

NOTIFIER NION-2C8M Normally Closed Supervised PID Installation Guide

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**NION-2C8M-Normally Closed Supervised (NCS)
Product Installation Document**

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NION-2C8M Normally Closed Supervised PID

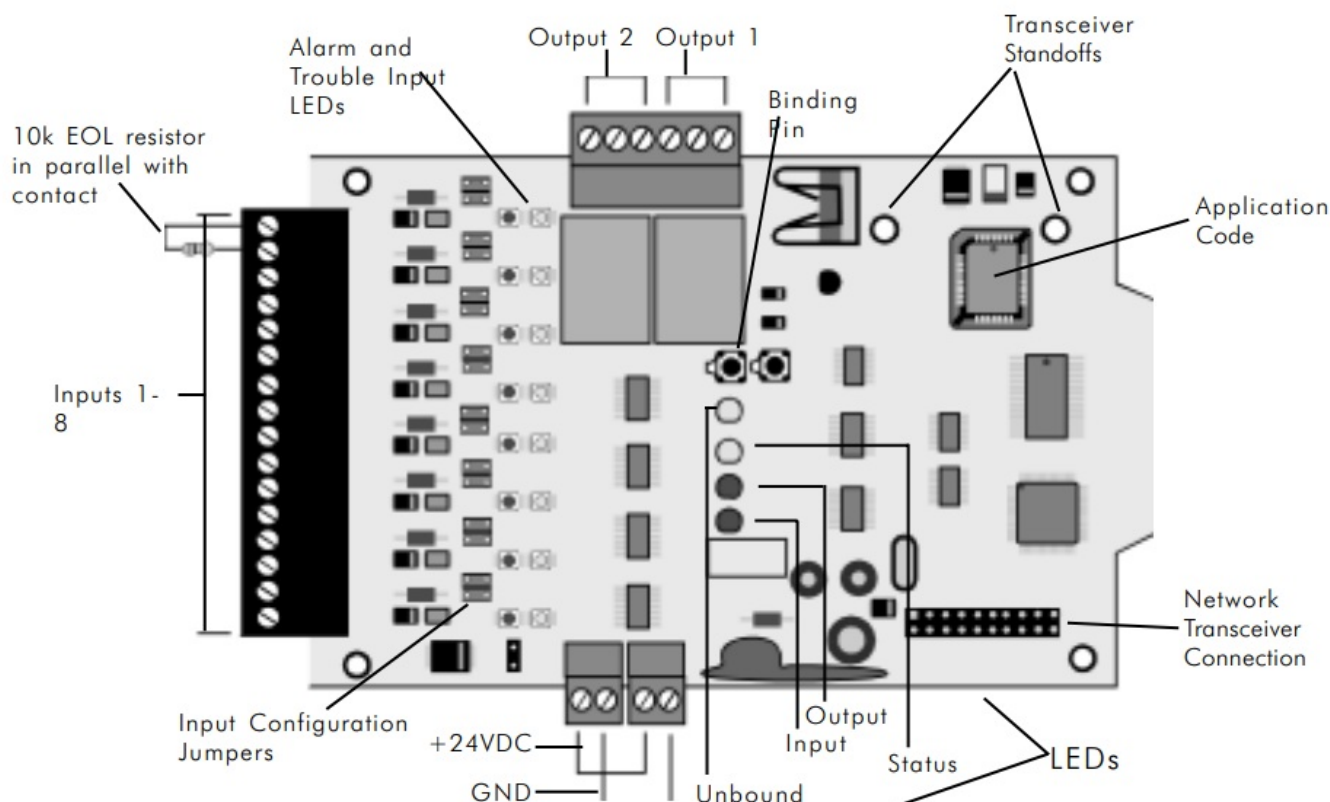
This document covers the procedures and specifications for installing the above listed unit and when appropriate, information regarding configuration on the monitored device. For more detailed configuration and operation information, refer to Network Installation Manual, Echelon Local Area Server Manual, or BCI 3 Manual as appropriate.

Description of the NION-2C8M

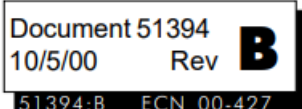
The NION-2C8M (2 Control, 8 Monitor) is a discrete input/output interface used on the network. All of the system components are based on LonWorks (Local Operating Network) technologies. The NION-2C8M provides a gateway to the network for equipment and control panels that have dry contacts.

The NION-2C8M connects a LonWorks FT-10 or FO-10 network, and discrete monitored devices and conventional control panels. It provides a single, two-way communication channel for discrete inputs and outputs when connected to a control panel. NIONs are specific to the type of network to which they connect (FT-10 or FO-10). The transceiver type must be specified and ordered separately when ordering the NION. The NION-2C8M

can be powered by any 24VDC power limited source with battery backup which is UL listed for use with fire protective signaling units. Power must be supervised or placed within 20 ft of the NION with connections run in conduit. The NION-2C8M mounts in an enclosure (NIS CAB-1 or CHS-4L in CAB-3 series enclosure) with conduit knockouts.



NOTE: DO NOT change the factory default jumper settings from what is shown in the above diagram.



NION-2C8M Board Layout

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Installation Description

The NION-2C8M can be installed in the following environmental conditions:

- Temperature range of 0°C to 49°C (32°F – 120°F).
- 93% humidity non-condensing at 30°C (86°F).



NOTE: Use only wire for power limited systems. Power limited wire runs use type FPLR, FPLP, FPL or equivalent cabling per NEC 760.

Mounting

The NION-2C8M is designed to be installed on a wall within 20 feet of the monitored equipment in the same room. The type of hardware used is at the discretion of the installer, but must be in accordance with local code requirements.

NION Power Requirements

The NION-2C8M requires 24 VDC @ 0.10 A nominal and battery backup in accordance with local code requirements. It can be powered by any power limited 24 VDC source which is UL or ULC listed, as appropriate for

your area, for use with fire protective signaling units.



NOTE: Always remove power from the NION before making any changes to switch settings and removing or installing option modules, SMX network modules and software upgrade chips. Damage may result if changes like this are made without powering down the NION first.

NION-2C8M LEDs

Four LEDs on the front panel of the NION-2C8M provide information about module operation. The table below explains the possible conditions.



NOTE: Refer to the NION-2C8M Board Layout diagram on the previous page for the position of each of the LEDs listed below.

LED	Color	Description
Status	Green	This LED provides information on network communication and node binding by one of the three modes listed below: Flashing slow – NION is functioning normally. Flashing fast – NION is bound but encountering communication problems.
Unbound	Yellow	This LED provides information on node binding by one of the three modes listed below: Off – NION is bound. Flashing – NION is not bound (Status LED is off). Solid – Unrecoverable error; code is not running.
Output	Red	Solid – an output has been energized.
Input	Red	Solid – an input is active.

NION-2C8M LED Status Information

I/O Configuration and Connections

Inputs

The NION-2C8M accepts eight normally open or normally closed dry contact inputs. Each input is monitored by an end-of-line resistor. These inputs are wired to a 16 point plug-in terminal strip in the following pattern:

Input 1 –	Input 8 –
point 1 = input line through	point 15 = input line
point 2 = common	point 16 = common

The PCB is labeled and the terminals are numbered for convenience. Inputs are rated for 18V nominal, 1.8mA maximum current and 2,000 ohm maximum resistance.

Each input circuit requires a 10k EOL resistor installed in parallel with the contact.

Each input is configured as NO/NC from the plug-in application.



NOTE: Jumpers JP4-JP11 should be left in factory default setting as shown to the left.

Disregard silk screen below output LED.

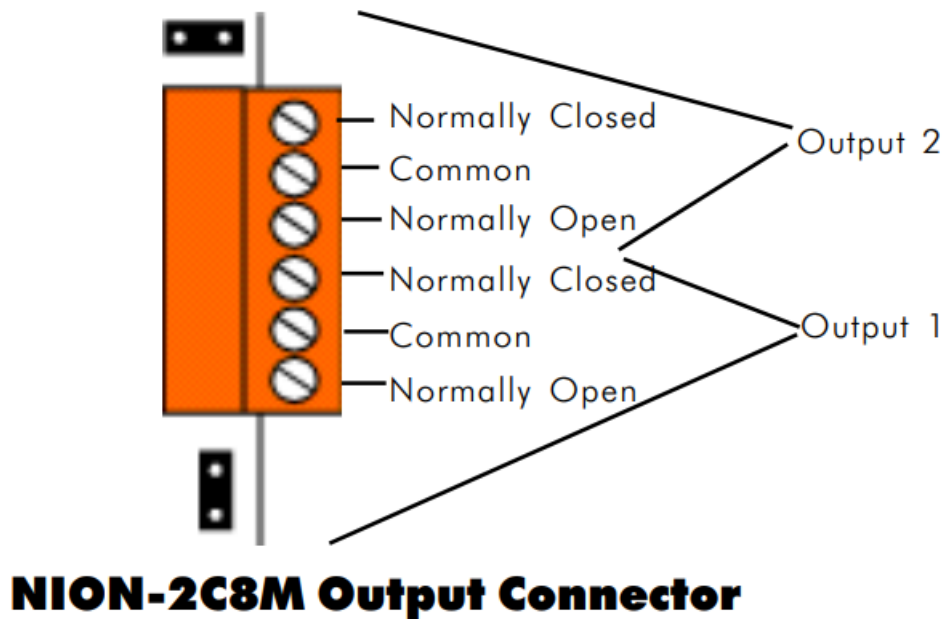
Each input has a pair of diagnostic LEDs. For Normally Open (NO) contacts, the Red LED is ON when the point is in alarm, and OFF when the point is normal. For Normally Closed (NC) contacts, the Red LED is OFF when the point is in alarm, and ON when the point is normal. The Yellow LED is ON only when the point is in Trouble (open

circuit).

Outputs

The NION-2C8M provides two SPDT relay outputs. The relays are rated at 5A @ 30VDC. They can be wired for normally open or normally closed operation. All rated loads are resistive. Inductive and tungsten loads will be lower.

NOTE: Input and output lines should not exceed 2000ft.



General Configuration

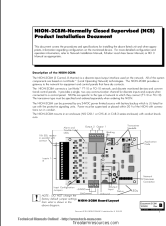
In order to utilize all features available with the NION-2C8M, the 2C8M Scheduling Plug-In utility must be configured at the system workstations. Each Plug-In is described in detail in the Product Installation Description shipped with each

NION. General Plug-In setup information can be found in the appendix of the workstation manual.

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Technical Manuals Online! – <http://www.tech-man.com>
firealarmresources.com

Documents / Resources

	<p>NOTIFIER NION-2C8M Normally Closed Supervised PID [pdf] Installation Guide NION-2C8M Normally Closed Supervised PID, NION-2C8M, Normally Closed Supervised PID, Closed Supervised PID, Supervised PID</p>
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