



March 27, 2001

DN-6737 • D-124

## LCD-2X20 Series

### Liquid Crystal Display Fire Annunciators for use with AFP-100

Section: Annunciators

## GENERAL

The **NOTIFIER LCD-2X20 Series** are compact, cost-effective, 40 character, backlit LCD Fire Annunciators for use with the **AFP-100** Addressable Fire Alarm Control Panel. The LCD-2X20 Series consists of two models: the basic LCD-2X20 and the low-cost LCD-2X20L. The LCD-2X20 Series is capable of displaying English-language text of system point status including: device type, independent point alarm, trouble or supervisory, zone and custom alpha labels programmed into the AFP-100. The LCD-2X20 Series also provides system status LEDs to display Power, Alarm, Trouble and Supervisory. Remote control of critical system functions, such as Reset, Silence, Acknowledge, and Drill, can be accomplished with the model LCD-2X20 only.

Communications between the AFP-100 and the LCD-2X20 Series are accomplished over a serial interface employing the EIA-485 communication standard. Up to 32 LCD-2X20 Series annunciators may be connected to the EIA-485 circuit. Annunciators may be powered from the host AFP-100 or remote power supplies (requires filtered, regulated power).

## FEATURES

- English language, 40 character (20 characters x 2 lines) backlit, Liquid Crystal Display.
- Control Switches for System Acknowledge, Signal Silence, Drill and Reset with enable key are included on the model LCD-2X20 only (*shown*).
- Both models include system status LEDs for Power, Alarm, Trouble and Supervisory.
- No programming necessary — LCD mimics the AFP-100 display.
- Displays device type identifiers, individual point alarm, trouble or supervisory, zone and custom alpha labels.
- Time and date display field.
- Aesthetically pleasing, semi-flush mount design.
- Serial EIA-485 interface for reduced installation cost (see reverse side for wiring diagram).
- May be powered by 24 VDC from the host FACP or by remote power supplies (requires filtered, regulated power).
- Up to 32 LCD-2X20 Series annunciators per AFP-100.
- Plug-in terminal blocks for ease of installation and service.
- Can be remotely located up to 3,000 feet (914.4 m) from host control panel.
- Local piezo sounder with alarm and trouble resound.
- **Semi-flush-mounts** to 2-3/16"/55.5625 mm (minimum) deep, three-gang electrical box (NOTIFIER P/N 10103 or equivalent); or **surface-mounts** to NOTIFIER SBB-3 surface backbox.

## OPERATION

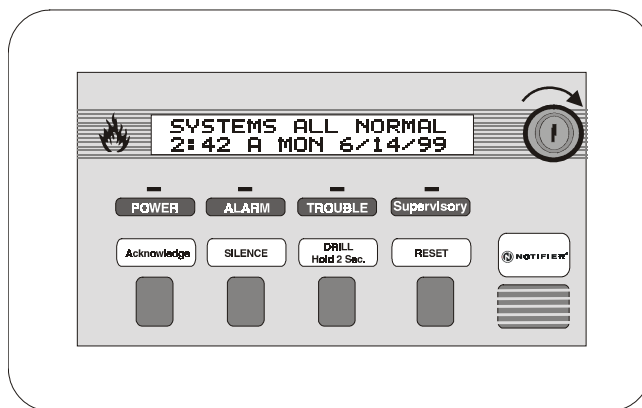
The LCD-2X20 Series annunciators provide the AFP-100 Addressable Fire Alarm Control Panel with point annunciation, displayed in English-language text on a 40-character LCD display. The LCD-2X20 Series annunciators also provide an ar-



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**LCD-2X20**

ray of LEDs to indicate system status, while the LCD-2X20 also includes control switches for remote control of critical system functions.

The LCD-2X20 annunciator series provides the AFP-100 with up to 32 remote serially connected annunciators. All field-wiring terminations on the LCD-2X20 Series use removable, compression-type terminal blocks for ease of wiring and circuit testing.

Communications between the FACP and the annunciators are accomplished over an EIA-485 serial interface, greatly reducing wire and installation cost over traditional systems. Six wires total are required: two for the EIA-485 communications in (twisted-pair), two for the EIA-485 communications return (twisted-pair from last LCD-2X20(L) on loop) and two for 24 VDC regulated power. Dip switches control local functions such as: piezo disable, control switches/key-switch disable, transmit/receive mode.

## INSTALLATION

The LCD-2X20 Series can be semi-flush mounted to a 2-3/16"/55.5625 mm (minimum) deep, three-gang electrical box (NOTIFIER P/N 10103 or equivalent). Alternately, an SBB-3 surface backbox is available for surface-mount applications.

**PRE-INSTALLATION NOTE:** Electrical installers should be made aware that locknuts on off-the-shelf three-gang electrical boxes may prevent proper seating of this product. **USE ONLY THE TOP OR BOTTOM ENTRANCE HOLES FOR CORRECT FIT.**

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER**. Phone: (203) 484-7161 FAX: (203) 484-7118

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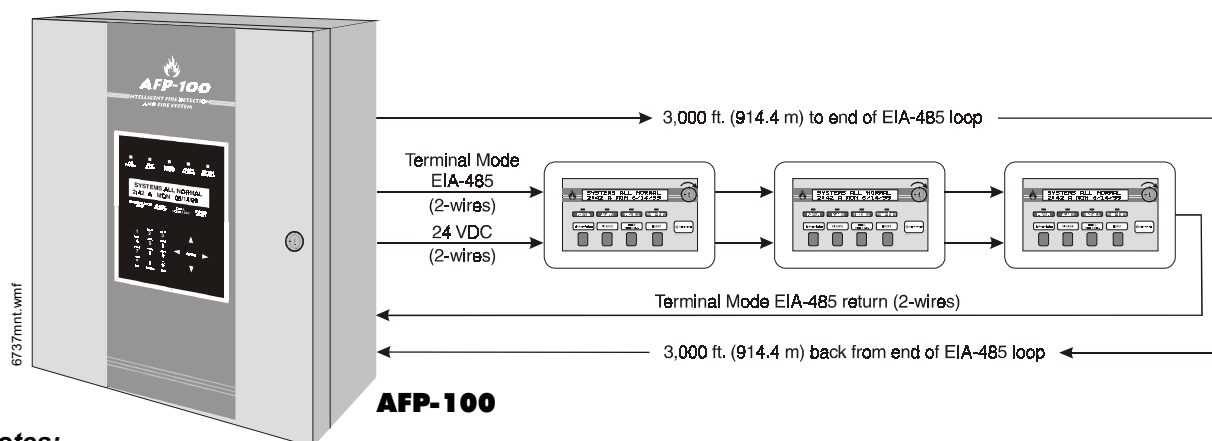


Made in the U.S.A.

## ORDERING INFORMATION

- LCD-2X20** 40 character, backlit, English language, LCD Fire Annunciator with control switches for remote control of critical system functions, and key-switch lock.
- LCD-2X20L** Low-cost version of above without control switches and key-switch lock.
- DIM-485** Display Interface Module (necessary to convert EIA-232 output of AFP-100 to EIA-485 [terminal mode] for use with LCD-2X20 Series).
- 10103** Three-gang electrical box, minimum 2-3/16" (55.5625 mm) deep, for semi-flush-mount applications.
- SBB-3** Three-gang surface backbox for surface-mount applications.

## LCD-2X20 TERMINAL MODE WIRING



### Notes:

- 1) EIA-485: Maximum of 6,000 feet (1828.8 m) total cable length from FACP to LCD-2X20 Series annunciators and back to FACP. Circuit is power-limited.
- 2) Up to 32 LCD-2X20 Series annunciators may be used on the EIA-485 circuit. The AFP-100 can power a maximum of five LCD-2X20 Series annunciators. If additional LCD-2X20 Series annunciators are connected, the NOTIFIER FCPS-24 may be used to supply additional power. *NOTE: Power supplies used for this purpose must have their negative terminals commoned together.*
- 3) Between each LCD-2X20 Series annunciator are four wires: a twisted-shielded pair for data communications and a pair for 24 VDC power. The return circuit only requires two wires for data communication supervision, wired from the last LCD-2X20(L) annunciator on the loop.
- 4) Each model LCD-2X20 (only) may have ACK/STEP, SIGNAL SILENCE, DRILL and SYSTEM RESET switches.
- 5) Duplicates AFP-100 display.
- 6) No programming required for LCD-2X20 Series annunciator.

## MOUNTING TO BACKBOX(ES)

### CAUTION!

The LCD-2X20 Series annunciators can **ONLY** be **semi-flush-mounted** in a three-gang electrical box with a **minimum** depth of 2-3/16" (55.5625 mm) (NOTIFIER P/N 10103 or equivalent).

The LCD-2X20 Series annunciators **CANNOT** be mounted in three gangable electrical switch boxes connected together.

**NOTE:** Alternately, the LCD-2X20 Series annunciators can be mounted to the SBB-3 surface backbox for **surface-mount** applications.

**PRE-INSTALLATION NOTE:** Electrical installers should be made aware that locknuts on off-the-shelf three-gang electrical boxes may prevent proper seating of this product. **USE ONLY THE TOP OR BOTTOM ENTRANCE HOLES FOR CORRECT FIT.**

**5-13/16" (147.6375 mm) wide x 4" (101.6 mm) high x minimum 2-3/16" (55.5625 mm) deep, three-gang electrical box (NOTIFIER P/N 10103 or equivalent). 10103 shown at right.**

