

by Honeywell

## Description

The Gamewell-FCI, INX Intelligent Network Transponder serves as the point of distribution for the system's audio and fire fighter telephone risers. It is a component of the following systems.

- E3 Series® Expandable Emergency Evacuation System
- E3 Series Combined Fire and Mass Notification System
- E3 Series Broadband Audio Evacuation System

The INX occupies a single node on the E3 Broadband network and is connected by a single pair of unshielded, twisted wires, fiber-optic cable or any combination of the two. Each E3 Broadband node can be spaced on the network up to a maximum distance of 3,000 feet (914.4 m) or up to an 8 dB loss using a fiber-optic cable. Built-in isolation at each node permits Style 4, Style 6, and Style 7 network configurations.

The E3 Broadband Audio Evacuation System is a peer-to-peer, self-regenerating, token ring network comprised of up to 64 individual nodes. In addition, the Addressable Node Expander (ANX) board expands the network to 122 nodes.

The E3 Broadband employs proven technology and extends it to accomplish emergency voice evacuation, 2-way fire fighter communications, and building control applications. It is unique in the industry since it requires only a single pair of wires or fiber-optic cable connections between nodes to convey all fire alarm, digital voice, fire fighter communications, paging, and building control signals. This system provides a 16 message capacity with up to a 3 minute duration per INX. Messages are easily field-configurable with a laptop computer

A typical INX assembly consists of the following:

- an Intelligent Network Interface-Voice Gateway (INI-VGX) module
- a PM-9/PM-9G power supply
- up to 4 AM-50 Series amplifiers including a minimum of one backup amplifier

It is enclosed in a compact 19" enclosure capable of accommodating up to 12 A/H size batteries. The modular approach of the E3 Broadband greatly simplifies the design and the installation and allows the complete flexibility in retrofit or add-on situations. This system is ideal for a wide range of complex system applications including high-rise or campus installations.

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## Intelligent Network Transponder



INX

## Features

- IBC Seismic Certified
- Listed under UL® Standard 864, 9th Edition.
- Listed under UL Standard UL2572 for Mass Notification.
- Offers all communication signals and control-by-event sequences over two wires or fiber-optic cable including: audio evacuation, voice paging, fire fighter intercom, and building control signals.
- Integrates with INCC command centers and additional INX transponders to create a complete audio evacuation system with up to 122 nodes.
- Distributed architecture, including Style 7 wiring configurations, allow system components to continue normal operation with NO loss of function during single line fault conditions.
- Uses state-of-the-art digital signal processor (DSP) technology for efficient audio compression and filtering.
- Software-programmable multi-channel digital audio applications.
- One Style 4 signaling line circuit (SLC) supporting up to 32 addressable speaker circuits (AOM-2SF used for single channel circuits and 16 addressable phones circuits AOM-TELF).
- Up to 150 watts of audio power provided by the AM-50 Series amplifiers with an 50 watts of standby amplifier enclosed in a single, compact wall-mounted cabinet.
- Each AM-50 Series amplifier provides two individually activated speaker circuits supplying 50 watts total.

SIGNALING



FM

MEA  
Approved  
FDNY:

S1869 3017416 COA #-217-03-E



City of  
Chicago  
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DENVER  
Approved

7165-1703:0125 - Class 1  
7170-1703:0126 - Class 2  
High Rise



Reference Certificate

of Compliance

VMA-45894-02C

(Revision 1)



## GAMEWELL-FCI

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Specifications are for information only, are not intended for installation purposes, and are subject to change without notice. No responsibility is assumed by Gamewell-FCI for their use.

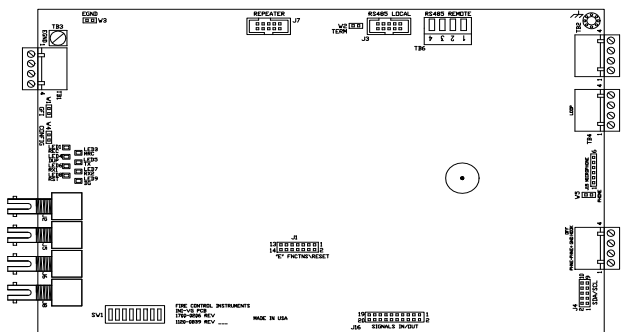


Figure 1 INI-VGX

### INI-VGX

The INI-VGX is a multi-function module which incorporates the following:

- Network interface using twisted, unshielded wire or fiber-optic cable.
- Fully digital message generator.
- One signaling line circuit for local peripheral devices.
- Local fire fighter phone riser.

It occupies a single DIP switch selectable address on the network and provides termination points for the network connection using either a pair of twisted, non-shielded wire (12 AWG max.) or fiber-optic cable.

The INI-VGX uses advanced Digital Signal Processing (DSP) technology for audio compression and filtering allowing E3 Broadband to produce the clearest audio possible. Background noise is automatically filtered during voice paging and fire fighter communications which increase audibility and eliminates the need for the Push-to-Talk devices.

The INI-VGX can accommodate up to 16 different messages with a total combined duration of three minutes. Each message can be field installed via a laptop computer and the messages can be in the form of a voice message or an evacuation tone. The INI-VGX provides a fire fighter phone riser that would connect to phone jacks or warden stations through AOM-TELF modules.

The INI-VGX provides one Signaling Line Circuit (SLC) to control and supervise Addressable Output Modules (AOM) serving as speaker circuits and fire fighter telephone circuits. The INI-VGX SLC can support up to 32 speaker circuits using the AOM-2SF for single channel applications. In addition, each INI-VGX SLC can support up to 16 fire fighter intercom circuits using the AOM-TELF.

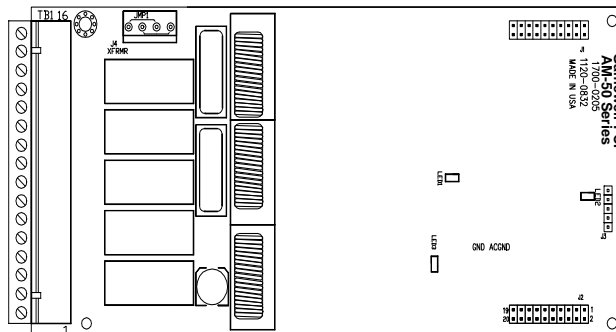


Figure 2 AM-50 Series Amplifiers

### AM-50 Series Amplifiers

The AM-50 Series amplifiers offer 2 types of AM-50 Series amplifiers:

- AM-50-25 amplifier produces a 25V<sub>RMS</sub> audio output
- AM-50-70 amplifier produces a 70.7V<sub>RMS</sub> audio output

The AM-50 Series amplifiers are a component of the following systems.

- E3 Series, Expandable Emergency Evacuation System
- E3 Series Combined Fire and Mass Notification System
- E3 Broadband Audio Evacuation System

Both AM-50 Series amplifiers produce 50 watt, digital, switching power. As many as four AM-50 Series amplifier modules can be installed in each INX CAB-B cabinet and are supervised and controlled by an INI-VGX Voice Gateway.

Each AM-50 Series amplifier provides two speaker circuits that can be wired Style Y (Class "B") or Style Z (Class "A"). The terminal connections can accommodate up to 12 AWG, twisted-pair, shielded wire. Both speaker circuits can produce a combined 50 watt power that can be divided between the two integral Class A/B speaker circuits. The 2 speaker circuits may be individually activated and supervised by an INI-VGX Voice Gateway.

The AM-50 Series amplifiers may be installed in an INX CAB-B cabinet or an INCC command center using the expander plates whenever the E3 control panel is used in conjunction with the E3 Series<sup>®</sup>, Expandable Emergency Evacuation System.

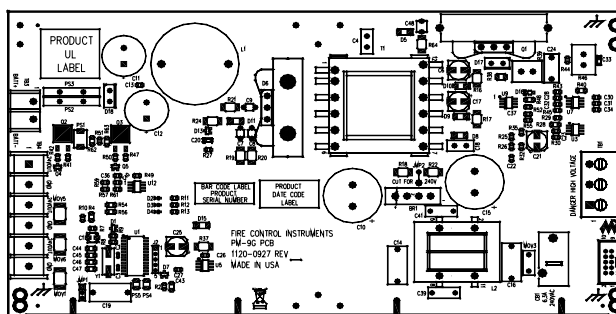


Figure 3 PM-9

### PM-9

The PM-9 is a switching power supply that provides 9 amps of filtered and regulated 24 VDC (nominal) to power the INX transponder. It has an internal battery charging circuit capable of accommodating up to 55 A/H batteries as well as an auxiliary continuous duty 24 VDC output @ 5 amps max.

## GAMEWELL-FCI

## Description (Continued)

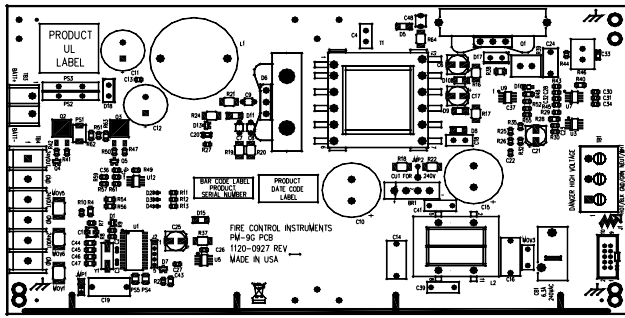


Figure 4 PM-9G

### PM-9G

The PM-9G is a switching power supply that provides 9 amps of filtered and regulated 24 VDC (nominal) to power the INX transponder. It has an internal battery charging circuit capable of accommodating up to 55 A/H batteries as well as an auxiliary continuous duty 24 VDC output @ 5 amps max.

## Specifications

### Description

#### PM-9G

**Input Voltage:** 240 VAC @ 50/60 Hz  
**Input Current:** 2.4 amps max. @ 240 VAC, 50/60 Hz  
**Output Voltage:** 24 VDC FWR  
**Output Current:** 9 amperes Alarm max. continuous  
**Output Current:** 5 amperes max. continuous Standby (when the PM-9G is used with the ILI-E3 or the ILI95-E3 Series, see Note 1).  
**Output Current:** 4 amperes max. continuous Standby (when the PM-9G is used with any AM-50 Series amplifier, see Note 2).

#### Operating

**Temperature:** 32° to 120° F (0° to 49° C)

#### Relative

**Humidity:** 0 to 93%, non-condensing at 90° F (32° C)

#### Supervised

#### Non Power-Limited:

**Note 1:** Continuous standby loads in excess of .560 Amps up to 5 Amps may require a Generator Backup or load shedding during an AC power failure.

**Note 2:** Continuous standby loads in excess of .560 Amps up to 4 Amps may require a Generator Backup or load shedding during an AC power failure.

#### PM-9

**Input Voltage:** 120 VAC, 60 Hz  
**Input Current:** 4.6 amps max. @ 120 VAC 60 Hz  
**Output Voltage:** 24 VDC FWR  
**Output Current:** 9 amperes Alarm max. continuous  
**Output Current:** 5 amperes max. continuous Standby (when the PM-9 is used with the ILI-E3 or the ILI95-E3 Series, see Note 1).

## Specifications (Continued)

### PM-9 (Continued)

**Output Current:** 5 amperes max. continuous Standby (when the PM-9 is used with any AM-50 Series amplifier) (See Note 2)

#### Operating

**Temperature:** 32° to 120° F (0° to 49° C)

#### Relative

**Humidity:** 0 to 93%, non-condensing at 90° F (32° C)

#### Supervised

#### Non Power-Limited

**Note 1:** Continuous standby loads in excess of .560 Amps up to 5 Amps may require a Generator Backup or load shedding during an AC power failure.

**Note 2:** Continuous standby loads in excess of .560 Amps up to 4 Amps may require a Generator Backup or load shedding during an AC power failure.

## Ordering Information

### Part Number Description

<b>INX</b>	Intelligent Network Transponder, (Distributed Voice Network Sub-Assembly Enclosure)
<b>INI-VGX</b>	Transponder Voice Gateway
<b>PM-9</b>	INX 9 ampere Power Supply
<b>PM-9G</b>	INX 9 ampere Power Supply
<b>AM-50 Series:</b>	
<b>AM-50-25</b>	INX 50 watt 25 V <sub>RMS</sub> audio amplifier
<b>AM-50-70</b>	INX 50 watt 70.7 V <sub>RMS</sub> audio amplifier
<b>Cabinets:</b>	
<b>INX-CAB</b>	Backbox with Black Door
<b>Dimensions:</b>	INX 19" W x 19" H x 4" D (48 x 48 x 10 cm)
<b>INX-CABR</b>	Backbox with Red Door
<b>Dimensions:</b>	INX 19" W x 19" H x 4" D (48 x 48 x 10 cm)
<b>INX-CAB-B</b>	Backbox with louvered door and INX-CAB-B Mounting Plate
<b>Dimensions:</b>	19 3/8" W x 19 3/8" H x 4.5" D (49 x 49 x 11 cm)

### Seismic Battery Bracket Kits

#### Part Number Description

90518	NetSOLO NS-INX 7 A/H Seismic Battery Bracket Kit
90519	E3 CAB-C (INX only) 12 A/H Seismic Battery Bracket Kit
	E3 CAB-D (INX only) 12 A/H Seismic Battery Bracket Kit
	NetSOLO NS-INX 12 A/H Seismic Battery Bracket Kit

For additional information on the Seismic Battery Brackets, refer to the following documents:

- Seismic Battery Bracket Installation Guide, P/N: 53839
- E3 Series Cabinets Data Sheet, P/N: 9020-0649

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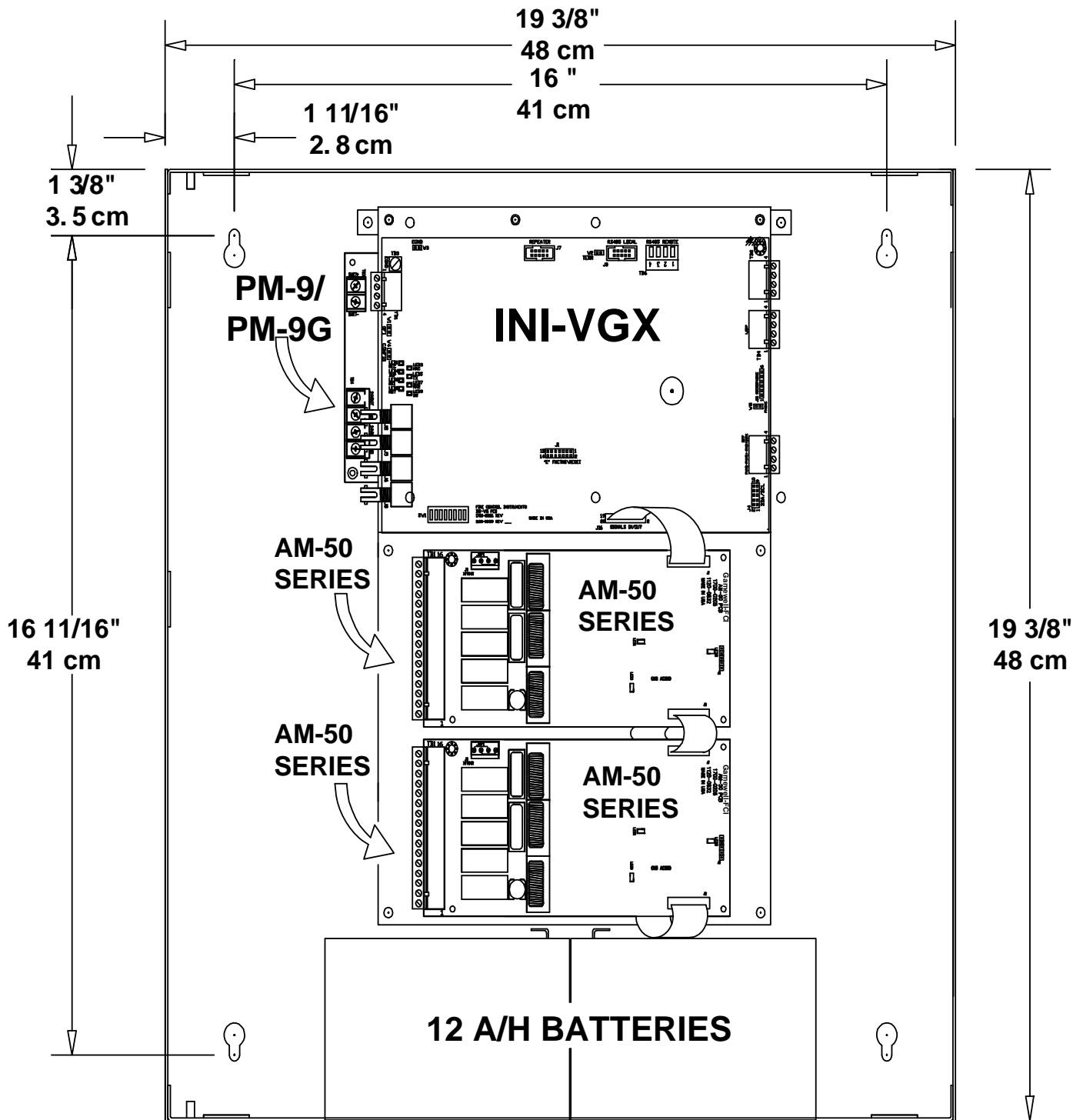


Figure 5 INX Dimensions