



## ILI-S-E3

# Intelligent Loop Interface - Expansion Board Product Installation Document



#### **CAUTION 1: STATIC SENSITIVE EQUIPMENT**

THIS EQUIPMENT IS SENSITIVE TO STATIC ELECTRICITY. IT MAY BE DAMAGED IF NOT PROPERLY HANDLED. TRANSPORT AND STORE THIS UNIT IN A STATIC-SHIELDING BAG.

FAILURE TO OBSERVE THIS REQUIREMENT COULD CAUSE LATENT DAMAGE TO THE EQUIPMENT WHICH MIGHT NOT MANIFEST ITSELF UNTIL AFTER THE EQUIPMENT IS PLACED IN SERVICE.



#### **CAUTION 2: DISCONNECT ALL POWER**

REMOVE ALL SOURCES OF POWER BEFORE SERVICING, REMOVING OR INSTALLING ANY UNITS.

## **Section 1: Description**

The ILI-S-E3 (Intelligent Loop Interface-Expansion Board) is a supplementary signaling line circuit expander board. When the ILI-S-E3 is connected to the network, it is compatible with the following systems.

- E3 Series<sup>®</sup> Fire Alarm and Mass Notification System
  - E3 Series (Expandable Emergency Evacuation) System E3 Series Classic System

NOTE 1: The E3 Series nodes may be networked with the S3 Series System.

It is used in the E3 Series Broadband and the Autonomous Control Unit (ACU) for the Mass Notification System. The ILI-S-E3 provides the E3 Series control panel with two signaling line circuits and terminals for the connections to up to 159 detectors and 159 modules per SLC in the Velociti mode. In clip mode, each SLC supports 99 detectors and 98 modules. The ARCNET communication circuits are wired in a Class X configuration.



NOTE 2: Use the Signaling Line Circuit (SLC) devices for Fire and/or E3 Releasing applications.

The layout is similar to the ILI-MB-E3 with the exception that some components are omitted and a power supply is added. Figure 1.1 illustrates the ILI-S-E3 (First Generation) circuit board. Figure 1.2 illustrates the ILI-S-E3 (Second Generation) board.

#### **ILI-S-E3** (First Generation)



Figure 1.1 ILI-S-E3 (First Generation) Module

#### ILI-S-E3 (Second Generation)

E3 Series Broadband System



Figure 1.2 ILI-S-E3 (Second Generation) Module

E3 Series<sup>®</sup> is a registered trademark and CAMWorks™ is a trademark of Honeywell International Inc. ©2020 Copyright by Honeywell International, Inc. All rights reserved.

## 1.1 Mass Notification System (MNS)

The Gamewell-FCI, Mass Notification System (MNS) is a Combination In-Building Fire and Mass Notification System. It comprises the E3 Series Broadband Emergency Voice Evacuation and the E3 Series Broadband Networked Fire Alarm Systems. This design allows a wide range of configurations to form an integrated, distributed fire alarm system in combination with the audio evacuation for both Fire and Mass Notification functions as desired. The design also allows for its use as a dedicated standalone Mass Notification System without the fire alarm service. The network communication conveys all Fire Alarm and Mass Notification control functions, audio evacuation, voice paging, and fire fighter communications over a single pair of wires or fiber-optic cable. The modular design offers several configurations to accommodate the following audio components:

- Autonomous Control Unit (ACU), (Main Command Center)
- Local Operating Console (LOC), (Remote Command Center)
- E3 Series Broadband Voice Evacuation System

Table 1.1.1 lists the E3 Series sub-assemblies that can be used in the Gamewell-FCI, MNS (Mass Notification System).

| Autonomous Control Unit (ACU) Main<br>Command Center   | E3 LOC Remote Command Center   | E3 Broadband System<br>(Distributed System)  |
|--|--|--|
| AM-50 Series Amplifiers  | AOM-TELF/AOM-2SF   | AM-50 Series Amplifiers  |
| ANU-48 (Remote Annunciator)  | ASM-16 (Addressable Switch Module)   | ANU-48 (Remote Annunciator)  |
| ASM-16 (Addressable Switch Module)   | INI-VG Series<br>(First/Second/Third Generation)<br>(Intelligent Network Interface Voice<br>Gateway) | ASM-16 (Addressable Switch Module)   |
| ILI-MB-E3<br>(Intelligent Loop Interface-Main Board)   | INCC-MIC (Microphone)  | ILI-MB-E3<br>(Intelligent Loop Interface-Main Board)   |
| ILI-S-E3<br>(Intelligent Loop Interface-Expansion<br>Board)  | NGA (Network Graphic Annunciator)  | ILI-S-E3 (Intelligent Loop Interface-<br>Expansion Board)                                      |
| ILI95-MB-E3<br>(Intelligent Loop Interface-Main Board)   | INCC-TEL (Telephone)   | ILI95-MB-E3<br>(Intelligent Loop Interface-Main Board)   |
| ILI95-S-E3 (Intelligent Loop<br>Interface95-Expansion Board)   |  | ILI95-S-E3 (Intelligent Loop<br>Interface95-Expansion Board)                                   |
| INCC-MIC (Microphone)  |  | INCC-MIC (Microphone)  |
| INCC-TEL (Telephone)   |  | INCC-TEL (Telephone)   |
| INI-VG Series<br>(First/Second/Third Generation)<br>(Intelligent Network Interface Voice<br>Gateway) |  | INI-VGC<br>(First/Second/Third Generation)<br>(Intelligent Network Interface Voice<br>Gateway) |
| NGA (Network Graphic Annunciator)  |  | INI-VGX<br>(First/Second/Third Generation)<br>(Intelligent Network Interface Voice<br>Gateway) |
| PM-9/PM-9G (Power Supply)  |  | NGA (Network Graphic Annunciator)  |
| RPT-E3-UTP (Communication Circuit)   |  | PM-9/PM-9G (Power Supply)  |
|  |  | RPT-E3-UTP (Communication Circuit)   |
| Note: In the E3 Series, Mass Notification Sy   | ystem, the LCD-E3 Display panel is not used  | l  |

#### Table 1.1.1 E3 Series Modules Used in the MNS System

## 1.1.1 Mass Notification System - Documentation

The following MNS System information is available in the Gamewell-FCI, Mass Notification System (MNS) Installation/Operation Manual, Part Number:LS10013-000GF-E.

- System Configurations
- Class 2 Power-Limited Requirements
- System Operation

- Cabinets Installations
- Wiring

Testing/Maintenance

## **Section 2: Installation**

#### 2.1 Standards

This product is intended to be installed in accordance with the following standards.

#### **National Fire Protection Association**

AHJ Authority Having Jurisdiction
 NFPA 72 National Fire Alarm Code

• NFPA 70 National Electrical Code • NFPA 101 Life Safety Code

#### UL Standards UL 864 9th and 10th Edition

- Per the UL Continuing Certification Program, UL 864 9th edition fire alarm control equipment will retain certification after the roll-out of UL 10th edition (12/2/2018).
- Installations of UL 864 10th Edition certified equipment are permitted to use UL864 9th Edition certified equipment when approved by the local Authority Having Jurisdiction (AHJ).

For product compliance, refer to the UL/ULC listing cards located on the UL online certification directory. <a href="https://iq.ulprospector.com">https://iq.ulprospector.com</a>

#### Underwriters Laboratories® Standard

• UL-2572 MNS Mass Notification, Second Edition

#### 2.2 Installation Requirements

All components of the E3 Series<sup>®</sup> System should be installed per the following requirements:

- Installations are to be indoors only, in dry locations, protected from rain, water, and rapid changes in temperature that could cause condensation. Equipment must be securely mounted on rigid, permanent walls.
- Operating temperature shall not exceed the range of 32° to 120° F (0 to 49° C).
- Operating humidity not to exceed 93% non-condensing at 90° F (32° C).
- There should be adequate space around the installation to allow easy access for operation and servicing.
- All sub-assemblies and components are to be located in compliance with the local and the national codes.
- All installation field wiring shall be in compliance with the local, the national codes and the manufacturer's recommendations.
- Use the Architects and Engineering Specifications for detailed information on your facility's configuration.
- Installers must be Gamewell-FCI Factory Certified to program this product. For additional information on this product, contact the Gamewell-FCI Customer Support to schedule the Factory Certified Training.



#### NOTE: COLD WATER/EARTH GROUND STANDARD:

Per Article 760 of the National Electrical Code, the following terminal blocks must be connected to an Earth Ground connection:

- Terminal TB3-3 on the ILI-MB-E3/ILI95-MB-E3
- Terminal TB3-3 on the INI-VG Series (First/Second Generation)
- Terminal TB1-5 on the INI-VG Series (Third Generation)

Failure to make a proper earth ground connection from a metallic cold water pipe or driven ground rod to this terminal will result in loss of lightning protection, reduce the tolerance of the system to transients, and will adversely affect the operation of the system. Panel neutral or conduit ground is not acceptable; minimum wire size is 14 AWG.

## 2.3 Specifications

The following are the electrical specifications for the ILI-S-E3 sub-assembly.

**Operating Voltage:** 24 VDC (from PM-9/PM-9G power supply)

**Standby Current:** 0.118 amps **Alarm Current:** 0.119 amps

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

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

**Supervised** 

**Class 2 Power-Limited** 

## 2.4 ILI-S-E3 Installation Assembly Options

- 1. Remove the ILI-S-E3 from its static-shield bag, observing proper static protection measures.
- 2. Visually inspect the unit for damage.
- 3. Use the Hardware Kit provided with the unit.

The ILI-S-E3 sub-assembly can be installed in several types of configurations in the E3 Series cabinets.

To determine the ILI-S-E3 installation that you require, refer to the following documents:

- E3 Series Cabinets B, C, D, Retrofit, DR-C4/DR-D4 and EQ Cabinets Installation Instructions, P/N: LS10082-000GF-E
- E3 Series, Remote Annunciator Display and Retrofit Cabinets Installation Instructions, P/N: LS10083-000GF-E
- Mass Notification System (MNS) Installation/Operation Manual, P/N: LS10013-000GF-E

Table 2.4.1 lists the cabinet configurations that the ILI-S-E3 can be installed. To determine which configuration to install the ILI-S-E3 module, identify the System your facility uses. Then, locate the configuration in the Cabinet Assembly Options column. To locate the Section that describes how to install the ILI-S-E3 in the appropriate configuration, refer to the Installation Instructions column. For example, if your facility uses an E3 Series System, and your facility purchased the Cabinet C, E3-ILI-C Plate, refer to Section 2.4.1 for instructions on how to install the ILI-S-E3 to the Cabinet C, E3-ILI-C mounting plate.

| Cabinet Assembly Options  | Part Number                        | Cabinet Dimensions                                     | Installation Instructions (For installation instructions, refer to the Section listed below). |
|---|------------------------------------|--|---|
|   | E3 Series System                   | Installation Options                                   |   |
| Cabinet C, E3-ILI-C Plate<br>(RPT-E3-UPT Connected<br>to ILI-MB-E3/ILI95-MB-E3) | E3-ILI-CPLATE                      | 19 3/8"W x 30"H x 4 1/2"D<br>(49W x 76H x 11.4D cm)    | Section 2.4.1   |
| Cabinet C, E3-INCC-C Plate  | E3-INCC-CPLATE                     | 21"W x 28 1/2"H x 4"D<br>(53.34W x 72.39H x 10.16D cm) | Section 2.4.1   |
| Cabinet D, E3-INCC-D Plate  | E3-INCC-D PLATE                    | 19 3/8"W x 41"H x 4 1/2"D<br>(49W x 104H x 11.4D cm)   | Section 2.4.2   |
| E3 Series Combined Fire and MNS System Installation Option                      |                                    |  |   |
| Cabinet D, E3-INCC-D Plate (ACU)  | E3-INCC-D PLATE                    | 19 3/8"W x 41"H x 4 1/2"D<br>(49W x 104H x 11.4D cm)   | Section 2.4.2   |
|   | Retrofit Insta                     | llation Options  |   |
| 600XL Retrofit Cabinet C<br>Backbox<br>E3-INCC-C Plate                          | 600XL-RETROFIT<br>(E3-INCC-CPLATE) | 22"W x 30"H x 5 1/2"D<br>(55.8W x 76H x 13.9D)         | Section 2.4.1   |
| 7200 Cabinet B, E3-INCC-C<br>Plate  | E3-INCC-CPLATE                     | 21"W x 28 1/2"H x 4"D<br>(53.34W x 72.39H x 10.16D cm) | Section 2.4.1   |
| 7200 Cabinet B, E3-ILI-C Plate  | E3-ILI-CPLATE                      | 21"W x 28 1/2"H x 4"D<br>(53.34W x 72.39H x 10.16D cm) | Section 2.4.1   |
| 7200 Cabinet C, E3-INCC-D<br>Plate  | E3-INCC-D PLATE                    | 21"W x 38"H x 4"D<br>(53.34W x 96.52H x 10.16D cm)     | Section 2.4.2   |

Table 2.4.1 IILI-S-E3 Installation Assembly Options

## 2.4.1 ILI-S-E3 Installed to the Cabinet C, Mounting Plates

The ILI-S-E3 can be installed in the following Cabinet and E3 Series mounting plate configurations.

#### Cabinet C

#### 600XL Retrofit Cabinet

#### 7200 Cabinet B Retrofit

E3-ILI-C Plate

- E3-INCC-C Plate
- E3-ILI-C Plate

E3-INCC-C Plate

#### E3-INCC-C Plate

#### E3-ILI-C Mounting Plate Installation

- Align and place the ILI-S-E3 on the bottom of the E3-ILI-C mounting plate.
- Insert eight standoffs (3/16" HEX #4-40, x 1.25") into the eight-hole mounting pattern and secure the standoffs to the E3-ILI-C mounting plate as shown in Location 1 of the figure below.
- Align and place the second ILI-S-E3 on top of the standoffs 3. extending from the first ILI-S-E3.
- Insert eight screws (#4-40 x 1/4") into the eight standoffs and secure the screws to the standoffs extending from the first ILI-S-E3 as shown in Location 2 of the figure below.

Figure 2.4.1.1 illustrates the ILI-S-E3 installed to the Cabinet C, Figure 2.4.1.2 illustrates the ILI-S-E3 installed to the Cabinet C, E3-ILI-C plate.

#### E3-INCC-C Mounting Plate Installation

- Align and place the ILI-S-E3 to the pins on the bottom of the E3-INCC-C plate.
- 2. Insert eight screws (#4-40 x .1/4") in the eight-hole mounting pattern as shown in Location 1 of the figure below.
  - Secure the screws to the E3-INCC-C mounting plate as shown in Location 1 of the figure below.

E3-INCC-C plate.

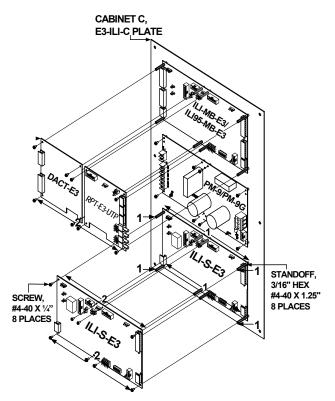


Figure 2.4.1.1 Cabinet C, E3-ILI-C Plate

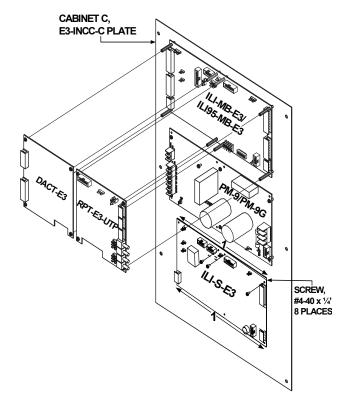


Figure 2.4.1.2 Cabinet C, E3-INCC-C Plate

#### 2.4.2 ILI-S-E3 Installed to the Cabinet D, Mounting Plate

The ILI-S-E3 can be installed to the E3-INCC-D plate in the following Cabinet D, configurations.

Cabinet D

7200 Cabinet D Retrofit

E3-INCC-D Plate

E3-INCC-D Plate

#### E3-INCC-D Mounting Plate Installation

- 1. Align and place the first ILI-S-E3 sub-assembly to the pins on the E3-INCC-D plate.
- 2. Insert eight standoffs (3/16" HEX x #4-40 x 1.25") into the eight-hole mounting pattern and secure the screws to the E3-INCC-D plate as shown in Location 1 of the figure below.
- 3. Align and place the second ILI-S-E3 sub-assembly to the pins on the E3-INCC-D plate. Insert eight standoffs (3/16" HEX x #4-40 x 1.25") into the eight-hole mounting pattern and secure the screws to the E3-INCC-D plate as shown in Location 1 of the figure below.
- 4. Align and place the third ILI-S-E3 sub-assembly over the standoffs on top of the first ILI-S-E3. Insert eight screws (#4-40 x 1/4") into the eight-hole mounting pattern and secure the screws to the standoffs as shown in Location 3 of the figure below.
- 5. Align and position the fourth ILI-S-E3 sub-assembly over the standoffs on top of the second ILI-S-E3. Insert eight screws (#4-40 x 1/4") into the eight-hole mounting pattern and secure the screws to the standoffs as shown in Location 4 of the figure below.

Figure 2.4.2.1 illustrates four ILI-S-E3s mounted to the Cabinet D, E3-INCC-D plate.



**NOTE:** You can install the INI-VG Series (First/Second/Third Generations) to the CAB D, E3-INCC-C Plate. Figure 2.4.2.1 shows the installation with the INI-VG Series (Third Generation) fiber-optic plug-in module.

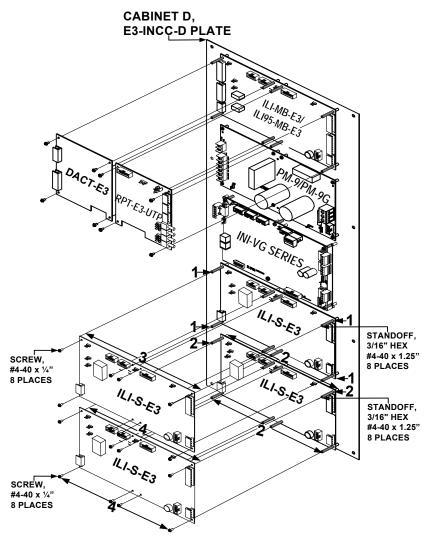


Figure 2.4.2.1 Cabinet D, E3-INCC-C Plate Installation

## **Section 3 Wiring**

## 3.1 Signaling Line Circuits

The ILI-S-E3 provides two, 24 VDC Class A, Class X or Class B signaling line circuits. See Figure 3.1.1 for wiring information. Class X wiring requires the use of an M500X Isolator Module, on both sides of a device.

#### **Wiring Instructions**

SLC 1 Class B TB4-8 (+), TB4-7 ( - ) SLC 2 Class B TB4-4 (+), TB4-3 ( - )

SLC 1 Class A TB4-8 OUT, TB4-6 RETURN TB4-7 OUT, TB4-5 RETURN

SLC-2 Class A TB4-4 OUT, TB4-4-2 RETURN TB4-3 OUT, TB4-1 RETURN

(Polarity markings indicate the polarity that should be maintained throughout the circuit. Polarity connected to the circuit must be observed on all devices).

Circuit Ratings: 24 VDC (nominal)

Current: 0.048 amp max. (supervisory) 0.136 amp max. (alarm)

0.100 amp max. Steady State (short circuit)

40 Ohms max. line impedance 0.5 μf max. line capacitance

Ground fault test impedance: Zero ohms

Wiring: 18 AWG minimum, twisted-pair, unshielded Supervised Class 2 Power-Limited

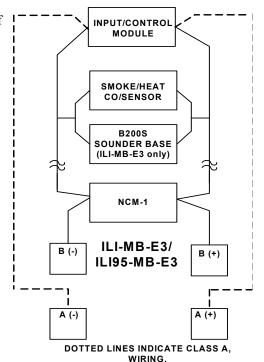


Figure 3.1.1 Signaling Line Circuits

## 3.2 Wiring Requirements

Table 3.2 lists the wiring requirements for the ILI-S-E3 sub-assembly.

| Circuit Function  | Wire Requirements   | Distance   | Typical Wire Type*  |
|---|---|--|---|
| Connects to intelligent and addressable modules.  | Twisted-unshielded pair, 12 to 18 AWG (3.1 to 0.78 mm²) 40 Ohms maximum per length of Class A and Class X loops. 40 Ohms combined-branch circuits maximum for Class B loop. MC cable with 2 | 10,000 ft. (3,000 m)<br>8,000 ft. (2,400 m)<br>4,875 ft. (1,450 m)<br>3,225 ft. (980 m)  | 12 AWG (3.1 mm <sup>2</sup> )<br>14 AWG (2.00 mm <sup>2</sup> )<br>16 AWG (1.30 mm <sup>2</sup> )<br>18 AWG (0.78 mm <sup>2</sup> )   |
| Or  |   | 1,000 ft. (304.8 m)  | 12 to 18 AWG<br>(3.1 to 0.78 mm <sup>2</sup> )  |
|   | Note: The maximum total capacitance of all SLC wiring (both between conductors and from any conductor to ground) should not exceed 0.5 microfarads.   |  |   |
| Provides interface<br>between network nodes.<br>ARCNET should be<br>installed in a separate<br>conduit. | low capacitance 18 AWG, or ribbon cable to the other modules within the same cabinet.   |  | 18 AWG (3.1 mm <sup>2</sup> )   |
|   | Connects to intelligent and addressable modules.  Or  Provides interface between network nodes. ARCNET should be installed in a separate conduit.   | Connects to intelligent and addressable modules.  Twisted-unshielded pair, 12 to 18 AWG  (3.1 to 0.78 mm²) 40 Ohms maximum per length of Class A and Class X loops. 40 Ohms combined-branch circuits maximum for Class B loop. MC cable with 2 conductor twisted.  Or  Shielded wire, in conduit or outside of conduit or outside of conduit or MC cable. MC cable with 3 conductor twisted.  Note: The maximum total capacitance of all SLC wiring (both between conductors and from any conductor to ground) should not exceed 0.5 microfarads.  Provides interface between network nodes. ARCNET should be installed in a separate conduit. | Connects to intelligent and addressable modules.  Twisted-unshielded pair, 12 to 18 AWG (3.1 to 0.78 mm²) 40 Ohms maximum per length of Class A and Class X loops. 40 Ohms combined-branch circuits maximum for Class B loop. MC cable with 2 conductor twisted.  Or  Shielded wire, in conduit or outside of conduit or outside of conduit or outside of conduit or MC cable. MC cable with 3 conductor twisted.  Note: The maximum total capacitance of all SLC wiring (both between conductors and from any conductor to ground) should not exceed 0.5 microfarads.  Provides interface between network nodes. ARCNET should be installed in a separate  Twisted-unshielded pair low capacitance 18 AWG, or ribbon cable to the other modules within the |

**Table 3.2.1 Wiring Requirements** 

## 3.3 ILI-S-E3 Wiring Connections

Figure 3.3.1 illustrates the ILI-S-E3, (First Generation) and Figure 3.3.2 illustrates the ILI-S-E3, (Second Generation).

## ILI-S-E3 (First Generation)

#### **ILI-S-E3 (Second Generation)**

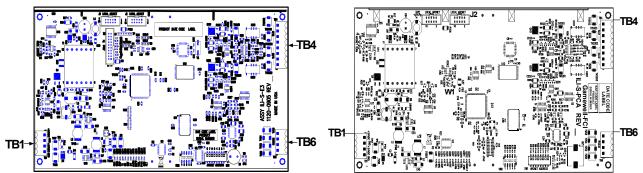


Figure 3.3.1 ILI-S-E3 (First Generation) Module 3.3.1 ILI-S-E3 Wiring Designations

Figure 3.3.2 ILI-S-E3 (Second Generation) Module

The ILI-S-E3 (First Generation) sub-assembly is wired as shown in Figure 3.4.1.1.1 and Table 3.3.1.1. The ILI-S-E3 (Second Generation) sub-assembly is wired as shown Figure 3.4.1.2.1 and Table 3.3.1.1.

| Designation  | Description   | Comments  |       |
|--------------|---|---|-------|
|              | ILI-S-E3 (Firsts and Second Generation) Wiring Designations |   |       |
| TB1-1, TB1-3 | +24 V IN  | V IN +24 VDC Input  |       |
| TB1-2, TB1-4 | GND   | Common negative from PM-9/PM-9G TB4-2   |       |
| TB4-1        | SLC 2 A-  | SLC 2 Class A / Class X Return (See Note 1)   |       |
| TB4-2        | SLC 2 A+  | SLC 2 Class A / Class X Return (See Note 1)   |       |
| TB4-3        | SLC 2 B-  | SLC 2 Class B / Class A / Class X Out (See Note 1)  |       |
| TB4-4        | SLC 2 B+  | SLC 2 Class B / Class A / Class X Out (See Note 1)  |       |
| TB4-5        | SLC 1 A-  | SLC 1 Class A / Class X Return (See Note 1)   |       |
| TB4-6        | SLC 1 A+  | SLC 1 Class A / Class X Return (See Note 1)   |       |
| TB4-7        | SLC 1 B-  | SLC 1 Class B / Class A / Class X Out (See Note 1)  |       |
| TB4-8        | SLC 1 B+  | SLC 1 Class B / Class A / Class X Out (See Note 1)  |       |
| TB6-1        | RS232 GND   | For Programming, GND connects to red lead on the download cable P/N 75267. For Printer Port, GND connects to printer DB-9, PIN-5.  RS-232                                 |       |
| TB6-2        | RS232 TxD   | For Programming, TxD connects to black lead on the download or cable P/N 75267. For Printer Port, TxD connects to printer DB-9, PIN-2.    Download or Printer P (See Not) | Port  |
| TB6-3        | Supervision   | Optional Printer Supervision. For Printer Port, SUPV connects to printer DB-9, PIN-4.   | ie z) |
| TB6-4        | RS232 RxD   | For Programming, RxD connects to green lead on the download cable P/N 75267. For Printer Port, RxD connects to printer DB-9, PIN-3.                                       |       |
| SW2-1        | Switch  | 1 ON = SLC 1 DISABLED<br>(OFF = SLC 1 ENABLED)  |       |
| SW2-2        | Switch  | 2 ON = SLC 2 DISABLED<br>(OFF = SLC 2 ENABLED)  |       |
| SW2-3        | Switch  | Unused  |       |
| SW2-4        | Switch  | 4 ON = BUZZER DISABLED<br>(OFF = BUZZER ENABLED)  |       |
| SW2-5        | Switch  | 5 ON = 115.2 BAUD<br>(OFF = defined by CAMWorks™).  |       |
| J2           | Local ARCNET  | Connect to J5 of the next ILI or ILI95 Series sub-assembly.   |       |
| J5           | Local ARCNET  | Connect to J2 from the previous ILI or ILI95 Series sub-assembly.   |       |
|              |   |   |       |

Table 3.3.1.1 ILI-S-E3 Wiring Designations

| Designation                                      | Description                                     | Comments  |                                       |
|--|---|---|---------------------------------------|
|  | ILI-S-E3 (First Generation) Wiring Designations |   |                                       |
| W1, W2, W3                                       | Factory Jumpers                                 | Factory Use Only (Default OUT)  | Used for                              |
| W4   | Local ARCNET Terminal                           | OPEN = Normal Operation SHORT = If the ILI-S-E3 or ILI95-S-E3 is located at the end of the ARCNET bus.  | ILI-S-E3<br>First Generation<br>only. |
| ILI-S-E3 (Second Generation) Wiring Designations |   |   |                                       |
| W1   | Factory Jumpers                                 | Factory Use Only (Default OUT)  | Used for                              |
| W4   | Local ARCNET<br>Termination                     | OPEN = If the ILI-S-E3 is located in the middle of the bus or if it is not used.  SHORT = If the ILI-S-E3 is located at either end of the ARCNET bus. | ILI-S-E3 Second<br>Generation only    |
| NOTES  |   |   |                                       |

**Note 1:** For Class B, use Terminals B+ and B- only. For Class A use terminals B+ and B- and connect return wiring to A+ and A-. For Class X wire as for Class A and use Isolator Modules and or Isolator Detectors per recommendations as required.

**Note 2:** The PRN-7 Printer is a dot-matrix printer. It is shipped with a DB-9 Adapter Kit that provides the necessary hardware and cables for installation. For additional information on the PRN-7 Printer, refer to the Manufacturer's Installation Guide.

#### Table 3.3.1.1 ILI-S-E3 Wiring Designations

#### 3.4.1 ILI-S-E3 Wiring Diagram

#### 3.4.1.1 ILI-S-E3 (First Generation) Diagram

Figure 3.4.1.1.1 illustrates the wiring connections for the ILI-MB-E3 (First Generation) sub-assembly.

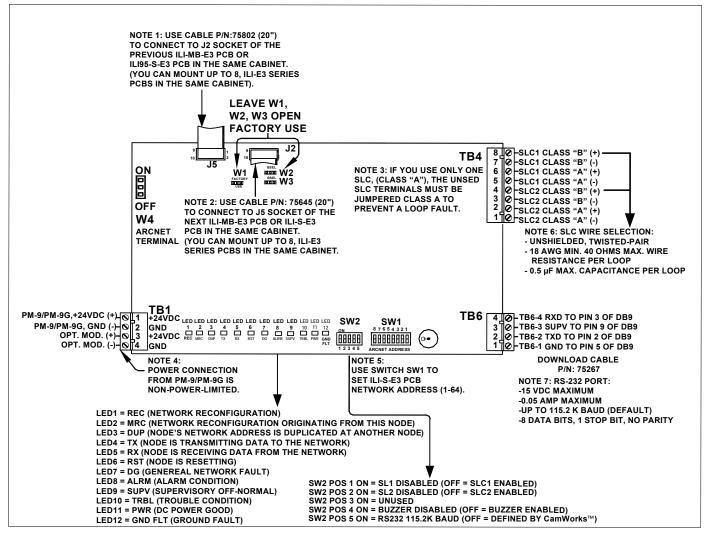


Figure 3.4.1.1.1 ILI-S-E3 (First Generation) Wiring Diagram

#### 3.4.1.2 ILI-S-E3 (Second Generation) Diagram

Figure 3.4.1.2.1 illustrates the field wiring connections for the ILI-S-E3 sub-assembly.

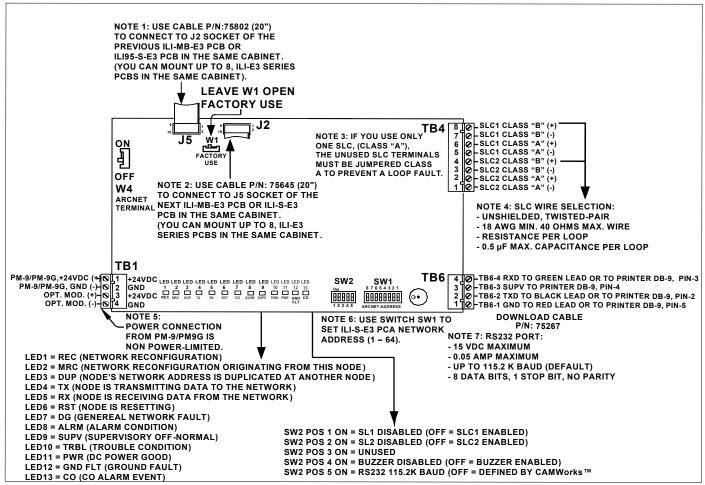


Figure 3.4.1.2.1 ILI-S-E3 (Second Generation) Wiring Diagram

## **Section 4: Programming Address Switch Settings**

Set the address using the switch, SW1. Figure 4.1 illustrates the address switch settings for the ILI-S-E3 sub-assembly.

#### **ADDRESS SWITCH SETTINGS**

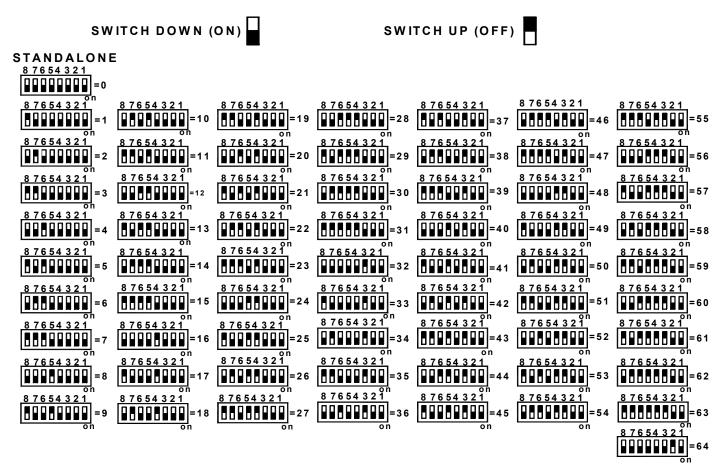


Figure 4.1 ILI-S-E3 Address Switch Settings

## **Section 5: Programming Requirements**

This product uses the CAMWorks<sup>TM</sup> Software Program. Installers must be Gamewell-FCI Factory Certified to program this product. For additional information on this product, contact the Gamewell-FCI Customer Support to schedule the Factory Certified Training.



NOTE: For information on the latest version of CAMWorks, see the Gamewell-FCI website, www.gamewell-fci-esd.com.

## **Section 6: Reference Documentation**

Table 6.1 lists the UL-Controlled documentation assigned to the S3 Series and E3 Series Systems. If you require detailed installation instructions on cabinetry, wiring and specifications, you can download the following UL-Controlled documents from the ESD site on the Gamewell-FCI Website (<a href="https://www.gamewell-fci-esd.com">www.gamewell-fci-esd.com</a>).

| Part Number                  | Title   |  |
|------------------------------|---|--|
| UL Listing Document          |   |  |
| LS10005-051GF-E              | S3 Series (Small Addressable Fire Alarm Control Panel) UL Listing Document                  |  |
| LS10080-051GF-E              | E3 Series Fire System (Expandable Emergency Evacuation System) UL Listing Document          |  |
| Manuals                      |   |  |
| 9000-0575                    | E3 Series Broadband Installation/Operation Manual   |  |
| 9000-0577                    | E3 Series Classic Installation/Operation Manual   |  |
| LS10013-000GF-E              | E3 Series Combined Fire and MNS Installation/Operation Manual                               |  |
| Installation Instruction     | ons   |  |
| 9000-0491                    | LCD-7100 (Remote Serial Annunciator) Installation Instructions                              |  |
| 9000-0544                    | AM-50 Series (50 Watt Amplifiers) Installation Instructions                                 |  |
| 9000-0545                    | INX, INX CAB-B, INX CAB-C and INX CAB-D Installation Instructions                           |  |
| 9000-0546                    | INCC Intelligent Network Interface Installation Instructions                                |  |
| 9000-0548                    | PM-9 (Power Supply) Installation Instructions   |  |
| 9000-0549                    | INI-VG Series (Intelligent Network Interface-Voice Gateway) Installation Instructions       |  |
| 9000-0550                    | ASM-16 (Addressable Switch Module) Installation Instructions                                |  |
| 9000-0564                    | ANU-48 (Remote LED Driver Annunciator) Installation Instructions                            |  |
| 9000-0568                    | NGA (Network Graphic Annunciator) Installation Instructions                                 |  |
| 9000-0569                    | ILI-S-E3 (Intelligent Loop Interface - Expansion Board) Installation Instructions           |  |
| 9000-0579                    | ILI-MB-E3 (Intelligent Loop Interface - Main Board) Installation Instructions               |  |
| 9000-0580                    | RPT-E3-UTP (Repeater-E3 Unshielded Twisted-Pair) Installation Instructions                  |  |
| 9000-0581                    | DACT-E3 (Digital Alarm Communicator Transmitter) Installation Instructions                  |  |
| 9000-0582                    | LCD-E3 (Liquid Crystal Display-E3) Installation Instructions                                |  |
| 9001-0017                    | ILI95-MB-E3 (Intelligent Loop Interface-95 - Main Board) Installation Instructions          |  |
| 9001-0018                    | ILI95-S-E3 (Intelligent Loop Interface-95 - Expansion Board) Installation Instructions      |  |
| 9001-0055                    | PM-9G (Power Supply) Installation Instructions  |  |
| 9001-0064                    | ANX (Addressable Node Expander) Installation Instructions                                   |  |
| 9001-0065                    | E3BB-FLUSH-LCD-CAB A2 Remote Flush Annunciator Installation Instructions                    |  |
| 9001-0066                    | RAN-7100 (Remote Alphanumeric Annunciator) Installation Instructions                        |  |
| LS10044-000GF-E              | SLC-PM/SLC95-PM (Signaling Line Circuit-Personality Modules) Installation Instructions      |  |
| LS10046-000GF-E              | FML-E3/FSL-E3 (Fiber-Optic Multi-Mode/Fiber-Optic Single-Mode) Installation Instructions    |  |
| LS10058-000GF-E              | FLPS-7 (Power Supply) Installation Instructions   |  |
| LS10082-000GF-E              | E3 Series Cabinets B, C, D, Retrofit, DR-C4/DR-D4 and EQ Cabinets Installation Instructions |  |
| LS10083-000GF-E              | E3 Series, Remote Annunciator Display and Retrofit Cabinets Installation Instructions       |  |
| LS10218-000GF-E              | INI-VG Series (Intelligent Network Transponder-Voice Gateway-Third Generation) Instructions |  |
| LS10222-000GF-E              | NGA (Network Graphic Annunciator-Second Generation) Installation Instructions               |  |
| Addendum                     |   |  |
|                              | Compatibility Addendum to Gamewell-FCI Installation/Operation Manuals UL File S1869 Vol. 8C |  |
| Supplement / Frame and Posts |   |  |
|                              | E3 Series Releasing System Supplement   |  |
|                              | E3 Series for the LCD-E3 Operating Instructions   |  |
|                              | S3 Series (Small Addressable Fire Alarm Control Panel System), Operating Instructions       |  |
| LS10121-000GF-E              | E3 Series for the LCD-SLP Operating Instructions  |  |

Table 6.1 Reference Documentation

#### Honeywell Gamewell-FCI

12 Clintonville Road Northford, CT 06472-1610 203.484.7161 www.gamewell-fci.com

