SAFETECH™
INTERNATIONAL, INC.

IPB-3

DATA SHEET

DS-IPB3-01B

Description

The SAFE**TECH**™ **IPB-3** In-Line Power Booster/24VDC Power Supply is a 3-Amp filtered, regulated power supply with 2 solid-state drive indicating circuits programmable for continuous tone, 2 march times (60 & 102), temporal code, follow mode, and battery charger/supervision circuitry. This compact, filtered, regulated power supply is perfect to supply additional power required in many A.D.A. upgrade applications or as a converter / translator from a 12 volt control unit for use in powering any 24 VDC device.

The **IPB-3** Booster is power limited and operates with input from any 12 VDC (for use as a translator) or 24VDC control unit to provide up to 3 amps of 24 VDC power. The **IPB-3** is built to UL 864 specifications and will monitor for AC power, low battery, and ground fault conditions.

Operation

The **IPB-3** provides an uninterrupted path from the panel to the end-of-line device (EOL) when in the supervisory mode, maintaining normal panel supervision. The booster supervises the drives and auxiliary relays, and automatically transfers to an internal battery backed up power supply on AC power fail.

Because the system sets in-line, there is practically no limit to the number of boosters that may be used in a Class Y indicating loop. Trouble conditions are transmitted over the existing bell circuit loop, and are annunciated at the booster by a trouble sounder, with silence. A fault condition within the **IPB-3** will be annunciated by the loop supervision circuitry of the host panel and locally at the affected power booster.

The **IPB-3** requires local AC power at each unit and requires two 12V, 4AH batteries in series for 24 hr backup operation.
(7 AH batteries for 60 hr backup.)

Supervision

The unit is completely supervised by the fire panel but is transparent in the supervision of any polarized device. A fault condition will open the bell loop during standby and cause a trouble signal back to the host panel, except when in alarm. If the booster suffers complete power failure, (AC and DC) it will drop completely out of the loop.

Cabinet Size
14.5" W x 14" H x 3.25" D

AC Input
Input Voltage: 120 VAC, 60 Hz, Single Phase,
or 220 VAC, 50 Hz, Single Phase.
Circuit breaker protected.

Output
24.3 VDC regulated, filtered
3 Amp
Power Limited
Reverse polarity protection on battery input.

Fault Detection
Low / No AC Blown Battery Fuse
Low / No Battery Ground Fault
Opens and shorts on indicating outputs

Visual Indicators
AC Power
Low Battery, Ground Fault
Bell1 / Bell 2 Trouble

Input Activation Requirement
Alarm input: 9mA @ 8 VDC to 40mA @ 30 VDC

Wiring Diagram

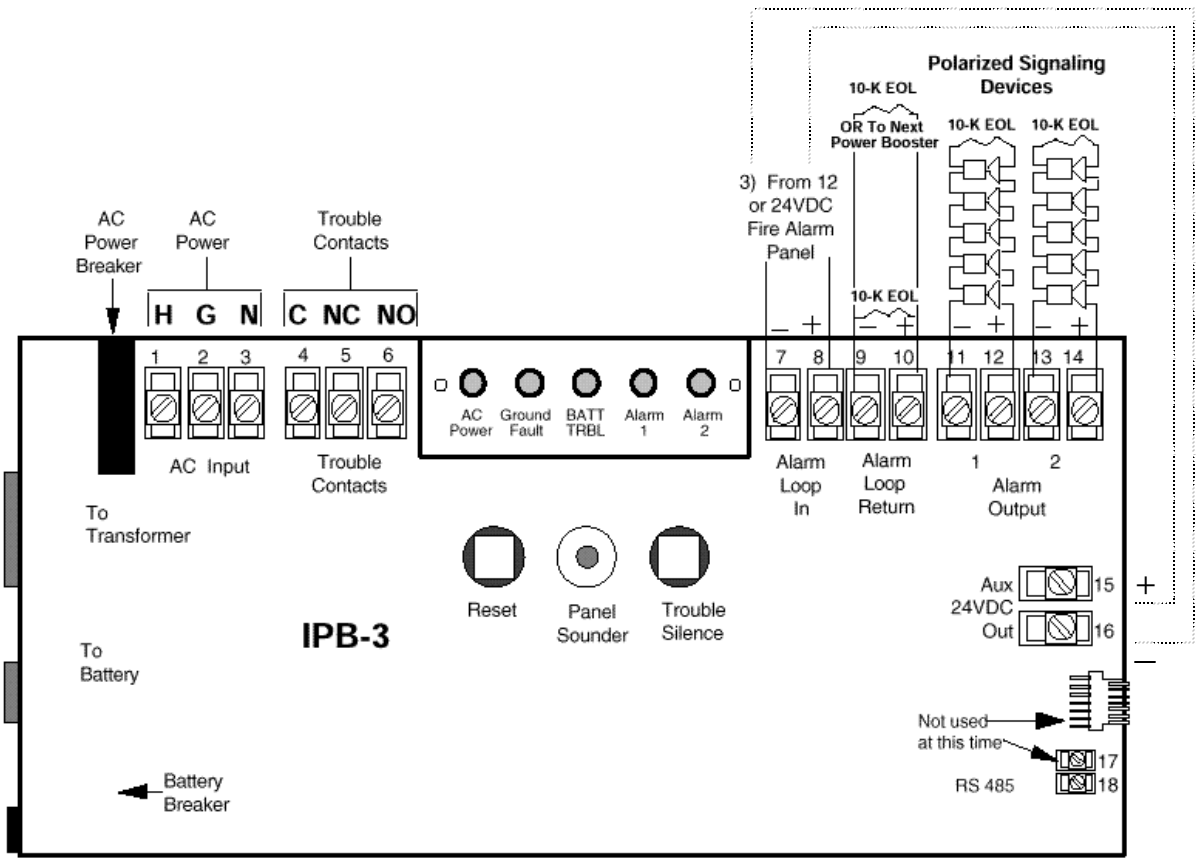

FIG I-2

NOTES

1. Contacts are shown with the coil de-energized. When the Booster is powered up, the coil will energize. A trouble condition will de-energize the coil.

2. The trouble contacts are auxiliary and may be used at your discretion. (DO NOT EXCEED 10 Amp RELAY RATING!)

3. Accepts Input Voltage range from 9 to 27 VDC.

4. To supply a continuous 24 VDC (terminals 15 & 16) to the Alarm Loop In (terminals 7 & 8). Always use an End of Line relay to supervise the 24 VDC. No 10K EOL resistor is required when the system is used in this manner.

Battery Backup Requirements

24 hour w/ 10 minutes in Alarm:4 AH
60 Hour w/ 10 minutes in Alarm:7 AH

UL LISTED