## Mills MGC

## INX-10A Series

Intelligent NAC Expander Panel


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### 1.0 Introduction

This document provides information for the successful installation, operation and configuration of the INX-10A, the INX-10ADS, and the INX-10AC. Unless specifically mentioned, INX-10A can hereafter be used to refer to any of the INX-10A, the INX-10ADS, or the INX-10AC.

## This chapter explains

- Feature Overview


### 1.1 The INX-10A Intelligent NAC Expander Panel

Mircom's INX-10A is an Intelligent NAC Expander Panel and operates in CLIP (Classic Loop Interface Protocol) mode. Available as a 10 Amp configuration, the INX-10A extends the power capabilities of existing notification appliance circuits and provides power for other ancillary devices.

The INX-10A also has the ability to operate with any UL Listed 24 VDC conventional fire alarm control panel to provide Notification Appliance Circuit expansion.

### 1.1.1 Compatible Fire Alarm Control Panels

Table 1 Compatible Fire Alarm Control Panels

| Manufacturer | Fire Alarm Control Panel Series |
| :---: | :---: |
| Mircom | FleX-Net ${ }^{\text {TM }}$ |
|  | FleX-Net ${ }^{\text {TM }}$ FX-4000 |
|  | FX-400 Series |
|  | FX-2003-12N |
|  | FX-2017-12N |
|  | FX-2009-12N |
|  | FX-2003-6 |
|  | FX-2003-12 |
|  | FX-2003S-12 |
|  | FX-2017-12A |
|  | FX-2017S-12A |
|  | FX-2009-12 |
|  | FX-2009S-12 |
|  | FX-3500 |
|  | FX-3500RCU |
| Secutron | MR-2100 / MR-2200 Series |
|  | MR-2900 Series |
|  | MR-3500/3500RCU |

### 1.1.2 Features

- Supports 2 synchronized panels on one node to meet sync timing requirements
- Up to 6 INX-10A panels per loop
- Outputs used as power supply outputs do not require panel configuration or SLC addresses
- Utilizes DIP switches for configuration
- DC regulated outputs
- Configurable NAC, Power and Door Holder Outputs
- Configurable AC Power fail delay
- Enable or disable Ground fault
- Separate Relay for Ground Fault and Common Trouble available on terminals
- Enable or disable the Battery Charger on activation
- Class A or B output signals
- Horn/Strobe sync protocols include Mircom, Amseco, Gentex, System Sensor and Wheelock
- Ability to sync outputs for multiple INX-10A units
- 2 wire horn/strobe Sync mode allows audible notification appliances (horns) to be silenced while visual notification appliances (strobes) continue to operate
- Audible signals may be configured for Steady, Temporal Code, California Code and March Time
- Output fault notification to FACP
- Built-in charger for sealed lead acid or gel type batteries up to and including 40 Ah storage capacity
- Enclosure fits 4 Ah, 7 Ah, and 12 Ah batteries. 18 Ah batteries will fit in the INX-10ADS only. The INX-10A series can charge 40 Ah batteries but they must be placed in an external battery cabinet (BC-160)
- 2.5 Amp max current per output
- 1.7 Amp auxiliary power output
- Unit includes power supply and charger, red enclosure, cam lock, transformer and battery leads
- Compatible with 24VDC fire panels
- Surface or flush-mountable


### 1.1.3 General Notes

## Circuits And Zones

Circuits refers to an actual electrical interface, Input (Detection), NAC Notification Appliance Circuit) which connect audible and visible notification appliances to the fire alarm system control unit (Signal), or Relay.

## Wiring Styles

- Input Circuits are configured as Class B (Style B)
- NAC Circuits may be individually wired as Class A (Style Z) or Class B (Style Y) without affecting the number of circuits available
- Signal Line Circuit Class X (Style 7) and Class B (Style 4)


### 2.0 INX-10A Overview

This chapter lists the components of the INX-10A.

## This chapter explains

- INX-10A Components


### 2.1 INX-10A Components

The following table describes the components of the INX-10A.
Table 2 INX-10A Components

|  | Model | Description |  |
| :--- | :--- | :--- | :--- |
| $\vdots$ |  |  |  |

### 3.0 Installation

This chapter describes the installation of the INX-10ADS, INX-10AC, and INX-10A.

## This chapter explains

- How to mount the Enclosure
- Main Chassis Board Connections


### 3.1 Enclosure Dimensions

| Dimensions of Enclosure (minus built in trim ring) | $14.5 " \times 4.2^{\prime \prime} \times 26^{\prime \prime}$ |
| :--- | :--- |
| Distance between horizontal mounting screws | $12 "$ |
| Distance between vertical mounting screws | $23.5^{\prime \prime}$ |
| Complete Dimensions of Enclosures | $16.3^{\prime \prime} \times 5.5^{\prime \prime} \times 27.5^{\prime \prime}$ |

### 3.2 INX-10ADS Mechanical Installation

The INX-10ADS comes with an BBX-1024DS or BBX-1024DSR enclosure which are suitable for flush or surface mounting, and have a built-in trim ring.


Figure 1 INX-10ADS Installation Instructions and Dimensions

### 3.2.1 Installation Tips

- Group the incoming wires through the top of the enclosure. Use a wire tie to group wires for easy identification and neatness.
- Be sure to connect a solid Earth Ground (from building system ground / to a cold water pipe) to the Chassis Earth Ground Mounting Lug, and to connect the Earth Ground Wire Lugs from the Main Chassis to the ground screw on the Backbox.

Attention: DO NOT install cable through bottom of the box. This space is reserved for Batteries.

### 3.3 INX-10AC Mounting Instructions

The INX-10AC mounts into the BB-5008 or BB-5014 enclosure as shown in Figure 2.


Figure 2 INX-10AC Mounting Instructions

### 3.4 Enclosure Dimensions

## Outer Dimensions

Distance between upper mounting screws
Distance between lower mounting screws
Distance between upper and lower mounting screws
FA-300TR Dimensions
$14.23^{\prime \prime} \times 4.42^{\prime \prime} \times 19.85$ "
11"
11"
14.1"
$17^{\prime \prime} \times 22.5^{\prime \prime}$

### 3.5 Installing the INX-10A Enclosure

The INX-10A can be surface mounted with four screws as shown in Figure 3 or flush mounted as shown in Figure 5 on page 19.


Figure 3 INX-10A Dimensions

## To Surface Mount the Enclosure

1. Using the INX-10A back plate as a template, mark the top of the two mounting hole locations 11" apart as shown in Figure 3.
2. Place the screws halfway into the wall in the position shown using a suitable screw.
3. Hang the box onto the two screws.
4. Screw the other two screws at the bottom of the panel.
5. Tighten all four screws into place.


Figure 4 FA-300TR Dimensions


Figure 5 Flush mounting the enclosure

## To Flush Mount the Enclosure

1. Unscrew and remove Main Chassis and Transformer from the enclosure.
2. Unscrew the wingnut and remove the door.
3. Mount the backbox into the wall.
4. After the wall is finished, peel the adhesive cover from the trim ring and stick to the wall surface around the backbox.

Note: Figure 3 shows a cross-section of the semi-flush mounted backbox and the trim ring. Allow a minimum depth of 1 " above the wall surface for proper door opening.

### 3.5.1 Installation Tips

- Group the incoming wires through the top of the enclosure. Use a wire tie to group wires for easy identification and neatness.
- Be sure to connect a solid Earth Ground (from building system ground / to a cold water pipe) to the Chassis Earth Ground Mounting Lug, and to connect the Earth Ground Wire Lugs from the Main Chassis to the ground screw on the Backbox.

Attention: DO NOT install cable through bottom of the box. This space is reserved for Batteries.

### 3.6 Chassis Board Connections

The Main Chassis is preinstalled in the INX-10A Enclosure as shown in Figure 1. The connections are shown in Figure 6 and are described in Table 3.


Figure 6 INX-10A Chassis Board Connectors and Jumpers
Table 3 INX-10A Chassis Board Connectors and Jumpers

| Connector/Jumper | Description |
| :---: | :--- |
| P1,2 | Connection for 29VAC AC In |
| P3,4 | Connection to Battery <br> Red(+) to P3 <br> Black(-) to P4 |
| JW1 | Auxiliary Power Supervision. Factory set ON. Leave in place for <br> supervision. Remove for non-supervision. |
| JW2 | Factory set (closed), leave in place. |

### 4.0 Indication \& Controls

This chapter describes the LED indicators and controls of the INX-10A.

## This chapter explains

- Main Chassis Board LED Indicators
- Flash Rates
- Acknowledge button
- DIP switches


### 4.1 Indication and Controls

The INX-10A has 5 main annunciation indicators located on the main display panel. For troubleshooting purposes there are 3 trouble LED indicators located directly on the main board. There are also other LED's for SLC activity, synchronized input and output activity, and trouble and alarm relay. These indicators are only visible after opening the enclosure. Indicators may be Amber, Red, or Green, and may illuminate continuously (steady), or at the Trouble Flash Rate. For additional information see section 4.1.4 on page 25.

There is one control button, the acknowledge button, located underneath the main display panel. There are also five DIP switches used for configuration. For additional information see section 6.0 on page 32 .

Figure 7 displays the LED indicators and the control button on the INX-10A main board.


Figure 7 Main Board highlighting Common Indicators, Trouble LED's, Other LEDs

### 4.1.1 Common Indicators

The main display panel has 5 common LED indicators; Power On, Add. Line Activity/Alarm, Common Trouble, Battery / Charger Trouble and CPU fail.

## Power On

The Power On LED Indicator activates steady green while the main AC power is within acceptable levels. It flashes green to display a trouble when the level falls below the power-fail threshold and the panel is switched to standby (battery) power.

Addressable Line Activity / Alarm (Add. Line Activity / Alarm)
The Addressable Line Activity / Alarm Indicator flashes red whenever there is activity on the addressable circuit(s). It activates steady red when there is an alarm.

## Common Trouble

The Common Trouble LED Indicator activates steady amber to indicate any active trouble and flashes for


Figure 8 Common Indicators restored troubles. To clear the trouble and reset the panel press the acknowledge button. The additional troubleshooting LED's on the main board can provide more information on what the trouble is. See section 4.1.2 below for a description.

## Battery / Charger Trouble

The Battery / Charger Trouble LED Indicator activates steady amber when the Battery is either low (below 20.4 VDC), or the Battery or Charger are disconnected. It flashes amber for a restored trouble. For configuration information see section 6.2.2 on page 39.

## CPU Fail

The CPU Fail LED Indicator flashes amber when the processor ceases functioning.

### 4.1.2 Trouble LEDs

The main board has three onboard LEDs to aid in troubleshooting. The door must be opened in order to view these LEDs.

## Auxiliary Supply Trouble

Flashes amber when there is a trouble with the auxiliary


Figure 9 Trouble LEDs supply output, check for shorts or excessive load.

## Synchronized Output Trouble

Flashes amber when there is a trouble with the synchronized output. Check the circuit for presence of EOL or short.

## Ground Fault Trouble

Flashes amber when there is a ground fault trouble. To correct the fault, check for any external wiring touching the chassis. Jumper, a wire loop, must be installed to enable Ground Fault detection. For wiring information see section 7.2.10 on page 112. For configuration information see section 6.2.2 on page 39.

### 4.1.3 Other LEDs



Figure 10 Additional LEDs

## Addressable (SLC) Loop Indicators

Three LEDs. Two LED's that flash green for incoming activity for each loop, and one that flashes red for outgoing loop activity.

## Synchronized Input Indicators

Two LEDs. One LED on each input that flashes green for incoming activity.

## Trouble Relay Indicator

One LED that is steady green for system OK.

## Alarm Relay Indicator

One red LED that is steady red when an alarm is activated.

## NAC Circuit Indicators

Each NAC Circuit has one red LED that flashes when activated and one amber that activates solid when a trouble occurs. To clear the trouble and reset the panel press the acknowledge button.

## Synchronized Output Indicators

Two LEDs. One LED on each output that flashes green for outgoing activity.

### 4.1.4 Flash Rate

## Trouble Flash

20 flashes per minute, $50 \%$ duty cycle.

### 4.1.5 Controls

## Acknowledge Button

This button is used to clear any trouble indications on the INX-10A.

## Configuration DIP switches

The DIP switches are used for a variety of different configuration settings. For more information see Chapter 6.0 on page 32.

### 5.0 Operation

This chapter describes operational capabilities of the INX-10A.

This chapter explains

- Circuit Types
- Synchronization Modes
- Power Supply Modes
- Evacuation Codes


## NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES

This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864, certain programming features or options must be limited to specific values or not used at all as indicated below.

| Program feature or option | Permitted in UL 864? (Y/N) | Possible settings | Settings permitted in UL <br> 864 |
| :--- | :---: | :--- | :--- |
| Second Stage Enabled | YES | Second Stage Enabled/Disabled <br> (Free loop addresses base +7 to base <br> $+11)$ | Second Stage Enabled |
| AC Trouble | YES | Return Specific ULC Trouble/Free <br> loop addresses base +2 to base +4 | Reporting of ULC Specific <br> trouble is permitted |
| Battery/Charger Trouble | YES | Return Specific ULC Trouble/Free <br> loop addresses base +2 to base +4 | Reporting of ULC Specific <br> trouble is permitted |
| Ground Fault | YES | Return Specific ULC Trouble/Free <br> loop addresses base +2 to base +4 | Reporting of ULC Specific <br> trouble is permitted |

NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES
This product incorporates field-programmable software. In order for the product to comply with the requirements in CAN/ULC S527 Standard for Control Units for Fire Alarm Systems, certain programming features or options must be limited to specific values or not used at all as indicated below.

| Program feature or option | $\begin{aligned} & \text { Permitted in CAN/ULC } \\ & \text { S527? (Y/N) } \end{aligned}$ | Possible settings | Settings permitted in CAN/ULC S527 |
| :---: | :---: | :---: | :---: |
| Second Stage Enabled | YES | Second Stage Enabled/Disabled (Free loop addresses base +7 to base +11) | Second Stage Enabled |
| AC Trouble | YES | Return Specific ULC Trouble/Free loop addresses base +2 to base +4 | Reporting of ULC Specific trouble is permitted |
| Battery/Charger Trouble | YES | Return Specific ULC Trouble/Free loop addresses base +2 to base +4 | Reporting of ULC Specific trouble is permitted |
| Ground Fault | YES | Return Specific ULC Trouble/Free loop addresses base +2 to base +4 | Reporting of ULC Specific trouble is permitted |

### 5.1 Circuit Types

Any failure on the SLC loop activates any configured NAC Circuits.

> Attention: If the INX-10A has configured NAC circuits the Evacuation Rate or Strobe Rate MUST be set via the appropriate DIP switches or a trouble will sound. For more information see section 6.2 .3 on page 40 and section 6.2 .4 on page 41 .

### 5.1.1 NAC (Output) Circuits Types

## Signal

For audible devices such as bells and piezo mini-horns. While sounding, these follow the pattern appropriate for the condition;

- the configured Evacuation Code (default is Temporal Code) during Single-Stage Alarm
- Two-Stage General Alarm
- or the Alert Code during Two-Stage's Alert (First) Stage.


## Strobe

For visual devices such as strobes that use no code pattern (they are continuous) and follow input contact.

## Synchronized Strobes

For visual devices such as strobes that support Mircom/Amseco, System Sensor, Gentex, Wheelock proprietary code patterns, configure to the appropriate pattern.

## DC Power Supply

Uses no code pattern (they are continuous) and cannot be silenced. Configured via DIP switches and is not allocated an SLC address.

### 5.2 Intelligent NAC Expander (INX) Modes

The INX-10A is capable of synchronizing signal rates internally or receiving the signals externally. The INX-10A also has the ability to synchronize the signal rates for another INX10A in a leader - follower relationship.

Attention: When using multiple INX-10A panels in a leader - follower relationship, always assign a lower address to the leader INX-10A panel.

### 5.2.1 INX Internal Sync Mode

In this mode all signal and sync strobe rates are produced in the INX-10A. When a NAC circuit is commanded by the FACP to turn on, the NAC output signals are produced based on how the DIP switches are configured.

The Sync Outputs will be activated when one of the NAC circuits has been activated. If two stage operation is used, Sync Output1 is to produce the rate for first stage signal and Sync Output 2 is to produce the second stage signal.

To enable this mode set DIP SW3, Bit 8 to zero.
For information on configuring signal and strobe rates see Table 8 on page 41 and Table 9 on page 42.

### 5.2.2 INX External Sync Mode

When one of the Sync Inputs is activated, the INX-10A outputs follow the signal pattern of the Sync Input. The INX-10A must be configured as a slave to operate in this mode.

All synchronization signals are supplied from the FACP or leader INX-10A.
To enable this mode for Bell Signals set DIP SW3, Bit 8 to one, and set Alert (DIP SW4, Bits 13) Evacuation (DIP SW4, Bits 4-6) and Strobe (DIP SW5, Bits 1-3) rates to zero. The NAC and Sync outputs are to follow the Sync Inputs.

To enable this mode for other signals for sync Horn Strobes, set DIP SW3, Bit 8 to one and set Alert (DIP SW4, Bits 1-3) and Evacuation (DIP SW4, Bits 4-6) to use the Strobe Manufacturer Sync Rate (1-0-0) and Strobe (DIP SW5, Bits 1-3) to match the protocol being used in the system. The NAC and Sync Outputs are to follow the Sync Inputs.

If the INX-10A loses synchronization with the FACP during alarm, the INX-10A will default to the internal configured rate. A trouble will be generated back to the FACP. The INX-10A will continue to use the default rate until the FACP is reset.

## Attention: External Sync Mode cannot be used in conjunction with Independent Mode.

### 5.2.3 INX Mode with Redundant Input

The system continuously monitors the SLC loop. If there is no activity for a notable time (80 seconds typical), an SLC trouble will be generated. While SLC trouble is active, if either of the Sync Inputs are activated then all NAC outputs follow.

### 5.2.4 Independent Mode - Driving Signals and Strobes

The INX-10A can drive Signals and Strobes on separate NAC circuits.
To enabled Independent Mode set SW4 Bit 4-6 to 010, 110, 001, 101, or 011 and set SW5 Bit $1-3$ to $100,110,001$ or 101. When using a Two stage application SW4 bits $1-3$ are required to set the alert rate. For a comprehensive description of Independent Mode options see Table 9 on page 42.

### 5.3 Power Supply Modes

In addition to the operation modes above, some or all of the NAC outputs can be configured as power supply outputs. The circuit ratings are same as the NAC circuits. Three types of power output can be configured as described below:

### 5.3.1 NAC Outputs as Power Supply Outputs

Any NAC output can be configured as a power supply. SLC and Sync Inputs are ignored for the power supply outputs.

For configuration information see section 6.2.4 on page 41 and section 6.2.5 on page 42 .

### 5.3.2 NAC Outputs for Door Release

Only NAC 4 and/or 5 can configured for this option, NAC 4 or 5 are turned off (cut supply) when any alarm input is active. This is used for devices which must be unpowered during alarm like door releases. The output will also turned off when the primary power to the INX10A has been lost.

For configuration information see section 6.2.4 on page 41 and section 6.2.5 on page 42. For wiring see section 7.2.14 on page 114 and for supervision see section 7.2.15 on page 114.

### 5.3.3 NAC Outputs for 4 Wire Smoke Supply

Only NAC 4 and/or 5 can configured for this option, NAC 4 and 5 can be selected to turn-off for 4 seconds when an alarm ends (inputs inactive for more than five seconds). This is typically used to reset four wires detectors.

For configuration information see section 6.2.5 on page 42.

### 5.4 Evacuation Codes

### 5.4.1 Single stage codes

## Continuous

On 100\% of the time.
Temporal Code
0.5 second on, 0.5 second off, 0.5 second on, 0.5 second off, 0.5 second on, $0.5,1.5$ second off, then repeat.

March Code
0.5 second on, 0.5 second off.

## California Code

5 seconds on, 10 seconds off.

### 5.4.2 Two-stage codes

Alert Code
0.5 second on, 2.5 seconds off.

General Alarm
Evacuation code as selected from above.

### 5.5 Horn Strobe Rates

Horn Strobe rates are fixed at the following rates.

### 5.5.1 Single Stage

Temporal Code
3 of 0.5 second on, 0.5 second off, 1.5 second pause, then repeat.

### 5.5.2 Two-stage codes

## Alert Code

0.5 second on, 2.5 seconds off.

Temporal Code
3 of 0.5 second on, 0.5 second off, 1.5 second pause, then repeat.


Figure 11 Evacuation Codes

### 6.0 Configuration

The chapter describes how to configure the INX-10A with the DIP switches located on the main board.

## This chapter explains

- Using DIP Switches
- Single Stage and Two Stage Addressing
- Adding Functions in the FX-2000 configurator
- Assigning Protocols
- Trouble Reporting
- AC Fail Delay
- Charger and Battery Settings
- Synchronization Settings
- Configuring NACs
- Alert and Evacuation Rates
- Strobe Types
- Configuration for MGC addressable devices (MIX-4000)


### 6.1 DIP Switches

The following diagram displays the five DIP switches used by the INX-10A.


### 6.1.1 Using the DIP switches

Configuring the INX-10A is done with 5 banks of DIP switches. They are named SW1, SW2, SW3, SW4 and SW5. Each bank has 8 switches, numbered 1 to 8 . Flipping a switch up places it in the ON position. For the purposes of the configuration tables $\mathrm{ON}=\mathbf{1}$ and $\mathrm{OFF}=\mathbf{0}$. For an illustration of the DIP switch settings see Figure 12.


Figure 12 DIP switch positions

### 6.2 DIP Switch Configuration

Configuration is done via a group a five DIP switches located to the left of the LED display board.

### 6.2.1 Setting Loop Base Address, Disabling Addressable Loop Interface

Use DIP switch 1 to

- Enable or disable the addressable loop.
- Set the Base Address of the INX-10A.

To configure the desired address, refer to Figure 13 and Table 5.
To disable, configure all switches to 0 .
Table 4 Setting INX-10A Base Address/ Disabling Addressable Loop Interface

| DIP switch 1 | Bits | Default Setting = 0 $\square$ <br>  | Activated Setting = 1 | Notes/ Additional Diagrams |
| :---: | :---: | :---: | :---: | :---: |
| swn |  |  |  |  |
|  | $\begin{gathered} \text { All } \\ (1-8) \end{gathered}$ | Addressable Loop Disabled | Sets the INX-10A base address. For an addressing example see Figure 13. |  |
|  |  |  |  |  |

Address is set to 85


Figure 13 DIP switch address example

Table 5 INX-10A Base Address DIP switch positions

| Address | Bit Setting | Address | Bit <br> Setting | Address | Bit <br> Setting | Address | Bit <br> Setting |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 10000000 | 26 | 01011000 | 51 | 11001100 | 76 | 00110010 |  |
| 2 | 01000000 | 27 | 11011000 | 52 | 00101100 | 77 | 10110010 |  |
| 3 | 11000000 | 28 | 00111000 | 53 | 10101100 | 78 | 01110010 |  |
| 4 | 00100000 | 29 | 10111000 | 54 | 01101100 | 79 | 11110010 |  |
| 5 | 10100000 | 30 | 01111000 | 55 | 11101100 | 80 | 00001010 |  |
| 6 | 01100000 | 31 | 11111000 | 56 | 00011100 | 81 | 10001010 |  |
| 7 | 11100000 | 32 | 00000100 | 57 | 10011100 | 82 | 01001010 |  |
| 8 | 00010000 | 33 | 10000100 | 58 | 01011100 | 83 | 11001010 |  |
| 9 | 10010000 | 34 | 01000100 | 59 | 11011100 | 84 | 00101010 |  |
| 10 | 01010000 | 35 | 11000100 | 60 | 00111100 | 85 | 10101010 | Two Stage |
| 11 | 11010000 | 36 | 00100100 | 61 | 10111100 | 86 | 01101010 | Application with Enhanced |
| 12 | 00110000 | 37 | 10100100 | 62 | 01111100 | 87 | 11101010 | Reporting |
| 13 | 10110000 | 38 | 01100100 | 63 | 11111100 | 88 | 00011010 | Two Stage |
| 14 | 01110000 | 39 | 11100100 | 64 | 00000010 | 89 | 10011010 | Basic Reporting |
| 15 | 11110000 | 40 | 00010100 | 65 | 10000010 | 90 | 01011010 | Single Stage |
| 16 | 00001000 | 41 | 10010100 | 66 | 01000010 | 91 | 11011010 | Enhanced |
| 17 | 10001000 | 42 | 01010100 | 67 | 11000010 | 92 | 00111010 | Reporting |
| 18 | 01001000 | 43 | 11010100 | 68 | 00100010 | 93 | 10111010 |  |
| 19 | 11001000 | 44 | 00110100 | 69 | 10100010 | 94 | 01111010 |  |
| 20 | 00101000 | 45 | 10110100 | 70 | 01100010 | 95 | 11111010 |  |
| 21 | 10101000 | 46 | 01110100 | 71 | 11100010 | 96 | 00000110 | Application with |
| 22 | 01101000 | 47 | 11110100 | 72 | 00010010 | 97 | 10000110 | eporting |
| 23 | 11101000 | 48 | 00001100 | 73 | 10010010 | 98 | 01000110 |  |
| 24 | 00011000 | 49 | 10001100 | 74 | 01010010 | 99 | 11000110 |  |
| 25 | 10011000 | 50 | 01001100 | 75 | 11010010 |  |  |  |
| 100 | 00100110 | 135 | 11100001 | 170 | 01010101 | 205 | 10110011 |  |
| 101 | 10100110 | 136 | 00010001 | 171 | 11010101 | 206 | 01110011 |  |
| 102 | 01100110 | 137 | 10010001 | 172 | 00110101 | 207 | 11110011 |  |
| 103 | 11100110 | 138 | 01010001 | 173 | 10110101 | 208 | 00001011 |  |
| 104 | 00010110 | 139 | 11010001 | 174 | 01110101 | 209 | 10001011 |  |
| 105 | 10010110 | 140 | 00110001 | 175 | 11110101 | 210 | 01001011 |  |
| 106 | 01010110 | 141 | 10110001 | 176 | 00001101 | 211 | 11001011 |  |
| 107 | 11010110 | 142 | 01110001 | 177 | 10001101 | 212 | 00101011 |  |
| 108 | 00110110 | 143 | 11110001 | 178 | 01001101 | 213 | 10101011 |  |
| 109 | 10110110 | 144 | 00001001 | 179 | 11001101 | 214 | 01101011 |  |

Table 5 INX-10A Base Address DIP switch positions (Continued)

| Address | Bit Setting | Address | Bit Setting | Address | Bit Setting | Address | Bit Setting |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 110 | 01110110 | 145 | 10001001 | 180 | 00101101 | 215 | 11101011 |  |
| 111 | 11110110 | 146 | 01001001 | 181 | 10101101 | 216 | 00011011 |  |
| 112 | 00001110 | 147 | 11001001 | 182 | 01101101 | 217 | 10011011 |  |
| 113 | 10001110 | 148 | 00101001 | 183 | 11101101 | 218 | 01011011 |  |
| 114 | 01001110 | 149 | 10101001 | 184 | 00011101 | 219 | 11011011 |  |
| 115 | 11001110 | 150 | 01101001 | 185 | 10011101 | 220 | 00111011 |  |
| 116 | 00101110 | 151 | 11101001 | 186 | 01011101 | 221 | 10111011 |  |
| 117 | 10101110 | 152 | 00011001 | 187 | 11011101 | 222 | 01111011 |  |
| 118 | 01101110 | 153 | 10011001 | 188 | 00111101 | 223 | 11111011 |  |
| 119 | 11101110 | 154 | 01011001 | 189 | 10111101 | 224 | 00000111 |  |
| 120 | 00011110 | 155 | 11011001 | 190 | 01111101 | 225 | 10000111 |  |
| 121 | 10011110 | 156 | 00111001 | 191 | 11111101 | 226 | 01000111 | MGC Addressable |
| 122 | 01011110 | 157 | 10111001 | 192 | 00000011 | 227 | 11000111 | Devices (MIX4000) Application |
| 123 | 11011110 | 158 | 01111001 | 193 | 10000011 | 228 | 00100111 | with Enhanced Reporting |
| 124 | 00111110 | 159 | 11111001 | 194 | 01000011 | 229 | 10100111 | MGC Addressable |
| 125 | 10111110 | 160 | 00000101 | 195 | 11000011 | 230 | 01100111 | Devices Two Stage Application with |
| 126 | 01111110 | 161 | 10000101 | 196 | 00100011 | 231 | 11100111 | Basic Reporting |
| 127 | 11111110 | 162 | 01000101 | 197 | 10100011 | 232 | 00010111 | MGC Addressable |
| 128 | 00000001 | 163 | 11000101 | 198 | 01100011 | 233 | 10010111 | Stage Application with Enhanced Reporting |
| 129 | 10000001 | 164 | 00100101 | 199 | 11100011 | 234 | 01010111 |  |
| 130 | 01000001 | 165 | 10100101 | 200 | 00010011 | 235 | 11010111 |  |
| 131 | 11000001 | 166 | 01100101 | 201 | 10010011 | 236 | 00110111 | MGC Addressable Devices Single |
| 132 | 00100001 | 167 | 11100101 | 202 | 01010011 | 237 | 10110111 | Stage Application |
| 133 | 10100001 | 168 | 00010101 | 203 | 11010011 | 238 | 01110111 | with Basic |
| 134 | 01100001 | 169 | 10010101 | 204 | 00110011 | 239 | 11110111 |  |
|  |  |  |  |  |  | 240 | 00001111 |  |

Attention: When using multiple INX-10A panels in a leader - follower relationship, always assign a lower address to the leader INX-10A panel.
6.2.1.1 Base Address Offset for the FX-2000/FleX-Net and MR-2100/2200/2900 Series Panels

The FX-2000/FleX-Net and MR-2100/2200/2900 series of panels reserve addresses 101 to 199 for CLIP modules. As a result, you must offset the addresses of INX-10A devices by 100 when you add these devices on the FX-2000 or MR-2100/2200/2900 configurator.

### 6.2.1.2 <br> Base Address Offset for the FX-3500/3500RCU and MR-3500/3500RCU Panels

For the FX-3500/3500RCU and MR-3500/3500RCU, CLIP device addresses start at 201. As a result, you must offset the addresses of INX-10A devices by 200 when you configure these devices on the Configurator.

> Attention: The FX-3500/3500RCU and MR-3500/3500RCU panels must be configured with a CLIP address space before you can add INX-10A panels to them. See the following procedure for instructions on how to add a CLIP address space to an FX-3500/3500RCU and MR-3500/ 3500RCU.

To configure an FX-3500/3500RCU and MR-3500/3500RCU loop with a CLIP address space

1. Start the Configurator, and then open your job.
2. Select Base I/O from your job tree.

The CLIP/Advance Protocol Address Space configuration window appears. By default, the entire address space is assigned to AP devices and there is no address space reserved for CLIP modules. (That is, Allowable CLIP Addresses is set to None for both Sensors and Modules.) To reserve address space for CLIP devices, you must add the number of CLIP devices to the AP Start value.
3. Enter 100 in the AP Start column for the loop that your INX-10A is connected to, and then press the Tab key.
The entries for allowable CLIP addresses for Sensors and Modules change to 1-99 and 201-299, respectively. This allows you to enter 99 CLIP sensors and 99 CLIP modules to
the loop. Your CLIP/Advance Protocol Address window should look similar to Figure 14 (assuming your INX-10A is connected to Loop 2).


Figure 14 Configurator CLIP/Advance Protocol Device Address Space window
A value of 100 in a loop's AP Start column configures the FX-3500/3500RCU and MR-3500/ 3500 RCU with the maximum address space for CLIP modules (201-299). If you enter a smaller value for AP Start, the address space for CLIP modules and the number of CLIP devices you can add are reduced. For example, if you enter 50 in the AP Start column, the CLIP module address space for the loop changes to 201-249 and you can only configure 49 CLIP modules for that loop.

Note: For all the FX-3500/3500RCU and MR-3500/3500RCU examples in this chapter, the maximum CLIP device address space is assumed. That is, the AP Start is set to 100 and the CLIP modules address space is 201-299.

### 6.2.2 Setting Protocols, Reporting, Charger, Battery Installed

Use DIP switch 2 to set device protocols, enable second stage reporting, set AC fail reporting, enabling or disabling the Charger, and if a battery is installed.

Table 6 Setting Protocols, Enabling Second Stage, Setting AC Fail Reporting, Enabling Charger, Battery Installed

| DIP switch 2 | Bits | Default Setting = 0 | Activated Setting = 1 | Notes/ Additional Diagrams |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | Setting for System Sensor devices | Setting for MGC addressable devices | For MGC addressable devices, set bit 1 to 1 and bit 2 to 0 |
|  | 2 | Setting for Mircom FACPs | Setting for Secutron and other non-Mircom FACPs | For non-Mircom panels Signal Silence must be configured as a Control module in the proprietary configuration software. |
|  | 3 | Enable Enhanced Reporting (AC, Battery/ Charger and Earth Ground) <br> *See Board LED's for further trouble shooting* | Free loop addresses base +2 to base +4 | Base address is set by SW1 |
|  | 4 | Second Stage Enabled | Free loop addresses base +8 to base +12 or if Enhanced Reporting is enabled frees addresses base +11 to base +15 | Base address is set by SW1 |
|  | 5-6 | Configure Report Delay for AC fail <br> The digits below refer to the corresponding bit number i.e. 01 means that bit $5=0$ and bit $6=1$ see corresponding diagram |  |  |
|  | 5-6 | $00=$ No Delay |  |  |
|  | 5-6 | 10 = One Hour |  |  |
|  | 5-6 | 01 = Two Hours |  |  |
|  | 5-6 | 11 = Three Hours |  |  |
|  | 7 | Charger Enabled | Charger Disabled |  |
|  | 8 | Battery Installed | No Battery Required and Charger Disabled |  |

### 6.2.3 Charger Settings, Synchronization Settings, NAC Input Settings

Use DIP switch 3 to configure charger, synchronization and NAC Input settings.
Table 7 Charger Settings, Synchronization Settings, NAC Input Settings

| DIP switch 3 | Bits | $\text { Default Setting = } 0$ $\square$ | Activated Setting $=1$ | Notes/ Additional Diagrams |
| :---: | :---: | :---: | :---: | :---: |
| SW1 $\square$ <br> SW2 $\square$ <br> SW3 $\square$ <br> SW4 $\square$ <br> SW5 $\square$ | 1 | Charger Cut When all NACs activated | Charger Always "ON" | Remember <br> Bit 7 on DIP Switch 2 must be set to "OFF" to enable Charger |
|  | 2 | Setting for FleX-Net ${ }^{\text {TM }}$ FX-4000 | Setting for FX-400 series | This switch has an effect only if bit 1 on DIP Switch 2 is " $O N$ " |
|  | 3-6 | Reserve |  |  |
|  |  | Independent Mode NAC 1 and 2 = Signals Configured NACs = Sync Strobes | Independent Mode NAC 1 to 3 = Signals Configured NAC's = Sync Strobes | For a comprehensive description of Independent Mode options see section 6.9 on page 97. |
|  | 7 | Independent mode is active if <br> SW4 Bit 4-6 Evacuation Rates <br> is set to 010, 110, 001, 101, or 011 <br> AND <br> SW5 Bit 1-3 Setting Strobe Manufacturer Type set to 100, 110,001 or 101. |  |  |
|  | 8 | Synchronous Signal Leader | Synchronous Signal Follower |  |

Attention: If Independent Mode is not being used SW3-7 must be set to OFF.
sw3


### 6.2.4 Setting Alert Rates, Evacuation Rates, NAC 5 Output Functions

Use DIP switch 4 to configure Alert and Evacuation Rates, and NAC Output functions.
Table 8 Setting Alert Rates, Evacuation Rates, NAC 5 Output Functions

| DIP switch 4 | Bits | $\text { Default Setting = } 0$ | Activated Setting $=1$ | Notes/ Additional Diagrams |
| :---: | :---: | :---: | :---: | :---: |
| SW1 $\square$ <br> SW2 $\square$ <br> SW3 $\square$ <br> SW4 $\square$ <br> SW5 $\square$ | 1-3 | Setting Alert Rates (Alert Rates are only used in Two Stage Applications) |  |  |
|  | 1-3 | 000 - Disable (No Output) |  |  |
|  | 1-3 | 100 - Uses Strobe Manufacturer Sync Rate |  |  |
|  | 1-3 | 010-Continuous |  |  |
|  | 1-3 | 110-0.5s ON, 2.5s OFF, Repeat <br> (20 PPM as in FA-1000 or FX-2000) |  |  |
|  | 1-3 | 001-20 PPM, 50\% Duty Cycle |  |  |
|  | 4-6 | Setting Evacuation Rates |  |  |
|  | 4-6 | If the INX-10A has NAC circuits configured the Evacuation Rate or Strobe Rate MUST be enabled or a trouble will sound. |  |  |
|  | 4-6 | 100 - Uses Strobe Manufacturer Sync Rate NOT AFFECTED BY SIGNAL SILENCE |  |  |
|  | 4-6 | 010 - Continuous |  |  |
|  | 4-6 | 110 - Temporal |  |  |
|  | 4-6 | 001 - March Time |  |  |
|  | 4-6 | 101 - California |  |  |
|  | 4-6 | 011-120 PPM, 50\% Duty Cycle |  |  |
|  | 7-8 | NAC 5 Output Settings |  |  |
|  | 7-8 | 00 - Normal NAC |  | swa |
|  | 7-8 | 10 - Continuous Supply |  | swa |
|  | 7-8 | 01 - Cut on Alarm |  | swa |
|  | 7-8 | 11-4 seconds Cut on Reset |  | swa |

### 6.2.5 Setting Strobe Types, NAC 1-3 Supply Settings, NAC 4 Output Function

Use DIP switch 5 to configure Strobe types, NAC 1-3 settings and NAC 4 output functions.

| DIP switch 5 | Bits | Default Setting = 0 <br>  | Activated Setting = 1 | Notes/ Additional Diagrams |
| :---: | :---: | :---: | :---: | :---: |
| SW1 $\square$ <br> SW2 $\square$ <br> SW3 $\square$ <br> SW4 $\square$ <br> SW5 $\square$ | 1-3 | Setting Strobe Manufacturer |  |  |
|  | 1-3 | 000 - Disable <br> If the INX-10A has NAC circuits configured the Evacuation Rate or Strobe Rate MUST be enabled or a trouble will sound. |  |  |
|  | 1-3 | 100 - Mircom/Amseco |  |  |
|  | 1-3 | 010 - Not Used |  |  |
|  | 1-3 | 110 - System Sensor |  |  |
|  | 1-3 | 001 - Secutron/Gentex |  |  |
|  | 1-3 | 101 - Wheelock |  |  |
|  | 1-3 | 011 - System Sensor 2 Alternate Setting |  |  |
|  | 4 | NAC 1-NAC | NAC 1 - Continuous Supply |  |
|  | 5 | NAC 2 - NAC | NAC 2 - Continuous Supply |  |
|  | 6 | NAC 3 - NAC | NAC 3 - Continuous Supply |  |
|  | 7-8 | NAC 4 Output Settings |  |  |
|  | 7-8 | $00-N A C$ |  | sws |
|  | 7-8 | 10 - Continuous Supply |  | sus |
|  | 7-8 | 01 - Cut on Alarm |  |  |
|  | 7-8 | 11-4 seconds Cut on Reset |  |  |

### 6.3 Single Stage Addressing

Address Assignments are done via DIP switch 2(SW2) which is located to the left of the Main LED display board. The addresses for the functions are dependent upon the Base Address of the INX Panel.

There are two types of addressing options

- Basic Reporting
- Enhanced Reporting

In addition, the addressing can be changed by having NACs configured as Power Supplies. For further information on setting the Base Address of the INX Panel see Figure 13.

Attention: Ensure that the configuration is set correctly on the INX-10A DIP switches and the Fire Panel Configuration Software.

### 6.3.1 Single Stage with Basic Reporting Addressing

To configure the recommended base address
Set DIP switch SW1 as:

$$
1-0-1-1-1-0-1-0
$$

ON-OFF-ON-ON-ON-OFF-ON-OFF
sw1


To configure the INX for Single Stage with Basic Reporting in a Mircom system
Set DIP switch SW2-1 to SW2-4 as: 0-0-1-1
OFF-OFF-ON-ON

SW2


To configure the INX for Single Stage with Basic Reporting in a Secutron system
Set DIP switch SW2-1 to SW2-4 as: $0-1-1-1$
OFF-ON-ON-ON
SW2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 10 Configuring Single Stage Functions

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 93 |
| Signal Silence | Base Address + 1 | 94 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 95 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 96 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 97 |
| Activate NAC4, return NAC4 line status | Base Address +5 | 98 |
| Activate NAC5, return NAC5 line status | Base Address +6 | 99 |

Notes: Table 10 represents all NACs configured as NAC circuits.
Mircom recommends always using the upper range of addresses available for the INX-10A.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 15 and 16).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 17).

If any NAC circuit is configured as a Power Supply, see section 6.3 .3 on page 49 for an explanation on addressing.

### 6.3.1.1 Software Configuration - Single Stage with Basic Reporting Addressing

## Job5-01: INX-10A - FX-2000 Configuration Utility



File Job Insert Edit Panel Help


Base Panel (Compact Build) Loop 0 (Hardwired) Loop 1 (Hardwired) Loop 2
由 Main Display

+ Loop Adder: Node 1
Common System Status
Timers
Input Summary
Output Summary


Figure 15 FX-2000 Configurator Settings - INX-10A Single Stage with Basic Reporting


Figure 16 Secutron MR-2100/2200/2900 Configuration Settings - INX-10A Single Stage with Basic Reporting


Figure 17 FX-3500/3500RCU/MR-3500/3500RCU Configuration Settings - INX-10A Single Stage with Basic Reporting

### 6.3.2 Single Stage with Enhanced Trouble Reporting Addressing

To configure the recommended base address
Set DIP switch SW1

$$
\begin{aligned}
& 0-1-0-1-1-0-1-0 \\
& \text { OFF-ON-OFF-ON-ON-OFF-ON-OFF }
\end{aligned}
$$



To configure the INX for Single Stage with Enhanced Trouble Reporting in a Mircom System

Set DIP switch SW2-1 to SW2-4 as: 0-0-0-1
OFF-OFF-OFF-ON
sw2


To configure the INX for Single Stage with Enhanced Trouble Reporting in a Secutron System

Set DIP switch SW2-1 to SW2-4 as: 0-1-0-1
OFF-ON-OFF-ON
sW2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 11 Configuring Single Stage with Enhanced Reporting Functions

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 90 |
| Signal Silence | Base Address + 1 | 91 |
| Monitor AC trouble | Base Address + 2 | 92 |
| Monitor Battery/Charger trouble | Base Address + 3 | 93 |
| Monitor Earth Ground Fault | Base Address + 4 | 94 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 95 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 96 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 97 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 98 |
| Activate NAC5, return NAC5 line status | Base Address + 9 | 99 |

Mircom recommends always using the upper range of addresses available for the INX-10A.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 18 and 19).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 20). If any NAC circuit is configured as a Power Supply see section 6.3.4 on page 52 for an explanation on addressing.

### 6.3.2.1 Software Configuration - Single Stage with Enhanced Trouble Reporting Addressing

## Job5-01: INX-10A - FX-2000 Configuration Utility



File Job Insert Edit Panel Help

$\square$ Base Panel (Compact Build) Loop 0 (Hardwired)
Loop 1 (Hardwired)
Loop 2
由-Main Display

+ Loop Adder: Node 1
Common System Status
Timers
Input Summary
Output Summary
Notes: Table 11 represents all NACs configured as NAC circuits.

| Wixil Job5-01: INX-10A - FX-2000 Configuration Utility |  |  |  |  |  |  |  | - $\square \times$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| File Job Insert Edit Panel Help |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ```\square. Base Panel (Compact Build) Loop 0 (Hardwired) Loop 1 (Hardwired) Loop 2 \otimes-Main Display * Loop Adder: Node 1 Common System Status Timers Input Summary Output Summary``` | Add | Device | Type | F1 | F.. | A.\| 5 T T. | Tag (Line1) | Tag (Line2) |
|  | 190 | Ipt Module | Trouble Input |  |  |  | "NX-104* \#1 | Common TidiActive |
|  | 191 | Relay Opt Mod | Relay |  |  |  | INX-104 \#1 | Signal Silence |
|  | 192 | Ipt Module | Trouble Input |  |  |  | INX-104. \#1 | AC Trouble |
|  | 193 | Ipt Module | Trouble Input |  |  |  | INX-104\#1 | Battery Trouble |
|  | 194 | Ipt Module | Trouble Input |  |  |  | INX-104 \#1 | Ground Fault |
|  | 195 | Supv Opt Mod | Strobe | NS |  |  | INX-104 \#1 | NAC1 |
|  | 196 | Supv Opt Mod | Strobe | NS |  |  | INX-104 \#1 | NAC2 |
|  | 197 | Supv Opt Mod | Strobe | NS |  |  | INX-104\#1 | NAC3 |
|  | 198 199 | Supv Opt Mod Supv Opt Mod | Strobe Strobe | NS |  |  | INX-104\#1 | NAC4 |
|  |  |  | Stabe | NS |  |  | Nr-1aa+ | NAC5 |

Figure 18 FX-2000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting


Figure 19 Secutron MR-2100/2200/2900 Configuration Settings - INX-10A Single Stage with Enhanced Reporting


Figure 20 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Enhanced Reporting

### 6.3.3 Single Stage with Basic Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.3.3.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 194.

To configure the recommended base address

## Set DIP switch SW1

as:

```
0-1-1-1-1-0-1-0
OFF-ON-ON-ON-ON-OFF-ON-OFF
```



To configure the INX for Single Stage with Basic Reporting in a Mircom System Set DIP switch SW2-1 to SW2-4 as: 0-0-1-1

OFF-OFF-ON-ON
sw 2


To configure the INX for Single Stage with Basic Reporting in a Secutron System
Set DIP switch SW2-1 to SW2-4 as: 0-1-1-1
OFF-ON-ON-ON
sw2


To configure NAC 5 as a Continuous Power Supply
Set DIP switch SW4-7 and SW4-8
as:
1-0
ON-OFF


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 12 Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 94 |
| Signal Silence | Base Address + 1 | 95 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 96 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 97 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 98 |
| Activate NAC4, return NAC4 line status | Base Address +5 | 99 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

Mircom recommends always using the upper range of NACs (NAC5 then NAC4 then NAC3 etc.) when configuring as a Power Supply.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 21 and 22).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 23).

### 6.3.3.2 Software Configuration - Single Stage with Basic Reporting and Power Supply Output Addressing

## Job5-01: INX-10A - FX-2000 Configuration Utility



Figure 21 FX-2000 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output


Figure 22 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output


Figure 23 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output

### 6.3.4 Single Stage with Enhanced Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.3.4.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 191.

To configure the recommended base address

## Set DIP switch SW1

as:

$$
1-1-0-1-1-0-1-0
$$

ON-ON-OFF-ON-ON-OFF-ON-OFF
sW1


To configure the INX for Single Stage with Enhanced Reporting in a Mircom System

## Set DIP switch SW2-1 to SW2-4 as: 0-0-0-1

OFF-OFF-OFF-ON
SW2


To configure the INX for Single Stage with Enhanced Trouble Reporting in a Secutron System

Set DIP switch SW2-1 to SW2-4 as: $0-1-0-1$
OFF-ON-OFF-ON
SW2


To configure NAC 5 as a Continuous Power Supply
Set DIP switch SW4-7 and SW4-8
as:

1-0
ON-OFF

SW4


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 13 Assigning Addresses - Single Stage Application, 1 Power Supply Output

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 91 |
| Signal Silence | Base Address + 1 | 92 |
| Monitor AC trouble | Base Address + 2 | 93 |
| Monitor Battery/Charger trouble | Base Address + 3 | 94 |
| Monitor Earth Ground Fault | Base Address + 4 | 95 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 96 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 97 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 98 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 99 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

Mircom recommends always using the upper range of NACs (NAC5 then NAC4 then NAC3 etc.) when configuring as a Power Supply.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 24 and 25).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 26).

### 6.3.4.2 Software Configuration - Single Stage with Enhanced Reporting and Power Supply Output Addressing

## Job5-01: INX-10A - FX-2000 Configuration Utility



Figure 24 FX-2000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output


Figure 25 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Single Stage with Power Supply Output


Figure 26 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output

### 6.4 Two Stage Addressing Options

Address Assignments are done via DIP switch 2(SW2) which is located to the left of the Main LED display board. The addresses for the functions are dependent upon the Base Address of the INX Panel.

For further information on setting the Base Address of the INX panel see Figure 13.

Attention: Ensure that the configuration is set correctly on the INX-10A DIP switches and the Fire Panel Configuration Software.

### 6.4.1 Two Stage with Basic Reporting Addressing

To configure the recommended base address
Set DIP switch SW1 as: 0-0-0-1-1-0-1-0

OFF-OFF-OFF-ON-ON-OFF-ON-OFF

To configure the INX for Two Stage with Basic Reporting in a Mircom system

Set DIP switch SW2-1 to SW2-4 as: 0-0-1-0
OFF-OFF-ON-OFF
sw2


To configure the INX for Single Stage with Basic Reporting in a Secutron system
Set DIP switch SW2-1 to SW2-4 as: $0-1-1-0$
OFF-ON-ON-OFF
sw2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

## Table 14 Configuring Two Stage Functions

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 88 |
| Signal Silence | Base Address +1 | 89 |
| Activate NAC1, return NAC1 line status | Base Address +2 | 90 |
| Activate NAC2, return NAC2 line status | Base Address +3 | 91 |
| Activate NAC3, return NAC3 line status | Base Address +4 | 92 |
| Activate NAC4, return NAC4 line status | Base Address +5 | 93 |

Table 14 Configuring Two Stage Functions (Continued)

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Activate NAC5, return NAC5 line status | Base Address + 6 | 94 |
| Second Stage NAC1 | Base Address + 7 | 95 |
| Second Stage NAC2 | Base Address + 8 | 96 |
| Second Stage NAC3 | Base Address + 9 | 97 |
| Second Stage NAC4 | Base Address +10 | 98 |
| Second Stage NAC5 | Base Address + 11 | 99 |

Notes: Table 14 represents all NACs configured as NAC circuits.
Mircom recommends always using the upper range of addresses available for the INX-10A.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 27 and 28).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 29).

If any NAC circuit is configured as a Power Supply see section 6.4.3 on page 62 for an explanation on addressing.

### 6.4.1.1 Software Configuration - Two Stage with Basic Reporting Addressing

| Hindil Job5-01: INX-10A - FX-2000 Configuration Utility |  |  |  |  |  |  |  |  |  |  | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| File Job Insert Edit Panel Help |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\square$ Base Panel (Compact Build) Loop 0 (Hardwired) Loop 1 (Hardwired) Loop 2 <br> 由 Main Display <br> 由 Loop Adder: Node 1 <br> Common System Status <br> Timers <br> Input Summary <br> Output Summary | Addr | Device | Type | F1 | F.. | A.\| | S.. | T. | Tag (Line1) | Tag (Line2) |  |  |
|  | 188 | Ipt Module | Trouble Input |  |  |  |  |  | INX-104 \# | Common Tibl | Active |  |
|  | 189 | Relay Opt Mod | Relay |  |  |  |  |  | INX-108 \# 1 | Signal Silenc |  |  |
|  | 190 | Supv Opt Mod | Strobe | NS |  |  |  |  | INX-108 \# 1 | NAC 1 |  |  |
|  | 191 | Supv Opt Mod | Strobe | NS |  |  |  |  | INX-104 \#1 | NAC 2 |  |  |
|  | 192 | Supv Dpt Mod | Strobe | NS |  |  |  |  | INX-104 \# 1 | NAC 3 |  |  |
|  | 193 | Supv Opt Mod | Strobe | NS |  |  |  |  | INX-104 \#1 | NAC 4 |  |  |
|  | 194 | Supv Dpt Mod | Strobe | NS |  |  |  |  | INX-104 \#1 | NAC 5 |  |  |
|  | 195 | Relay Opt Mod | Relay |  |  |  |  |  | INX-104 \#1 | NAC 1 Secon | d Stage |  |
|  | 196 | Relay Opt Mod | Relay |  |  |  |  |  | INX-104 \#1 | NAC 2 Secon | d Stage |  |
|  | 197 | Relay Opt Mod | Relay |  |  |  |  |  | INX-104 \#1 | NAC 3 Secon | d Stage |  |
|  | 198 | Relay Opt Mod | Relay |  |  |  |  |  | INX-108 \#1 | NAC 4 Secon | d Stage |  |
|  | 199 | Relay Opt Mod | Relay |  |  |  |  |  | INX-104 \#1 | NAC 5 Secon | d Stage |  |

Figure 27 FX-2000 Configurator Settings - INX-10A Two Stage with Basic Reporting


Figure 28 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Basic Reporting


Figure 29 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Basic Reporting

### 6.4.2 Two Stage Address Assignment with Enhanced Trouble Reporting

To configure the recommended base address

## Set DIP switch SW1

as:

$$
1-0-1-0-1-0-1-0
$$

ON-OFF-ON-OFF-ON-OFF-ON-OFF

To configure the INX for Two Stage with Enhanced Trouble Reporting in a Mircom System

Set DIP switch SW2-1 to SW2-4 as: 0-0-0-0
OFF-OFF-OFF-OFF
sw2


To configure the INX for Two Stage with Enhanced Trouble Reporting in a Secutron System

Set DIP switch SW2-1 to SW2-4 as: 0-1-0-0
OFF-ON-OFF-OFF
SW2


Attention: Two Stage Enhanced reporting is mandatory to meet ULC requirements.

Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 15 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 85 |
| Signal Silence | Base Address + 1 | 86 |
| Monitor AC trouble | Base Address + 2 | 87 |
| Monitor Battery/Charger trouble | Base Address + 3 | 88 |
| Monitor Earth Ground Fault | Base Address + 4 | 89 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 90 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 91 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 92 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 93 |

Table 15 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting (Continued)

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Activate NAC5, return NAC5 line status | Base Address + 9 | 94 |
| Second Stage NAC1 | Base Address + 10 | 95 |
| Second Stage NAC2 | Base Address + 11 | 96 |
| Second Stage NAC3 | Base Address + 12 | 97 |
| Second Stage NAC4 | Base Address + 13 | 98 |
| Second Stage NAC5 | Base Address + 14 | 99 |

Notes: Table 15 on the previous page represents all NACs configured as NAC circuits.
Mircom recommends always using the upper range of addresses available for the INX-10A.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 30 and 31).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 32).

If any NAC circuit is configured as a Power Supply see section 6.4.4 on page 66 for an explanation on addressing.

### 6.4.2.1 Software Configuration - Two Stage Address Assignment with Enhanced Trouble Reporting



Figure 30 FX-2000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting


Figure 31 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Enhanced Reporting


Figure 32 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Enhanced Reporting

### 6.4.3 Two Stage with Basic Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.4.3.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 190.

To configure the recommended base address
Set DIP switch SW1

$$
0-1-0-1-1-0-1-0
$$

as:
OFF-ON-OFF-ON-ON-OFF-ON-OFF
SW1


To configure the INX for Two Stage with Basic Reporting in a Mircom system
Set DIP switch SW2-1 to SW2-4 as: 0-0-1-0

OFF-OFF-ON-OFF
sw2


To configure the INX for Single Stage with Basic Reporting in a Secutron system
Set DIP switch SW2-1 to SW2-4 as: $0-1-1-0$
OFF-ON-ON-OFF
sw2


To configure NAC 5 as a Continuous Power Supply
Set DIP switch SW4-7 and SW4-8
as:

1-0
ON-OFF


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 16 Assigning Addresses - Two Stage Application, 1 Power Supply Output

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 90 |
| Signal Silence | Base Address + 1 | 91 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 92 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 93 |

Table 16 Assigning Addresses - Two Stage Application, 1 Power Supply Output

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 94 |
| Activate NAC4, return NAC4 line status | Base Address + 5 | 95 |
| Second Stage NAC1 | Base Address + 6 | 96 |
| Second Stage NAC2 | Base Address + 7 | 97 |
| Second Stage NAC3 | Base Address + 8 | 98 |
| Second Stage NAC4 | Base Address +9 | 99 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 33 and 34).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 35).

Troubles occurring on a NAC circuit are only reported via the first stage address.
6.4.3.2 Software Configuration -Two Stage with Basic Reporting and Power Supply Output Addressing

## Job5-01: INX-10A - FX-2000 Configuration Utility



File Job Insert Edit Panel Help
 Loop 0 (Hardwired)
Loop 1 (Hardwired)
Loop 2
$\pm$ Main Display
© Loop Adder: Node 1
Common System Status
Timers
Input Summary
Output Summary

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Addr | Device | Type | F1 | F..\| | A. 15 | I. | Tag (Line1) | Tag (Line2) |
| 190 | Ipt Module | Trouble Input |  |  |  |  | INX-104 \#1 | Common Tribl Active |
| 191 | Relay Opt Mod | Relay |  |  |  |  | INX-10A \#1 | Signal Silence |
| 192 | Supv Opt Mod | Strobe | NS |  |  |  | INX-10A \#1 | NAC 1 |
| 193 | Supv Opt Mod | Strobe | NS |  |  |  | INX-10A \#1 | NAC 2 |
| 194 | Supv Opt Mod | Strobe | NS |  |  |  | INX-10A \#1 | NAC 3 |
| 195 | Supv Opt Mod | Strobe | NS |  |  |  | INX-10A \#1 | NAC 4 |
| 196 | Relay Opt Mod | Relay | NS |  |  |  | INX-10A \#1 | NAC 1 Second Stage |
| 197 | Relay Opt Mod | Relay |  |  |  |  | INX-10A \#1 | NAC 2 Second Stage |
| 198 | Relay Opt Mod | Relay |  |  |  |  | INX-104 \#1 | NAC 3 Second Stage |
| 199 | Relay Opt Mod | Relay |  |  |  |  | INX-10A \#1 | NAC 4 Second Stage |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Figure 33 FX-2000 Configurator Settings - INX-10A Two Stage with Power Supply Output


Figure 34 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Power Supply Output


Figure 35 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Power Supply Output

### 6.4.4 Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

Attention: Two Stage Enhanced reporting is mandatory to meet ULC requirements.

### 6.4.4.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 187.

To configure the recommended base address

## Set DIP switch SW1

as:

$$
1-1-1-0-1-0-1-0
$$

ON-OFF-ON-OFF-ON-OFF-ON-OFF
sw1


To configure the INX for Two Stage with Enhanced Trouble Reporting in a Mircom System

Set DIP switch SW2-1 to SW2-4 as: 0-0-0-0
OFF-OFF-OFF-OFF

SW2


To configure the INX for Two Stage with Enhanced Trouble Reporting in a Secutron System

Set DIP switch SW2-1 to SW2-4 as: $0-1-0-0$
OFF-ON-OFF-OFF
sw2


To configure NAC 5 as a Continuous Power Supply
Set DIP switch SW4-7 and SW4-8
as:

1-0
ON-OFF


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 17 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 87 |
| Signal Silence | Base Address + 1 | 88 |
| Monitor AC trouble | Base Address + 2 | 89 |
| Monitor Battery/Charger trouble | Base Address + 3 | 90 |
| Monitor Earth Ground Fault | Base Address + 4 | 91 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 92 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 93 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 94 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 95 |
| Second Stage NAC1 | Base Address + 9 | 96 |
| Second Stage NAC2 | Base Address + 10 | 97 |
| Second Stage NAC3 | Base Address + 11 | 98 |
| Second Stage NAC4 | Base Address + 12 | 99 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

When adding devices to FX-2000 and MR-2100/2200/2900 configurations, add 100 to the recommended device address (see Figures 36 and 37).

When adding devices to FX-3500/3500RCU and MR-3500/3500RCU configurations, add 200 to the recommended device address (see Figure 38).

Troubles occurring on a NAC circuit are only reported via the first stage address.
6.4.4.2 Software Configuration - Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

Job5-01: INX-10A - FX-2000 Configuration Utility


File Job Insert Edit Panel Help

|  | $\times$ |  | 限\| |  |  | . |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ```B-Base Panel (Compact Build) Loop 0 (Hardwired) Loop 1 (Hardwired) Loop 2 & Main Display``` | Addr \| Device |  | Type | F1 | F..\| | A.\| G T.| | Tag (Line1) | Tag (Line2) |
|  | 187 | Ipt Module | Trouble Input |  |  |  | INX-104 \#1 | Common Tiblactive |
|  | 188 | Relay Opt Mod | Relay |  |  |  | INX-104 \#1 | Signal Silence |
|  | 189 | Ipt Module | Trouble Input |  |  |  | INX-104 \# 1 | AC Trouble |
|  | 190 | Ipt Module | Trouble Input |  |  |  | INX-108 \#1 | Battery Trouble |
| - Loop Adder: Node 1 | 191 | Ipt Module | Trouble Input |  |  |  | INX-104 \#1 | Ground Fault |
| Common System Status | 192 | Supv Dpt Mod | Strobe | NS |  |  | INX-104 \#1 | NAC 1 |
| - Timers | 193 | Supv Dpt Mod | Strobe | NS |  |  | INX-104 \#1 | NAC 2 |
| " F Input Summary | 194 | Supv Dpt Mod | Strobe | NS |  |  | INX-104 \#1 | NAC 3 |
| Input Summary | 195 | Supv Dpt Mod | Strobe | NS |  |  | INX-104 \#1 | NAC 4 |
| Output Summary | 196 | Relay Opt Mod | Relay |  |  |  | INX-104 \#1 | NAC 1 Second Stage |
|  | 197 | Relay Opt Mod | Relay |  |  |  | INX-104 \#1 | NAC 2 Second Stage |
|  | 198 | Relay Opt Mod | Relay |  |  |  | INX-104 \#1 | NAC 3 Second Stage |
|  | 199 | Relay Opt Mod | Relay |  |  |  | INX-104 \# 1 | NAC 4 Second Stage |

Figure 36 FX-2000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing


Figure 37 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

| dind Job5-01: INX-10A example - FX-3500 Configuration Utility |  |  |  |  |  | - 回 | 可 x |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| File Job Insert Edit Panel Help |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Job Details: FX-3500 Series Base I/O <br> ... Loop 0 (Hardwired) <br> ... Loop 1 <br> Loop 2 <br> .... Loop 3 <br> - Bypass Groups <br> .... Hazard Zones Main Display Dialer <br> ... Common System Status ... Input Summary <br> -... Output Summary | Addr | Device | Type | F.\| F.| F4 | C. ${ }^{\text {S }}$...\| Tag (Line1) | Tag (Line2) |  |
|  | 287 | Input Module [CLIP] | Trouble Input |  | INX-104 \#1 | Common Tib | blactive |
|  | 288 | Relay Output Module (CLIP) | Relay | NF | INX-104 \# 1 | Signal Silenc |  |
|  | 289 | Input Module (CLIP) | Trouble Input |  | INX-104 \#1 | AC Trouble |  |
|  | 290 | Input Module (CLIP] | Trouble Input |  | INX-10A \#1 | Battery Troub | uble |
|  | 291 | Input Module (CLIP] | Trouble Input |  | INX-108 \#1 | Ground Fault |  |
|  | 292 | Supervised Output Module(CLIP] | Strobe | NF | INX-108 \#1 | NAC1 |  |
|  | 293 | Supervised Output Module(CLIP) | Strobe | NF | INX-10A \#1 | NAC 2 |  |
|  | 294 | Supervised Output Module(CLIP) | Strobe | NF | INX-108 \#1 | NAC 3 |  |
|  | 295 | Supervised Output Module(CLIP) | Strobe | NF | INX-104 \#1 | NAC 4 |  |
|  | 296 | Relay Output Module (CLIP) | Relay | NF | INX-10A \#1 | NAC 1 Secon | ond Stage |
|  | 297 | Relay Output Module (CLIP) | Relay | NF | INX-108 \#1 | NAC 2 Secon | ond Stage |
|  | 298 | Relay Output Module (CLIP) | Relay | NF | INX-104 \#1 | NAC 3 Secon | ond Stage |
|  | 299 | Relay Output Module (CLIP) | Relay | NF | INX-10A \#1 | NAC 4 Secon | ond Stage |
|  | 1 $\square$ III |  |  |  |  | $\square$ | + |
| For Help, press F1 |  |  |  |  |  | NUM |  |

Figure 38 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

### 6.4.5 Adding Functions in the FX-2000 Configurator Software

1. Open Job in Configurator.
2. Select the appropriate loop.
3. Click INSERT > ADD DEVICE.
4. From the Add Devices window, use the drop down menus to select the type of virtual device Supv Opt Mod, the base address of the INX panel. how many NAC circuits are being supervised.
5. Click ADD > CLOSE to return to the main window.


Figure 39 Add Devices Window
6. Add the appropriate TAG(s) to the new devices by double clicking the appropriate cell.
7. To assign correlations to each virtual device right click the device and select ADD CORRELATIONS and then select the appropriate items to ADD.

### 6.5 Single Stage Configuration in FleX-Net ${ }^{\text {TM }}$ FX-4000

### 6.5.1 Single Stage with Basic Reporting Addressing

To configure the recommended base address
Set DIP switch SW1
as:

$$
0-1-0-1-0-1-1-1
$$

OFF-ON-OFF-ON-OFF-ON-ON-ON
sw1


To configure the INX for Single Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-1
ON-OFF-ON-ON
sw2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 18 Configuring Single Stage Functions

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 234.1 |
| Reserved |  | 2 | 234.2 |
| Signal Silence | Base Address + 1 | 1 | 235.1 |
| Reserved |  | 2 | 235.2 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 1 | 236.1 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 1 | 237.1 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 1 | 238.1 |
| Activate NAC4, return NAC4 line status | Base Address +5 | 1 | 239.1 |
| Activate NAC5, return NAC5 line status | Base Address + 6 | 1 | 240.1 |

Notes: Table 18 represents all NACs configured as NAC circuits.
Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply, see section 6.3 .3 on page 49 for an explanation on addressing.

### 6.5.1.1 Software Configuration - Single Stage with Basic Reporting Addressing

[0, Job7-01: INX-10A - MGC-4000 Configurator

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ Job Details: FlexNetMP | Addr | Device | Type | IptMet... | F1 | Tag (Line 1) | Tag (Line2) | SubType |
| E- Node 1 | 234.1 | (MIX4)Input | Trouble Input | Class B |  | INX-10A \#1 | Common trouble |  |
| + Base I/O | 234.2 | (MIX4)Input | Monitor |  |  | INX-10A \#1 | Reserved |  |
|  | 235.1 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Signal Silence |  |
| $\dagger$ - Main Display | 235.2 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Reserved |  |
| Mircom QLA: CPU 1 | 236.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 1 |  |
| Loop 1 | 237.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 2 |  |
| Loop 2 | 238.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 3 |  |
| Loop 3 - N/A | 239.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 4 |  |
| Loop 4-N/A | 240.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 5 |  |
| - Input Zones |  |  |  |  |  |  |  |  |
| Output Zones |  |  |  |  |  |  |  |  |
| $\ldots$ Node \& CPU Status |  |  |  |  |  |  |  |  |

Figure 40 MGC-4000 Configurator Settings - INX-10A Single Stage with Basic Reporting

### 6.5.2 Single Stage with Enhanced Reporting Addressing

To configure the recommended base address
Set DIP switch SW1 as:

$$
1-0-0-1-0-1-1-1
$$

ON-OFF-OFF-ON-OFF-ON-ON-ON
SW1


To configure the INX for Single Stage with Enhanced Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-1
ON-OFF-OFF-ON
sw2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 19 Configuring Single Stage Functions

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 233.1 |
| AC Trouble |  | 2 | 233.2 |
| Monitor Signal Silence | Base Address +1 | 1 | 234.1 |
| Reserved |  | 2 | 234.2 |
| Monitor Battery/Charger trouble | Base Address + 2 | 1 | 235.1 |
| Monitor Earth Ground Fault |  | 2 | 235.2 |

Table 19 Configuring Single Stage Functions (Continued)

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Activate NAC1, return NAC1 line status | Base Address + 3 | 1 | 236.1 |
| Activate NAC2, return NAC2 line status | Base Address + 4 | 1 | 237.1 |
| Activate NAC3, return NAC3 line status | Base Address +5 | 1 | 238.1 |
| Activate NAC4, return NAC4 line status | Base Address +6 | 1 | 239.1 |
| Activate NAC5, return NAC5 line status | Base Address + 7 | 1 | 240.1 |

Notes: Table 19 represents all NACs configured as NAC circuits.
Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply, see section 6.3.3 on page 49 for an explanation on addressing.

### 6.5.2.1 Software Configuration - Single Stage with Enhanced Reporting Addressing

[0, Job7-01: INX-10A - MGC-4000 Configurator

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ Job Details: FlexNetMP | Addr | Device | Type | IptMet... | F1 | Tag (Line 1) | Tag (Line2) | Si |
| $\square$ Node 1 | 233.1 | (MIX4)Input | Trouble Input | Class B |  | INX-10A \#1 | Common trouble |  |
| - Base I/O | 233.2 | (MIX4)Input | Trouble Input |  |  | INX-10A \#1 | AC trouble |  |
|  | 234.1 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Signal Silence |  |
| $\pm$ Main Display | 234.2 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Reserved |  |
| Mircom QLA: CPU 1 | 235.1 | (MIX4)Input | Trouble Input | Class B |  | INX-10A \#1 | Battery trouble |  |
| Loop 1 | 235.2 | (MIX4)Input | Trouble Input |  |  | INX-10A \#1 | Ground Fault |  |
| Loop 2 | 236.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 1 |  |
| Loop 3 - N/A | 237.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 2 |  |
| Loop 3 - N/A | 238.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 3 |  |
| Loop 4 - N/A | 239.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 4 |  |
| ...\|nput Zones | 240.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 5 |  |
| - Output Zones |  |  |  |  |  |  |  |  |
| -... Node \& CPU Status |  |  |  |  |  |  |  |  |

Figure 41 MGC-4000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting

### 6.5.3 Single Stage with Basic Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.5.3.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 235.

To configure the recommended base address

## Set DIP switch SW1

as:

$$
1-1-0-1-0-1-1-1
$$

SW1
ON-ON-OFF-ON-OFF-ON-ON-ON


To configure the INX for Single Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-1
ON-OFF-ON-ON

SW2


To configure NAC 5 as a Continuous Power Supply

## Set DIP switch SW4-7 and SW4-8

 as:1-0
ON-OFF

Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 20 Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 235.1 |
| Reserved |  | 2 | 235.2 |
| Signal Silence | Base Address + 1 | 1 | 236.1 |
| Reserved |  | 2 | 236.2 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 1 | 237.1 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 1 | 238.1 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 1 | 239.1 |

Table 20 Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Activate NAC4, return NAC4 line status | Base Address +5 | 1 | 240.1 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

Mircom recommends always using the upper range of NACs (NAC5 then NAC4 then NAC3 etc.) when configuring as a Power Supply.

### 6.5.3.2 Software Configuration - Single Stage with Basic Reporting and Power Supply Output Addressing

Job7-01: INX-10A - MGC-4000 Configurator

## Figure 42 MGC-4000 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output

### 6.5.4 Single Stage with Enhanced Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.5.4.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 234.

To configure the recommended base address
Set DIP switch SW1
as:

$$
0-1-0-1-0-1-1-1
$$

OFF-ON-OFF-ON-OFF-ON-ON-ON

To configure the INX for Single Stage with Enhanced Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-1
ON-OFF-OFF-ON

SW2


To configure NAC 5 as a Continuous Power Supply

Set DIP switch SW4-7 and SW4-8 as:

ON-OFF
sw4


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 21 Assigning Addresses - Single Stage Application, 1 Power Supply Output

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 234.1 |
| Monitor AC Trouble |  | 2 | 234.2 |
| Signal Silence | Base Address + 1 | 1 | 235.1 |
| Reserved |  | 2 | 235.2 |
| Monitor Battery/Charger trouble | Base Address + 2 | 1 | 236.1 |
| Monitor Earth Ground Fault |  | 2 | 236.2 |
| Activate NAC1, return NAC1 line status | Base Address + 3 | 1 | 237.1 |
| Activate NAC2, return NAC2 line status | Base Address + 4 | 1 | 238.1 |
| Activate NAC3, return NAC3 line status | Base Address + 5 | 1 | 239.1 |
| Activate NAC4, return NAC4 line status | Base Address + 6 | 1 | 240.1 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

Mircom recommends always using the upper range of NACs (NAC5 then NAC4 then NAC3 etc.) when configuring as a Power Supply.
6.5.4.2 Software Configuration - Single Stage with Enhanced Reporting and Power Supply Output Addressing

| [0, Job7-01: INX-10A - MGC-4000 Configurator File Job Insert Edit Panel Help |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Job Details: FlexNetMP Node 1 Base I/O Main Display Mircom QLA: CPU 1 Loop 1 Loop 2 Loop 3 - N/A <br> Loop $4-$ N/A | Addr | Device | Type | IptMet... | F1 | Tag (line1) | Tag (Line2) | SubType |  |
|  | 234.1 | (MIX4)Input | Trouble Input | Class B |  | INX-10A \#1 | Common trouble |  |  |
|  | 234.2 | (MIX4)Input | Trouble Input |  |  | INX-10A \#1 | AC trouble |  |  |
|  | 235.1 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Signal Silence |  |  |
|  | 235.2 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Reserved |  |  |
|  | 236.1 | (MIX4)Input | Trouble Input | Class B |  | INX-10A \#1 | Battery trouble |  |  |
|  | 236.2 | (MIX4)Input | Trouble Input |  |  | INX-10A \#1 | Ground Fault |  |  |
|  | 237.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 1 |  |  |
|  | 238.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 2 |  |  |
|  | 239.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 3 |  |  |
|  | 240.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 4 |  |  |

Figure 43 MGC-4000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output

### 6.6 Two Stage Addressing Options in FleX-Net ${ }^{\text {TM }}$ FX-4000

Address Assignments are done via DIP switch 2 (SW2) which is located to the left of the Main LED display board. The addresses for the functions are dependent upon the Base Address of the INX Panel.

For further information on setting the Base Address of the INX panel see Figure 13.

> Attention: Ensure that the configuration is set correctly on the INX-10A DIP switches and the Fire Panel Configuration Software.

### 6.6.1 Two Stage with Basic Reporting Addressing

To configure the recommended base address
Set DIP switch SW1 as: 1-1-1-0-0-1-1-1
ON-ON-ON-OFF-OFF-ON-ON-ON


To configure the INX for Two Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-0
ON-OFF-ON-OFF
sw 2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 22 Configuring Two Stage Functions

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 231.1 |
| Reserved |  | 2 | 231.2 |
| Signal Silence | Base Address + 1 | 1 | 232.1 |
| Reserved |  | 2 | 232.2 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 1 | 233.1 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 1 | 234.1 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 1 | 235.1 |
| Activate NAC4, return NAC4 line status | Base Address + 5 | 1 | 236.1 |
| Activate NAC5, return NAC5 line status | Base Address + 6 | 1 | 237.1 |
| Second Stage NAC1 | Base Address + 7 | 1 | 238.1 |
| Second Stage NAC2 |  | 2 | 238.2 |
| Second Stage NAC3 | Base Address + 8 | 1 | 239.1 |
| Second Stage NAC4 |  | 2 | 239.2 |
| Second Stage NAC5 | Base Address + 9 | 1 | 240.1 |
| Reserved |  | 2 | 240.2 |

Notes: Table 22 represents all NACs configured as NAC circuits.
The second stage NACs must have the Signal Type in the Configurator in order to work with signal silence.

Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply see section 6.4.3 on page 62 for an explanation on addressing.
6.6.1.1 Software Configuration - Two Stage with Basic Reporting Addressing

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q-Job Detaiss FerNemP | Addr | 1 Denice | ITpee | $\mid$ Iomet... | \|Fi | Tog (inei) | 1 Tag (ine2) | 1 subTrpe |
| ¢- .ode 1 | ${ }_{231.1}^{2312}$ | (MxX)Inout | Troule Trout | Class ${ }^{\text {B }}$ | Inc-100 \#1 | Common toul |  |
| . $\mathrm{Basel}^{\text {P/ }}$ | ${ }_{232.1}^{23.12}$ |  |  |  |  | Reserved |  |
| (9-Main isplay | ${ }^{2322,2}$ | (mxx) (mutut |  |  |  | Reserved |  |
| Loop 1 | ${ }_{233.1}^{23.1}$ | (MXx)MUOOMac | Stobe |  | Ns ${ }_{\text {NS }}$ | NaC2 |  |
| Loop 2 | ${ }^{235.1}$ | Mrxamu Mac | Strobe |  |  | NaC3 |  |
| Loop 3-N/A | ${ }_{2}^{237.1}$ | (mxa)MOOMAC | Stobe |  | NS INX-104* $=1$ |  |  |
|  | ${ }_{2}^{238.1}$ | (Mxx) ouput |  |  | TM-100*1 | NaC 12nd Stoge |  |
| Outputzones | ${ }^{239.1}$ | Mixf) Ouput | Signal |  |  | NaC 3 2nd Stase |  |
| - Node 8 CPU Status | ${ }_{2}^{200.1}$ | Mrx ouput | somal |  | TNX-10A \#1 | NaC 5 2nd Stage |  |
| mmon System Status |  | (MxA)Outur |  |  |  |  |  |

Figure 44 MGC-4000 Configurator Settings - INX-10A Two Stage with Basic Reporting

### 6.6.2 Two Stage Address Assignment with Enhanced Trouble Reporting

To configure the recommended base address
Set DIP switch SW1 as:

```
\[
0-1-1-0-0-1-1-1
\]
OFF-ON-ON-OFF-OFF-ON-ON-ON
```

To configure the INX for Two Stage with Enhanced Trouble Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-0
ON-OFF-OFF-OFF
sw2


Attention: Two Stage Enhanced reporting is mandatory to meet ULC requirements.

Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 23 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 230.1 |
| Monitor AC Trouble |  | 2 | 230.2 |

Table 23 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting (Continued)

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Signal Silence | Base Address + 1 | 1 | 231.1 |
| Reserved |  | 2 | 231.2 |
| Monitor Battery/Charger trouble | Base Address + 2 | 1 | 232.1 |
| Monitor Earth Ground Fault |  | 2 | 232.2 |
| Activate NAC1, return NAC1 line status | Base Address + 3 | 1 | 233.1 |
| Activate NAC2, return NAC2 line status | Base Address + 4 | 1 | 234.1 |
| Activate NAC3, return NAC3 line status | Base Address + 5 | 1 | 235.1 |
| Activate NAC4, return NAC4 line status | Base Address + 6 | 1 | 236.1 |
| Activate NAC5, return NAC5 line status | Base Address + 7 | 1 | 237.1 |
| Second Stage NAC1 | Base Address + 8 | 1 | 238.1 |
| Second Stage NAC2 |  | 2 | 238.2 |
| Second Stage NAC3 | Base Address + 9 | 1 | 239.1 |
| Second Stage NAC4 |  | 2 | 239.2 |
| Second Stage NAC5 | Base Address + 10 | 1 | 240.1 |
| Reserved |  | 2 | 240.2 |

Notes: Table 23 represents all NACs configured as NAC circuits.
The second stage NACs must have the Signal Type in the Configurator in order to work with signal silence.

Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply see section 6.4.4 on page 66 for an explanation on addressing.
6.6.2.1 Software Configuration - Two Stage Address Assignment with Enhanced Trouble Reporting


Figure 45 MGC-4000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting

### 6.6.3 Two Stage with Basic Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.6.3.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 233.

To configure the recommended base address
Set DIP switch SW1
1-0-0-1-0-1-1-1
as:
ON-OFF-OFF-ON-OFF-ON-ON-ON
sw1


To configure the INX for Two Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-0
ON-OFF-ON-OFF
sw2


To configure NAC 5 as a Continuous Power Supply
Set DIP switch SW4-7 and SW4-8
as:
1-0
ON-OFF
SW4


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 24 Assigning Addresses - Two Stage Application, 1 Power Supply Output

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 233.1 |
| Reserved |  | 2 | 233.2 |
| Signal Silence | Base Address + 1 | 1 | 234.1 |
| Reserved |  | 2 | 234.2 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 1 | 235.1 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 1 | 236.1 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 1 | 237.1 |
| Activate NAC4, return NAC4 line status | Base Address + 5 | 1 | 238.1 |
| Second Stage NAC1 | Base Address + 6 | 1 | 239.1 |
| Second Stage NAC2 |  | 2 | 239.2 |
| Second Stage NAC3 | Base Address + 7 | 1 | 240.1 |
| Second Stage NAC4 |  | 2 | 240.2 |

Notes: The second stage NACs must have the Signal Type in the Configurator in order to work with signal silence.

Mircom recommends always using the upper range of addresses available for the INX-10A.

Troubles occurring on a NAC circuit are only reported via the first stage address.
6.6.3.2 Software Configuration -Two Stage with Basic Reporting and Power Supply Output Addressing

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ Job Details: FlexNetMP | Addr | Device | Type | IptMet... | F1 | Tag (Line 1) | Tag (Line2) |
| $\square$ Node 1 | 233.1 | (MIX4)Input | Trouble Input | Class B |  | INX-10A \#1 | Common trouble |
| + Base I/O | 233.2 | (MIX4)Input | Monitor |  |  | INX-10A \#1 | Reserved |
| Hain Display | 234.1 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Signal Silence |
| $\dagger$ - Main Display | 234.2 | (MIX4)Output | Relay |  |  | INX-10A \#1 | Reserved |
| Mircom QLA: CPU 1 | 235.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 1 |
| Loop 1 | 236.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 2 |
| Loop 2 | 237.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 3 |
| Loop 3 - N/A | 238.1 | (MIX4)MUO/NAC | Strobe |  | NS | INX-10A \#1 | NAC 4 |
| -Loop 3 - N/A | 239.1 | (MIX4)Output | Signal |  |  | INX-10A \#1 | NAC 12 2nd Stage |
| -...Loop 4 - N/A | 239.2 | (MIX4)Output | Signal |  |  | INX-10A \#1 | NAC 2 2nd Stage |
| - $\quad$ Input Zones | 240.1 | (MIX4)Output | Signal |  |  | INX-10A \#1 | NAC 3 2nd Stage |
| Output Zones | 240.2 | (MIX4)Output | Signal |  |  | INX-10A \#1 | NAC 4 2nd Stage |
| Node \& CPU Status |  |  |  |  |  |  |  |
| . Common System Status |  |  |  |  |  |  |  |

Figure 46 MGC-4000 Configurator Settings - INX-10A Two Stage with Power Supply Output

### 6.6.4 Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

Attention: Two Stage Enhanced reporting is mandatory to meet ULC requirements.

### 6.6.4.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 232.

To configure the recommended base address
Set DIP switch SW1

$$
0-0-0-1-0-1-1-1
$$

as:
OFF-OFF-OFF-ON-OFF-ON-ON-ON

To configure the INX for Two Stage with Enhanced Trouble Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-0
ON-OFF-OFF-OFF
sw2


To configure NAC 5 as a Continuous Power Supply


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 25 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

| Function | Address | Subaddress | Recommended <br> Device Address |
| :--- | :--- | :--- | :---: |
| Common Trouble | Base Address | 1 | 232.1 |
| Monitor AC trouble |  | 2 | 232.2 |
| Signal Silence | Base Address + 1 | 1 | 233.1 |
| Reserved |  | 2 | 233.2 |
| Monitor Battery/Charger trouble | Base Address + 2 | 1 | 234.1 |
| Monitor Earth Ground Fault |  | 2 | 234.2 |
| Activate NAC1, return NAC1 line status | Base Address + 3 | 1 | 235.1 |
| Activate NAC2, return NAC2 line status | Base Address + 4 | 1 | 236.1 |
| Activate NAC3, return NAC3 line status | Base Address +5 | 1 | 237.1 |
| Activate NAC4, return NAC4 line status | Base Address + 6 | 1 | 238.1 |
| Second Stage NAC1 | Base Address + 7 | 1 | 239.1 |
| Second Stage NAC2 |  | 2 | 239.2 |
| Second Stage NAC3 | Base Address + 8 | 1 | 240.1 |
| Second Stage NAC4 |  | 2 | 240.2 |

Notes: The second stage NACs must have the Signal Type in the Configurator in order to work with signal silence.

Mircom recommends always using the upper range of addresses available for the INX-10A.

Troubles occurring on a NAC circuit are only reported via the first stage address.
6.6.4.2 Software Configuration - Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing


Figure 47 MGC-4000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

### 6.7 Single Stage Configuration in FX-400/401

## Attention: To configure the INX-10A for FX-400/401, DIP switch SW2-1 and SW3-2

 must be set to $O N$. See section 6.2.3 on page 40 .
### 6.7.1 Single Stage with Basic Reporting Addressing

To configure the recommended base address

Set DIP switch SW1

$$
0-1-0-1-0-1-1-1
$$

OFF-ON-OFF-ON-OFF-ON-ON-ON


To configure the INX for Single Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-1
ON-OFF-ON-ON
sw2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 26 Configuring Single Stage Functions

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 234 |
| Signal Silence | Base Address + 1 | 235 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 236 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 237 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 238 |
| Activate NAC4, return NAC4 line status | Base Address + 5 | 239 |
| Activate NAC5, return NAC5 line status | Base Address + 6 | 240 |

Notes: Table 26 represents all NACs configured as NAC circuits.
Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply, see section 6.3.3 on page 49 for an explanation on addressing.

### 6.7.1.1 Software Configuration - Single Stage with Basic Reporting Addressing



Figure 48 MGC-400 Configurator Settings - INX-10A Single Stage with Basic Reporting

### 6.7.2 Single Stage with Enhanced Reporting Addressing

To configure the recommended base address

## Set DIP switch SW1

as:

$$
1-1-1-0-0-1-1-1
$$

ON-ON-ON-OFF-OFF-ON-ON-ON
sW1


To configure the INX for Single Stage with Enhanced Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-1
ON-OFF-OFF-ON


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 27 Configuring Single Stage Functions

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 231 |
| Monitor Signal Silence | Base Address + 1 | 232 |
| AC Trouble | Base Address + 2 | 233 |
| Monitor Battery/Charger trouble | Base Address + 3 | 234 |
| Monitor Earth Ground Fault | Base Address + 4 | 235 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 236 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 237 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 238 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 239 |
| Activate NAC5, return NAC5 line status | Base Address + 9 | 240 |

- Notes: Table 27 represents all NACs configured as NAC circuits.

Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply, see section 6.3.3 on page 49 for an explanation on addressing.

### 6.7.2.1 Software Configuration - Single Stage with Enhanced Reporting Addressing

| ■ Job Details: FX-400 | Addr | \| Lp Addr | CkiNo | Device | Type | F1 F | F3 | F4 | Sens | Tag (Line1) | Tag (Line2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ Base | 231 | 231 | 0 | (M\|X-404x) Dual InputA | Trouble Input |  | CA |  |  | Common Trouble |  |
|  | 232 | 232 | 4 | (MIX-4045)Dual Relay | Relay |  |  | NF |  | Signal Silence |  |
| Loop 0 (Hardwire؛ | 233 | 233 | 1 | (MIX-404x) Dual InputA | Trouble Input |  | CA |  |  | AC Trouble |  |
| Loop 1 | 234 | 234 | 2 | (MIX-404x) Dual InputA | Trouble Input |  | CA |  |  | Battery Trouble |  |
| - Bypass Groups | 235 | 235 | 3 | (M1X-404x) Dual Inputé | Trouble Input |  | CA |  |  | Ground Fault |  |
| 円-Main Display | 236 | 236 | 5 | (MIX-4046) Sup Dutput Module | Signal |  |  | NF |  | NAC1 |  |
| Dialer | 237 | 237 | 6 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC2 |  |
|  | 238 | 238 | 7 | (MIX-4046) Sup Output Module | Signal |  |  | NF |  | NAC3 |  |
| - Common System Status | 239 | 239 | 8 | [M\|X-4046)Sup Output Module | Signal |  |  | NF |  | NAC4 |  |
| - Input Summary | 240 | 240 | 9 | (MIX-4046) Sup Output Module | Signal |  |  | NF |  | NAC5 |  |
| Output Summary |  |  |  |  |  |  |  |  |  |  |  |

Figure 49 MGC-400 Configurator Settings - INX-10A Single Stage with Enhanced Reporting

### 6.7.3 Single Stage with Basic Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.7.3.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 235.

To configure the recommended base address

## Set DIP switch SW1

as:

$$
1-1-0-1-0-1-1-1
$$

ON-ON-OFF-ON-OFF-ON-ON-ON

SW1


To configure the INX for Single Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-1
ON-OFF-ON-ON
sW2


To configure NAC 5 as a Continuous Power Supply

## Set DIP switch SW4-7 and SW4-8

 as:1-0
ON-OFF


sw4 | 1 | 2 | 3 | 4 | 5 | 678 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 28 Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 235 |
| Signal Silence | Base Address + 1 | 236 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 237 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 238 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 239 |
| Activate NAC4, return NAC4 line status | Base Address +5 | 240 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

Mircom recommends always using the upper range of NACs (NAC5 then NAC4 then NAC3 etc.) when configuring as a Power Supply.
6.7.3.2 Software Configuration - Single Stage with Basic Reporting and Power Supply Output Addressing

| ■Job Details: FX-400 | Addr | \| Lp Addr | CkiNo | Device | Type | F1 \| | F3 | F4 | Sens | \| Tag (Line1) | Tag (Line2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f- Base I/O | 235 | 235 | 0 | (M1X-404x) Dual InputA. | Trouble Input |  | CA |  |  | Common Trouble |  |
|  | 236 | 236 | 4 | (M\|X-4045)Dual Relay | Relay |  |  | NF |  | Signal Silence |  |
| O (Hardwire | 237 | 237 | 5 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC1 |  |
| Loop 1 | 238 | 238 | 6 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC2 |  |
| - Bypass Groups | 239 | 239 | 7 | (MIX-4046) Sup Dutput Module | Signal |  |  | NF |  | NAC3 |  |
| 円-Main Display | 240 | 240 | 8 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC4 |  |
| - Dialer |  |  |  |  |  |  |  |  |  |  |  |
| - Common System Status |  |  |  |  |  |  |  |  |  |  |  |
| - Input Summary |  |  |  |  |  |  |  |  |  |  |  |
| Output Summary |  |  |  |  |  |  |  |  |  |  |  |

Figure 50 MGC-400 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output

### 6.7.4 Single Stage with Enhanced Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.7.4.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 232.

To configure the recommended base address
Set DIP switch SW1
as:

$$
\begin{aligned}
& 0-0-0-1-0-1-1-1 \\
& \text { OFF-OFF-OFF-ON-OFF-ON-ON-ON }
\end{aligned}
$$

sw1

To configure the INX for Single Stage with Enhanced Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-1
ON-OFF-OFF-ON
sw2


To configure NAC 5 as a Continuous Power Supply
Set DIP switch SW4-7 and SW4-8
1-0
as:
sw4


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 29 Assigning Addresses - Single Stage Application, 1 Power Supply Output

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 232 |
| Signal Silence | Base Address + 1 | 233 |
| Monitor AC Trouble | Base Address + 2 | 234 |
| Monitor Battery/Charger trouble | Base Address + 3 | 235 |
| Monitor Earth Ground Fault | Base Address + 4 | 236 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 237 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 238 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 249 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 240 |

Notes: Mircom recommends always using the upper range of addresses available for the INX-10A.

Mircom recommends always using the upper range of NACs (NAC5 then NAC4 then NAC3 etc.) when configuring as a Power Supply.

### 6.7.4.2 Software Configuration - Single Stage with Enhanced Reporting and Power Supply Output Addressing



Figure 51 MGC-400 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output

### 6.8 Two Stage Addressing Options in FX-401

Attention: To configure the INX-10A for FX-400/401, DIP switch SW2-1 and SW3-2 must be set to $O N$. See section 6.2.3 on page 40 .

Address Assignments are done via DIP switch 2 (SW2) which is located to the left of the Main LED display board. The addresses for the functions are dependent upon the Base Address of the INX Panel.

For further information on setting the Base Address of the INX panel see Figure 13.

Attention: Ensure that the configuration is set correctly on the INX-10A DIP switches and the Fire Panel Configuration Software.

### 6.8.1 Two Stage with Basic Reporting Addressing

To configure the recommended base address
Set DIP switch SW1 as: 1-0-1-0-0-1-1-1
ON-OFF-ON-OFF-OFF-ON-ON-ON
sw1


To configure the INX for Two Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-0
ON-OFF-ON-OFF

SW2


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 30 Configuring Two Stage Functions

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 229 |
| Signal Silence | Base Address + 1 | 230 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 231 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 232 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 233 |
| Activate NAC4, return NAC4 line status | Base Address + 5 | 234 |

Table 30 Configuring Two Stage Functions (Continued)

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Activate NAC5, return NAC5 line status | Base Address + 6 | 235 |
| Second Stage NAC1 | Base Address + 7 | 236 |
| Second Stage NAC2 | Base Address + 8 | 237 |
| Second Stage NAC3 | Base Address + 9 | 248 |
| Second Stage NAC4 | Base Address + 10 | 239 |
| Second Stage NAC5 | Base Address + 11 | 240 |

Notes: Table 30 represents all NACs configured as NAC circuits.
The second stage NACs must be correlated to the Fire Drill and Total Evacuation statuses. They must have the Signal Type in the Configurator in order to work with signal silence.
Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply see section 6.4.3 on page 62 for an explanation on addressing.
6.8.1.1 Software Configuration - Two Stage with Basic Reporting Addressing

| Addr | 1 Lp Addr | CkiNo | Device | Type | F1 \| F3 | F4 \| Sens | Tag (Line 1) | Tag (Line2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 229 | 229 | 0 | (M\|X-404x) Dual Inputa | Trouble Input | CA |  | Common Trouble |  |
| 230 | 230 | 4 | (MIX-4045)Dual Relay | Relay |  | NF | Signal Silence |  |
| 231 | 231 | 5 | (M\|X-4046)Sup Output Module | Signal |  | NF | NAC1 |  |
| 232 | 232 | 6 | (M\|X-4046)Sup Output Module | Signal |  | NF | NAC2 |  |
| 233 | 233 | 7 | (M1X-4046)Sup Output Module | Signal |  | NF | NAC3 |  |
| 234 | 234 | 8 | (M1X-4046)Sup Output Module | Signal |  | NF | NAC4 |  |
| 235 | 235 | 9 | (M\|X-4046)Sup Output Module | Signal |  | NF | NAC5 |  |
| 236 | 236 | 10 | (MIX-4045)Dual Relay | Signal |  | NF | NAC1 2nd Stage |  |
| 237 | 237 | 11 | (MIX-4045)Dual Relay | Signal |  | NF | NAC2 2nd Stage |  |
| 238 | 238 | 12 | (MIX-4045)Dual Relay | Signal |  | NF | NAC3 2nd Stage |  |
| 239 | 239 | 13 | [MIX-4045)Dual Relay | Signal |  | NF | NAC4 2nd Stage |  |
| 240 | 240 | 14 | (MIX-4045)Dual Relay | Signal |  | NF | NAC5 2nd Stage |  |

Figure 52 MGC-400 Configurator Settings - INX-10A Two Stage with Basic Reporting

### 6.8.2 Two Stage Address Assignment with Enhanced Trouble Reporting

To configure the recommended base address

## Set DIP switch SW1

as:

$$
0-1-0-0-0-1-1-1
$$

OFF-ON-OFF-OFF-OFF-ON-ON-ON


To configure the INX for Two Stage with Enhanced Trouble Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-0

Attention: Two Stage Enhanced reporting is mandatory to meet ULC requirements.

Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 31 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 226 |
| Signal Silence | Base Address + 1 | 227 |
| Monitor AC Trouble | Base Address + 2 | 228 |
| Monitor Battery/Charger trouble | Base Address + 3 | 229 |
| Monitor Earth Ground Fault | Base Address + 4 | 230 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 231 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 232 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 233 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 234 |
| Activate NAC5, return NAC5 line status | Base Address + 9 | 235 |
| Second Stage NAC1 | Base Address + 10 | 236 |
| Second Stage NAC2 | Base Address + 11 | 237 |
| Second Stage NAC3 | Base Address + 12 | 238 |
| Second Stage NAC4 | Base Address + 13 | 239 |
| Second Stage NAC5 | Base Address + 14 | 240 |

Notes: Table 31 represents all NACs configured as NAC circuits.
The second stage NACs must be correlated to the Fire Drill and Total Evacuation statuses. They must have the Signal Type in the Configurator in order to work with signal silence.

Mircom recommends always using the upper range of addresses available for the INX-10A.

If any NAC circuit is configured as a Power Supply see section 6.4.4 on page 66 for an explanation on addressing.
6.8.2.1 Software Configuration - Two Stage Address Assignment with Enhanced Trouble Reporting

| [Job Details: FX-401 | Addr | LpAddr | CkNo | Device | Type | F1 | F3 | F4 | Sens | Tag (Line1) | Tag (Line2) | Delay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Base I/O | 122 | 226 | 0 | (M1X-404x) Dual Inputa | Trouble Input |  | CA |  |  | Common Trouble |  |  |
| - ${ }^{\text {a }}$ | 227 | 227 | 4 | (MIX-4045)Dual Relay | Relay |  |  | NF |  | Signal Silence |  | 0 |
| Loop 0 (Hardwirer | 228 | 228 | 1 | (MIX-404x) Dual Inputa | Trouble Input |  | CA |  |  | AC Trouble |  |  |
| Loop 1 | 229 | 229 | 2 | (MIX-404x) Dual InputA | Trouble Input |  | ca |  |  | Battery Trouble |  |  |
| Bypass Groups | 230 | 230 | 3 | (M1X-404x) Dual Inputa | Trouble Input |  | CA |  |  | Ground Fault |  |  |
| †-Main Display | 231 | 231 | 5 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC1 |  | 0 |
|  | 232 | 232 | 6 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC2 |  | 0 |
| - Dialer | 233 | 233 | 7 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC3 |  | 0 |
| - Common System Status | 234 | 234 | 8 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC4 |  | 0 |
| - Input Summary | 235 | 235 | 9 | (MIX-4046)Sup Output Module | Signal |  |  | NF |  | NAC5 |  | 0 |
| Output Summary | 236 | 236 | 10 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC1 2nd Stage |  | 0 |
| Output Sumary | 237 | 237 | 11 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC2 2nd Stage |  | 0 |
|  | 238 | 238 | 12 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC3 2nd Stage |  | 0 |
|  | 239 | 239 | 13 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC4 2nd Stage |  | 0 |
|  | 240 | 240 | 14 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC5 2nd Stage |  | 0 |

Figure 53 MGC-400 Configurator Settings - INX-10A Two Stage with Enhanced Reporting

### 6.8.3 Two Stage with Basic Reporting and Power Supply Output Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

### 6.8.3.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 231 .

To configure the recommended base address
Set DIP switch SW1


To configure the INX for Two Stage with Basic Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-1-0
ON-OFF-ON-OFF

SW2


To configure NAC 5 as a Continuous Power Supply

## Set DIP switch SW4-7 and SW4-8

 as:```
1-0
```

ON-OFF
sw4


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 32 Assigning Addresses - Two Stage Application, 1 Power Supply Output

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 231 |
| Signal Silence | Base Address + 1 | 232 |
| Activate NAC1, return NAC1 line status | Base Address + 2 | 233 |
| Activate NAC2, return NAC2 line status | Base Address + 3 | 234 |
| Activate NAC3, return NAC3 line status | Base Address + 4 | 235 |
| Activate NAC4, return NAC4 line status | Base Address + 5 | 236 |
| Second Stage NAC1 | Base Address + 6 | 237 |
| Second Stage NAC2 | Base Address + 7 | 238 |
| Second Stage NAC3 | Base Address + 8 | 239 |
| Second Stage NAC4 | Base Address + 9 | 240 |

Notes: The second stage NACs must be correlated to the Fire Drill and Total Evacuation statuses. They must have the Signal Type in the Configurator in order to work with signal silence.
Mircom recommends always using the upper range of addresses available for the INX-10A.

Troubles occurring on a NAC circuit are only reported via the first stage address.

### 6.8.3.2 Software Configuration -Two Stage with Basic Reporting and Power Supply Output Addressing

| ■Job Details: FX-400 | Addr | 1 LpAddr | CkiNo | Device | Type | F1 \| | F3 | F4 | Sens | \| Tag (Line1) | Tag (Line2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Base I/O | 231 | 231 | 0 | (M1X-404x)Dual InputA. | Trouble Input |  | CA |  |  | Common Trouble |  |
|  | 232 | 232 | 4 | (M1X-4045) Dual Relay | Relay |  |  | NF |  | Signal Silence |  |
| -Loop 0 (Hardwires | 233 | 233 | 5 | (M\|X-4046)Sup Output Module | Signal |  |  | NF |  | NAC1 |  |
| Loop 1 | 234 | 234 | 6 | (M\|X-4046)Sup Output Module | Signal |  |  | NF |  | NAC2 |  |
| - Bypass Groups | 235 | 235 | 7 | (M\|X-4046)Sup Output Module | Signal |  |  | NF |  | NAC3 |  |
| + Main Display | 236 | 236 | 8 | (M\|X-4046)Sup Output Module | Signal |  |  | NF |  | NAC4 |  |
|  | 237 | 237 | 9 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC1 2nd Stage |  |
| - Dialer | 238 | 238 | 10 | (M1X-4045)Dual Relay | Signal |  |  | NF |  | NAC2 2nd Stage |  |
| - Common System Status | 239 | 239 | 11 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC3 2nd Stage |  |
| - Input Summary | 240 | 240 | 12 | (MIX-4045)Dual Relay | Signal |  |  | NF |  | NAC4 2nd Stage |  |
| Output Summary |  |  |  |  |  |  |  |  |  |  |  |

Figure 54 MGC-400 Configurator Settings - INX-10A Two Stage with Power Supply Output

### 6.8.4 Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

In order to maximize the amount of addresses available, if a NAC circuit is configured as a Power Supply, the next configured NAC Circuit is assigned the address reserved for the previous Circuit.

Attention: Two Stage Enhanced reporting is mandatory to meet ULC requirements.

### 6.8.4.1 Example Application

- NAC 5 configured as a Power Supply.
- INX-10A Common Trouble reporting address is 228.

To configure the recommended base address
Set DIP switch SW1
as:
$0-0-1-0-0-1-1-1$
OFF-OFF-OFF-ON-OFF-ON-ON-ON
SW1


To configure the INX for Two Stage with Enhanced Trouble Reporting in a system with MGC addressable devices

Set DIP switch SW2-1 to SW2-4 as: 1-0-0-0
ON-OFF-OFF-OFF
sw 2


To configure NAC 5 as a Continuous Power Supply
Set DIP switch SW4-7 and SW4-8
as:

1-0
ON-OFF

SW4


Attention: If NACs are configured the Evacuation Rate must be set on SW4 4-6. For more information see section 6.2.4 on page 41.

Table 33 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Common Trouble | Base Address | 228 |
| Signal Silence | Base Address + 1 | 229 |
| Monitor AC trouble | Base Address + 2 | 230 |
| Monitor Battery/Charger trouble | Base Address + 3 | 231 |
| Monitor Earth Ground Fault | Base Address + 4 | 232 |
| Activate NAC1, return NAC1 line status | Base Address + 5 | 233 |
| Activate NAC2, return NAC2 line status | Base Address + 6 | 234 |
| Activate NAC3, return NAC3 line status | Base Address + 7 | 235 |
| Activate NAC4, return NAC4 line status | Base Address + 8 | 236 |
| Second Stage NAC1 | Base Address + 9 | 237 |
| Second Stage NAC2 | Base Address + 10 | 238 |

Table 33 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

| Function | Address | Recommended <br> Device Address |
| :--- | :--- | :---: |
| Second Stage NAC3 | Base Address +11 | 239 |
| Second Stage NAC4 | Base Address +12 | 240 |

Notes: The second stage NACs must be correlated to the Fire Drill and Total Evacuation statuses. They must have the Signal Type in the Configurator in order to work with signal silence.

Mircom recommends always using the upper range of addresses available for the INX-10A.

Troubles occurring on a NAC circuit are only reported via the first stage address.

### 6.8.4.2 Software Configuration - Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

| $\square$ Job Details: FX-401 | Addr | 1 Lp Addr | CkHNo | Device | Type | F1 \| F3 | F4 | Sens | Tag (Line1) | Tag (Line2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ¢ Base I/O | 228 | 228 | 0 | (MIX-404x) Dual InputA. | Trouble Input | CA |  |  | Common Trouble |  |
| - Base IVO | 229 | 229 | 4 | (M\|X-4045) Dual Relay | Relay |  | NF |  | Signal Silence |  |
|  | 230 | 230 | 1 | (M1X-404x) Dual InputA | Trouble Input | cas |  |  | AC Trouble |  |
| - Loop 1 | 231 | 231 | 2 | (M\|X-404x) Dual InputA | Trouble Input | CA |  |  | Battery Trouble |  |
| Bypass Groups | 232 | 232 | 3 | (M1X-404x) Dual InputA | Trouble Input | cA |  |  | Ground Fault |  |
| 円-Main Display | 233 | 233 | 5 | (MIX-4046)Sup Output Module | Signal |  | NF |  | $\mathrm{NAC1}$ |  |
|  | 234 | 234 | 6 | (MIX-4046)Sup Output Module | Signal |  | NF |  | NAC2 |  |
|  | 235 | 235 | 7 | (MIX-4046)Sup Output Module | Signal |  | NF |  | NAC3 |  |
| - Common System Status | 236 | 236 | 8 | (MIX-4046)Sup Output Module | Signal |  | NF |  | NAC4 |  |
| - Input Summary | 237 | 237 | 9 | (MIX-4045)Dual Relay | Signal |  | NF |  | NAC1 2nd Stage |  |
| Output Summary | 238 | 238 | 10 | (M1X-4045)Dual Relay | Signal |  | NF |  | NAC2 2nd Stage |  |
|  | 239 | 239 | 11 | (M\|X-4045)Dual Relay | Signal |  | NF |  | NAC3 2nd Stage |  |
|  | 240 | 240 | 12 | (M\|X-4045) Dual Relay | Signal |  | NF |  | NAC4 2nd Stage |  |

Figure 55 MGC-400 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

### 6.9 Independent Mode Configuration Options

NAC circuits on the INX-10A can be configured to drive both Signals and Strobes.

### 6.9.1 NACs 1 and 2 Configured as Signals

To configure NAC1 and NAC2 to drive signals set SW3-7 to 0 (OFF).
Configure the Strobe Manufacturer and Signal Rate by setting SW4-4, SW4-5, SW4-6, SW5-1 SW5-2 and SW5-3 as described in Table 34.

Notes: Using Independent Mode in a Two Stage Application
When driving Signals and Strobes in a Two Stage Application configure the Alert Rate by setting SW4-1, SW4-2 and SW4-3 as follows:

100 - Uses Strobe Manufacturer Sync Rate

010 - Continuous


110-0.5s ON, 2.5s OFF, Repeat (20 PPM as in FA-1000 or FX-2000)


001-20 PPM, 50\% Duty Cycle


Table 34 Independent Mode DIP Switch Settings - NAC1 and NAC2 configured as Signals

| NAC3 NAC4 and NAC5 | NAC1 and NAC2 | CONFIGURE SWITCHES AS SHOWN |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Strobe Manufacturer (SW5 1-3) | Signal Rate <br> (SW4 4-6) | sW3 | SW4 | SW5 |
| Mircom/Amseco | Continuous |  |  |  |
| Mircom/Amseco | Temporal |  |  |  |
| Mircom/Amseco | March Time |  |  |  |
| Mircom/Amseco | California |  |  |  |
| Mircom/Amseco | 120 PPM, 50\% Duty Cycle |  |  |  |
| System Sensor | Continuous |  |  |  |

Table 34 Independent Mode DIP Switch Settings - NAC1 and NAC2 configured as Signals (Continued)

| NAC3 NAC4 and NAC5 | NAC1 and NAC2 | CONFIGURE SWITCHES AS SHOWN |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Strobe Manufacturer (SW5 1-3) | Signal Rate (SW4 4-6) | SW3 | SW4 | SW5 |
| System Sensor | Temporal |  |  |  |
| System Sensor | March Time |  |  |  |
| System Sensor | California |  |  |  |
| System Sensor | 120 PPM, 50\% Duty Cycle |  |  |  |
| Secutron/Gentex | Continuous |  |  |  |
| Secutron/Gentex | Temporal |  |  |  |
| Secutron/Gentex | March Time |  |  |  |
| Secutron/Gentex | California |  |  |  |
| Secutron/Gentex | 120 PPM, 50\% Duty Cycle |  |  |  |
| Wheelock | Continuous |  |  |  |
| Wheelock | Temporal |  |  |  |
| Wheelock | March Time |  |  |  |
| Wheelock | California |  |  |  |
| Wheelock | 120 PPM, 50\% Duty Cycle |  |  |  |

### 6.9.2 NAC1, NAC2 and NAC3 Configured as Signals

To configure NAC1, NAC2 and NAC3 to drive signals set SW3-7 to 1 (ON).
Configure the Strobe Manufacturer and Signal Rate by setting SW4-4, SW4-5, SW4-6, SW5-1 SW5-2 and SW5-3 as described in Table 35.

Notes: Using Independent Mode in a Two Stage Application
When driving Signals and Strobes in a Two Stage Application configure the Alert Rate by setting SW4-1, SW4-2 and SW4-3 as follows:

100 - Uses Strobe Manufacturer Sync Rate

010 - Continuous


110-0.5s ON, 2.5s OFF, Repeat (20 PPM as in FA-1000 or FX-2000)


001-20 PPM, 50\% Duty Cycle


Table 35 Independent Mode DIP Switch Settings - NAC1, NAC2 and NAC3 configured as Signals

| NAC4 and NAC5 | NAC1, NAC2 and NAC3 | CONFIGURE SWITCHES AS SHOWN |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Strobe Manufacturer (SW5 1-3) | Signal Rate (SW4 4-6) | SW3 | SW4 | SW5 |
| Mircom/Amseco | Continuous |  |  |  |
| Mircom/Amseco | Temporal |  |  |  |
| Mircom/Amseco | March Time |  |  |  |
| Mircom/Amseco | California |  |  |  |
| Mircom/Amseco | 120 PPM, 50\% Duty Cycle |  |  |  |
| System Sensor | Continuous |  |  |  |
| System Sensor | Temporal |  |  |  |

Table 35 Independent Mode DIP Switch Settings - NAC1, NAC2 and NAC3 configured as Signals (Continued)

| NAC4 and NAC5 | NAC1, NAC2 and NAC3 | CONFIGURE SWITCHES AS SHOWN |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Strobe Manufacturer (SW5 1-3) | Signal Rate (SW4 4-6) | SW3 | SW4 | SW5 |
| System Sensor | March Time |  |  |  |
| System Sensor | California |  |  |  |
| System Sensor | 120 PPM, 50\% Duty Cycle |  |  |  |
| Secutron/Gentex | Continuous |  |  |  |
| Secutron/Gentex | Temporal |  |  |  |
| Secutron/Gentex | March Time |  |  |  |
| Secutron/Gentex | California |  |  |  |
| Secutron/Gentex | 120 PPM, 50\% Duty Cycle |  | "abutup |  |
| Wheelock | Continuous |  |  |  |
| Wheelock | Temporal |  |  |  |
| Wheelock | March Time |  |  |  |
| Wheelock | California |  |  |  |
| Wheelock | 120 PPM, 50\% Duty Cycle |  |  |  |

### 7.0 Wiring

This chapter describes the proper field wiring for the INX-10A.

## This chapter explains

- Maximum wiring distances
- Wiring Terminal Connections
- Wiring Power Supply Connections


### 7.1 Wiring Tables

Table 36 Wiring Table for Input Circuits

| Wire Gauge | Maximum Wiring Run to Last Device (ELR) |  |
| :---: | :---: | :---: |
| (AWG) | $\mathbf{f t}$ | $\mathbf{m}$ |
| 22 | 2990 | 910 |
| 20 | 4760 | 1450 |
| 18 | 7560 | 2300 |
| 16 | 12000 | 3600 |
| 14 | 19000 | 5800 |
| 12 | 30400 | 9200 |

Note: Maximum Loop Resistance Should Not Exceed 100 Ohms.

Table 37 Wiring Table for NAC and Auxiliary Power Circuits

| TOTAL SIGNAL LOAD | MAXIMUM WIRING RUN TO LAST DEVICE (ELR) |  |  |  |  |  |  |  | MAX. LOOP RESISTANCE <br> Ohms |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 18AWG |  | 16AWG |  | 14AWG |  | 12AWG |  |  |
| Amperes | ft | m | ft | m | ft | m | ft | m |  |
| 0.06 | 2350 | 716 | 3750 | 1143 | 6000 | 1829 | 9500 | 2895 | 30 |
| 0.12 | 1180 | 360 | 1850 | 567 | 3000 | 915 | 4720 | 1438 | 15 |
| 0.30 | 470 | 143 | 750 | 229 | 1200 | 366 | 1900 | 579 | 6 |
| 0.60 | 235 | 71 | 375 | 114 | 600 | 183 | 950 | 289 | 3 |
| 0.90 | 156 | 47 | 250 | 76 | 400 | 122 | 630 | 192 | 2 |
| 1.20 | 118 | 36 | 185 | 56 | 300 | 91 | 470 | 143 | 1.5 |
| 1.50 | 94 | 29 | 150 | 46 | 240 | 73 | 380 | 115 | 1.2 |
| 1.70 | 78 | 24 | 125 | 38 | 200 | 61 | 315 | 96 | 1.0 |
| 2.0 | 70 | 21 | 112 | 34 | 178 | 54 | 285 | 86 | 0.9 |
| 2.25 | 62 | 19 | 100 | 30 | 158 | 48 | 250 | 76 | 0.8 |
| 2.50 | 56 | 17 | 90 | 27 | 142 | 43 | 230 | 70 | 0.72 |

$i$
Notes: Main Board NAC Circuits are rated for 2.5 Amperes each.
Maximum Voltage Drop Should Not Exceed 1.8 Volts.

### 7.2 Main Board Terminal Connections

Wire devices to terminals as shown below. See 7.1 Wiring Tables on page 102, Table 37 Wiring Table for NAC and Auxiliary Power Circuits on page 102 and 8.0 Appendix A Specifications and Features - for more information.


Figure 56 Main Board Terminal Blocks

> Attention: DO NOT exceed power supply ratings: Total current including Main Chassis, AUX, and NAC circuits is 10A max.
> Ground Fault Detection is required at all times. INX Ground fault detection can only be disabled IF it is interfering the FACPs Ground Fault Detection operation AND the FACP is used to manage the Ground Fault Detection.
$i$
Notes: The Terminal Blocks are depluggable for ease of wiring.

All power limited circuits must use type FPL, FPLR, or FPLP power limited cable.

### 7.2.1 SLC Loop Wiring - Class B

FX-2000
ADDRESSABLE LOOP CONNECTIONS


Figure 57 SLC Loop Wiring - Class B

### 7.2.2 SLC Loop Wiring - Class A

FX-2000
ADDRESSABLE LOOP CONNECTIONS


Figure 58 SLC Loop Wiring-Class A

### 7.2.3 Synchronized Input from FACP Wiring - Class B

SYNCH SIGNAL FROM FACP


Figure 59 Synchronized Input from FACP Wiring - Class B

Attention: DO NOT USE AN SLC LOOP IN THIS APPLICATION.

### 7.2.4 Synchronized Input from FACP Wiring- Class A

SYNCH SIGNAL FROM FACP
NAC CIRCUIT FROM FACP


Figure 60 Synchronized Input from FACP Wiring - Class A

Attention: DO NOT USE AN SLC LOOP IN THIS APPLICATION.

### 7.2.5 Synchronized Input from INX-10A Wiring - Class B Single Follower

 SYNCH SIGNAL FROM INX-10A CLASS B ONLY

Figure 61 Synchronized Input from INX-10A Wiring - Class B Single Follower

Attention: CLASS B WIRING ONLY
7.2.6 Synchronized Input from INX-10A Single Stage Wiring - Class B Multiple Followers

## SYNCH SIGNAL FROM INX-10A CLASS B ONLY



Figure 62 Synchronized Input from INX-10A Wiring - Class B Multiple Followers

Attention: SYCNHRONIZING SIGNALS FROM THE INX-10A CAN USE CLASS B WIRING ONLY
MIRCOM RECOMMENDED SETUP FOR MULTIPLE FOLLOWERS

### 7.2.7 Synchronized Input from INX-10A Two Stage Wiring - Class B Multiple Followers

 SYNCH SIGNAL FROM INX-10A CLASS B ONLY

Figure 63 Synchronized Input from INX-10A Wiring - Class B Multiple Followers

Attention: SYNCHRONIZING SIGNALS FROM THE INX-10A CAN USE CLASS B WIRING ONLY

MIRCOM RECOMMENDED SETUP FOR MULTIPLE FOLLOWERS

### 7.2.8 Relay Contact Activation from FACP - Single Stage RELAY CONTACT ACTIVATION FROM FACP - SINGLE STAGE

FACP


To FACP input configured for

Alarm Relay

Aux Power trouble


Figure 64 Relay Contact Activation from FACP - Single Stage

## Attention: DO NOT USE AN SLC LOOP IN THIS APPLICATION.

Disable the addressable loop by setting DIP switch SW1 to all 0 (OFF).

Table 38 Difference between features provided by SLC Interface and Contact Interface

| Feature Description | SLC Interface | Contact Interface |
| :--- | :--- | :--- |
| NAC by NAC activation | Yes | No |
| NAC circuit trouble reporting | Yes | No |
| Common trouble reporting | Yes | Yes |
| Enhanced trouble reporting | Yes | No |

### 7.2.9 Relay Contact Activation from FACP - Two Stage

RELAY CONTACT ACTIVATION FROM FACP - TWO STAGE
FACP
Second Stage Alarm Relay

FACP
First Stage
Alarm
Relay


Figure 65 Relay Contact Activation from FACP - Two Stage

Attention: DO NOT USE AN SLC LOOP IN THIS APPLICATION.
Disable the addressable loop by setting DIP switch SW1 to all 0 (OFF).

### 7.2.10 Relay, Ground Supervision and Auxiliary Supply Wiring

COMMON TROUBLE CONTACTS
28 VDC, 1 AMP RESISTIVE LOAD


## ATTENTION!

Ground Fault Detection is required at all times. INX Ground fault detection can only be disabled IF it is interfering the FACP's Ground Fault Detection operation AND the FACP is used to manage the Ground Fault Detection.

Figure 66 Relay, Ground Supervision and Auxiliary Supply Wiring

### 7.2.11 Supervision of Auxiliary Supply Wiring



Figure 67 Relay, Ground Supervision and Auxiliary Supply Wiring

### 7.2.12 NAC Circuit Wiring - Class B



Figure 68 NAC Circuit Wiring - Class B

### 7.2.13 NAC Circuit Wiring-Class A



Figure 69 NAC Circuit Wiring - Class A

### 7.2.14 NAC 4 and 5 Door Release Wiring



Figure 70 Example door holder wiring on NAC4 and NAC5

### 7.2.15 Supervision of NAC4 and NAC5 Configured for Door Release



Figure 71 NAC4 and NAC5 Supervision

### 7.3 Power Supply Connections

The power supply is preinstalled as part of the Main Chassis. The following table displays the electrical ratings. Figure 72 Power Supply Connections shows the proper connections to wire the Power Supply successfully.

Table 39 Power Supply Electrical Ratings

| Connector/Jumper | Description |
| :--- | :--- |
| Electrical input ratings | $120 \mathrm{VAC}, 60 \mathrm{~Hz}, 2 \mathrm{~A} / 240 \mathrm{VAC}, 50 \mathrm{~Hz}, 1 \mathrm{~A}$ |
| Power supply total current | 10 A maximum |
| Battery Fuse | Replace with WX-058 Battery Cable Assembly |



Figure 72 Power Supply Connections

Attention: DO NOT exceed power supply ratings. Wire as shown using proper wire gauges.
Connect batteries after the system main A.C. power is turned on to reduce sparking.

### 7.4 System Checkout

The following are the recommended steps before and during the powering up of the INX-10A.

### 7.4.1 Before Turning The Power ON

1. To prevent sparking, DO NOT connect the batteries first. Connecting the batteries is only to be done after the system has been powered from the main AC Supply.
2. Check all field (external) wiring for opens, shorts, and ground.
3. Check that all interconnection cables are secure, and that all connectors are plugged-in properly.
4. Check all Jumpers and Switches for proper setting.
5. Check the AC power wiring for proper connection.
6. Check that the chassis is connected to EARTH GROUND (cold water pipe).
7. Close the front cover plate before powering the system from main AC supply.

### 7.4.2 Power-up Procedure

1. After completing 7.4.1 Before Turning The Power ON procedures, power-up the panel. The green AC-ON LED should illuminate.
2. Since the batteries are not connected, the Battery Trouble LED should illuminate, the Common Trouble LED should flash and the Trouble Relay (on the main board) will be active.
3. Connect the batteries while observing correct polarity; the red wire is positive (+) and black wire is negative ( - ).
4. All indicators should extinguish except for normal power AC-ON green LED.

### 7.5 Troubleshooting

The following are common methods to solving Circuit Ground Fault, Battery and Common troubles.

### 7.5.1 Circuit Trouble

Normally when a circuit trouble occurs, the Common Trouble indicator will be illuminated and the common trouble relay will be active. Additionally, the corresponding LED on the main board will be illuminated. This can be viewed by opening the panel and looking the top of the board. To correct the fault, check for open wiring on that particular circuit loop.

### 7.5.2 Ground Fault

This panel has a common ground fault detector. To correct the fault, check for any external wiring touching the chassis or other Earth Ground connection.

### 7.5.3 Battery Trouble

Check for the presence of batteries and their conditions. Low voltage (below 20.4V) will cause a battery trouble. If battery trouble condition persists, replace batteries as soon as possible.

### 7.5.4 Common Trouble

If only a common trouble is indicated on the main panel and none of those above confirming trouble indicators are on, then check the following for possible fault

- any missing interconnection wiring
- improperly secured cabling


### 8.0 Appendix A - Specifications and Features

Table 40 INX-10A, INX-10ADS and INX-10AC Specifications and Features

## INX-10A, INX-10ADS and INX-10AC Chassis

| General | Micro-controller based design, fully configurable from DIP Switches on front panel. |
| :---: | :---: |
| NAC Circuits | 5 Class B (Style Y) or Class A (Style Z) configurable as strobes or audibles. Terminals are labeled "NAC". <br> Power limited / 24 VDC regulated / 2.5 A @ $49^{\circ} \mathrm{C}$ per Circuit |
| Aux. Power Supply. | Terminals are labelled AUX PWR. <br> Power limited / 24 VDC Filtered (special application) / 1.7 A @ $49^{\circ} \mathrm{C}$ |
| Auxiliary relays (resistive loads) | Must be connected to a Listed Power Limited Source of Supply. Terminals are labelled "GROUND" and "TROUBLE". <br> Ground Fault <br> Common Trouble <br> Form C, 1 Amp, 28 VDC <br> Form C, 1 Amp, 28 VDC |
| Electrical ratings | AC line voltage $120 \mathrm{~V} 60 \mathrm{~Hz} / 240 \mathrm{~V}, 50 \mathrm{~Hz}$ <br>  $2 \mathrm{Amps} / 1 \mathrm{Amp}$ (primary) <br> Maximum allowable current $120 \mathrm{~V} @ 4.25 \mathrm{~A}$ <br>  $240 \mathrm{~V} @ 2.125 \mathrm{~A}$ <br> NAC Circuits 24 VDC regulated, Power Limited <br>  10 A Total, 2.5A maximum per circuit |
| Battery | Type $2 \times 12 \mathrm{VDC}$, Gel-Cell/Sealed Lead-Acid <br> Charging capability 4 Ah to 40 Ah batteries <br> Current Consumption standby: 200 mA <br> alarm: 350 mA |
| Compliance | System Model INX Addressable NAC Expander <br> Applicable Standards ULC S527-11, UL 864 10th Edition <br>  and UL 1481 R5 |

### 9.0 Appendix B - Power Supply \& Battery Calculations

Use the form below to determine the required Main Chassis and Secondary Power Supply (batteries).

## IMPORTANT NOTICE

The main AC branch circuit connection for Fire Alarm Control Unit must provide a dedicated continuous power without provision of any disconnect devices. Use \#12 AWG wire with 600-volt insulation and proper over-current circuit protection that complies with the local codes. Refer to8.0 Appendix A - Specifications and Features for specifications.

Power Requirements (All currents are in amperes)

| Model Number | Description | Qty |  | Standby | Total <br> Standby | Alarm | Total <br> Alarm |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| INX-10A | Main Chassis (10 <br> Amp) |  | X | 0.200 | $=$ | 0.350 | $=$ |
| INX-10ADS | Chassis (10 Amp) |  | X | 0.200 | $=$ | 0.350 | $=$ |
| INX-10AC | Chassis (10 Amp) |  | X | 0.200 | $=$ | 0.350 | $=$ |
| Signal Load (bells, horns, strobes, and etc.) |  | X |  |  | $=$ |  |  |
| Auxiliary Power Supply |  |  |  |  |  | $=$ | Alarm |
| Total currents (Add above currents) |  |  |  |  |  |  |  |

Total Current Requirement
ALARM (B) $\qquad$ Amps.

Battery Capacity Requirement
([STANDBY (A) $\qquad$ ] X [(24 or 60 Hours) $\qquad$ ]) $+($ (ALARM (B) $\qquad$ ] X [*Alarm in Hr.] $\qquad$ ) $=$ (C) $\qquad$ AH

## Battery Selection

Multiply (C) by 1.20 to derate battery.
Batteries BA-104(4AH), BA-1065(7AH) and BA-110(12AH) will fit into the INX-10A, BA-117 (18 Ah) fit in the INX-10ADS only
*Use 0.084 for five minutes of alarm or 0.5 for thirty minutes of alarm as a multiplier figure.

### 10.0 Appendix C - Sample Applications

### 10.1 Minimal Size Single Stage Addressable System - Factory Default Settings

In a minimal size system the INX-10A will require 7 addresses. The following are the specs for the system.

| Bas | ddress | 193 |
| :---: | :---: | :---: |
| Prot |  | System Sensor |
| AC | ure Report Delay | No Delay |
| Cha |  | Yes |
| Batt |  | Yes |
| Cut | arger when NACs activated | Yes |
| Aler | ate | N/A |
| Eva | ation Rate | Temporal |
| Stro | Type | None |
| NAC | Output Settings | NAC |
| NAC | Output Settings | NAC |
| SW1 |  |  |
| SW2 |  |  |
| SW3 |  |  |
| SW4 |  |  |
| SW5 |  |  |

### 10.2 Minimal Two Stage Addressable System

In a minimal size system the INX-10A will require 7 addresses. The following are the specs for the system.


### 10.3 Minimal ULC Two Stage Addressable System

In a minimal size system the INX-10A will require 7 addresses. The following are the specs for the system.


### 11.0 Appendix D - FX-2000 and FleX-Net Series ULI Compatible Devices

### 11.1 Horns and Bells

Table 41 FX-2000 and FleX-Net Series ULI Compatible Horns and Bells

| Manufacturer | Device Type | Horn Model | Max. Strobe/NAC |
| :---: | :---: | :---: | :---: |
| System Sensor -SpectrAlert | Horn | H12/24 | n/a |
|  | Horn | H12/24W | n/a |
| Wheelock | Horn | AH-24-R | n/a |
|  | Horn | AH-24-WP-R | n/a |
|  | Horn | MT-12/24-ULC | n/a |
|  | Horn | AMT-12/24-R-ULC | n/a |
|  | Bell | MB-G6-24-R | n/a |
|  | Bell | MB-G10-24-R | n/a |

### 11.2 Synchronized Strobes

Table 42 FX-2000 and FleX-Net Series ULI Compatible Synchronized Strobes

| Manufacturer | Brand | Strobe Model | Max. Strobe/NAC |
| :--- | :--- | :--- | :--- |
| Amseco/Potter | Mircom | FHS-240-110 | 15 |
| Gentex Corp. | Secutron | MRA-HS3-24ww | 20 |
| SpectrAlert | System Sensor | P1224 MC | 25 |
| Wheelock | Wheelock | NS-24 MCW -FW | 25 |

### 11.3 UL and ULC Listed Compatible Horn/Strobes

Table 43 UL and ULC Listed Compatible Horn/Strobes

| Device | Mircom Part \# |
| :--- | :--- |
| Horns/Strobes | FH-400-WW, FH-400-RR, FS-400-WW, FS-400-RR, FS-400C- |
|  | WW, FS-400C-RR, FHS-400-WW, FHS-400-RR, FHS-400C-WW, <br> FHS-400C-RR |

### 11.4 ULI Compatible Horn/Strobes

Table 44 ULI Compatible Horn/Strobes

| System Sensor <br> L Series Models | Description |
| :--- | :--- |
| P2RL | HORN STROBE 2W RED WALL |

Table 44 ULI Compatible Horn/Strobes (Continued)

| System Sensor <br> L Series Models | Description |
| :---: | :---: |
| P2WL | HORN STROBE 2W WHITE WALL |
| P2GRL | HORN STROBE 2W RED WALL, COMPACT |
| P2GWL | HORN STROBE 2W WHITE WALL, COMPACT |
| P2RL-P | HORN STROBE 2W RED WALL, PLAIN |
| P2WL-P | HORN STROBE 2W WHITE WALL, PLAIN |
| P2RL-SP | HORN STROBE 2W RED WALL, FUEGO |
| P2WL-SP | HORN STROBE 2W WHITE WALL, FUEGO |
| PC2RL | HORN STROBE 2W RED CEILING |
| PC2WL | HORN STROBE 2W WHITE CEILING |
| SRL | STROBE RED WALL |
| SWL | STROBE WHITE WALL |
| SGRL | STROBE RED WALL, COMPACT |
| SGWL | STROBE WHITE WALL, COMPACT |
| SRL-P | STROBE RED WALL, PLAIN |
| SWL-P | STROBE WHITE WALL, PLAIN |
| SRL-SP | STROBE RED WALL, FUEGO |
| SWL-CLR-ALERT | STROBE WHITE WALL, CLEAR LENS |
| SWL-ALERT | STROBE WHITE WALL, AMBER LENS |
| SCRL | STROBE RED CEILING |
| SCWL | STROBE WHITE CEILING |
| SCWL-CLR-ALERT | STOBE WHITE CEILING CLEAR LENS ALERT |
| HWL | HORN WHITE WALL |
| HRL | HORN RED WALL |
| HGRL | HORN RED WALL, COMPACT |
| HGWL | HORN WHITE WALL, COMPACT |
| CHWL | CHIME WHITE WALL |
| CHRL | CHIME RED WALL |
| CHSRL | CHIME STROBE RED WALL |
| CHSWL | CHIME STROBE WHITE WALL |
| CHSCRL | CHIME STROBE RED CEILING |
| CHSCWL | CHIME STROBE WHITE CEILING |

Table 44 ULI Compatible Horn/Strobes (Continued)

| System Sensor <br> L Series Models | Description |
| :--- | :--- |
| SPSRL | SPEAKER STROBE RED WALL |
| SPSWL | SPEAKER STROBE WHITE WALL |
| SPSRL-P | SPEAKER STROBE RED WALL, PLAIN |
| SPSWL-P | SPEAKER STROBE WHITE WALL, PLAIN |
| SPSRL-SP | SPEAKER STROBE RED WALL, FUEGO |
| SPSWL-ALERT | SPEAKER STROBE WHITE WALL CLEAR LENS, ALERT |
| SPSWL-CLR-ALERT | SPEAKER STROBE RED CEILING |
| SPSCRL | SPEAKER STROBE WHITE CEILING |
| SPSCWL | SPEAKER STROBE WHITE CEILING, FUEGO |
| SPSCWL-P | SPEAKER STROBE WHITE CEILING, ALERT |
| SPSCWL-SP |  |
| SPSCWL-CLR-ALERT |  |

### 11.5 ULC Compatible Horn/Strobes

Table 45 ULC Compatible Horn/Strobes

| System Sensor <br> L Series Models | Description |
| :--- | :--- |
| P2WLA-P | Horn Strobe 2W White Wall, Plain |
| P2WLA-F | Horn Strobe 2W White Wall - French "FEU" |
| P2WLA-E | Horn Strobe 2W White Wall - English "FIRE" |
| P2WLA | Horn Strobe 2W White Wall - Bilingual "FIRE/FEU" |
| P2RLA-P | Horn Strobe 2W Red Wall, Plain |
| P2RLA-F | Horn Strobe 2W Red Wall - English "FIRE" |
| P2RLA-E | Horn Strobe 2W Red Wall - Bilingual "FIRE/FEU" |
| P2RLA | Horn Strobe 2W White Wall, Compact - English "FIRE" |
| P2GWLA-F | Horn Strobe 2W White Wall, Compact - Bilingual "FIRE/FEU" |
| P2GWLA-E | Horn Strobe 2W Red Wall, Compact - French "FEU" |
| P2GWLA | Horn Strobe 2W Red Wall, Compact - Bilingual "FIRE/FEU" |
| P2GRLA-F | Horn Strobe 2W Red Wall, Compact- English "FIRE" |
| P2GRLA | Horn Red Wall, Compact |
| P2GRLA-E | Horn White Wall, Compact |
| HGRLA | HGWLA |

Table 45 ULC Compatible Horn/Strobes

| System Sensor <br> LSeries Models | Description |
| :--- | :--- |
| HRLA | Horn Red Wall |
| HWLA | Horn White Wall |
| CHRLA | Chime Red Wall |
| CHSCRLA | Chime Strobe Red Ceiling - Bilingual "FIRE/FEU" |
| CHSCRLA-E | Chime Strobe Red Ceiling - English "FIRE" |
| CHSCRLA-F | Chime Strobe Red Ceiling - French "FEU" |
| CHSCWLA | Chime Strobe White Ceiling - Bilingual "FIRE/FEU" |
| CHSCWLA-E | Chime Strobe White Ceiling - English "FIRE" |
| CHSCWLA-F | Chime Strobe White Ceiling - French "FEU" |
| CHSRLA | Chime Strobe Red Wall - Bilingual "FIRE/FEU" |
| CHSRLA-E | Chime Strobe Red Wall - English "FIRE" |
| CHSRLA-F | Chime Strobe Red Wall - French "FEU" |
| CHSWLA | Chime Strobe White Wall - Bilingual "FIRE/FEU" |
| CHSWLA-E | Chime Strobe White Wall - English "FIRE" |
| CHSWLA-F | Chime Strobe White Wall - French "FEU" |
| CHWLA | Chime White Wall |

## WARNING!

Please read this document CAREFULLY, as it contains important warnings, life-safety, and practical information about all products manufactured by the Mircom Group of Companies, including Mircom and Secutron branded products, which shall include without limitation all fire alarm, nurse call, building automation and access control and card access products (hereinafter individually or collectively, as applicable, referred to as "Mircom System").

## NOTE TO ALL READERS:

1. Nature of Warnings. The within warnings are communicated to the reader out of an abundance of caution and create no legal obligation for Mircom Group of Companies, whatsoever. Without limiting the generality of the foregoing, this document shall NOT be construed as in any way altering the rights and obligations of the parties, governed by the legal documents that apply in any given circumstance.
2. Application. The warnings contained in this document apply to all Mircom System and shall be read in conjunction with:
a. the product manual for the specific Mircom System that applies in given circumstances;
b. legal documents that apply to the purchase and sale of a Mircom System, which may include the company's standard terms and conditions and warranty statements;
c. other information about the Mircom System or the parties' rights and obligations as may be application to a given circumstance.
3. Security and Insurance. Regardless of its capabilities, no Mircom System is a substitute for property or life insurance. Nor is the system a substitute for property owners, renters, or other occupants to act prudently to prevent or minimize the harmful effects of an emergency situation. Building automation systems produced by the Mircom Group of Companies are not to be used as a fire, alarm, or life-safety system.

## NOTE TO INSTALLERS:

All Mircom Systems have been carefully designed to be as effective as possible. However, there are circumstances where they may not provide protection. Some reasons for system failure include the following. As the only individual in contact with system users, please bring each item in this warning to the attention of the users of this Mircom System. Failure to properly inform system end-users of the circumstances in which the system might fail may result in over-reliance upon the system. As a result, it is imperative that you properly inform each customer for whom you install the system of the possible forms of failure:
4. Inadequate Installation. All Mircom Systems must be installed in accordance with all the applicable codes and standards in order to provide adequate protection. National standards require an inspection and approval to be conducted by the local authority having jurisdiction following the initial installation of the system and following any changes to the system. Such inspections ensure installation has been carried out properly.
5. Inadequate Testing. Most problems that would prevent an alarm a Mircom System from operating as intended can be discovered by regular testing and maintenance. The complete system should be tested by the local authority having jurisdiction immediately after a fire, storm, earthquake, accident, or any kind of construction activity inside or outside the premises. The testing should include all sensing devices, keypads, consoles, alarm indicating devices and any other operational devices that are part of the system.

## NOTE TO USERS:

All Mircom Systems have been carefully designed to be as effective as possible. However, there are circumstances where they may not provide protection. Some reasons for system failure include the following. The end user can minimize the occurrence of any of the following by proper training, testing and maintenance of the Mircom Systems:
6. Inadequate Testing and Maintenance. It is imperative that the systems be periodically tested and subjected to preventative maintenance. Best practices and local authority having jurisdiction determine the frequency and type of testing that is required at a minimum. Mircom System may not function properly, and the occurrence of other system failures identified below may not be minimized, if the periodic testing and maintenance of Mircom Systems is not completed with diligence and as required.
7. Improper Operation. It is important that all system users be trained in the correct operation of the alarm system and that they know how to respond when the system indicates an alarm. A Mircom System may not function as intended during an emergency situation where the user is unable to operate a panic or emergency switch by reason of permanent or temporary physical disability, inability to reach the device in time, unfamiliarity with the correct operation, or related circumstances.
8. Insufficient Time. There may be circumstances when a Mircom System will operate as intended, yet the occupants will not be protected from the emergency due to their inability to respond to the warnings in a timely manner. If the system is monitored, the response may not occur in time enough to protect the occupants or their belongings.
9. Carelessness or Safety Hazards. Moreover, smoke detectors may not provide timely warning of fires caused by carelessness or safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits or children playing with matches or arson.
10. Power Failure. Some Mircom System components require adequate electrical power supply to operate. Examples include: smoke detectors, beacons, HVAC, and lighting controllers. If a device operates only by AC power, any interruption, however brief, will render that device inoperative while it does not have power. Power interruptions of any length are often accompanied by voltage fluctuations which may damage Mircom Systems or other electronic equipment. After a power interruption has occurred, immediately conduct a complete system test to ensure that the system operates as intended.
11. Battery Failure. If the Mircom System or any device connected to the system operates from batteries it is possible for the batteries to fail. Even if the batteries have not failed, they must be fully charged, in good condition, and installed correctly. Some Mircom Systems use replaceable batteries, which have a limited life-span. The expected battery life is variable and in part dependent on the device environment, usage and type. Ambient conditions such as high humidity, high or low temperatures, or large temperature fluctuations may reduce the expected battery life. Moreover, some Mircom Systems do not have a battery monitor that would alert the user in the event that the battery is nearing its end of life. Regular testing and replacements are vital for ensuring that the batteries function as expected, whether or not a device has a low-battery monitor.
12. Physical Obstructions. Motion sensors that are part of a Mircom System must be kept clear of any obstacles which impede the sensors' ability to detect movement. Signals being communicated by a Mircom System may not reach the receiver if an item (such as metal, water, or concrete) is placed on or near the radio path. Deliberate jamming or other inadvertent radio signal interference can also negatively affect system operation.
13. Wireless Devices Placement Proximity. Moreover all wireless devices must be a minimum and maximum distance away from large metal objects, such as refrigerators. You are required to consult the specific Mircom System manual and application guide for any maximum
distances required between devices and suggested placement of wireless devices for optimal functioning.
14. Failure to Trigger Sensors. Moreover, Mircom Systems may fail to operate as intended if motion, heat, or smoke sensors are not triggered.
a. Sensors in a fire system may fail to be triggered when the fire is in a chimney, walls, roof, or on the other side of closed doors. Smoke and heat detectors may not detect smoke or heat from fires on another level of the residence or building. In this situation the control panel may not alert occupants of a fire.
b. Sensors in a nurse call system may fail to be triggered when movement is occurring outside of the motion sensors' range. For example, if movement is occurring on the other side of closed doors or on another level of the residence or building the motion detector may not be triggered. In this situation the central controller may not register an alarm signal.
15. Interference with Audible Notification Appliances. Audible notification appliances may be interfered with by other noise sources such as stereos, radios, televisions, air conditioners, appliances, or passing traffic. Audible notification appliances, however loud, may not be heard by a hearing-impaired person.
16. Other Impairments. Alarm notification appliances such as sirens, bells, horns, or strobes may not warn or waken a sleeping occupant if there is an intervening wall or door. It is less likely that the occupants will be alerted or awakened when notification appliances are located on a different level of the residence or premise.
17. Software Malfunction. Most Mircom Systems contain software. No warranties are provided as to the software components of any products or stand-alone software products within a Mircom System. For a full statement of the warranties and exclusions and limitations of liability please refer to the company's standard Terms and Conditions and Warranties.
18. Telephone Lines Malfunction. Telephone service can cause system failure where telephone lines are relied upon by a Mircom System. Alarms and information coming from a Mircom System may not be transmitted if a phone line is out of service or busy for a certain period of time. Alarms and information may not be transmitted where telephone lines have been compromised by criminal tampering, local construction, storms or earthquakes.
19. Component Failure. Although every effort has been made to make this Mircom System as reliable as possible, the system may fail to function as intended due to the failure of a component.
20. Integrated Products. Mircom System might not function as intended if it is connected to a non-Mircom product or to a Mircom product that is deemed non-compatible with a particular Mircom System. A list of compatible products can be requested and obtained.

## Warranty

Purchase of all Mircom products is governed by:
https://www.mircom.com/product-warranty
https://www.mircom.com/purchase-terms-and-conditions
https://www.mircom.com/software-license-terms-and-conditions

