

INX-10A Series

Intelligent NAC Expander Panel





Table of Contents

1.0	Introduction	10
1.1	The INX-10A Intelligent NAC Expander Panel	11
2.0	INX-10A Overview	13
2.1	INX-10A Components	14
3.0	Installation	15
3.1	Enclosure Dimensions	15
3.2	INX-10ADS Mechanical Installation	15
3.3	INX-10AC Mounting Instructions	17
3.4	Enclosure Dimensions	18
3.5	Installing the INX-10A Enclosure	18
3.6	Chassis Board Connections	21
4.0	Indication & Controls	22
4.1	Indication and Controls	23
5.0	Operation	26
5.1	Circuit Types	27
5.2	Intelligent NAC Expander (INX) Modes	
5.3	Power Supply Modes	29
5.4	Evacuation Codes	30
5.5	Horn Strobe Rates	30
6.0	Configuration	32
6.1	DIP Switches	33
6.2	DIP Switch Configuration	34
6.3	Single Stage Addressing	43
6.4	Two Stage Addressing Options	55
6.5	Single Stage Configuration in FleX-Net™ FX-4000	70
6.6	Two Stage Addressing Options in FleX-Net™ FX-4000	76
6.7	Single Stage Configuration in FX-400/401	84
6.8	Two Stage Addressing Options in FX-401	90
6.9	Independent Mode Configuration Options	97



7.0	Wiring	101
7.1	Wiring Tables	102
7.2	Main Board Terminal Connections	103
7.3	Power Supply Connections	115
7.4	System Checkout	
7.5	Troubleshooting	116
8.0	Appendix A - Specifications and Features	118
9.0	Appendix B - Power Supply & Battery Calculations	119
10.0	Appendix C - Sample Applications	120
10.1	Minimal Size Single Stage Addressable System - Factory Default Settings	120
10.2	Minimal Two Stage Addressable System	121
10.3	Minimal ULC Two Stage Addressable System	122
11.0	Appendix D - FX-2000 and FleX-Net Series ULI	
	Compatible Devices	123
11.1	Horns and Bells	123
11.2	Synchronized Strobes	123
11.3	UL and ULC Listed Compatible Horn/Strobes	123
11.4	ULI Compatible Horn/Strobes	123
11.5	ULC Compatible Horn/Strobes	125
12.0	Warranty and Warning Information	127



List of Figures

Figure 1	INX-10ADS Installation Instructions and Dimensions	16
Figure 2	INX-10AC Mounting Instructions	17
Figure 3	INX-10A Dimensions	18
Figure 4	FA-300TR Dimensions	19
Figure 5	Flush mounting the enclosure	19
Figure 6	INX-10A Chassis Board Connectors and Jumpers	21
Figure 7	Main Board highlighting Common Indicators, Trouble LED's, Other LEDs	23
Figure 8	Common Indicators	24
Figure 9	Trouble LEDs	24
Figure 10	Additional LEDs	25
Figure 11	Evacuation Codes	31
Figure 12	DIP switch positions	33
Figure 13	DIP switch address example	34
Figure 14	Configurator CLIP/Advance Protocol Device Address Space window	38
Figure 15	FX-2000 Configurator Settings - INX-10A Single Stage with Basic Reporting	44
Figure 16	Secutron MR-2100/2200/2900 Configuration Settings - INX-10A Single Stage with Basic Reporting	45
Figure 17	FX-3500/3500RCU/MR-3500/3500RCU Configuration Settings - INX-10A Single Stage with Basic Reporting	45
Figure 18	FX-2000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting	47
Figure 19	Secutron MR-2100/2200/2900 Configuration Settings - INX-10A Single Stage with Enhanced Reporting	48
Figure 20	FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Enhanced Reporting	48
Figure 21	FX-2000 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output	50
Figure 22	Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output	51
Figure 23	FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output	51
Figure 24	FX-2000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output	53
Figure 25	Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Single Stage with Power Supply Output	54
Figure 26	FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output	54
Figure 27	FX-2000 Configurator Settings - INX-10A Two Stage with Basic Reporting	57
Figure 28	Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Basic Reporting	57
Figure 29	FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Basic Reporting	58
Figure 30	FX-2000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting	60
Figure 31	Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Enhanced Reporting	61
Figure 32	FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Enhanced Reporting	61



Figure 33	FX-2000 Configurator Settings - INX-10A Two Stage with Power Supply Output	64
Figure 34	Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Powe Supply Output	
Figure 35	FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Power Supply Output	65
Figure 36	FX-2000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing	68
Figure 37	Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing	68
Figure 38	FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing	69
Figure 39	Add Devices Window	69
Figure 40	MGC-4000 Configurator Settings - INX-10A Single Stage with Basic Reporting	71
Figure 41	MGC-4000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting .	72
Figure 42	MGC-4000 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output	
Figure 43	MGC-4000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output	76
Figure 44	MGC-4000 Configurator Settings - INX-10A Two Stage with Basic Reporting	78
Figure 45	MGC-4000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting	80
Figure 46	MGC-4000 Configurator Settings - INX-10A Two Stage with Power Supply Output	82
Figure 47	MGC-4000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing	
Figure 48	MGC-400 Configurator Settings - INX-10A Single Stage with Basic Reporting	85
Figure 49	MGC-400 Configurator Settings - INX-10A Single Stage with Enhanced Reporting	86
Figure 50	MGC-400 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output	88
Figure 51	MGC-400 Configurator Settings - INX-10A Single Stage with Enhanced Reporting an Power Supply Output	
Figure 52	MGC-400 Configurator Settings - INX-10A Two Stage with Basic Reporting	91
Figure 53	MGC-400 Configurator Settings - INX-10A Two Stage with Enhanced Reporting	93
Figure 54	MGC-400 Configurator Settings - INX-10A Two Stage with Power Supply Output	94
Figure 55	MGC-400 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing	96
Figure 56	Main Board Terminal Blocks	103
Figure 57	SLC Loop Wiring - Class B	104
Figure 58	SLC Loop Wiring - Class A	104
Figure 59	Synchronized Input from FACP Wiring - Class B	105
Figure 60	Synchronized Input from FACP Wiring - Class A	106
Figure 61	Synchronized Input from INX-10A Wiring - Class B Single Follower	107
Figure 62	Synchronized Input from INX-10A Wiring - Class B Multiple Followers	108
Figure 63	Synchronized Input from INX-10A Wiring - Class B Multiple Followers	109
Figure 64	Relay Contact Activation from FACP - Single Stage	
Figure 65	Relay Contact Activation from FACP - Two Stage	
Figure 66	Relay, Ground Supervision and Auxiliary Supply Wiring	
Figure 67	Relay, Ground Supervision and Auxiliary Supply Wiring	
Figure 68	NAC Circuit Wiring - Class B	
Figure 60	NAC Circuit Wiring - Class A	113



Figure 70	Example door holder wiring on NAC4 and NAC5	114
Figure 71	NAC4 and NAC5 Supervision	114
Figure 72	Power Supply Connections	115



List of Tables

Table 1	Compatible Fire Alarm Control Panels	11
Table 2	INX-10A Components	14
Table 3	INX-10A Chassis Board Connectors and Jumpers	21
Table 4	Setting INX-10A Base Address/ Disabling Addressable Loop Interface	34
Table 5	INX-10A Base Address DIP switch positions	35
Table 6	Setting Protocols, Enabling Second Stage, Setting AC Fail Reporting, Enabling Charger, Battery Installed	39
Table 7	Charger Settings, Synchronization Settings, NAC Input Settings	40
Table 8	Setting Alert Rates, Evacuation Rates, NAC 5 Output Functions	41
Table 9	Setting Strobe Types, NAC 1-3 Supply Settings, NAC 4 Output Function	42
Table 10	Configuring Single Stage Functions	44
Table 11	Configuring Single Stage with Enhanced Reporting Functions	46
Table 12	Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output	50
Table 13	Assigning Addresses - Single Stage Application, 1 Power Supply Output	53
Table 14	Configuring Two Stage Functions	55
Table 15	Configuring Two Stage Address Assignment with Enhanced Trouble Reporting	59
Table 16	Assigning Addresses - Two Stage Application, 1 Power Supply Output	62
Table 17	Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing	67
Table 18	Configuring Single Stage Functions	70
Table 19	Configuring Single Stage Functions	71
Table 20	Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output	73
Table 21	Assigning Addresses - Single Stage Application, 1 Power Supply Output	75
Table 22	Configuring Two Stage Functions	77
Table 23	Configuring Two Stage Address Assignment with Enhanced Trouble Reporting	78
Table 24	Assigning Addresses - Two Stage Application, 1 Power Supply Output	81
Table 25	Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing	83
Table 26	Configuring Single Stage Functions	85
Table 27	Configuring Single Stage Functions	86
Table 28	Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output	87
Table 29	Assigning Addresses - Single Stage Application, 1 Power Supply Output	89
Table 30	Configuring Two Stage Functions	90
Table 31	Configuring Two Stage Address Assignment with Enhanced Trouble Reporting	92
Table 32	Assigning Addresses - Two Stage Application, 1 Power Supply Output	94
Table 33	Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing	95
Table 34	Independent Mode DIP Switch Settings - NAC1 and NAC2 configured as Signals	97
Table 35	Independent Mode DIP Switch Settings - NAC1, NAC2 and NAC3 configured as Signals	99
Table 36	Wiring Table for Input Circuits	102
Table 37	Wiring Table for NAC and Auxiliary Power Circuits	102
Table 38	Difference between features provided by SLC Interface and Contact Interface	
Table 39	Power Supply Electrical Ratings	
Table 40	INX-10A, INX-10ADS and INX-10AC Specifications and Features	118
Table 41	FX-2000 and FleX-Net Series ULI Compatible Horns and Bells	123



Table 42	FX-2000 and FleX-Net Series ULI Compatible Synchronized Strobes	123
Table 43	UL and ULC Listed Compatible Horn/Strobes	123
Table 44	ULI Compatible Horn/Strobes	123
Table 45	ULC Compatible Horn/Strobes	125



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™
	FleX-Net™ 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
Mircom	INX-10A	Intelligent NAC Expander, 10 Amps.
	INX-10ADS	Intelligent NAC Expander, 10 Amps. Mounts into the BBX- 1024DS.
	INX-10AC	Intelligent NAC Expander, 10 Amps Addressable Chassis Mounts into the BB-5008 or BB- 5014 enclosure.
W= 5.94" H= 3.94" D= 3.86"	BA-104, BA-1065, BA- 110, BA-117	12 VOLT Batteries (4 Ah to 12 Ah). 18 Ah batteries fit in the INX-10ADS only. Maximum 40 Ah batteries with an external enclosure.



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" x 4.2" x 26"

Distance between horizontal mounting screws 12"

Distance between vertical mounting screws 23.5"

Complete Dimensions of Enclosures 16.3" x 5.5" x 27.5"

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.



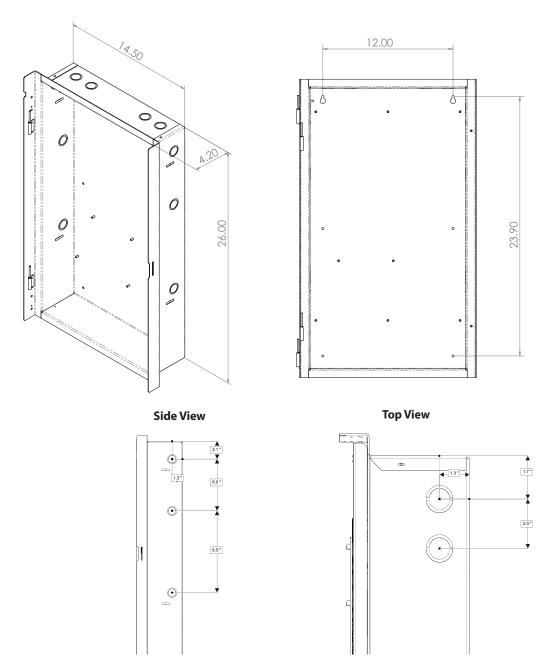


Figure 1 INX-10ADS Installation Instructions and Dimensions

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.

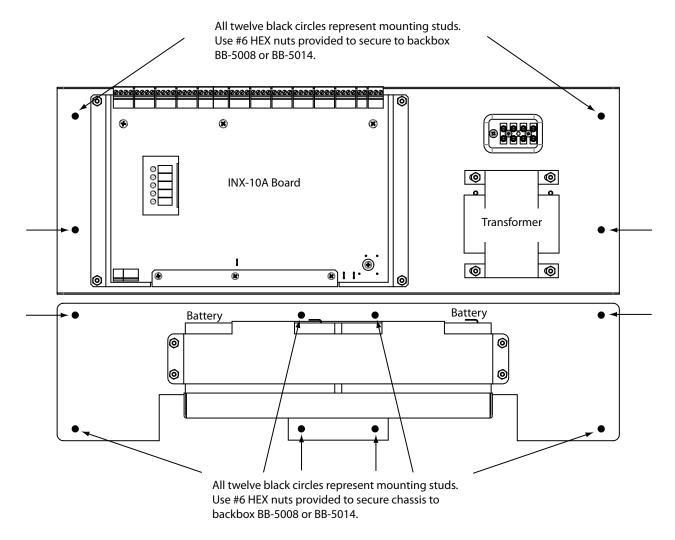


Figure 2 INX-10AC Mounting Instructions



3.4 Enclosure Dimensions

Outer Dimensions	14.23" x 4.42" x 19.85"
Distance between upper mounting screws	11"
Distance between lower mounting screws	11"
Distance between upper and lower mounting screws	14.1"
FA-300TR Dimensions	17" x 22.5"

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.

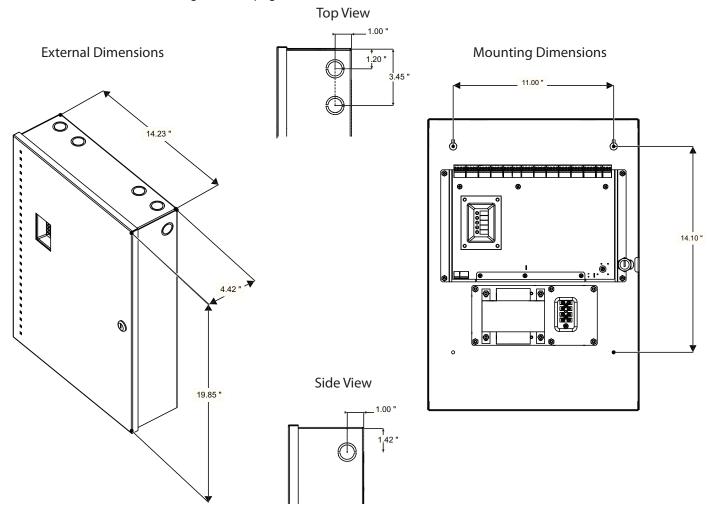


Figure 3 INX-10A Dimensions



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.

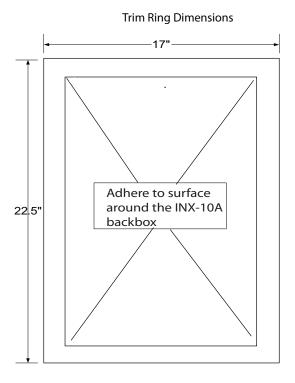


Figure 4 FA-300TR Dimensions

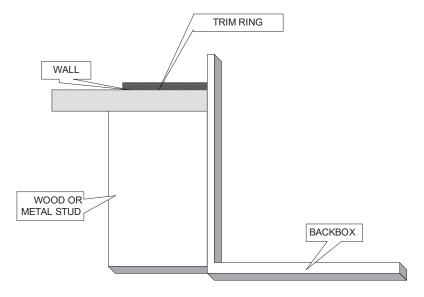


Figure 5 Flush mounting the enclosure



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.

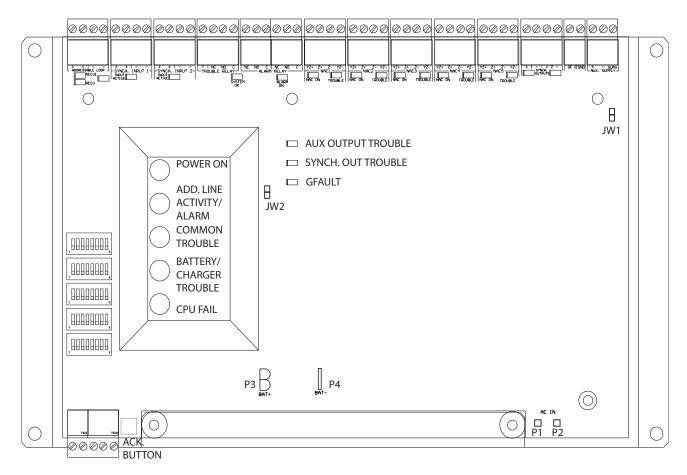


Figure 6 INX-10A Chassis Board Connectors and Jumpers

Table 3 INX-10A Chassis Board Connectors and Jumpers

Connector/Jumper	Description
P1,2	Connection for 29VAC AC In
	Connection to Battery
P3,4	Red(+) to P3
	Black(-) to P4
JW1	Auxiliary Power Supervision. Factory set ON. Leave in place for 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.

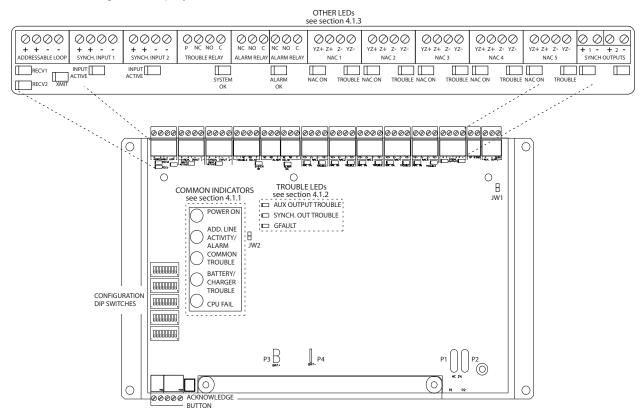


Figure 7 Main Board highlighting Common Indicators, Trouble LED's, Other LEDs



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 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.

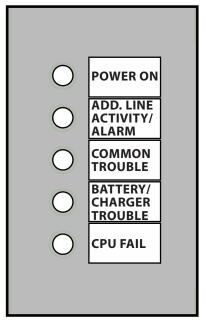


Figure 8 Common Indicators

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 supply output, check for shorts or excessive load.

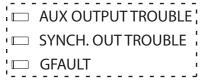


Figure 9 Trouble LEDs

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

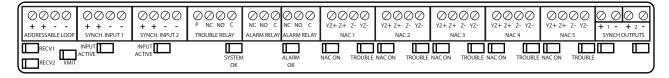


Figure 10 Additional LEDs

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 864	
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	

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 Permitted in CAN/ULC S527? (Y/N)		Possible settings	Settings permitted in CAN/ULC S527				
Second Stage Enabled	Enabled YES Second Stage (Free loop add +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.

NAC (Output) Circuits Types 5.1.1

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 INX-10A 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 1-3) 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 INX-10A 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.



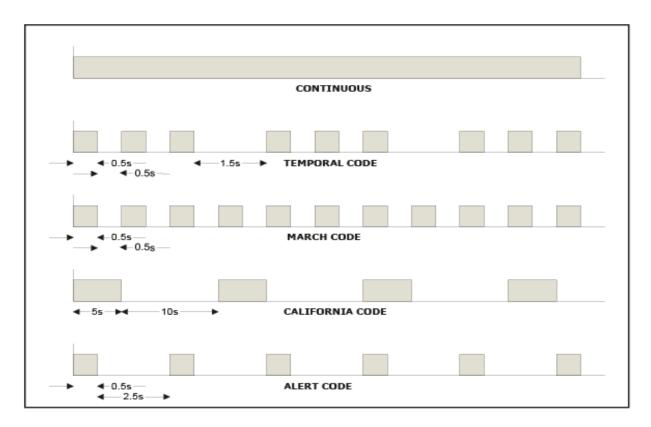


Figure 11 Evacuation Codes



6.0 Configuration

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

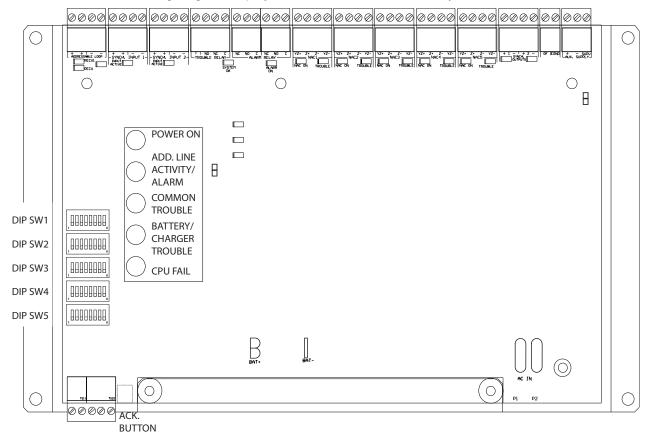
This chapter explains

- 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 ON = 1 and OFF = 0. For an illustration of the DIP switch settings see Figure 12.

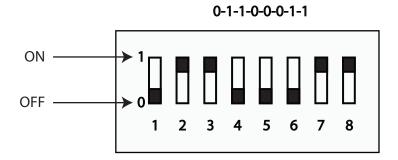


Figure 12 DIP switch positions



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	Activated Setting = 1	Notes/ Additional Diagrams
SW2 ON 1 2 3 4 5 6 7 8 SW3 ON 1 2 3 4 5 6 7 8 SW4 ON 1 2 3 4 5 6 7 8 SW4 ON 1 2 3 4 5 6 7 8	AII (1-8)	Addressable Loop Disabled	Sets the INX-10A base address. For an addressing example see Figure 13.	

Address is set to 85

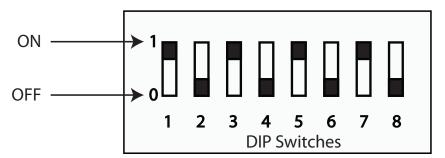


Figure 13 DIP switch address example



Table 5 INX-10A Base Address DIP switch positions

					-			
Address	Bit Setting	Address	Bit Setting	Address	Bit Setting	Address	Bit Setting	
1	1000 0000	26	0101 1000	51	1100 1100	76	0011 0010	
2	0100 0000	27	1101 1000	52	0010 1100	77	1011 0010	
3	1100 0000	28	0011 1000	53	1010 1100	78	0111 0010	
4	0010 0000	29	1011 1000	54	0110 1100	79	1111 0010	
5	1010 0000	30	0111 1000	55	1110 1100	80	0000 1010	
6	0110 0000	31	1111 1000	56	0001 1100	81	1000 1010	
7	1110 0000	32	0000 0100	57	1001 1100	82	0100 1010	
8	0001 0000	33	1000 0100	58	0101 1100	83	1100 1010	
9	1001 0000	34	0100 0100	59	1101 1100	84	0010 1010	
10	0101 0000	35	1100 0100	60	0011 1100	85	1010 1010	Two Stage
11	1101 0000	36	0010 0100	61	1011 1100	86	0110 1010	Application with Enhanced
12	0011 0000	37	1010 0100	62	0111 1100	87	1110 1010	Reporting
13	1011 0000	38	0110 0100	63	1111 1100	88	0001 1010	Two Stage
14	0111 0000	39	1110 0100	64	0000 0010	89	1001 1010	Application with Basic Reporting
15	1111 0000	40	0001 0100	65	1000 0010	90	0101 1010	Single Stage
16	0000 1000	41	1001 0100	66	0100 0010	91	1101 1010	Application with Enhanced Reporting
17	1000 1000	42	0101 0100	67	1100 0010	92	0011 1010	
18	0100 1000	43	1101 0100	68	0010 0010	93	1011 1010	
19	1100 1000	44	0011 0100	69	1010 0010	94	0111 1010	
20	0010 1000	45	1011 0100	70	0110 0010	95	1111 1010	Single Stage
21	1010 1000	46	0111 0100	71	1110 0010	96	0000 0110	Application with
22	0110 1000	47	1111 0100	72	0001 0010	97	1000 0110	Basic Reporting
23	1110 1000	48	0000 1100	73	1001 0010	98	0100 0110	
24	0001 1000	49	1000 1100	74	0101 0010	99	1100 0110	
25	1001 1000	50	0100 1100	75	1101 0010			
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 (MIX- 4000) Application with Enhanced Reporting
123	11011110	158	01111001	193	10000011	228	00100111	
124	00111110	159	11111001	194	01000011	229	10100111	MGC Addressable
125	10111110	160	00000101	195	11000011	230	01100111	Devices Two Stage Application with Basic Reporting
126	01111110	161	10000101	196	00100011	231	11100111	
127	11111110	162	01000101	197	10100011	232	00010111	MGC Addressable
128	00000001	163	11000101	198	01100011	233	10010111	Devices Single Stage Application with Enhanced Reporting
129	10000001	164	00100101	199	11100011	234	01010111	
130	01000001	165	10100101	200	00010011	235	11010111	MGC Addressable Devices Single Stage Application with Basic Reporting
131	11000001	166	01100101	201	10010011	236	00110111	
132	00100001	167	11100101	202	01010011	237	10110111	
133	10100001	168	00010101	203	11010011	238	01110111	
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.



Notes: Shaded addresses are the recommended range of addresses used for a single INX-10A.

> Ensure that there are enough addresses for reporting and configured NACs. In a system without MGC addressable devices, the highest address that a Single Stage Application with Basic Reporting with 5 configured NACs can be assigned is **93**.

> For systems with MGC addressable devices, the valid address range is from 1 to 240. For information on configuring a system with MGC addressable devices, see section 6.5 on page 70.

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 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).

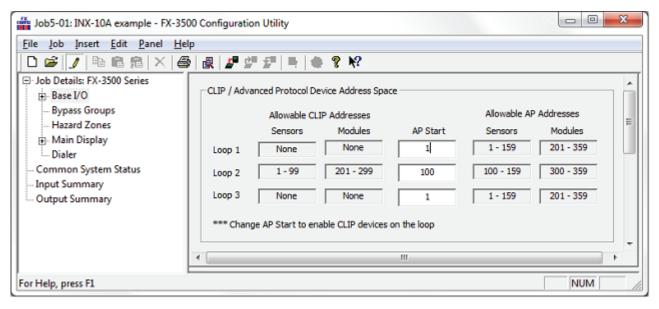


Figure 14 Configurator CLIP/Advance Protocol Device Address Space window

A value of 100 in a loop's AP Start column configures the FX-3500/3500RCU and MR-3500/3500RCU 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
SW1 0N 1 1 2 3 4 5 6 7 8 SW2 0N 1 2 3 4 5 6 7 8	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
SW3 ON 1 2 3 4 5 6 7 8 SW4 ON 1 2 3 4 5 6 7 8 SW5 ON 1 2 3 4 5 6 7 8	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) *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
		Configure Report Delay for A	C fail	
	5-6	The digits below refer to the	corresponding bit number	
		i.e. 01 means that bit 5 = 0 a	nd bit 6 = 1 see corresponding	ı diagram
	5-6	00 = No Delay		SW2 ON
	5-6	10 = One Hour		SW2 ON 1 2 3 4 5 6 7 8
	5-6	01 = Two Hours		SW2 ON 1 2 3 4 5 6 7 8
	5-6	11 = Three Hours		SW2 ON 1 2 3 4 5 6 7 8
	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

		Default Setting = 0	Activated Setting = 1	Notes/
DIP switch 3	Bits	ALL SWITCHES OFF	ALI SWITCHES ON BBBBBBBBB 1 2 3 4 5 6 7 6	Additional Diagrams
				Remember
SW1	1	Charger Cut When all NACs activated	Charger Always "ON"	Bit 7 on DIP Switch 2 must be set to "OFF" to enable Charger
SW4 0N	2	Setting for FleX-Net™ FX-4000	Setting for FX-400 series	This switch has an effect only if bit 1 on DIP Switch 2 is "ON"
12345678	3-6	Reserve		SW3 ON 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		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
		Independent mode is active if		description of Independent Mode options see section
	7	SW4 Bit 4-6 Evacuation Rates		
		is set to 010, 110, 001, 101, or 011		
		AND		6.9 on page 97.
		SW5 Bit 1-3 Setting Strobe M 110, 001 or 101.	lanufacturer Type set to 100,	
	8	Synchronous Signal Leader	Synchronous Signal Follower	



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





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

		Default Setting = 0	Activated Setting = 1	Notes/
DIP switch 4	Bits	ALL SWITCHES OFF	ALL SWITCHES ON HER HER STATE OF THE STATE O	Additional
	1.0		12345678	Diagrams
ON	1-3	Setting Alert Rates (Alert F	Rates are only used in Two St	age Applications)
SW2 000000000000000000000000000000000000	1-3	000 - Disable (No Output)		SW4 ON 1 2 3 4 5 6 7 8
SW3 0N	1-3	100 - Uses Strobe Manufact	urer Sync Rate	SW4 ON 1 2 3 4 5 6 7 8
SW4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1-3	010 - Continuous		SW4 ON 1 2 3 4 5 6 7 8
SW5 0N	1-3	110 - 0.5s ON, 2.5s OFF, Repeat (20 PPM as in FA-1000 or FX-2000)		SW4 ON 1 2 3 4 5 6 7 8
	1-3	001 - 20 PPM, 50% Duty Cy	cle	SW4 ON 1 2 3 4 5 6 7 8
	4-6	Setting Evacuation Rates		1
		000 - Disable		
	4-6	trouble will sound.	Rate MUST be enabled or a	SW4 1 2 3 4 5 6 7 8
	4-6	100 - Uses Strobe Manufact	urer Sync Rate	SW4 ON THE THE THE SWA
	4-0	NOT AFFECTED BY SIGNA	AL SILENCE	SW4 1 2 3 4 5 6 7 8
	4-6	010 - Continuous		SW4 ON 1 2 3 4 5 6 7 8
	4-6	110 - Temporal		SW4 ON 1 2 3 4 5 6 7 8
	4-6	001 - March Time 101 - California		SW4 ON 1 2 3 4 5 6 7 8
	4-6			SW4 ON 1 2 3 4 5 6 7 8
	4-6	011 - 120 PPM, 50% Duty Cycle		SW4 ON 1 2 3 4 5 6 7 8
	7-8	NAC 5 Output Settings		1
	7-8	00 - Normal NAC		SW4 ON 1 2 3 4 5 6 7 8
	7-8	10 - Continuous Supply		SW4 ON 1 2 3 4 5 6 7 8
	7-8	01 - Cut on Alarm		SW4 ON 1 2 3 4 5 6 7 8
	7-8	11 - 4 seconds Cut on Reser	t	SW4 ON 1 2 3 4 5 6 7 8



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.

 Table 9
 Setting Strobe Types, NAC 1-3 Supply Settings, NAC 4 Output Function

DIP switch 5		Default Setting = 0	Activated Setting = 1	Notes/
DIP SWITCH 5	Bits	ALL SWITCHES OFF	ALL SWITCHES ON 1 2 3 4 5 6 7 9	Additional Diagrams
	1-3	Setting Strobe Manufactur	er	
SW1		000 - Disable		
SW2	1-3	Evacuation Rate or Strobe	If the INX-10A has NAC circuits configured the Evacuation Rate or Strobe Rate MUST be enabled or a trouble will sound.	
SW3				ON
	1-3	100 - Mircom/Amseco		SW5
SW5	1-3	010 - Not Used		SWS 0N 1 2 3 4 5 6 7 8
	1-3	110 - System Sensor	SW5 0N 1 2 3 4 5 6 7 8	
	1-3	001 - Secutron/Gentex		SW5 ON 1 2 3 4 5 6 7 8
	1-3	101 - Wheelock		sws 0N 1 2 3 4 5 6 7 8
	1-3	011 - System Sensor 2 Alternate Setting		SW5 ON 1 2 3 4 5 6 7 8
	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 - NAC		SWS ON 1 2 3 4 5 6 7 8
	7-8	10 - Continuous Supply		SW5 ON 1 2 3 4 5 6 7 8
	7-8	01 - Cut on Alarm		SW5 ON 1 2 3 4 5 6 7 8
	7-8	11 - 4 seconds Cut on Reset	i	SWS ON 1 2 3 4 5 6 7 8



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:

1-0-1-1-0-1-0

ON-OFF-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



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







Table 10 Configuring Single Stage Funct	ions
---	------

Function	Address	Recommended 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

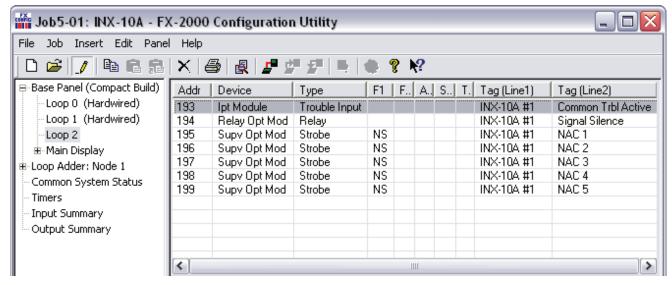


Figure 15 FX-2000 Configurator Settings - INX-10A Single Stage with Basic Reporting



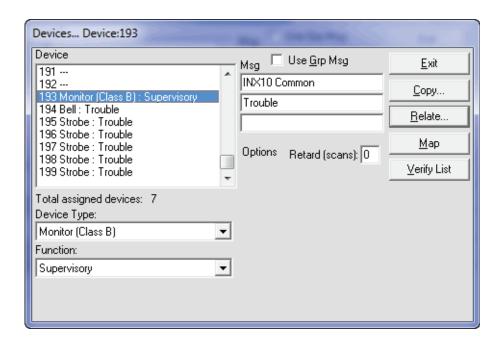


Figure 16 Secutron MR-2100/2200/2900 Configuration Settings - INX-10A Single Stage with Basic Reporting

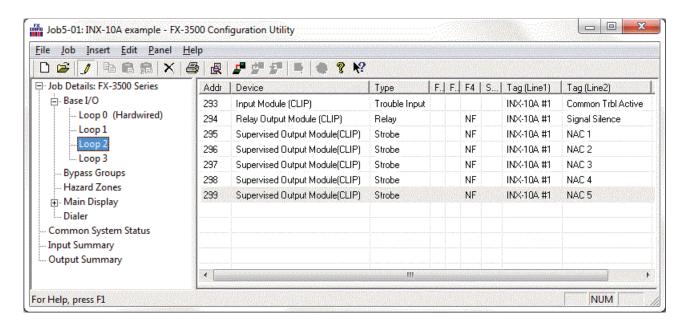


Figure 17 FX-3500/3500RCU/MR-3500/3500RCU Configuration Settings - INX-10A Single Stage with Basic Reporting



6.3.2 Single Stage with Enhanced Trouble Reporting Addressing

To configure the recommended base address

Set DIP switch SW1

as:

0-1-0-1-1-0-1-0

OFF-ON-OFF-ON-OFF



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-OF

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

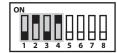




Table 11 Configuring Single Stage with Enhanced Reporting Functions

Function	Address	Recommended 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



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Notes: Table 11 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 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

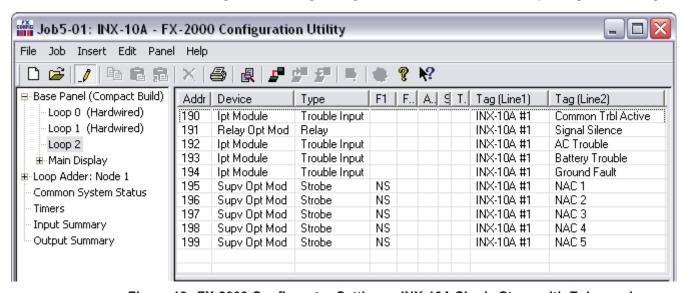


Figure 18 FX-2000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting



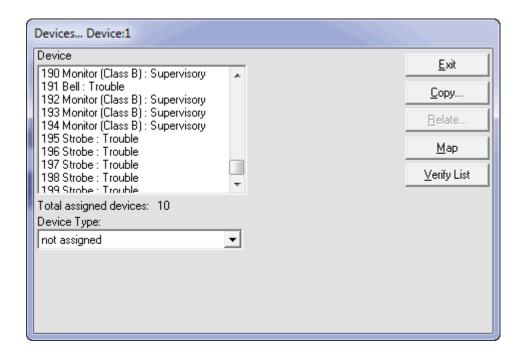


Figure 19 Secutron MR-2100/2200/2900 Configuration Settings - INX-10A Single Stage with Enhanced Reporting

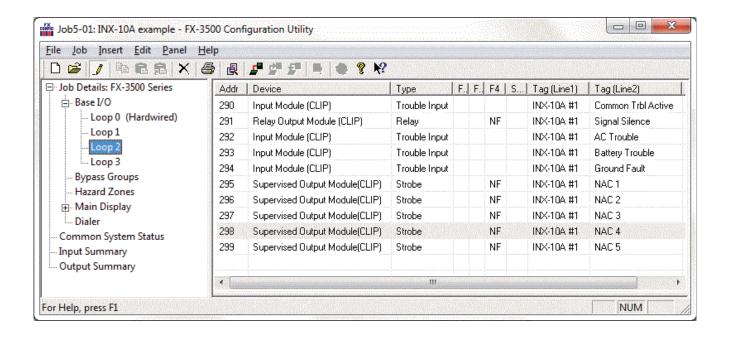


Figure 20 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Enhanced Reporting



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:

0-1-1-1-0-1-0

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



SW1

SW₂

SW2

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



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



To configure NAC 5 as a Continuous Power Supply

Set DIP switch SW4-7 and SW4-8

as:

1-0

ON-OFF







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

Function	Address	Recommended 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

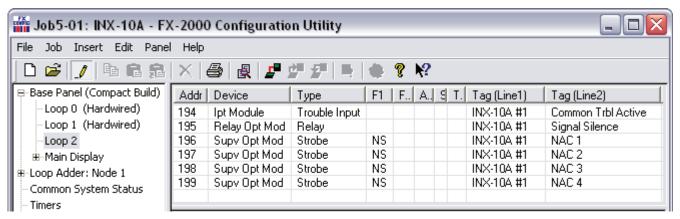


Figure 21 FX-2000 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output



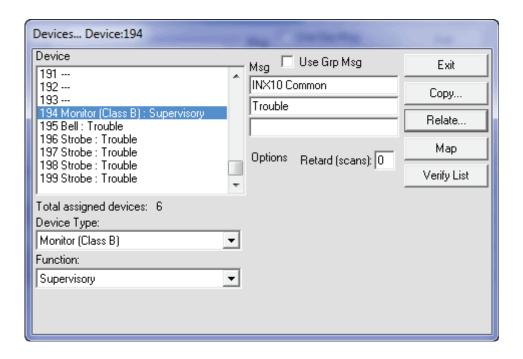


Figure 22 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output

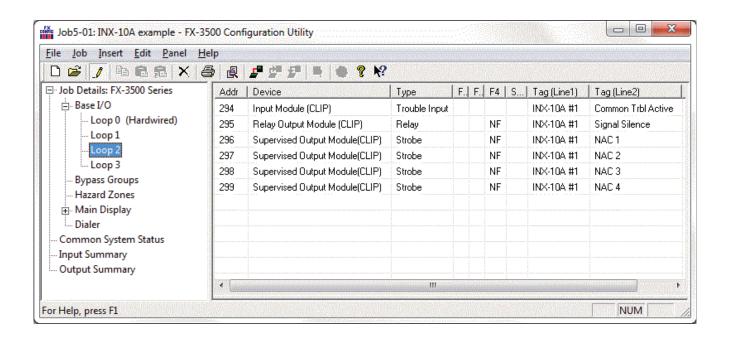


Figure 23 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output



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-OFF-ON-OFF



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

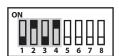
OFF-OFF-ON



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

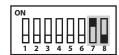






Table 13 Assigning Addresses - Single Stage Application, 1 Power Supply Output

Function	Address	Recommended 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

lotes: 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

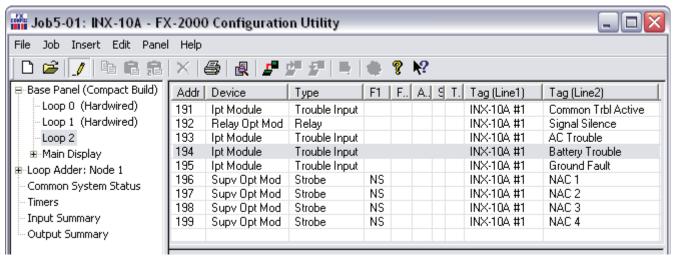


Figure 24 FX-2000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output



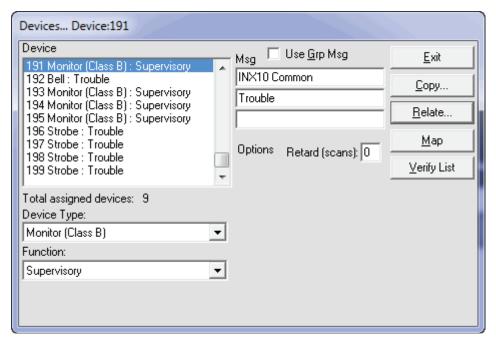


Figure 25 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Single Stage with Power Supply Output

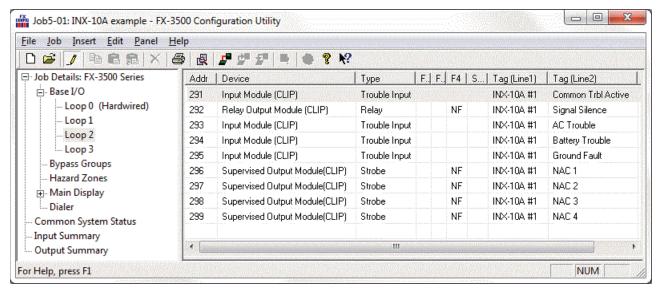


Figure 26 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output



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-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





Table 14 Configuring Two Stage Functions

Function	Address	Recommended 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 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

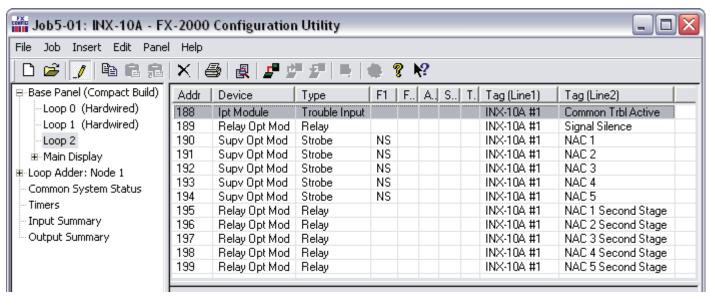


Figure 27 FX-2000 Configurator Settings - INX-10A Two Stage with Basic Reporting

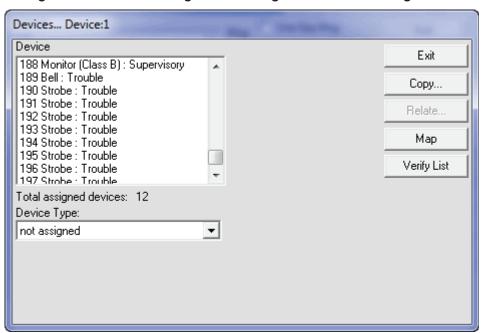


Figure 28 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Basic Reporting



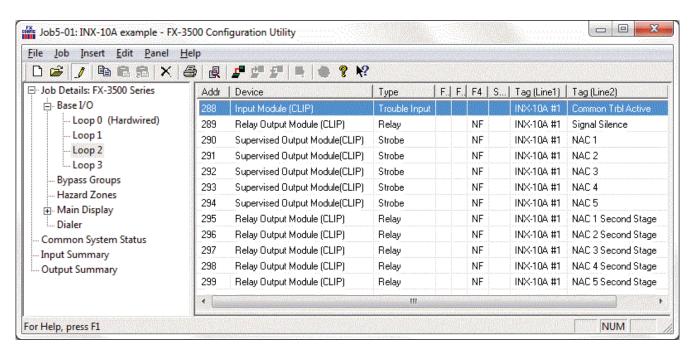


Figure 29 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Basic Reporting



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



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

SW2

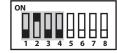


To configure the INX for Two Stage with Enhanced Trouble Reporting in a Secutron System

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.



Table 15 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting

Function	Address	Recommended 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 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

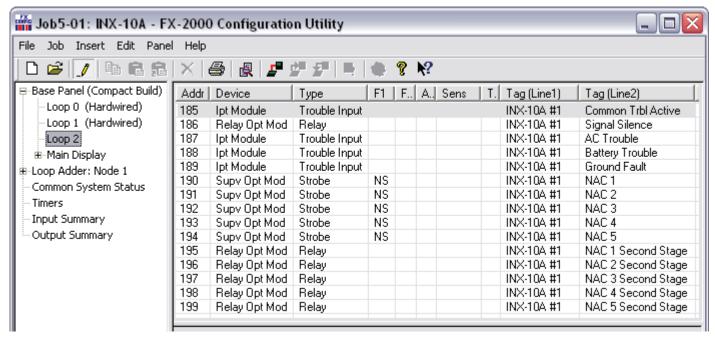


Figure 30 FX-2000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting



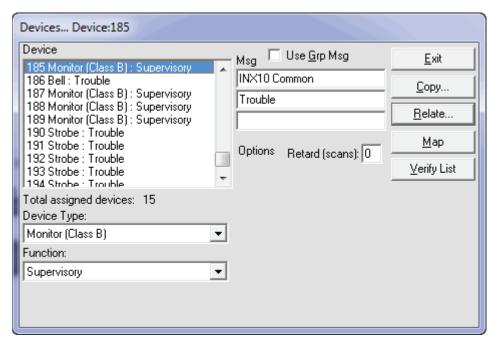


Figure 31 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Enhanced Reporting

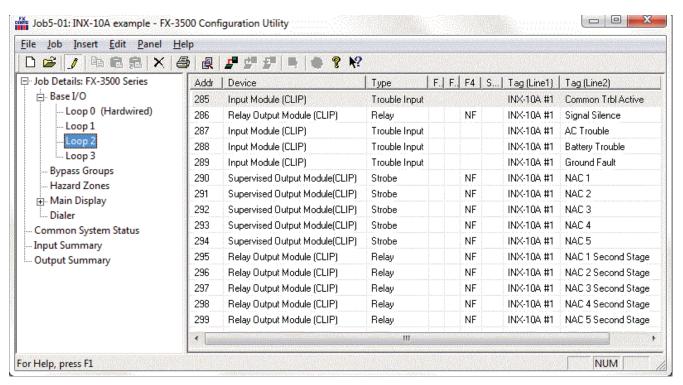


Figure 32 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Enhanced Reporting



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

as:

0-1-0-1-1-0-1-0

OFF-ON-OFF-ON-OFF



SW1

SW2

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



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



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 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 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

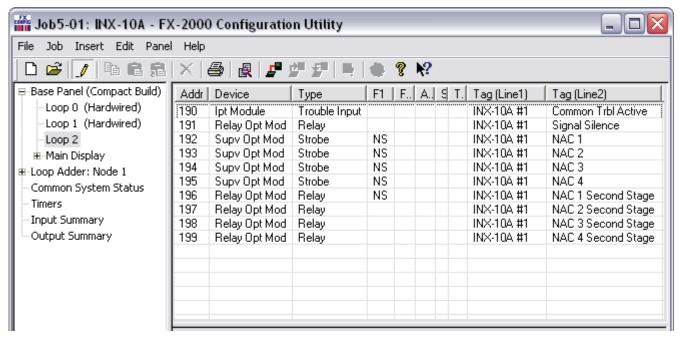


Figure 33 FX-2000 Configurator Settings - INX-10A Two Stage with Power Supply Output

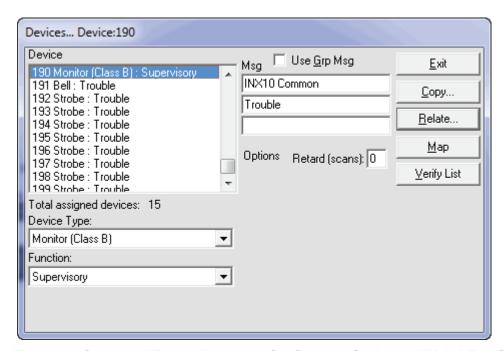


Figure 34 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Power Supply Output



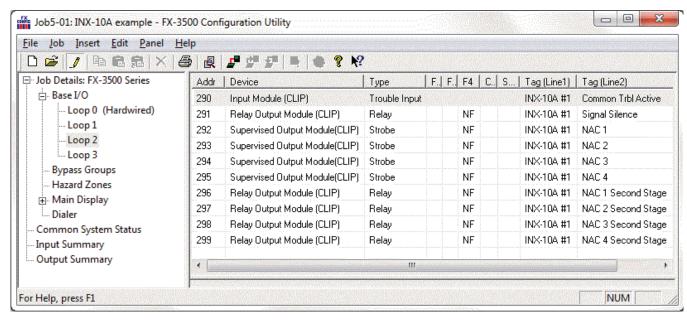


Figure 35 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Power Supply Output



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

as:

- 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

1-1-1-0-1-0-1-0

SW1

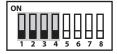


ON-OFF-ON-OFF-ON-OFF

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

_



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

OFF-OFF-OFF



To configure NAC 5 as a Continuous Power Supply

Set DIP switch SW4-7 and SW4-8

as:

1-0

ON-OFF

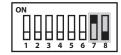






Table 17 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

Function	Address	Recommended 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

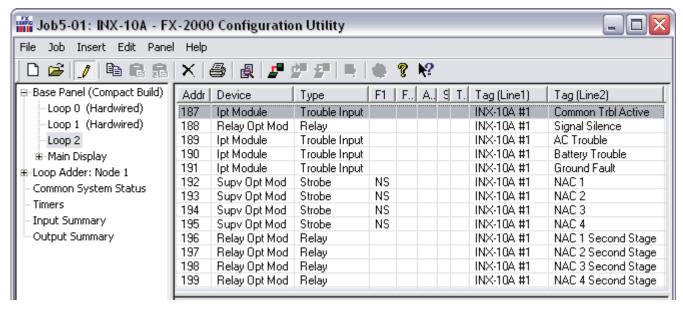


Figure 36 FX-2000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

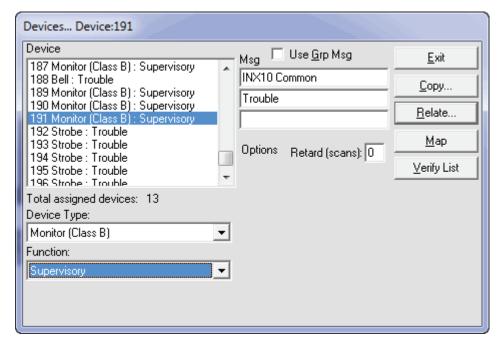


Figure 37 Secutron MR-2100/2200/2900 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing



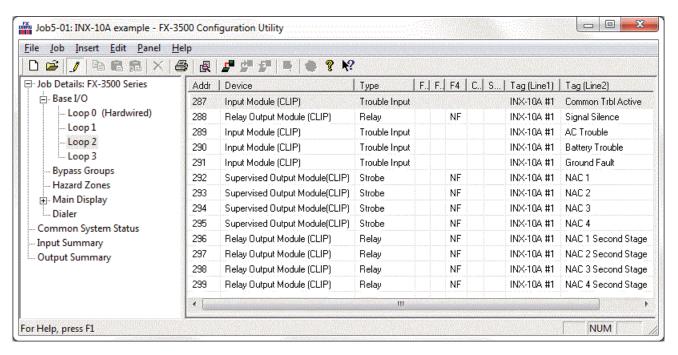


Figure 38 FX-3500/3500RCU/MR-3500/3500RCU Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

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.
- 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.
- Click ADD > CLOSE to return to the main window.

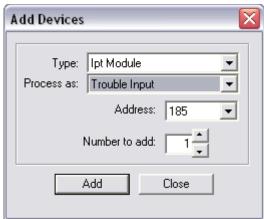


Figure 39 Add Devices Window

- 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™ 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

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

W2





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 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

Job7-01: INX-10A - MGC-4000 Configurator File Job Insert Edit Panel Help □-Job Details: FlexNetMP SubType Addr Device IptMet... F1 Tag (Line1) Type Tag (Line2) ⊟ Node 1 234.1 (MIX4)Input Trouble Input INX-10A #1 Common trouble 234.2 (MIX4)Input Monitor INX-10A #1 Reserved ...Base I/O 235.1 (MIX4)Output INX-10A #1 Relay Signal Silence 235.2 (MIX4)Output Relay INX-10A #1 Reserved Mircom QLA: CPU 1 236.1 (MIX4)MUO/NAC Strobe INX-10A #1 Loop 1 237.1 (MIX4)MUO/NAC Strobe NS INX-10A #1 NAC 2 238.1 (MIX4)MUO/NAC Strobe INX-10A #1 NAC 3 NS Loop 2 239.1 (MIX4)MUO/NAC Strobe NS INX-10A #1 NAC 4 Loop 3 - N/A 240.1 (MIX4)MUO/NAC Strobe INX-10A #1 NAC 5 Loop 4 - N/A Input Zones Output Zones 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

ON-OFF-OFF-ON-ON-ON

1 2 3 4 5 6 7 8

SW1

SW2

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

ON 1 2 3 4 5 6 7 8



Table 19 Configuring Single Stage Functions

Function	Address	Subaddress	Recommended 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 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

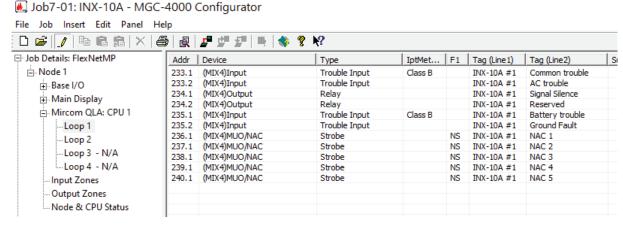


Figure 41 MGC-4000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting



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

ON-ON-OFF-ON-ON-ON



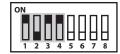
SW1

SW4

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



To configure NAC 5 as a Continuous Power Supply

Set DIP switch SW4-7 and SW4-8

as:

1-0

ON-OFF

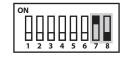




Table 20 Assigning Addresses - Single Stage with Basic Reporting and Power Supply Output

Function	Address	Subaddress	Recommended 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 Device Address
Activate NAC4, return NAC4 line status	Base Address + 5	1	240.1

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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

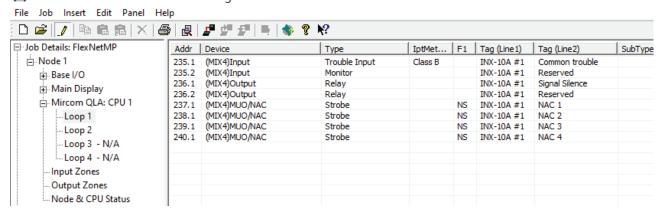


Figure 42 MGC-4000 Configurator Settings - INX-10A Single Stage with Basic Reporting and Power Supply Output

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.

74



To configure the recommended base address

Set DIP switch SW1

as:

0-1-0-1-0-1-1

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

ON 1 2 3 4 5 6 7 8

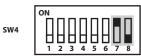
To configure NAC 5 as a Continuous Power Supply

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

Function	Address	Subaddress	Recommended 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

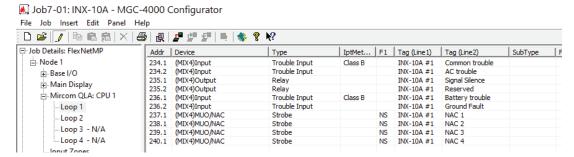


Figure 43 MGC-4000 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output

6.6 Two Stage Addressing Options in FleX-Net™ 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-OFF-OFF-ON-ON-ON

1 2 3 4 5 6 7 8

SW1

SW2

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

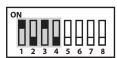






Table 22 Configuring Two Stage Functions

Function	Address	Subaddress	Recommended 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

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

	3 4		₹ ₩?					
Job Details: FlexNetMP	Addr	Device	Туре	IptMet	F1	Tag (Line 1)	Tag (Line2)	SubType
	231.1	(MIX4)Input	Trouble Input	Class B		INX-10A #1	Common trouble	
	231.2	(MIX4)Input	Trouble Input			INX-10A #1	Reserved	
T -	232.1	(MIX4)Output	Relay			INX-10A #1	Signal Silence	
i Main Display	232.2	(MIX4)Output	Relay			INX-10A #1	Reserved	
Mircom QLA: CPU 1	233.1	(MIX4)MUO/NAC	Strobe		NS	INX-10A #1	NAC 1	
Loop 1	234.1	(MIX4)MUO/NAC	Strobe		NS	INX-10A #1	NAC 2	
Loop 2	235.1	(MIX4)MUO/NAC	Strobe		NS	INX-10A #1	NAC 3	
•	236.1	(MIX4)MUO/NAC	Strobe		NS	INX-10A #1	NAC 4	
- Loop 3 - N/A	237.1	(MIX4)MUO/NAC	Strobe		NS	INX-10A #1	NAC 5	
Loop 4 - N/A	238.1	(MIX4)Output	Signal			INX-10A #1	NAC 1 2nd Stage	
Input Zones	238.2	(MIX4)Output	Signal			INX-10A #1	NAC 2 2nd Stage	
· •	239.1	(MIX4)Output	Signal			INX-10A #1	NAC 3 2nd Stage	
Output Zones	239.2	(MIX4)Output	Signal			INX-10A #1	NAC 4 2nd Stage	
Node & CPU Status	240.1	(MIX4)Output	Signal			INX-10A #1	NAC 5 2nd Stage	
Common System Status	240.2	(MIX4)Output	Signal			INX-10A #1	Reserved	

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

SW1



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

2





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



Table 23 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting

Function	Address	Subaddress	Recommended 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 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		

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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

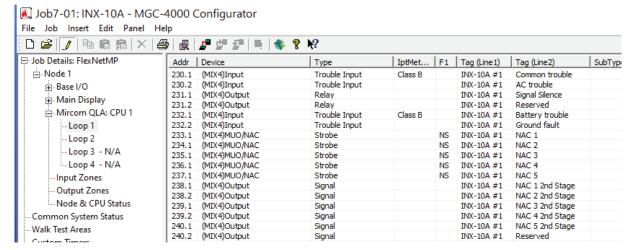


Figure 45 MGC-4000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting

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 as:

1-0-0-1-0-1-1-1

ON-OFF-OFF-ON-ON-ON

1 2 3 4 5 6 7 8

SW1

SW2

SW4

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



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

Function	Address	Subaddress	Recommended 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

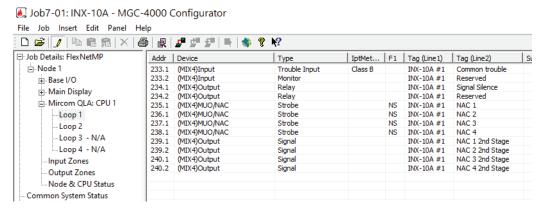


Figure 46 MGC-4000 Configurator Settings - INX-10A Two Stage with Power Supply Output

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

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

ON 1 2 3 4 5 6 7 8

SW₂

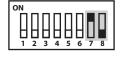
SW4

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

Function	Address	Subaddress	Recommended 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

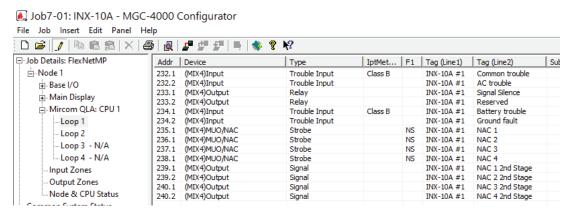


Figure 47 MGC-4000 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

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 ON. 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 as:

0-1-0-1-0-1-1

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







Table 26 Configuring Single Stage Functions

Function	Address	Recommended 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

<u>.</u>

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

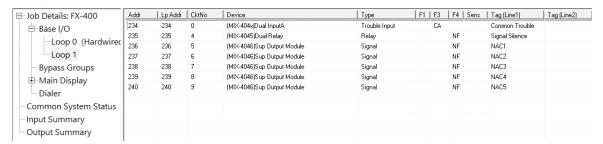


Figure 48 MGC-400 Configurator Settings - INX-10A Single Stage with Basic Reporting

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

SW1

1 2 3 4 5 6 7 8

ON-ON-OFF-OFF-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

SW2

ON 1 2 3 4 5 6 7 8

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 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

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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	CktNo	Device	Туре	F1	F3	F4	Sens	Tag (Line1)	Tag (Line2)
⊟-Base I/O	231	231	0	(MIX-404x)Dual InputA	Trouble Input		CA			Common Trouble	
· ·	232	232	4	(MIX-4045)Dual Relay	Relay			NF		Signal Silence	
Loop 0 (Hardwired	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	(MIX-404x)Dual InputA	Trouble Input		CA			Ground Fault	
⊞-Main Display	236	236	5	(MIX-4046)Sup Output Module	Signal			NF		NAC1	
' '	237	237	6	(MIX-4046)Sup Output Module	Signal			NF		NAC2	
- Dialer	238	238	7	(MIX-4046)Sup Output Module	Signal			NF		NAC3	
Common System Status	239	239	8	(MIX-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

86



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

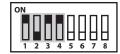
ON-ON-OFF-ON-ON-ON



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



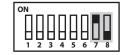
To configure NAC 5 as a Continuous Power Supply

Set DIP switch SW4-7 and SW4-8

as:

1-0

ON-OFF



SW4



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

Function	Address	Recommended 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	CktNo	Device	Туре	F1	F3	F4	Sens	Tag (Line1)	Tag (Line2)
⊟-Base I/O	235	235	0	(MIX-404x)Dual InputA	Trouble Input		CA			Common Trouble	
	236	236	4	(MIX-4045)Dual Relay	Relay			NF		Signal Silence	
Loop 0 (Hardwired	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 Output Module	Signal			NF		NAC3	
⊞-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:

0-0-0-1-0-1-1

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



SW1

SW₂

SW4

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

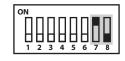
ON-OFF-OFF-ON

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

Function	Address	Recommended 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

i

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

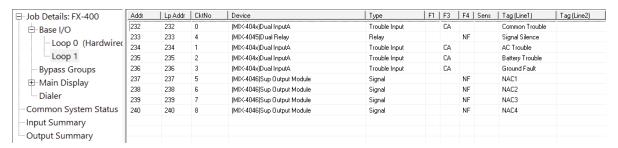


Figure 51 MGC-400 Configurator Settings - INX-10A Single Stage with Enhanced Reporting and Power Supply Output

89



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 ON. 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

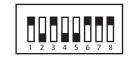
switches and the Fire Panel Configuration Software.

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-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



SW2



Table 30 Configuring Two Stage Functions

Function	Address	Recommended 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 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

i

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



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

C\A/1

SW₂

1 2 3 4 5 6 7 8

OFF-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







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 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

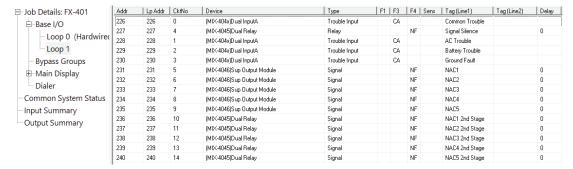


Figure 53 MGC-400 Configurator Settings - INX-10A Two Stage with Enhanced Reporting

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 as:

1-1-1-0-0-1-1-1

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

1 2 3 4 5 6 7 8

SW1

SW2

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

To configure NAC 5 as a Continuous Power Supply

Set DIP switch SW4-7 and SW4-8

as:

1-0

ON-OFF

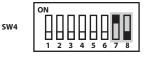






Table 32 Assigning Addresses	- Two Stage Application, 1 Power Supply Output
------------------------------	--

Function	Address	Recommended 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

i

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

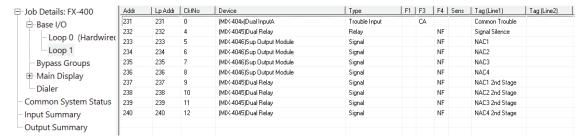


Figure 54 MGC-400 Configurator Settings - INX-10A Two Stage with Power Supply Output

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

as:

- 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

0-0-1-0-0-1-1-1

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



SW1

SW2

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



To configure NAC 5 as a Continuous Power Supply

Set DIP switch SW4-7 and SW4-8

as:

1-0

ON-OFF

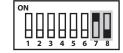




Table 33 Configuring Two Stage Address Assignment with Enhanced Trouble Reporting and Power Supply Addressing

Function	Address	Recommended 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 Device Address	
Second Stage NAC3	Base Address + 11	239	
Second Stage NAC4	Base Address + 12	240	

i

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

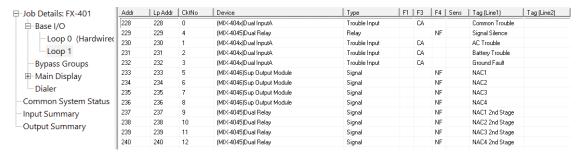


Figure 55 MGC-400 Configurator Settings - INX-10A Two Stage with Enhanced Reporting and Power Supply Addressing

96



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.

i

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

1 2 3 4 5 6 7 8

010 - Continuous

ON 1 2 3 4 5 6 7 8

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

1 2 3 4 5 6 7 8

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 (SW4 4-6)	SW3	SW4	SW5		
Mircom/Amseco	Continuous	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Mircom/Amseco	Temporal	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Mircom/Amseco	March Time	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Mircom/Amseco	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Mircom/Amseco	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
System Sensor	Continuous	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		



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	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
System Sensor	March Time	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
System Sensor	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
System Sensor	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Secutron/Gentex	Continuous	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Secutron/Gentex	Temporal	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Secutron/Gentex	March Time	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Secutron/Gentex	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Secutron/Gentex	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Wheelock	Continuous	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Wheelock	Temporal	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Wheelock	March Time	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Wheelock	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Wheelock	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	



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.

i

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	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Mircom/Amseco	Temporal	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Mircom/Amseco	March Time	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Mircom/Amseco	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
Mircom/Amseco	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
System Sensor	Continuous	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	
System Sensor	Temporal	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	



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	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
System Sensor	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
System Sensor	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Secutron/Gentex	Continuous	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Secutron/Gentex	Temporal	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Secutron/Gentex	March Time	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Secutron/Gentex	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Secutron/Gentex	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Wheelock	Continuous	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Wheelock	Temporal	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Wheelock	March Time	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Wheelock	California	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		
Wheelock	120 PPM, 50% Duty Cycle	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8	ON 1 2 3 4 5 6 7 8		



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)	ft	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	MAXIMUM WIRING RUN TO LAST DEVICE (ELR)						MAX. LOOP		
SIGNAL LOAD	18AWG		16AWG		14AWG		12AWG		RESISTANCE
Amperes	ft	m	ft	m	ft	m	ft	m	Ohms
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



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.

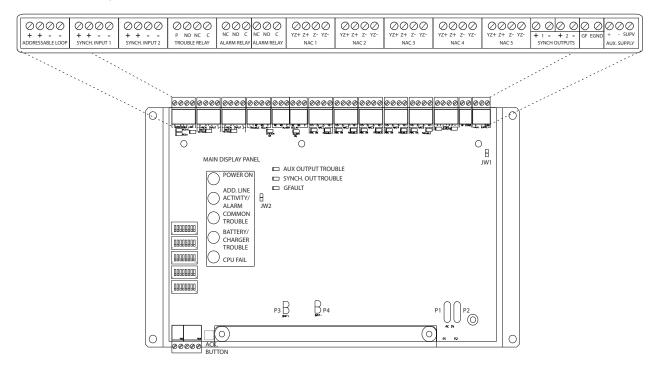


Figure 56 Main Board Terminal Blocks



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.



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

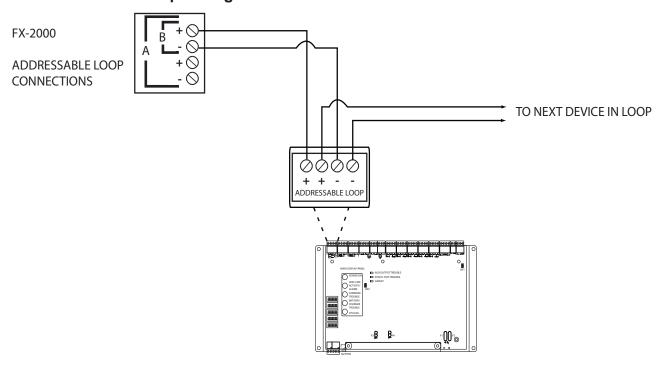


Figure 57 SLC Loop Wiring - Class B

7.2.2 SLC Loop Wiring - Class A

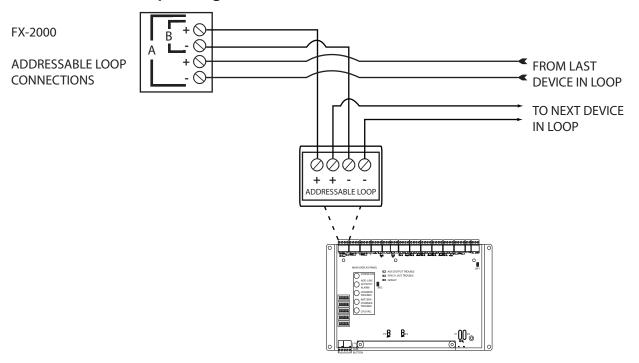


Figure 58 SLC Loop Wiring - Class A

104



7.2.3 Synchronized Input from FACP Wiring - Class B

SYNCH SIGNAL FROM FACP

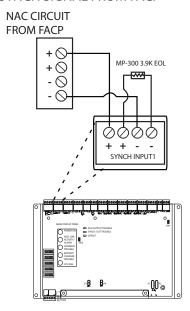


Figure 59 Synchronized Input from FACP Wiring - Class B



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



7.2.4 Synchronized Input from FACP Wiring- Class A

SYNCH SIGNAL FROM FACP

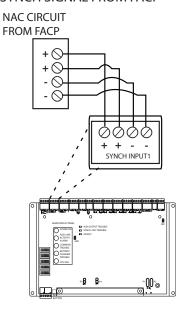


Figure 60 Synchronized Input from FACP Wiring - Class A



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

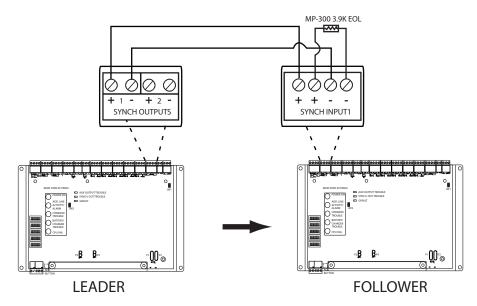


Figure 61 Synchronized Input from INX-10A Wiring - Class B Single Follower



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

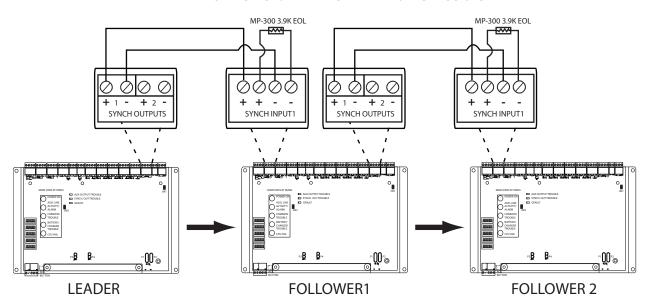


Figure 62 Synchronized Input from INX-10A Wiring - Class B Multiple Followers



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

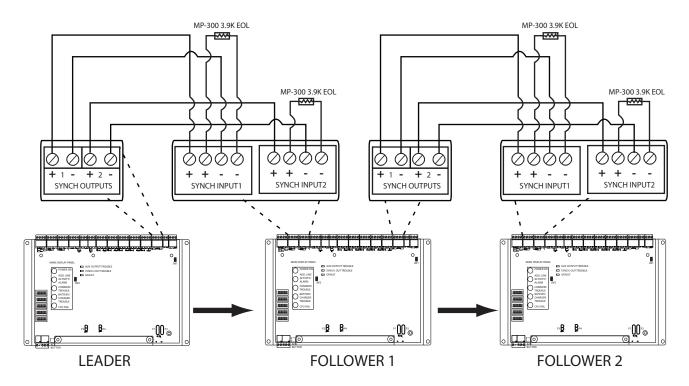


Figure 63 Synchronized Input from INX-10A Wiring - Class B Multiple Followers



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

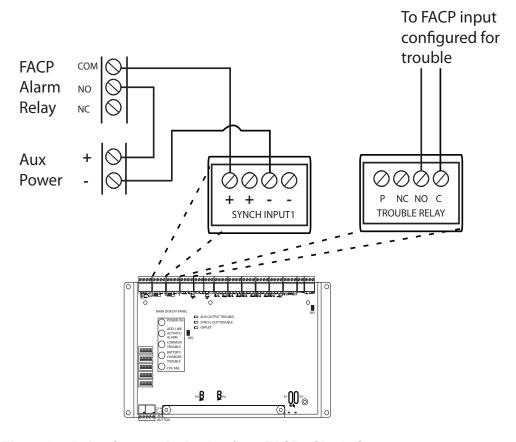


Figure 64 Relay Contact Activation from FACP - Single Stage



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

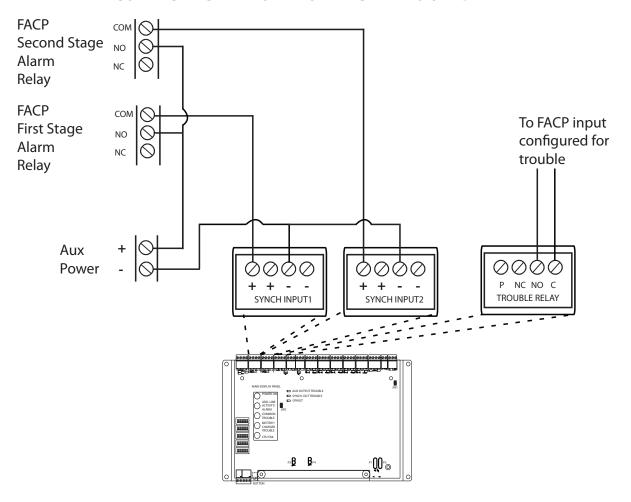


Figure 65 Relay Contact Activation from FACP - Two Stage



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

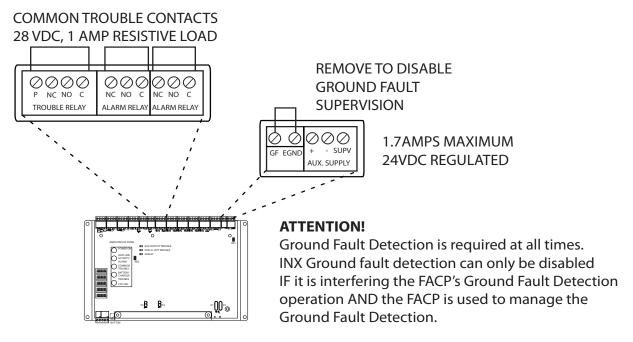


Figure 66 Relay, Ground Supervision and Auxiliary Supply Wiring

7.2.11 Supervision of Auxiliary Supply Wiring

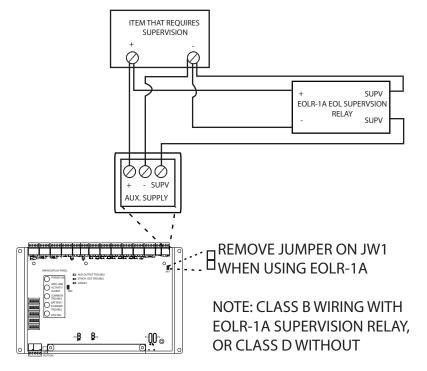


Figure 67 Relay, Ground Supervision and Auxiliary Supply Wiring



7.2.12 NAC Circuit Wiring - Class B

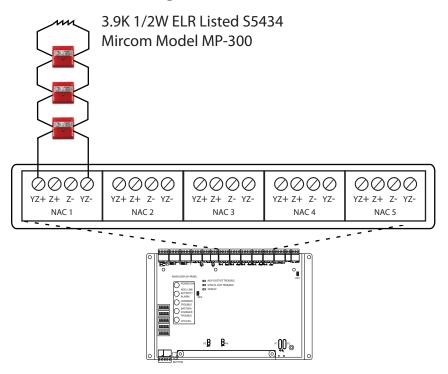


Figure 68 NAC Circuit Wiring - Class B

7.2.13 NAC Circuit Wiring - Class A

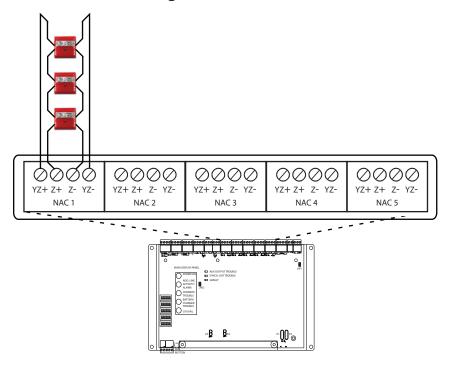


Figure 69 NAC Circuit Wiring - Class A



7.2.14 NAC 4 and 5 Door Release Wiring

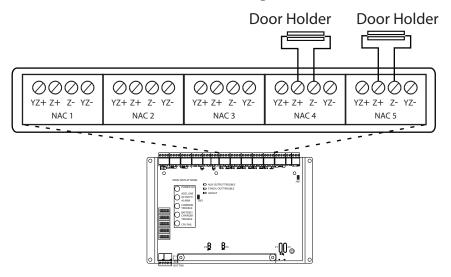


Figure 70 Example door holder wiring on NAC4 and NAC5

7.2.15 Supervision of NAC4 and NAC5 Configured for Door Release

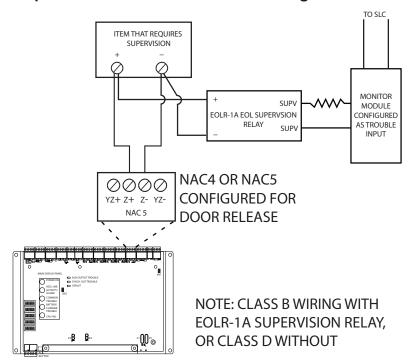


Figure 71 NAC4 and NAC5 Supervision



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 VAC, 60 Hz, 2 A / 240 VAC, 50 Hz, 1A
Power supply total current	10 A maximum
Battery Fuse	Replace with WX-058 Battery Cable Assembly

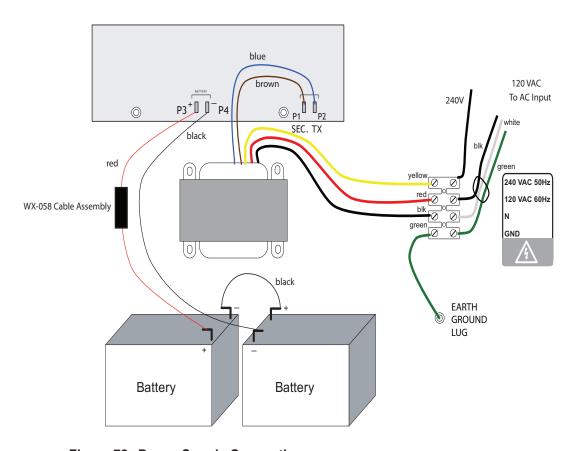


Figure 72 Power Supply Connections



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.
- 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	S 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) Terminals are labeled "NAC".	configurable as strobes or audibles.
	Power limited / 24 VDC regulated / 2.	5 A @ 49° C per Circuit
Aux. Power Supply.	Terminals are labelled AUX PWR.	
	Power limited / 24 VDC Filtered (spec	cial application) / 1.7 A @ 49° C
Auxiliary relays (resistive loads)	Must be connected to a Listed Power L labelled "GROUND" and "TROUBLE".	imited Source of Supply. Terminals are
	Ground Fault	Form C, 1 Amp, 28 VDC
	Common Trouble	Form C, 1 Amp, 28 VDC
Electrical ratings	AC line voltage	120V 60Hz / 240V, 50Hz
		2 Amps / 1 Amp (primary)
	Maximum allowable current	120V @ 4.25A
		240V @ 2.125A
	NAC Circuits	24VDC regulated, Power Limited
		10A Total, 2.5A maximum per circuit
	Туре	2 x 12VDC, Gel-Cell/Sealed Lead-Acid
Battery	Charging capability	4 Ah to 40 Ah batteries
	Current Consumption	standby: 200 mA
		alarm: 350 mA
Compliance	System Model	INX Addressable NAC Expander
	Applicable Standards	ULC S527-11, UL 864 10th Edition 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 to 8.0 Appendix A - Specifications and Features for specifications.

Power Requirements (All currents are in amperes)							
Model Number	Description	Qty		Standby	Total Standby	Alarm	Total Alarm
INX-10A	Main Chassis (10 Amp)		Х	0.200	=	0.350	=
INX-10ADS	Chassis (10 Amp)		Х	0.200	=	0.350	=
INX-10AC	Chassis (10 Amp)		Χ	0.200	=	0.350	=
Signal Load (bells, horns, strobes, and etc.)			Χ				=
Auxiliary Power Supply			=	Alarm	=		
Total currents (Add above currents)		STANDBY	(A)	Alailii	(B)		

Total Current Requirement	
ALARM (B)Amps.	
Battery Capacity Requirement	
([STANDBY (A)] X [(24 or 60 Hours)]) + ([ALARM (B)] X [*Alarm in Hr.]) (C)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.

None

Base Address 193

Protocol System Sensor

AC Failure Report Delay No Delay

Charger Yes

Battery Yes

Cut Charger when NACs activated Yes

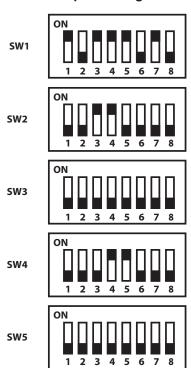
Alert Rate N/A

Evacuation Rate Temporal

Strobe Type

NAC 4 Output Settings NAC

NAC 5 Output Settings NAC





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.

Base Address 188

Protocol System Sensor

AC Failure Report Delay 2 hour
Charger Yes
Battery Yes

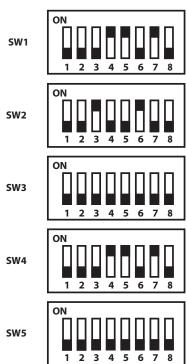
Cut Charger when NACs activated Yes

Alert Rate Follow Inputs

Evacuation RateTemporalStrobe TypeNone

NAC 4 Output Settings NAC

NAC 5 Output Settings Continuous Supply





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.

Base Address 185

Protocol System Sensor

AC Failure Report Delay 2 hour
Charger Yes
Battery Yes

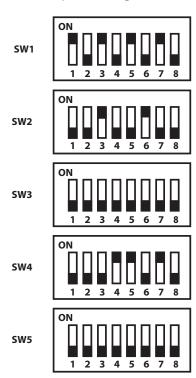
Cut Charger when NACs activated Yes

Alert Rate Follow Inputs

Evacuation Rate Temporal

Strobe Type None
NAC 4 Output Settings NAC

NAC 5 Output Settings Continuous Supply





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	Horn	H12/24	n/a
-SpectrAlert	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-400C-WW, FHS-400C-RR, FHS-400C-WW, FHS-400C-RR

11.4 ULI Compatible Horn/Strobes

Table 44 ULI Compatible Horn/Strobes

System Sensor L Series Models	Description
P2RL	HORN STROBE 2W RED WALL



Table 44 ULI Compatible Horn/Strobes (Continued)

System Sensor 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 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, ALERT
SPSWL-CLR-ALERT	SPEAKER STROBE WHITE WALL CLEAR LENS, ALERT
SPSCRL	SPEAKER STROBE RED CEILING
SPSCWL	SPEAKER STROBE WHITE CEILING
SPSCWL-P	SPEAKER STROBE WHITE CEILING, PLAIN
SPSCWL-SP	SPEAKER STROBE WHITE CEILING, FUEGO
SPSCWL-CLR-ALERT	SPEAKER STROBE WHITE CEILING, ALERT

11.5 ULC Compatible Horn/Strobes

Table 45 ULC Compatible Horn/Strobes

System Sensor 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 - French "FEU"
P2RLA-E	Horn Strobe 2W Red Wall - English "FIRE"
P2RLA	Horn Strobe 2W Red Wall - Bilingual "FIRE/FEU"
P2GWLA-F	Horn Strobe 2W White Wall, Compact - French "FEU"
P2GWLA-E	Horn Strobe 2W White Wall, Compact - English "FIRE"
P2GWLA	Horn Strobe 2W White Wall, Compact - Bilingual "FIRE/FEU"
P2GRLA-F	Horn Strobe 2W Red Wall, Compact - French "FEU"
P2GRLA	Horn Strobe 2W Red Wall, Compact - Bilingual "FIRE/FEU"
P2GRLA-E	Horn Strobe 2W Red Wall, Compact- English "FIRE"
HGRLA	Horn Red Wall, Compact
HGWLA	Horn White Wall, Compact



Table 45 ULC Compatible Horn/Strobes

System Sensor L Series 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



12.0 Warranty and Warning Information

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:

- 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

