

## Installation Instructions

### Models PMI-3

Person-Machine Interface

#### INTRODUCTION

The Model PMI-3 from Siemens Industry, Inc., is the user interface for the FireFinder-XLS™ system. From the PMI-3 the operator can acknowledge events, control the system notification appliance circuits and reset the system. Detailed information about the nature and location of events can also be displayed.

The PMI-3 is used as the primary user interface in CAB1, CAB2 or CAB3 enclosures. The PMI-3 can also be used as a primary user interface in a remote REMBOX2 or REMBOX4 enclosure.

The PMI-3 contains the site specific program as developed in Zeus. All system logic and supervision is provided by the controller in the PMI-3.

The PMI-3 contains a full VGA LCD, Touch Screen and LEDs for displaying system status. An audible sounds when there are unacknowledged events on the PMI-3. The display is surrounded by keys that are used to control the displayed information and to navigate through these screens. Keys are also provided to obtain help and to enter into the menu features of the PMI-3. (Refer to Figure 1.)

On the back of the PMI-3 there are additional diagnostic displays to aid in system troubleshooting. This is also where the PMI-3 address is set and where the connection is made to Zeus for programming. (Refer to Figure 2.)

For systems configured to provide Smoke Control (UUKL), refer to the FireFinder XLS Control Panel System Manual, P/N 315-034853.

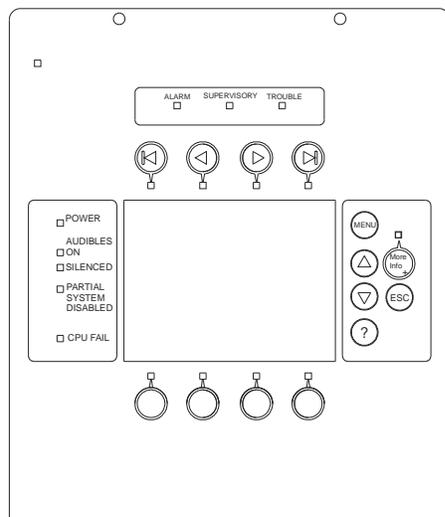


Figure 1  
PMI-3 User Interface

#### PRE-INSTALLATION

Additional labels are available for applications that require French (Canadian), Spanish, or Portuguese (Brazilian) languages. These labels need to be ordered separately. Refer to the table below for ordering information.

To apply labels, remove the backing from the labels and apply them to the PMI-3. (Refer to Figure 3.)



For systems configured for Security, an LED must be configured (on an LCM-8) to indicate Security. This LED must be present on each node in the system. Refer to the FireFinder-XLS IOM Manual, P/N 315-033744, and the Zeus Quick-Start Manual, P/N 315-033875, for LCM-8 installation and configuration.

## DESCRIPTION OF PMI-3 DIAGNOSTICS

100	LED glows steady if a 100Mbps ethernet connection is detected.
ACT	LED glows steady during times of ethernet network activity.
HNET	HNET connection to a laptop PC for network diagnostics.
LAN	Ethernet port used for high speed data link (including main CPU firmware uploads).
LINK	Glows steady if an ethernet connection is detected.
OPTIONS	Pin Description: 1-Touchscreen Calibration mode 2-Main CPU Firmware Upload Mode 3-(TBD) 4-(TBD)
PCC PORT	USB port used to transfer new firmware to the PCC.
RESET	1. Press to re-initialize the PMI. 2. Hold 5 seconds for hard reset.
SD #1	SD card port used to store GPMI database and backup information.
SD #2	SD card port used to allow GPMI capability.
STATUS	Walking segments light to indicate normal operation. Error code is displayed if an internal error ID is detected.
TO CC-5	Connects 60-pin ribbon cable to CC-5.
TO LVM	Analog audio bus.
TSP-40A	Connector for TSP-40A strip printer.
UPLOAD (USB "B")	Connection to Zeus tool for transferring system configuration data and module firmware. Uses USB type B connector.
USB "A"	Port used to collect logs and information from system. Uses USB type A connector.
XNET ID	XNET address: Set to 01 in local mode; set to appropriate address for XNET.

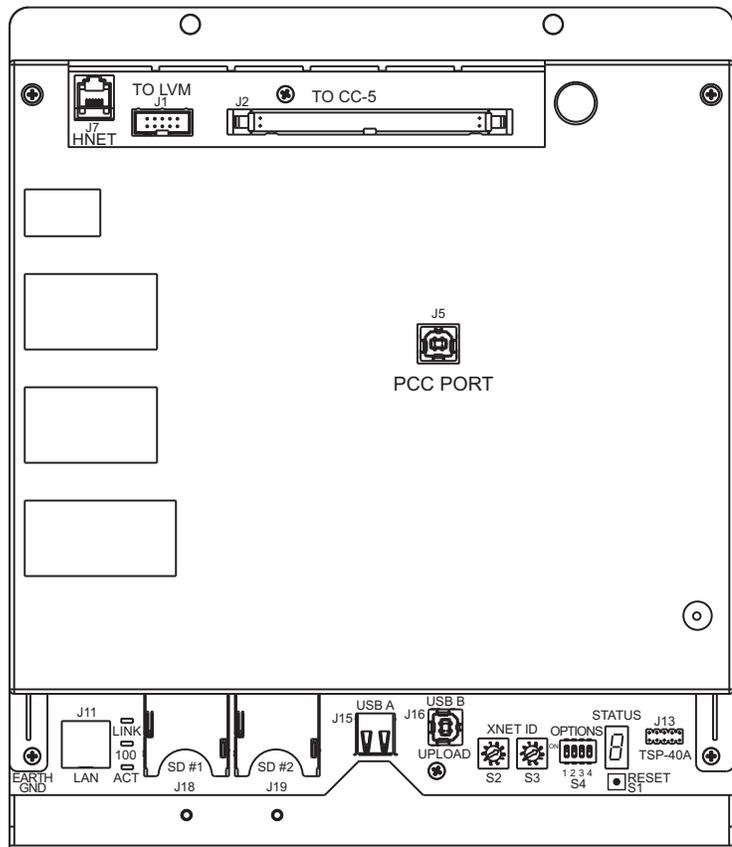
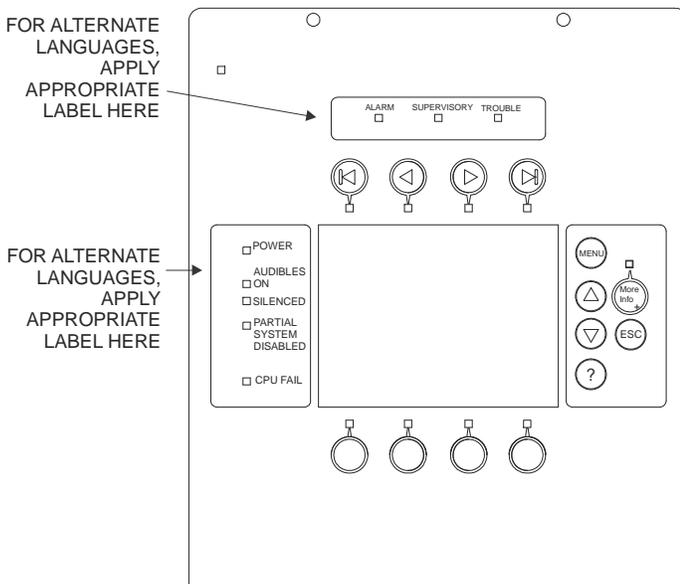


Figure 2  
PMI-3 Diagnostics



**NOTE**

Part number S54430-C16-A1 contains alternate language labels

Figure 3  
Applying PMI-3 Labels for Alternate Languages



Set the Network Address

**Remove ELECTRICAL POWER prior to installing the PMI-3 in the enclosure.**

Remove the PMI-3 from its anti-static bag. Set the two-digit address using the 10-position rotary switches (S2, S3) located on the back of the PMI-3. For a standalone HNET panel, set the address of the PMI-3 to 01. Be sure to set leading zeros. In the Zeus Physical View, make sure that the PMI-3 is configured at address 253.

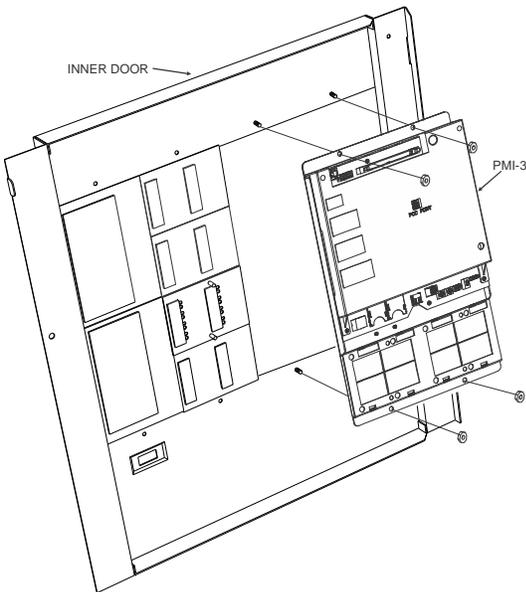
When the PMI-3 is used for networking with other panels, set the two-digit network address to the XNET node address that has been assigned in Zeus. Be sure to set leading zeros. For example, Node 2 is set at 02. In the Zeus Physical View, the HNET address of the PMI is automatically set to 253 when operating in an XNET panel.

The table below details the differences between the network address settings in a PMI-3 and a PMI.

SETTING THE NETWORK ADDRESS SWITCHES		
	PMI-3	PMI
<b>Number of Rotary Address Switches</b>	Two (S2, S3)	Three (S16, S14, S11)
<b>HNET (Standalone)</b> (Setting on PMI)  (Setting in Zeus)	Set address to 01.  No setting on S4 (Options switch).  Make sure the PMI-3 is configured at address 253 in the Zeus physical view.	Set address to 253.  Set S17 (Options switch), position 4 to OFF.  Make sure the PMI is configured at address 253 in the Zeus physical view.
<b>XNET (Network)</b> (Setting on PMI)  (Setting in Zeus)	No setting on S4 (Options switch).  Set the XNET node address to the two-digit address assigned for it in Zeus.  Set the XNET two-digit node address (from 01-64) in the Zeus physical tree. Be sure to set leading zeros.	Set S17 (Options switch), position 4 to ON.  Set the XNET node address to the three-digit address assigned for it in Zeus.  Set the XNET three-digit node address (from 001-064) in the Zeus physical tree. Be sure to set leading zeros.

Mount the PMI-3

The PMI-3 mounts to the rear of the inner door in the CAB-1, CAB-2, CAB-3, REMBOX2 or REMBOX4 enclosures. Select the location of the PMI-3. It can be mounted either in the center or on the left side of the inner door, when viewed from the outside of the enclosure. Place the PMI-3 onto the inner door from the rear, over the four mounting studs in the desired location. Secure the PMI-3 to the inner door with the four nuts provided. (Refer to Figure 4.)



A 40 inch long 60 wire cable, P/N 555-133743, connects the PMI-3 to the CC-5. The CC-5 is located in the back of the enclosure on the left hand side. Connect one end of the cable to J2 on the PMI-3. J2 is marked with "CC-5" on the PMI-3 printed circuit board. Connect the other end of the cable to P1 on the CC-5. (Refer to Figure 5.)

Connect the PMI-3 to the RNI in a REMBOX2/4. The RNI is located in the back of the enclosure on the top left hand side. Connect one end of the cable to J2 on the PMI-3. J2 is marked with "CC-5" on the printed circuit board. Connect the other end of the cable to JP1 on the RNI. (Refer to Figure 6.)

Figure 4  
Mounting the PMI-3 to the Rear of the Inner Door

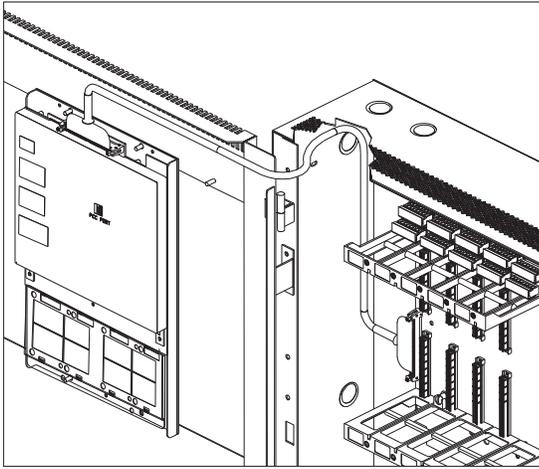


Figure 5  
Connecting the PMI-3 to the CC-5

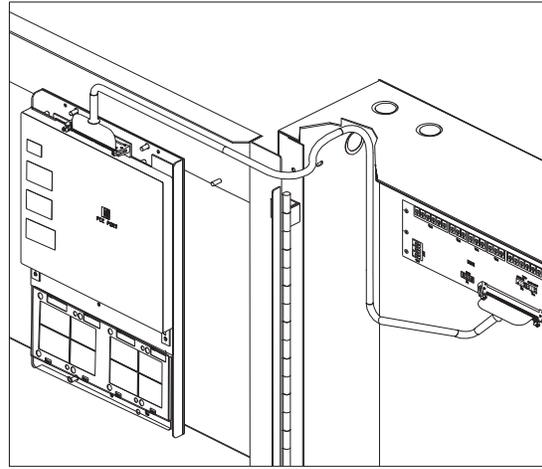


Figure 6  
Connecting the PMI-3 to the RNI

Make sure that all cables snap fully into their connectors and close the locking levers over the top of each cable connector. Secure the cable in the back box using cable ties and the tie down points in the enclosure. The cable must have sufficient slack to allow the inner door to open fully without putting stress on the cable.

## OPERATION

In the normal standby condition the PMI-3 displays the site specific custom message, the time and date, and a synopsis of the system status.

When an event occurs in the system, the display enters the Alert mode. The event is displayed, the local audible sounds and the tab on the display for the corresponding event queue flashes. If the event type is Alarm, Trouble, or Supervisory, the appropriate LED blinks. If the event caused notification appliances to sound the Audibles On indicator lights. At the bottom of the screen an acknowledge button is displayed. Pressing this button acknowledges the event and silences the local audible. Once all events are acknowledged a reset button becomes available in the lower right side of the display. If notification appliances were active, two additional buttons appear at the bottom of the screen. These allow the operator to silence or unsilence the notification appliances. When the notification appliances are silenced the Audibles Silenced LED lights. The system can only be reset with the notification appliances silenced.

If more events are present in the system than can be displayed on a single screen a scroll bar appears to the right of the event list. Pressing the up and down navigation buttons to the right of the LCD allows the operator to move through the list. The selected event is highlighted in the display. Pressing the More Info button will display a screen showing details relating to the selected event. Other buttons also appear at the bottom of this screen. There is an expanded text message available and a selection to show all of the devices associated with the event that are active. The operator can return to the previous screen by pressing the ESC button. (For more detail on PMI-3 operation, refer to the FireFinder-XLS Manual, P/N 315-033744.)

If the LED under one of the   buttons above the LCD is lit, pressing the button moves the highlight to the next queue. Use the   buttons to shift to the first or last queue.

Follow the procedure below to upgrade an XLS panel from a PMI to a PMI-3.

1. Please ensure you are using Zeus 12.0 or greater.
2. Create a new project in Zeus (**File>New**) to avoid overwriting a current project. The new project's filename is not important.
3. Download the current configuration from the PMI.
  - a) Connect the Laptop via the Upload cable and select **Build>Transfer>Configuration From Panel**.
  - b) An .hrc configuration file from the PMI control panel downloads to the Zeus host PC. Initially, the Zeus Transfer dialog will open, with settings for serial port and transfer protocol. Once these are set, the Transfer Configuration dialog will display information the PMI's current configuration, software and firmware versions. You can select the panel from which to download (if there are multiple compiled configurations in the host PC), and also choose to download the PMI's current history file into the project directory. Once you have begun the transfer, the Transfer Progress dialog displays transfer progress and status messages, and allows you to cancel the transfer.
4. Once the panel configuration is downloaded, close the new project, use **Tools > Decompile** to open the downloaded .hrc configuration file as a project in Zeus.
5. In the Zeus tool replace the PMI with the new PMI-3.



Please make sure you are converting the correct PMI with a PMI-3 by matching the address of the switches on the back of the PMI.

- a) In the configuration which you have just removed from the original PMI, click on the PMI module in the physical tree. Select the Edit menu and click on "**Find/Replace Tree Node**". A dialog box will open and allow you to replace the PMI with the PMI-3.
- b) Once this is completed, save and then compile the configuration.



Remove ELECTRICAL POWER prior to removing the original PMI and installing the new PMI-3 in the enclosure.

- c) Physically remove the original PMI and install the new PMI-3 on the inner door of the enclosure. (For more detail see the INSTALLATION section and Figure 4 of this document.)
  - d) Re-attach the 60-pin cable to the connector at the top of the PMI-3 (see Figures 5 and 6) as well as any other original connections to the PMI.
  - e) Apply power and allow the unit to initialize.
6. Transfer the configuration to the Panel.
    - a) Connect the USB programming cable to the PMI-3 USB type B connector labeled "UPLOAD" at the bottom of the unit. (Refer to Figure 2.)
    - b) In the Zeus configuration, select the module in the Physical Tree. Then select **Build>Transfer>Configuration to Panel**. An .hrc configuration file uploads from the Zeus host PC to the PMI-3 control panel, overwriting the existing configuration in the panel.
      - i) Initially, the Zeus Transfer dialog will open, with settings for serial port and transfer protocol. Once these settings are made, the Transfer

Configuration dialog will display information on the PMI firmware and system configuration currently stored in the panel. You can select the configuration to upload (if there are multiple compiled configurations in the host PC), and also choose to download the PMI's current history file into the project directory.

- ii) Once you have begun the transfer, the Transfer Progress dialog displays transfer progress and status messages, and allows you to cancel the transfer. When you click OK at the transfer complete message, the control panel will reset itself with the new configuration.

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## ELECTRICAL RATINGS

Input Power		Output Power	
24V Back Plane Current	195mA	Each HNET/XNET and CAN Network Pair	8V peak to peak max.
Screw Terminal 24V Current	0		75mA max. (during msg. transmission)
6.2V Back Plane Current	0		
24V Standby Current	125mA		

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