

## Description

The 867 module provides one supervised Style W notification appliance circuit for powering polarized 12 or 24 VDC notification devices in DMP Command Processor™ fire systems. The 867 connects to the panel's LX-Bus and provides supervision for ground fault, open, and short conditions on the notification circuit. The 867 contains four side-mounted LEDs to indicate circuit Trouble and Ground Fault conditions as well as module power supply and data monitoring.

## Supervisory Zone Addressing

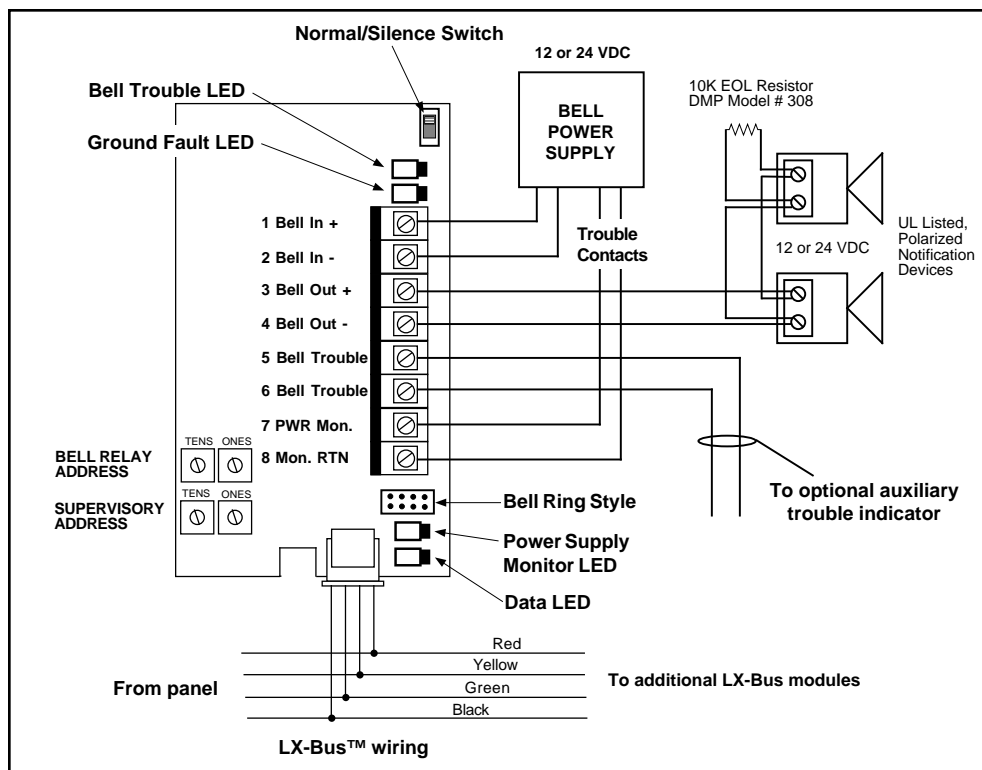
The Supervisory Address switches allow you to set the zone address for the module that is then programmed into the panel as a Supervisory Type zone. A trouble condition on the bell circuit, or a loss of communication between the 867 module and the panel, can cause the panel to display the zone's condition on keypads, outputs, and report the trouble to the central station.

The 867 module occupies just a single zone address on the LX-Bus. As an example, setting the Supervisory Address to 1 and 0 sets the zone as 110 on the LX-Bus. Zone 110 is then programmed as a Supervisory Type zone to monitor the data communication from the panel.

## Bell Relay Address

The switches labeled Bell Relay Address allow you to set an output number for the module that can then be activated by any one of the panel's zones or by the Fire Bell and Burglary Bell output. On a 1912XR panel, you can set the output number from 100 to 199. On an XR200 panel, you can set the output number from 100 to 299 (depending on which of the two possible LX-Bus circuits the module is connected).

When activated, the 867 module provides a programmed bell output for the duration of the Bell Cutoff time or until manually silenced by an authorized user. See **Bell Ring Style**.

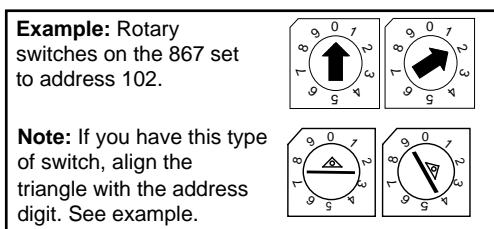


**Figure 1: 867 module wiring and component descriptions.**

The 867 also contains a Silence switch that allows technicians to disable the module's bell output during service and maintenance checks.

## Rotary Switch Addressing

The 867 module contains two pairs of rotary switches for setting the Bell Relay Address of the module and a Supervisory zone address. Having a separate Bell Relay Address allows multiple modules to be activated in groups yet monitored by individual Supervisory zones.



**Figure 2: Rotary switch styles.**

To set the Bell Relay Address, use a small slotted screwdriver and rotate the arrow dial in the middle of each switch. You can set the address from 00 to 99. As an example, to set the Bell address to 20 (Output 120) you would set the TENS switch to 2 and the ONES switch to 0 (zero).

## Bell Ring Style

The 867 module allows you to specify the cadence of its bell output by setting the Bell Ring Style jumper located below the wire terminal. The 867 can be activated by either the Fire Bell output of the XR200 panel (see Zone Information) or by a Zone Alarm Output of the 1912XR or XR200 panels (see Alarm Action).

## Bell Ring Style continued

When activated, one of the following cadences are available from the 867 module:

Pins marked as	provide the cadence
Steady	Steady - on for duration of Bell Cutoff time
Pulsed	Pulsed - One second on, one second off for duration of programmed Bell Cutoff time
Temporal	Temporal Code 3 as defined in NFPA-72, section A-3-7.2(a).
California Schools	As defined in West's Annotated California Codes, section 32002

## Powering the module

The bell power must be supplied by a auxiliary power supply with a maximum output of 5 Amps at 12 or 24 VDC. The power supply output connects to the 867 module's **Bell In** terminals 1 and 2.

## Power supply supervision

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's Supervisory Zone address.

## Style W circuit operation

For normal operation, all notification devices are connected in parallel on the Style W circuit. A 10k Ohm End of Line resistor (supplied with the module) installs at the last device in the circuit. The operation of the Style W circuit is defined below:

- During a *normal* condition on the circuit - No LEDs are lit and a normal condition is reported on the Supervisory Zone address.
- During an *open* or *short* condition on the circuit - the 867 module turns on the **TRBL** LED and reports an open condition on the Supervisory Zone address
- During a *ground fault* condition on the circuit - the 867 turns on the **TRBL** and **GND FAULT** LEDs and reports an open condition on the Supervisory Zone address.

## Silence switch operation

The Silence switch on the 867 module allows technicians to test or perform maintenance on the DMP fire system without sounding the building's fire alarm notification devices. When the switch is placed in the Silence position, the module's **TRBL** LED turns on and an open condition is reported on the Supervisory Zone address.

## Specifications

Operating Voltage	LX-Bus = 8.0 to 15 VDC Bell Power = 10.2 to 28 VDC
Operating Current	LX-Bus = 30mA maximum Bell power supply = 30mA normal 85mA maximum in alarm
Alarm Switching Current	5 Amps

## Digital Monitoring Products

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