Installation Manual: PSK-1000 Programmable Soft Keys

NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the PSK-1000 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 PSK-1000, programmable soft keys, provides 16 programmable push buttons to manually enable and disable zones. It is enclosed in a sheet metal enclosure and has a lock securing the push buttons. The PSK-1000 is a P-Link device and communicates with the control panel via the 4-wire RS-485 connection. A maximum of 31 PSK-1000s can be connected in a system. Each push button has a corresponding LED for status indication. In standby, the LED is off and when a programmed push button is selected it will illuminate green. The PSK-1000B, circuit board only, may be mounted in the IPA-4000E and AFC-1000E panels to offer an integrated solution. The IPA-4000E and AFC-1000E can house one PSK-1000B in the panel.

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.

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 modulevia 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

Operating Voltage	24 VDC
Standby Current	18 mA
Alarm Current	19 mA
Operating Temperature Range	32° to 120° F (0° to 49° C)
Operating Humidity Range	0 to 93% (non-condensing)

4. Installation

The PSK-1000 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 PSK-1000 programmable soft keys can be connected. Refer to the illustrations below for wiring connections

Figure 3. PSK-1000 Connections
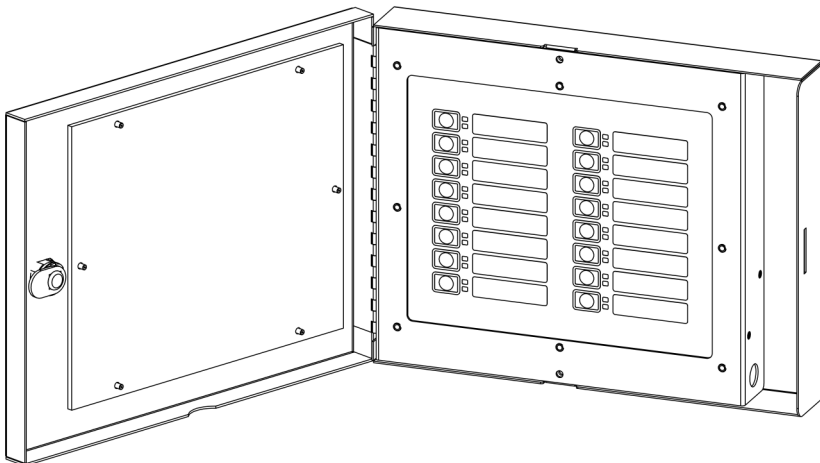
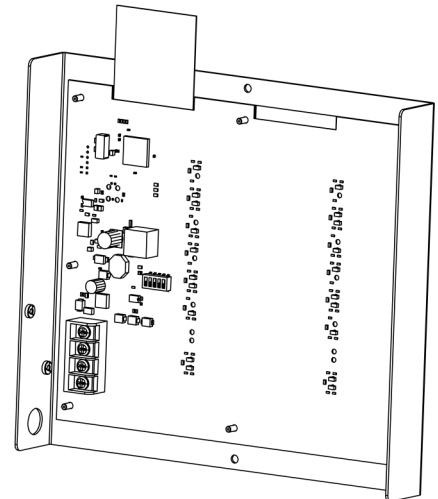Front   Back
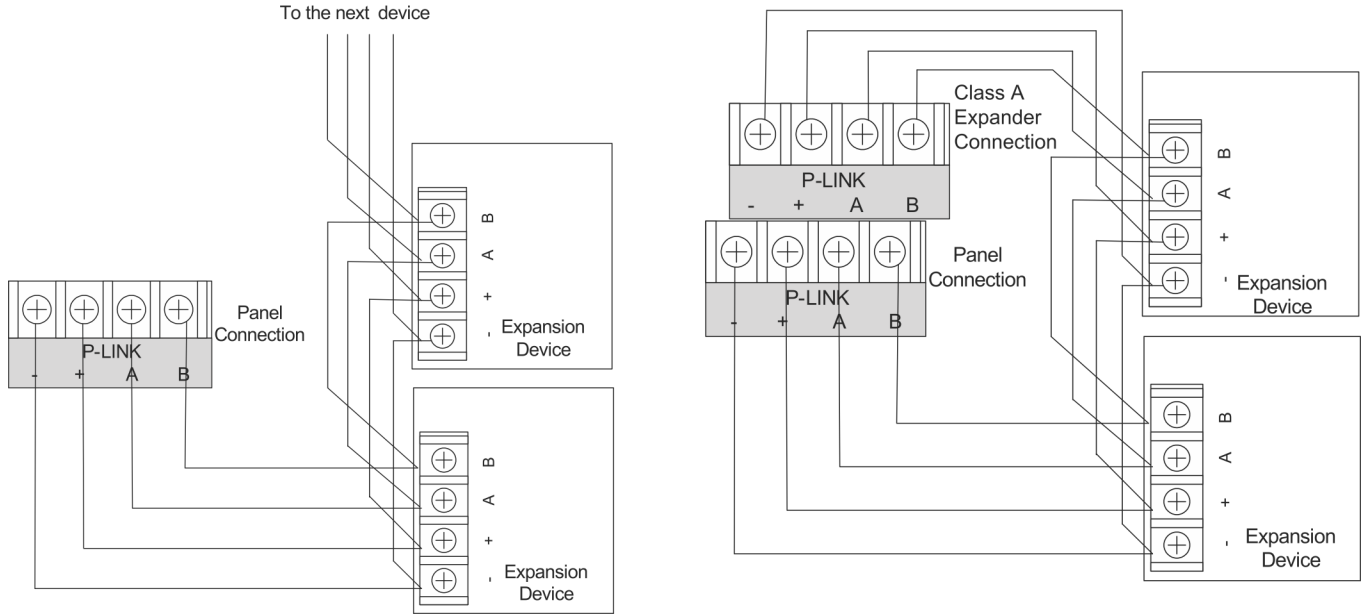
Figure 4. PSK-1000 P-Link Wiring Class A and Class B
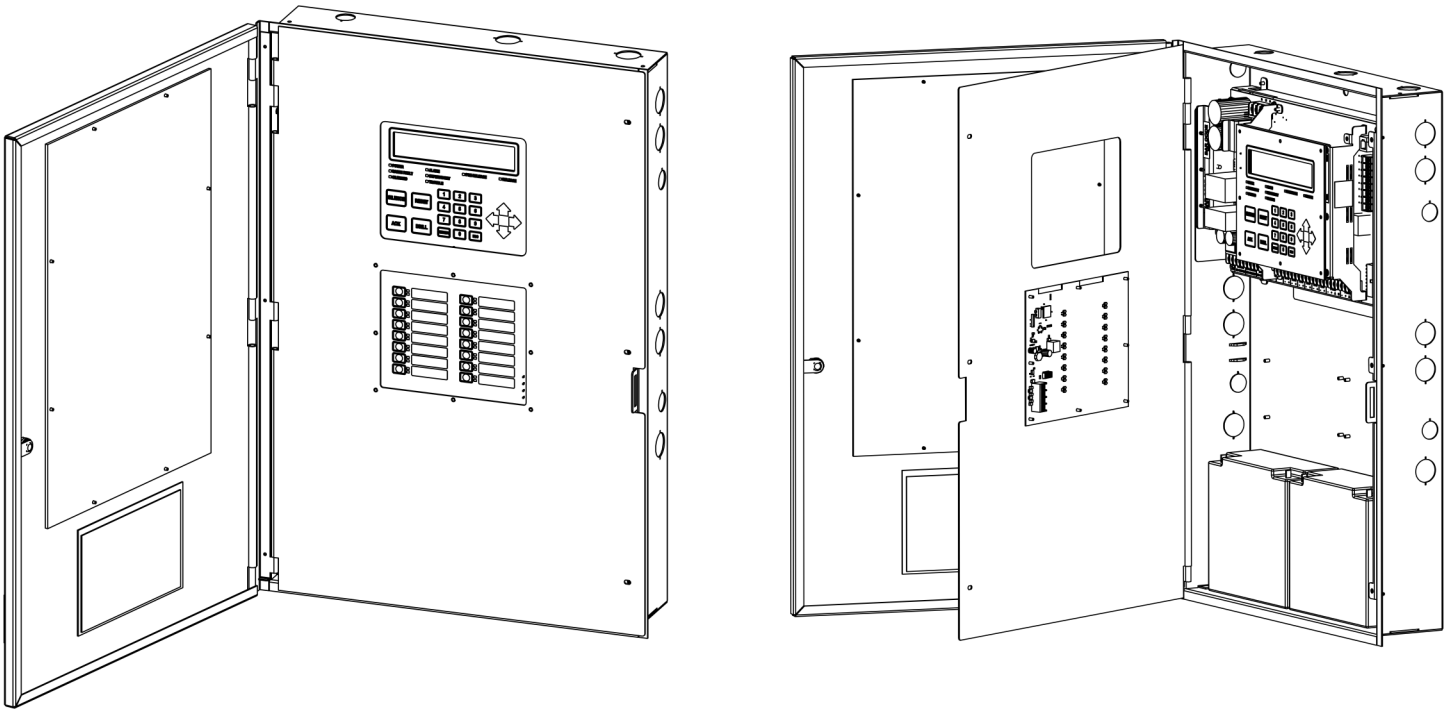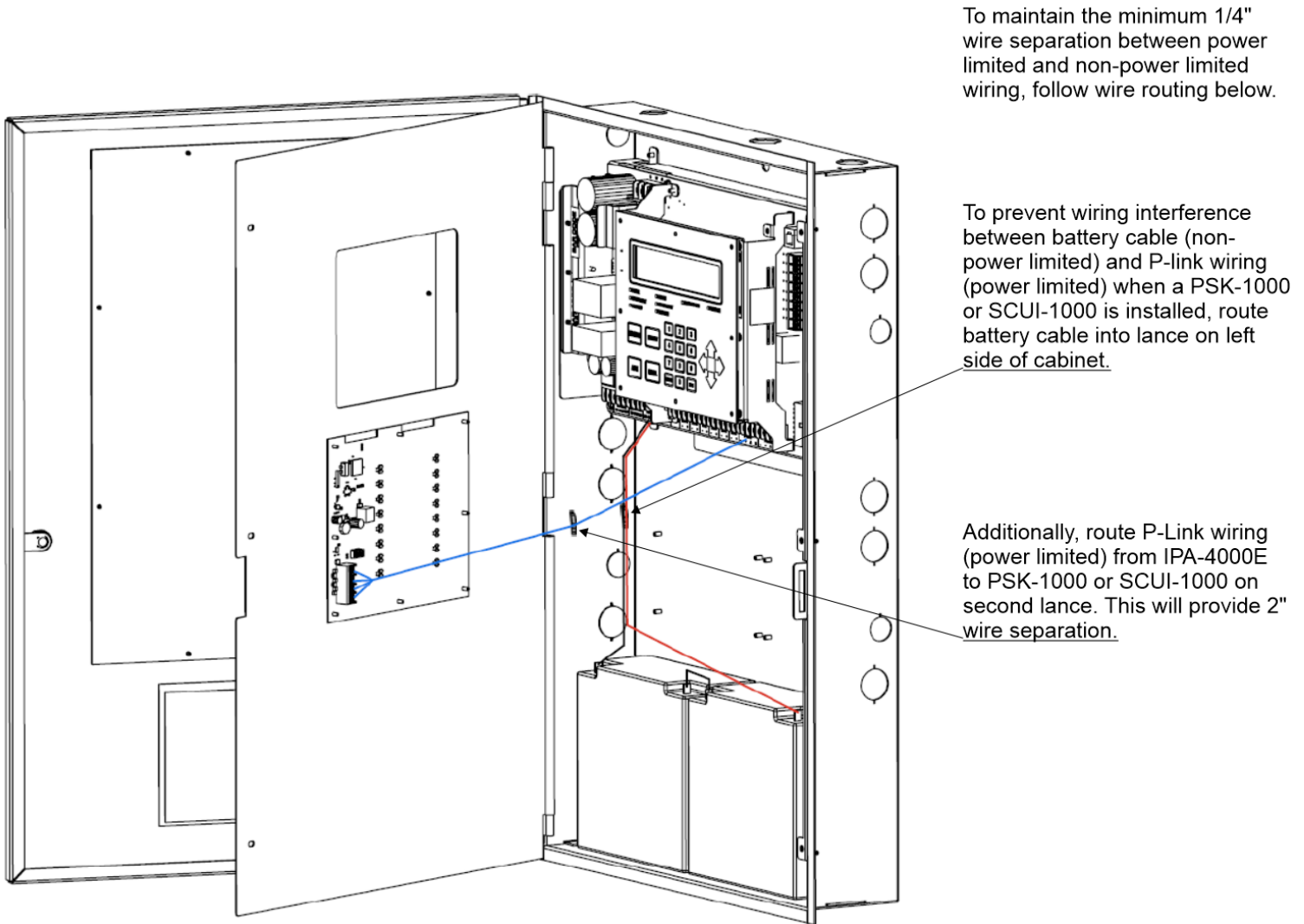

Figure 5. PSK-1000 Installed in IPA-4000E or AFC-1000E

Figure 6. Wire Routing

To maintain the minimum 1/4" wire separation between power limited and non-power limited wiring, follow wire routing below.

To prevent wiring interference between battery cable (non-power limited) and P-link wiring (power limited) when a PSK-1000 or SCUI-1000 is installed, route battery cable into lance on left side of cabinet.

Additionally, route P-Link wiring (power limited) from IPA-4000E to PSK-1000 or SCUI-1000 on second lance. This will provide 2" wire separation.

5. Notes

- 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.

1/4 inch

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.