NOTIFIER NION-232-VISTA50P Network Input Output Node Instruction Manual

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NION-232-VISTA50P

Product Installation Document

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 configura-tion and operation information, refer to Network Installation Manual, Echelon Local Area Server Manual, or BCI 3 Manual as appropriate.

Description of the Serial NION-232B

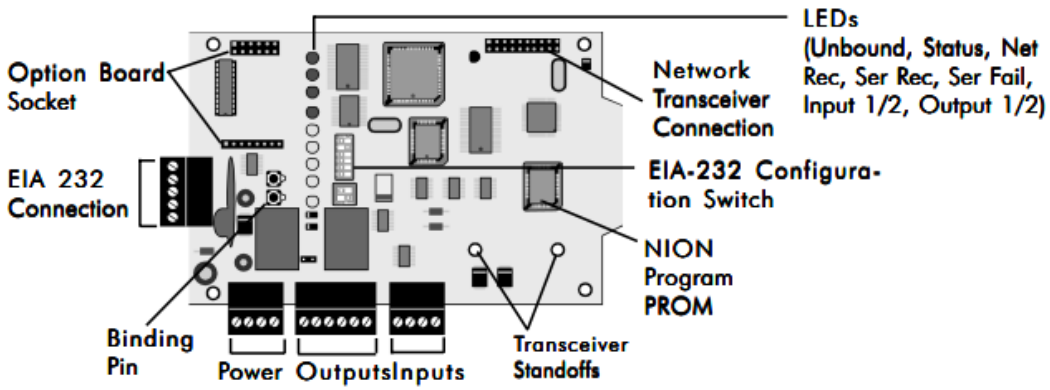
- The Serial NION-232B (Network Input Output Node) is the EIA-232 interface used with the network. All of the system components are based on LonWorks™ (Local Operating Network) technologies. The Serial NION-232B provides transparent or interpreted communications between the workstation and control panels. Unless otherwise noted, full control capabilities are available for each interface. Check specific connections for details.
- The NION connects a LonWorks™ FT-10 or FO-10 network, and the EIA-232 port of control panels. It provides a single, two-way communication channel for EIA-232 serial data 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 can be powered by any 24VDC power limited source with battery backup which is UL listed for use with fire protective signaling units.
- The NION mounts in an enclosure (NISCAB-1 or CHS-4L in CAB-3 series enclosure) with conduit knockout.

Site Requirements
The NION-232B can be installed in the following environmental conditions:

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

Mounting

The NION-232B is designed to be installed on a wall within 20 feet of the control panel 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-PCB (General)

Document 50838 11/30/01 Rev B
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Serial Communication Description

The baud rate, parity and data bits of the NION-232B must be equal to those of the EIA-232 serial port of the control panel. The NION-232B settings must be configured in the field for the application it was ordered to fill. These settings are made on switch S2.

If it becomes necessary to change any of these settings use the chart below:

Baud Rate	Switch Position 4	Switch Position 5	Switch Position 6
600	Off	On	On
1200	On	Off	On
2400	Off	Off	On
4800	**On**	**On**	**Off**
9600	Off	On	Off

Parity	Switch Position 2	Switch Position 3
None	On	On
Odd	On	Off
Even	**Off**	**Off**

Data Bits	Switch Position 1
8	**On**
7	Off

NOTE: If the device connected to the NION calls for 9 data bits then the NION must be set to data bits with either Even or Odd parity.

Switch S2 Settings for the NION-232B EIA-232 Configuration

NION Power Requirements

The NION-232B requires 24 VDC @ 0.080 A nominal and battery backup in accordance with local code requirements. It can be powered by any power limited source with battery backup which is UL listed for use with fire protective signaling units.

NOTES: It is recommended that the installer conform to local code requirements when installing all wiring . All power connections must be non-resettable. Refer to the current Notifier catalog for specific part numbers and ordering information for each NION. 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 or damage may result. Always observe ESD protection procedures.

Serial Connections with the ADEMCO VISTA-50P Security Panel
The NION-VISTA must be connected to the EIA-232 port of an ADEMCO 4100SM Serial Interface Module installed with the VISTA-50P security panel. The 4100SM module must be connected to the keypad loop on the VISTA 50P main board. The EIA-232 port requires a DB25M connector. For specific connections, refer to Figure: NION-VISTA – ADEMCO VISTA-50P Wiring Diagram. EIA-232 settings are: Baud Rate – 4800, Data Bits – 8, Stop Bits – 1, Parity – Even.

Powering the NION
The NION-VISTA can be powered from any regulated, power limited, filtered power source UL\ULC listed, as appropriate for your area, for use with fire protective signaling units, providing +24VDC +/- 10% @ 0.060 A. For specific connections refer to Figure: NION-VISTA – ADEMCO VISTA-50P Wiring Diagram.

Device Addressing for the ADEMCO VISTA-50P
The VISTA-50P and Vista 100 device addresses are a hierarchy which include partitions (1 – 9), partition bypasses (disabling of each partition) and zones. Each device type uses the following format:
Part<X>
BYPASS<X>
ZONE<XX>
In addition, the following addresses must be created for the VISTA panel:

- Panel
- Batt

Configuring the VISTA-50P
The VISTA-50P must be configured to communicate with an alpha-console at address 03.

To configure the alpha-console, execute the following steps on a VISTA-50P keypad:
Complete steps 1-6 to configure the VISTA-50P with a single partition. Additionally, if you wish to setup the VISTA-50P for multiple partitions complete steps 7-11.

1. Log in – <Operator/Installer Code>+800.
2. #93 to enter Menu Mode.
3. Answer Yes (1) to device Programming.
4. Select device 03. Press *.
5. Press 1 for Alpha Console. Press *.

   If you are setting up a VISTA-50P Panel for a single partition, answer 1 to question number 6 and you are finished with the setup.

   If you are setting up a VISTA-50P Panel for multiple partitions, answer 9 to question number 6 and complete steps 7- 11.
6. Assign it to partition _____.

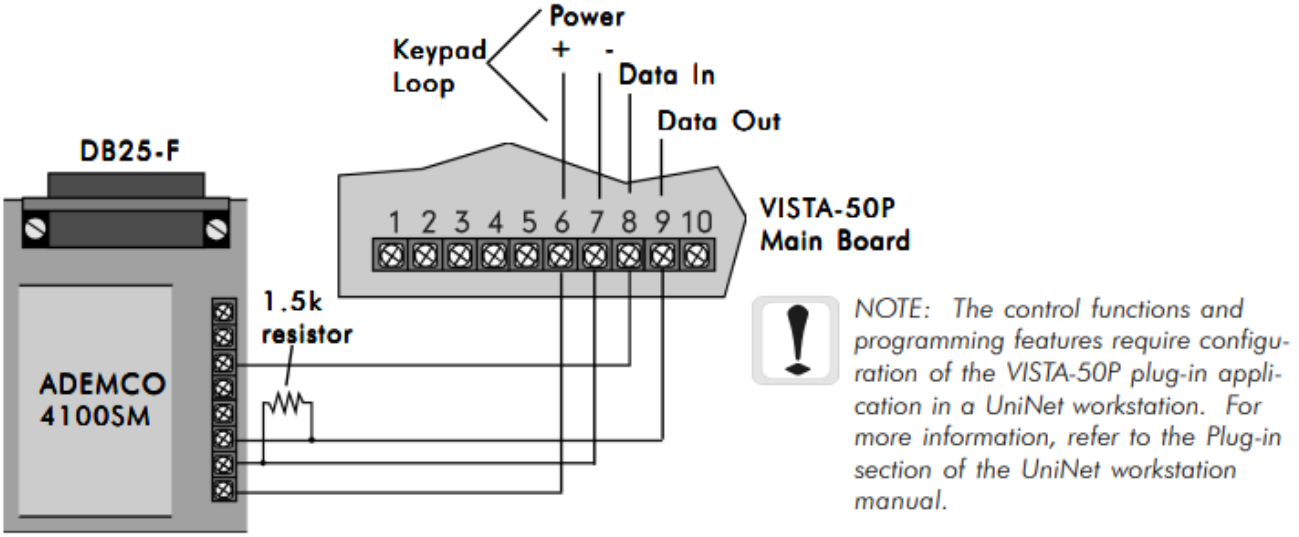
   NOTE: If the VISTA-50P panel is configured for multiple partitions the alpha-console address 03 must have the GOTO option enabled for each partition in order for the NION to send commands and make panel inquiries. Each partition GOTO must be enabled seperately. To do this follow steps 7-11. For complete programming information on the VISTA-50P panel, refer to the VISTA-50P manual.

   Complete the following steps for a multiple partition setup.
7. Log in – <Operator/Installer Code>+800.

8. *94 twice to enter Page Two data fields.
9. *18 to set partition GOTO.
10. Enter desired partition number.
11. Enter 1 to enable the GOTO.

NOTE: If you are configuring a VISTA-50P with a single partition, the Input 1 on the NION must be jumpered. When the VISTA-50P is rebooted, it will check for the jumper and if found will use the single partition setting for the VISTA-50P. The D16 LED will be on when input 1 is jumpered.

Input 1
Jumper
NION-VISTA
DB25-M

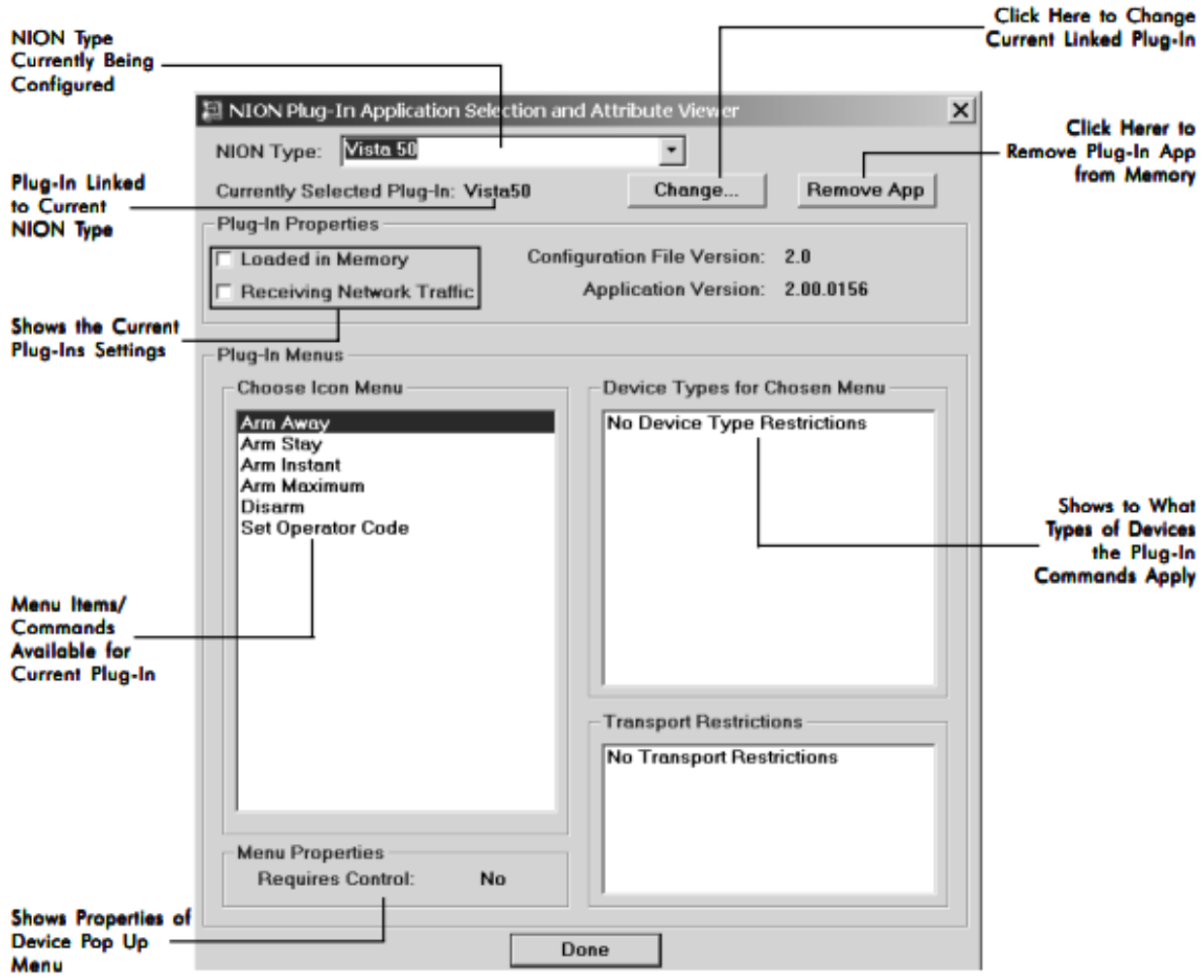


NION-VISTA - ADEMCO VISTA-50P Wiring Diagram

Plug-In Selection and Configuration
Plug-Ins are .CFG configuration files that may have an associated .EXE file. Plug-In Applications are independently operating software applications that are linked to specific NION types. They interface with the workstation at the network level. Configuration Plug-Ins act to create new menu options by defining ‘macro’ commands or sequences of information for communicating with specific devices.
Plug-Ins relate to specific devices, and their options are accessed through device menu options or macro definitions.
Plug-Ins are configured using the NION Plug-In Application Selection and Attribute Viewer. To configure a Plug-In for a device, follow these steps:

1. Select the appropriate NION type in the NION Type combo box.

   NOTE: The related hardware must be installed to utilize the related features provided by the plug-in.



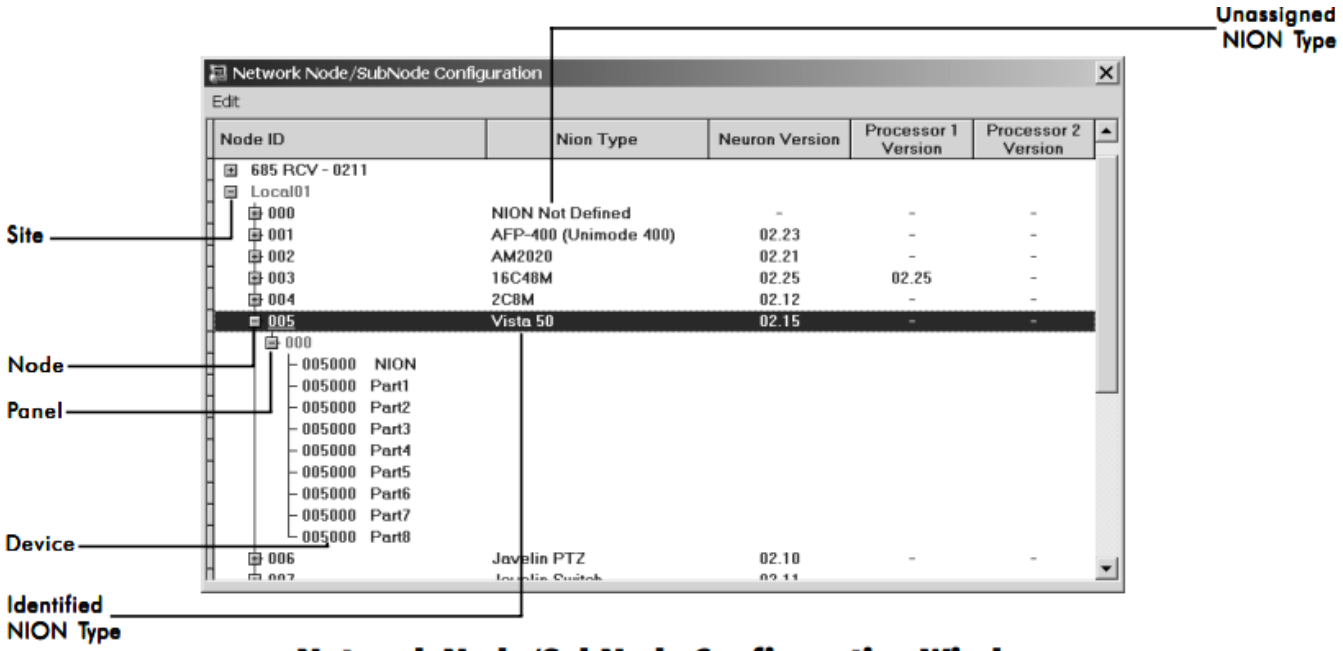
NION Plug-In Selection and Configuration Form

2. Click Change… to modify the currently selected plug-in for the selected device. This will bring up a file selection dialog showing the plug-in directory. Select the .CFG or .EXE file associated with the desired plug-in and click on OK.
3. The commands associated with the selected plug-in will now appear in the Available Icon Menus display. These are the commands that can now be assigned to a macro function using the Macro Editor, or assigned to a Functional Button on the Floor Plan Display. These options will automatically appear on the pulldown menu for the selected device (provided the current workstation has control of the device).

Clicking on an available command will cause the Device Type for Chosen Menu display to show what devices are affected by the chosen command. Some commands will affect all device types, others will have specific types only. When creating devices to use plug-in commands be sure they are defined as one of the appropriate types. When the plug-in has been configured, click OK to close the Plug-In Selection and Configuration Form.

Mapping Plug-ins With NIONs

In order for plug-in applications to function they must be linked with the nodes or devices to which they correspond. In most cases this is done automatically and each recognized node is linked to the appropriate plug-in application.
There may be times when nodes and devices are not automatically read and updated by the workstation and links are not established. Therefore, it is advised that this one time linking process be checked when assigning new plug-ins and if the device type has not been automatically assigned then assign it manually. This can be done in the Network Configuration Window. This window is opened by selecting Tools, Network Administration.



Network Node/SubNode Configuration Window

To assign a device type to a node double click the NION Type field for the desired node. This opens a combo box with a list of available device types. Select the desired device type to complete the assignment process and establish the plug-in link. If the NION is reset while the workstation is on-line, this information will be automatically updated.
NOTE: Plug-ins often have configuration forms for the related NIONs. These configuration tools can only be accessed from the device pop-up menus. Therefore, before any configuration of the NION can be done, a device must be assigned to the node.

VISTA-50 Plug-In
The VISTA-50P requires a 4 digit PIN number to access any of its functions. The first time a VISTA-50P command is selected, the software will request a PIN number. This PIN number is then passed to the VISTA-50P panel and stored within the workstation software. For all further usage of the VISTA-50P, the workstation will pass the appropriate PIN number to the panel, relying on the workstation's security to control access to the panel.
The VISTA-50P plug-in provides a number of NION specific commands to the NION pulldown menu:

- Arm Away – Arms the VISTA-50P in Away Away Away Away Away mode.
- Arm Stay – Arms the VISTA-50P in Stay Stay Stay Stay Stay mode.
- Arm Instant – Arms the VISTA-50P in Instant Instant Instant Instant Instant mode.
- Arm Maximum – Arms the VISTA-50P in Maximum Maximum Maximum Maximum Maximum mode.
- Disarm – Disarms the VISTA-50P partition. Deactivates all alarm points and audibles.
- Set Operator Code – This command defines what PIN number is sent out by the workstation software when interfacing with the VISTA-50P. If the PIN is changed at the panel or in a panel communications session, this command must be used to redefine the PIN being sent to the panel.

For information on the definition of each arming mode within the VISTA-50P, refer to the VISTA-50P user's manual provided with the panel.

IMPORTANT NOTE: If the VISTA-50P does not send a response event to any command issued (such as reporting the panel disarmed if Disarm was selected), verify the PIN number within the workstation software and try the command again. If the password for the VISTA-50P Panel is changed at the panel or during a panel communications session, the workstation will not be aware of this and the VISTA-50P will disregard messages sent or commands issued due to a password mismatch.

Device Addressing and Monitoring the VISTA-50P

Addressing
The VISTA-50P device addresses are a hierarchy which include partitions (1 – 9), partition bypasses (disabling of each partition) and zones. Each device type uses the following format:

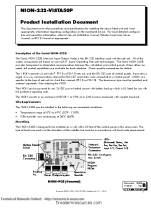
- Part<X>
- BYPASS<X>
- ZONE<XX>

In addition, the following addresses must be created for the VISTA panel:

- Panel
- Batt

Monitoring
When alarm events are sent to the workstation from the VISTA-50P the defined partition for the zone sending the event is annunciated first. When the NION receives the partition event it querries the VISTA-50P for information about the zone. Once received, the NION sends the zone information to the workstation for annunciation.
When a zone is disabled on the panel the Bypass device for that partition annunciates a disabled status. This indicates that at least one zone in that partition is disabled. Zones that are still enabled will continue to be monitored for that partition.

Documents / Resources

	NOTIFIER NION-232-VISTA50P Network Input Output Node [pdf] Instruction Manual NION-232-VISTA50P, NION-232-VISTA50P Network Input Output Node, Network Input Output Node, Input Output Node, Output Node, Node

References

- Fire Alarm Resources | Download fire alarm documents
- tech-man.com