

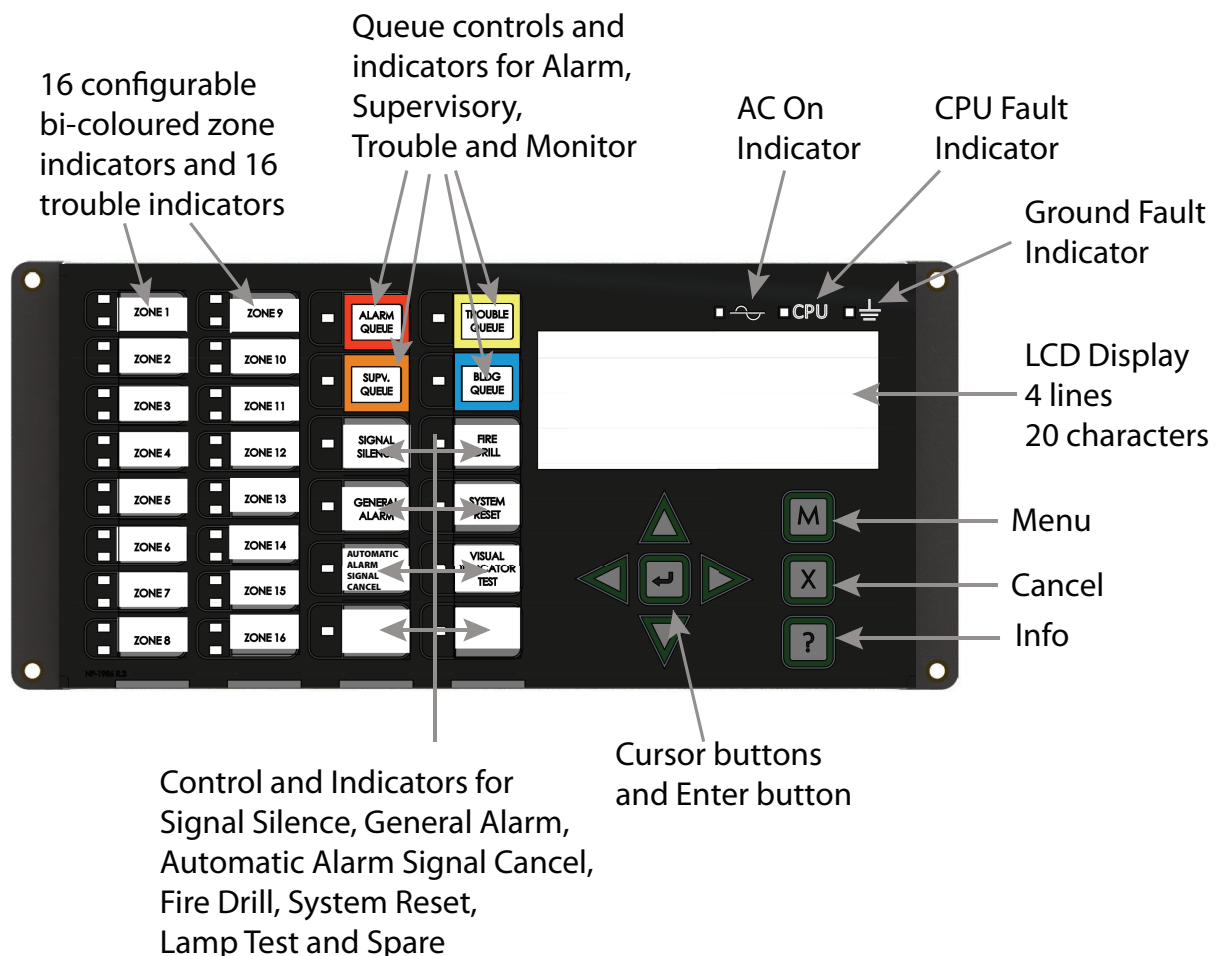
1.0 DSPL-420-16TZDS

The DSPL-420-16TZDS is a main display / control interface for a main panel in a Flex-Net, MMX, or a classic FX-2000. It is designed to mount in any standard display window cut out found on the doors in the Flex-Net, MMX, and FX-2000 series. This display is functionally equivalent to the Flex-Net and classic FX-2000 main display, but more compact.

The DSPL-420-16TZDS has a 4 line, 20 character back-lit LCD display with 4 cursors buttons and an Enter button to navigate the LCD menu items, as well as Menu, Cancel and Information buttons. The display also features 16 configurable bi-coloured LEDs, 4 Queue Buttons with LED Indicators, and 8 control buttons, each with it's own LED Indicator. The display also includes LEDs to indicate AC On, Ground Fault and CPU Fault.

1.1 Indicators and Controls

Figure 1 Indicator and Control locations on the DSPL-420-16TZDS



LED indicators are amber (trouble or supervisory), red (alarm), or green (AC On), and may illuminate continuously (steady) or at one of two flash rates:

- **Fast Flash:** 120 flashes per minute, 50% duty cycle
- **Trouble flash:** 20 flashes per minute, 50% duty cycle



Note: The General Alarm LED and pushbutton, and the Automatic Alarm Signal Cancel LED and pushbutton, are active only on a system configured for “Two Stage”.

Paper Labels for Buttons and Indicators













Buttons and indicators are supplied with paper labels. These labels slide into the plastic label templates on the face of the panel. Paper labels allow for easy English / French selections and custom printed zone information.

Common Indicators

Indicators	Description
Buzzer	<p>The Buzzer is activated by any of the following:</p> <ul style="list-style-type: none"> Fire Alarm - Steady Supervisory Trouble - Fast Rate Trouble - Trouble Rate Monitor - Configurable for silence or for sounding at the Fast Rate. <p>Note: To meet UL-864 requirements, set the Monitor buzzer for silence.</p> <p>If the Buzzer is turned on in response to a Non-Latching Trouble or Supervisory, it will be turned off if the condition causing it goes away and there is no other reason for it to be on.</p>
AC On LED	The AC On Indicator is activated steady green while the main AC power is within acceptable levels. It is turned off when the level falls below the power-fail threshold and the panel is switched to standby (battery) power.
Alarm Queue LED	The common Alarm LED flashes red whenever the Panel is in Alarm. An alarm results from any alarm on any point or input programmed as Alarm or activation of the manual red General Alarm Button (if the panel is set for Two Stage Operation). The Alarm Queue LED will go steady, once all alarms in the queue have been reviewed using the Alarm Queue button. Since all Alarms are latched until the Panel is reset, the Common Alarm LED will remain on until then.
Supervisory Queue LED	The Common Supv. (Supervisory) LED flashes amber at the Fast Flash Rate when there is a Supervisory Alarm in the Panel, as the result of any Latching or Non-Latching Supervisory Circuit. The LED turns off if all Non-Latching Supervisory Circuits are restored and there are no Latching Supervisory Circuits active. The Supv. Queue LED will go steady, once all supervisory alarms in the supervisory queue have been reviewed using the Supv. Queue button. Latching Supervisory Alarms remain active until the Panel is reset.
Trouble Queue LED	The Common Trouble LED flashes amber at the Trouble Flash Rate when there is any Trouble condition being detected on the panel. It is turned off when all Non-Latching Troubles are cleared. The Trouble Queue LED will go steady, once all troubles in the trouble queue have been reviewed using the Trouble Queue button.
Monitor Queue LED	The Monitor Trouble Indicator flashes amber at the Trouble Flash Rate when there is any Monitor condition being detected on the panel. It is turned off when all Monitors are cleared.
CPU Fault LED	The CPU Fault Indicator flashes yellow if the CPU is faulty.
Fire Drill LED	The Fire Drill Indicator turns on steady amber while the Fire Drill is active.
Automatic Alarm Signal Cancel LED	If the Panel is configured as Two Stage, the Automatic Alarm Signal Cancel Indicator flashes amber at the Fast Flash Rate while the Auto General Alarm Timer is running. It turns on steady amber when the Timer is cancelled by activating the Automatic Alarm Signal Cancel or Signal Silence buttons. If the Auto General Alarm Timer times out and puts the Panel into General Alarm, the indicator is turned off.

Indicators	Description
General Alarm LED	In Two Stage Operation only, the General Alarm Indicator is activated steady red when General Alarm is activated due to the red General Alarm button being pushed, a General Alarm Initiating Circuit being activated, or the Auto General Alarm Timer timing out. Once the General Alarm Indicator has been turned on, it will stay active until the Panel is reset.
Signal Silence LED	The Signal Silence indicator is flashed amber at the trouble rate when the Indication Circuits are Silenced either by the Signal Silence button, or by the Auto Signal Silence Timer. It is turned off when the Signals are re-sounded by a subsequent Alarm.
Ground Fault LED	The Ground Fault Indicator flashes amber at the Trouble Rate when the Ground Fault Detector detects a Ground Fault on any field wiring. It turns off immediately when the Ground Fault is cleared.

Common Controls

Controls	Description
LCD Display	The display is a compact 4 line by 20 character back-lit alphanumeric LCD. It displays information on the panel and it's devices. There are cursor buttons for menu selection and control. Information provided by the LCD display is an alarm log, an event log, current levels, device information, verification and maintenance reports.
Queue Buttons	<p>Use the queue buttons to select a particular queue to review.</p> <ul style="list-style-type: none"> Use the Alarm Queue button to view all alarms. Pressing this button will show the latest alarm on the LCD display. Use  and  to view all previous alarms. Use the Supervisory Queue button to view all Supervisory conditions. Pressing this button will show the latest supervisory information on the LCD display. Use  and  to view all previous supervisory Conditions on the LCD display. Use the Trouble Queue button to view all trouble conditions. Pressing this button will show the latest trouble condition on the LCD display. Use  and  to view all previous troubles. Use the Monitor Queue button to view all monitor conditions. Pressing this button will show the latest monitor information on the LCD display. Use  and  to view all previous monitor conditions. <p>Queues are displayed on the screen according to a priority sequence. Queue priority ranking from highest to lowest is as follows: alarm, supervisory, trouble, and monitor. If, for example, you are viewing a monitor queue and an alarm occurs, the display will immediately display the alarm condition. Also, if there is no activity on the system for 10 seconds after you have pressed a queue button, the display will switch to the highest priority condition.</p>
Cursor Buttons	<p>These four buttons around the Enter Button are used for up (previous), down (Latest), left, and right selection of items on the LCD Display.</p> <p>Enter Button:  This button is used to select a displayed item on the LCD Display.</p> <p>Cancel Button:  This button is used to cancel an operation.</p> <p>Menu Button:  This button is used to initiate the FX-2000N Menu System.</p> <p>Info Button:  This button is used to get more details about a displayed item.</p>

Controls	Description
System Reset Button	<p>The System Reset button causes the Fire Alarm Control Panel, and all Circuits, to be reset</p> <ul style="list-style-type: none"> Resets all Latching, Trouble Conditions Resets all Initiating Circuits Resets 4-Wire Smoke Supply and Aux. Power Supply Turns off all NACs Turns off Signal Silence, Ack & GA Indicators turns off Fire Drill Stops and resets all Timers Processes inputs as new events Aux Disconnect is not affected Reset cannot be activated until the Signal Silence Inhibit timer has expired.
Signal Silence Button	<p>Activation of the Signal Silence button when the Panel is in Alarm turns on the Signal Silence Indicator and deactivates and Silenceable NACs. Non-Silenceable Circuits are unaffected. Signals will re-sound upon any subsequent Alarm. This button does not function during any configured Signal Silence Inhibit Timer period. It also does not function if the NACs are active as the result of a Fire Drill. In a Two Stage System, if the Auto General Alarm Timer is running, the Signal Silence button also performs the same function as the Automatic Alarm Signal Cancel button.</p>
Fire Drill Button	<p>The Fire Drill button activates all programmed and non-Disconnected NACs, but does not transmit any Alarms via the City Tie, or Common Alarm Relay. Fire Drill may be programmed to operate specific NACs. Fire Drill is cancelled by pressing the button again (toggle switch), or if the Panel goes into a real Alarm.</p>
Automatic Alarm Signal Cancel Button (Two Stage Only)	<p>If the panel is not configured for Two Stage Operations, this button does nothing. If the Panel is configured for Two Stage Operation, activation of the Automatic Alarm Signal Cancel button while the Auto General Alarm Timer is running (there is an Alarm in the Panel, but it is still in the First Stage), that timer is cancelled, and the Automatic Alarm Signal Cancel Indicator is on steady amber.</p>
General Alarm Button	<p>If the panel is not configured for Two Stage Operation, this button does nothing. If the Panel is configured for Two Stage Operation, activation of the General Alarm button immediately sends the Panel into Second Stage -- General Alarm. It will also re-activate the Signals if they have been Silenced during General Alarm. The General Alarm condition remains active until the Panel is reset.</p>
Visual Indicator Test Button	<p>Activations of the Visual Indicator Test button turns on all front panel Indicators on steady in whichever colour they would normally be activated and turns on the buzzer on steady. If the Visual Indicator Test is active for more then 10 seconds, Common Trouble is activated.</p>

1.2 Specifications

DSPL-420-16TZDS - Standby current: 10 mA
 Alarm current: 46 mA



Attention: For Flex-Net and MMX battery calculations: Add the standby and alarm currents to the currents listed under DSPL-2440 in Appendix B: Power Supply and Battery Calculations in the LT-893 and LT-893SEC manuals.



Attention: For FX-2000 battery calculations: Use the standby and alarm currents as noted in Appendix C: Power Supply and Battery Calculations in the LT-657 manual. Display module DSPL-420-16TZDS currents are included as part of the main chassis.