FIRE CONTROL INSTRUMENTS

by Honeywell

Intelligent Network Command Center

INCC

Description

The INCC Intelligent Network Command Center is a component of the E3 Series™ Expandable Emergency Evacuation and E3 Series™ Broadband Audio Evacuation System. The INCC Command Center serves as the point of interface between an operator and the system's audio evacuation, fire fighter intercom, and building control circuits. The INCC occupies a single node along the E3 Broadband network and is connected by a single pair of twisted, unshielded wire, fiber-optic cable or any combination of the two. Each E3 Broadband node can be spaced along the network a maximum distance of 3,000 feet (914.4 m) or up to an 8dB loss using fiber-optic cable. Built-in isolation at each node permits Style 4, Style 6, and Style 7 network configurations.
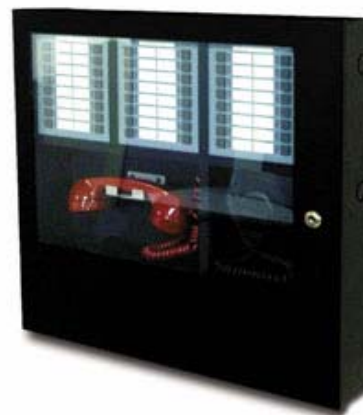
The E3 Broadband Audio Evacuation System is a peer-to-peer, self-regenerating, token ring network comprised of up to sixty-four (64), individual nodes. E3 Broadband employs proven technology and extends it to accomplish emergency voice evacuation, 2-way Fire Fighter communications, and building control applications. It is unique in the industry in requiring only a single pair of wires or a fiber-optic cable connection between nodes to convey all fire alarm, digital voice, fire fighter communications, paging, and building control signals.

A typical INCC assembly consists of an Intelligent Network Interface-Voice Gateway (INI-VGC) Module and one or more Addressable Switch Modules (ASM-16). INI-VGC. The INCC Command Center's INI-VGC module also provides connections for an optional emergency voice page microphone as well as a Fire Fighter telephone handset.

The INI-VGC is a fully digital voice/tone generator using state-of-the-art Digital Signal Processing (DSP) technology to produce the clearest, most audible signal possible. The INI-VGC provides an output to a local speaker for message verification and testing. It is ideal for a wide range of complex System Applications including high-rise or campus installations.

E3 Series™ is a trademark of Fire Control Instruments.

Features

- All communication signals and control-by-event sequences over twisted, unshielded pair of wires or fiber-optic cable including:
  - Audio Evacuation
  - Voice Paging
  - Fire Fighter Intercom
  - Elevator Control
  - Fan Control & Damper Shutdown
  - Door Closures
  - Fire Alarm and Control Devices
  - Horn/Strove Circuit Activation

- Distributed architecture, including Style 7 wiring configurations, allow system components to continue normal operation with NO loss of function during single line fault conditions.

- Integrates with INX transponders and additional INCC command centers to create a complete audio evacuation system with up to 64 nodes.

- Each INI-VGC supports up to sixteen (16), ASM-16 switch modules for a total of 256 switches.

- INI-VGC connects to a voice page microphone and fire fighter's handset.

- Redundant command centers with microphone and fire fighter's handset easily configured by adding additional INCCs.

- Advance Boolean logic-based programming such as AND, OR, NOT, NOR, time delay, and calendar functions configurable through computer programming.

- Advanced digital signal processor (DSP) technology for efficient audio compression and filtering. Uses network data transfer rate at 625K baud.

- Listed under UL Standard 864, 9th Edition.

An ISO 9001-2000 Company

SIGNALING

UL LISTED S1969

FM APPROVED 3017416

MEA Approved 217-03-E

06911-0694:257

City of Chicago Approved
• Class 1
• Class 2
• High Rise

City of DENVER Approved

ASM-16

Each Addressable Switch Module (ASM-16) has sixteen (16), push-button switches that can be programmed to serve any function the application demands. An ASM-16 switch can be programmed as a Speaker Circuit switch, Fire Fighter Phone switch, an Auxiliary Control switch using a bank of three (3), switches (one switch each for On-Off-Auto functions), or switches with custom defined functions (e.g. System Reset, System Silence, System Acknowledge, All-Call, Phone Patch, Lamp Test, Alarm Tone On, Manual Select, etc.). Each ASM-16 switch also has three (3), fully programmable status-indicating LEDs in Red, Yellow, and Green.

The INCC assembly is enclosed in one or more compact 19" wall-mounted enclosures. Its modular construction provides complete flexibility in system design. Each cabinet can contain the INI-VGC and up to six (6), ASM-16 modules. If more ASM-16 modules are required, they may be mounted in additional INCC cabinets. As many as six (6), ASM-16 modules can fit in the INCC cabinet. If a Microphone module is required, it would take the place of one ASM-16 position. A Fire Fighter handset would take the place of two ASM-16 positions. An INI-VGC can support as many as sixteen (16), ASM-16s for a total of 256 completely programmable switches.

The INCC operates on 24 VDC that can be sourced from the non-resettable auxiliary output of its associated power supply such as the PM-9.

A complete E3 Audio Evacuation System can be assembled from three (3) different panels: one or more E3 Series™ fire alarm control panels, one or more INCC Audio Evacuation Command Centers, and one or more INX transponders. This modular approach greatly simplifies the design and installation process and can be configured to meet the exact needs of the project.
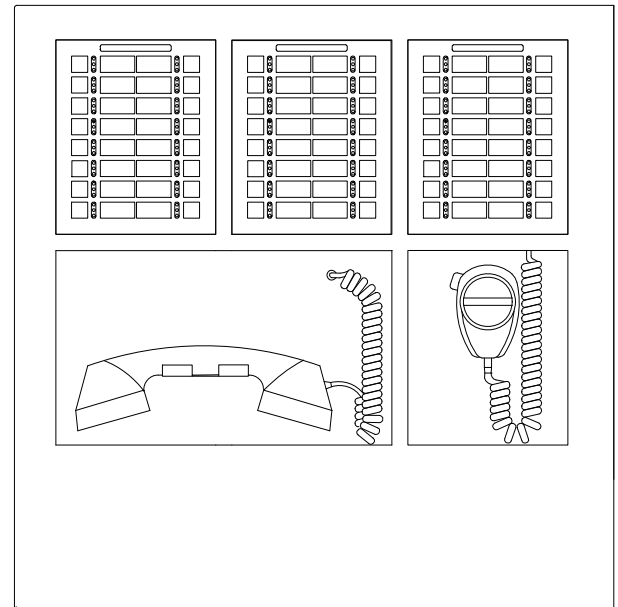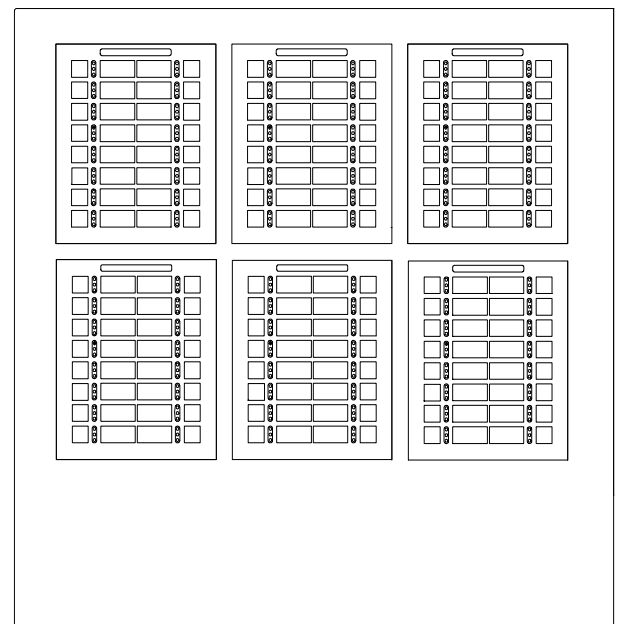

Figure 1 INCC with MIC and Handset
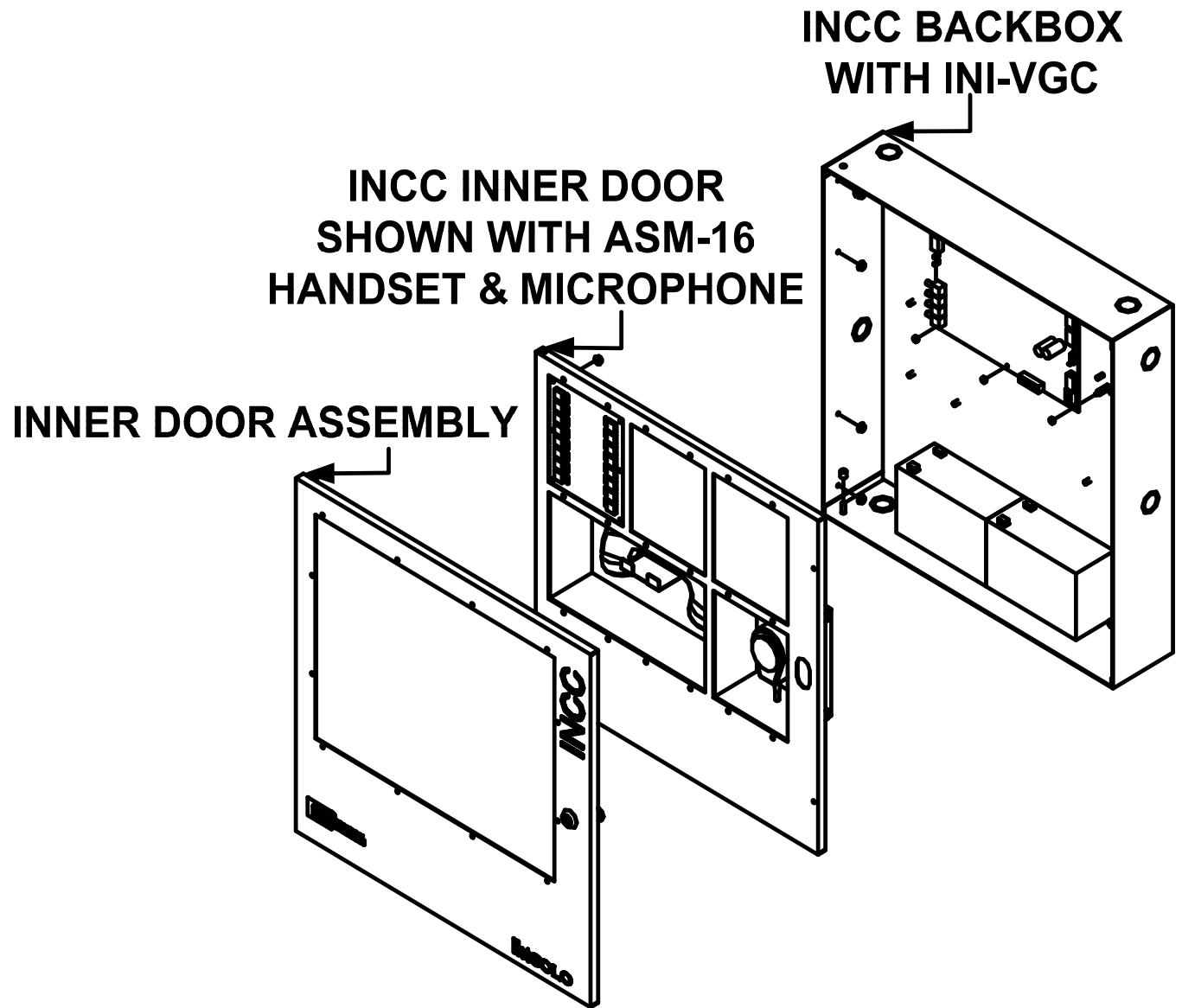

Figure 2 INCC with Six (6) ASM-16s

**INCC BACKBOX
WITH INI-VGC**

**INCC INNER DOOR
SHOWN WITH ASM-16
HANDSET & MICROPHONE**

INNER DOOR ASSEMBLY

Figure 3 INCC Assembly

Specifications

Description
INI-VGC

Operating Voltage:	24 VDC (nominal)
Operating Current:	0.150 amp. supervisory and alarm
Operating Temperature:	32˚ to 120˚ F (0˚ to 49˚ C)
Relative Humidity:	0 to 93% (non-condensing)
Protocol	Asynchronous with half-duplex data flow
Speed	RS-232 up to 64 KBps RS-485 up to 128 KBps
St connectors	Up to 200 microns (multimode), optimized for 62.5/125 microns

ASM-16

Operating Voltage:	24 VDC (nominal)
Operating Current:	0.005 amp supervisory 0.005 amp alarm plus 0.003 amp per LED activated (0.195 amp max.)
Operating Temperature:	32˚ to 120˚ F (0 to 49˚ C)
Relative Humidity:	0 to 93% (non-condensing)

Ordering Information

Intelligent Network Command Center

INI-VGC	Command center voice gateway
ASM-16	Programmable switch module (occupies one single slot of inner door)
INCC-IDT	Inner door with one double slot for INCC=TEL fire fighter handset and 4 single slots
INCC-ID	Inner door with six (6), single slots
INCC-CAB	INCC backbox (black) with black outer door. 19" W x 19" H x 4" D (48 x 48 x 10 cm)
INCC-CABR	INCC backbox (black) with red outer door 19" W x 19" H x 4" D (48 x 48 x 10 cm)

Optional Accessories

INCC-TEL	Fire fighter telephone handset (requires INCC-IDT Inner Door)
INCC-MIC	Paging microphone module (occupies one single slot of Inner Door)
INCC-BP	Command center blank face plate (occupies one single slot of inner door)