INSTALLATION MANUAL: LOC-1000 LOCAL OPERATOR CONSOLE

NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the LOC-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 LOC-1000 is a local operator console which is utilized to locally control the system, generate live voice and ECS. The LOC-1000 communicates in conjunction with the IPA-4000V using a RS-485 connection via P-Link. It also provides common indication of Alarms, Supervisory, Trouble and other system status and control functions. A maximum of thirty-one (31) LOC-1000 can be employed.

The LOC-1000 is equipped with three (3) modules ; LOC-RA6500R, SB-8 and VM-1000.

The LOC-RA6500R is a remote annunciator that provides common indication for Alarms, Supervisory, Trouble and other system status and control functions. The board connects in conjunction with the IPA-4000V using a 4-wire RS-485 connection via P-Link. Alternatively, the LOC-RA6500R can communicate and receive power from a PSN-1000. The LOC-1000 is equipped with a bracket to securely mount an optional PSN-1000 power supply.

The SB-8 is the user interface for ECS control and events. It provides 8 programmable buttons, an All Call button and an ECS Reset and Control button. The SB-8 also includes LED indicators for Ready to Page, Trouble, Control Requested, Remotely Controlled and Locally Controlled. Each of the 8 programmable buttons have two corresponding LEDs to indicate activity and trouble conditions.

The VM-1000 is the voice module that generates live voice and ECS to remote amplifiers. The VM-1000 connects to the LOC-RA6500R using a 4-wire RS-485 connection via P-Link.

2. SETTING THE ADDRESS

The LOC-RA6500R and VM-1000 address is set by a five (5) position dip switch, which is used to program the device address ranging from one (1) to thirty-one (31). NOTE - LOC-RA6500R and VM-1000 devices will not have the same address.

FIGURE 1. DIP SWITCH SETTINGS TABLE (ADDRESSES 1–31)

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

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.

3. TECHNICAL SPECIFICATIONS

Standby Current	77 mA
Alarm Current	107 mA
Maximum Wire Length	6500 FT
Maximum Number of LOC-1000	31
Wire Gauge	14AWG – 22AWG
Operating Temperature Range	32° to 120° F (0° to 49°C)
Operating Humidity Range	10% to 93% (non-condensing)

4. INSTALLATION

FIGURE 3. LOC-1000 WIRING CONNECTIONS

(back of LOC-RA6500R)

(front of LOC-RA6500R)

In from previous P-Link Device or PSN-1000

SB-8 Connection

ID LABEL

MAC

In from previous V-Link 1 (IPA-4000V, SCA, DCA or LOC-1000)

In from previous V-Link 2 (IPA-4000V, DCA or LOC-1000)

To P-Link Devices
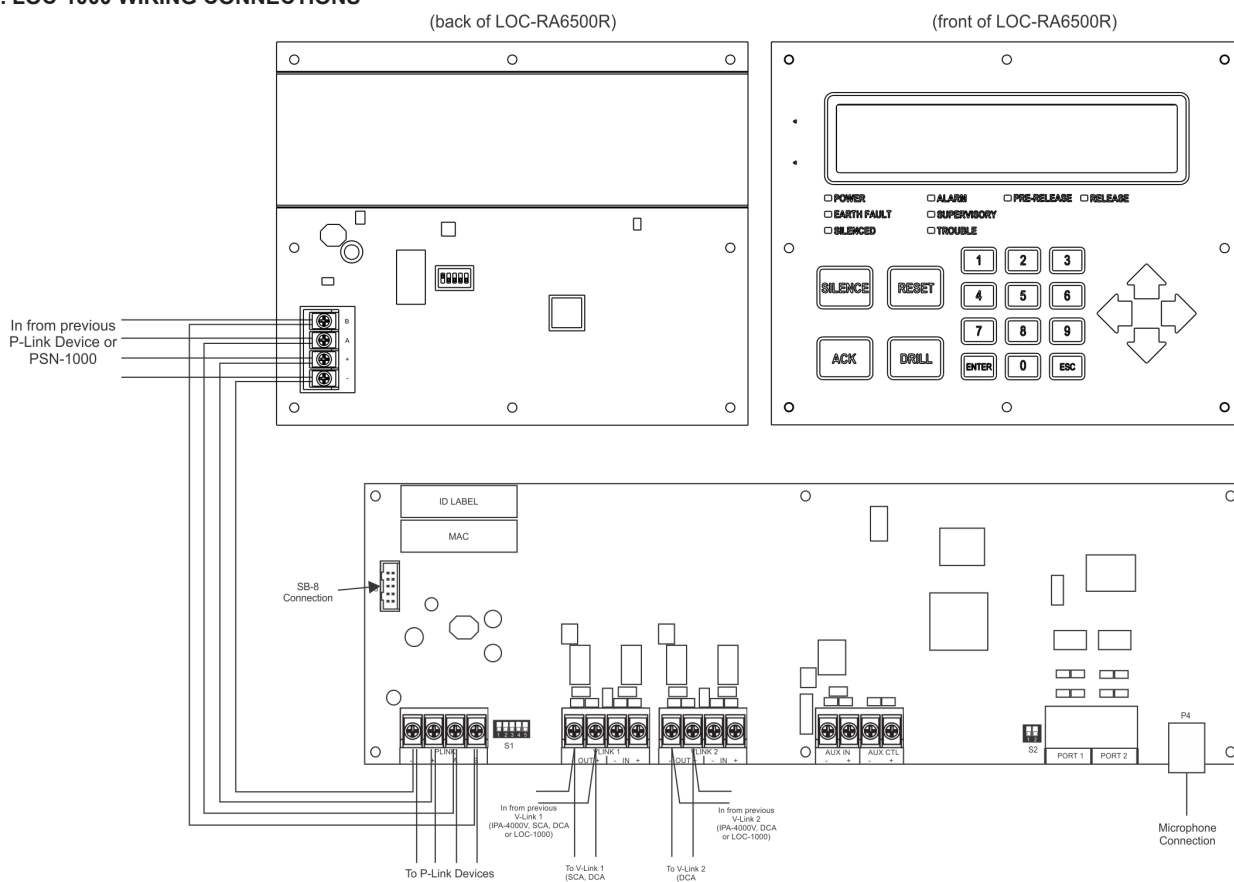
To V-Link 1 (SCA, DCA)

To V-Link 2 (DCA)

Microphone Connection
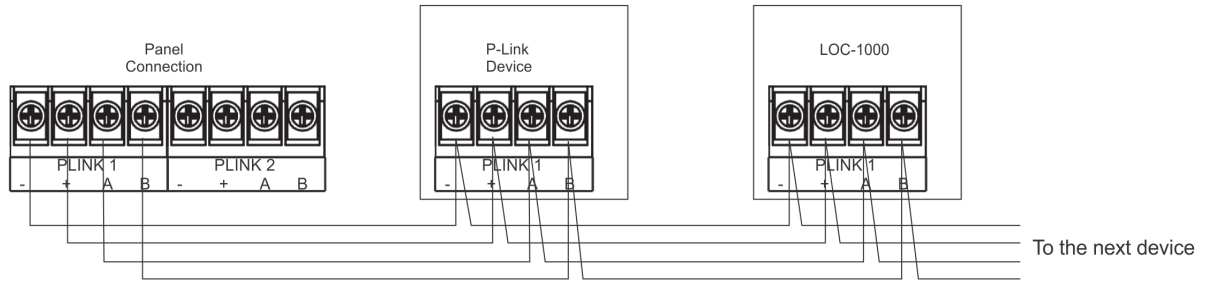
FIGURE 4. P-LINK CLASS B WIRING

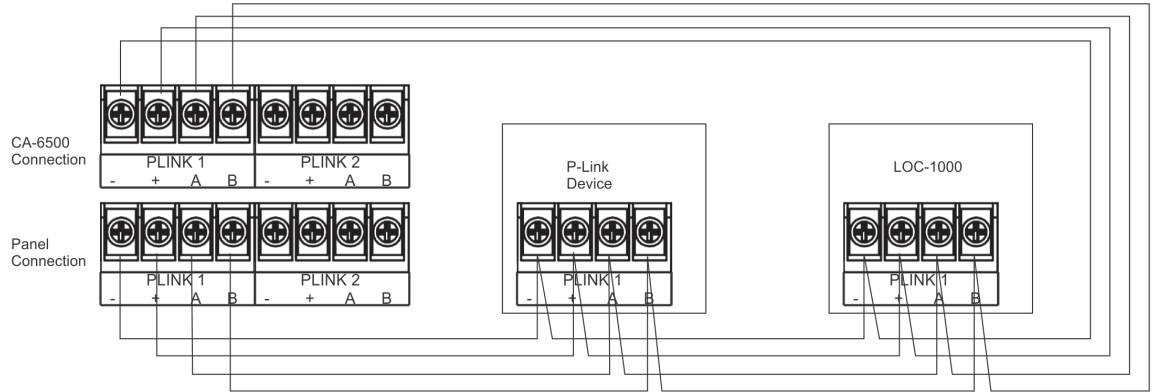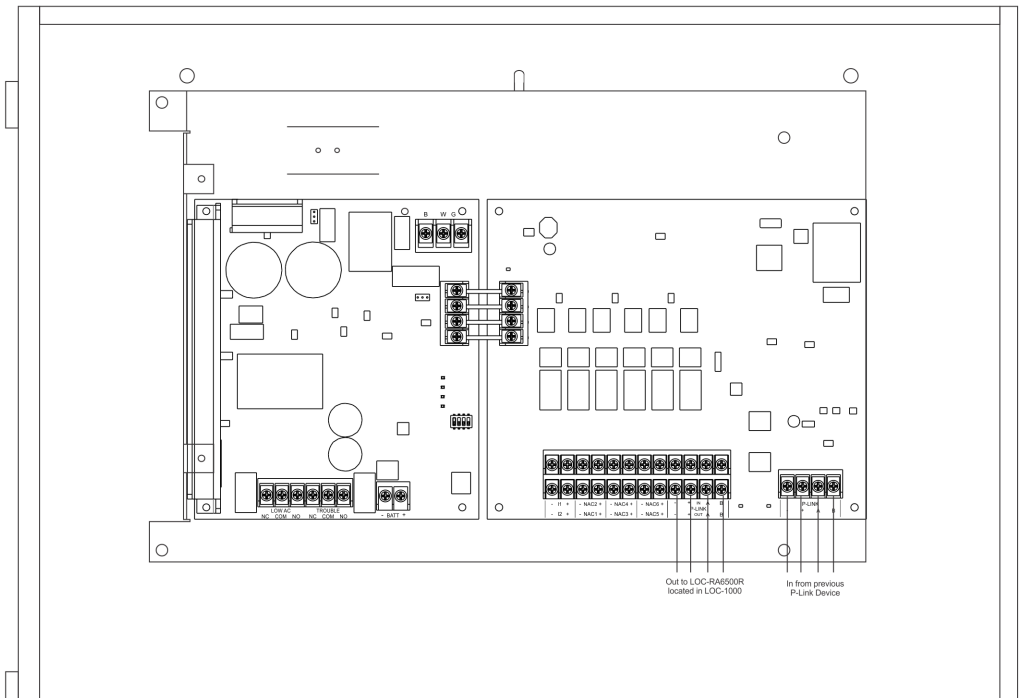**FIGURE 5. P-LINK CLASS A WITING**

FIGURE 6. OPTIONAL PSN-1000 INSTALLATION

A LOC-PSN1000 can be mounted in the upper portion of the LOC-1000 cabinet to provide additional power. The LOC-PSN1000 is an intelligent 10 amp power supply and P-Link repeater. Reference the PSN-1000(E) manual for additional technical and operational information,

ECS Reset   When the RESET button is pressed, all active ECS events will relinquish.

CTRL   When the CTRL button is pressed, this allows operator consoles to request control of the system when a remote operator console is in use.

Control Requested   A steady amber LED indicates a LOC-1000 is requesting control of the system.

Remotely Controlled   A steady amber LED indicates a remote operating console is currently in control.

Locally Controlled   A steady red LED indicates the local operating console is currently in control.

FOR SERVICE, CONTACT:

NAME: _____

COMPANY: _____

ADDRESS: _____

TELEPHONE: _____

FRAME AND DISPLAY INSTRUCTIONS ADJACENT TO
THE FIRE ALARM PANEL.
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