NOTIFIER® by Honeywell

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ONYXWORKS-WS Listing Document

PN LS10050-051NF-E:K 5/3/2022 ECN: 14593

1. Installation

1.1 Agency Listings

1.1.1 Standards

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

National Fire Protection Association

- NFPA 92 Standard for Smoke Control Systems

Underwriters Laboratories

- UL 864 Control Units for Fire Alarm Systems, Tenth Edition
- UL 2017 General-Purpose Signaling Devices and Systems, Second Edition
- UL 2572 Mass Notification Systems, Second Edition
- UL 2610 Standard for Commercial Premises Security Alarm Units and Systems, Second Edition

Underwriters Laboratories Canada

- CAN/ULC S527-11 Standard for Control Units for Fire Alarm Systems, Third Edition
- CAN/ULC S559-13 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

Underwriters Laboratories

- UL 681 Standard for Installation and Classification of Burglar and Holdup Alarm Systems
- UL 2610 Standard for Commercial Premises Security Alarm Units and Systems, Second Edition

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

1.1.2 Agency Restrictions and Limitations

- If the ONYXWORKS-WS or the transmitter is sharing on-premises communications equipment, the shared equipment shall be "listed for the purpose"; otherwise the transmitter must be installed ahead of the unlisted equipment. “Listed for the purpose” has been formally interpreted by NFPA (Formal Interpretation 72-99-1) for equipment on packet switched networks as being listed to the requirements applicable to general purpose communications network equipment.
- The ONYXWORKS-WS is UL listed only for monitoring when using an Ethernet connection for communications with a life safety network. The Ethernet connection can be part of, or connected to, a shared bandwidth network that operates over topologies such as an intranet, the Internet, or a frame relay.
- The ONYXWORKS-WS uses active communication for monitoring of devices. In Canada, infrastructure which involves LAN/WAN configurations may be used for monitoring of fire networks provided that a dedicated T-1 line is used and routers are battery backed with a power source capable of providing backup power for a period of 24 hours.
- The UL listing for the ONYXWORKS-WS includes the ability for the workstation to send emails. These emails are intended to be transmitted to a limited number of staff (refer to Table 3 for details) for maintenance purposes and system status reasons. This feature is approved by UL as supplementary.
- The ONYXWORKS-WS must be manned 24/7 by trained competent personnel.
- When operating as a Proprietary Receiving Unit, the ONYXWORKS-WS is UL listed only for monitoring of fire, smoke control, and mass notification devices.
- When operating as a Protected Premises Control Unit, the ONYXWORKS-WS is UL listed for monitoring and control of fire, smoke control, and mass notification devices.
- In Canada, when operating as a Proprietary Receiving Unit, the ONYXWORKS-WS is ULC listed only for monitoring of fire devices and must be configured in “Canada – Receiving Unit” mode.
- In Canada, when operating as a Protected Premises Control Unit, the ONYXWORKS-WS is ULC listed for monitoring and control of fire devices and must be configured in “Canada - Protected Premises Control Unit” mode or “Canada – Protected Premises Control Unit + DCC” (Display and Control Centre) mode.

1.1.3 UL 2572 Security Levels

The ONYXWORKS-WS meets the UL 2572 security levels stated below:

Table 1. Security Levels

Level Type	Level
Communication Security	1
Stored Data Security	0
Access Control Security	2
Physical Security	1
Audit Control Security	0

1.2 Connections

1.2.1 Component Connections

The location of the connections to the workstation PC are shown in Figure 1. Each connection is described in Table 2.

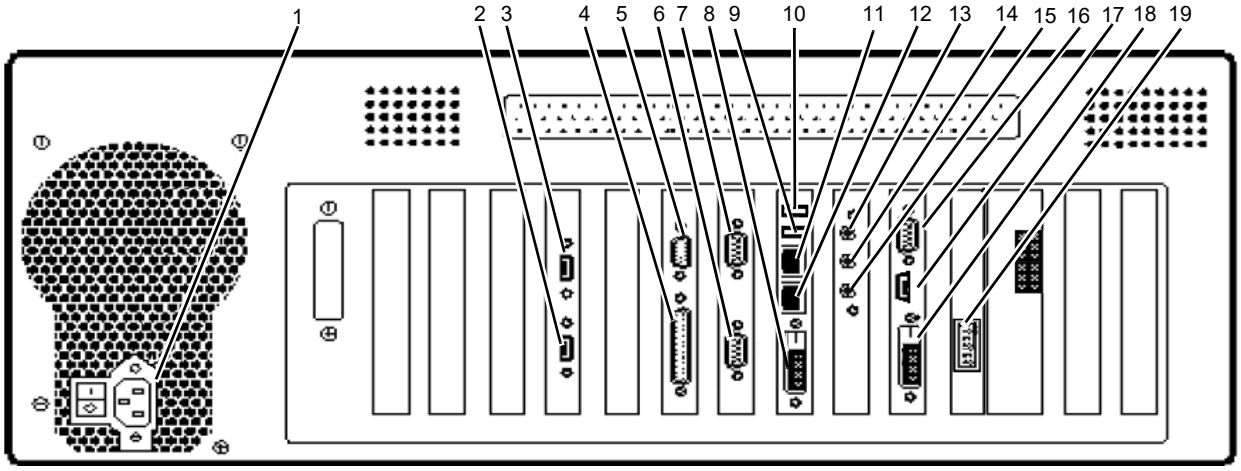


Figure 1. Computer Component Connections

Table 2. Connection Specifications

Item	Reference Designator	Description	Circuit Class	Specifications	Connection
1	Power	AC Power for Computer		• Voltage 120 VAC, 60 Hz • Current: 0.6 – 0.8 amps during normal operation	Refer to 1.2.3.
2	USB 2	USB 3.0 Type A Connector	2	• Line impedance 90±15% • Max distance 40 meters • Power limited • Supervised	
3	USB 3	USB 3.0 Type A Connector	2	• Line impedance 90±15% • Max distance 40 meters • Power limited • Supervised	
4	Parallel Port	Printer Port			Not Used
5	Com 3	RS-232	2	• Line impedance 5K ohm • Max distance 50 ft • Connection is power limited • Connection is supervised	
6	Com 2	RS-232	2	• Line impedance 5K ohm • Max distance 50 ft • Connection is power limited • Connection is supervised	
7	Com1	RS-232	2	• Line impedance 5K ohm • Max distance 50 ft • Connection is power limited • Connection is supervised	
8	DVI 0	DVI		Not Used	Not Used
9	USB 1	USB 2.0 Type A Connector	2	• Line impedance 90 ohm ±15% • Max distance 40 meters • Power limited • Supervised	Keyboard or Mouse
10	USB 0	USB 2.0 Type A Connector	2	• Line impedance 90 ohm ±15% • Max distance 40 meters • Power limited • Supervised	Keyboard or Mouse

Table 2. Connection Specifications *(Continued)*

Item	Reference Designator	Description	Circuit Class	Specifications	Connection
11	LAN 1	RJ45	2	• Line impedance 100 ohm • Max distance 328 ft. (100 m) • Power limited • Supervised - Except for ground faults	Refer to 1.2.2
12	LAN 2	RJ45	2	• Line impedance 100 ohm • Max distance 328 ft. (100 m) • Power limited • Supervised - Except for ground faults	Refer to 1.2.2
13	Line In	3.5 mm		Audio Input	
14	Mic	3.5 mm		Microphone	
15	Speaker (Line Out)	3.5 mm		Audio Output	
16	VGA	VGA		Video	Display
17	HDMI	HDMI		Video	Display
18	DVI 1	DVI		Not Used	Not Used
19	J7	Digital I/O		Not Used	Not Used
Not Shown	USB	USB 2.0 Type A Connector on Front of PC	2	Maintenance Use Only	

1.2.2 Network (LAN) Connections

CAUTION: LAN TRANSIENT PROTECTION
IF LAN CONNECTIONS ARE REQUIRED TO LEAVE THE ROOM, TRANSIENT SUPPRESSION IS REQUIRED. USE SURGE SUPPRESSOR P/N PNET-1.

Make one of the following connections as applicable:

For a workstation that uses a single Ethernet connection for communications, attach the cable as shown in Figure 2.

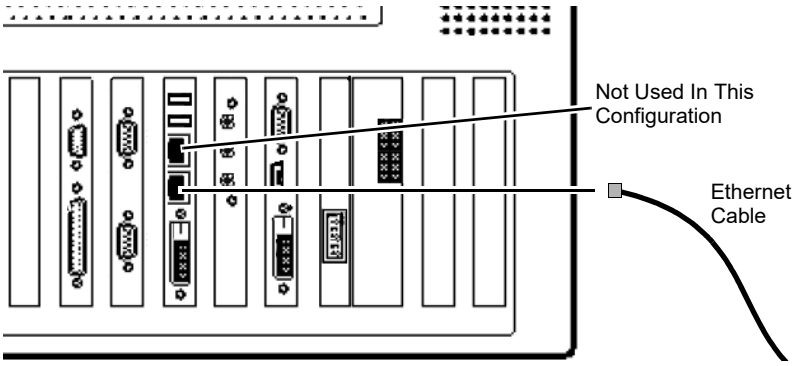


Figure 2. Single LAN Connection

For a workstation that uses dual connections for communications, attach the cable as shown in Figure 3.

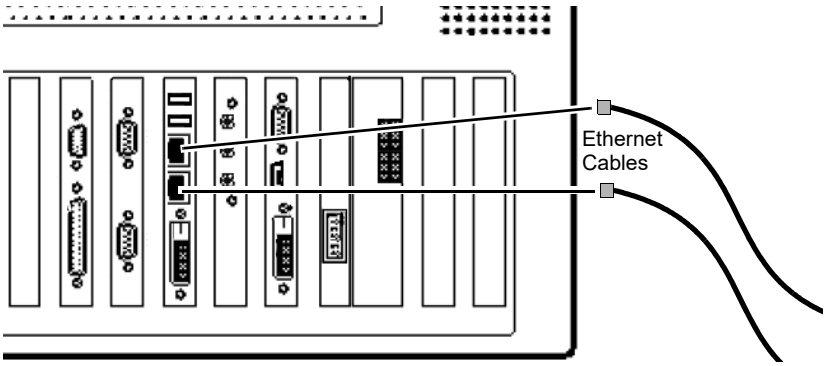


Figure 3. Dual LAN Connection

For an ONYXWORKS-WS that will not be using Ethernet for communications, a single Ethernet patch cable must be plugged in both RJ45 ports to create a loop-back between the Ethernet ports as shown in Figure 4.

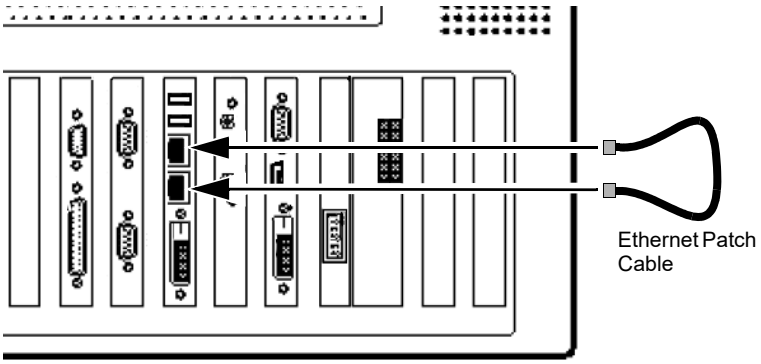
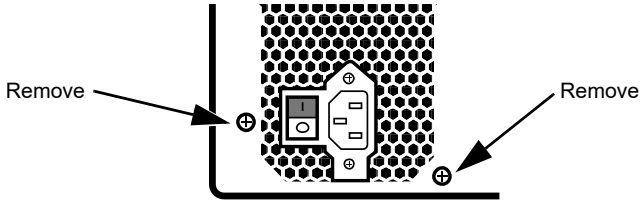


Figure 4. Stand-alone ONYXWORKS-WS

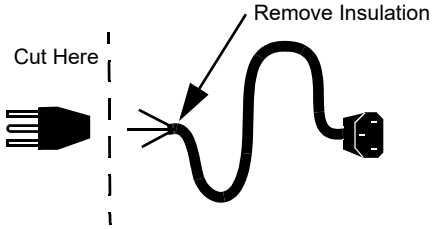
1.2.3 AC Power Connection

Connect AC power to the ONYXWORKS-WS computer as follows:

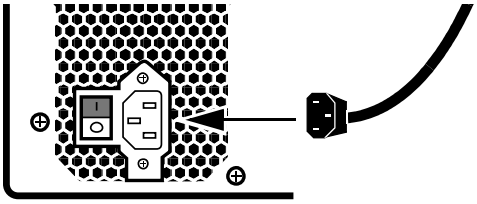
1. Verify that the voltage selection switch is in the correct position.
2. Verify that the rear-panel power switch is set to the **ON** (|) position.
3. Verify that the functional power switch, located behind the locking front door, is set to the **OFF** (O) position.
4. Remove the two screws shown below and retain for later use.



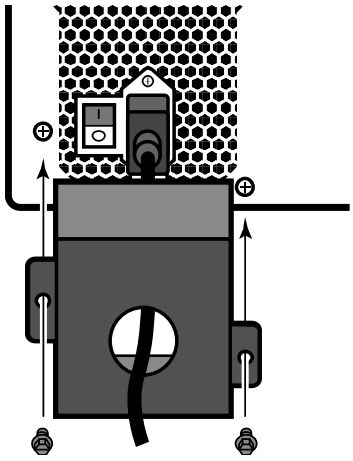
5. Cut the end off of the factory supplied AC power cord and remove outer insulation.



6. Plug the power cord into the ONYXWORKS-WS computer's AC power receptacle.



7. Feed the cut end of the power cord through the hole in the power cord locking bracket (PCLB) and reinstall the two screws removed earlier.



8. Strip the insulation from the ends of the three AC power cord wires and connect them to the UPS in accordance with manufacturer's instructions.

1.2.4 Wiring Methods

Wiring methods used shall be in accordance with UL 681.

1.3 UPS Installation

Install the uninterruptible power supply (UPS) and connect the power cord and monitor module in accordance with manufacturer's instructions.

For UPS supervision, connect a monitor module from an FACP to the low current connectors of the UPS battery charger. The monitor module must be rated for 2A @ +30 VDC.

Relay output is used to enable annunciation by any external device:

- That uses power limited dry contacts.
- The common relay output is a contact that is not supervised and is rated for 2A @ +30VDC.

1.4 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 15-27º C (60-80º F).

1.5 Viewing Version Information

To view ONYXWORKS-WS software version information, go to **Menu > Help > About** in the workstation application.

2. Operation

The ONYXWORKS-WS monitors building and life-safety systems and annunciates events (status change signals) that are received from the attached network(s). It functions either as a Proprietary Receiving Unit (PRU) or as a Protected Premises Control Unit (PPCU). Multiple user accounts are supported with monitoring and control permissions configured individually for each of the user accounts.

When operating as a PRU, the ONYXWORKS-WS supports one or more gateways. The gateway(s) may run on the same PC as the ONYXWORKS-WS or they may run on other PCs and/or embedded hardware. The use of multiple gateways allows for redundancy and provides the ability to monitor multiple networks. One or more ONYXWORKS-WSs may be installed on a network. Multiple ONYXWORKS-WSs can be used to monitor a single network or a single ONYXWORKS-WS can monitor multiple networks. The ONYXWORKS-WS can be located at the protected premises or at a different location. The protected property may be contiguous or noncontiguous, but must be under one ownership.

When operating as a PPCU, support of gateways is limited to a single NFN Gateway that is installed and operating on the same PC as the ONYXWORKS-WS.

The ONYXWORKS-WS provides an optional graphic interface feature by which Administrator and Point Control privilege users can monitor and control the smoke control system for one or more buildings.

3. Functionality

3.1 System Functions

The ONYXWORKS-WS provides the following major functions:

- Displays events by priority. New events are displayed in the list based upon their event type priority.
- Displays acknowledged and new events in separate lists.
- Visual and audible annunciation of events.
- Maintains a history of the following:
  - Life safety events
  - Security events
  - Smoke control system events (if licensed)
- Ability to silence, acknowledge, and reset all panels with off normal events when operating as a PPCU.
- Remote activate/deactivate of speakers and strobes when operating as a PPCU.
- Monitors the communications path between workstation and gateway.
- Annunciates a trouble event when communications with gateway is lost.
- Displays device location information.
- Annunciates CPU fan failure.
- Acts as a time server for gateways on the life safety network.
- Ability to send emails (see Table 3 for limitations).
- Displays an icon  that when clicked, displays a list of the silenced fire panels.
- Monitors and controls building smoke control systems (if licensed).

NOTE: If the ONYXWORKS-WS is configured for use in a dedicated or non-dedicated smoke control system, refer to the *Smoke and HVAC Control Station SCS Series Operation and Installation Manual* (P/N 15712) for concepts and requirements for smoke control strategy and examples for implementing the system in various applications.

3.2 System Limits

The workstation is designed to operate within the limits listed below:

Table 3. Limitations

Limit	Feature	Maximum Allowed
Physical Network Limit	Gateways	200 Total
	Workstations per System	50 Maximum
Logical Network & Screen	Screens	10,000
	Devices	250,000
	Devices Per Screen	1,000
	Macros	250
	Macro Buttons	2,000
	Navicons	1,000
	Monitoring Profiles	100
	Node Control Profiles	100
Workstation	Output Formats	25 per Workstation
	Email Recipients	10 per Workstation
	Email Recipients (MNS)	5 per Event
User Manager	Users	500

4. Programming Options

This section describes the available programming options for the ONYXWORKS-WS.

4.1 Field-programmable Settings

This product incorporates field-programmable software. The features and/or options listed below must be approved by the local AHJ.

Table 4. UL 864 Field-programmable Settings

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES			
This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, certain programming features or options must be limited to specific values or not used at all as indicated below.			
Program Feature or Option	**Permitted in UL 864 (Y/N)**	**Possible Settings**	**Settings Permitted in UL 864**
Remote resetting and silencing of a fire alarm control unit from other than the protected premises (ref: NFPA 72-2007 6.8.2.8)	No	Security Levels: • Administrator • User with Point Control • User with Client Control • Read Only	None
Block Acknowledge (PRU Mode Only)	No	• Yes • No	No
Use Node Control	No	• Yes • No	No
Enable NetLogic	No	• Yes • No	No
Alarm Reminders (Fire, CO, Supervisory, Trouble)	Yes	• Disable • 4 hours • 24 hours	• 4 hours • 24 hours

Table 5. UL 2572 Field-programmable Settings

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES			
This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 2572 certain programming features or options must be limited to specific values or not used at all as indicated below.			
Program Feature or Option	**Permitted in UL 2572 (Y/N)**	**Possible Settings**	**Settings Permitted in UL 2572**
Inactivity Timeout	Yes	0 - 20 minutes (0 disables feature)	1 - 20 minutes
Alarm Reminders (Fire, CO, Supervisory, Trouble)	Yes	• Disable • 4 hours • 24 hours	• 4 hours • 24 hours

Table 6. CAN/ULC S527 Field-programmable Settings

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES			
This product incorporates field-programmable software. In order for the product to comply with the requirements in CAN/ULC S527, Standard for Control Units and Accessories for Fire Alarm Systems, certain programming features or options must be limited to specific values or not used at all as indicated below.			
Program Feature or Option	**Permitted in CAN/ULC S527 (Y/N)**	**Possible Settings**	**Settings Permitted in CAN/ULC S527**
Remote resetting and silencing of a fire alarm control unit from other than the protected premises (ref: NFPA 72-2007 6.8.2.8)	No	Security Levels: • Administrator • User with Point Control • User with Client Control • Read Only	None
Block Acknowledge (PRU Mode Only)	No	• Yes • No	No
Use Node Control	No	• Yes • No	No

Table 6. CAN/ULC S527 Field-programmable Settings *(Continued)*

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES			
Program Feature or Option	**Permitted in CAN/ULC S527 (Y/N)**	**Possible Settings**	**Settings Permitted in CAN/ULC S527**
Enable NetLogic	No	• Yes • No	No
Disable Trouble Reminder	No	• Disable • 4 hours • 24 hours	• 4 hours • 24 hours

4.2 CAN/ULC S527 Event Colors

The default event color scheme is set to comply with the requirements in CAN/ULC-S527, Standard for Control Units and Accessories for Fire Alarm Systems. Off-normal events and their corresponding default colors are listed in the following table.

Table 7. Event Icon Color Coding

Default Event Color	Off-Normal Event
Yellow	• Pre-Alarm • Verifying for Fire Alarm • Alert Condition • Soft Anti-Passback Warning • Point Inactive • Fault Condition • Temperature Alarm • Zone Trouble • Ground Fault • AC Power Failure • Trouble • Loop Trouble • Very Low Value • Very High Value • High Value • Low Value • Cover Open • Out of Paper • Transmission Trouble • Fuse Failure • Short Circuit • Open Circuit • Walk Test
Gray	• Offline

Default Event Color	Off-Normal Event
Red	• Fire Alarm (Non Latching) • Alarm • Agent Release • Supervisory Alarm • Extremely Low Value • Extremely High Value • Addressable Input On • Restart
Blue	• Security Alarm • Audibles Silenced • Off Normal Condition • Bad Address • Device Disabled • Addressable Output On • Device Non-Monitoring • Test Mode Activated • Manual Disable • Schedule Disable • Manual Output On • Schedule Output On

4.3 User Security Options

User accounts can be created with differing levels of access to the ONYXWorks® system. The user's security option choice determines which functions are visible or selectable. Refer to the tables below for detailed information.

In Canada, user accounts with permissions must be granted in accordance with the following guidelines:

1. **Read Only:** The default setting with minimum permissions granted. This permission level is equivalent to no user logged in.
2. **Client Control:** Granted to persons having a general responsibility for safety supervision, who might be expected to investigate and initially respond to a fire alarm or trouble indication;
3. **Point Control:** Granted to persons who have a specific responsibility for safety and who are trained to operate the fire signal receiving center and systems;
4. **Administrator:** Granted to persons who are trained and authorized by the manufacturer to:
   a. Reconfigure the site specific data held within the fire signal receiving center and systems controlled by it; and
   b. Maintain the fire signal receiving center and systems in accordance with the manufacturer's published instructions and data.

Table 8. Basic PC Functionality

Basic PC Functionality	Windows User Account Privileges	
	Limited User Account	Administrator Privileges Account
Run Workstation	YES	YES
Reset Operating System	NO	YES
Change PC Settings	NO	YES
Change/Install Software Programs	NO	YES
Change/Create Local PC User Accounts	NO	YES
Set Time and Date	NO	YES
Note: In Canada, the PC must be run with a Limited User Account.		

Table 9. Canada User Permissions and Settings

User Permissions	Accounts - Permissions Level			
	Read Only	Client Control	Point Control	Administrator
Print Events and Floor Plans	NO	YES	YES	YES
View History and Linked Media	YES	YES	YES	YES
Backup History Data	NO	YES	YES	YES
Acknowledge Events Locally	NO	YES	YES	YES
Acknowledge Field Events	NO	NO	YES	YES
Silence/Reset	NO	NO	YES	YES
Enable/Disable Points	NO	NO	YES	YES
Activate/Deactivate Points	NO	NO	YES	YES
Manual Evacuation	NO	NO	YES	YES
Change/Configure Site Specific Data	NO	NO	NO	YES
Change/Configure User Accounts	NO	NO	NO	YES
Change/Configure Software Options	NO	NO	NO	YES

4.3.1 Display Configuration Privileges

The primary and secondary displays can be configured only by users with administrative privileges.

4.4 Windows Settings

In order for the workstation to operate properly, the following settings must be made in Microsoft® Windows®:

Table 10. Windows Settings

Setting	Required Value
IP Address	Enter a valid IP Address if connecting to a LAN.
Power Options	Screen: Turn off the display after: **Never** Sleep: PC goes to sleep after: **Never**
Time Zone	Set the local time zone.
Daylight Savings Time	Set as appropriate for the local area.
Display Settings for the following Monitors: MON-22LCDW MON-22LCDW-TS MON-42LCDW MON-42LCDW-TS	• Display Resolution: **1920 x 1080** • Display Scale: **100%**

4.5 ONYXWORKS-WS Settings

The following settings are available from the workstation application **Menu > Configure > Options** menu. The settings apply to the local workstation only.

4.5.1 General Tab

Table 11. General Tab Settings

Setting	Possible Settings	Description
Event Label: The event label is displayed in event lists throughout the workstation. The event label options are described below.		
Network Label	Description	Display the network description (alias).
	None	Default. No label is displayed.
Node Label	Description	Display the node description (alias).
	Address	Display the system-assigned node address.
	None	Default. No label is displayed.
Point Label	Description	Default. Display the point description (alias).
	Address	Display the system-assigned point address.
	None	No label is displayed.
History Backup: The external backup file is named with the date: YYYMMDD.HIS. History backup options are described below.		
Automatically Backup History	Scheduled	Activates the Backup Frequency field. Schedule history backup interval by number of days (1-62) or months (1-12).
	When Full	Default. History is backed up when the history database is full (2.5 million entries).
General: Options are described below.		
Show Only Off-normal Devices	Yes	Display only icons of points that are off normal. If there are no current events on the system, no points are visible in the graphics display.
	No	Default. Show all points regardless of state.
Auto-activate Next Event After Acknowledge	Yes	Once the first event in the New Events pane is acknowledged, the next event automatically activates. The workstation plays any media files linked to the event.
	No	Default. When the first event is acknowledged in the New Events pane, the next event does not auto-activate.
Automatically Navigate On Event	Yes	Default. Once an event reaches the top of the New Events list, the workstation navigates to the screen containing the device icon associated with the event.
	No	Do not automatically navigate to the screen with the off- normal event.
Show Navigation Icon Labels	Yes	Default. Display the user-defined text below the navigation icons.
	No	Hide the user-defined text located below the navigation icons.
Show Background Events on Navigation Icons	Yes	Navigation icons “illuminate” to indicate a status change of points that are in the floor plan or nested floor plans for mapped background events.
	No	Default. Navigation icons do not illuminate.
Save Toner When Printing	Yes	Causes the optional graphics printer to invert dark colors (i.e. black to white) when printing the floor plan. For optimum print quality, the floor plan background should be set to black or white.
	No	The graphics printer will print screen as it appears on the workstation.
Fire Alarm Reminder	Disabled	The fire alarm reminder feature is not enabled.
	4 hrs or 24 hrs	After the selected number of hours has passed, an on-screen reminder alerts the user that a system trouble has not been acknowledged. (Default is 24 hours.)
CO Alarm Reminder	Disabled	The CO alarm reminder feature is not enabled.
	4 hrs or 24 hrs	After the selected number of hours has passed, an on-screen reminder alerts the user that a system trouble has not been acknowledged. (Default is 24 hours.)

Table 11. General Tab Settings *(Continued)*

Setting	Possible Settings	Description
Supervisory Reminder	Disabled	The supervisory alarm reminder feature is not enabled.
	4 hrs or 24 hrs	After the selected number of hours has passed, an on-screen reminder alerts the user that a system trouble has not been acknowledged. (Default is 24 hours.)
Trouble Reminder	Disabled	The trouble reminder feature is not enabled.
	4 hrs or 24 hrs	After the selected number of hours has passed, an on-screen reminder alerts the user that a system trouble has not been acknowledged. (Default is 24 hours.)
Enable Emails (Optional Software Feature)	Yes	Default. The workstation sends emails as configured on the Email tab.
	No	Email function is disabled.
Use Node Control	Yes	Default. Proprietary Receiving Unit (PRU) modes only. Requires a user with control privileges to take manual control of nodes or networks via the Control Profiles window before sending commands to the node/network. Refer to 4.1, "Field-programmable Settings" for regulatory considerations.
	No	PRU modes only. Allows any user with control permissions to send commands to any nodes/networks on the system. Control Profiles window is inaccessible.
Block Acknowledge	Yes	Proprietary Receiving Unit (PRU) modes only. Allows acknowledgment of all events listed in the New Events pane by clicking the Block AK button.
	No	Default. PRU modes only. Block acknowledgment of new events is not available.
Enable NetLogic	Yes	Enables the NetLogic automatic event response application.
	No	Default. NetLogic is not Enabled
Monitor Fan	Yes	A fan trouble event appears in the New Events window on the workstation screen if a PC cooling fan malfunctions.
	No	Default. Fan monitoring is not enabled.
Omit Control Point On, Point Active, and Zone On From History	Yes	Control Point Activations, Point Activations, and Zone Activations are not written to history.
	No	Default. Store these events in history.

4.5.2 User Features Tab

Table 12. User Features Settings

Setting	Possible Settings	Description
Unacked Event Alarm Configuration: This feature is used to automatically activate a user-defined macro if an alarm is present in the new event list for more than the configured amount of time.		
Use Unacked Event Supervision	Yes	Automatic Unacked Alarm Operation enabled.
	No	Default. Automatic Unacked Alarm Operation disabled.
Unacked Event Timeout	3 - 60 minutes	Amount of time before the user-defined macro is executed. (Default is 3 minutes)
Macro Activated on Alarm	Macro Name	Select a macro from the drop-down list. Macros are configured in the workstation configuration tool.
	None	Default. Do not activate a macro.
Security:		
Inactivity Timeout	1-20 minutes	Amount of time with no activity after which a user is automatically logged out. **Note**: Must be enabled for UL 2572 compliance.
	0	Default. Do not automatically log out a user.
User Responses:	8 User-defined Responses	Enter text to be stored in history as responses to events. These are displayed when a user right-clicks on a floor plan icon.

4.5.3 Event Printer Tab

The Event Printer tab allows the user to enable or disable the optional printer. An event printer is not required for UL 864 operations. A default output format and monitoring profile are preconfigured for a local event printer. It is only necessary to enable the printer in Windows. The local event printer must be named “Local Event Printer” through Windows. Consult Windows information for details about naming the printer. To modify the printer configuration, a user-definable monitoring profile must be selected along with a user-definable output format. A sample event is displayed using the selected output format.

4.5.4 Email Tab

The Email tab of the configuration allows the user to configure the optional email capabilities of the workstation.

Email notifications are only intended to be transmitted to a limited number of staff for maintenance and system status purposes. This feature is approved by UL as supplementary.

4.5.5 Output Tab

The user-defined output formats defined on the Output tab are used by the event printers and e-mails. Each format can consist of various fields which define an event. The list of available fields is: Action, Actual Time, Card Facility Code, Card Number, Card Time, Description, Network Alias, Node Alias, Point Type, Status, and User Defined.

4.5.6 Smoke Control Tab

The Smoke Control Tab is only available for workstations licensed for the smoke control feature. This tab allows users to configure the following:

- A key station that allows firefighters to have access to, and control of, a site’s smoke control system via the workstation.
- The appearances of an on-screen toolbar, smoke control device count icons, and a smoke control device modules status pane on the smoke control window.
- The ability to enable/disable control buttons on smoke control device widgets and menus.

4.5.7 Multi-Station Smoke Control Tab

The Multi-Station Smoke Control Tab is only available for workstations licensed for the smoke control feature. This tab allows users to set workstation control priorities for a building's smoke control system when there is more than one workstation installed in the building's fire safety network.

4.6 Configuration Tool Settings

The following settings are found in the configuration tool and are shared among the workstations on a network. From the workstation application, go to **Menu > Configure > Launch Configuration Tool**.

4.6.1 Main Menus and Toolbars

Table 13. Configuration Tool Menus and Floor Plan Toolbar Settings

Location	Description
Main Menu Bar	Located along the top of the configuration tool main screen.
	File Menu: **Open** - Visible on stand-alone configuration PCs only. Allows the user to open and configure additional systems. **Merge Database** - Allows the user to import the data from an existing system database into the currently open system database. This creates a single database with the contents of both databases merged. **Save** - Saves the configuration tool settings without closing the configuration tool. **Exit** - Closes the configuration tool.
	System Menu: **Networks** - Allows the user to add, delete, modify networks and nodes. **DVC Inputs** - Allows the user to map sequence inputs from their network Digital Voice Command modules (DVCs) to inputs that can be used by the workstation when configured for emergency audio. These inputs are then used by the Audio Group Manager, in which an audio group will be assigned one of the input numbers that were configured in the DVC Inputs window. **Note:** The input and priority settings must match those configured on the DVC(s). **Signs** - Allows the user to configure the LED Sign Gateways as part of the current system. This allows the user to send a message to the sign from the workstation. Using this feature violates the UL listing. **System Options** - Allows the user to select options as to how the workstation interface will operate. Refer to Table 14 for additional information. **Monitoring Profiles** - Allows the user to configure the monitoring profiles which can be selected by the users in the workstation software. **Users** - Allows the user to set workstation user passwords and privileges. **Chemicals** - Opens the Chemicals screen where information about hazardous chemicals is stored. The user can add or remove chemicals from the list. Chemical information can be associated with a hazardous material icon on the floor plan. **Database Editor** - Allows the user to edit the workstation database in a spreadsheet format.
	Control Menu: **Macros** - Opens the Macro Editor Screen where the user can configure macros. **Control Profiles** - Allows the user to configure the control profiles which can be selected by the users in the workstation software. **Audio Groups** - Allows the user to configure audio groups for use with NOTIFY-IP. **SCS Weekly Test** - Only visible with workstation optional smoke control feature. Allows the user to configure a weekly test of the smoke control system via specified fire panels.
	Graphics Menu: **Default Icons** - Allows the user to view, search, and customize the icons in the currently selected icon set. **Status Classes** - Allows the user to configure custom colors and sounds for each event status class. **Floorplan Options** - Allows the user to configure the text displayed above the icons, the floor plan foreground and background colors, and the icon set to be used. **Smoke Control Widget -** Only visible with workstation optional smoke control feature. Allows the user to configure the labels and indicator colors for smoke control device widgets.

Table 13. Configuration Tool Menus and Floor Plan Toolbar Settings *(Continued)*

Location	Description
Floor Plan Tool Bar	Allows the user to configure and place/draw a variety of informational objects on the floor plan screen.
	Objects: **Screen** - Allows the user to add screen backgrounds, titles, and specify parent screens. **Navigation Area** - Allows the user to create and select the destination for a navigational area. **Navigation Icon** - Allows the user to create and select the destination for a navigation icon. **Point** - Allows the user to create and configure points. For each event status class, a point can be assigned an icon and linked media for text, image, audio, and video; each of which can be auto-activated. **Macro Button** - Allows the user to create and place buttons that activate configured macros. **Audio Button** - Allows the user to configure and place audio buttons. **Information Label** - Allows the user to configure and place information labels that provide important user information. **Smoke Control Icon** - Only visible with workstation optional smoke control feature. Allows the user to configure smoke control device icons and smoke control operations.
	Draw - Provides drawing tools for use on the floor plan screen. Hover to display the meaning of symbols.
	Text - Provides text settings for use on the floor plan screen. Active when text tool "**T**" is clicked.
	View: **Gridlines Button** - When clicked, grid lines are displayed on the floor plan to aid in placement of information. Does not appear on the workstation screen. **Events Button** - When this button is clicked, all device icons on the floor plan display in an alarm state. This includes tinting of each icon, placing a box around it, and displaying event text below each icon. The purpose of this option is to assist users when laying out floor plan icons. For instance, they can use it to ensure that the event text is easily readable and does not overlap lines on the floor plan background.

4.6.2 System Options

To access the following settings in the configuration tool, go to **System > System Options** in the menu bar.

Table 14. System Options Configuration

Setting	Possible Settings	Comments
Operating Mode		The workstation must be set to the same operating mode as the NFN Gateway(s).
	Canada - Proprietary Receiving Unit	Canada - Proprietary Receiving Unit (PRU) mode meets ULC S527 requirements and otherwise runs exactly as the PRU Mode. NFN networks configured for Mass Notification operations are not supported in Canada - Proprietary Receiving Unit mode.
	Canada - Protected Premises Control Unit	Canada - Protected Premises Control Unit (PPCU) mode meets ULC S527 requirements and otherwise runs exactly as the PPCU mode. This mode is not available when more than one NFN is connected to the workstation.
	Canada - Protected Premises Control Unit + DCC	Canada - PPCU + DCC (Display and Command Center) mode meets ULC S527 requirements and otherwise runs exactly as the PPCU mode. This mode is not available when more than one NFN is connected to the workstation.
	China - CCCF	China - CCCF mode meets Certification Center for Fire Products (CCCF) standards.
	Proprietary Receiving Unit	PRU mode supports multiple gateways and workstations. NFN networks configured for mass notification operations are not supported in PRU mode.
	Protected Premises Control Unit	PPCU mode is not available when more than one NFN is connected to the workstation. In this mode, the workstation is a peer of a panel it monitors (i.e. actions taken at the panel register on the workstation). PPCU mode requires exactly one workstation and the NFN Gateway running on the same PC as the workstation.
Mass Notification Priority	• None • Lower than Fire • Higher than Fire	Active only in PPCU mode.Select from the drop-down list.
Logged-Out Monitoring Profile	• All Nodes, All Events (Default) • Custom Profiles	Select the desired monitoring profile from the drop-down list. If no one is logged in to the workstation, the selected monitoring profile is activated.
Extract Description from Panel	• Yes	Default. Use point descriptions as received from the FACP.
	• No	Use point descriptions as defined by the configuration tool and discard point descriptions received from the FACP.
Time Server Settings	IP Address	This field is used to enter the IP address of the server that is used to synchronize the ONYXWorks system time. If the IP address for the time server is the same IP address as this workstation PC, then this workstation will function as the time server. Otherwise, the workstation PC will use the time server at the specified IP address.
Audio Multicast IP	IP Address	This setting is for use with the NOTIFY-IP option provided the IP network supports multicasting.
System Description	Enter a unique system description.	This description is an alias by which the system can be easily identified. This aids the user during off-line configuration where multiple systems may be configured.
System Password	Enter a unique password.	20 characters maximum, case sensitive. In order for the workstation to connect to a gateway, the system password must match the system password configured on the gateway. The system password must be manually entered individually on each workstation PC by entering this setting in the configuration tool residing on that PC. On workstation PCs, this setting is only available when editing the live system.

Table 14. System Options Configuration *(Continued)*

Setting	Possible Settings	Comments
Require Confirmation	• Field Acknowledge • Silence • Reset • Manual Evacuation • Enable/Disable • Activate/Deactivate	Selecting 'Yes' causes a confirmation message to display before the action is performed. (Default is "No").

5. Testing/Maintenance

Testing shall be performed in accordance with NFPA-72 and CAN/ULC S536.

When acting as a smoke control subsystem, the workstation should also be tested in accordance with NFPA 92.

Before performing any testing on a fire alarm system or smoke control system:

1. Notify the fire department and the central alarm receiving station if transmitting alarm conditions.
2. Notify the people occupying the facility about the impending test, the expected time period of the test, and to disregard any alarm during the test period.
3. When appropriate, disable activation of alarm notification appliances and speakers to prevent their sounding.

6. Compatibilities

6.1 Current Compatible Equipment

The ONYXWORKS-WS is compatible with the following equipment. For additional documentation on this product, go to notifiermanuals.com. This additional documentation may be used as a reference only.

Table 15. Compatible Equipment

Type	Equipment	Description
Fire Panels:	• N16 • NFS-320 • NFS2-640 • NFS2-3030	**Note:** N16 panel compatible with workstation in PPCU mode only.
Network Cards:	• NCM-W • NCM-F • HS-NCM-MF • HS-NCM-SF • HS-NCM-W-2 • HS-NCM-WSF-2 • HS-NCM-WMF-2 • HS-NCM-MFSF	
Monitors:	• MON-22LCDW	22” Wide Screen LCD Monitor
	• MON-22LCDW-TS	Touchscreen 22” Wide Screen LCD Monitor
	• MON-42LCDW	42” Wide Screen LCD Monitor
	• MON-42LCDW-TS	Touchscreen 42” Wide Screen LCD Monitor
	Notes: • To remain compliant with UL listing and to meet the “Condition of Acceptability”, the keyboard and mouse must be connected when using a touchscreen monitor. • In Canada, all wiring connections to the monitor must be encased in conduit.	
Network Gateways:	• NFN-GW-EM-3	Embedded NFN Gateway
	• NFN-GW-PC-HNW-2	NFN PC Gateway card (wire connections)
	• NFN-GW-PC-HNSF	NFN PC Gateway card (single mode fiber connections)
	• NFN-GW-PC-HNMF	NFN PC Gateway card (multi mode fiber connections)
	• NFN-GW-PC-W	NFN PC Gateway card (wire connections)
	• NFN-GW-PC-F	NFN PC Gateway card (fiber connections)
Other Products:	• DACR-GW	Digital Alarm Communicator Receiver Gateway
	• LEDSIGN-GW	LED Sign Gateway
	• NOTIFY-IP	Live Voice Paging Application
	• OW-SCS	Smoke Control Feature Application (Only with NFS2-3030panels.)

6.2 Legacy Compatible Equipment

The following equipment is listed as compatible with the ONYXWORKS-WS, but is no longer available.

Table 16. Legacy Compatible Equipment

Type	Equipment	Description
Network Cards:	• HS-NCM-W • HS-NCM-WSF • HS-NCM-WMF	
Network Gateways:	• NFN-GW-PC-HNW	NFN PC Gateway card (wire connections)

7. System Configuration

The following table describes the required and optional configurations needed to meet the ONYXWORKS-WS's intended application.

Table 17. System Configuration

Accessory/Subassembly	Part No.	Description	Proprietary Receiving Unit	Protected Premises Control Unit
Fire Panels	Refer to Tables 15 and 16	Current UL-listed Fire Panels	R	R
Network Cards		Current UL-listed Network Cards	R	R
Workstation		Current UL-listed PC with ONYXWorks Software	R	R
Monitors		Current UL-listed Monitors	R[1]	R[1]
Network Gateway		Current UL-listed Network Gateways	R[2]	R[3]
Receivers Gateway		Digital Alarm Communicator Receiver Gateway	O	O
Paging Application		Live Voice Paging Application	O[4]	O[5]
Smoke Control Application		Monitoring and Control of Building Smoke Control Systems	O[5]	O[5]
Sign Gateway		LED Sign Gateway	O	O
UPS		Uninterruptible Power Supply	R	R
Keyboard		USB Keyboard	R	R
Mouse		USB Mouse	R	R
Software License		Enables ONYXWORKS-WS features.	R	R

R - Required component for functionally minimal system.
O - Optional

Notes:
1 - At least one of the monitors listed in Table 15 is required. A second monitor from Table 15 may be used, but is not required.
2 - One or more network gateways listed in Tables 15 and 16 is required.
3 - A PC version of the network gateways is required when operating as a Protected Premises Control Unit.
4 - Paging from a Proprietary Receiving Unit is limited to non-emergency paging.
5 - Smoke control application is only compatible with NFS2-3030 panels.
6 - Life safety, emergency and mass notification paging is permitted from a Protected Premises Control Unit.

8. System Power

NOTE: This equipment is not suitable for use in locations where children are likely to be present.

8.1 Primary and Secondary Power

The ONYXWORKS-WS requires connection to a separate dedicated primary AC fire alarm circuit as the primary power source. The circuit must be labeled "FIRE ALARM" and must connect to the line side of the main power feed of the protected premises. No other equipment can be powered from the fire alarm circuit. This circuit must run continuously, without disconnect devices, from the power source to the workstation. Overcurrent protection for this circuit must comply with Article 760 of the National Electrical Code as well as local codes.

If available, backup power for the workstation must be supplied by the building emergency power source. A supervised Uninterruptible Power Supply (UPS) is required to provide power continuity during the transition period from the primary power source to the emergency power source. The UPS must be UL 1481 or UL 864 listed, regulated, and power limited.

In Canada, backup power for the workstation must be supplied by the building emergency power source. A supervised UPS is required to provide power continuity during the transition period from the primary power source to the emergency power source. The UPS must be CSA or ULC listed, regulated, and power limited.

8.2 System Power Requirements

Table 18. System Power Requirements

Device Type	Max Current (Amps)	Power
ONYXWORKS-WS	7.0	120 VAC, 60 Hz
MON-22-LCDW	1.97	
MON-22-LCDW-TS	1.97	
MON-42-LCDW	1.2	
MON-42-LCDW-TS	2.00	

8.3 Motherboard Battery

The motherboard battery employed is the Panasonic CR2032 lithium battery. This part is not user serviceable and is provided as information only.