

Installation Manual: CIM-16 Contact Input Module

NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the CIM-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 CIM-16 input module provides 16 inputs which are activated via normally open dry contacts. A contact closure between the selected input point and common will activate the input. The CIM-16 communicates through the P-Link communication bus. The inputs are power limited and supervised. Each card is mounted to the exclusive Stacker Bracket for secure and accessible mounting.

2. Setting the Address

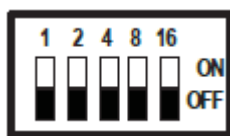
Each P-Link device has a five (5) position dip switch which is used to program the device address ranging from one (1) to thirty-one (31). The table below may be used to set dip switches when addressing any P-Link module:

Figure 1. Dip Switch Settings Table (Addresses 1-31) P-Link Dip Switches Are Labeled 1,2,3,4,5.

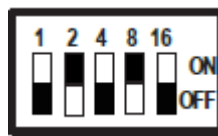
	1	2	4	8	16		1	2	4	8	16
1						17					
2						18					
3						19					
4						20					
5						21					
6						22					
7						23					
8						24					
9						25					
10						26					
11						27					
12						28					
13						29					
14						30					
15						31					
16											

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.

Note: Unless these are different than other P-Link dip switches they are labeled 1,2,3,4,5 and not 1,2,4,8 & 16

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

- Power to the RS-485 connection is removed.
- Field wiring on module is correctly installed.
- Field wiring has no open or short circuits.

3. Technical Specifications

Input Voltage	24VDC
Standby Current	23 mA
Alarm Current	23 mA
Class	Class B
Initiating Circuit Voltage	24VDC
Maximum Short-Circuit Current	4 mA
Maximum Line Impedance	100 ohms
Supervised	Yes
Power Limited	Yes
Operating Temperature Range	32° to 120°F (0° to 49°C)
Operating Humidity Range	10% to 93% (non-condensing)

4. Installation

The CIM-16 is connected through the P-Link communication bus using a 4-wire RS-485 connection. The connection is power limited and supervised. Each card is mounted to the exclusive Stacker Bracket for secure and accessible mounting.

Figure 3: CIM 16 Connections

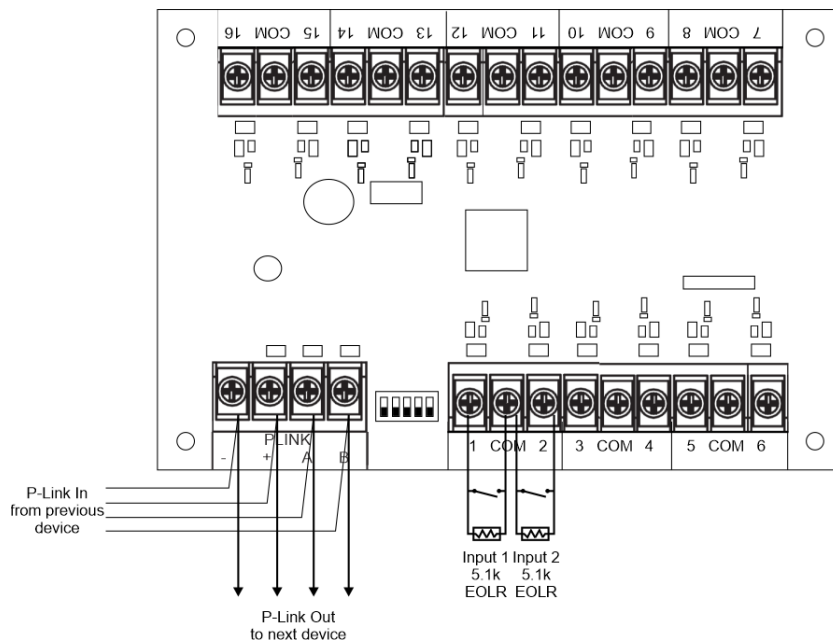


Figure 4: CIM-16 Mounted in Backbox

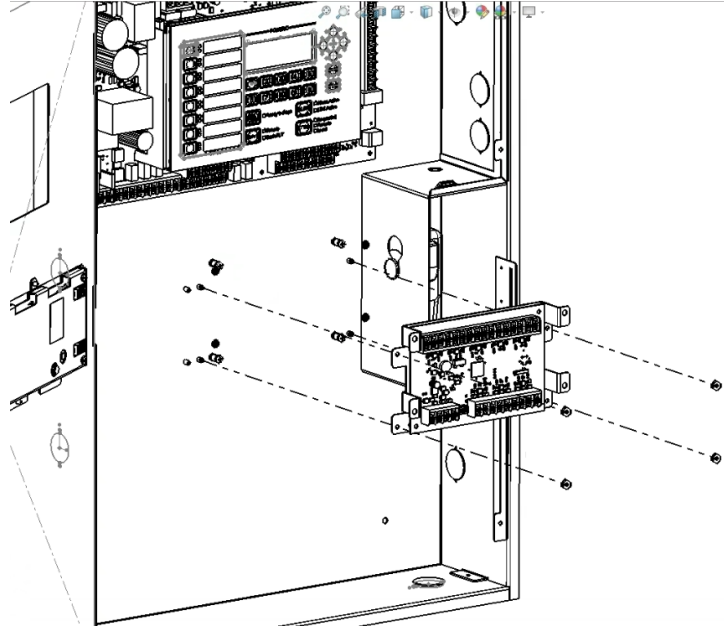
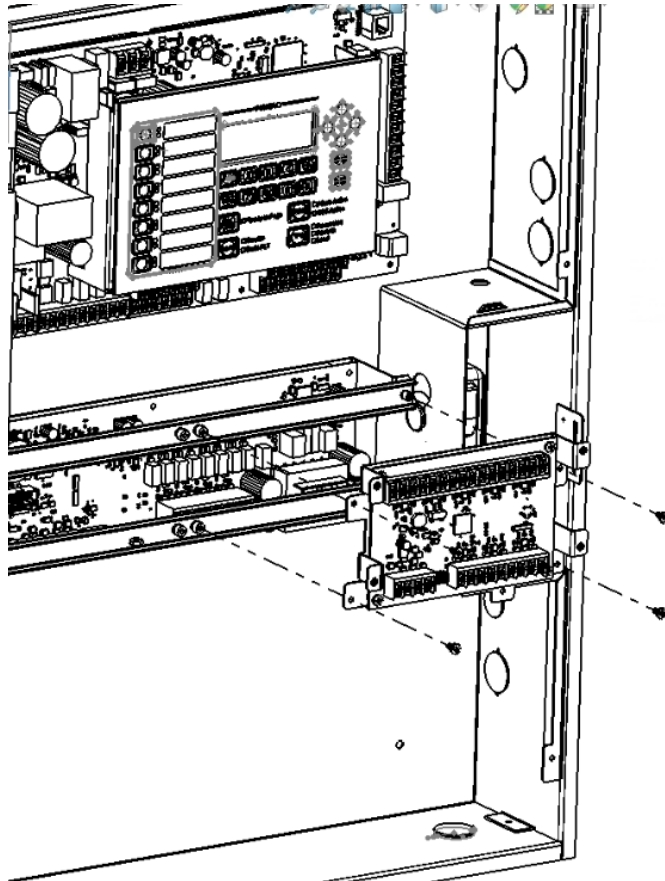
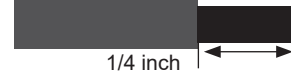


Figure 5: CIM 16 mounted on Stacker Bracket Installation



5. Notes

- Inputs 1-16 are power limited
- RS-485 wiring style supports class A and class B.
- RS-485 is power limited
- Wiring for terminals (A, B) and (+,-).
- 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.