INSTALLATION AND PROGRAMMING GUIDE

DMP.

867 Class B
LX-Bus Notification Module

GET STARTED

The 867 module provides one supervised Class B notification appliance circuit for powering polarized 12 or 24 VDC fire notification devices on XR150/XR550 Series and XF6 Series Fire Control panels. The module connects to the panel LX-Bus and provides ground fault, open, and short condition supervision on the notification circuit. The module has four LEDs to indicate circuit trouble and ground fault conditions, as well as power supply and data monitoring.

The 867 also has a silence switch that allows technicians to disable the module bell output during service and maintenance checks.

What's Included

- ► One 867 NAC Module
- ► One Model 308 10k Ohm Resistor with Leads
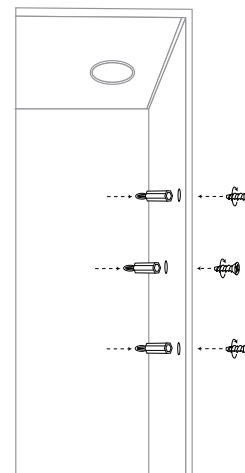- ► Hardware Pack

Compatibility

- ► XR150/XR550 Series Panels
- ► XF6 Series Fire Control Panels
- ► 505-12 Series power supplies

INSTALLATION

1 Mount the Module

The module can be mounted in a DMP enclosure using the standard 3-hole mounting pattern. Refer to Figure 1 as needed during installation.

1. Hold the plastic standoffs against the inside of the enclosure side wall.

2. Insert the included Phillips head screws from the outside of the enclosure into the standoffs. Tighten the screws.

3. Carefully snap the module onto the standoffs.

Figure 1: Standoff and Module Installation

2 Address the Module

For more information about addressing and switch locations, refer to Table 1 and Figure 3 respectively.

Set the Bell Output Address

Bell Address switches allow you to set an output number for the module that can be activated by any panel zone, fire bell output, or burglary bell output. When activated, the module provides a programmed bell output for the duration of the bell cutoff time or until manually silenced by an authorized user.

Set the Supervisory Zone Address

Supervisory Address switches allow you to set the zone address for the module, which is programmed into the panel as a supervisory zone. A trouble condition on the bell circuit either causes the panel to display a trouble on the keypads or trips zone outputs and reports the trouble to the central station.
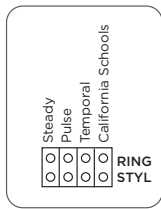
The module occupies a single zone address on the LX-Bus. For example, on an XR550 Series panel, a module connected to LX700 with the switches set to 5, 2 would be Supervisory Address zone number 752.

SWITCH		XR150 AND XF6-100 SERIES	XR550 AND XF6-500 SERIES				
TENS	ONES	LX500	LX500	LX600	LX700	LX800	LX900
0	0	500	500	600	700	800	900
0	1	501	501	601	701	801	901
0	2	502	502	602	702	802	902
0	3	503	503	603	703	803	903
0	4	504	504	604	704	804	904
...	...	...	...	...	...	...	...
9	5	595	595	695	795	895	995
9	6	596	596	696	796	896	996
9	7	597	597	697	797	897	997
9	8	598	598	698	798	898	998
9	9	599	599	699	799	899	999

Table 1: LX-Bus Addresses

3 Select a Bell Ring Style

The 867 module allows you to specify the cadence of the bell output with the Ring Style header. To select a bell ring style, place a jumper across the two appropriate pins on the header as shown in Figure 2. For more information, refer to Table 2.

Figure 2: Ring Style Header Detail

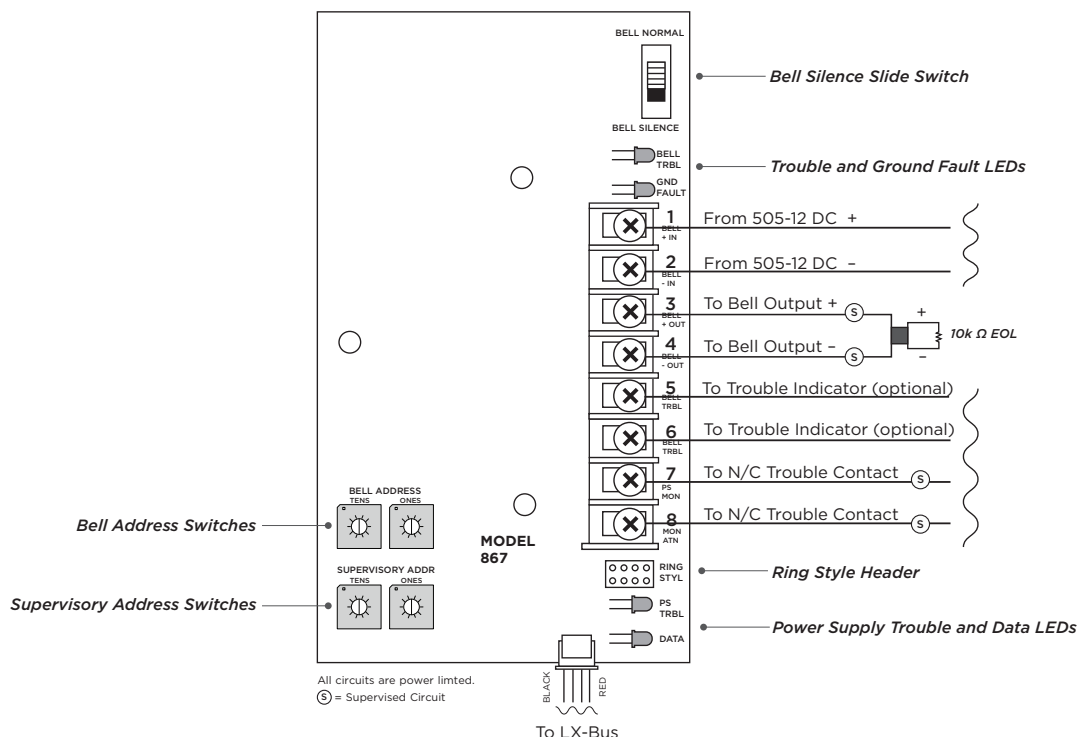| JUMPER SETTING	BELL CADENCE
Steady	On for duration of Bell Cutoff time
Pulse	1 second on, 1 second off for duration of programmed Bell Cutoff time
Temporal	Temporal Code 3 as defined in NFPA-72, section A-3-7.2(a): 0.5 seconds on, 0.5 seconds off, 0.5 seconds on, 0.5 seconds off, 0.5 seconds on, 2 seconds off.
California Schools	As defined in West's Annotated California Codes, section 32002: Short, intermittent sounds for 10 seconds, then off for 5 seconds.

Table 2: Bell Ring Style Options

4 Wire the Module

⚡ **Caution:** Disconnect all power from the panel before wiring the module. Failure to do so may result in equipment damage or personal injury.

For power connections, use 22 AWG or larger wire. Refer to Figure 3 when wiring the module.

1. Connect 505-12 DC positive to module Terminal 1. Connect 505-12 DC negative to module Terminal 2.

2. Connect module Terminal 3 to bell output positive. Connect module Terminal 4 to bell output negative.

3. Install the included 10k Ohm EOL resistor across module Terminals 3 and 4.

4. If necessary, wire module Terminals 5 and 6 to auxiliary trouble indicators.

5. Wire module Terminals 6 and 7 to N/C trouble contacts.

6. Connect the module 4-wire harness to the panel LX-Bus.

Figure 3: Wiring Connections

ADDITIONAL INFORMATION

Wiring Specifications

DMP recommends using 18 or 22 AWG for all LX-Bus and Keypad Bus connections. The maximum wire distance between any module and the DMP Keypad Bus or LX-Bus circuit is 1,000 feet. To increase the wiring distance, install an auxiliary power supply, such as a DMP Model 505-12. Maximum voltage drop between a panel or auxiliary power supply and any device is 2.0 VDC. If the voltage at any device is less than the required level, add an auxiliary power supply at the end of the circuit.

To maintain auxiliary power integrity when using 22-gauge wire on Keypad Bus circuits, do not exceed 500 feet. When using 18-gauge wire, do not exceed 1,000 feet. Maximum distance for any bus circuit is 2,500 feet regardless of wire gauge. Each 2,500 foot bus circuit supports a maximum of 40 LX-Bus devices.

For additional information refer to the LX-Bus/Keypad Bus Wiring Application Note (LT-2031) and the 710 Bus Splitter/Repeater Module Installation Guide (LT-0310).

Power Supply

The bell power must be supplied by a regulated, power limited, auxiliary power supply listed for Fire Protective Signaling with a maximum output of 5 Amps at 12 or 24 VDC. The power supply output positive connects to module Terminal 1 and power supply output negative connects to module Terminal 2.

The power supply must be supervised and provide a set of Normally Closed trouble contacts that connect to the Power Supply Monitor zone (Terminals 7 and 8) on the 867 module. An open on the supervision circuit causes the Power Supply Monitor LED to light and an open condition to be reported on the panel supervisory zone address.

LED Operation

For normal operation, all notification devices are connected in parallel on the Class B circuit. An included 10k Ohm EOL resistor installs at the last device in the circuit. The Class B circuit LED operation is defined as follows:

▸ Normal—No LEDs light and the module reports a normal condition on the supervisory zone address.

▸ Open or Short—The TRBL LED lights and the module reports an open condition on the supervisory zone address.

▸ Ground Fault—The TRBL and GND FAULT LEDs light and the module reports an open condition on the supervisory zone address.

Bell Silence Switch

The Bell Silence slide switch allows technicians to test or perform maintenance on the fire system without sounding the fire alarm notification devices. When the switch is placed in the Bell Silence position, the module TRBL LED turns on and an open condition is reported on the supervisory zone address. After testing, returning the silence switch to the Bell Normal position returns the module to normal operation.

SPECIFICATIONS

Operating Voltage

LX-Bus   8.0 to 15.0 VDC

Operating Current

LX-Bus   30 mA maximum

Bell Power   30 mA standby, 86 mA maximum

Alarm Switching

Current   5 Amps @ 12 or 24 VDC

CERTIFICATIONS

► California State Fire Marshal (CSFM)

► FCC Certified Part 15

► New York City (FDNY)

Underwriters Laboratory (UL) Listed

ANSI/UL 1023   Household Burglar

ANSI/UL 985   Household Fire Warning

ANSI/UL 864   Fire Protective Signaling

FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada Information

This device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.