

Installation Manual: LED-16 LED Annunciator

NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the LED-16 module.

All terminals are power limited and should be wired in accordance with the requirements of NFPA 70 (NEC) and NFPA 72 (National Fire Alarm Code). Failure to follow the wiring diagrams in the following pages will cause the system to not operate as intended. For further information, refer to the control panel installation instructions.

The module shall only be installed with listed control panels. Refer to the control panel installation manual for proper system operation.

1. Description

The LED-16 is a LED remote annunciator. LED-16 communicates using a RS-485 connection to the main panel providing zone specific indication of Alarm Supervisory, and Trouble conditions. The module mounts on either a 4" square or double gang box.

The LED-16 features 2 slide-in labels allowing each of the 16 zones to be customized for any application. It can be mounted on a single gang electrical box or a four-square electrical box. The annunciator utilizes a sheet metal enclosure secured with a Potter lock.

2. Setting the Address

Each P-Link device has a **five (5) position dip switch** which is used to program the device address ranging from one (1) to thirty-one (31). The table below may be used to set dip switches when addressing any P-Link module:

Figure 1. Dip Switch Settings Table (Addresses 1–31)

	1	2	4	8	16		1	2	4	8	16
1	Gray	White	White	White	White	17	Gray	White	White	White	Gray
2	White	Gray	White	White	White	18	White	Gray	White	White	Gray
3	Gray	Gray	White	White	White	19	Gray	Gray	White	White	Gray
4	White	White	Gray	White	White	20	White	White	Gray	White	Gray
5	Gray	White	Gray	White	White	21	Gray	White	Gray	White	Gray
6	White	Gray	Gray	White	White	22	White	Gray	Gray	White	Gray
7	Gray	Gray	Gray	White	White	23	Gray	Gray	Gray	White	Gray
8	White	White	White	Gray	White	24	White	White	Gray	Gray	Gray
9	Gray	White	White	White	Gray	25	Gray	White	Gray	Gray	Gray
10	White	Gray	White	Gray	White	26	White	Gray	Gray	Gray	Gray
11	Gray	Gray	White	Gray	White	27	Gray	Gray	White	Gray	Gray
12	White	White	Gray	Gray	White	28	White	White	Gray	Gray	Gray
13	Gray	White	Gray	Gray	White	29	Gray	White	Gray	Gray	Gray
14	White	Gray	Gray	Gray	White	30	White	Gray	Gray	Gray	Gray
15	Gray	Gray	Gray	Gray	White	31	Gray	Gray	Gray	Gray	Gray
16	White	White	White	White	Gray						
	1	2	4	8	16		1	2	4	8	16

Note: Each **"gray" box** indicates that the dip switch is **"On,"** and each **"white" box** indicates **"Off."**

The examples shown below illustrate a P-Link's dip switch settings: the 1st example shows a P-Link module *not addressed* where all dip switch settings are in the *default "Off" position*, the 2nd illustrates an *addressed P-Link module* via the dip switch settings.

Figure 2. Examples of P-Link Module Showing Default Dip Switch Setting (Unaddressed) & Addressed



All dip switches are shown in the "Off" position.



Example shows this P-Link module address = 10. Dip switches #2 & 8 are in the "On" position.

Before connecting a device to the RS-485, take the following precautions to prevent potential damage to the RS-485 connection or P-Link or device.

- Power to the LED-16 is removed.
- Field wiring on module is correctly installed.
- Field wiring has no open or short circuits.

3. Technical Specifications

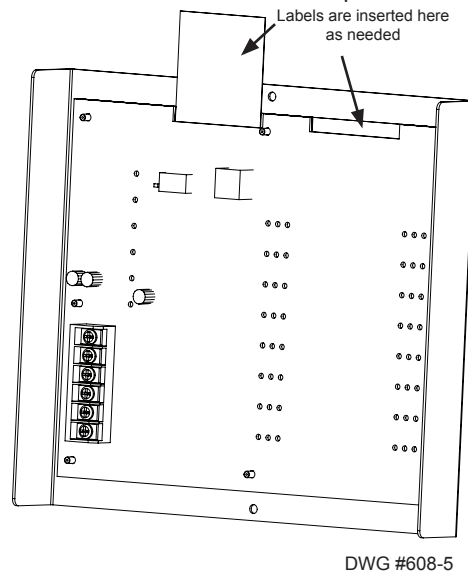
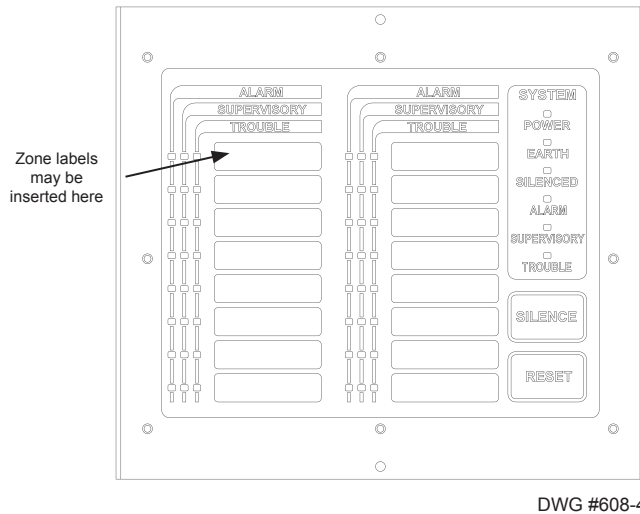
P-Link Alarm Current	25 mA
P-Link Standby Current	25 mA
LED PWR Maximum Standby Current	15 mA
LED PWR Alarm Current	210 mA
Operating Temperature Range	32°F to 120°F (0°C to 49°C)
Maximum # of Annunciators	31
Dimensions (WxHxD)	10"x7 7/8"x1 5/8"
Operating Humidity Range	10%-93% (non-condensing)
Maximum Wire Length	6500 ft
Wire Gauge	12 AWG to 18 AWG

Note: LED PWR can be provided by any fire listed source. Output power must be 16 VDC - 33 VDC and must be power limited.

4. Installation

The LED-16 is connected to the fire alarm control panel using a four wire RS-485 connection. The connection is power limited and supervised. Up to 31 LED-16 LED annunciators can be connected. Refer to the illustrations below for a front panel and board view.

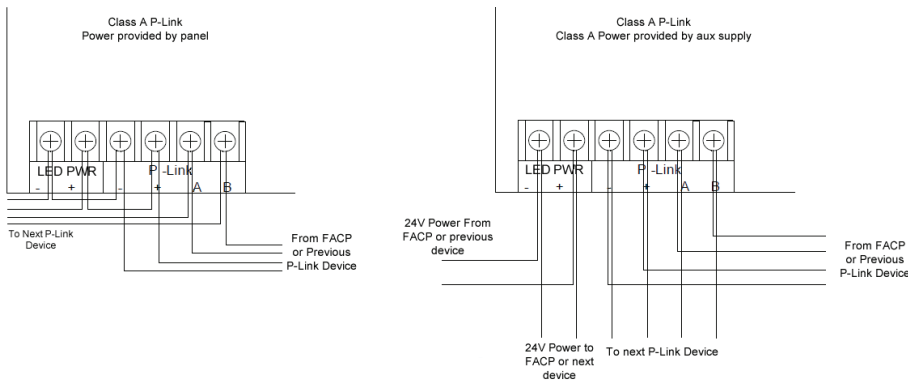
Figure 3. LED-16 Module Showing Front Panel & Board



5. Wiring Diagram

The following wiring diagrams illustrate how to wire a LED-16 to Control Panel or Auxiliary Power.

Figure 4. Wiring LED-16 to Control Panel or Auxiliary Power Example



Notes:

- RS-485 supports the Class A, and Class B.
- RS-485 connection is power limited and supervised.
- All wiring is between #12 (max.) and #18 (min.).
- Wire Preparation – Strip all wires 1/4 inch from their edges as shown here:
 - Stripping too much insulation may cause a ground fault.
 - Stripping too little may cause a poor connection and subsequently an open circuit.



These instructions do not purport to cover all the details or variations in the equipment described, nor provide for every possible contingency to be met in connection with installation, operation and maintenance.

Specifications subject to change without prior notification.

For Technical Assistance contact Potter Electric Signal Company at 866-956-1211.

Actual performance is based on proper application of the product by a qualified professional.

Should further information be desired or should particular problems arise, which are not covered sufficiently for the purchaser's purpose, the matter should be referred to a distributor in your region.