LDM2

Lamp Driver Modules

NOTIFIER®
by Honeywell

Annunciator Input Output (AIO) Bus Device

General

The **LDM2-32 and LDM2-60** lamp driver modules, when combined with a custom graphic display, provide annunciation and control for Notifier's INSPIRE series intelligent fire alarm control panels and the Network Control Display (NCD). These modules use a serial communication interface, and may be located up to 6,000 feet from the panel.

The LDM2-32, has 32 outputs and 10 inputs (one preconfigured for lamp test), and the LDM2-60, which has 60 outputs and 21 inputs (one preconfigured for lamp test).

The LDM2-32 is designed to support retrofits such that output connectors, power, security key switch and lamp test connectors are all pin for pin compatible with legacy LDM-32.

Communication between the FACP or NCD and these panel modules is accomplished over a power-limited, two-wire serial interface called the AIO Bus and can be connected to either the main or local bus on the module. Power for the LDM2-32/LDM2-60 is provided through a separate power-limited power loop from the control panel or an external power supply which is inherently supervised by these modules (loss of power results in an annunciator communication failure at the control panel).

The N16 FACP or the NCD supports a maximum of 80 LDM2-32/LDM2-60 per node. Up to 10 LDM2-32/LDM2-60's can be configured as routers with each router supporting up to 15 LDM2-32/LDM2-60 peripheral modules.

Features

- Each lamp/LED output may be programmed to display a local or network
  - Event condition (i.e. fire, CO, supervisory, etc.)
  - Activation, Trouble or Disable status of a point (i.e. detector, module, PAM, Speaker, BELL circuits)
  - Activation, Trouble or Disable status of a zone (general zone, logic zone, special function zone)
  - Releasing zone states
- Onboard inputs may be programmed to ACK, Signal Silence or Reset a node, initiate Drill, Control or Disable a module, zone, PAM point or BELL circuit.
- The external switch inputs can be set up to be momentary (push button) or toggle.
- Integral piezo sounds for each new alarm or trouble and is silenced with the Local Acknowledge switch, or may permanently disabled with a dip switch selection. It also offers the option of an external piezo.
- LDM2-32/LDM2-60 may be configured to be a router or peripheral. N16 panel or NCD supports up to 80 LDM2-32/LDM2-60. Up to 10 LDM2-32/LDM2-60's can be configured as routers with each router supporting up to15 LDM2-32/LDM2-60 peripheral modules.
- Customizable 80 character Primary label.
- Preconfigured inputs for lamp test.
- Alarm and trouble resound with flash for new conditions.
- Local or External piezo for both alarm/circuit-on and trouble conditions with silence/acknowledge switch connection.

LDM2-32

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LDM2-60

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- Power Limited two-wire Serial RS-485 interface for reduced installation costs.
- May be powered by 24 VDC from the panel or by remote power supplies.
- Microprocessor-controlled electronics, fully supervised.
- Plug-in terminal blocks for ease of installation and service.
- The LDM2-32/LDM2-60 has on-board LED indicators that display power, trouble, test and transmit and receive on both the Main and Local AIO bus.

Applications

The LDM2-32/LDM2-60 with a custom graphic array may be used to indicate status, as well as control or disable output points.

Installation

The LDM2-32/LDM2-60 modules mount on four standoffs inside the custom annunciator graphic box. Alternately, the modules are also designed to mount in standard option module positions on a variety of chassis compatible with cabinet series CAB-5 and CAB-4, or on the back wall of ABB-1, ABB-2, and NBB-2 behind door-mounted equipment. The module size is approximately 4.4" (11.2cm) x 7.0" (17.78cm).

Communication between the FACP or NCD and the LDM2-32/LDM2-60 is accomplished over a power-limited, two-wire serial interface called AIO. The Power for the LDM2-32/LDM2-60 is provided through a separate power limited power loop from the control panel which is inherently supervised (loss of power results in a communication failure at the control panel).

All field-wiring terminations use removable, compression-type terminal blocks for ease of installation, wiring, and circuit testing. Refer to the *LDM2-32/LDM2-60 manual*, LS10385-000GE, for more details.

Operation

LDM2 Series modules, when used with a custom graphic annunciator, provide Notifier intelligent fire alarm control panels with up to 80 unique or redundant annunciators, each with a capacity of 60 points for a total capacity of **4800 points**.

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

N16 system alarm, trouble and/or disable conditions may be annunciated on a per-point basis, or in a grouped-zone configuration.

N16 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 Acknowledge), and Lamp Test may be accomplished through special key (toggle) or push-switches.

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
- **CSFM:** 7165-0028:0516 (N16e, N16x, NCD)
- **FM approved:** FM23FPUS0095
- **City of Chicago approved:** Class 1, Class 2
- **FDNY** COA #001761(N16e, N16x, NCD)
- **Certified for Seismic applications in accordance with IBC 2024:** VMA-45894-01C
- **OSHPD Approved:** OSP-0072

Product Line Information

LDM2-32: Lamp Driver Module for use with remote custom graphics provides 32 LED driver outputs (lamp-driver transistors sink to power common on alarm) and 10 switch inputs (one pre-configured for lamp test input). Designed to support retrofits such that output connectors, power, security key switch and lamp test connectors are pin for pin compatible with legacy LDM-32. Connects to the panel through the AIO bus and may be set up as a router or a peripheral. Integral piezo sounds for each new alarm or trouble and is silenced with the Local Acknowledge switch, or may permanently disabled with a dip switch selection. It also offers the option of an external piezo.

LDM2-60: Lamp Driver Module for use with remote custom graphics provides 60 LED driver outputs and 21 switch inputs (one pre-configured for lamp test input). Connects to the panel through the AIO bus and may be set up as a router or a peripheral. Integral piezo sounds for each new alarm or trouble and is silenced with the Local Acknowledge switch, or may permanently disabled with a dip switch selection. It also offers the option of an external piezo.

LDM-CBL24, LDM-CBL48: Ribbon cable sets to provide either a 24" (60.96cm) or 48" (121.96cm) connection between LDM2-32/LDM2-60 and LEDs or lamps on a custom graphic panel. Includes all cables necessary for one LDM2-32. LDM2-60 will need two cable sets. Cables have connector on one end only (split, strip, and connect other end to graphic annunciator).

AIO-CBL: Cable kit that includes a 48" preconfigured cable that can be used to connect AIO bus devices (ACM-30, LDM2-32, LDM2-60, TM-8) set as peripherals from one row to an adjacent row. It also includes four 6" interconnect cables for connecting AIO bus devices in a row.

Architectural/Engineering Specifications

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

Electrical Specifications

- **Operating voltage:** 18V to 30VDC
- **Alarm Current:**
  - LDM2-32 44mA @ 24VDC (excluding LED current)
  - LDM2-60 51mA @ 24VDC (excluding LED current)
- **Standby Current:** 23mA @ 24VDC (excluding LED current)
- **Maximum current per output:** 20 mA
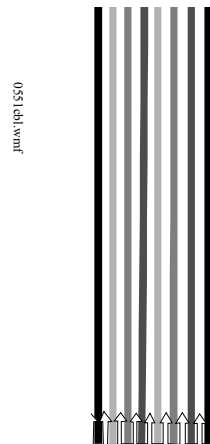
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LDM-CBL48
LDM-CBL24

ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS

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.

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