

# INTELLIGENT NAC EXPANDER/POWER SUPPLY



# **Description**

Mircom's INX-10A is an Intelligent NAC expander/power supply that works on the addressable initiating circuit (SLC/ DCL) of the listed compatible Intelligent fire alarm control panels, or, as a NAC expander of any UL/ULC listed 24VDC conventional fire alarm control panel. Available in a 10 Amp configuration, the INX-10A can extend the power capabilities of existing notification appliance circuits as well as provide power for other ancillary devices. In addition, the INX-10A has the ability to operate with any UL/ULC Listed 24 VDC fire alarm control panel to provide Notification Appliance Circuit expansion.

The INX-10A is equipped with five individual Class B (Style Y) or Class A (Style Z) output circuits that can be independently configured for NAC operation or auxiliary power. INX-10A provides the option of configuring all five circuits as an output to provide general purpose power. Output circuits four and five can be configured to provide auxiliary power for four-wire detectors or door holders.

Each output circuit is rated for 2.5 Amps. When configured for NAC operation the outputs can be set for Steady, Temporal Code, California Code or March Time. In addition the output circuits have field selectable built-in strobe and horn synchronization protocols to support Mircom, Amseco, System Sensor, Wheelock and Gentex devices, eliminating the need for additional external synchronization modules.







NYC Fire Dept



#### **Features**

- Supports multiple intelligent protocols, MGC Protocol\* plus Classic Loop Interface Protocol (CLIP).
- Listed with UL 864, 10th Edition and ULC S527-11. 3rd Edition
- 10 Amp output
- 120V 60Hz / 240V 50Hz operation
- Compatible with the following panels: FX-4000N Series, FX-2000N Series, FX-2000 Series, FX-401, FX-400, FX-3500 & FX-3318. Complete list of compatibe panels can be found in LT-899 INX-10A Installation and Operation
- Compatible with any UL/ULC listed 24VDC conventional fire alarm control panel to provide Notification Appliance Circuit
- · Easily configured using DIP switches
- One isolated SLC input for connection to the host panel
- Five Class B (Style Y) or Class A (Style Z) synchronized output circuits
- DC regulated outputs
- Configurable AC Power fail delay
- · Ground fault enable or disable
- Option available on configuration to enable or disable the battery charger on activation
- From 7 to 15 Address functions (Combination of inputs and outputs, depending on the application)
- · Outputs individually controllable
- Separate Relay for Ground Fault and Common Trouble available on terminals
- Horn/Strobe synchronization protocols include Mircom, Amseco, Gentex, System Sensor and Wheelock
- Two-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 circuits four and five can be configured to provide auxiliary power for four-wire detectors or door holders.
- Supports Canadian two stage operation
- Output fault notification to fire alarm control panel
- Ability to sync outputs for multiple INX-10A units
- 2.5 Amp max. current per output
- 1.7 Amp auxiliary power output
- Built-in charger for sealed lead acid or gel type batteries
- Unit includes power supply, charger, red door, black backbox, transformer and battery leads

\* Minimum SO-229 Ver 2.7.3 and minimum MD-950 [M]

# **Modes of Operation**

## Intelligent NAC Expander (INX) Modes

The INX-10A features three modes of NAC Expander operation:

- · INX Mode with Internal Sync
- · INX Mode with External Sync
- INX Mode with Redundant Input

## **Input Mode with Internal Sync**

In this mode all signal and sync strobe rates are produced in the INX-10A.

## **INX Mode with External Sync**

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

## **INX Mode with Redundant Input**

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

#### **Power Supply Modes**

In addition to the NAC expander modes, some or all of the NAC outputs on the INX-10A can be configured for the following power supply modes of operation:

- · NAC Outputs as Power Supply Outputs
- NAC Outputs for Door Release
- NAC Outputs for 4-Wire Smoke Supply

## **NAC Outputs as Power Supply Outputs**

This mode allows any NAC output to be configured as a power supply. The SLC and Sync inputs are ignored for the power supply outputs.

#### **NAC Outputs for Door Release**

This mode allows NAC circuits 4 and/or 5 to provide power for door holders

#### **NAC Outputs for 4-Wire Smoke Supply**

This mode allows NAC circuits 4 and/or 5 to provide auxiliary power for 4-wire smoke detectors.

# **Specifications**

Dimensions	
20"H x 14½"W x 4½"D	
AC Line Voltage	
120V 60Hz / 240V, 50Hz, 2 Amps / 1 Amp (primary)	
NAC Circuits	
24VDC regulated, Power Limited 10A Total, 2.5A maximum per circuit	
Battery	
24VDC, Gel-Cell/Sealed Lead-Acid	
Charging Capability	
Up to 40 AH batteries	
Current Consumption from INX-10(A) Power Supply	
Standby	200 mA
Alarm	350 mA
Current Consumption from Compatible FACP	
4.5mA	

## **Common Indicators**

Power On

Addressable Line Activity/Alarm

Common Trouble

Battery Charger/Trouble

CPU Fail

## **Trouble LEDs**

Auxiliary Output Trouble Synchronized Output Trouble Ground Fault Trouble

## Other LEDs

Addressable (SLC) Loop Indicators (3 LEDs) Synchronized Input Indicators (2 LEDs) Synchronized Output Indicators (2 LEDs) Trouble LED Indicator Alarm Relay Indicator

#### Controls

Acknowledge Button

Configuration via DIP Switches

**Current Consumption from Compatible FACP** 

4.5mA

# **Ordering Information**

Model	Description	
INX-10A	Intelligent NAC Expander, 10 Amps c/w backbox and red doornn	
INX-10AC	Intelligent NAC Expander, 10 Amps Addressable Chassis Mounts into BB-5008 or BB-5014 enclosure	



#### Canada

25 Interchange Way Vaughan, ON L4K 5W3 Telephone: (905) 660-4655 | Fax: (905) 660-4113

#### U.S.A.

4575 Witmer Industrial Estates Niagara Falls, NY 14305 Toll Free: (888) 660-4655 | Fax Toll Free: (888) 660-4113



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