

Interactive Display

ONYX FirstVision[®]

Installation and Operation Manual



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 0-49° C/ 32-120° 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 15-27° C/60-80° 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 présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère 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.

Documentation Feedback

Your feedback helps us keep our documentation up-to-date and accurate. If you have any comments or suggestions about our on-line help or manuals, please email us at FireSystems.TechPubs@honeywell.com.

On-Line Help – Please include the following information:

- Product name and version number (if applicable)
- Topic title
- The content you think should be corrected/improved
- Detailed suggestions for correction/improvement

Documents – Please include the following information:

- Document part number and title
- Page number and paragraph
- The content you think should be corrected/improved
- Detailed suggestions for correction/improvement

Please Note: If you have any technical issues, please contact Technical Services.

Manual Usage

This manual is written with the understanding that the user has been trained in the proper operations and services for this product. The information provided in this manual is intended to assist the user by describing the configurations and how they affect operations.

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Section 1 Product Overview

1.1 Operation

ONYX FirstVision[®] enables a first responder (e.g. firefighter) to view an event in the context of the building's floor layouts. This product consists of an enclosure (P/N FIRSTVISION-ENC) and a liquid-crystal display (P/N FIRSTVISION-LCD).

FirstVision annunciates only the following types of events from a fire alarm or mass notification network:

- CO Alarm
- CO Supervisory
- Critical Process
- Fire Alarms
- Fire Supervisory
- Gateway faults (for network connection purposes only)
- MN Alarm High Priority
- MN Alarm Low Priority
- MN Supervisory High Priority
- MN Supervisory Low Priority
- Security
- Supervisory

1.2 Limitations

FirstVision is designed to operate within the limits listed below:

Table 1.1 Limitations

Feature	Limit
Network Gateways: <ul style="list-style-type: none">• NFN-GW-EM-3• NFN-GW-PC-F• NFN-GW-PC-W• NFN-GW-PC-HNMF• NFN-GW-PC-HNSF• NFN-GW-PC-HNW• NFN-GW-PC-HNW-2	200 Total
Screens	10,000
Devices	250,000
Devices per Screen	1,000
Navicons	1,000

1.3 Required Configuration Software

For configuring FirstVision, it is recommended that Windows[®] 10 Professional, 64-bit be used. However, FirstVision will operate with Windows 7 Professional, 64-bit software.

1.4 Software Updates

A USB drive containing the latest version of the configuration tool software is shipped with your LCD display. When a new FirstVision software version is installed, the configuration tool software must also be updated on the configuration PC. Refer to [Appendix A, “Upgrades”](#) for additional information.

1.5 System Architecture

FirstVision communicates with NFN-GW-EM-3 Gateways over an Ethernet connection. If FirstVision is configured to communicate with multiple NFN-GW-EM-3 gateways, all gateways must be configured to operate in the Proprietary Receiving Unit or Canada-Proprietary Receiving Unit mode.

If FirstVision is configured to communicate with a workstation containing a PC NFN Gateway, both the workstation and gateway must be configured to operate in the Proprietary Receiving Unit or Canada-Proprietary Receiving Unit mode.

[Figures 1.1](#) and [1.2](#) illustrate how FirstVision can be set up on a network.

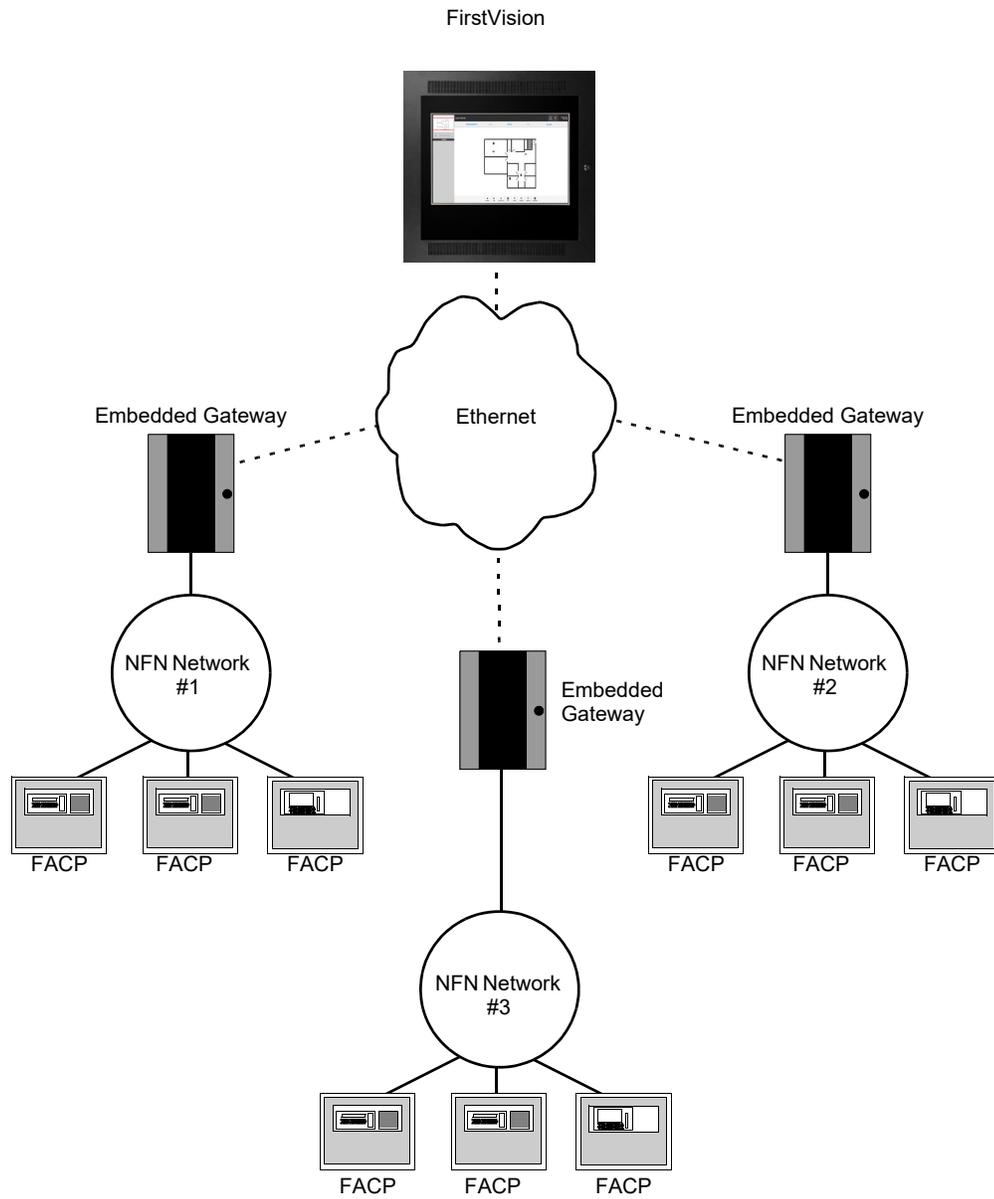


Figure 1.1 FirstVision Monitoring Multiple NFN Networks

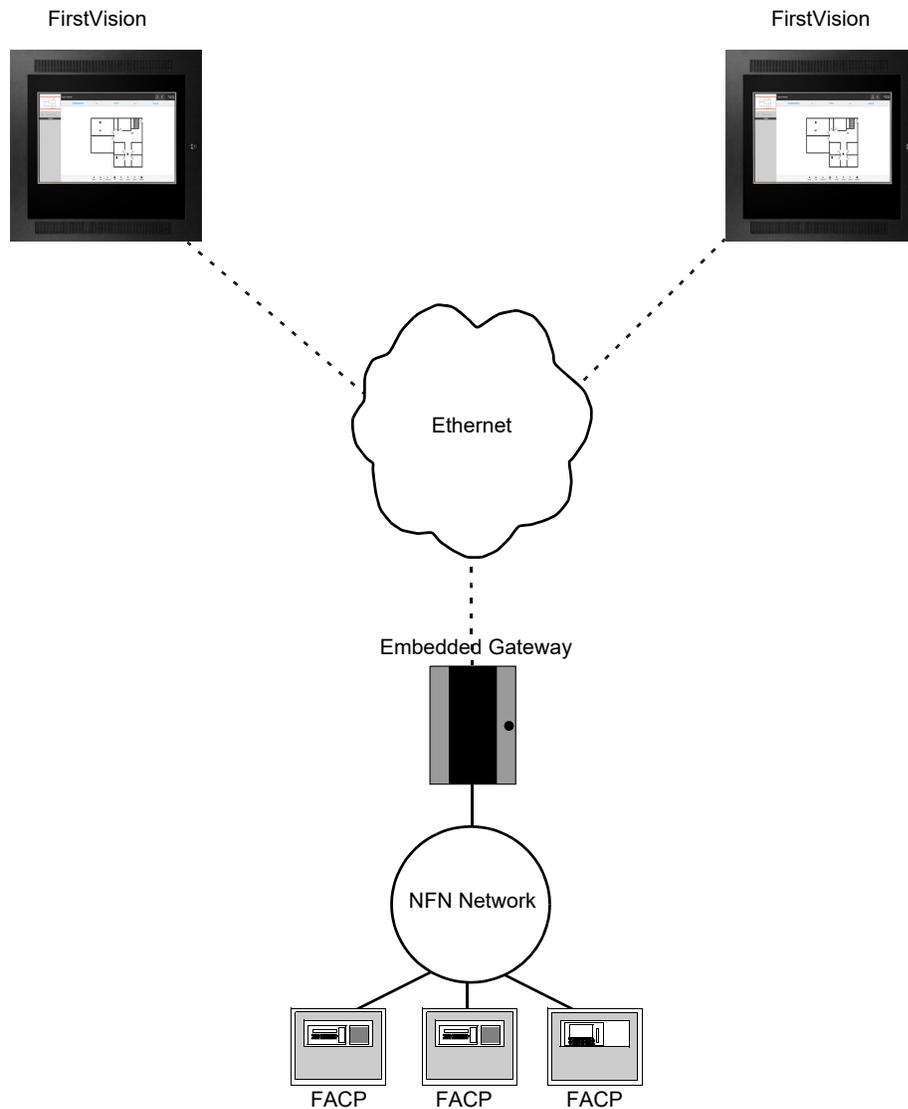


Figure 1.2 Multiple FirstVisions Monitoring a Single NFN Network

1.6 Environmental Requirements

This product meets the following requirements for operation:

- Temperature - 0°C to 49°C (32°F - 120°F)
- Relative Humidity - 93 ±2% non-condensing at 32 ±2°C (90 ±3°F)

However, it is recommended that this product be installed in an environment with a normal room temperature of 15-27° C (60-80° F).

1.7 Agency Listings

1.7.1 Standards

■ **Compliance** - This product has been investigated to, and found to be in compliance with, the following standards:

National Fire Protection Association

- NFPA 72 National Fire Alarm and Signaling Code

Underwriters Laboratories

- UL 864 Control Units for Fire Alarm Systems, Tenth Edition
- UL 1076 Proprietary Burglar Alarm Units and Systems
- UL 2017 General Purpose Signaling Devices and Systems, Second Edition
- UL 2572 Mass Notification Systems, Second Edition

Underwriters Laboratories Canada

- CAN/ULC S527-11 Standard for Control Units for Fire Alarm Systems, Third Edition
- CAN/ULC S559-13 Standard for Equipment for Fire Signal Receiving Centres and Systems, Second Edition

■ **Installation** - This product is intended to be installed in accordance with the following:

Local

- AHJ Authority Having Jurisdiction

National Fire Protection Association

- NFPA 70 National Electrical Code
- NFPA 72 National Fire Alarm and Signaling Code
- NFPA 101 Life Safety Code

Underwriters Laboratories

- UL 864 Control Units for Fire Alarm Systems, Ninth Edition
- UL 1076 Proprietary Burglar Alarm Units and Systems (Certified Applications Only)

Underwriters Laboratories Canada

- CAN/ULC S524 Installation of Fire Alarm Systems
- CAN/ULC S561 Installation and Services for Fire Signal Receiving Centres and Systems

Canada

- CSA C22.1 Canadian Electrical Code, Part I, Safety Standard for Electrical Installations

1.7.2 Agency Restrictions and Limitations

- FirstVision is UL 864 listed for supplementary use only.
- FirstVision is UL 2572 listed for supplementary use only.

1.8 Windows Settings

Table 1.2 Windows Setting

Setting	Required Value	Comments
Auto Login	An account that is part of the administrator’s group must be configured to Auto Login.	
Automatic Updates	Set to OFF.	Windows updates may be installed manually.
Firewall	Unblock FirstVision.	Allows the application to function as intended.
Monitor Power	Set “Turn off monitor” to Never .	Factory default setting.
Time Zone	Set appropriately for your location.	
Daylight Savings Time	Set appropriately for your location.	
IP Address	Configure IP settings in accordance with site IP setting schema.	Default factory IP Address setting is 192.168.0.4 . IP address must be assigned before a gateway is added.
Calibration	Calibrate the touch screen before using the touch feature.	The touch screen calibration utility is factory installed.

1.9 Compatible Equipment

FirstVision is compatible with the following equipment.

Table 1.3 Compatible Equipment

Type	Equipment
Fire Panels:	<ul style="list-style-type: none"> • NFS-320 • NFS2-640 • NFS2-3030
Network Cards	<ul style="list-style-type: none"> • NCM-W • NCM-F • HS-NCM-W • HS-NCM-W-2 • HS-NCM-SF • HS-NCM-MF • HS-NCM-WMF • HS-NCM-WMF-2 • HS-NCM-WSF • HS-NCM-WSF-2 • HS-NCM-MFSF
Gateways:	<ul style="list-style-type: none"> • NFN-GW-EM-3 • PC NFN Gateways: <ul style="list-style-type: none"> – NFN-GW-PC-F – NFN-GW-PC-W – NFN-GW-PC-HNMF – NFN-GW-PC-HNSF – NFN-GW-PC-HNW – NFN-GW-PC-HNW-2
Other Products:	<ul style="list-style-type: none"> • NCA-2 • VESDA-HLI-GW

1.10 System Configuration

The items listed in the following table are required in order for FirstVision to meet its intended application.

Table 1.4 System Configuration

Accessory/Subassembly	Part Number	Description	Network Configuration
Fire Panels	Refer to Table 1.3	Current UL-listed Fire Panels	R
Network Interface Card		Current5 UL-listed Network Card	O ¹
Gateways		Current UL-listed Gateways	R
Notes: R - Indicates required component for minimally functional system. O - Indicates optional equipment. 1 - For a network with more than one fire panel, one or more of the network cards listed in Table 1.3 is required.			

1.11 System Power

Primary power source requirements for FirstVision are contingent upon the discretion of the local Authority Having Jurisdiction (AHJ). If the AHJ determines that the FirstVision is not a required component of the fire system, battery backup is optional.

The primary power source can be any UL 1481 listed power supply meeting the requirements shown in [Table 1.5](#). However, if the AHJ determines that the FirstVision is a required component of the fire system, then the primary power source must be a supervised +24 VDC, UL 1481 listed, power limited, battery backed, regulated power supply.

For Canada, a CSA or ULC listed uninterruptible power supply (UPS) is required.

Table 1.5 Power Requirements

Power	Requirement
Input Voltage (Nominal)	24 VDC
Input Current @ 24VDC	3.0 A
Motherboard Lithium Battery	The battery (Comark Part Number 10-05188-103) may only be replaced by a qualified service technician. Contact Technical Services.
Notes: <ul style="list-style-type: none"> Primary power is supplied by a supervised 24V, 2A regulated, power limited, non-resettable power supply that is UL listed for fire protection signaling units. It is recommended that a dedicated power supply be used for FirstVision. Power supplies for FirstVision and the NFN-GW-EM-3 should use a common ground and the same earth ground. 	

Section 2 Installation

2.1 Installation Location

FirstVision should be installed at the first responder's (firefighter's) preferred building entry location.

2.2 Required Equipment

2.2.1 FirstVision Assembly

- Enclosure (P/N FIRSTVISION-ENC)
- Liquid Crystal Display (P/N FIRSTVISION-LCD)

2.2.2 Network Components

- NFN Network, version 5.0 or later
- Embedded NFN Gateway (P/N NFN-GW-EM-3) or a PC NFN Gateway (P/N NFN-GW-PC-F, NFN-GW-PC-W, NFN-GW-PC-HNMF, NFN-GW-PC-HNSE, or NFN-GW-PC-HNW)

2.2.3 Customer-Supplied Equipment

- Power Supply
- Power Supply Enclosure
- Back-up Batteries (see 2.3, "Installing the Enclosure")
- Ethernet patch cable (with RJ45 connectors) for connecting FirstVision to a Local Area Network (LAN)
- Keyboard and Mouse with USB Connectors

2.3 Installing the Enclosure

Mount the enclosure (P/N FIRSTVISION-ENC) on an inside wall of the building as follows:

1. Prepare a rough opening in the wall at the location the enclosure is to be mounted according to [Figure 2.1](#). For enclosure dimensions, refer to [Figure 2.2](#).

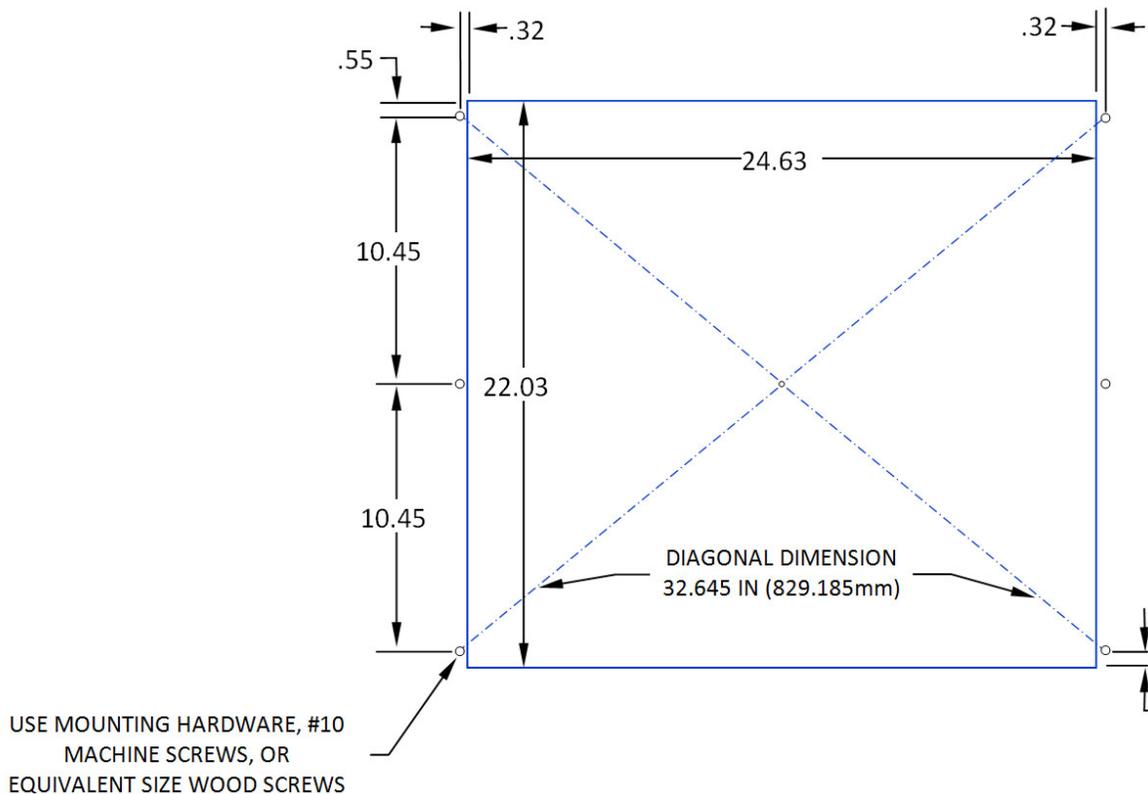


Figure 2.1 Wall Cutout Dimensions

2. Remove the knockout(s) (see [Figure 2.2](#)) through which the external Ethernet and power supply cables will be routed. The power supply connections to the solenoid board are located inside the enclosure on the left-hand side (see [Figure 2.3](#)).
3. Place the enclosure inside of the rough opening (hinges for the LCD display on the left).
4. Verify that the enclosure is level and attach it to the wall using six customer-supplied fasteners (see [Figure 2.3](#)).

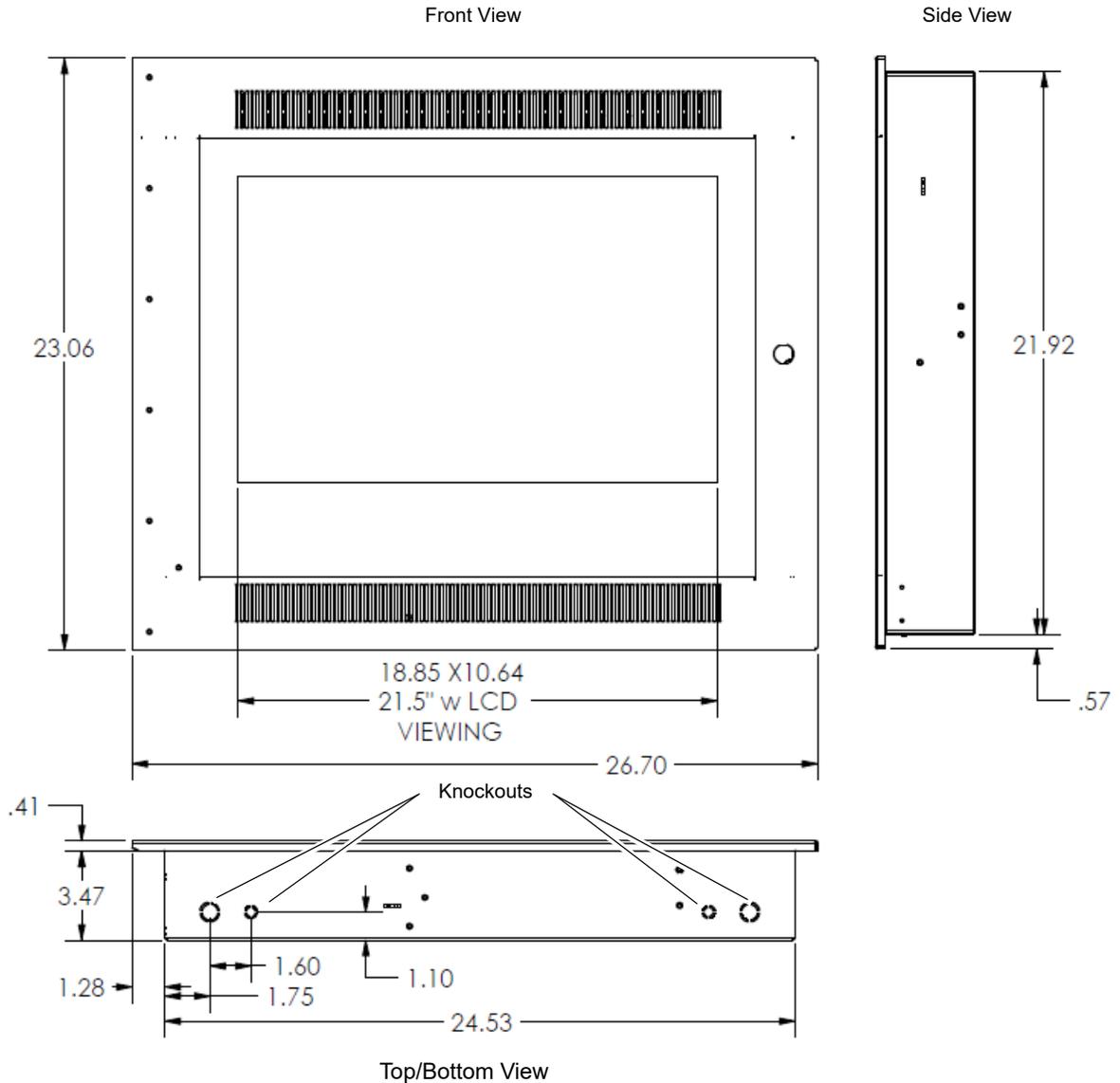


Figure 2.2 Enclosure Dimensions

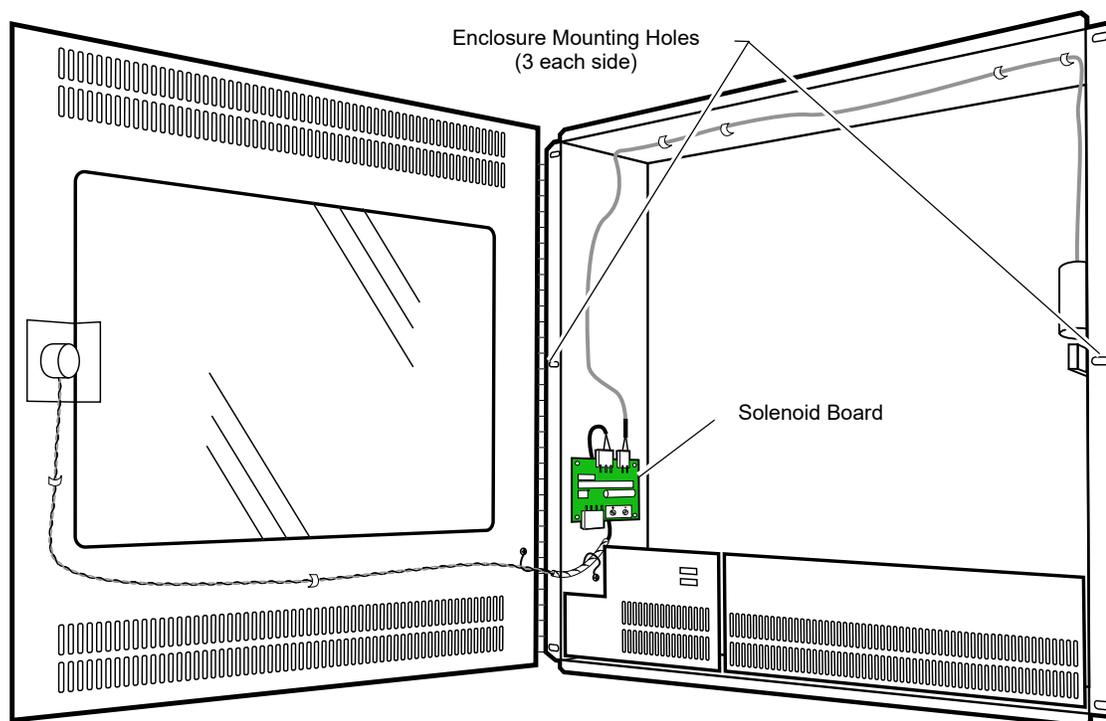


Figure 2.3 Enclosure Installed

2.4 Mounting the LCD Display

1. Lift the LCD display (P/N FIRSTVISION-LCD) so that the bottom of its hinge is slightly higher than the receiving hinge on the enclosure (see [Figure 2.4](#)).
2. Align the LCD display hinges with the hinge pins on the enclosure.
3. Lower the display hinge down onto the enclosure hinge pins.

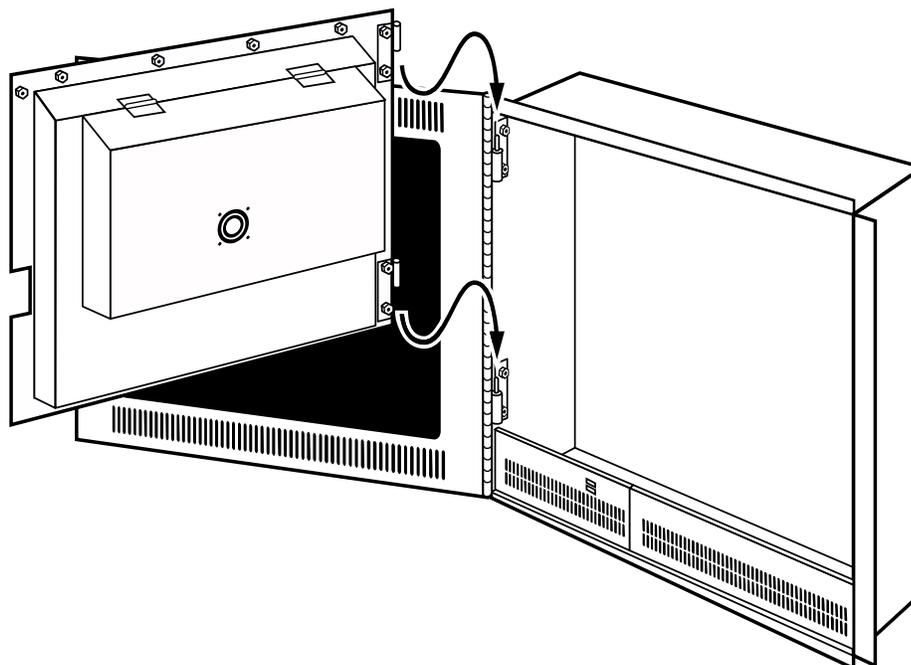


Figure 2.4 Mounting the LCD Display on the Enclosure

2.5 Connections

2.5.1 Solenoid Board Connections

Verify the external main power breaker is OFF and make the following connections to the solenoid board (see [Figure 2.5](#)):

1. Connect the LCD power cable to J1.
2. Connect the key lock cable to J2.
3. Connect the key switch cable to J3.
4. Connect the external 24 VDC power supply cable to P1.

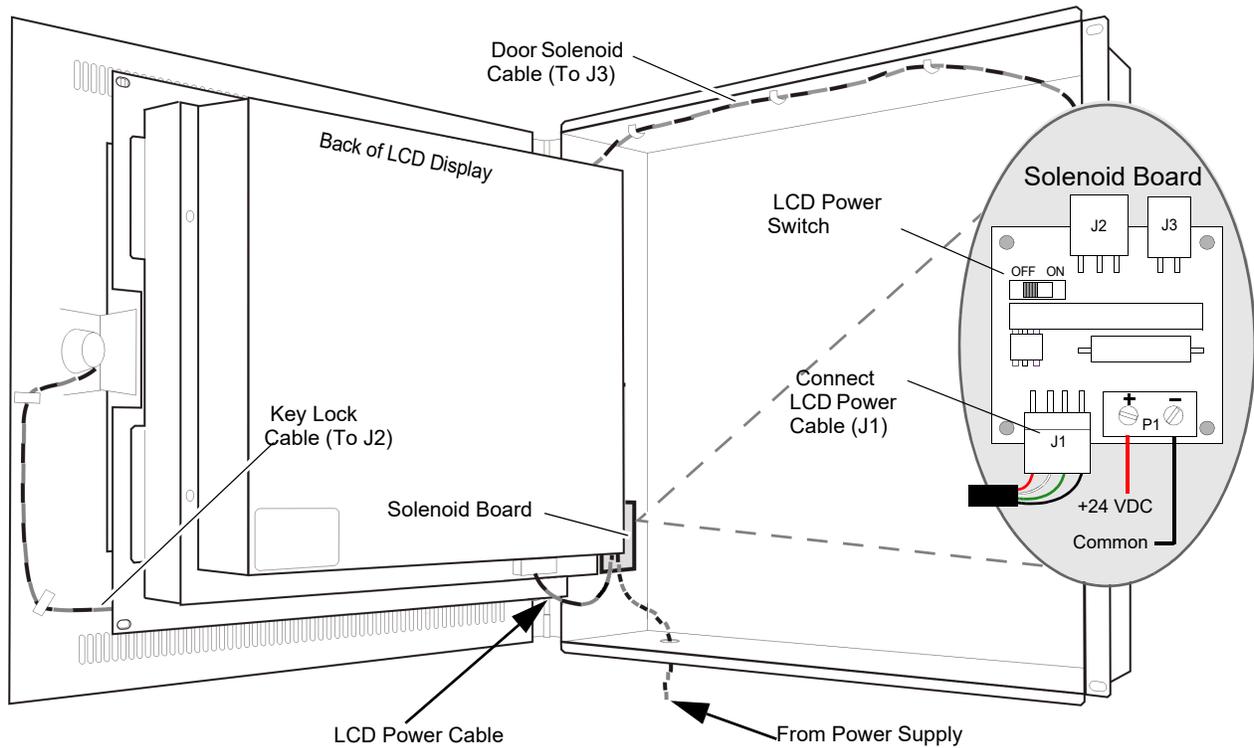


Figure 2.5 Solenoid Board Connections

Table 2.1 Solenoid Board Connection Specifications

Reference Designator	Description	Specifications
J1	LCD Power Cable	24 VDC Max.
J2	Key Lock Cable	12 VDC Max.
J3	Key Switch	0.0 VDC
P1	DC Power	24 VDC
Notes: <ul style="list-style-type: none"> • All wiring from the power supply is power limited. • Separation of at least 1/4-inch (6.35 mm) must be maintained between power limited and non-power limited wiring. 		

2.5.2 Connecting to the LCD Connections Panel

Make the following connections to the LCD connections panel (see [Figure 2.6](#)):

1. Route the customer-supplied CAT-5 Ethernet cable through one of the enclosure's knockout holes and connect it to the active/enabled LAN port.
2. Connect the two cables from the front panel USB ports to two USB ports.
3. Connect the power cable from the solenoid board to the LCD 4-pin power connector.

When all connections have been made, move the LCD power switch on the solenoid board to the **ON** position (see [Figure 2.5](#)). The LCD display starts and displays the Windows screen.

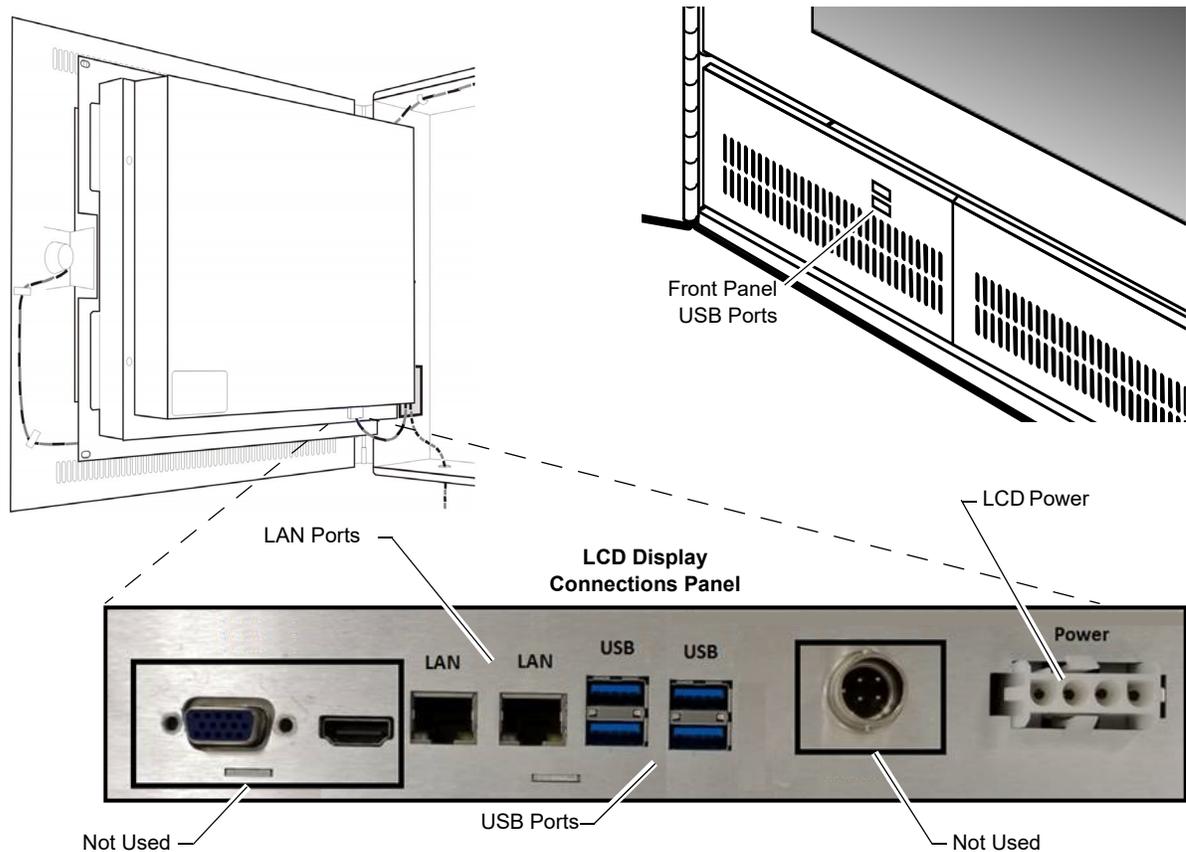


Figure 2.6 LCD Display Connections

Table 2.2 LCD Display Connection Specifications

Port	Description	Circuit Class	Specifications
LAN	RJ-45	2	10/100/1000BT Ethernet: Line Impedance 100 ohm Max. Length 328.083 ft. (100 m) See Note 1 below.
LCD Power	4-Pin Power Connector	2	+24 VDC
USB Ports	USB	2	See Note 2 below.
Notes:			
1. Ethernet connections are power limited and supervised except for ground faults.			
2. Two USB ports are used for connecting the front panel USB port cables.			
3. All interconnects are power limited.			

2.6 Closing and Locking the Enclosure

1. Ensure all cables are clear and close the LCD display panel.
2. Fasten the LCD display panel to the enclosure using the two factory-supplied, black, Phillips head machine screws (see [Figure 2.7](#)).
3. Close the glass-paneled door.
4. With the key inserted into the lock, test the door lock as follows:
 - a. Close the door and slowly turn the key to the right. When the key is in the vertical position, a metallic click will be heard as the door locks.
 - b. Slowly turn the key to the left. As you turn the key back to the horizontal position, a metallic click will be heard as the door unlocks.

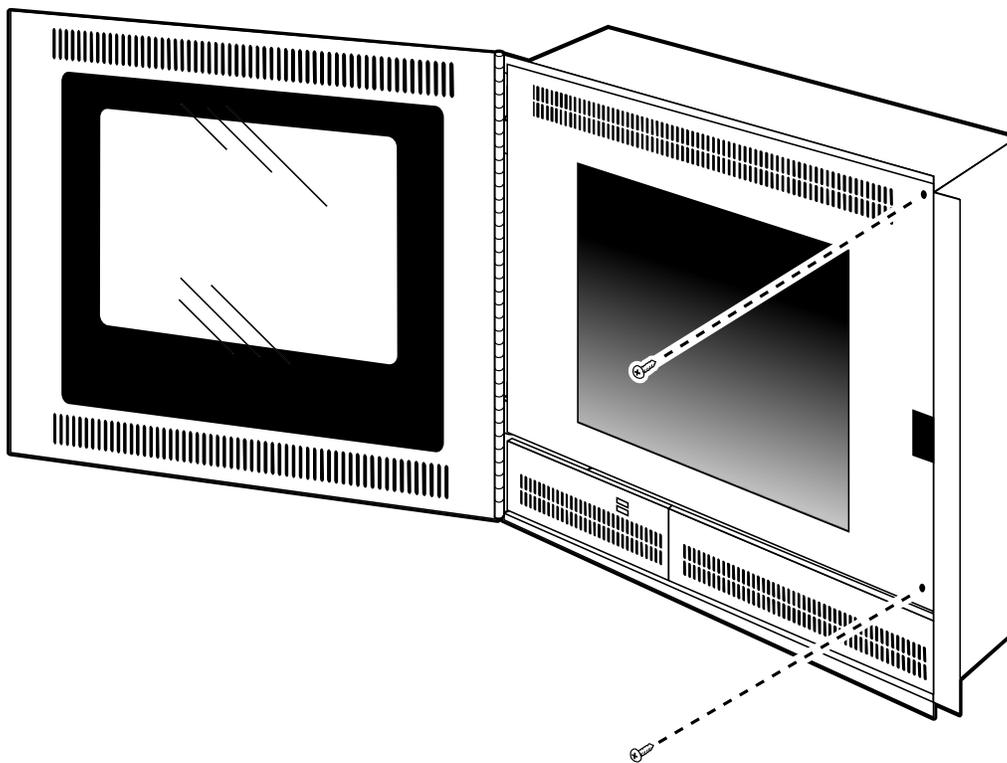


Figure 2.7 Securing the LCD Display to the Enclosure

2.7 Testing and Maintenance

Testing and maintenance should be performed according to the *Testing and Maintenance* section of NFPA-72 and CAN/ULC S536.



CAUTION:

ONLY AUTHORIZED PERSONNEL SHOULD SERVICE THIS PRODUCT. ALLOWING UNAUTHORIZED PERSONNEL TO PERFORM PRODUCT SERVICING IS STRICTLY PROHIBITED AND MAY VOID THE PRODUCT WARRANTY.

Section 3 FirstVision Setup

3.1 Connecting the Keyboard and Mouse

Connect a keyboard and mouse as follows:

1. Unlock and open the front door of the FirstVision enclosure.
2. Connect a USB keyboard and mouse to the two USB ports on the front panel of the FirstVision. A system reboot is not necessary.

3.2 Connecting FirstVision to the Network

Perform the following steps using Windows to set up communication between FirstVision and your network:

1. If the FirstVision application is running, shut it down (press the **ESC** key on the keyboard).
2. From the Windows Start menu, type **Control Panel** and go to **Network and Sharing Center**.
3. In the *View your active networks* area of the screen, click on the link for your network. A connection status dialog box displays.
4. Click the **Properties** button. A network properties dialog box displays.
5. On the *Networking* tab, double-click **Internet Protocol Version 4 (TCP/IPv4)**. The Internet Protocol (TCP/IPv4) Properties dialog box displays.
6. Select the **Use the following IP address** radio button and enter your network information in the fields provided.
7. Click **OK**, then **OK**, and then **Close** to exit the dialog boxes.
8. Restart the FirstVision application. Communication between FirstVision and the network should be established as indicated by a green network connection icon  on the screen. If the icon is red, , touch the icon to display network gateway connection status.

3.3 Printer Setup

Set up the default printer as follows:

1. From Windows Start, go to **Printers & Scanners**.
2. Click **Add a Printer or Scanner**.
3. Follow the on-screen prompts to select the default network printer.
4. When finished, close the window.
5. Test the printer setup by touching the print icon  on the FirstVision screen. The default printer should print a copy of the current FirstVision screen.
6. When setup is complete, proceed to [3.4, "Calibrating the Touch Screen"](#).

3.4 Calibrating the Touch Screen

The touchscreen is calibrated at the factory, but if the cursor is not correctly tracking to the position of your finger on the display, the touchscreen can be calibrated as follows:

1. If not already connected, connect a keyboard and mouse as specified in [3.1, "Connecting the Keyboard and Mouse"](#).
2. If FirstVision application is running, press the **ESC** key to shut it down.
3. From Windows Start, go to **Control Panel > All Programs**.
4. Select **GenTouchScreen > Calibration**. The GeneralTouch calibration utility opens.
5. Follow the on-screen prompts.
6. When finished, start the FirstVision application.
7. Test the accuracy of the calibration on the touchscreen.
8. Close the enclosure as specified in [3.4, "Calibrating the Touch Screen"](#).

3.5 Configuring FirstVision

3.5.1 Overview

Before FirstVision can be used, its graphical user interface must be configured with information about the location into which it is installed. This is accomplished using the ONYX Configuration Tool running on a separate PC. Refer to the *ONYX Configuration Tool Installation and Operation Manual* (P/N LS10050-007NF-E) for detailed information about how to use the configuration tool to configure FirstVision.

The configuration tool is used to enter meaningful information about the site. The locations of all sensing devices (i.e., heat, smoke, security) that communicate with FirstVision, site features (i.e., shut-offs, access points, stairs, etc.), and hazards (i.e., flammable or reactive chemicals) are configured and indicated on site maps and floor plans. A first responder uses this information to identify the location of, and respond to, events that FirstVision annunciates.

After the site design is completed, it is manually copied to FirstVision where the user must verify that all information correctly displays.

3.5.2 Site Design File Size Limitations

The combined size for the site design files should not exceed the following:

- 2 GB for the 19" LCD display
- 4 GB for the 22" LCD display.

3.5.3 Upgrading Configuration Tool Software

A USB drive containing the latest version of the configuration tool software is shipped with your LCD display. When a new FirstVision software version is installed, the configuration tool software must also be updated on the configuration PC. Refer to Appendix A, “Upgrades” for additional information.

3.5.4 Stand-alone Configuration PC Requirements

A stand-alone configuration PC must have, at minimum, the following features:

- Windows 10, 64-bit Professional
- Intel i5 Processor or better
- 16 GB RAM
- 240 GB Hard Drive
- Microsoft® compatible mouse
- 104-key keyboard
- USB Connector
- TCP/IP Ethernet Network Adapter Card

3.5.5 Loading Configuration Tool Software on a Configuration PC

Install the configuration tool software as follows:

1. Insert the configuration tool USB drive into the configuration PC USB port. Use Windows Explorer to locate and start the **(USB Drive letter):\Setup.exe** file.
2. Follow the on-screen prompts.
3. When finished, remove the USB drive and retain.

3.6 Installing the System Database on the Unit

1. The configuration data for FirstVision must be copied from the configuration PC to FirstVision unit using one of the methods described below. For upgrades to FirstVision, refer to Appendix A.2, “Upgrading FirstVision to Version 4.xx”.
 - a. To install the system from an off-line configuration PC to FirstVision unit, locate the data to be copied from the configuration PC at:
C:\Facilities Monitoring\Data\System-[system description] where **[system description]** is the system description set in the configuration tool.
 - b. To install the system from a workstation PC to FirstVision unit, locate the data to be copied from the workstation PC at:
C:\Facilities Monitoring\Data\System
2. Copy the contents of the folder to a USB drive.
3. Use Windows to safely eject the drive.
4. Install a keyboard and mouse (if not already installed) on the FirstVision unit.
5. If the unit is running, exit the application by pressing the **Esc** key.
6. Insert the USB drive into the FirstVision unit.
7. Copy the system data from Step 1 into the **C:\Facilities Monitoring\Data\System** folder on FirstVision.
8. On the Windows screen, double-click the Configuration Tool icon. The System Configuration window displays.

9. Configure the system using Table 3.1. When finished, click **OK**.

Table 3.1 System Configuration Window Options

Window Section	Property	Description
System Configuration	System Password	Enter the same system password as is used for the NFN Gateway.
	Save Toner When Printing	<ul style="list-style-type: none"> • Yes - Printer uses less toner. • No - Printer uses normal amount of toner. (Default)
Door and Sound Configuration	Event Column	Lists the Event status classes.
	Play Sound	For each status class select: <ul style="list-style-type: none"> • Yes - Plays the sound configured in the ONYX Configuration Tool. • No - Does not play a sound
	Unlock Door	For each status class select: <ul style="list-style-type: none"> • Yes - Unlocks the door to allow access to the FirstVision display. • No - Does not unlock the door.
Root Screen		Select the Root Screen from the drop-down list. The root screen is the first screen to display when FirstVision application starts. All child screens below this root screen in hierarchy can be optionally excluded from this FirstVision unit.
Monitored Screens		Check the checkbox for the screens to be monitored.

10. Start the FirstVision unit by double-clicking the FirstVision icon.
11. Verify the installed database.
12. Change the system password and any other settings in FirstVision configuration tool.
13. Once FirstVision is configured with a system database, the configuration may be updated from workstations which share the system configuration and reside on the same network. After updating the configuration using the workstation configuration tool, the user can export the system data to FirstVision by using "Export System Data to All Workstations" (on the workstation, **Menu > Files > Export System Data to All Workstations**).

3.7 Changing the Display Language

If necessary, change the language displayed on FirstVision as follows:

1. From Windows **Start**, go to the **Control Panel**.
2. Select **Clock, Language, and Region** (in category view).
3. Under the Region and Language header, select **Change the date, time, or number format**. The Region and Language dialog displays.
4. On the Formats tab, select the desired language from the drop-down list.
5. On the Keyboards and Languages tab, click **Change Keyboards....** The Text Services and Input Languages dialog displays.
6. On the General tab, proceed as applicable:
 - If the desired language is included in the drop-down list, go to sub-step f.
 - If the desired language is not included in the drop-down list, go to sub-step a.
 - a. Click the **Add...** button.
 - b. Expand the tree for the language to be added.
 - c. Expand the Keyboard label.
 - d. Check the check box for the language.
 - e. Click **OK**.
 - f. Select the language from the drop-down list.
 - g. Click **Apply** and then **OK**.
7. Click **Apply** and then **OK** in the Region and Language dialog.
8. Restart FirstVision.

3.8 Copying Files From FirstVision Unit

The configuration information may be copied from the FirstVision unit if the PC previously used for configuration is not available. Copy the configuration information as follows:

1. Shut down the FirstVision application if it is running.
2. Unlock the door and connect a keyboard and mouse (see [3.1, "Connecting the Keyboard and Mouse"](#)).
3. Using Windows File Explorer, navigate to C:**Facilities Monitoring** and copy the **data** folder onto a USB drive.
4. Eject the flash drive.

Section 4 Operation

4.1 Screen Saver

When there are no active events in the system, a Windows screen saver displays on the FirstVision screen. The screen saver is hidden by the floorplan view of the affected location if events are reported. The screen saver remains disabled as long as the event condition exists. After the event has been remedied, the screen saver automatically enables after the configured wait time.

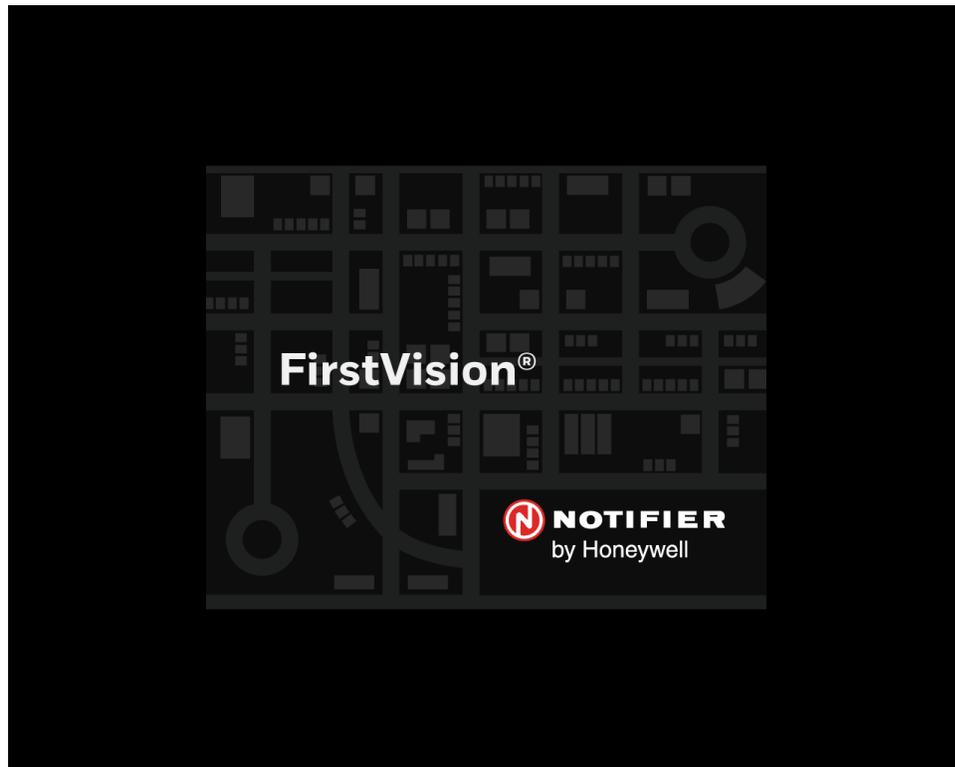
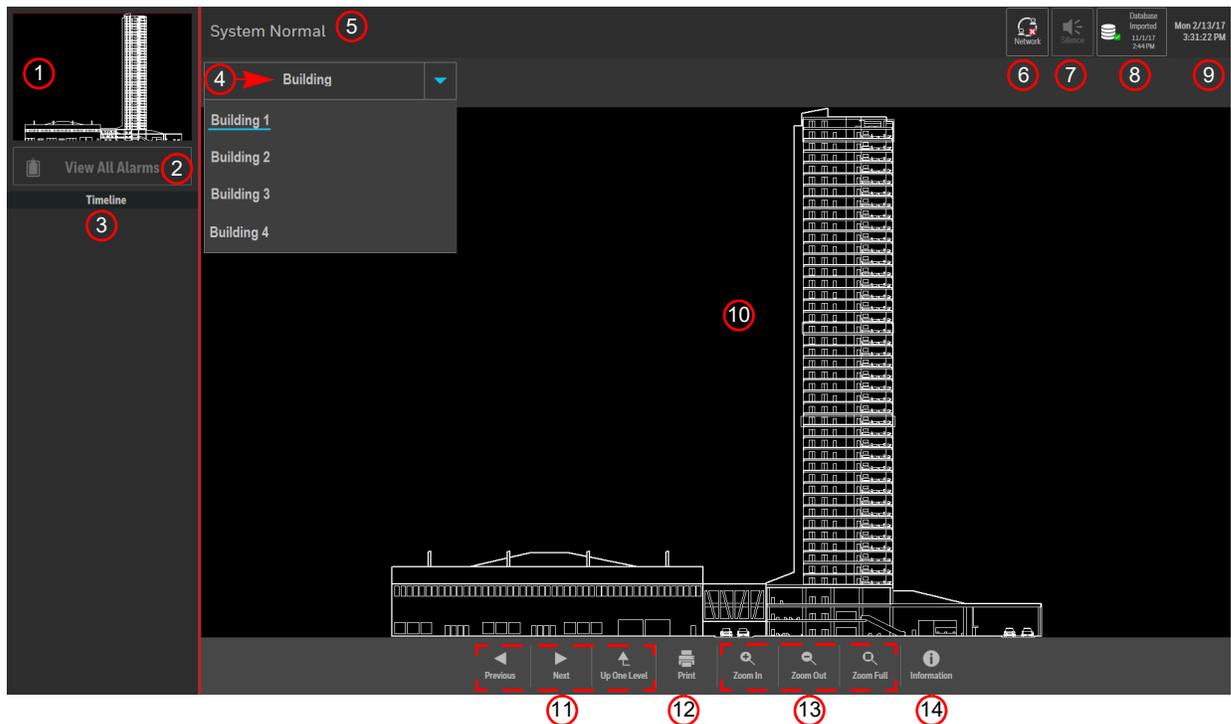


Figure 4.1 Default Screen Saver

4.2 Main Window Features

Figure 4.2 describes the features that are typically shown on the FirstVision main window.

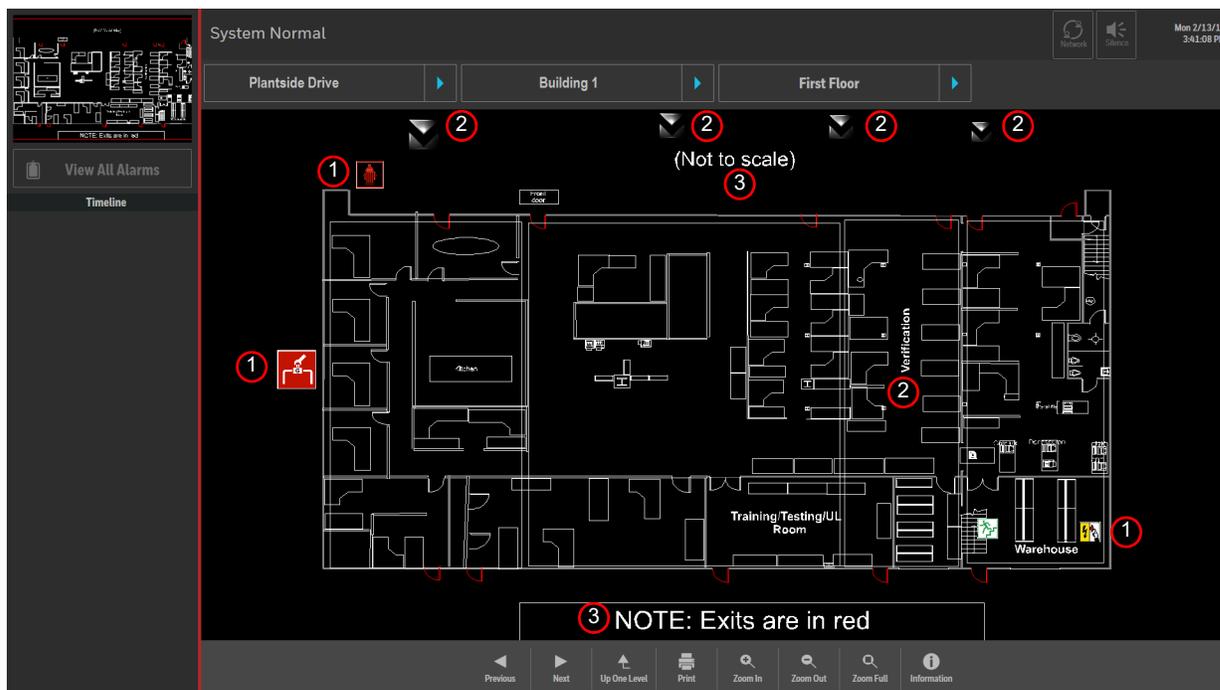


Item	Feature	Description
1	Overview Pane	A miniature map of the floorplan. When the selected zoom level of the floorplan limits the portion of the floorplan that can be seen, a red outline on the map indicates the area being viewed.
2	View All Alarms Button	See Figure 4.4 .
3	Timeline Pane	See Figure 4.4 .
4	Navigation Toolbar	Displays the screen hierarchy of the selected screen. Allows the user to navigate to different screens on the system.
5	Current Status	Displays the current status of the system. Displays the highest priority event status class color and location if there is an event on the system. See Figure 4.4 .
6	Gateway Connection Icon	Becomes active (as shown) if the NFN Gateway connection is lost. Touching the icon displays a list of network gateways by IP address, type, and status.
7	Silence Button	See Figure 4.4 .
8	Database Import Indicator	Displays success/failure when a system database is imported from a workstation on the same network. Touch the icon to make it disappear.
9	Date/Time	Displays the current day, date, and time.
10	Floorplan	Displays the floorplan view of the selected screen.
11	Navigation Buttons	Click to navigate to the previous screen, next screen, or go up one level in the system hierarchy.
12	Print Button	Touch to print the screen on the Windows default network printer.
13	Zoom Tools	Allows the user to zoom in and out on the floorplan. The Zoom Full tool centers the floorplan view and returns it to its original size.
14	Information Button	Opens a window that contains information about the screen being viewed.

Figure 4.2 FirstVision Screen Features

4.3 Floorplan Features

Figure 4.3 describes additional features that are typically shown on a floorplan.



Item	Feature	Description
1	Information Icons	Touch to view additional information.
2	Navicons	Touch to go to the configured location on the floorplan.
3	Text Labels	Provide information to the viewer.

Figure 4.3 Building Floorplan - Normal Condition

4.4 Alarm Screen Features

When a monitored system first reports an alarm, the FirstVision front door unlocks and the view changes to display the screen where the event has occurred. [Figure 4.4](#) describes other actions that take place on a screen in alarm.



Item	Feature	Description
1	View All Alarms Button	Displays a tabular list of all current alarms with date, time, location, and event status class with associated color indicator.
2	Timeline Pane	Displays a list of current alarms with their date, time, and event status ordered by the time the alarm occurred.
3	Navigation Toolbar	Displays the hierarchy of the screen in alarm. The number in the colored dot indicates the number of devices in alarm.
4	Current Status	Displays the event status class icon, label, and color.
5	Floorplan	Displays the floorplan view of the location of the alarm. Automatically navigates when a higher priority event is received.
6	Device Icon	Device icon displays in event status class color. Touching the icon displays alarm details.
7	First Device in Alarm	Animated box displays around the first device to be in alarm. Touching the icon displays alarm details.
8	Silence Button	Becomes active. Click to silence the alarm sound from the FirstVision unit.

Figure 4.4 Floorplan - Alarm Condition

4.5 Operation After Alarms Have Been Cleared

After all alarms have been cleared from the fire panel that FirstVision monitors, the following takes place:

- The alarms are cleared from the FirstVision Timeline pane and event log.
- Any flashing alarm-related device icons are no longer displayed.
- If a screen saver is being used, the screen saver will automatically start when the screen saver’s wait time setting is reached.
- FirstVision returns to normal monitoring operation.

4.6 Downloading the Event Log File

FirstVision maintains a log of the most recent 1,000 events from attached devices. Each log entry contains an event number, a time and date stamp, information identifying the device involved, and the state of the device during the event. Download the event log as follows:

1. Unlock and open the front door.
2. With the FirstVision application running, insert a USB flash drive into one of the USB ports on the front of FirstVision. FirstVision automatically detects the USB flash drive and asks if you want to download the log file.
3. Touch **Yes** to download the log file onto the USB flash drive.
4. When the download is complete, remove the flash drive, and close and lock the door.
5. Insert the USB flash drive into a PC or other device that can read the “.html” file.

Appendix A: Upgrades

A.1 Hardware Upgrade

A.1.1 Supported Hardware

The FirstVision application version 4.xx supports 19" and 22" LCD displays only. The 17" LCD display cannot be upgraded to run version 4.xx.

A.1.2 Upgrading a 19" LCD Display to Version 4.xx

If the 19" LCD display is not running Windows 7, then the compact flash card must be replaced (Kit # LCD-WIN7-UG). Refer to LS10079-009GE-E – *Upgrading Compact Flash Card for 19" LCD Display to Windows® 7* for details.

A.1.3 Microsoft Upgrades

It is necessary to install the latest updates from Microsoft prior to installing the latest version of FirstVision. To perform these operating system updates, FirstVision must be able to connect to the Windows Update Server. If errors are encountered during the installation of FirstVision, please perform the Windows update and then reinstall FirstVision.

A.1.4 Required Equipment

- FirstVision Unit
- Configuration PC with Configuration Tool Software Version 4.xx
- Flash Drive

A.2 Upgrading FirstVision to Version 4.xx

A.2.1 Upgrade Overview

When upgrading to software version 4, the following considerations apply:

- Versions 4.30 and higher of the software only support embedded gateways which are running on HS-GW-EMPCB hardware.
- Hardware information may be viewed from the gateway configuration tool as follows:
 1. Log into the gateway. The gateway configuration tool displays.
 2. View the gateway Board Type property. If the Board Type property value is not listed due to an older version of the software, contact Technical Support.
- With Version 4, FirstVision units operate on the same platform as the workstation and are required to run on the same software version as the workstation. Refer to the *ONYXWorks Workstation Installation and Operation Manual* (P/N LS10050-000NF-E) for Version 4 upgrade instructions.
- When upgrading old versions of the NFN gateway, it may be necessary to use the "Download Utility" that is installed along with the workstation software. Proceed as follows:
 1. In Windows 10, go to **Windows Start Menu > All apps > Facilities Monitoring > Download Utility**.
 2. Enter the gateway IP address.
 3. Click the File Name field. An Open dialog box displays containing the archive files installed on the workstation PC.
 4. Select appropriate archive file from the list. The archive file name information is described in the NFN gateway manual (refer to Main Menus - Upgrade Firmware).
 5. Click **Open**.

A.2.2 Upgrading a Stand-alone Configuration Tool to v.4.xx

Upgrading a stand-alone FirstVision configuration tool to v.4.10 depends on which version of the configuration tool was installed. Use the following to select the appropriate upgrade method:

- If the user has access to the Pre-4.xx FirstVision campus database on its configuration PC's configuration tool, go to A.2.2.1.
- If the user no longer has access to the original FirstVision databases and has version 3.10-3.50, go to A.2.2.2.

A.2.2.1 Using Database Files from a Pre-4.xx FirstVision Configuration Tool

Pre-4.10 versions of FirstVision do not have the required data on the unit itself, so the data must be obtained from the original FirstVision configuration tool. The following procedure works for all versions 1.8 to 3.50 if the customer has access to the original configuration tool campus data.

1. Install the v. 4.xx stand-alone configuration tool on the PC.
2. Navigate to the **C:\Facilities Monitoring\Applications\IncidentMonitorDataMigration** folder.
3. Double-click the **IncidentMonitorDataMigration** application.
4. A prompt displays asking the user for the location of the campus package to be upgraded, as seen below.

5. Clicking on <**Select Directory**> opens the Windows File selection dialog. Navigate to the folder containing the campus to be migrated. In the case below it is the LDC Campus folder. Click **OK** to start the migration. The Administrator Password dialog displays.
6. Enter and confirm the administrator password for the new database and click **OK**.
7. Once migration is complete, the path to the location of the migrated data displays. Note the location and click **OK**.
8. Navigate to the location of the migrated data and copy the data folder to a USB drive. For instance, if the location is **C:\Facilities Monitoring\Data\System-Campus**, the user would copy the **System-Campus** folder to the USB drive.
9. Install the FirstVision 4.10 application on the FirstVision unit, accepting all default settings. This may take 1 to 1.5 hours on the 19" units.
10. When the installation is complete, rename the **System-[xxx]** directory to read **System**.
11. Copy the renamed system directory to the **C:\Facilities Monitoring\Data** directory.
12. Once the copy is complete, start FirstVision and verify the integrity of the data.

A.2.2.2 Using Database Files from a Version 3.10-3.50 FirstVision Unit

If the customer no longer has access to the original FirstVision databases and has version 3.10 to 3.50, the data may be obtained from the FirstVision unit itself as follows:

1. Connect a USB drive to the FirstVision unit.
2. From the FirstVision unit, open Windows Explorer and navigate to the **C:\FacilitiesMonitoring\FIT\data** folder. In the data folder will be a folder with the campus name.
3. Create a new folder on the USB drive with that exact same name.
4. Navigate back to the **C:\FacilitiesMonitoring\FIT** folder, copy the data and Floorplans folders, and paste them into the newly created folder on the USB drive.
5. Connect the USB drive to the computer that has the 4.10 stand-alone configuration tool running and perform the procedure in A.2.2.1, "Using Database Files from a Pre-4.xx FirstVision Configuration Tool".

Notes

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