional 2-wire smoke detectors, the addressable monitor module must be programmed for Smoke-Conventional operation

2 For HVAC SHUTDOWN description, refer to “Control Module Operation” on page 144.

Silenceable

```
EDIT CONTROL
1=ENABLED
2=TYPE
3=SILENCEABLE
```

Edit Control Screen #2

The Silenceable selection allows the programmer to select whether output devices connected to the control module can be silenced, either by pressing the Alarm Silence key or by enabling Autosilence. Pressing the *3* key while viewing Edit Control Screen #2 will enable the Silenceable feature causing the display to read *Silenceable Yes*. Repeated presses of the *3* key will cause the display to toggle between *Silenceable Yes* and *Silenceable No*. When set to Canadian mode of operation, a third silenceable type appears, Silenceable Auto. When set to *Auto*, the control module will automatically silence after the Control Module Auto Silence timer expires.

Walktest

```
EDIT CONTROL
1=WALKTEST
2=ZONE ASSIGNMENT
 000 *** *** *** ***
```

Edit Control Screen #3

The Walktest feature allows one person to test the system devices without the necessity of manually resetting the control panel after each device activation. To enable devices, which are connected to a control module, for the Walktest feature, press *1* while viewing the Edit Control Screen #3 until the display reads *Walktest Yes*. Each press of the *1* key will cause the display to toggle between *Walktest Yes* and *Walktest No*. Refer to “Walktest” on page 113 for additional information.

Zone Assignment

A maximum of five zones can be programmed to each addressable control module. Pressing *2* while viewing Edit Control Screen #3 displays the following screen:

```
ZONE ASSIGNMENT
Z000 Z*** Z*** Z***
```

Zone Assignment Screen

Note that Z*** represents the Zone Number(s) corresponding to this device. The factory default for an unprogrammed device is Z000 for general alarm zone. A flashing cursor will appear on the first *0* to the left. Enter the three digit number corresponding to the zone that is to be assigned to this device. The cursor moves to the next Z*** designation. Continue entering zone assignments or the remaining zones can be left blank or programmed as general alarm zones Z000. When all desired changes have been made, press the Enter key to store the zone assignments. The display will return to the Edit Control Screen #3.

Noun/Adjective

```
EDIT CONTROL
1=NOUN/ADJECTIVE
2=DESCRIPTION
```

Edit Control Screen #4

The Noun/Adjective selection allows the programmer to enter specific descriptors about the control module currently being programmed. Pressing *1* while viewing Edit Control Screen #4 will cause the following screen to be displayed:

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```

Noun/Adjective Screen

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```

Noun/Adjective Screen

Pressing *1* while viewing the Noun/Adjective Screen will cause the following screen(s) to be displayed. Note that the keypad *down* arrow key must be pressed to see all the Adjective screens. Press the number corresponding to the adjective that is to be used as a descriptor for the location of the control module currently being programmed.

```
********************
1=NORTH
2=SOUTH
3=EAST
```

Adjective Screen #1

```
********************
1=WEST
2=FRONT
3=CENTER
```

Adjective Screen #2

```
********************
1=REAR
2=UPPER
3=LOWER
```

Adjective Screen #3

```
********************
1=MAIN
2=FIRST
3=2ND
```

Adjective Screen #4

```
********************
1=3RD
2=4TH
3=5TH
```

Adjective Screen #5

```
********************
1=FLOOR 1
2=FLOOR 2
3=FLOOR 3
```

Adjective Screen #6

```
********************
1=FLOOR 4
2=FLOOR 5
3=ROOM
```

Adjective Screen #7

```
1=STANDARD ADJECTIVE
2=STANDARD NOUN
3=CUSTOM ADJECTIVE
4=CUSTOM NOUN
```

Noun/Adjective Screen

Pressing *2* while viewing the Noun/Adjective Screen will cause the following screen(s) to be displayed. Note that the keypad *down* arrow key must be pressed to see all the Noun screens. Press the number corresponding to the noun that is to be used as a descriptor for the location of the control module currently being programmed.

```
********************
1=BASEMENT
2=BOILER RM
3=CLASSROOM
```

Noun Screen #1

```
********************
1=CLOSET
2=CORRIDOR
3=ELECTRIC RM
```

Noun Screen #2

```
********************
1=ELEVATOR
2=ENTRANCE
3=FLOOR
```

Noun Screen #3

```
********************
1=GARAGE
2=HALLWAY
3=HVAC RM
```

Noun Screen #4

```
********************
1=KITCHEN
2=LOBBY
3=OFFICE
```

Noun Screen #5

```
********************
1=PATIENT
2=RESTROOM
3=ROOM
```

Noun Screen #6

```
********************
1=STAIRWAY
2=STOREROOM
3=WING
```

Noun Screen #7

```
********************
1=ZONE
```

Noun Screen #8

Pressing *3* or *4* while viewing the Noun/Adjective Screen will display screens similar to the previous Adjective and Noun Screens. The new screens will list Custom Adjectives and Nouns which have been programmed into the control panel using the FS-Tools programming utility.

Description

```
EDIT CONTROL
1=ADJECTIVE/NOUN
2=DESCRIPTION
```

Edit Control Screen #4

The Description selection allows the programmer to enter additional information about the control module currently being programmed. This information will be displayed as part of the device label on the display. Pressing *2* while viewing Edit Control Screen #4 will cause the following screen to be displayed:

```
DESCRIPTION    1M002
NOUN/ADJECTIVE
********************
```

Adjective/Noun Screen

A flashing cursor will appear at the first asterisk to the left. The programmer can enter additional descriptive information about the device being programmed. This information will appear on the display along with the standard device label information.

A maximum of 20 characters (including spaces) can be entered. To enter alphanumeric characters from the keypad, repeatedly press the appropriate key until the desired character is displayed in the first position. For example, to enter the letter *B*, press the *2 (ABC)* key three times to toggle through the characters *1*, *A*, and *B*. Press the right arrow key to move the cursor one position to the right and repeat the process to enter the next character. To enter a space, press the * *(QZ)* key four times until a blank appears in the desired position. When all characters have been entered, press the Enter key to store the information. The display will return to the Edit Control Screen #4, displaying the new information at the bottom of the screen.

Control Module Delay

```
EDIT CONTROL
1=CTRL MOD DLY   NO
WIRELESS         NO
```

Edit Control Screen #5

The control module delay feature, if enabled, will delay activation after being triggered by an alarm condition. Pressing *2* while viewing Edit Control Screen #5 will cause the display to change from the factory default of *Ctrl Mod Dly No* to *Ctrl Mod Dly Yes*. Each press of the *1* key will cause the display to toggle between the two options. Delay time varies from 0-180 seconds. See “Control Module Delay” on page 75 to set the delay time. The control module must first be set to *Silenceable No* to enable the Delay Timer.

Wireless

```
EDIT CONTROL
1=CTRL MOD DLY   NO
WIRELESS         NO
```

Edit Control Screen #5

The Wireless selection will update automatically if the system recognizes a wireless device. If the module is wireless, the display reads *Wireless Yes*. If the module is wired, the display will read *Wireless No*.

3.5.7 Communicator

```
  PROGRAMMING
1=HISTORY
2=COMMUNICATOR
3=ANNUNCIATORS
```

Programming Screen #3

The communicator settings allow the user to configure the settings for the pre-installed CLSS Pathway Pro. Pressing *2* while viewing the Programming Screen #3 will cause the following Communicator options to be displayed:

```
  COMMUNICATOR
1=INSTALLED      NO
2=POTS SETTINGS
3=IP SETTINGS
```

Communicator Screen #1

```
  COMMUNICATOR
1=PRI COMM PATH
2=SEC COMM PATH
3=TBL REPRT LIMIT 0
```

Communicator Screen #2

```
  COMMUNICATOR
1=REPORT SYTLE POINT
2=EVENT CODES
```

Communicator Screen #3

Communicator Installed

The pre-installed communicator provides communication to a central station. Use of the communicator requires it be enabled in user programming. Pressing *1* while viewing the Communicator Screen #1 will change the display to *Installed Yes*. Each press of the *1* key will cause the display to toggle between *Installed Yes* and *Installed No.*

Primary Communication Path

```
  COMMUNICATOR
1=PRI COMM PATH
2=SEC COMM PATH
3=TBL CALL LIMIT   0
```

Communicator Screen #1

The Primary Communication Path screen is used to configure the method for reporting to central station. Pressing *1* for *Pri* will display the following screens.

```
  XXX COMM PATH
1=POTS
2=ETHERNET
3=CELLULAR
```

Comm Path Screen

■ Cellular

```
  XXX COMM PATH
1=POTS
2=ETHERNET
3=CELLULAR
```

Comm Path Screen #1

To configure the communication method to contact central station using the CLSS Pathway Pro, select *3* for *Cellular* from the Comm Path Screen. The following screens will display.

```
  CELLULAR OPTIONS
1=ENABLED        NO
2=CS ACCOUNT
```

Cellular Options Screen #1

```
  CELLULAR OPTIONS
1=SUPV. SETTINGS
NFPA 2010 DUAL PATH
```

Cellular Options Screen #2

Enable

To enable the Cellular connection, press *1* while viewing the Cellular Options Screen #1 to change the display to *Enabled Yes*. Each press of the *1* key will cause the display to toggle between *Enabled Yes* and *Enabled No.*

NOTE: When using the CLSS Pathway Pro, CS Account Options and Supervision Settings are not configured at the panel. Use the CLSS Site Manager or the mobile app to configure Central Station settings. Visit www.fire.honeywell.com and refer to Section 2.8 for more information.

9.3.2 How to Calculate System Current Load

Use Table 9.3 on page 131 to calculate current load as follows:

1. Enter the quantity of devices in all three columns.
2. Enter the current draw where required. Refer to the Device Compatibility Document and SWIFT Manual for compatible devices and their current draw.
3. Calculate the current draws for each in all columns.
4. Sum the currents for each column. This is the total load.
5. Verify that the total from Column 1 is less than or equal to the value specified in the note.
6. Copy the totals from Column 2 and Column 3 to Table 9.4 on page 132.

Table 9.3 contains columns for calculating current load. For each column, calculate the current and enter the total (in amperes) in the bottom row. When finished, copy the totals from Calculation Column 2 and Calculation Column 3 to Table 9.4 on page 132. For maximum output current available per circuit and per panel, refer to Section 1.2, “Specifications”, on page 14.

Device Type	Calculation Column 1 Primary (AC) Power Source Fire Alarm Current (amps)			Calculation Column 2 Secondary (Battery) Power Source Fire Alarm Current (amps)			Calculation Column 3 Secondary (Battery) Power Source Standby Current (amps)		
	Qty	X[current draw]=	Total	Qty	X [current draw]=	Total	Qty	X [current draw]=	Total
Main Circuit Board[1]				1	X[0.257]=		1	X[0.141]=	
CLSS Pathway Pro	[ ]	X[0.085]=		[ ]	X[0.085]=		[ ]	X[0.080]=	

Table 9.3 System Current Load Calculations

1 Main board with display only.

9.4 Calculating the Battery Size

Use Table 9.4 to calculate the total Standby and Alarm load in ampere hours (AH). This total load determines the battery size (in AH), required to support the system upon loss of primary (AC) power. Complete Table 9.4 as follows:

Enter the totals from Table 9.3 on page 130, Calculation Columns 2 and 3 where shown
Enter the NFPA Standby and Alarm times (refer to ‘NFPA Requirements’ below)
Calculate the ampere hours for Standby and Alarm, then sum the Standby and Alarm ampere hours
Multiply the sum by the derating factor of 1.2 to calculate the proper battery size (in AH)
Write the ampere hour requirements on the Protected Premises label located inside the cabinet door the cabinet door

Total Standby Load, Battery Powered (from Table Calculation Column 3) [ ]	Required Standby Time (24 hours) X[ ]	= AH
Total Fire Alarm Load, Battery Powered (from Table Calculation Column 2) [ ]	Required Alarm Time (for 5 min., enter 0.084, for 10 min., enter 0.168) X[ ]	= AH
Sum of Standby and Alarm Ampere Hours		= AH
Multiply by the Derating Factor		X 1.2
Battery Size, Total Ampere Hours Required		= AH

Table 9.4 Total Secondary Power Requirements at 24 VDC

9.4.1 NFPA Battery Requirements

NFPA 72 Local, Proprietary, Central, Auxiliary and Remote Fire Alarm Systems require 24 hours of standby power followed by 5 minutes in alarm.

9.4.2 Selecting and Locating the Batteries

Select sealed lead acid batteries that meet or exceed the total ampere hours calculated in Table 2.1 . The control panel can charge batteries in the 12 AH to 18 AH range. The control panel cabinet is capable of housing batteries up to 18 AH. Batteries larger than 18 AH require a UL listed external battery charger and cabinet such as the BB-26, BB-55F or other UL listed external battery cabinet.

Appendix H: NFPA Requirements

The following is the minimum configuration to meet the NFPA requirements.

Module	Local	Aux	RS	CS	Proprietary	Process Management [1]
ES-50XP	Y	Y	Y	Y	Y	N[3]
HW-AV-LTE-M-FL (pre-installed CLSS Pathway Pro)	Y	Y	Y	Y [2]	Y	N[3]
Where Y = Yes, N = No, and O = Optional						

1 Non-Emergency
2 Also required when devices for Carbon Monoxide signaling are employed
3 Non-Fire Emergency signals may be communicated off-premises as supplementary signals. Please refer to Table 3.1 Note 4

ES-50XP Fire Alarm Control Panel Operating Instructions

NORMAL - Only *AC POWER* is illuminated green.
All other indicators are off. LCD display will read SYSTEM NORMAL.

PANEL KEY - The key to open the panel can be found at the following location:

_____

WHEN AUDIBLE DEVICES ARE SOUNDING -

FOR AN ALARM

1. Evacuate the protected area
2. Notify the monitoring service and/or the Fire Department immediately. Tell them briefly what happened and what your current status is.

   Phones: _____ _____
   Fire Department Monitoring Service

3. If the Fire Department is responding, be prepared to provide directions to arriving firefighters.

FOR TROUBLE, SUPERVISORY, AND EMERGENCY ALARMS

1. Notify the monitoring service and/or applicable first responders if this panel is connected to either one, and tell them what is happening.
2. Silence audible devices by unlocking and opening the panel and pressing the ACKNOWLEDGE/STEP button. The applicable indicator will remain illuminated. Contact authorized service personnel immediately! (See Below).

WARNING!

DO NOT ALLOW TROUBLE CONDITIONS TO REMAIN LOGGED IN THE SYSTEM. THE PROTECTION THE SYSTEM OFFERS HAS BEEN COMPROMISED OR ELIMINATED, WHEN A TROUBLE CONDITION EXISTS.

Cut along dotted line.

To return to normal after an alarm

1. Do not enter the protected area until safe to do so.
2. Clear all initiating devices. Smoke detectors will not reset if there is still smoke in the area.
3. Reset the control panel (PRESS the RESET button)

Power failure or brownout

If AC power drops too low or fails, *AC POWER* indicator will extinguish, the system *TROUBLE* indicator will turn on yellow, and the panel buzzer and any other audible trouble devices will sound. Contact authorized service personnel immediately. See below.

FIRE·LITE® ALARMS
by Honeywell

In the event of trouble, contact the
local Fire-Lite Service Representative

Name: _____

Company: _____

Address: _____

Telephone Number: _____

Manual activation (Fire Drill or otherwise)

Notification Appliance Circuits (NACs) can be activated by pressing and holding the DRILL button for at least two seconds.

NOTE: You may want to disconnect the municipal box by sliding the DISCONNECT switch, located on the 4XTMF module, to its disconnect position (to the right). If a DACT is connected, notify the monitoring service before conducting any fire drills or tests.

Alarm Silencing

Notification Appliance Circuits may be silenced by pressing the ALARM SILENCE button. *ALARM SILENCED* will turn on yellow. Subsequent alarms will reactivate circuits. Press the RESET button to clear the "silenced" condition.

NOTE: Notification Appliance Circuits may be programmed as nonsilenceable. Also, Signal Silence Inhibit, if enabled, will prevent silencing of NACs for five minutes after an alarm (see manual).

To test the indicators, LCD display and piezo

Press and release the RESET button and check all indicators/LEDs. Every indicator/LED should be on, LCD shows all pixels on, piezo sounder beeps.

For more information, refer to the ES-50X Series Manual, Document #LS10386-000FL-E and ES-50XP Supplement, Document #LS10388-000FL-E. They are kept in the following location:

_____

THIS SHEET SHALL BE FRAMED ADJACENT TO THE CONTROL PANEL

Document #LS10388-000FL-E Rev. B 2/5/2025 ECN 00057355

Cut along dotted line.