Honeywell

Experion PKS
Native Window User's Guide

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Honeywell

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EPDOC-XX74-en-431A	431	0	February 2015

Disclaimer

Contents

1 About This Document

This document contains operating instructions for using Native Window. The Native Window is available on integrated - Experion Stations (ES-T).

Attention

Beginning with Experion R431, the Enhanced TPS Node (ETN) has been introduced. In ETN, the LCNP4 card has been removed and is replaced by a combination of Enhanced TPS Node Interface card (ETNI) and K4LCN board which provides the same functionality as the LCNP4 card. Throughout the document, unless specifically mentioned, the term LCNP4 can be interchangeably used with the terms ETNI-K4LCN hardware.

Revision history

Revision	Date	Description
A	December 2013	Initial release of document.

2 Getting Started with Native Window

Related topics

“Overview of Native Window” on page 10

2.1 Overview of Native Window

The Native Window is a virtual LCN Universal Station within a PC window that provides all of the functionality of a Universal Station, including the operator and engineering functions. The Native Window (Figure 1) consists of:

- Menu Bar
- Local Control Network display
- Status Bar

2.1.1 Operator station

Through out this document, the term “operator station” is used for designating the Experion station that the control room operator uses to monitor the control process.

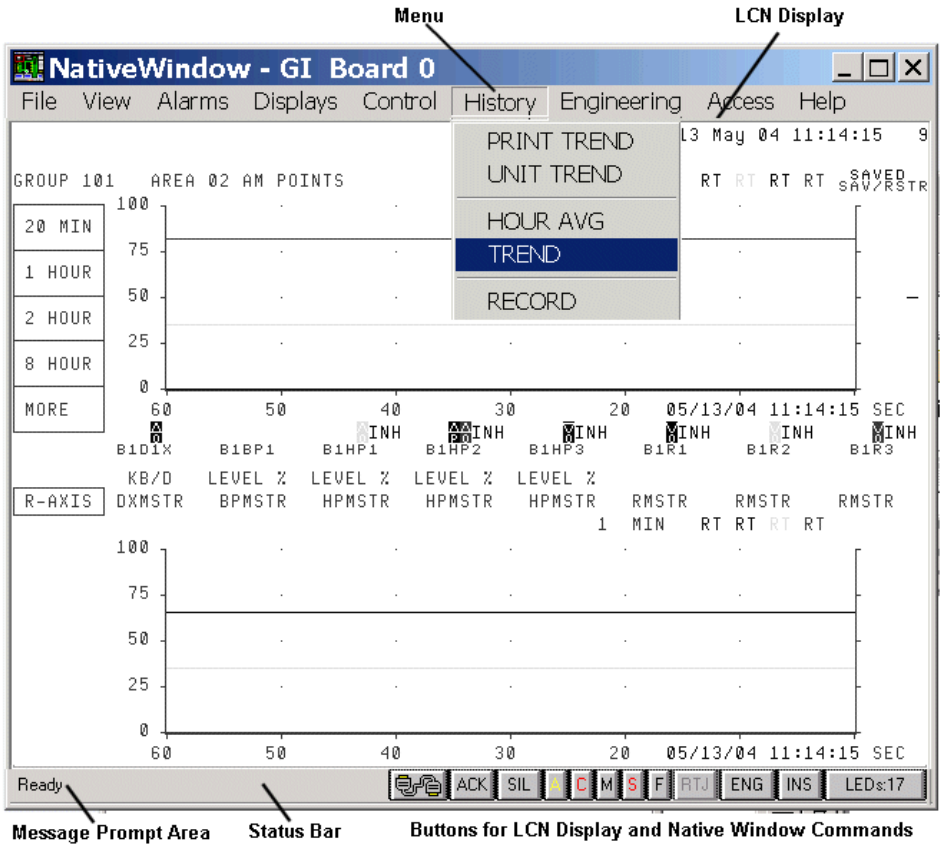


Figure 1: Native Window

More specifically, the Native Window is an application that runs in a Windows environment and interfaces to the Experion software.

2.1.2 Considerations while operating Native Window

Attention

ACCIDENTAL TPN (LCN) TARGET SELECTION

- Be aware that casual clicking of the Native Window when it is in the background, in an attempt to bring it into the foreground, may result in the selection of a TPN (LCN) target. This can happen if the TPN (LCN) target is under the area you clicked. This is standard Microsoft Windows behavior.

FUNCTION KEY CUSTOMIZATION

- Do not set up the configurable function keys for the Windows operating system.
- The Windows operating system allows customization of the programmable function keys (F1 through F12) on a standard keyboard. Customizing the function keys overrides key actions reserved for Native Window operations. If you plan to have programmable function keys for this Station, do *not* customize the function keys for Windows.

LCN PRINT SETUP

- When in the Native Window, if you attempt to access the LCN Print Setup or Edit User defined Keys and you do not have the appropriate user rights (such as default OPER and SUPRV groups), no error message will be displayed. The functions do not appear.

3 Functions of Native Window

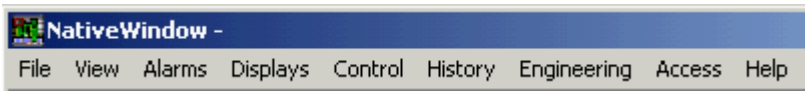
3.1 Interpreting Native Window Menus

Related topics

“Overview of menu bar selection” on page 14

3.1.1 Overview of menu bar selection

The Native Window Main Menu Bar consists of the commands shown below. Descriptions of those commands, and the choices under each command, are described in the section Native Window Menu Bar Detailed Descriptions.



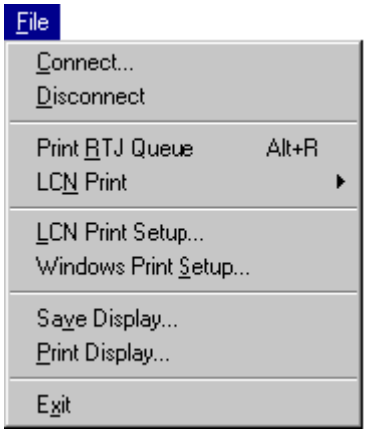
Attention

Native Window menu items in ALL UPPER CASE correspond to **TotalPlant** Solution (TPS) Network buttons found on the classic operator keyboard; those in mixed case are new items.

File menu

As shown in the illustration below, the File Menu accesses Native Window operation and printing functions such as:

- Connect or disconnect the Native Window application to or from an LCNP
- Print reports, trends, the Real Time Journal, and the contents of the Native Window
- Change printer configuration and assignment
- Save or print a display
- Exit the Native Window application



For more information, see “File menu” under the section Native Window Menu Bar Detailed Descriptions.

View menu

As shown in the illustration below, the View Menu toggles the following functions on and off:

- The Menu Bar, which appears at the top of the Native Window
- The Status Bar, which appears at the bottom of the Native Window
- Double sizes the Native Window

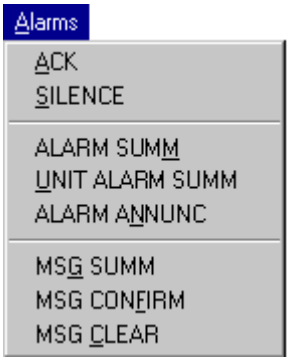
- Returns the Native Window, which can be scaled, to its default size
- Smooth fonts so they don't display with “jagged edges”
- Keeps the Native Window always on top of any other window that is open

For more information, see “View menu” under the section Native Window Menu Bar Detailed Descriptions.

Alarms menu

The Alarms Menu items handle alarms and messages in order to:

- Acknowledge a process or system alarm or program message to an operator
- Silence a process or system alarm
- Display an alarm summary display, such as the Alarm Summary, Unit Alarm Summary, or Alarm Annunciator
- Display a Message Summary, confirm a message, and clear an acknowledged message.

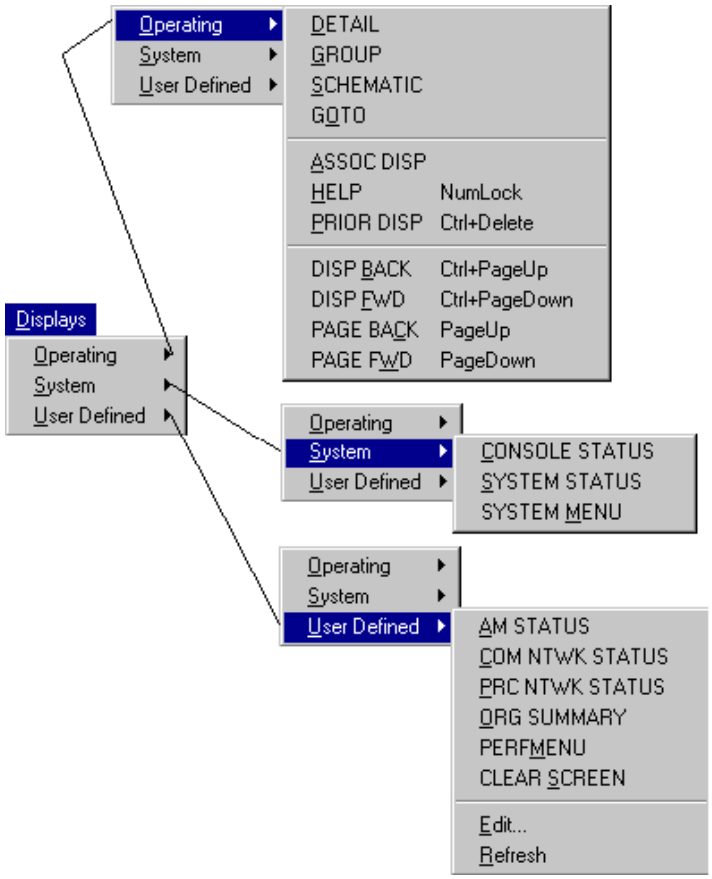


For more information, see “Alarms menu” under the section Native Window Menu Bar Detailed Descriptions.

Displays menu

The Displays Menu calls up the following types of standard displays:

- Operating (Detail, Group, LCN schematic, Slot tagname position, Associated Display, Help, Prior Display, Display Backward, Display Forward, Page Back, Page Forward)
- System (LCN's Console Status, System Status, and System Menu)

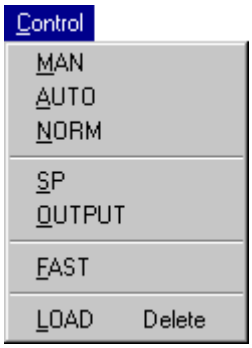


For more information, see “Displays menu” under the section Native Window Menu Bar Detailed Descriptions.

Control menu

The Control Menu executes the following process control changes:

- Places selected points in the Manual, Automatic, or configured Normal mode
- Enables changes to the setpoint of a tagname
- Enables changes to an analog or digital output
- Increases the rate of display information updates
- Prepares the operator station for personality program loading



For more information, see “Control menu” under the section Native Window Menu Bar Detailed Descriptions.

History menu

The History Menu access trend functions that:

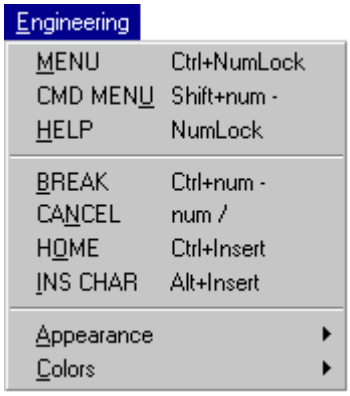
- Displays a Unit Trend
- Displays the Hourly Averages and Group Trend displays from within a Group Display
- Activates trend printing

For more information, see “History menu” under the section Native Window Menu Bar Detailed Descriptions.

Engineering menu

The Engineering Menu executes the following engineering functions:

- Call up the LCN's Engineering Main Menu and associated displays
- Execute special functions for Engineering Operations (BREAK, CANCEL, HOME, INS CHAR)
- Change the legacy Universal Station custom displays through the legacy Picture Editor behavior attributes (appearance and colors)

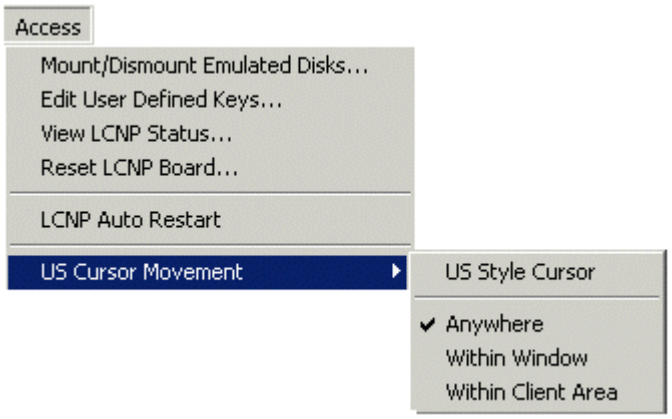


For more information, see “Engineering menu” under the section Native Window Menu Bar Detailed Descriptions.

Access menu EST

The Access menu items control access to process data and system configuration:

- Mount/dismount emulated disks
- Edit user-defined keys
- View LCNP status
- Reset the LCNP board
- LCNP Auto Restart
- Specify cursor behavior and cursor style when Native Window is active



For more information, see “Access menu EST” under the section Native Window Menu Bar Detailed Descriptions.

Help menu

The Help Menu items provide access to online Help topics

- Search with fast-find index
- Locate Help topics for all Native Window tasks
- View revision information

For more information, see “Help menu” under the section Native Window Menu Bar Detailed Descriptions.

3.2 Interpreting Native Window Status Bar

Related topics

"How to use Native Window Status Bar" on page 19
"Status bar button actions" on page 19

3.2.1 How to use Native Window Status Bar

The Native Window Status Bar provides process and system indications, as well as convenient access to several LCN displays by using pushbuttons. The Native Window Status bar provides indicators and/or buttons that allow you to do the following:

- Identify the connection status of the operator station to LCN.
- Acknowledge and silence alarms.
- Identify whether messages or alarms are occurring for process alarms, system alarms, console alarms, or process messages.
- Interpret whether Real Time Journal messages are in the print queue.
- Identify the keyswitch position as operator, supervisor, or engineer or view-only.
- Interpret whether insert or overwrite character function is on.
- Provide LCNP status for this operator station.

With Experion R400, on the Native Window status bar, the access levels for the operator and the view-only user logins are displayed as OPR and VIEW.

3.2.2 Status bar button actions

Review the following and table for descriptions of the status bar buttons.

Figure 2: Status Bar Buttons

Icon	Description
	Pressing this button connects/disconnects LCN Native Window.
	Pressing this button acknowledges alarms.
	Pressing this button silences alarms.
	Pressing this button calls up the Alarm Summary.

Icon	Description
	Pressing this button calls up the Console Status.
	Pressing this button calls up the Message Summary.
	Pressing this button calls up the System Status.
	When this F button (fast option) is enabled, it indicates that the “Fast” data collection is active.
	Pressing this button requests a Real Time Journal.
	This button displays the keyswitch position as Operator, Supervisor, Engineer, or View-Only.
	Pressing this button toggles between the insert character mode (INS) and the overwrite (OVR) character mode.
	Pressing this button calls up the LCNP status.

4 Native Window Process Operations

Related topics

4.1 Invoking Process and System Displays

Related topics

“Call up LCN process operation displays” on page 22
“Call up process and system displays” on page 22
“Call up customer (user-defined) displays” on page 23

4.1.1 Call up LCN process operation displays

You can call up LCN process operating displays by using the following steps.

Table 1: Procedure Table for Calling Up Process Operation Displays

If you need to request a…	Then choose…
Detail display	**Displays -** > **Operating** > **Detail** > **tagname**. Hit **Enter**.
Group display	**Displays-** > **Operating -** > **Group -** > **#** Hit **Enter**.
Control slot	**Displays -** > **Operating -** > **Group -** > **#** Hit **Enter**. Select **GOTO** and # of slot. (where # of slot is its position in the Group display). Hit **Enter**.
Custom schematic	**Displays** > **Operating -** > **schematic -** > **schematic name** Hit **Enter**.
Display related to a display or tagname	**Displays -** > **Operating -** > **Assoc Disp**
Help Display related to a display	**Displays -** > **Operating -** > **Help**
Prior display	**Displays -** > **Operating** > **Prior Disp**
Move forward or backward in displays	**Displays -** > **Operating -** > **DISP BACK** **Displays** > **Operating** > **DISP FWD**
Page forward or backward within a display	**Displays** > **Operating** > **PAGE BACK** **Displays** > **Operating** > **PAGE FWD**

4.1.2 Call up process and system displays

You can call up system displays from the Native Window by using the following steps.

Table 2: Procedure Table for Calling Up System Displays

If you need to request a…	Then choose…
Console Status display	**Displays -** > **Systems -** > **Console Status**
System Status display	**Displays** > **Systems -** > **System Status**
System Menu display	**Displays -** > **Systems -** > **System Menu**

4.1.3 Call up customer (user-defined) displays

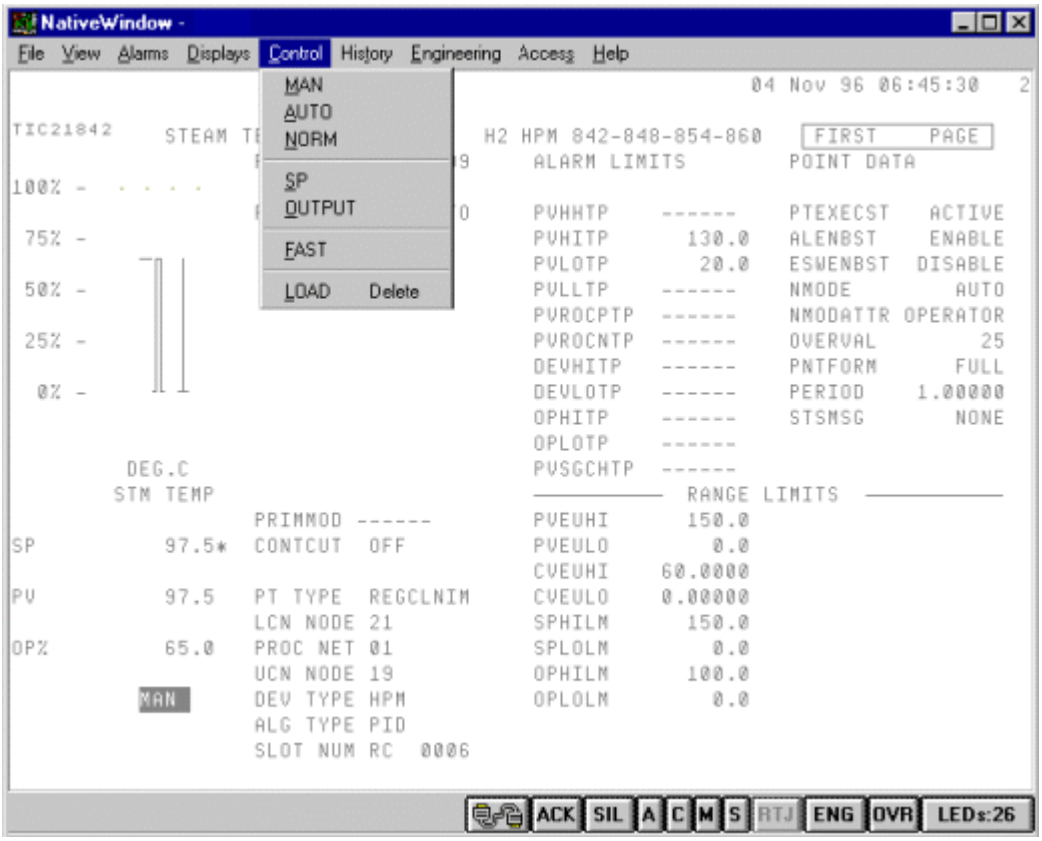
User-defined displays can be called up from the LCN Native Window. User-defined keys can be edited to include menu selections for display callups of your choice. (If you are using an integrated keyboard, the user-defined selections correspond to the six buttons on the lower-left side of the keyboard.) You can call up user-defined displays from the Native Window by using the following steps.

Table 3: Procedure Table to Edit User-Defined Keys

If you need to request a…	Then choose…
User-defined display	**Displays -** > **User-defined -** > **display of interest**
Label edit of user-defined keys	**Displays -** > **User-defined -** > **Edit**

4.2 Performing Control Operations

This section shows you how to use the LCN Native Window's Control menu to perform control operations, such as changing setpoints and outputs. Review the following figure for the menu items used when controlling a loop.



4.3 Requesting History Data

This section shows you how to call up history or trend data by accessing the Trend menu in the Native Window. Review the various selections on the following figure that appear in the Native Window's History menu. This figure shows a Group display with historized points.

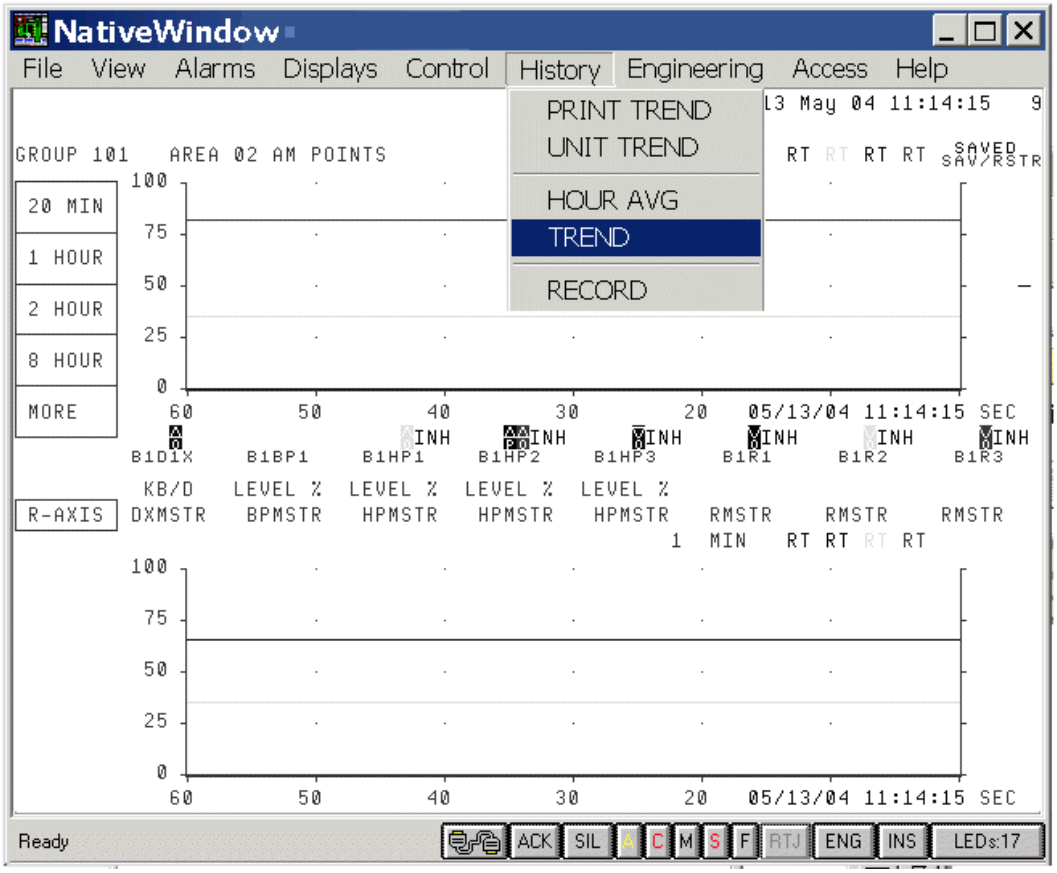


Figure 3: History Selections

4.3.1 How to make Native Window history changes

You can make history changes from the Native Window by using the following steps.

Table 4: Procedure Table for Making Trend Requests

If you need to request a…	Then choose…
Trend a selected tagname (point) from the LCN Native Window	**Displays -** > **Operating -** > **Group -** > # Hit **Enter**. **Displays -** > **Operating -** > **Goto -** > # Hit **Enter**. **History -** > **Trend**
Call up an LCN Group Trend display from a Group display	**Displays -** > **Operating -** > **Group** > # Hit **Enter**. **History** > **Trend**

If you need to request a…	Then choose…
Call up the Hourly Averages display from an LCN Group display	**Displays -** > **Operating -** > **Group -** > **#** Hit **Enter**. **History** > **Hour Avg**
Activate trend recording from the LCN Native Window	**Displays -** > **Operating -** > **Group -** > **#** Hit **Enter**. **History -** > **Record**
Call up an LCN Unit Trend display	**History -** > **Unit Trend** > **#** Hit **Enter**.
Activate trend printing from the LCN Native Window	**Displays** > **Operating -** > **Group -** > **#** Hit **Enter**. **History** > **Print Trend**

4.4 Responding to Process Alarms and Messages

This section shows you how to use the Local Control Network (LCN) Native Window Alarms menu to call up LCN Alarm and Message Summary displays. These displays are called up by operators as part of their corrective response to process alarms and messages. The following figure shows the menu selections you can make when responding to a process alarm or message.

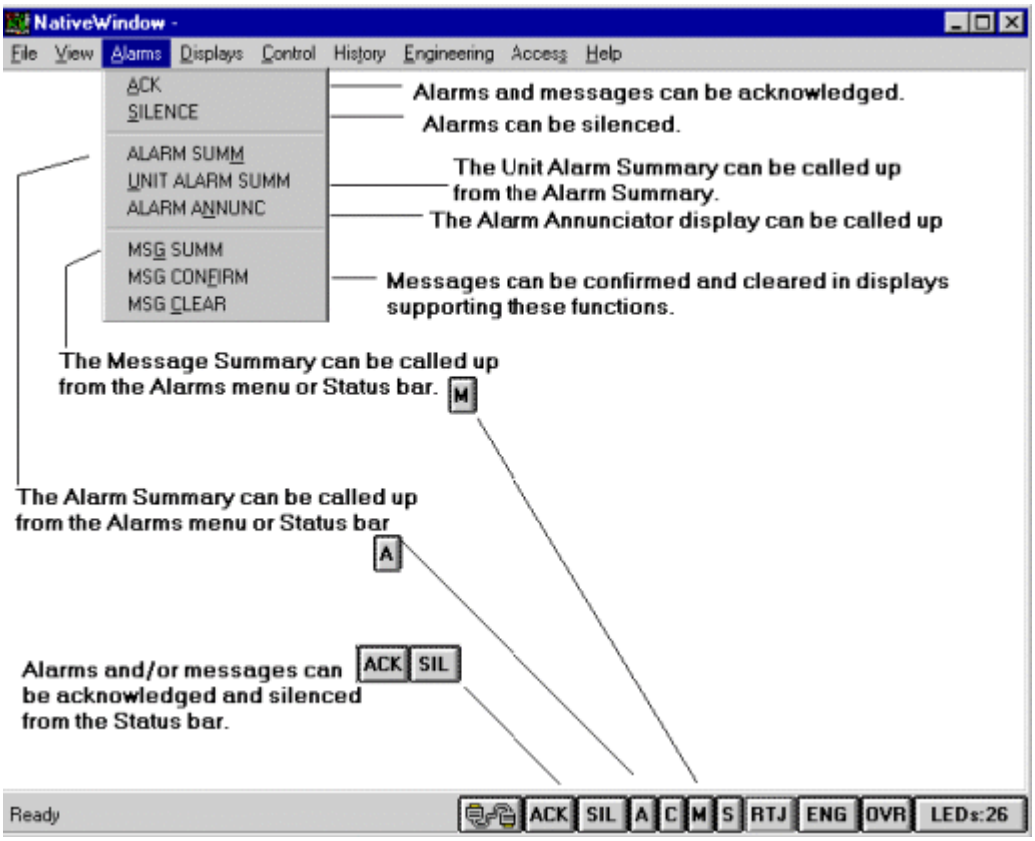


Figure 4: Menu Selection

4.4.1 What happens when a process alarm occurs?

When a process alarm occurs in the unit assigned to your operator station, the letter A in the status bar changes color and blinks. You can access the Alarms Menu from the Native Window menu by one of the following methods:

- Selecting the Alarm Summary from the Alarm pull-down menu
- Selecting the Unit Alarm Summary from the Alarm pull-down menu
- Selecting the “A” button on the status bar

When a process message occurs in the unit assigned to your, the letter M in the status bar changes color and blinks. You can select the Alarms Menu from the Native Window menu, then select Message Summary; or, by selecting the “M” button on the Status Bar call up the Message Summary. The message(s) of interest can be acknowledged.

4.4.2 How to respond to process alarms

You respond to process alarms and messages by making selections from the Native Window's Alarms Menu or Status Bar by using the following steps.

Table 5: Procedure Table for Responding to Process Alarms

If you need to…	Then …
Call up the Area Alarm Summary	Press the "**A**" button on the **Native Window Status** bar, or select **ALARM SUMM** from the **Alarms** menu
Acknowledge alarms/messages	Select **ACK** from the **Alarms** menu or **Status** bar
Silence alarms	Select **SILENCE** from the **Alarms** menu or **Status** bar
Call up Unit Alarm Summary	From **Alarms** menu, select **UNIT ALARM SUMM -** > **#** Hit **Enter**.
Call up the Alarm Annunciator Display	From the **Alarms** menu, select **ALARM ANNUNC**
Call up the Message Summary	Press the "**M**" button on the **Native Window Status** bar, or select **MSG SUMM** from the **Alarms** menu
Confirm messages	Select **MSG CONFIRM** from the **Alarms** menu
Clear messages	Select **MSG CLEAR** from the **Alarms** menu

4.5 Responding to System Alarms

This section shows the ways system alarm indications appear in the LCN Native Window. A system alarm, such as an LCN hardware failure, is indicated as an alarm on the Native Window Status bar (item turns red). The corresponding status display(s) can then be called up directly from the Native Window Status bar (the most convenient way) or from the Displays Menu.

A system alarm, such as an alarm for a device that is not in the proper state, is annunciated as an alarm on the Native Window's Status Bar. The corresponding status display(s) can then be called up directly from the Native Window's Status Bar, the Displays Menu, or the Access menu.

System alarms can be categorized as one of the following:

- Console alarm
- Node status alarm
- LCNP alarm

4.5.1 How to respond to System alarm

You respond to system alarms by making selections from the Native Window's Displays Menu or Status Bar by using the following steps.

Table 6: Procedure Table for Responding to Process Alarms

If you need to…	Then …
Respond to a Console alarm, e.g. printer off-line	Press the "**C**" button on the **Native Window Status** bar, or select **System-** > **CONSOLE STATUS** from the **Displays** menu.
Respond to a node status alarm, e.g. device not in the correct state	Press the "**S**" button on the **Native Window Status** bar, or select **System-** > **SYSTEM STATUS** from the **Displays** menu.
Respond to a alarm, e.g. LCNP status	Press the "**LEDs**" button on the **Native Window Status** bar, or select **View LCNP Status** from the **Access** menu.

5 Native Window Desktop Operations

Before a Native Window can operate, it must be connected to the LCN so that the operator station communications can be established. Communication to the LCN occurs through the LCNP board on the operator station. Therefore, the Native Window must be connected to the LCNP board.

Attention

In ETN, the LCNP board is removed and replaced with a combination of Enhanced TPS Node Interface (ETNI) and K4LCN processor boards. Therefore, the Native Window must be connected to the K4LCN board.

Native Window Operations establish communication to the LCN through a process called “connecting”. This is accomplished either through the File Menu or the Native Window Status bar.

5.1 Connecting to the LCN

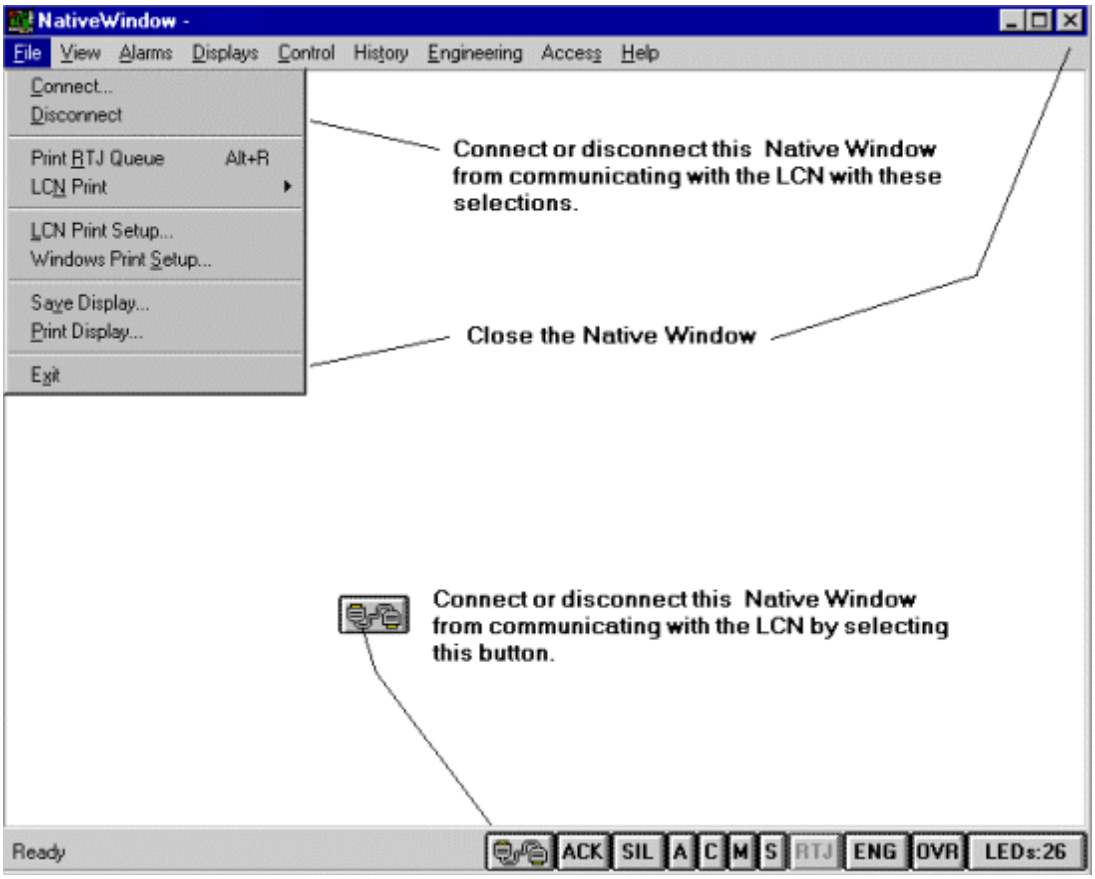


Figure 5: Connect/Disconnect Procedure

Perform the following to connect/disconnect and exit the Native Window.

Table 7: Connecting/Disconnecting Native Window

If you need to ...	Then choose ...
Connect/Disconnect the LCN Native Window	From the Native Window Menu bar: • **File** > **Connect** to establish LCN communication • **File** > **Disconnect** to end operator station communication to the LCNP. From the Native Window Status bar  , Click to toggle state (a red broken cable indicates a disconnected state; a solid cable indicates a connected state).
Exit the Native Window	From the Native Window Menu bar: • **File** > **Exit** to close the Native Window Application or • Click the Close Window Icon (located in the upper right corner of the Native Window). 

5.2 Loading a Personality

You have seen how a Native Window could be connected to view a process. To have a process view, your operator station requires the appropriate personality program, to be running.

5.2.1 Operator station personality

The operator station is loaded with **the appropriate** system software personality. The operator station personality resides in the operator station LCNP board. Both the Native Window application and operator station personality have menu commands related to their operation.

Native Window requires the UxS personality, otherwise known as the “GUS” personality.

5.2.2 Commands table

Menu commands relating to activating either the Native Window or loading the operator station personality are shown in the following table.

Attention
In the table below, Close, connect/disconnect commands apply to Native Window and Load, Reset LCNP commands apply to the operator station personality.

Table 8: Starting Native Window Operator Station Personality

Program	Menu Command	Comment
Native Window	From the Menu bar: • Select **File** > **Exit** or • Click the Close Window Icon (upper right corner). 	Disconnects and closes the Native Window application.
	From the Menu bar: • Select **File** > **Connect** or • Select **File** > **Disconnect** or • Click the Status bar button to change the state from connect to disconnect  (the red broken cable is the disconnected state).	Connects/disconnects the Native Window application to an LCNP. The Native Window displayed on your operator station can be connected to either a local or remote LCNP. The operator station Native Window application itself remains open.
operator station Personality	If the operator station personality is NOT loaded but the Native Window is connected to the LCNP, the LOAD button shows on the Status bar. To start the load, • Click the **Load** button or • From the Menu bar, select **Control** > **Load**. or • From the Access menu, select **LCNP Auto Restart**.	Initiates a load operation in which a user can load the operator station personality to the LCNP board. Note: The LCNP can optionally be configured to Auto Load without requiring manual intervention.

Program	Menu Command	Comment
	From the Menu bar: • Select **Access** > **Reset LCNP Board**.	Stops (resets) the operator station personality. The Native Window application remains open.

Attention
For a Station to be fully operational as an ES-T, its TPN Server must be running.

5.3 Managing Keyswitch and Cursor movement

The Native Window **Access** menu provides various LCN operation options:

- Emulated disk mounting
- Cursor movement

Attention
On ES-T nodes, change of operator logon (Windows logon or SignOn Manager) effects the change of key level.

This section shows you how to set up options for LCN operations through selections from the Access menu. In some cases, the options can also be set up from other Native Window menus.

5.3.1 Mounting/dismounting emulated disks

An Emulated Disk is a special file in the Windows environment that is used to "contain" LCN-formatted files. It functions like removable media on a Universal Station, hence the term "Emulated Disk".

The Emulated Disk file, which has a .lcn extension, can reside anywhere a Windows file can be created, such as on the operator station PC hard drive, on a CD, zip, or network server.

Attention

- The floppy disks should not be used as an emulated disk. The policy files restrict the use of floppies as a protective measure against the introduction of virus infected files.
- On the Experion R31x ES-T running as Native Window Only node, the "mount/dismount emulated disks" function does not work. Apply the following workaround on the Experion ES-T nodes without Experion Station to mount/dismount the volumes.
  - Insert the following command in the operator logon script: hopcsrvr -runnowindow.
  - Logoff and then logon to the system.
  - After logon, verify if the hopcsrvr.exe is running, using Windows Task Manager.
  - Verify if the volumes can be mounted/dismounted.

Note: Experion ES-T nodes that operate with the Experion Station running require no special action to enable the emulated disk mount functionality.

Emulated Disks are "mounted" into one of the two Emulated Drives: the left drive or the right drive.

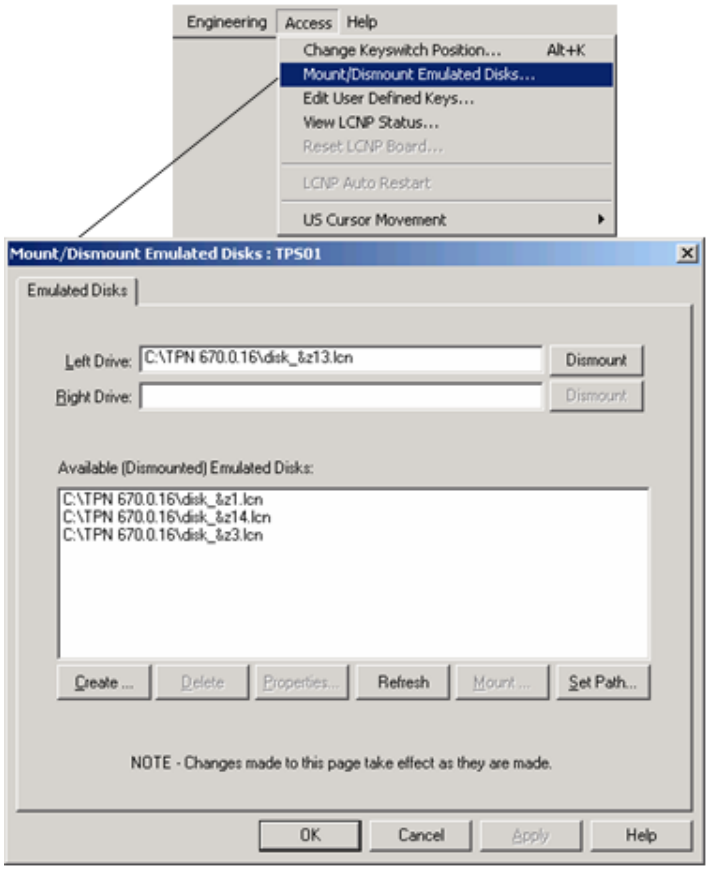


Figure 6: Emulated Disk Dialog

The emulated disks can also be operated using TPN (LCN) Command Processor and EC files.

For more information about operating emulated disks from TPN (LCN) Command Processor and EC files, refer to *Command Processor Operation, SW11*.

5.4 Connecting to a Remote LCNP

Attention

ES-T supports remote connections. The details discussed in this section refers to the requirements for making remote connection using an Experion Station.

One of the options when connecting to an LCNP is to connect to a remote operator station LCNP. Assuming that your configuration supports this option, select "**Network**" and enter the system name for the remote operator station when the dialog box appears. Review the following figure for the entries that appear. Connecting to a remote operator station LCNP is sometimes called "stealing the Native Window."

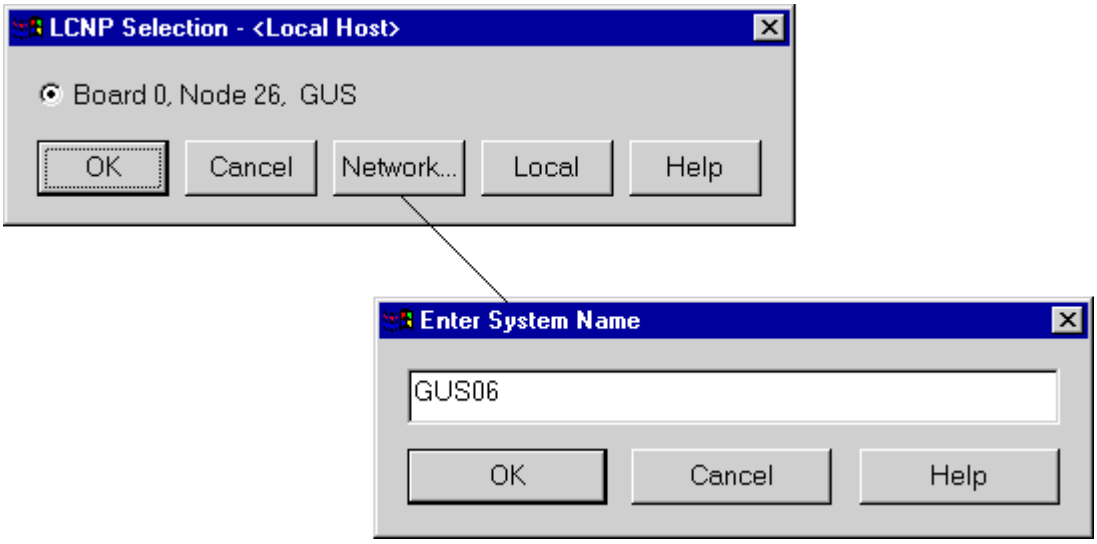


Figure 7: Connecting to a Remote operator station

The system name entry is the "computer name" of the remote operator station. To identify your computer name, select the **Control Panel**, and then **System**.

From the Network Identification tab select the **Properties** button. Note that the remote operator station Native Window must be disconnected from its LCNP before a local operator station can connect to the LCNP on the remote operator station.

5.5 Other operator station operations

This section describes how to change the view of the Native Window so that it will show (or not show) the Native Window Menu bar and/or Status bar.

5.5.1 Setting up the views

The following procedures can be followed to set up your views of the Native Window.

Table 9: Native Window Views

Action	Use the menu or status bar selections
Show or Hide the Menu Bar and/or Show the Status Bar	Select **View** from the Menu and select the desired view(s). A checkmark beside the Status Bar item indicates it shows. Or Press the right mouse button and select desired view(s). A checkmark beside an item indicates it shows.
Set up Native Window so it appears always on top of all other windows	Select **View** from the Menu and select **Always On Top** (you can also use the right mouse button menu). A checkmark beside the item indicates it is functioning.

5.6 Configure a Windows Printer for ES-T

Note: This procedure applies to a Windows printer that will NOT be used as the dedicated LCN alarm printer.

1 Add Windows Printer

- a Choose **Start** > **Printers**.
- b Double-click **ADD Printer** (launches the “Add Printer Wizard”).
- c Click **Next** on the Welcome screen.
- d Select **Local Printer** (NOT Network Printer).
- e Uncheck **Automatically detect and install my Plug & Play printer**.
- f Click **Next**.
- g Select **Create a new port**.
- h In the Type port, select **Standard TCP/IP port**.
- i Click **Next** (launches the “Add Standard TCP/IP Printer Port Wizard”).
- j Click **Next** on the Welcome screen.
- k In the Printer Name or IP Address port, enter the IP address of the printer. (Port Name is created based on the TCP/IP address.)
- l Click **Next**. (The window display indicates when the port is added.)
- m Click **Finish**. (The port wizard closes and defaults back to the printer wizard. When the wizard moves to the Manufacturers - Printer screen, the port has been created.)
- n Select the printer from the manufacturer and model.
- o Click **Next**.
- p If the “Use Existing Driver” screen displays, select **Keep existing driver (recommended)**.
- q Click **Next**.
- r On the “Name Your Printer” screen, enter a name for your printer in the “Printer Name” port.
- s Click **Next**.
- t On the “Printer Sharing” screen, sharing is optional. If you choose to share the printer, enter a share name and click “Next”. Otherwise accept the “Do not share this printer” default.
- u Click **Next**.
- v On the “Print Test Page” screen, answer **Yes** to the “Do you want to print a test page?” question.
- w Click **Next**.
- x Click **Finish** (the test page is printed).
- y Check for the test page. If good, select **OK** to close the message and the wizard.

2 Configure Native Window

- a Call up Native Window.
- b Select the **File** on the menu bar.
- c Select **Windows Print setup**.
- d Verify the name of the printer just added is in the “Name:” port. If not, use the drop down arrow to select it.
- e Locate the “Orientation” configuration and select **Landscape**.
- f Click **OK**.
- g Select **File** on the menu bar.
- h Select **LCN Print Setup**.
- i Verify that **Batch Printer Selection** is selected. If not, select it.
- j Verify that the printer name just added appears in the “Name:” port. If not, select “Print Setup” and add it.

k Click **OK**.

l **Test Display Print**

m Select **Print display** either from the IKB/OEP (PRINT DISP key) or from the Native Window display under “File” on the menu bar.

n Verify that the requested display is printed. If not, re-run the procedure.

6 Features of Native Window

Related topics

“PC Keyboards” on page 42
“Integrated Keyboard” on page 44
“Configurable Keyboard” on page 45
“Security” on page 46

6.1 PC Keyboards

The standard PC keyboard functions in two different environments:

- “PC function keys in Native Window” on page 42
- “Non Native Window” on page 43

An overlay is provided that can be placed over the keys to more easily note their TPS system functions. Of particular note are the following mappings:

- Holding CTRL and typing the QWERTY digit keys 1-0 achieve the F keys.
- The PF keys are achieved by typing the F keys on the PC keyboard.

6.1.1 PC function keys in Native Window

When the Native Window is active, the PC function keys perform the actions marked with red labels on the Integrated Keyboard keys.

The red markings on the front edge of the Integrated Keyboard keys represent functions activated when the Control key is pressed along with the keyboard key. The Control key activates the same functions on the PC keyboard.

In addition, the Delete key becomes the Load key.

6.1.2 PF Keys

The standard function keys F1 - F12 can be configured as button configurator keys PF1 - PF12.

PF13 and PF14 are excluded.

Three other keys in the top row of the PC keyboard can also be configured as PF keys:

Print Screen = PF15 (It also copies a Print Screen image to the clipboard.)

Scroll Lock = PF16

Pause = PF17

These 15 PF keys are configurable using the LCN Button Configuration file and can be used alone or in conjunction with the Control or Shift keys, creating a total of 45 possible key positions.

The Honeywell-supplied default button file provides the following key positions:

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8
CTRL			HR_AVG					EHR
SHIFT		ASSOC	TREND	TO SCRN	FRMSCRN			REPMENU
NORMAL	LCN HELP	PR_DISP	GROUP	DETAIL	SCHEM	SYSTAT	CONSTAT	SYSMENU

	PF9	PF10	PF11	PF12	PF15	PF16	PF17
CTRL			ALMANC	MSGCLR	RECORD	FAST	RAISE
SHIFT	SIL		UALMSM	MSGCNF	OUT	SP	LOWER
NORMAL	ACK		ALMSUM	MSGSUM	MAN	AUTO	NORM

6.1.3 Function Keys

Function keys F1 - F12 are implemented through the numeric keys at the top of the QWERTY keyboard (1, 2, 3, 4, 5, 6, 7, 8, 9, 0, -, =) in combination with the Control key in the Native Window environment.

6.1.4 Num Lock Key

On the PC-101 keyboard, the Num Lock key is the TPS system Help key. During Native Window operation, the Num Lock key is used for providing TPS system-level Help and should not be used in a text input port where numbers are being entered because it will create an input error.

6.1.5 Non Native Window

6.1.6 Keyboard functions

Outside the Native Window, the PC keyboard functions like a standard keyboard. The function keys are available for F1 - F12.

6.1.7 Right Mouse Button

Right-click the mouse button to display a menu with five choices for the right mouse button function.

When you select this…	The right mouse button's function is to do this…
Enter	Enter
Menu Bar	Call up/hide the Native Window Menu Bar
Status Bar	Call up/hide the Native Window Status Bar
Default Size	Return the Native Window to its default size of 640 x 448 pixels
Double Size	Unavailable unless the screen resolution is a minimum of 1280X1024. Allows doubling the size of the native Window.
Always On Top	Allow/disallow any other windows on the desktop to display on top of the Native Window

Tip

For ES-T, native Window will disable the Always On Top option if it is explicitly set in SafeView for the window in which SafeView is managing Native Window.

When the Menu, Status Bar, or Always On Top is on, a check mark appears next to the pull-down menu selection.

6.2 Integrated Keyboard

6.2.1 Native Window with Integrated Keyboard

Native Window numeric-F key and PF key positions are indicated in red on the Integrated Keyboard. The Integrated Keyboard PF keys operate alone or with the Control or Shift keys. They can also be configured using the LCN Button Configuration file.

6.2.2 Non-Native Window Key Functions

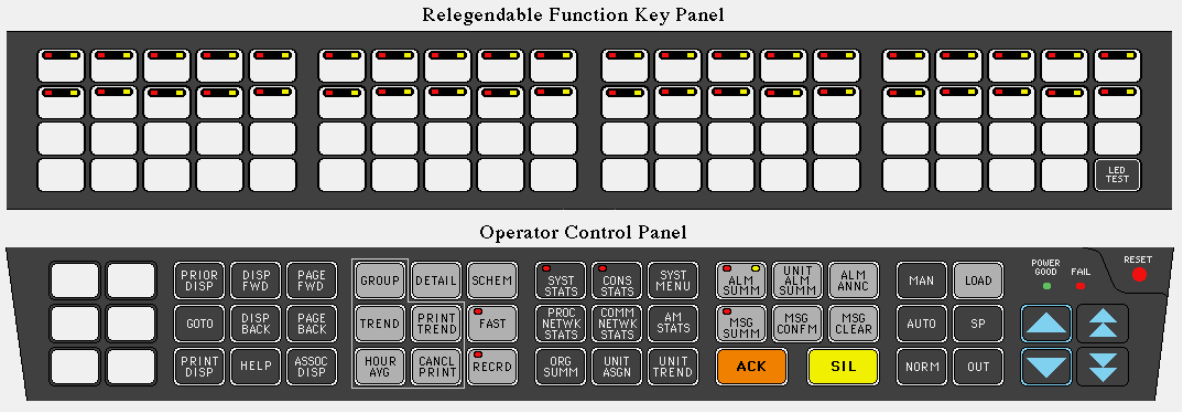
Non-Native Window key functions are indicated in blue on the Integrated keyboard.

6.2.3 INS CHAR LED

An LED titled “INS CHAR” is located at the top left corner of the integrated keyboard. When you are using an integrated keyboard on a Universal Station, this LED will be illuminated when you are in the insert mode. However, if you're using an operator station, the INS CHAR LED will not indicate when you are in the insert mode. In fact, it cannot be used in this manner because the operator station is a multi-window system, and it is not possible to display the Insert/Overwrite mode of more than one window using a single LED. Instead, the operator station Native Window displays the mode as either INS or OVR on the Status Bar at the bottom of the window.

6.3 Configurable Keyboard

The Configurable keyboard operates in combination with the Integrated Keyboard. It contains button configuration keys and display call-up buttons similar to the classic Universal Station Operator keyboard.



ES-T users should refer to the Integrated Keyboard section in the *Integrated -TPS Experion Nodes,* EX23, for details on the functions of each of the configurable keys on the IKB.

6.3.1 User Defined Keys

The six buttons on the left side of the Integrated Keyboard Operator Control Panel correspond to the six User Defined key assignments.

Refer to the *Keyboard Page* section in the *System Configuration Utility User's Guide* for information.

6.4 Security

Experion Security provides three “lines of defense” based on the following Security Objects:

Security Object	What	Permissions	Enforced by
Programs	executables (.exe files)	for user to run executable	Windows OS
Configurable Options	configurations made using the Configuration Utility	to make this type of connection	program
Connection Proxies	proxy files	for user to make specific LCNP connections	program
Access Level Proxies	proxy files	for users to access the LCN at specified key levels	program

For additional security information, refer to “Users, Groups, and Permissions” on page 48.

6.4.1 Programs

Users should verify they have adequate permissions to run the executable.

When a user attempts to run the Native Window, LCNP Status, or Debug Window executables, Windows OS checks to see if the user has adequate permissions to run the executable.

6.4.2 Configurable Options

On an LCNP board-by-board basis, the Configuration Utility program provides the ability to enable or disable the following types of connections:

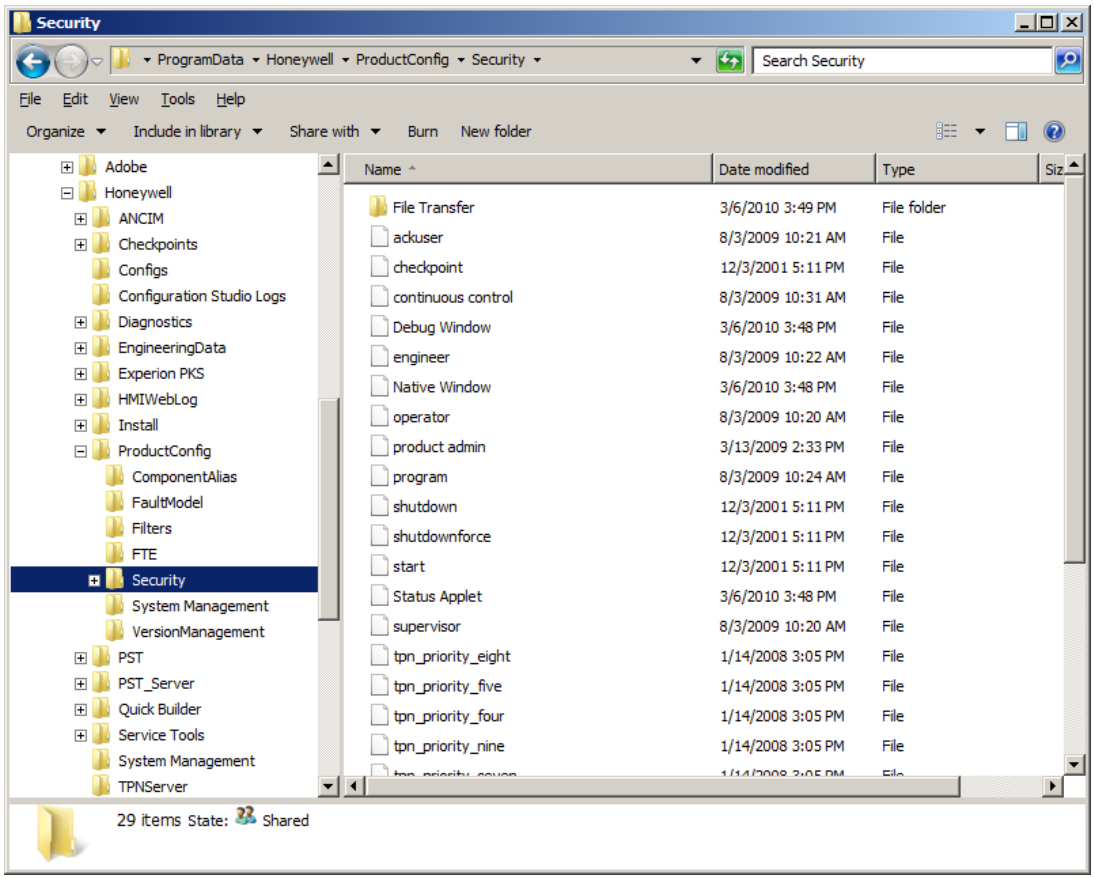
- **Local Connections** - Native Window connection to the local LCNP board by local users.
- **Remote Connections** - Native Window connection to the local LCNP board by remote users.
- **Local Connection Override** - The ability to override a remote user Native Window connection when a local user Native Window connection is requested.

6.4.3 Connection Proxies

When a user attempts to connect a Native Window, LCNP Status, or debug window to an LCNP board, the program makes an attempt to open a corresponding proxy file. If the user does not have adequate permission to open the proxy file, the connection of that program to the LCNP board is denied.

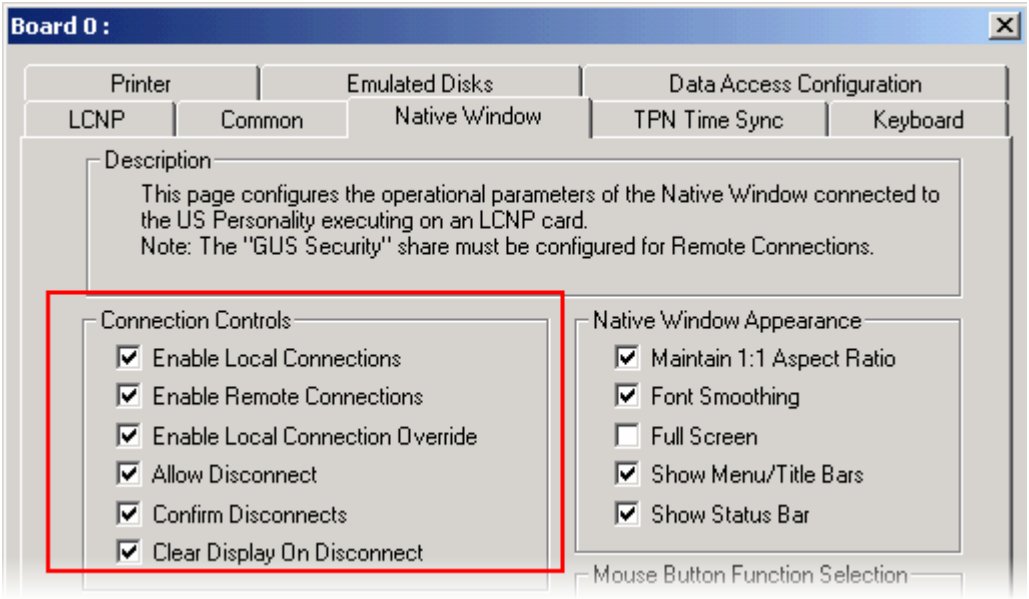
6.4.4 Security Directory Structure — ES-T

The security structure on an ES-T is one where the proxy files reside under C:\ProgramData\Honeywell \ProductConfig\Security as shown in the figure. The Security share is automatically enabled for remote access as part of installation. At the host, enable access for the remote Native Window client(s) using the Native Window page under the System Management/ Configuration Utility/Board0. The Windows account of the Remote Native Window user must be a member of one of the local Experion High Security groups at the host node.



6.4.5 Enable Remote Access from Configuration Utility

For an ES-T, remote access is enabled from the Native Window page of the Configuration Utility as shown in the following figure. Additional information about setting your preferences for Connection Controls is found in the Configuration Utility User's Guide.



For remote access, in addition to the Windows security, the appropriate selection must be made on the Native Window page of the Configuration Utility.

6.4.6 Users, Groups, and Permissions

Users

A user account defines a user to Windows OS.

The user account includes the following:

- the user name and password required to log on
- the group or groups the user is a member of
- the user's rights/permissions while using the assigned computer

When a user logs on and attempts to perform a certain action, the user's rights/permissions are checked to determine whether the user is authorized to perform that action.

Groups

A group is an account that contains user accounts. Groups are used to give users permissions to perform system tasks and to grant access to resources, such as file, directories, and printers.

Group accounts provide a convenient method of controlling access for users who perform similar tasks (for example, Operators and Supervisors). By placing multiple users in the same group, you can assign access to all of the users at the same time by assigning permissions to the group.

User accounts can be modified individually, even if they are members of one or more groups.

Permissions

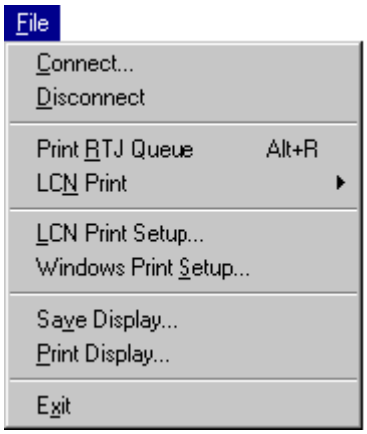
- “Read” access permission is the minimum required to run and/or to connect.
- If user inherits No Access through any path, the user has No Access.
- A user may have permission to run an executable but is allowed to connect the executable only to certain LCNPs.

7 Native Window Menu Bar Detailed Descriptions

Related topics

“File Menu” on page 50
“View Menu” on page 57
“Alarms Menu” on page 62
“Displays Menu” on page 63
“Control Menu” on page 67
“History Menu” on page 69
“Engineering Menu” on page 71
“Access Menu” on page 73
“Help Menu” on page 78

7.1 File Menu



7.1.1 Connect

The **Connect** selection enables connection to a local or remote LCNP (LCN Processor) board:

- **Local** = LCNP board is located in the operator station node in which the Native Window is running.
- **Remote** = LCNP board is located in another operator station node on the same LCN or in a PIN-connected operator station node located on a different LCN.

When the Native Window program begins, it attempts to connect to the LCNP in the local operator station node. If successful, this menu item becomes disabled. If unsuccessful, or if a File/Disconnect has been performed, this menu item is enabled.

Attention

An LCNP board in the local machine is not required to connect to an LCNP in a remote machine.

Remote connections are subject to security constraints that include the following:

- Permission to run the program
- Permission at the operator station containing the LCNP to allow remote connections
- Permission at the operator station containing the LCNP for the specific current logged-in user to make a connection

To connect the Native Window to an LCNP, perform the steps in the table below:

1 Select **Connect** from the File drop-down menu.
OR
Click the Connect/Disconnect button on the Native Window Status Bar.

The **LCNP Selection** dialog appears

2 Specify the computer you want to connect to:
- Click **Local** to connect to the local machine.
- Click **Network** to connect to a remote machine, type the computer name as a simple name (for example, no forward or backward slash characters), and then click **OK**.

3 Click **OK**.
Connection may take up to several minutes on a busy network.

7.1.2 Disconnect

Attention
It is not necessary to disconnect prior to terminating the Native Window program. An automatic disconnect occurs when the program terminates.

Perform the following steps to disconnect the Native Window from the LCNP prior to reconnecting to an alternate LCNP.

- Select **Disconnect** from the File drop-down menu.
  OR
  Click the Connect/Disconnect button on the Native Window Status Bar.

  The Native Window client area turns solid black.
  Disconnection may take up to several minutes.

7.1.3 Print RTJ Queue

The Experion system makes periodic entries in the Real Time Journal (RTJ). If a continuous printer is selected in the printer settings, these entries appear on the printer as they occur. However, if a batch-mode printer is configured, the entries are collected for printing later. These collected messages can be printed on demand by clicking the RTJ button, or they can remain in the queue until the Idle Flush Time or Queue Length setting in Configuration Utility is met.

Refer to the *Printer Selection* section in the *System Configuration Utility User's Guide* for information.

When RTJ events are available for printing, but the preconfigured time for automatically flushing the print queue has not yet expired, the **Print RTJ Queue** menu selection is enabled. The Status Bar **RTJ** button is also enabled.

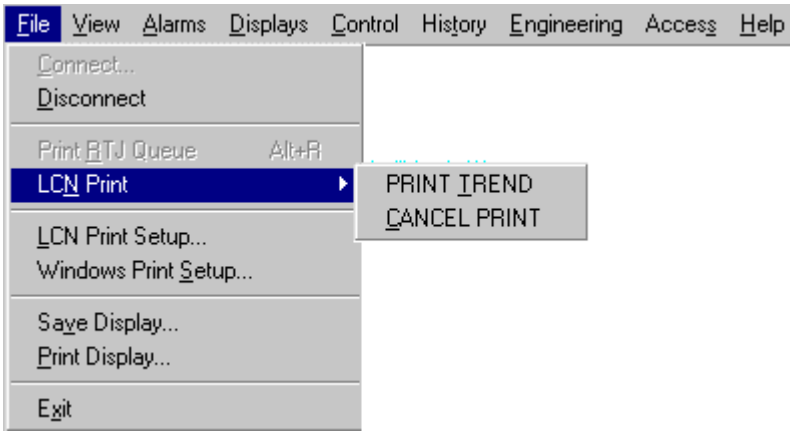
To demand print RTJ events in printer queue, execute the following procedure:

- Select **Print RTJ Queue** from the File drop-down menu.
  OR
  Click the RTJ button on the Native Window Status Bar.

  Queued Real Time Journal entries print.

Tip
An NCF option allows the user to control header/trailer messages. For an operator station RTJ queuing to work properly on a batch-mode printer, the user must configure the NCF System Wide Values > Console Data > Real Time Journal Header/Trailer Messages, then select BEG or END. This setting is not required for a continuous-mode printer.

7.1.4 LCN Print



From this menu you can either print Active Trending or Cancel, abort printing on any printer on the console.

The PRINT TREND option in this menu can be disabled if you check the **Disable Print Trend** box in the Native Window page of the Configuration Utility.

7.1.5 LCN Print Setup

The **LCN Print Setup** affects LCN-initiated printing activities, such as trend prints, and Real Time Journals.

If the station supports LCN-initiated printing through US printer emulation (that is, if a printer is configured in the NCF), then configure the LCN Print Setup and Windows Print Setup to be the *same*. **Note:** When you add a Windows printer to an ES-T, choose the “Local printer” option if the printer is to support LCN-initiated printing. If the printer is to be a dedicated LCN alarm printer, then choose “Continuous Printer Selection” in the LCN Print Setup, as shown in the following figure.

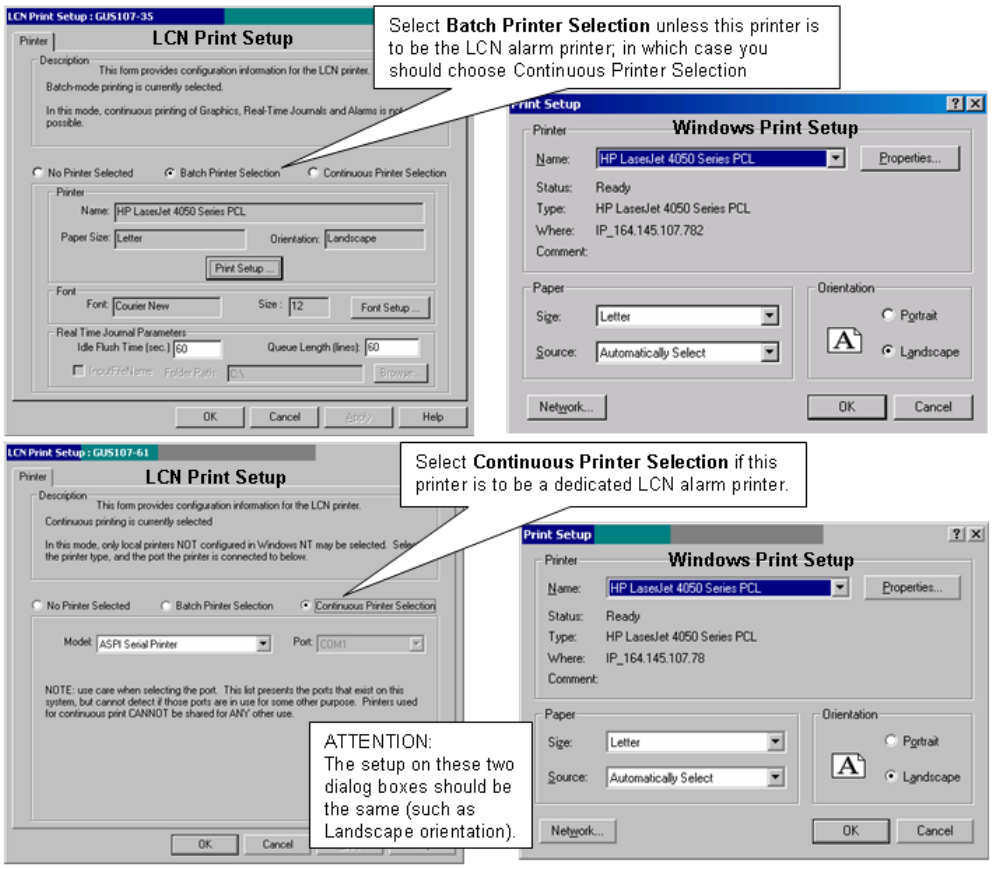


Figure 8: Example Windows Print Setup and LCN Print Setup

If a Windows printer is to do LCN (US)-side printing, then the following must be done:

- Configure the printer in the **NCF**, and
- Add the printer to Windows using the **"Local printer"** option, not the "Network printer" option, and
- Configure the Native Window **LCN Print Setup** to be the same as the **Windows Print Setup**.

Note: Windows printers configured in "Batch Printer mode" do not support LCN graphics printing.

For the detailed steps to add a Windows printer to the ES-T and configure the Native Window, refer to the section "Configure a Windows Printer for ES-T" on page 39 in this guide.

Refer to the Board Configuration Pages, Printer Page section in the *Configuration Utility User's Guide* for additional configuration information.

7.1.6 Save Display

Save a bitmap image of the current display.

Two types of images can be saved:

- Normal bitmap
  - A normal bitmap image captures the screen exactly as it appears, in color with a black background.
- Inverted bitmap
  - The inverted bitmap feature converts all black pixels to white and all white pixels to black, resulting in a white-background image. Pixels of other colors remain unchanged.

Saved bitmaps contain only the client area of the window. The Status Bar, Menu Bar, and window borders are not included. To obtain a bitmap of the entire Native Window including Status Bar, Menu Bar, and window

borders, use the Print Screen key, paste the clipboard-stored image into Paintbrush, crop the image as desired, and save the result into a file.

Tip

Display names saved in Windows OS must be limited to 8 characters if they are to be called by way of the Schem field in the Native Window.

7.1.7 Windows Print Setup

The **Windows Print Setup** affects printing for the Windows-related functions, such as the Native Window File>Print Display function.

See the “ “LCN Print Setup” on page 52” section for more information.

7.1.8 Print Display

Print the current display to the station's Windows printer.

Tip

- You can only use this Print Display function to print on Windows printers.
- Windows printers configured in “batch printer mode” do not support LCN graphics printing (see the “ “LCN Print Setup” on page 52” section in this guide).

Attention

Honeywell does not support the LCN console printer reassignment functionality for ES-T, because the behavior is inconsistent. Do not use the Console Printer Assignment display to reassign an ES-T printer to a remote station, or to reassign a remote station's printer to an ES-T.

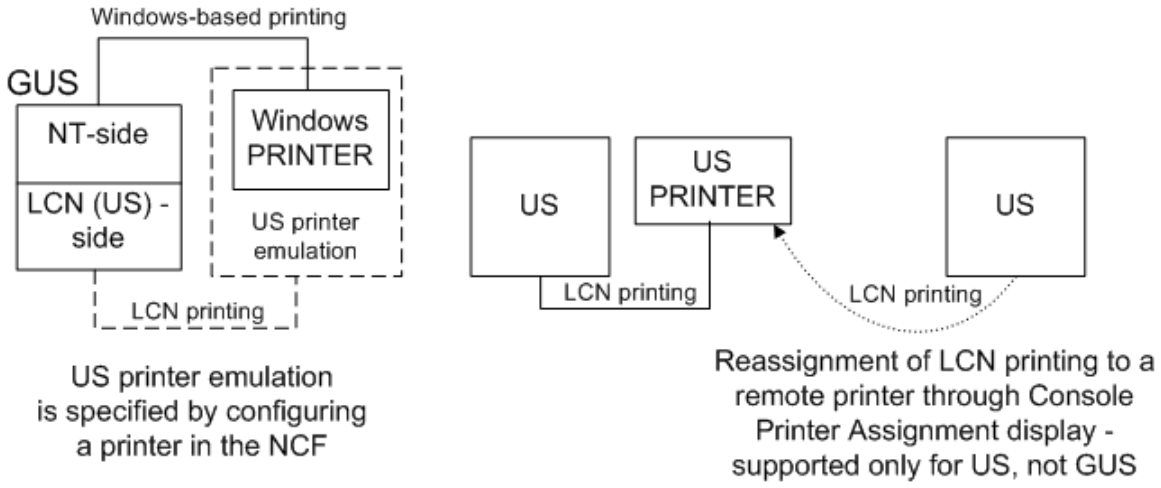
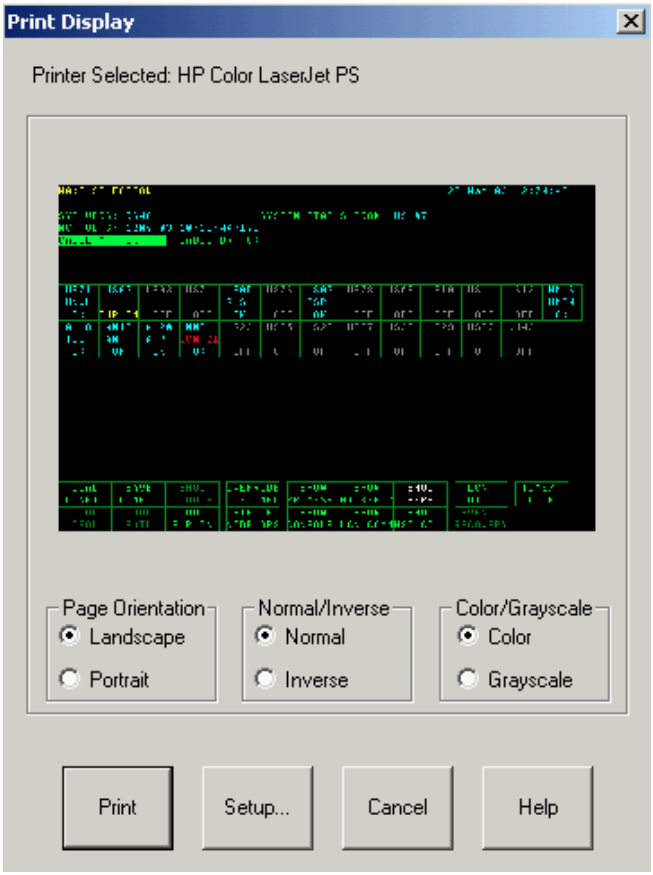


Figure 9: Diagram of LCN and Windows Based Printing

To print the current Display

Follow the steps in the table below to print the current display to the operator station assigned printer.

1. Select **Print Display** from the File drop-down menu.
2. The Print Display dialog box appears.



3. Choose the desired Page Orientation by selecting the appropriate radio button: Landscape or Portrait.
4. Choose the desired pixel color of everything in the client area (excluding the Status Bar, Menu Bar, and window borders) by selecting the appropriate radio button: Normal or Inverse.
   - **Normal** keeps the colors the same as they appear on the screen.
   - **Inverse** converts all black pixels to white and all white pixels to black, leaving the pixels of all other colors unchanged.

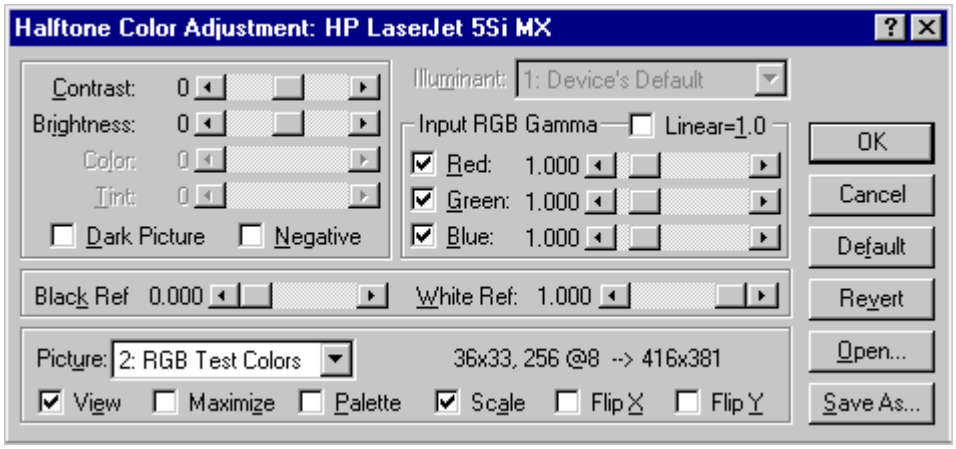
Tip
Typically, this function is employed to invert the background color of the current display to reduce toner/ink usage when the display is printed

5. Choose the desired color mode by selecting the appropriate radio button: **Color** or **Grayscale**.
6. If the currently assigned printer is not the one you want to use, select **Setup** to pick the one you want.
7. Select **Print**.
8. The client area of the current display, which excludes the Status Bar, Menu Bar and window borders, is printed out on the assigned printer.

Tip
You can only use this Print Display function to print on Windows printers. You have to use the Universal Station (US) PRINT DISPLAY function to print on printers connected to a US. Reassigning a US printer to an operator station -connected printer and then requesting a PRINT DISPLAY at the US will only work if:

- the operator station printer is configured as a continuous-mode printer, and
- the selected printer type supports LCN graphics printing (for example, the Signum printer).
- Operator station batch-mode printers do not support LCN graphics printing.

To avoid printing blank pages when using HP4 and 5 series printers, be sure the Negative checkbox is turned off on the Halftone Color Adjustment dialog. (**Start** > **Settings** > **Printers** > **File** > **Document Defaults…** > **Advanced** > **Document Options** > **Halftone Color Adjustment**.)



7.1.9 Exit

Exit the Native Window.

An automatic disconnect is performed if the Native Window is currently connected.

Tip

If SafeView has designated the Native Window as non-closable, the Exit selection in the File menu is automatically disabled.

7.2 View Menu

7.2.1 Hide Menu Bar

To display the Native Window without the Menu Bar, execute the following procedure:

- Select **Hide Menu Bar** from the **View** drop-down menu.
  The Menu Bar disappears

  The **Menu Bar** menu selection toggles on and off when it is selected and deselected.

  The Menu Bar can also be displayed/hidden by clicking the right mouse button and selecting/deselecting **Menu Bar** from the drop-down menu.

7.2.2 Status bar

To display the Native Window Status Bar, follow the steps in the following table.

1. Select **Status Bar** from the **View** menu in the Native Window.

   The Status Bar appears at the bottom of the Native Window and a check mark appears in front of the menu item.

The **Status Bar** menu selection toggles on and off when it is selected and deselected.

The Status Bar can also be displayed/hidden by clicking the right mouse button and selecting/deselecting **Status Bar** from the drop-down menu.

The Status Bar is divided into the following areas:

- Prompt
- Connect/Disconnect Status
- ACK
- SIL
- A C M S Alarm Message Indicators
- Real Time Journal Queue
- Keyswitch Position
- Insert Character Mode
- LEDs

7.2.3 Prompt

The Prompt pane, located at the extreme left of the status bar, provides a help message for any selected menu item, as well as various warnings and information.

7.2.4 Connect/Disconnect status

The Connect/Disconnect button displays the following icons:

- Connected to LCNP

When connected, the button can be clicked to disconnect from the LCNP.

- Disconnected from LCNP

When disconnected, the button displays a broken cable in red and can be clicked to initiate reconnection.

To disconnect/reconnect, refer to

“Connect” on page 50 and “Disconnect” on page 51 under the File Menu section.

7.2.5 ACK

Performs a ACKNOWLEDGE action. The ACKNOWLEDGE function is used to acknowledge various context-dependent conditions within the system. Clicking the **ACK** button performs the same function as selecting the Control/ACK menu item.

7.2.6 SIL

Performs a SILENCE action. The SILENCE function is used to silence any audible alarms that are occurring. Clicking the ACK button performs the same function as selecting the Control/SILENCE menu item.

7.2.7 A C M S

The A C M S buttons indicate LCN alarms and messages and call up their corresponding displays.

Click any button to call up its corresponding display.

If the letter showing in red or yellow is….	Then there are messages or alarms on this display…
A	Alarm Summary
C	Console Status
M	Message Summary
S	System Status

Blinking and colored letters correspond to the LED indicator lights on the Universal Station Operator keyboard.

For the Alarm Summary letter “A” only:

If the letter is…	Then the message is…
RED	EMERGENCY Priority
YELLOW	HIGH or LOW Priority
BLINKING	Unacknowledged

If there are no display messages, the letter is solid black.

7.2.8 Real Time Journal Queue

The Real Time Journal Queue button displays the letters “RTJ” in black when there are Real Time Journal messages in the print queue. This will occur only if a batch-mode printer is configured. Continuous-mode printers print the Real Time Journal entries as they occur.

These messages can be printed on demand by clicking the RTJ button, or they can remain in the queue until the Idle Flush Time or Queue Length setting in Configuration Utility is met.

Selecting Print RTJ Queue from the File drop-down menu can also print RTJ messages.

When there are no messages in the RTJ queue, the RTJ button is disabled.

7.2.9 Keyswitch Position

The Keyswitch Position button indicates the current keyswitch position in use when a “connect to the LCNP” request is made. The Signon Manager validates the position to which the key may be set. If an unsupported level is selected, the text of the button will still show the key position in use on the LCNP.

ENG	Keyswitch position set to Engineer
SUP	Keyswitch position set to Supervisor
OPR	Keyswitch position set to Operator
VIEW	Keyswitch position set to View-Only
- - - -	Information not available (for example, when the node is not loaded)

Follow the instructions under Configuring Signon Manager in the Experion System Implementation Guide to view the keyswitch position for an ES-T.

When the Native Window is shut down, the Keyswitch Position button becomes the **LOAD** button.

7.2.10 Insert Character Mode

The Insert Character Mode button displays the letters “INS” when the keyboard is in the insert instead of the overwrite character mode.

The Insert Character Mode button displays the letters “OVR” when the keyboard is in the Overwrite instead of the Insert character mode.

Click the Insert Character Mode button to toggle between insert and overwrite.

7.2.11 LEDs

The LEDs button corresponds to the physical LEDs on a K2LCN/K4LCN board.

It displays **LEDs nn**, where **nn** (a positive number) is the connected operator station node's physical address.

When **nn** is a negative number, it indicates a diagnostic or error condition.

To call up the LCNP Status dialog, execute the following procedure:

1. Click the **LEDs** button on the Native Window Status Bar.

   The LCNP Status dialog appears.

Clicking the **LEDs** button on the Status Bar calls up the **LCNP Status** dialog when the Native Window is connected. If the Native Window is disconnected, the LEDs button is inactive.

The LCNP Status application can be used to provide decoding for the LED values.

7.2.12 Default Size

The Default Size selection is used to return the Native Window to its default size when it has been scaled or stretched.

To reload the station, click **LOAD** to begin the loading sequence. This performs the same function as the **LOAD** selection from the **Control** drop-down menu, or the **LOAD** key on the keyboard.

7.2.13 Double Size

The Double Size selection is used to double the size of the Native Window.

Attention

To double the size of a Native Window, the Windows OS Display Settings must be at 1280x1024 pixels or higher. At lower settings, the Double Size selection will be disabled (grayed out).

Attention

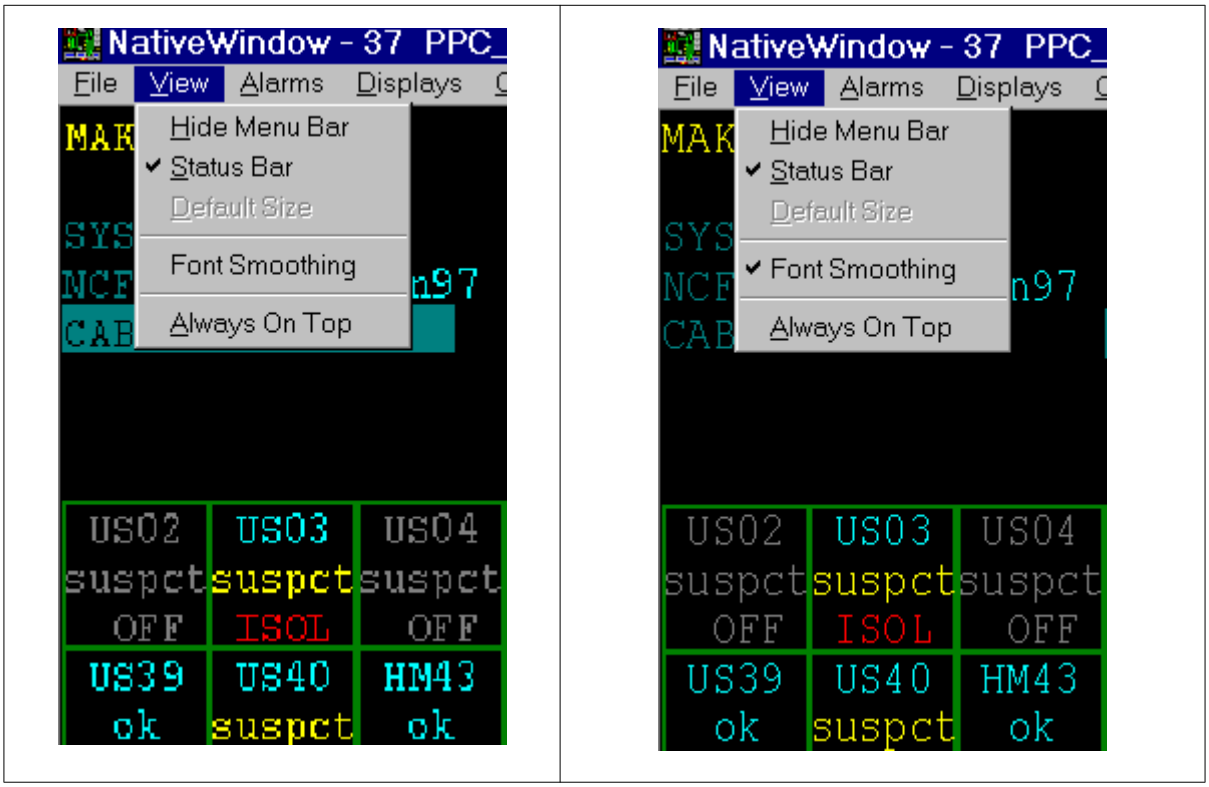
In Windows 7, maximizing the Native Window does not increase the font size properly.

To properly increase the font size of the Native Window, use the procedure described in the *Server and Client Configuration Guide* for Windows 7.

7.2.14 Font Smoothing

When Font Smoothing is selected, the Native Window renders fonts in an enhanced way that results in smoother characters at all window sizes.

Font Smoothing turned off	Font Smoothing turned on



When enabled, font smoothing may be turned on or off at any time by selecting Font Smoothing from the View drop-down menu.

Refer to the Native Window Appearance section in the *System Configuration Utility User's Guide* for information.

7.2.15 Always On Top

To keep the Native Window on top of all other windows automatically, execute the following procedure:

1. Select the View drop-down menu.

   If the **Always On Top** selection is check marked, the feature is activated and the Native Window will remain on top of any other open windows.
2. If the **Always On Top** selection is not check marked, select it to activate the function.

   When **Always On Top** is activated, a check mark appears in front of the menu item.

Note that **Always On Top** toggles on and off when its menu item is selected and reselected.

7.3 Alarms Menu

Related topics

“ACK Alarms Menu” on page 62
“SILENCE” on page 62
“ALARM SUMM” on page 62
“UNIT ALARM SUMM” on page 62
“ALARM ANNUNC” on page 62
“MSG SUMM” on page 62
“MSG CONFIRM” on page 62
“MSG CLEAR” on page 62

7.3.1 ACK Alarms Menu

Acknowledge console alarms and messages.

7.3.2 SILENCE

Silence all audible console alarms.

7.3.3 ALARM SUMM

Call up the Area Alarm Summary display.

7.3.4 UNIT ALARM SUMM

Call up a specified Unit Alarm Summary display.

The system prompts for the Unit number.

7.3.5 ALARM ANNUNC

Call up the Alarm Annunciator display.

7.3.6 MSG SUMM

Call up the Message Summary display.

7.3.7 MSG CONFIRM

Confirm a selected message on the Message Summary display.

7.3.8 MSG CLEAR

Confirm an ACK/CNFM message on the Message Summary display.

7.4 Displays Menu

Related topics

7.4.1 Operating

The following items can be selected from the **Operating** submenu to call up TPS system Operating displays:

- Detail display
- Group display
- Schematic display
- GO TO
- Associated display
- Help
- Prior display
- Display Back
- Display Forward
- Page Back
- Page Forward

7.4.2 DETAIL

Call up the Point Detail display.

The system prompts for the Point ID name.

7.4.3 GROUP

Call up the Group display.

The system prompts for the Group number.

7.4.4 SCHEMATIC

Call up a specified Picture Editor, GUS display, or HMIWeb schematic display.

The system prompts for the schematic name.

7.4.5 GO TO

Select a point on a group display.

The system prompts for the slot number.

7.4.6 ASSOC DISP

Call up the configured Associated display.

This selection is effective only when the current display has a configured associated display.

7.4.7 HELP

Call up a pre-configured LCN Help display.

7.4.8 PRIOR DISP

Call up the display shown prior to the current display.

7.4.9 DISP BACK

Call up the next lower-numbered display of the same display type.

7.4.10 DISP FWD

Call up the next higher-numbered display of the same display type.

7.4.11 PAGE BACK

Call up the next lower-numbered page of a multiple-page display.

7.4.12 PAGE FWD

Call up the next higher-numbered page of a multiple-page display.

7.4.13 System

The following items can be selected from the **System** submenu to call up TPS system displays:

- Console Status
- System Status
- System Menu

7.4.14 CONSOLE STATUS

Call up the Console Status display.

7.4.15 SYSTEM STATUS

Call up the System Status display.

7.4.16 SYSTEM MENU

Call up the System Menu display.

7.4.17 User Defined

The following items can be selected from the **User Defined** submenu to call up configurable-key displays:

- User Defined 1-6
- Edit
- Refresh

7.4.18 USER DEFINED 1–6

Call up a configurable-key display.

These menu selections function in the same way as the configurable buttons on the Operator keyboard. When positions 1 - 6 of the button file in the Area Database are configured, they can be linked to these User Defined positions and the corresponding displays can be called up with the User Defined submenu.

It is important to note that the user-defined keys are entered only as text and do not alter the actual keystrokes that are sent to the TPS system. The keystrokes that are sent are always the special six keys of the Operator keyboard. The meaning of these keys is defined in the TPS system configuration using the button file. The text appearing in the menu is set with the ES-T Configuration Utility program. Some sophisticated users may select different meanings for these keys as a function of what area is loaded in the ES-T node. However, there is no mechanism provided to automatically change the text in these menu items. For these cases, it is recommended that the buttons simply be named Button1, Button2, and so on. This is the same type of interpretation that must be provided for a classic Operator keyboard when an area change is made, but button legends remain the same.

The configured display titles appear here if they have been entered in the Configuration Utility Keyboard configuration, or in the Edit.section of the User Defined submenu.

7.4.19 EDIT

Edit the list of User Defined displays.

The six buttons on the lower-left side of the Integrated Keyboard Operator Control Panel correspond to the six User Defined key assignments.

The text appearing in these menu items (though not the actual keystrokes associated with the button file) can be changed through this mechanism.

Refer to the *Keyboard Page* section in the *System Configuration Utility User's Guide* for information.

You can also refer to *User Defined 1-6*.

7.4.20 REFRESH

Reads the User Defined key configuration on a remotely connected operator station.

On a locally connected operator station, this occurs automatically and this menu item is disabled.

7.5 Control Menu

Related topics

“MAN” on page 67
“AUTO” on page 67
“NORM” on page 67
“SP” on page 67
“OUTPUT” on page 67
“FAST” on page 67
“LOAD” on page 67

7.5.1 MAN

Place a selected point in Manual mode.

7.5.2 AUTO

Place a selected point in Automatic mode.

7.5.3 NORM

Place a selected point in Normal mode.

7.5.4 SP

Enable changes to a Setpoint value.

This function is mode-dependent.

7.5.5 OUTPUT

Enable changes to an Analog or Digital Output value.

This function is mode-dependent.

7.5.6 FAST

Increase the rate of display information updates.

Selection and deselection of **FAST** toggles between the normal 4-second update and fast update.

The toggle's on or off status is indicated by an LED on the Integrated Keyboard's FAST button, not by a check mark on the menu item.

7.5.7 LOAD

Prepare the operator station for personality loading.

1. Select the **LOAD** key, select **LOAD** from the Control drop-down menu, or click the **LOAD** button on the Status Bar.

   The prompt **W,N,1,2,3,4,X?** appears.

2. Normally, respond by typing **W** for Workstation load and pressing **ENTER**.

   The following prompts appear in sequence:

   WORKSTATION HOSTED LOAD IN PROGRESS

   WORKSTATION HOSTED LOAD IS COMPLETE

   NODE STARTING UP

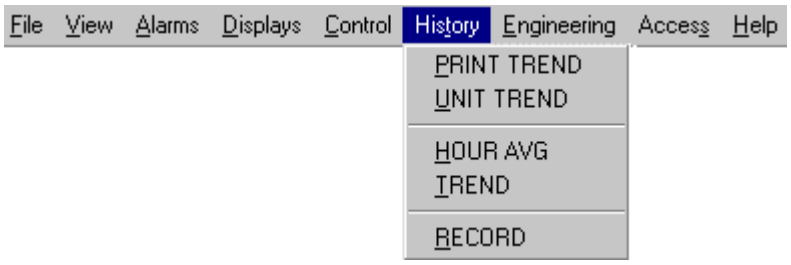
   NCF? N,1,2,3,4,X

3. Respond by typing **N** for Network and then pressing **ENTER**.

   The System Status display appears; the operator station node is loaded.

When the station is not loaded, the LOAD button appears on the Status Bar and can be clicked to initiate loading.

7.6 History Menu



7.6.1 PRINT TREND

Trend printing behavior depends on whether you configure the printer for batch-mode or for continuous-mode.

The PRINT TREND option in this menu can be disabled if you check the **Disable Print Trend** box in the Native Window page of the Configuration Utility.

7.6.2 Batch-mode Printing

To correctly request a PRINT TREND from the US (by reassigning a US printer to an operator station printer) or to request a PRINT TREND from an operator station , the trend must be configured for numeric in the NCF under System Wide Values < Console Data > Printed Trend Format, then select [NUMERIC]. Printing of graphic trends is not supported.

Printing a numeric trend on an operator station printer works differently than on a US printer. The operator station printer uses the Windows OS print manager, which supports page prints. Group trends sent to an operator station printer are queued until a page of data has been queued or it has been 3 minutes since all trends were cancelled. The occurrence of either of the two previous conditions will cause the queued trend data to print.

7.6.3 Continuous-mode Printing

When a continuous-mode printer is configured, trend printing behaves much as it does on a classical Universal Station. If the selected printer supports LCN graphics printing, (for example the Signum printer), the NCF configuration can select either graphic or numeric printing. However, if the configured printer does not support LCN graphics printing, the NCF must select numeric printing.

7.6.4 UNIT TREND

Call up a specified Unit Trend display.

The system prompts for the Unit number.

7.6.5 HOUR AVG

Call up the Hourly Averages display from a Group display.

7.6.6 TREND

Call up the Group Trend display from a Group display or Trend a selected point.

7.6.7 RECORD

Activate trend pen recording.

7.7 Engineering Menu

Related topics

“MENU” on page 71
“CMD_MENU” on page 71
“HELP” on page 64
“BREAK” on page 71
“CANCEL” on page 71
“HOME” on page 71
“INS CHAR” on page 72
“Appearance” on page 72
“BACKGRND” on page 72
“BLINK” on page 72
“INTENSITY” on page 72
“Colors” on page 72

7.7.1 MENU

Call up the Engineering Main Menu display.

7.7.2 CMD_MENU

Call up the Command Menu display (only active for certain functions).

On a PC-101 keyboard, this function can also be initiated by selecting the Shift and numeric Minus keys simultaneously.

7.7.3 HELP

Call up a pre-configured LCN Help display.

7.7.4 BREAK

Terminate execution of a current command.

On a PC-101 keyboard, this function can also be initiated by selecting the Ctrl and numeric Minus keys simultaneously.

7.7.5 CANCEL

Cancel current operation.

7.7.6 HOME

Move the cursor to the upper-left corner of the screen.

7.7.7 INS CHAR

Insert one or more characters. This function toggles between insert and overwrite. If insert is selected, the Status Bar indicates “INS,” if overwrite, the Status Bar indicates “OVR.”

7.7.8 Appearance

Select from the following **Appearance** menu items to change Picture Editor behavior attributes:

- Background
- Blink
- Intensity

7.7.9 BACKGRND

Change the behavior attribute to Reverse Background.

7.7.10 BLINK

Change the behavior attribute to Blink.

7.7.11 INTENSITY

Change the Intensity behavior attribute.

7.7.12 Colors

Select from the following Color submenu items to change Picture Editor color attributes to the selected color:

YELLOW	MAGENTA
RED	WHITE
CYAN	GREEN
BLUE	BLACK

7.8 Access Menu

Related topics

“Mount/Dismount Emulated Disks” on page 73
“Edit User Defined Keys” on page 73
“View LCNP Status” on page 73
“LCNP Auto Restart” on page 73
“Reset LCNP Board” on page 74
“US Cursor Movement” on page 75
“Windows Universal Station Cursor Mode” on page 75
“Windows Cursor Mode” on page 76
“Input Focus” on page 77
“Mouse/Trackball” on page 77
“Keyboard” on page 77

7.8.1 Mount/Dismount Emulated Disks

Select **Mount/Dismount Emulated Disks…** from the Access drop-down menu to mount or dismount emulated disks.

Refer to the *Emulated Disks Page* section in the *System Configuration Utility User's Guide* for information.

7.8.2 Edit User Defined Keys

Edit the list of User Defined displays.

Refer to the *Keyboard Page* section in the *System Configuration Utility User's Guide* for information.

7.8.3 View LCNP Status

Select **View LCNP Status…** from the Access drop-down menu to call up the LCNP Status dialog.

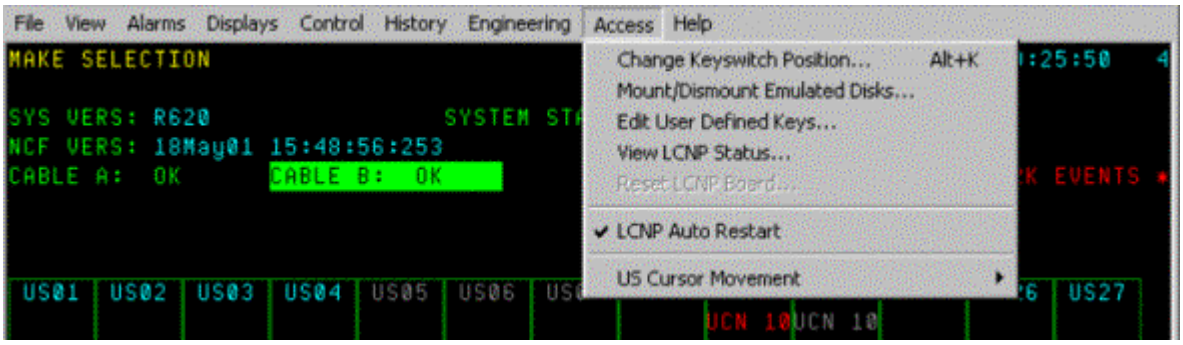
This function can also be selected by clicking the LEDs button on the Native Window Status Bar.

Refer to the LCNP Status section in the *LCNP Status User's Guide* for more information.

7.8.4 LCNP Auto Restart

1. Select LCNP **Auto Restart** from the Access drop-down menu to auto restart the LCNP

   A checkmark appears on the LCNP Auto Restart menu item indicating that the LCNP auto restart feature is enabled.



This function can be configured using the Native Window tab of the Configuration Utility.

Refer to the Native Window Page section in the *System Configuration Utility User's Guide* for additional information.

Attention
For the Enhanced TPS Node R431, the **LCNP Auto Restart** option has been disabled.

7.8.5 Reset LCNP Board

1. Select **Reset LCNP Board.** to demand reset of the LCNP board.

   A warning dialog appears.
2. Click **Yes** to confirm reset.

   The LCNP board resets. To reload, refer to LOAD.

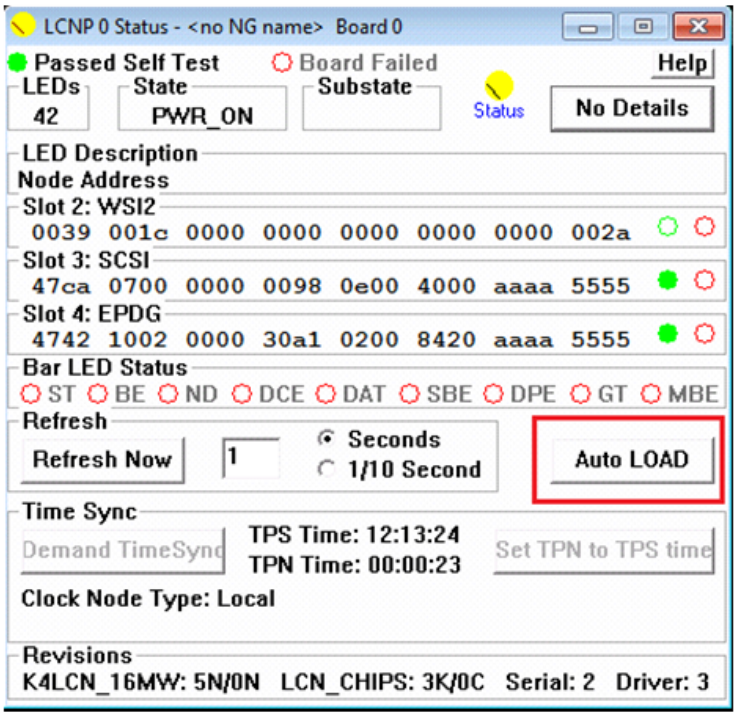
The Reset LCNP function can be configured in Configuration Utility to be active or non-active for the Native Window Access menu for Engineer and Supervisor users. It is never active for Operator users. When non-active, the menu selection appears with gray text.

Refer to the Extended Mode section in the *LCNP Status User's Guide* for more information.

Attention

For the Enhanced TPS Node, the **Reset LCNP** button has been removed. You can reset the node by resetting the power supply.

Also, a new **Auto LOAD** button has been added. Using the **Auto Load** button, you can load the workstation personality on the K4LCN processor board. This button is enabled only when the node is in **QUALIF** or **POWER ON** state.



7.8.6 US Cursor Movement

Within the Native Window, the cursor can operate in two different modes, Universal Station (US) and Windows.

- Windows XP Universal Station (US) Cursor mode
- Windows Cursor mode

7.8.7 Windows Universal Station Cursor Mode

With Windows, the Universal Station Cursor Mode attempts to simulate the behavior of the cursor on a classic Universal Station by displaying the US cursor separately from the mouse cursor.

In this mode, the basic mouse cursor shape is an arrow .

Depending upon where the mouse cursor is located, the basic shape will be changed in the following manner:

- a gunsight will added when the mouse cursor is over a target
- a crosshair will be added when the US is in the pixel graphics mode
- a mouse cursor (rectangle) will be added when the mouse cursor is over a text input port (TIP) or a text input area

In this US cursor mode, the Native Window displays a separate US cursor that does *not* automatically move with the mouse cursor. Pressing the mouse select button while the mouse cursor is within the Native Window client area will (normally) cause the US cursor to move the current mouse cursor location. When the US cursor does move to the point of the mouse-click, it will normally assume the same cursor shape modification as the

mouse cursor (arrow, gun sight, cross hair, or rectangle, as described below). Pressing the select mouse button triggers the same action that pressing your finger to the touch screen of a Universal Station would trigger. Releasing the select mouse button is equivalent to removing your finger from the touch screen, which will trigger the equivalent Universal Personality response.

In this mode, the US Cursor can move independently and therefore, can respond to movement requests from the LCN software without interfering with normal window operations.

The US cursor will appear in one of the following four different shapes, depending on the target area under the cursor:

- an arrow
- a gun sight
- cross hairs
- a rectangle

To select the US cursor mode, execute the following procedure:

1. From the Access menu, select US Style Cursor.

   A check mark is placed next to the US Style Cursor entry in the Access menu to indicate that it is the cursor mode currently selected.

7.8.8 Windows Cursor Mode

In the Windows Cursor mode, the mouse cursor can appear in one of four different forms. Moving this cursor around within the Native Window causes it to change shape, depending on the target area under the cursor. This is similar to pressing your finger against the touch screen of a Universal Station and moving it around. Clicking the mouse select button is equivalent to removing your finger from the touch screen of a Universal Station and will trigger the equivalent Universal Personality response.

TPN (LCN) software can request cursor relocation at any time. For example, the mouse cursor can automatically jump into a text input port (TIP) when a Native Window operation prompts the user for input. This can cause problems if it occurs at an inopportune moment. To help alleviate this problem, three cursor activation areas have been defined, such that the cursor will be moved only if

- the Native Window is the active window, and
- the cursor is currently within its specified activation area when cursor relocation is requested.

The three cursor-activation areas are:

- Anywhere
- Within Window
- Within Client Area

The Windows cursor will appear in one of the following four different shapes, depending on the target area under the cursor.

- an arrow
- a gun sight
- cross hairs
- a rectangle

To select the Windows Cursor mode, execute the following procedure:

1. Select the desired cursor activation area (Anywhere, Within Window, or Within Client Area).
2. Select **Anywhere** to allow automatic cursor response from anywhere within the window or desktop.

   OR

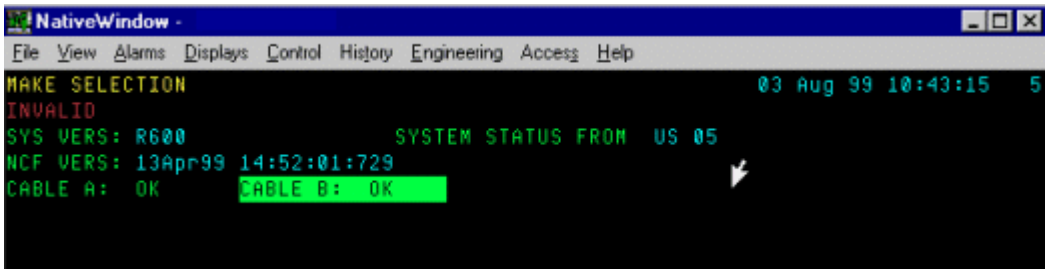
   Select **Within Window** to allow automatic cursor response from within the Native Window, including the client area (black background), the Status bar, the Menu Bar, and the window frame.

OR

Select **Within Client Area** to allow automatic cursor response from within the client area (black background) only, excluding the Status bar, the Menu Bar, and the window frame.

The Windows cursor replaces the US Style “pointing finger” cursor wherever it would normally appear.

A check mark is placed next to the Access menu entry selected in step 2 to indicate that it is the cursor mode currently selected.



7.8.9 Input Focus

In the Windows Cursor mode, the Native Window must have input focus for the mouse cursor to move into the TIP. If another application has input focus when a TIP is opened (such as by a cross-screen invocation or other automatic processing) the cursor is NOT automatically moved to the TIP.

Even if the cursor does not move to the TIP, if the Native Window does have input focus, typing there will cause characters to be entered into the TIP correctly.

The currently active TIP remains enabled until a target or other TIP is activated, when you point and click with the mouse or tab and select using the keyboard. The action to enable the TIP is device-dependent.

7.8.10 Mouse/Trackball

The active TIP does not lose focus when the cursor moves out of it, only when the mouse is moved and clicked on another target or TIP.

7.8.11 Keyboard

Focus changes when the cursor is tabbed to another target or TIP. When the cursor is moved with the mouse or tab keys and the select button is used, the selection takes place at the new cursor position.

7.9 Help Menu

Related topics

“Accessing Help” on page 78
“Help Jumps” on page 78

7.9.1 Accessing Help

Select items from the **Help** drop-down menu to call up the Native Window Users Guide or information About Native Window.

7.9.2 Help Jumps

1. From the browser button bar, click **Back** to return to the previous jump.

8 Notices

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8.2 How to report a security vulnerability

For the purpose of submission, a security vulnerability is defined as a software defect or weakness that can be exploited to reduce the operational or security capabilities of the software.

Honeywell investigates all reports of security vulnerabilities affecting Honeywell products and services.

To report a potential security vulnerability against any Honeywell product, please follow the instructions at:

https://honeywell.com/pages/vulnerabilityreporting.aspx

Submit the requested information to Honeywell using one of the following methods:

- Send an email to security@honeywell.com.

  or

- Contact your local Honeywell Process Solutions Customer Contact Center (CCC) or Honeywell Technical Assistance Center (TAC) listed in the “Support and other contacts” section of this document.

8.3 Support

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8.4 Training classes

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