NAPCO NetLink™

Getting Started Guide

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WI1298A 7/04

INTRODUCTION

Thank you for purchasing NAPCO's new TCP/IP alarm panel module. NAPCO's new NetLink™ family of products include the control panel interface module (NL-MOD), NL-MOD programming software (NL-MODCONFIG) and software-based receiver application (NL-CSRCV).

In the NL-MOD-SK Starters Kit the following components are included:

1. (1) NL-MOD interface module.
2. (1) PCD-Windows CD (which includes the NL-MODCONFIG software application).
3. (1) GEM-P9600 Software Enhancement EPROM for upgrading a GEM-P9600 control panel.
4. (1) RJ12 interface cable (silver) for connecting a GEM-P9600 control panel to the NL-MOD.
5. (1) Straight through RJ-45 LAN cable for connecting the NL-MOD to the network.
6. (1) Crossover RJ-45 LAN cable for use with this Getting Started Guide.
7. Instruction manuals as follows:

   - Installation Instructions WI1242 (NAPCO NetLink™ NL-MOD)

   - Programming Instructions WI1243 (NAPCO NetLink™ NL-MODCONFIG)

   - User's Guide OI294 (NAPCO NetLink™ NL-CSRCV)

   - Getting Started Guide (this document) WI1298 (NAPCO NetLink™)

   Note: The NL-CSRCV NAPCO NetLink™ Receiver Application software must be purchased separately and is not included in the NL-MOD-SK. The GEM-P9600 control panel must also be purchased separately.

This document first guides you through a simple setup using a PC (requires Windows XP Professional) to allow you to get familiar with the module and the software applications. Then the module can be moved onto a LAN and begin reporting alarms over a live network.

This Getting Started Guide will walk you through the following:

I. Software Installation (NL-CSRCV, NL-MODCONFIG and PCD-Windows Quickloader).
II. Create an Off-Line Test Environment just using a PC, an NL-MOD and an Ethernet crossover cable.
III. Add a GEM-P9600 panel to the Off-Line Test Environment.
IV. Move your equipment onto a real network.

SECTION I:

SOFTWARE INSTALLATION

☐ 1. Be sure you have the following: A computer (XP Pro set for Classic mode) with an Ethernet port, the CD labeled PCD-Windows and the CD labeled NAPCO NetLink™ Receiver Application.

> **Note:** To set the Classic Mode, see Appendix A.

☐ 2. In this step you will install all the software but will not be running any of it yet. Be sure your Operating System is Windows XP Professional, otherwise the software will not install. The PC should meet the requirements identified in OI294, page 5. For this test a 1GHz or faster machine with 256MB RAM is sufficient.

☐ a. Place the Quickloader for PCD-Windows CD in the CD-ROM drive. The install will auto-start. Click **Install Quickloader for Windows** button.

> **Note:** If the installation does not auto-start, click START/RUN/Browse, point to the drive letter of the CD-ROM and double-click the drive letter. Double-click on Startup.exe and install PCD-Windows Quickloader software. When installation is complete, proceed to step b.

If you already have NAPCO's PCD-Windows Quickloader installed on your PC, then install the software in a different folder other than the folder currently being used.

☐ b. Click START/RUN/Browse. Point to the drive letter of the CD-ROM and find the folder named "NetLink". Double-click on the folder to open the subfolder named "NL_MODCONFIG Software". Double-click on the subfolder, then double-click on Setup.exe to install the NL-MODCONFIG software. When installation is complete, remove the CD and go to step c.

☐ c. Place the NAPCO NetLink™ Receiver Application CD in the CD-ROM drive and close the door. It should auto start but if not click START/RUN/Browse. Point to the drive letter of the CD-ROM and find the file named Setup.exe. Let the install complete, accepting all defaults. When installation is complete, remove the CD and go to the next section.
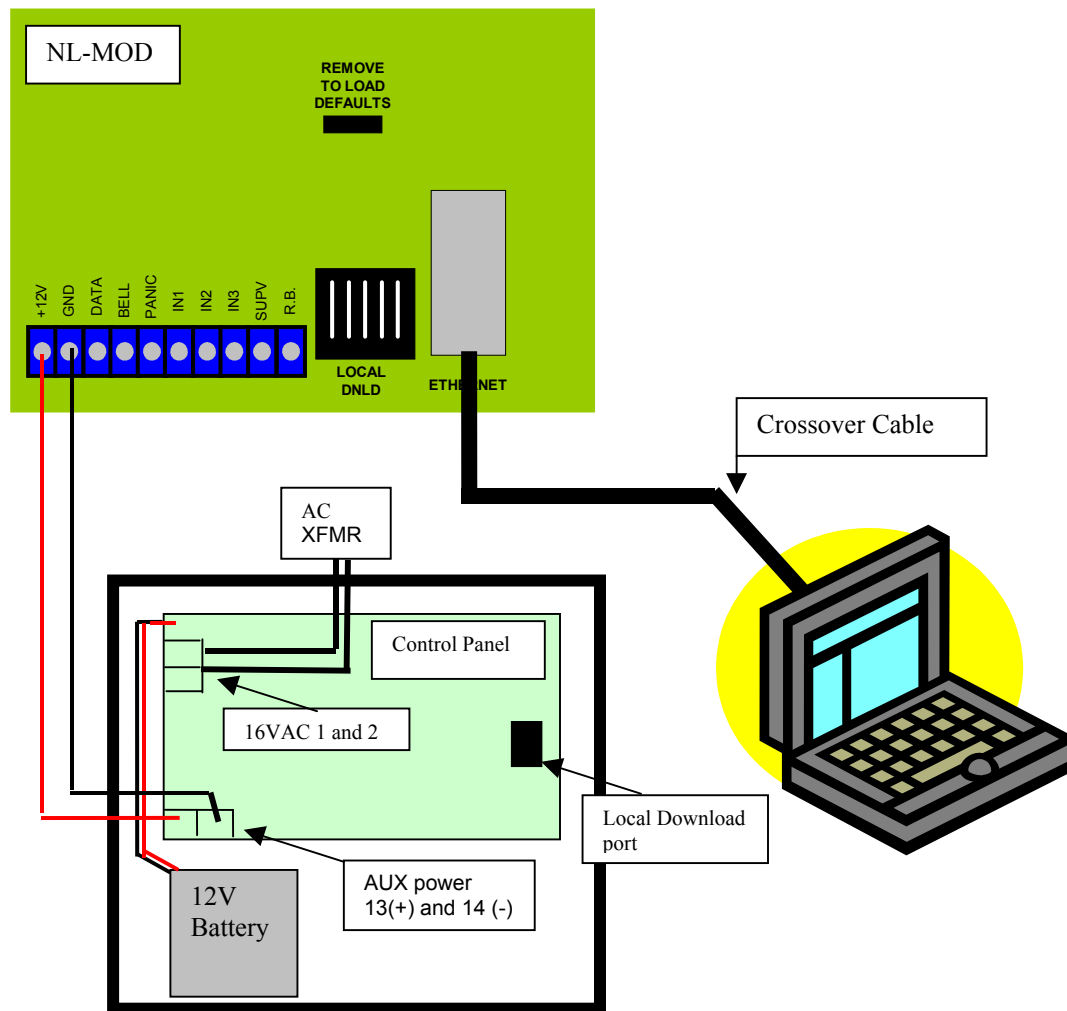
> **Note:** With a single computer, both the NL-MODCONFIG software utility and the NL-CSRCV NAPCO Net-Link™ Receiver Application software can be demonstrated as long as one application is closed while the other is running. If this were to occur, it is best to reboot your computer and relaunch the program.

SECTION II:

CREATE OFF-LINE TEST ENVIRONMENT

☐ 1. Be sure you have the following: The PC with Windows XP Professional software installed from Section I, an UNPRO-GRAMMED NL-MOD unit, a 12V supply (either a battery or 12V supply from the GEM-P9600 NAPCO panel), hookup wire, and a crossover cable (included in the NL-MOD carton and identified with the "Crossover" label).

☐ 2. Hook up the connections as shown in the diagram below but do not apply power (leave positive lead off of the battery and do not plug in AC Transformer). Do not plug anything into the "LOCAL DNLD" port. The attachment of the NL-MOD to the PC using a crossover cable simulates a network. For now leave the crossover cable unplugged.

Set up the equipment as shown in the diagram below:

☐ 3. Power up the PC, which should be disconnected from your corporate network. With a single computer, both the NL-MODCONFIG software utility and the NL-CSRCV NAPCO NetLink™ Receiver Application software can be demonstrated as long as one application is closed while the other is running. In this step, you will setup your PC with a temporary static IP address of the NAPCO NetLink™ Receiver Application to be used for this offline test.

☐ a: To avoid communication errors, the Windows XP Internet Connection Firewall must be disabled. See Appendix B.

☐ b: Set its configuration for a static IP address of 192.168.0.50. To do this, go to Start/Settings/Network Connections and double-click on the **Local Area Connection** selection (or the Network name that will be used for this test). Click on the **Properties** button and then double-click on "**Internet Protocol (TCP/IP)**" in the window.

Note: If TCP/IP is not listed, contact your network administrator to add TCP/IP to your machine.

On the *General* tab select the radio button for "**Use the following IP address**" and enter an IP address of

192.168.0.50, set the "Subnet Mask" for 255.255.255.0 and leave the entry for the "Default Gateway" blank. Click **OK** on each dialog box, and then verify the PC's static IP address you entered has been accepted by the PC. You can check this in several ways, and one such way is by clicking on the network icon (two adjacent PC's) in the system tray and then clicking on the *Support* tab and verifying the IP address is 192.168.0.50. Click **CLOSE**.

4. Apply power to the panel and connect Control Panel Aux Power to NL-MOD terminal 1(+12V) and 2(GND). After 60 seconds the unit should be continuously flashing its LED, indicating that it is not programmed and cannot be used until doing so.

5. Connect the NL-MOD RJ45 Ethernet connector to the computer's network card using the crossover cable. Wait 2 minutes for the NL-MOD to auto select a temporary IP address.

6. Open the NL-MODCONFIG software utility by clicking on its icon on the desktop.

7. Perform step 3 (page 2) in NAPCO NetLink™ NL-MODCONFIG Programming Instructions (WI 1243).

    Note: If the Search does not return a result, then Cancel and repeat every 30 seconds. If after several attempts no device is found, go to Troubleshooting section on page 7 of WI 1243.

8. Perform step 4 in WI 1243 using a New IP address of 192.168.0.150 and a Subnet Mask of 255.255.255.0. A Gateway address is not needed with a crossover cable connection.

9. Perform step 5 in WI 1243 using the IP address set in your computer previously, i.e., 192.168.0.50 and also select the Option "High Security Check-in".

10. Perform steps 6 and 7 in WI 1243. The NL-MOD programming is now complete, and the module is "locked down". To access it, the IP address and the PC Security Code must be known.

11. Close the NL-MODCONFIG application.

12. Open the NAPCO NetLink™ Receiver Application by first clicking on the NetLink™ Server icon, and then clicking the NetLink™ Application icon and press ENTER for the Default password.

13. Enter the **Minimum Required Information for Reporting** (listed in the shaded box on page 7 of NAPCO NetLink™ NL-CSRCV User's Guide OI 294). The Account programming is now complete.

14. Right-click on the NAPCO icon in the System Tray and select "Check-In Times". Verify that this unit has checked-in (see page 15 in OI 294).

    Note: It may take a minute before the NL-MOD performs a Check-In.

15. Manually trip an alarm on the NL-MOD by momentarily connecting Panic and GND on the terminal strip.

16. Verify the alarm is displayed on the Events screen.

SECTION III:

ADD A GEM-P9600 PANEL TO THE TEST ENVIRONMENT

☐ 1. Locate the RJ12 downloading cable provided.

☐ 2. Remove the AC transformer from AC power and disconnect the battery.

☐ 3. Shut down the NAPCO NetLink™ Application by clicking on the X in the upper right hand corner of the Events screen. In addition, the Server must be shutdown by right-clicking the "N" icon in the system tray and selecting "Shut Down".

☐ 4. Connect a NAPCO keypad to the system buss and then power up the panel and attach the battery. Verify the keypad is functional.

☐ 5. Open the PCD-Windows application by clicking on its icon on the desktop and create an account for the Control Panel with report on alarm selected for keypad panics. (Knowledge of PCD-Windows and how to setup the account for reporting is assumed… go to the *Keypad Assignment* tab and check Keypad #1 Fire, Auxiliary, Panic boxes and then go to *Keypad Reporting and Outputs* tab and for Report on Alarm Telco1 select Area1 for Auxiliary, Fire, Panic).

☐ 6. Connect the PC to the Control Panel RJ12 Local Download connector using the PCI-MINI. (Knowledge of PCD-Windows and availability of a PCI-MINI is assumed.)

☐ 7. Perform step 4a (page 2) in NAPCO NetLink™ NL-MOD INSTALLATION INSTRUCTIONS (WI 1242).

☐ 8. Perform step 4b in WI 1242, and in addition, select Disable in the receiver format drop-down list and then complete this step by "Download To Control Panel" (as shown on page 3). The Control Panel programming is now complete.

☐ 9. Disconnect the PCI-MINI from the Control Panel and close the QuickLoader application.

☐ 10. Open the NAPCO NetLink™ Receiver Application by first clicking on the NetLink™ Server icon, and then clicking the NetLink™ Application icon and press ENTER for the Default password.

☐ 11. Right-click on the NAPCO "N" icon in the System Tray and select "Check-In" Times. Verify that this unit has checked-in (see page 15 in OI 294).

☐ 12. Connect the NL-MOD RJ12 "LOCAL DNLD" jack to the Control Panel RJ12 Local Download connector using the silver cable provided.

☐ 13. Activate a keypad panic and verify it is received.
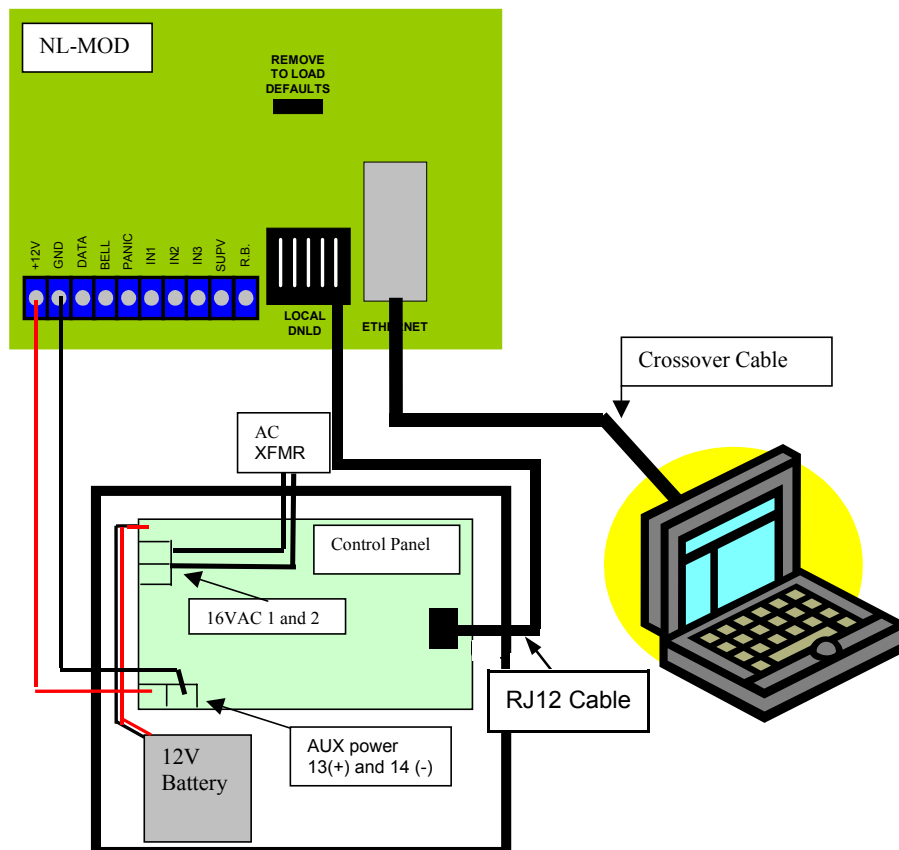
SECTION IV:

MOVE THE OFF-LINE ENVIRONMENT TO A LIVE NETWORK

☐ 1. In order to move the equipment to a live network, certain information must be obtained and/or network settings made in firewalls or routers (if your network is so equipped). Please check each item below:

    ☐ a. Obtain a static IP address for the PC that will run the NL-CSRCV application.

    ☐ b. Do you want to be able to download panel programming via the network? If so, then (1) The NL-MOD should have a static IP address so you can find it when you want to download to it or upload log information, (2) the NL-MOD must be "visible" on the network and not hidden behind a firewall.

    ☐ c. Is there a firewall and/or a router between the NL-MOD and the PC running the NL-CSRCV application? If so Ports 10,081 and 5,001 and 30,718 must be open and/or a Subnet Mask and Gateway IP address must be obtained.

Once the above has been addressed, then the equipment can be moved to a live network.

☐ 2. Using the setup from Section I, reprogram the NL-MOD with the new static IP address. The steps required are:

    ☐ a. Connect the NL-MOD RJ45 Ethernet connector to the computer's network card using the crossover cable.

    ☐ b. Shut down the NetLink™ Server (from system tray) and NetLink™ Application.

    ☐ c. Open the NL-MODCONFIG software utility by clicking on its icon on the desktop.

    ☐ d. Since the NL-MOD was previously "locked down" by programming, the only way to find it is to enter its IP address.

    ☐ e. Click "Search" and then press the "Find/Display Info" button. Enter in the IP address previously programmed (198.168.0.50). Press OK. The device should now appear in the search list.

    ☐ f. Double-click on the entry.

    ☐ g. Change the IP address to a newly assigned static address. (If you do not need the capability to access the device remotely, you can use DHCP by assigning an IP of "0.0.0.0" which will allow the NL-MOD to get an IP address from a DHCP server on the network).

    ☐ h. On the **NL-MOD** tab, enter the new Subnet mask and Gateway IP address if a static IP address was programmed; otherwise for a DHCP address just skip this step.

    ☐ i. On the **NL-Receivers** tab enter the static IP address of the PC running the NetLink™ Server/NetLink™ Application (NL-CSRCV) and then click **DOWNLOAD**.

    ☐ j. When complete, click **Close**.

☐ 3. Next, change the IP address of the PC running the NetLink™ Server/NetLink™ Application (NL-CSRCV) to the static IP address provided by the network administrator. Disconnect the crossover cable and move/connect this PC to the live network (via a hub, router or switch) using a straight through cable and re-boot the PC.

☐ 4. Verify the PC's static IP address you entered in step 3 above has been accepted by the PC. You can verify this by clicking on the network icon in the system tray (two PC's next to each other) and then clicking on the **Support** tab and verifying the IP address is correct. Click **CLOSE**.

☐ 5. Start the NetLink™ Server AND then start the NetLink™ Application.

☐ 6. Connect the NL-MOD to the network (via a hub, router or switch) using a straight through cable.

☐ 7. Transmit an alarm from panel or trip the NL-MOD hardwired panic input, and verify it is received by the NetLink™ Application.

APPENDIX A:
DISABLE WINDOWS XP THEMES

In order for the NL-ModConfig/NL-CSRCV to operate correctly, the Microsoft Windows XP Themes must be disabled, as follows:

1. Right click on the **Start** button and select *Properties* tab and single click to open the screen. See Figure 2.
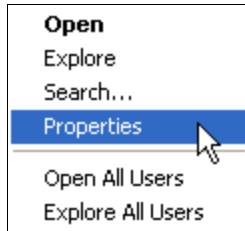

Figure 2.

2. In the **Properties** screen, click the **Classic View menu** radio button, then click **Apply**, then click **OK**. See Figure 3 and Figure 4.

Figure 3.

Figure 4.

3. Move your mouse arrow to an open area on your Desktop, right click to open the "Display" Pop up menu. Choose **Properties** from this menu and single click on it to open the Display Properties Screen. See Figure 5.
4. When the **Properties** screen opens, it defaults to the *Themes* tab. From this window, select the Windows Classic Theme from the drop down list. Click **Apply** and then click **OK**. The new setting will take effect immediately and the **Properties** window will close. See Figures 6 through 8.
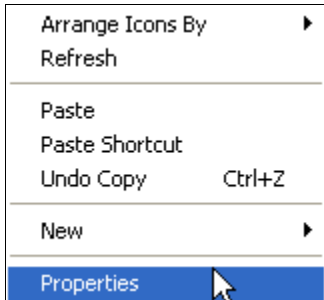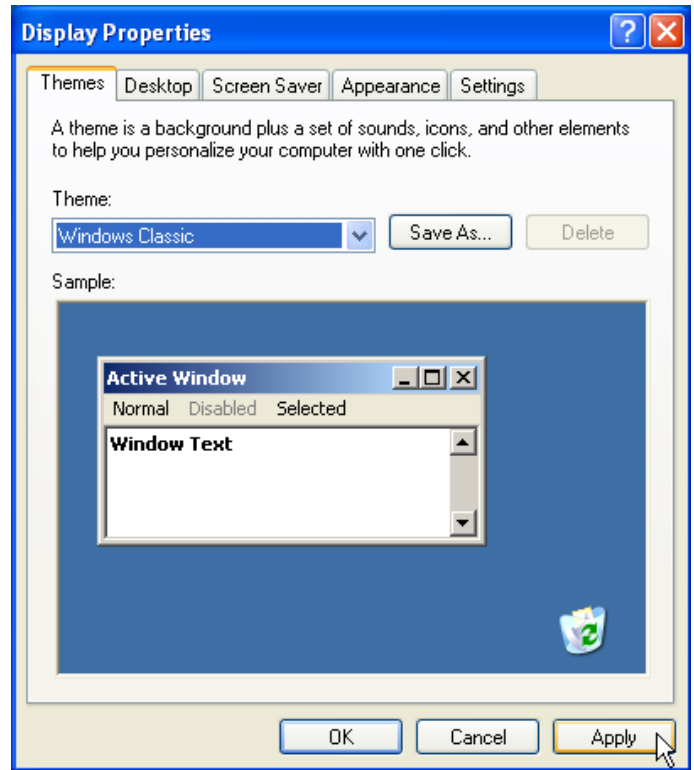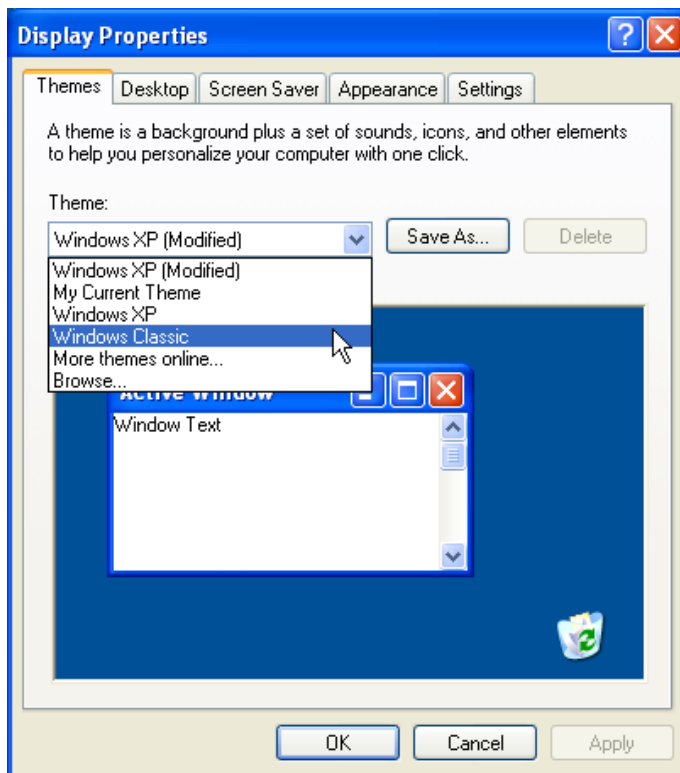

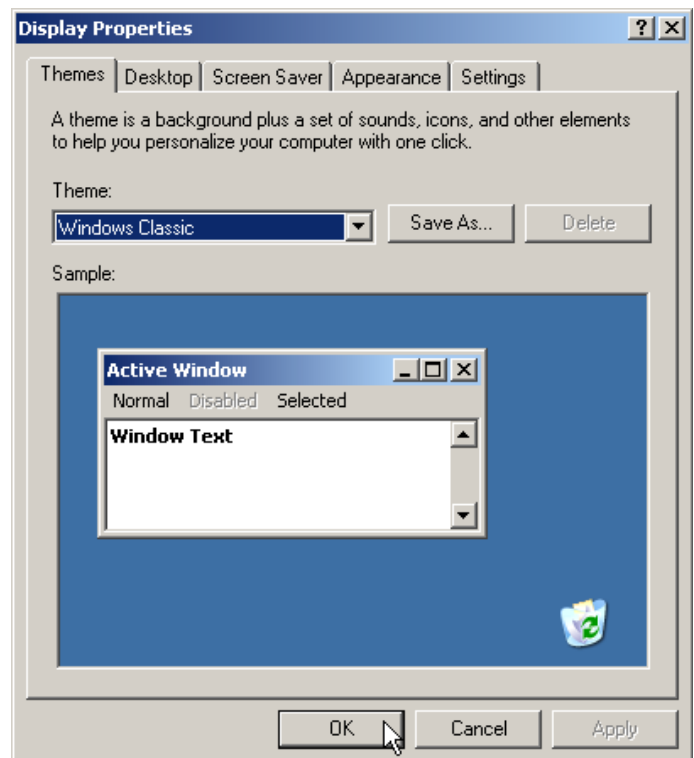Figure 5

Figure 7

Figure 6

Figure 8

8

APPENDIX B:

DISABLE INTERNAL WINDOWS XP PRO FIREWALL

In order for the NL-ModConfig/NL-CSRCV to operate correctly, you must disable the Internet Firewall program in Microsoft Windows XP Pro operating system. The default setting for the Internet Firewall program in Windows XP is *enabled*. Confirm the Firewall is *disabled* as follows:

1. Click **Start**, **Settings**, **Control Panel**.
2. Double click the **Network Connections** icon.
3. Right click the Local Area Connection and select **Properties** from the drop down menu.
4. Click on the *Advanced* tab in the **Properties** window.
5. When the **Local Area Connection Properties** dialog opens, ensure that the check boxes are un-checked and click **OK** to save (see Figure 1).
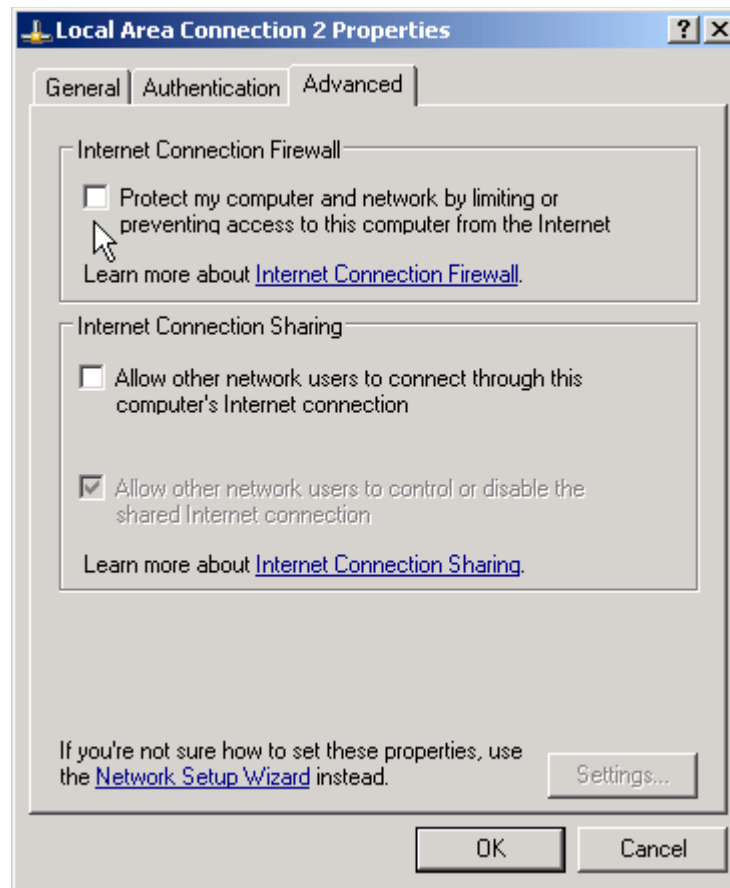

Figure 1.

NOTES

NOTES

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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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.

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