# NAPCO NetLink™

# NL-MODCONFIG
## Download Software Utility
# Programming Instructions

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## GENERAL DESCRIPTION

The NL-MODCONFIG software is used to configure the NL-MOD, which is a device that allows the reporting of alarms and the uploading and downloading of data over a TCP/IP based (Intranet or Corporate WAN) network.  In order to ensure that network data sent through the NL-MOD is correctly delivered to the remote monitoring location, various items such as the static IP Address of the NL-MOD, Subnet Mask and Gateway address must be obtained and pre-programmed into the on-board flash memory within the NL-MOD device.  Once configured, the NL-MOD retains this information, allowing positive identification of the device.

The NL-MODCONFIG software runs on a PC (see System Requirements) and connects to the NL-MOD via its Ethernet port.  **Note:** The NL-MODCONFIG software and its database should be retained if future access is necessary.

The NL-MOD is one part of a larger system which, in addition to the NL-MODCONFIG utility, includes a central station receiver to allow the receipt of alarms and supervisory data (NL-RCV-RMPCUL).  A short description is provided below:

### Central Station Receiver (NL-RCV-RMPCUL)

The NAPCO Net.Link™ NL-RCV-RMPCUL (Receiver) is a fully UL compliant central station receiver platform.  This Receiver is rack-mountable in a standard 4U configuration.  The NL-RCV-RMPCUL (Receiver) can supervise each NL-MOD, receive and display alarms and provide a means of archiving acknowledged alarm events.  Also provided is a software Service Application that is PC-based and network-connected to the Receiver.  The Service Application is used to load new Accounts, display a premise's status condition, display the *Event Queue*, retrieve *Event History*, and configure the interface to an automation system.  For more information, see the NL-RCV-RMPCUL Installation and programming manual, WI1491.

### Central Station Receiver Application (NL-CSRCV)

(Not evaluated by UL).  The NL-CSRCV is a PC based application designed to act as a remote monitoring receiver.  The NL-CSRCV can supervise each NL-MOD, receive alarms, provide a means of maintaining Accounts, display and dispose of alarms, display event history and route events to an automation system.  For more information, see the NL-CSRCV User Guide OI294.

## SYSTEM REQUIREMENTS

- A standard CAT5 network cable for connection to the LAN
- Access to the local area network
- Windows®-based PC with networking capability.
- 128MB RAM.
- Windows® XP Professional or Windows® 2000. (Windows® XP Home Edition is **not** supported).

## INSTALLING THE SOFTWARE

**Note:**  If any previous versions of the NL-MODCONFIG software exist on your computer, be sure to uninstall these versions before installing the latest version of the NL-MODCONFIG software.  It is highly recommended you exit any running software programs before installing the NL-MODCONFIG software.

1. Place the NL-MODCONFIG version 2.0 CD into the CD-ROM drive.  The NL-MODCONFIG 2.0 InstallShield Wizard will automatically begin the installation process.

## 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 UL864 |
|---|---|---|---|
| If E301 AC Trouble is selected on IN3, and the IN3 Input is tripped, reporting for this input will be delayed for 2 hours. | Yes | Select or deselect IN3 Report Code for **E301 A.C Trouble** | Yes |
| If Fire Trouble is selected for any input the NL-MOD will retransmit the report code every 24 hours as long as the input remains tripped. | Yes | Select or deselect IN0-IN3 Status Type for **Fire Trouble** | Yes |
| Edit Thresholds | No | Select or deselect check box for **Edit Thresholds** | Do not select **Edit Thresholds**. |

2. If the Wizard installation process does not automatically begin, click **Start, Run and** type the following: D:\NL-MODCONFIG\setup, if **D** is the drive letter associated with the CD-ROM. Press **Enter** to begin the installation process.

3. The Installation program will prompt you regarding the destination folder on your hard drive. When installation is complete, you may be asked to reboot your computer, depending on your operating system.

## PRELIMINARY INFORMATION

Before proceeding, contact the network administrator to obtain a unique static IP Address, Subnet Mask, and Gateway address for the NL-MOD to use. **Note:** Errors can be caused by duplicate IP Addresses on the network. Therefore, make sure that the IP Address you plan to use is unique.

A static IP Address and other configuration data can be programmed into the NL-MOD in two basic ways: (1) Directly connecting a laptop or a PC to the NL-MOD via a network crossover cable (not supplied), or (2) Indirectly connecting to the NL-MOD through the LAN connection.

When programming a new NL-MOD via a crossover cable, simply plug one end of the crossover cable into the network card of the computer running the NL-MODCONFIG software and the other end into the connection labeled "ETHERNET" on the NL-MOD. (See page 11 for 12VDC connections).

When programming a new NL-MOD via the LAN, access to the network is typically made through a router. When installing the NL-MOD with a Cable or a Digital Subscriber Line (DSL) modem, a router must be connected between these Internet services and the NL-MOD. The router's WAN/Uplink cable connects to the modem. The NL-MOD and computer (running NL-MODCONFIG software) connect to the router Local ports using straight through cables.

All NL-MOD devices on a given network should be configured with the same PC Security Code. The PC Security Code prevents unauthorized access. The NL-MOD's Port number should be left defaulted to 10081 unless the network administrator elects to change the number.

### MAC Address
Each device on a network contains a unique identifier called a MAC Address, which is encoded within the circuitry of the NL-MOD by the manufacturer. The MAC Address is printed on the bottom of the NL-MOD housing.

### DHCP - Dynamic Host Configuration Protocol
Generally, when a new device, such as an NL-MOD, is installed on a network, a protocol called DHCP automatically assigns an IP Address to the device. A new "out of the box" NL-MOD has DHCP enabled and the IP Address assigned to the device will be within a *range* controlled by the network's DHCP Server, with the exact address not known immediately. In addition, with DHCP enabled, a different IP Address could be assigned to the NL-MOD each time the device is powered up. Therefore, one use of the NL-MODCONFIG software is to assign a *static* IP Address to the NL-MOD. Once programmed with a static IP Address, the NL-MOD disables DHCP. Along with a *static* IP Ad-

dress, the Subnet Mask and Gateway must also be programmed. Then, if the static IP Address, etc. are saved into an Account, the NL-MODCONFIG software should always be able to connect with an NL-MOD located on a LAN or WAN. For the case where the NL-MOD is located behind a Firewall and it is not required that the NL-MODCONFIG software connect to an NL-MOD, then DHCP can be left enabled and a static IP Address, Subnet Mask or Gateway will not need to be programmed.
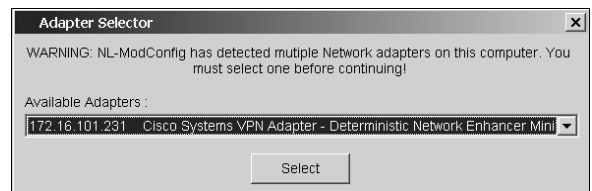
## CONFIGURE THE NL-MOD

Before proceeding, ensure that the physical connections to the NL-MOD (power and network) are secure, that the unit is powered up and that you have a good network connection.

1. **Run the NL-MODCONFIG Application**
Double-click on its desktop icon or click **Start**, **Programs**, **Napco Security Group**, **NL-ModConfig**.
If using a PC that contains only one network adaptor, proceed directly to step 2 below.
If using a PC that is able to communicate over two separate networks (has 2 network adaptors installed), the NL-MODCONFIG software must be directed to the network to which the NL-MOD is connected. The **Adaptor Selector** window appears (see below). Select the adaptor from the **Available Adapters** drop-down list and press **Select**.



2. **NL-MODCONFIG Main Screen**
The **NL-MODCONFIG** main screen appears (see below).
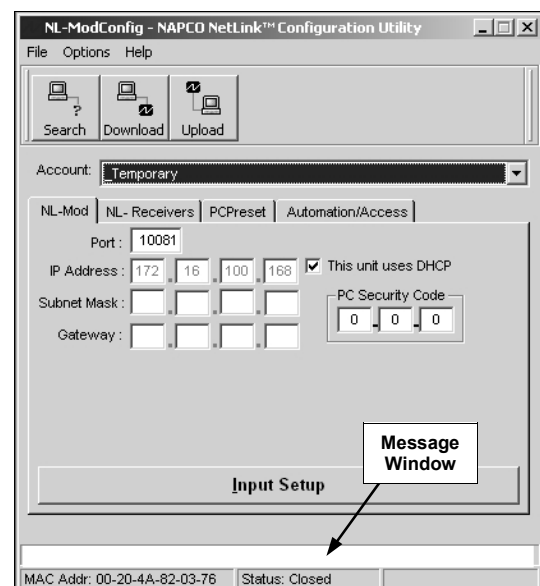


**Note:** The white field above the status bar is a *Message Window*. When performing searches and other tasks be aware that important messages may appear in this field.

3. **Perform Search for New NL-MOD Device**
   Click the **Search** button. After a short delay, the **Search Results** window will open and DHCP enabled devices connected to the network should appear in this list. Click on the desired device to select and then click **OK** (or simply double-click the listed entry). The NL-MODCONFIG main screen appears, with the networking addresses (Port, IP Address, etc.) populated.
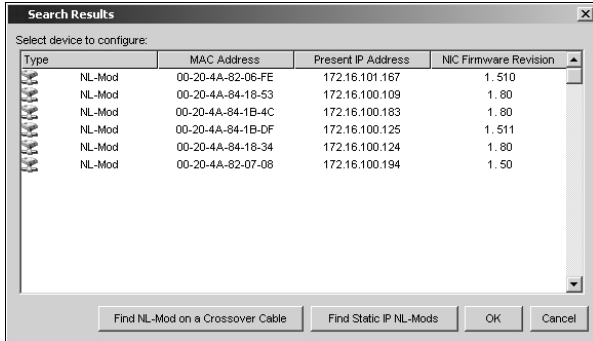
   **Note:** If the device is not listed and a cross-over cable is being used, click the button **Find NL-Mod on a Cross-over Cable**. It may take several minutes. If the device is still not listed please see *Troubleshooting* on page 8, Case 1.

4. **NL-MOD Tab**
   If not already displayed, click the **NL-MOD** tab on the NL-MODCONFIG main screen (see image in step 2). Using the information obtained previously from your network administrator, uncheck the "**This unit uses DHCP**" checkbox, then click to place the cursor into the **IP Address** field and overwrite the current IP Address with the new static IP Address. Then enter the **Subnet Mask, Port Number** and **Gateway** of the NL-MOD you wish to program in the fields provided.

   **Note:** To view the old Port number, IP Address, Subnet Mask or Gateway values, hover the mouse pointer over the IP Address field and the old value will be displayed as a "ToolTip" popup.

   **Enter PC Security Code** which allows the NL-MOD to be accessed by the NL-MODCONFIG software. At this time the PC Security Code will be defaulted to "0-0-0". **Note:** Because the NL-MOD will accept **any** PC Security Code if no code is programmed, **it is essential that you program a PC Security Code to prevent unauthorized access to the NL-MOD**.

5. **NL-Receivers Tab**
   The *NL-Receivers* tab is used to provide the IP Address to access the Receiver. (The NL-RCV-RMPCUL is used to receive alarms reported over the network).

   **Options**
   This section allows you to configure the NL-MOD to send a supervisory check-in transmission to the Receiver at the remote monitoring location.
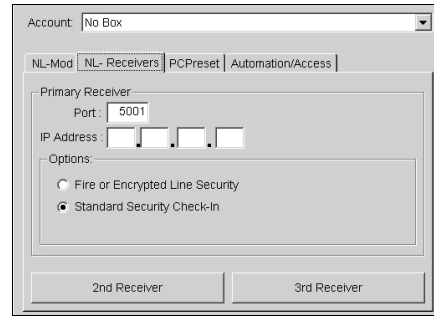
**Fire or Encrypted Line Security**
Select to program a check-in time interval of 50 seconds, conforming to Commercial Fire or Encrypted Line Security.
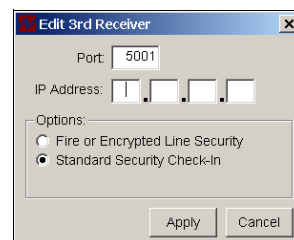
**Standard Security Check-In**
Select to program a check-in time interval of 3 hours.

You may program an NL-MOD to report into up to three (3) separate Receivers. Click **2nd Receiver** or **3rd Receiver** buttons to configure these additional connections. Examples of these configuration dialogs are displayed below:

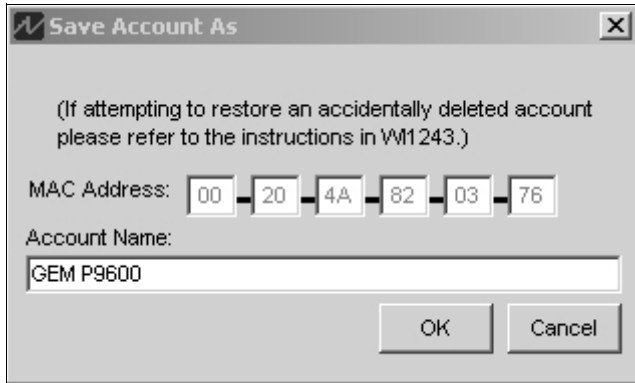**Edit Secondary Receiver**:

**Edit 3rd Receiver**:

**Supervision Failure**
If 4 consecutive check-ins are missed, the NL-MOD will cause the control panel to generate a Telemetry System Trouble (for the GEM-P9600, GEM-X255 and GEM-P3200 panels, and for version 30 or greater for GEM-P816, GEM-P1632 and GEM-P1664). In addition, the NL-MOD Supervisory Output will be activated (see WI1242).

6. **Save Your Work**
   If the Account name is "_Temporary", then be sure to save the configuration by clicking **File**, **Save As**. The **Save Account** dialog appears (see below). The MAC Address should already be populated, but if not, then enter the MAC Address of the NL-MOD. Specify the new Account name in the field provided and click **OK** to save. **Note:** Since the current Account is the

"_Temporary" Account, the "_Temporary" Account configuration will be cleared.



### 7. Downloading



Click the **Download** button (shown above). Specifically, if changes to the Port Number, IP Address, Subnet Mask or Gateway are pending, the small NAPCO logo in the **Download** button will turn red and a warning message will appear, listing the Networking parameters with the pending changes highlighted in red (similar to the message window shown below). **Note:** Changes to these items are pending when the NAPCO logo on the **Download** button is red. The logo will remain red until the device is successfully downloaded (or uploaded), then the logo will turn black again.



NAPCO logo will turn red when the Port, IP, Subnet Mask or Gateway has a pending change.



As stated in the window, clicking **Yes** will download the changes. If no changes are pending to the Port Number, IP Address, Subnet Mask or Gateway then the above window will not appear and instead the following warning popup appears:
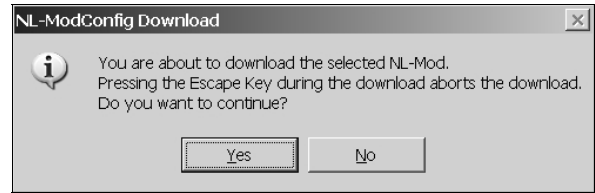


Click **Yes** if you are sure and have data to be downloaded, otherwise click **No**.
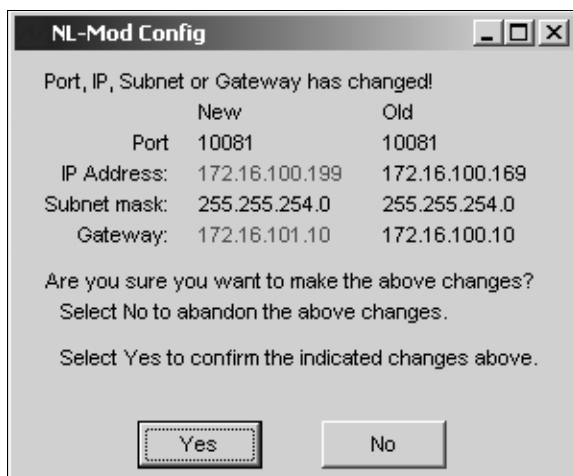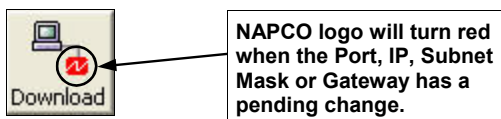
In the NL-MODCONFIG main screen, the message window will indicate the status of the download process.

All information in all tabs will be downloaded. Status will be displayed in the *Message Window*. The download process may take up to 60 seconds. After the successful download, the small NAPCO logo in the Download button will turn black again.

**Other Warning Conditions**
If downloading was not successful, a firewall client may be running. Disable the firewall client while NL-MODCONFIG is being used. See *Troubleshooting* on page 8, Case 1.
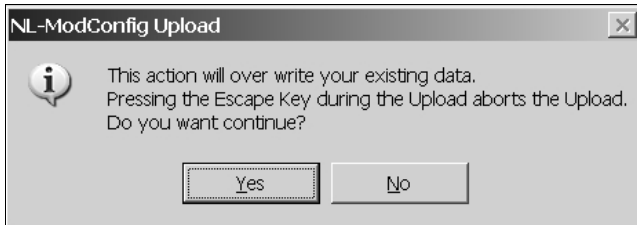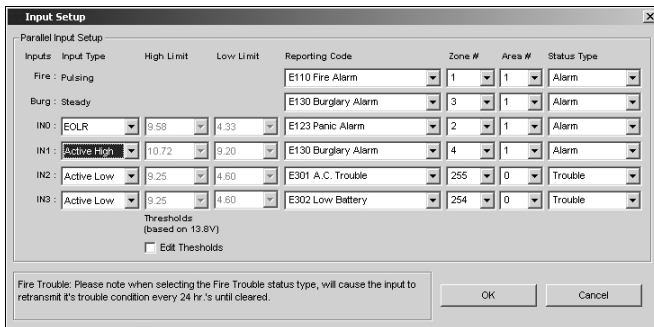
# USING THE NL-MODCONFIG

## UPLOADING



Click the **Upload** button and a warning popup appears:



Click **Yes** to start the upload process. Status will be displayed in the *Message Window*. The upload process may take up to 60 seconds.

**Note:** The NL-MOD will accept **any** PC Security Code if the Code in the NL-MOD is 0-0-0. **If the PC Security Code is found to be 0-0-0, we recommend that you program a PC Security Code to prevent unauthorized access to the NL-MOD.**

## INPUT SETUP



In the NL-MODCONFIG software, use the **Input Setup** button (located at the bottom of the NL-MODCONFIG main screen, *NL-MOD* tab) to allow the configuration of four parallel inputs located on the NL-MOD board terminal strip. In the **Input Setup** dialog, use the **Input Type** drop down to select as follows:

- If **Active-low** selected from the drop-down list, the input is considered normal if it is above the upper threshold ("High Limit") and faulted if it is below the lower threshold ("Low Limit"). An input value between the lower and upper thresholds maintains the current state.

- If **Active-high** is selected from the drop-down list, the input is considered normal if it is below the lower threshold ("Low Limit") and faulted if it is above the upper threshold ("High Limit"). An input value between the lower and upper thresholds maintains the current

state. Use a standard 2.2k EOL resistor when triggered by a switched +12V. See diagram below.
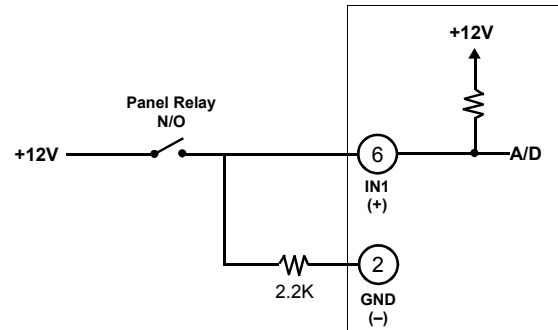


**Active high Example: N/O Relay Contact**

- If **EOLR** is selected from the drop-down list, this enables the 2.2K EOL Resistor. The default input is in a normal state if the input is between the lower threshold ("Low Limit") and the upper threshold ("High Limit"). If not between these two thresholds the input is considered faulted.

If EOLR is selected, the values programmed are identical to the values used in the panel. For example, to install a panic button, connect between the NL-MOD terminals 2 and 6. If button is normally closed, connect EOL resistor in series. If button is normally open, then connect EOL resistor in parallel. See diagrams below.



**N/C Panic          N/O Panic**
**Switch in Series    Switch in Parallel**
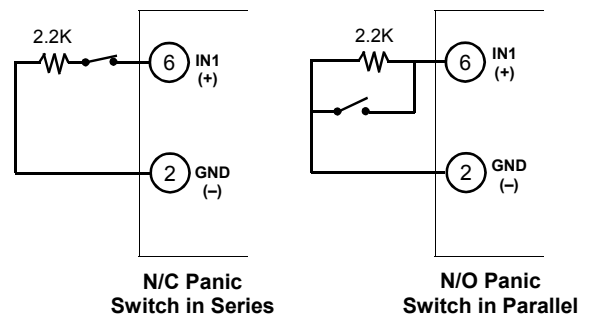
**Example: Select EOLR in the I/O Setup Screen**

**Note:** For advanced users, the upper and lower voltage limits can be programmed into the NL-MOD. To enable these settings to be changed, check **Edit Thresholds**.

☞ *Do NOT check Edit Thresholds for Fire Installations.*

- If **Disabled** is selected from the drop-down list, the input is disabled and will not respond to any input voltage. The Optional Inputs (IN1, IN2 and IN3 on the NL-MOD terminal strip) are configured with the lower limits set to zero and the upper limits set to 255. This results

in all the Optional Inputs being normal (i.e. "non-activated") regardless of the actual input voltage.

### Reporting Code
Select a Contact ID Code (E130 =Burglary, E110 = Fire, etc.) to be displayed by the Receiver or the automation system.
**Note:** If **E301 A.C. Trouble** is selected for input **IN3,** and the **IN3** input is tripped, reporting for this input will be delayed 2 hours (if the input restores before the 2 hour delay ends, the **E301 A.C. Trouble** report will not be sent). If **E301 A.C. Trouble** is selected for the other inputs (**IN0-IN2**) the report is sent immediately.

### Zone #
Assign a Zone number to the input.

### Area #
Assign the input to an area number. **Note:** If zero is selected for the Area number, no status will be sent.

### Status Type
Assign each input a status type that will be used when the NL-MOD reports its status to the receiver. The Service Application software **Panel Status** screen displays the attribute selected here along with other information such as **Check-In Status.**
**Note:** If **Fire Trouble** is selected for any input, the NL-MOD will *retransmit* the reporting code signal every 24 hours as long the associated input remains tripped.

## DOWNLOADING



### Changing the Port Number, IP Address, Subnet Mask or Gateway
Enter the new data and press the **Download** button. The NL-MODCONFIG will remember the old data and use it to contact the NL-MOD to make the changes. **Note:** If not immediately downloaded, the new data will be retained in the database. When the Account is re-opened, the NAPCO logo on the toolbar **Download** button will change to red, indicating that changes were made to the Port Number, IP Address, Subnet Maskor Gateway *and the changes have not yet been downloaded*.

### Data Transfer Protection
When downloading to an NL-MOD, the NL-MODCONFIG can detect if the target NL-MOD has been previously configured by another NL-MODCONFIG (on another computer, using a different database). A popup warning message will appear, with instructions regarding how to proceed, including an option to abandon the download process.

### Backward Compatibility
When using NL-MODCONFIG version 2.0 with older NL-MOD versions (i.e., 000.005.115 or earlier) they can be uploaded or downloaded but be aware of the following:

- **Reporting Code**, **Zone #**, **Area #** and **Status Type** data entry fields from the **NL-MOD** tab **Input Setup** button will NOT get downloaded into these earlier versions of the NL-MOD.

- For an earlier version NL-MOD that is programmed with a *static* IP Address, the unit should NOT be re-programmed to enable DHCP. Although DHCP will get enabled in the device, the **Search** button may not locate the device. For this reason, it is recommended that the NL-MOD be downloaded with new firmware, defaulted and then re-programmed in its entirety.

## SEARCHING



### Locating an NL-MOD
The NL-MODCONFIG application software is designed to program or re-program NL-MOD devices connected to a network. The **Search** feature is typically used for a new installation where the installer only knows the MAC Address of the NL-MOD. It also validates that the device can be reached over the network. Clicking the **Search** button will establish a connection with each DHCP enabled NL-MOD device on the network and will display, in the **Search Results** screen, their **MAC Address**, **Present IP Address** and the **NIC Firmware Revision**.



Double-clicking on the desired MAC Address entry in the list will open the Account name associated with that MAC Address. If no Account name exists with that MAC Address, an Account name "_Temporary" will be opened. The **Search Results** screen will close and the NL-MODCONFIG main screen will open with **NL-MOD** tab selected.

## NL-MODCONFIG MAIN MENU

The **File**, **Options** and **Help** menu selections are described below:

### File Menu

*Clear _Temporary* - Quickly clears all data in the _Temporary Account. **Note:** Data in any other Account is not affected.

*Delete* - Remove an Account from the NL-MODCONFIG database. A confirmation dialog will appear, click **Yes** to delete the Account.

*Rename* - Apply a new name to the existing Account. The Rename Account dialog appears (shown below). Type the new Account name in the field provided. Click **OK** to save.
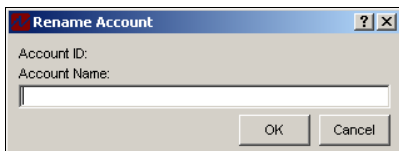


*Save As* - Save a current configuration as a new Account. The **Save Account** dialog appears. Specify the new Account name in the field provided. Enter the new MAC Address of the newly installed unit in the spaces provided. If attempting to restore an accidentally deleted Account, see Troubleshooting on page 8. Click **OK** to save.
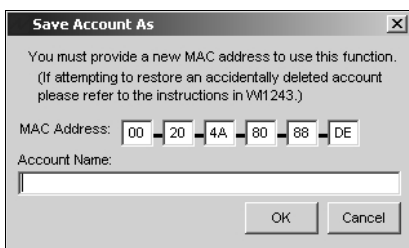


*Firmware Download* - Allows the updating of the NL-MOD firmware. The **Download Firmware** dialog appears. Enter the complete path and file name of the new firmware in the field provided or click the "**…**" button to browse for the location. The other fields will be populated with data from the current Account. Click **Download** to initiate the downloading process.
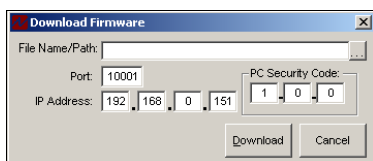


**Note:** Prior to performing a firmware download to an NL-MOD-UL, please contact your Central Station. The Firmware Download process may interfere with the High Security (50-second) check-in of the NL-MOD-UL to the Net-Link Receiver and could result in a *Fail to Check-In* Trouble condition.

### Options Menu

*Configuration* - Opens the NL-MODCONFIG Configuration dialog (shown below). Allows the selection of the network adapter for use with the NL-MOD.
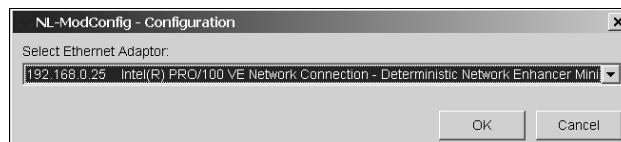


*Ping* - Ping option allows you to test the accessibility of installed NL-MOD devices in your system. To ping a device, click **Options, Ping**. In the **Ping** popup that appears, enter the IP Address of the device you wish to ping.
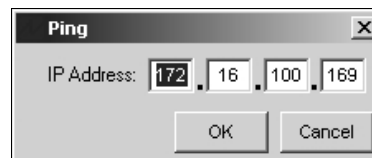


If the reply fails, a popup will appear (see below) indicating the reason for the failure. In the example below, the reason was a time-out failure:



If the reply is received, a popup will appear (see below) indicating its **Data size** and the **Roundtrip** time.
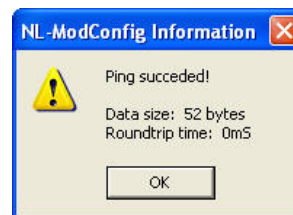


**Display Info** - Click **Display Info** and the **NL-MOD Information** popup appears, displaying system information. Displayed is the **NL-MOD MAC Address**, **NIC Firmware Version**, **Main Build Number** and the **Bootloader Build Number**.



### Help Menu

*About* - Opens the Help About screen, indicates the NL-MODCONFIG software version and other information.



7

# TROUBLESHOOTING

This section considers how to diagnose and fix common problems. When troubleshooting, always ensure that the physical connections (power, network and input) are secure, that the device is powered up and that you have a good network connection. **Note:** Some unexplained errors can be caused by duplicate IP Addresses on the network. Therefore, make sure that your unit's IP Address is unique.

## CASE 1

**When performing a search, the Search Results window fails to display the desired NL-MOD, and the following warning appears (Figure 1):**
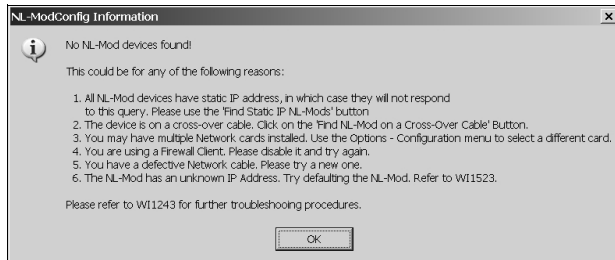


**Figure 1.**

### Step 1
If a cross-over cable is being used, click **Find NL-Mod on a Crossover Cable**. This may take several minutes. If the device is found, select the device and continue, otherwise, ensure that an actual "cross-over" cable is being used and not a "straight through" cable.

### Step 2
If there are multiple network cards installed on the PC, select a
different card and try again. This can be accomplished through the **Options**, **Configuration** menu.

### Step 3
If neither of the above steps have succeeded, it is possible the NL-MOD already has a *static* IP Address. If this is the case, click on **Find Static IP NL-Mods**, enter the static IP Address, Port Number and PC Security Code and click **OK**. Please wait at least 10 seconds for the search process to complete. Again, if multiple network cards are installed on the PC, it might be necessary to try another network card and repeat the process.

### Step 4
In the corporate intranet, it is quite possible you are using some kind of Proxy Client or Firewall Client Software. If you are having trouble "Finding" your NetLink Module, this software will need to be temporarily disabled. Below is one of many scenarios which may apply to you. Before making any changes, please check with your system administrator for assistance.

In your system tray, there may be an icon like the one in the lower left of Figure 2 (below).
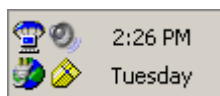


**Figure 2.**

If so, right-click on this icon and select the "Disable" option. This will allow you to "Find" the NetLink Module. After the NetLink Configuration application is closed, simply reverse the process and "Enable" the client software.

In some cases the icon is absent but the software is still running. To check for this, bring up task manager by right clicking on the Taskbar and selecting "Task Manager". Click on the *Processes* tab (Figure 3).
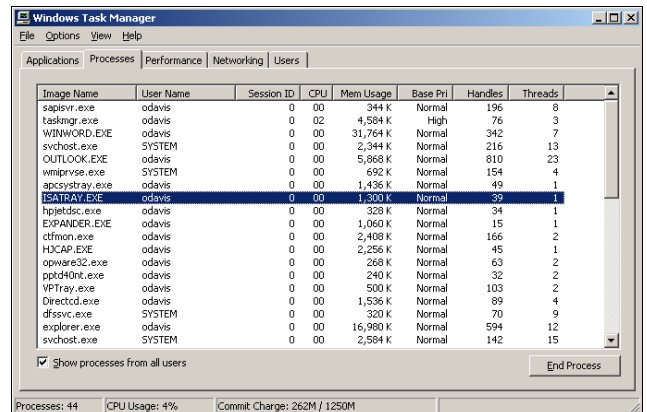


**Figure 3.**

There could be an "Image Name" of "ISATRAY.EXE" listed. If so, click on that name to highlight it, then click the "End Process" button. This will disable the client software until the computer is rebooted.

Another type of Firewall software is **ZoneAlarm**. This is software that can restrict outgoing access to the network. If this type of software is running, it too must be disabled. Please refer to the operating instructions or to your system administrator for assistance with this type of software.

### Step 5
Double-check that the NL-MOD is powered and has a functioning network cable. Replace the cable with a known working cable if necessary. Repeat the above steps.

### Step 6
If all else fails, it is likely that the NL-MOD has acquired an unknown static IP Address. In this situation, it is necessary to default the NL-MOD (see WI1523).

## CASE 2

**I just installed a new version of the NL-MODCONFIG software, and I am unable to view the Account database.**

Be sure the new software is installed in the same directory as the old version(s). We recommend using all default directories when installing the NL-MODCONFIG software.

**CASE 3**

**I accidentally deleted an Account in the database. How can it be re-created?**

If the IP Address, MAC Address and PC Security Code are known and the device is on the local network, then perform the following:

1. Select the "_Temporary" Account.
2. Click **File, Clear _Temporary** to clear the Account data.
3. In the NL-MODCONFIG main screen, enter the IP Address and the PC Security Code.  Verify the Port number.
4. Click **File, Save As…**, enter the MAC Address for the NL-MOD and type a name for the Account. Click **OK** to save.
5. Upload the Account to restore the Account data to the database.

# NL-MOD-UL Configuration Overview
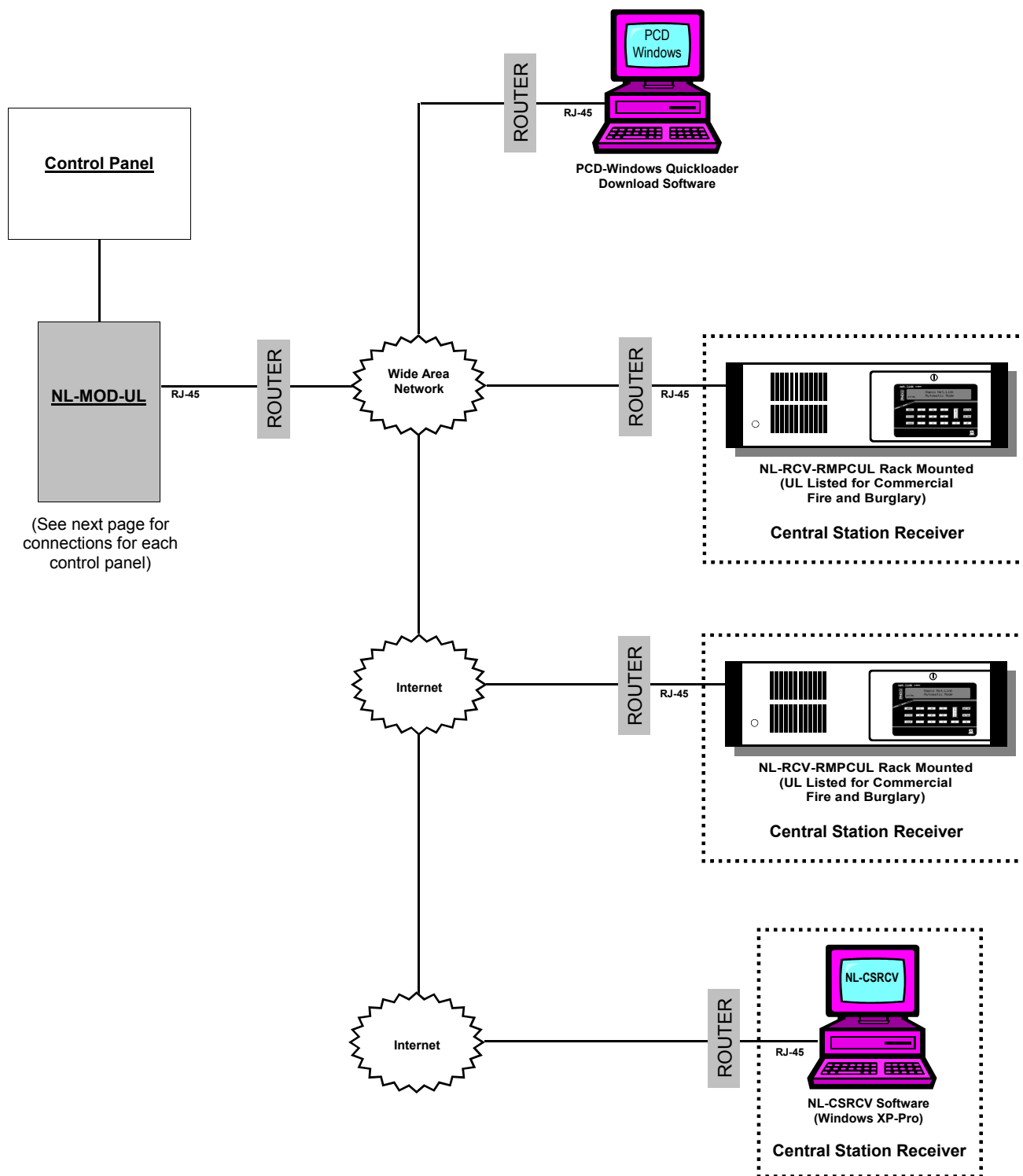
**Control Panel**

**NL-MOD-UL**

RJ-45

(See next page for connections for each control panel)

ROUTER

**Wide Area Network**

ROUTER

RJ-45

**PCD Windows**

**PCD-Windows Quickloader Download Software**

ROUTER

RJ-45

**NL-RCV-RMPCUL Rack Mounted (UL Listed for Commercial Fire and Burglary)**

**Central Station Receiver**

**Internet**

ROUTER

RJ-45

**NL-RCV-RMPCUL Rack Mounted (UL Listed for Commercial Fire and Burglary)**

**Central Station Receiver**

**Internet**

ROUTER

RJ-45

**NL-CSRCV**

**NL-CSRCV Software (Windows XP-Pro)**

**Central Station Receiver**

# Detailed NL-MOD-UL Connections

**Control Panels**

**GEM-P816**
**GEM-P1632**
**GEM-P1664**
**GEM-P3200**
**GEM-P9600**
**GEM-X255**

Local DNLD (RJ12)

GND

12V

Terminal 1    +12V
Terminal 2   GND
Terminal 3   DATA
Terminal 4   BELL
Terminal 5   IN0
Terminal 6   IN1
Terminal 7   IN2
Terminal 8   IN3
Terminal 9   SUPV.
Terminal 10   R.B.

**4 User Defined Inputs**

Ethernet (RJ45) → ROUTER

Local DNLD (RJ12)

**NL-MOD-UL**

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**FACP Control Panels**

GND

12V

Zone

Terminal 1    +12V
Terminal 2   GND
Terminal 3   DATA
Terminal 4   BELL
Terminal 5   IN0
Terminal 6   IN1
Terminal 7   IN2
Terminal 8   IN3
Terminal 9   SUPV.
Terminal 10   R.B.

**4 User Defined Inputs***

+12V

*Air Products and Controls* PAM-4 Relay N/C

EOLR

Ethernet (RJ45) → ROUTER

Local DNLD (RJ12)

**NL-MOD-UL**

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**Control Panels**

**Other Generic Panels**

Panic

Bell

GND

12V

Terminal 1    +12V
Terminal 2   GND
Terminal 3   DATA
Terminal 4   BELL
Terminal 5   IN0
Terminal 6   IN1
Terminal 7   IN2
Terminal 8   IN3
Terminal 9   SUPV.    Supervisory
Terminal 10   R.B.    Ringback

**3 User Defined Inputs**

Ethernet (RJ45) → ROUTER

Local DNLD (RJ12)

**NL-MOD-UL**

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# NAPCO LIMITED WARRANTY

NAPCO SECURITY SYSTEMS, INC. (NAPCO) warrants its products to be free from manufacturing defects in materials and workmanship for thirty-six months following the date of manufacture. NAPCO will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges.

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Any action for breach of warranty, including but not limited to any implied warranty of merchantability, must be brought within the six months following the end of the warranty period.

IN NO CASE SHALL NAPCO BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

In case of defect, contact the security professional who installed and maintains your security system. In order to exercise the warranty, the product must be returned by the security professional, shipping costs prepaid and insured to NAPCO. After repair or replacement, NAPCO assumes the cost of returning products under warranty. NAPCO shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. NAPCO will not be responsible for any dismantling, reassembly or reinstallation charges.

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In no event shall NAPCO be liable for an amount in excess of NAPCO's original selling price of the product, for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of any failure of the product. Seller's warranty, as hereinabove set forth, shall not be enlarged, diminished or affected by and no obligation or liability shall arise or grow out of Seller's rendering of technical advice or service in connection with Buyer's order of the goods furnished hereunder.

NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

**Warning:** Despite frequent testing, and due to, but not limited to, any or all of the following: criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

NAPCO is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to NAPCO's original selling price of the product regardless of the cause of such loss or damage.

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