

# Installation Manual: SCUI-1000 Smoke Control User Interface

## NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the SCUI-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 SCUI-1000, smoke control user interface, provides 4 dedicated smoke control zones and 2 programmable push buttons to manually control zones. Each dedicated smoke control zone has 3 push buttons: Open/On, Close/Off and Auto. It is enclosed in a sheet metal enclosure and has a lock securing the push buttons. The SCUI-1000 is a P-Link device and communicates with the control panel via the 4-wire RS-485 connection. Each push button has a corresponding LED for zone status.

Open/On - In standby, the LED is off and when activated the LED will illuminate green.

Close/Off - In standby, the LED is off and when activated the LED will illuminate red.

Normal - In standby, the Normal LED is white.

Fault - The Fault LED will illuminate amber during a trouble condition.

The SCUI-1000B, circuit board only, may be mounted in the IPA-4000E panel to offer integrated solution. The IPA-4000E can house one SCUI-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.

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

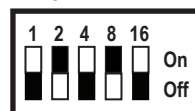
Note: Each "gray" box indicates that the dip switch is "On," and each "white" box indicates "Off."

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

## INSTALLATION MANUAL: SCUI-1000

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.

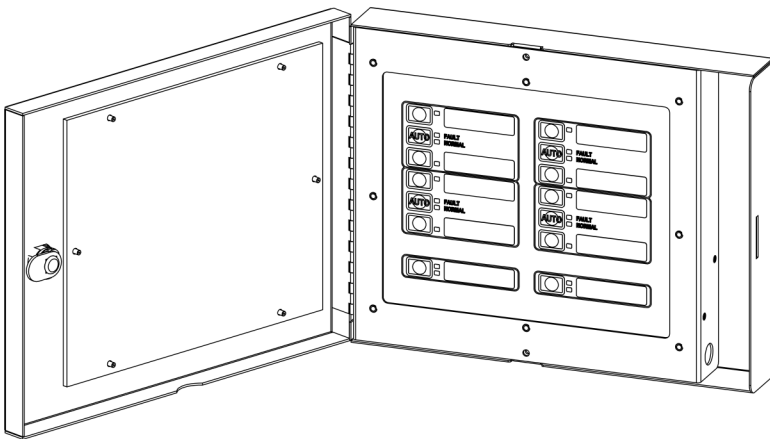
### 3. Technical Specifications

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

Figure 3. SCUI-1000 Connections  
Front



Back

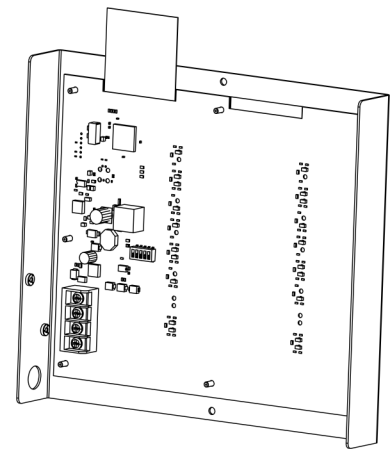


Figure 4. SCUI-1000 P-Link Wiring Class A and Class B

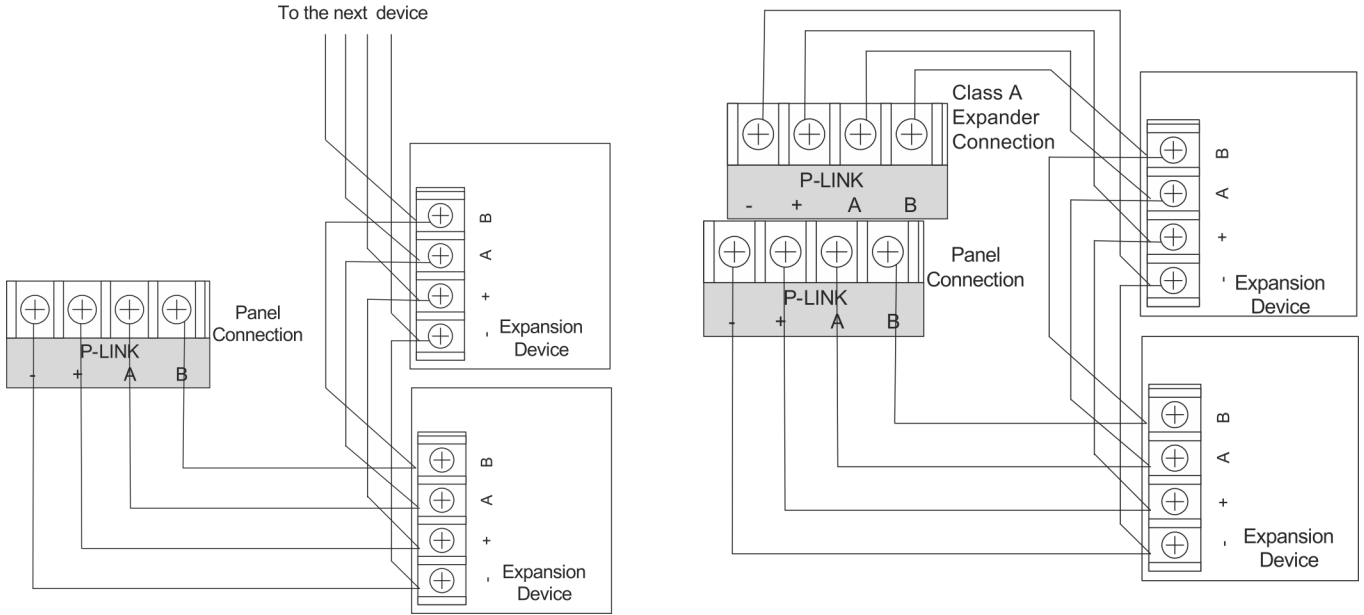


Figure 5. SCUI-1000 Installed in IPA-4000E

The SCUI-1000, circuit board only, may be mounted in the IPA-4000E panel to offer integrated solution using part number 3993141. The IPA-4000E can house one SCUI-1000 in the panel.

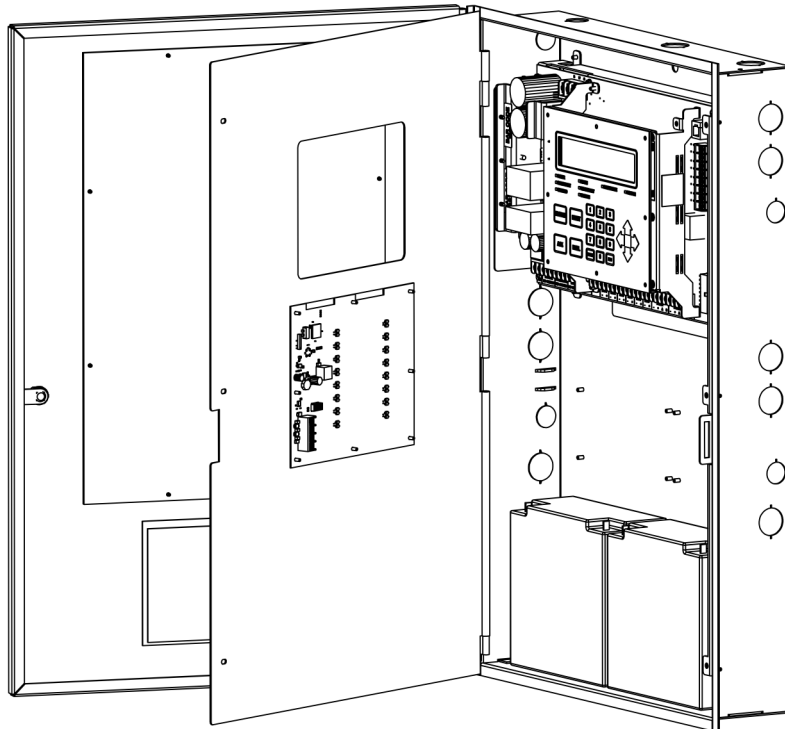
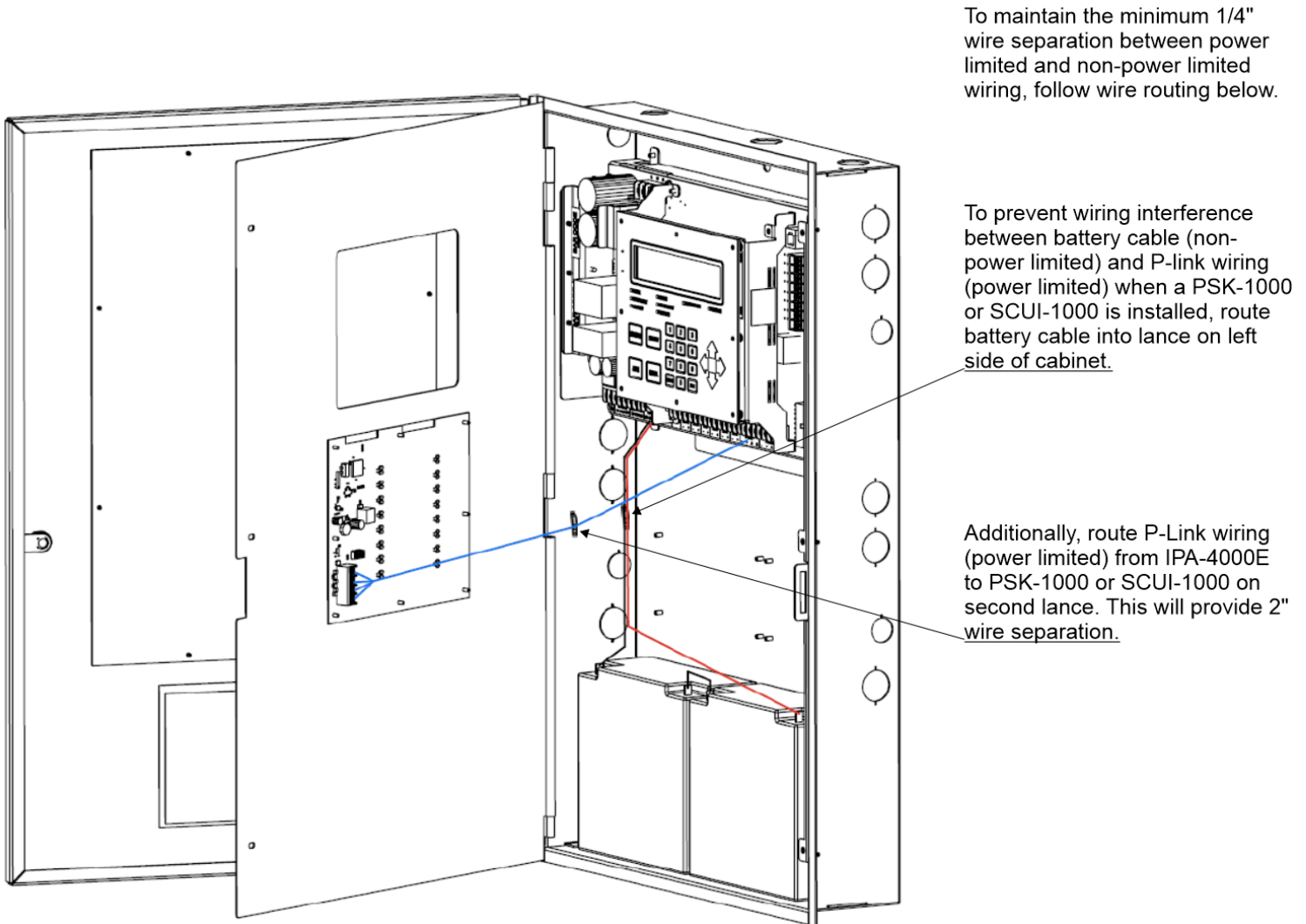
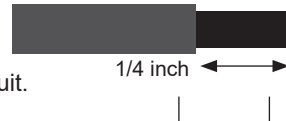


Figure 6. Wiring Routing



## 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.



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.