Lamp Driver Modules

General
The LDM Series lamp driver modules, when combined with a custom graphic display, provide annunciation and control for Notifier's intelligent fire alarm control panels. These modules use a serial communications interface, and may be located up to 6,000 feet from the panel.

Features
• ALARM/CIRCUIT ON and TROUBLE lamp/LED per-point option, or more dense alarm-only option (field selectable).
• Control switch option for remote control per point.
• Lamps/LEDs may be programmed to display status of indicating circuits or control relays as well as system status conditions.
• System trouble lamp/LED signal.
• On-line/power LED indicator.
• Alarm and trouble resound with flash of new conditions.
• Local sounder for both alarm/circuit-on and trouble conditions with silence/acknowledge switch connection.
• Serial EIA-485 interface for reduced installation costs.
• May be powered by 24 VDC from the panel or by remote power supplies.
• Efficient switch-power converter reduces power consumption.
• Microprocessor-controlled electronics, fully supervised.
• Plug-in terminal blocks for ease of installation and service.
• Trouble monitor option for remote power supplies.

Construction
Two basic models are available; the LDM-32 control module and the LDM-E32 expander module. Each may be selected to provide 32 alarm indications; or 16 alarm, 16 trouble, and 16 control points.

Applications
The LDM-32/LDM-E32 with a custom graphic array may be used to indicate point status and, in some versions, to control the state of output points.

In addition, the LDM-R32 module may be used to provide 32 dry-contact relays for electrical isolation when connecting the system to other equipment.

Installation
The LDM-32 and LDM-E32 modules mount on four standoffs inside the custom annunciator graphic box. Alternately, the modules may be installed in a CHS-4L chassis. The module size is approximately 4.4" (11.2cm) x 7.1" (18cm).

Communications between the LDM Series annunciators and the host Fire Alarm Control Panel are made through a two-wire EIA-485 multi-drop loop, and a two-wire regulated 24 VDC power loop. Up to 32 LDM systems may be connected to a single control panel.

All field-wiring terminations use removable, compression-type terminal blocks for ease of installation, wiring, and circuit testing.

Operation
LDM Series modules, when used with a custom graphic annunciator, provide the Notifier's intelligent fire alarm control panels with up to 32 unique or redundant annunciators, each with a capacity of 64 points for a total capacity of 2048 points.

Local or remote power supplies and serial communications allow the custom annunciators to be located anywhere on the protected premises.

AM2020/AFP1010 system alarm and/or trouble conditions may be annunciated on a per-point basis, or in a grouped-zone configuration.

AFP300/400 system panel points, intelligent addressable devices and software zones can be annunciated/controlled in a grouped fashion (see programming manual for details).

Control of system operational controls, such as Signal Silence, System Reset, and local annunciation controls (such as Local
Agency Listings and Approvals

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL Listed**: S635
- **ULC Listed**: S635
- **MEA Listed**: 291-61-E Vol. 4 (System 500, LDM-R32); 289-91-E Vol. V (AM2020/AFP1010); 104-93-E (AFP-200); 17-96-E (AFP-300/400); 447-99-E (AFC-600)
- **CSFM**: 7120-0028:0156, 7165-0028:0224 (NFS-3030, NFS2-3030); 7170-0028:0223 (NFS-3030, NFS2-3030)
- **BSA**: 578-81-SA (System 5000, System 500 except LDM-R32)
- **FM Approved**
- **City of Chicago** approved: Class 1, Class 2
- **City of Denver** approved
- **FDNY** COA #6085 (NFS2-640); 6065 (NFS2-3030)

Product Line Information

**LDM-32**: Lamp Driver Module with 32 alarm lamp-driver transistors (sink to power common on alarm). May be selected (dip switch) for 16 alarm/circuit on, 16 trouble, and 16 switch inputs if desired. Also includes system-trouble lamp driver and lamp-test/local-acknowledge switch input. Integral piezo sounder sounds for each new alarm or trouble and is silenced with the Local Acknowledge switch, or permanently disabled with a dip switch selection. Flash of new alarms or troubles is selectable through dip switches. 16 switch inputs may be used for panel SILENCE, RESET, or remote relay control. Instructions are included.

**LDM-E32**: Lamp Driver Module with 32 alarm drivers; or 16 alarm, 16 trouble, and 16 switch inputs. One LDM-E32 is allowed per LDM-32 in alarm-only mode. Three LDM-E32 modules are allowed per LDM-32 in alarm/trouble. Includes ribbon cable to connect to LDM-32/LDM-E32.

**LDM-R32**: Lamp Driver Module which connects to any LDM-32 or LDM-E32 to convert transistor outputs to 32 Form-A dry contacts (1.0 A @ 30 VDC). Provides 32 output terminal screw connections and a single common terminal screw. Includes ribbon cables to connect to the LDM-32/LDM-E32. Use for electrical isolation when interfacing the system to other equipment.

**LDM-CBL24, LDM-CBL48**: Ribbon cable sets to provide either a 24” (60.96cm) or 48” (121.96cm) connection between LDM-32/LDM-E32 and LEDs or lamps on a custom graphic panel. Includes all cables necessary for one LDM-32 or LDM-E32. Cables have connector on one end only (split, strip, and connect other end to graphic annunciator).

Architectural/Engineering Specifications

For specifications on LDM Graphic Annunciator Lamp Driver Modules, contact NOTIFIER.