Chapter

2

Installing and Running DigiLinX Dealer Setup

Installing DigiLinX Dealer Setup Version 2.3

Before you can run the DigiLinX Dealer Setup program, you must install and configure the software.

1. Close any open applications.
2. From your PC, open Internet Explorer.
3. Go to http://www.netstreams.com.
4. From the Dealer Login area in the lower left-hand corner of the screen, enter your username and password and select **Login**.

   A Dealer information page appears.
5. Select **Dealer Documents**.

   A list of *NetStreams* documents and application categories appears.
6. Scroll to the DigiLinX Tools section.
7. Click the + (plus) sign next to DigiLinX Tools and a list of tools will appear.
8. Click the DigiLinX **Dealer Setup Program Version 2.3**.

   You are asked if you want to run or save the DigiLinX Dealer Setup program (see Figure 2-1).

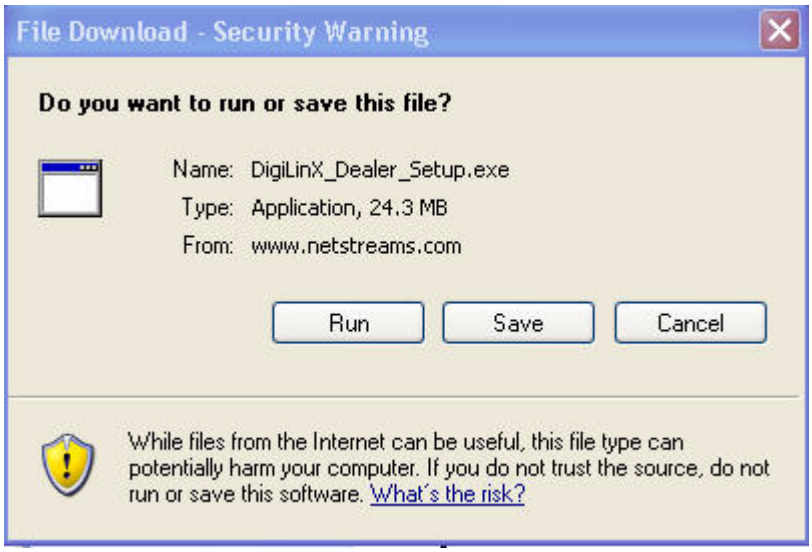

Figure 2-1 Application prompt

9. Select **Save**.

   You are prompted to save the file to your computer.
10. Browse to the folder where you'd like to save the file.
11. Select **Save As...** .

    The file saves to the indicated location on your hard drive.
12. Using Windows Explorer, navigate to the file you just saved on your computer.
13. Double-click the file to run it.

    The setup program opens (see Figure 2-2).

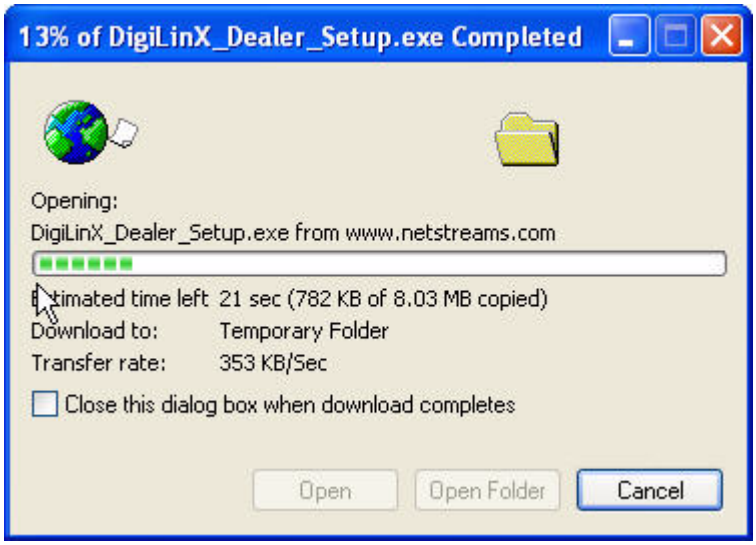

Figure 2-2 Application opens

You may be prompted that the publisher could not be verified (see Figure 2-3).

Figure 2-3 Publisher verification

14. Select **Run**.

    The DigiLinX Dealer Setup Wizard Welcome window displays (see Figure 2-4).

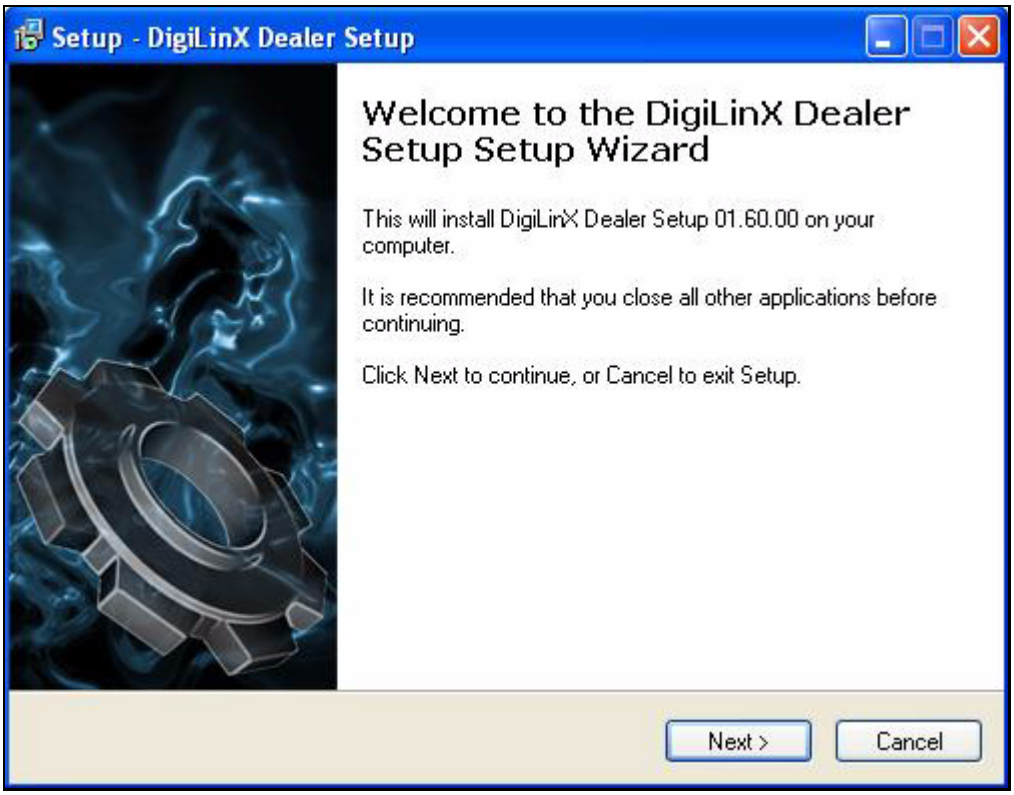

Figure 2-4 Welcome window

15. Select **Next**.

    A License Agreement displays (see Figure 2-5).

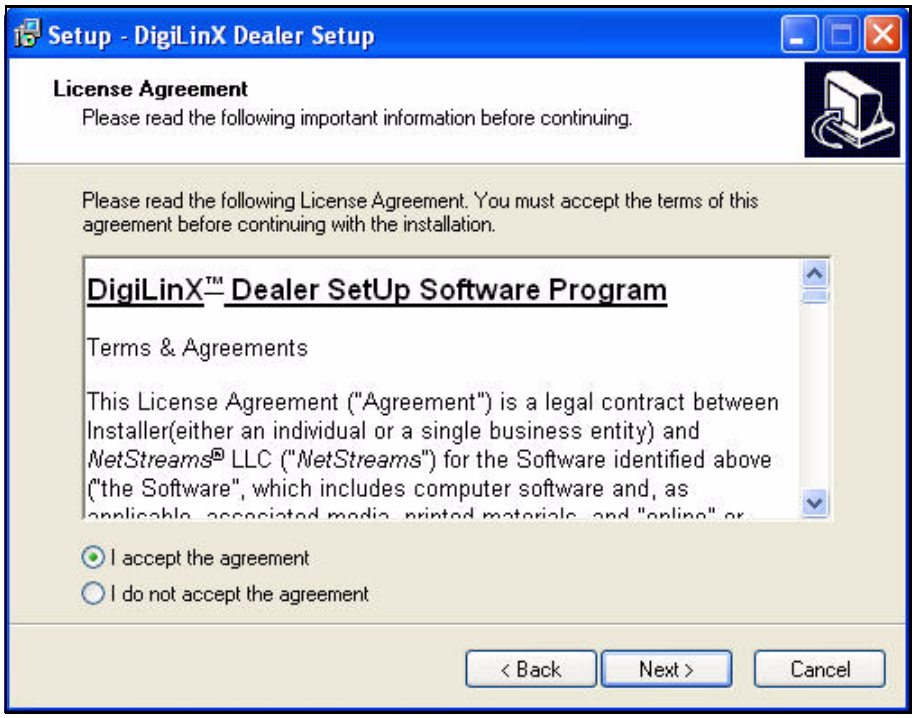

Figure 2-5 License Agreement

16. After reading the agreement, select **I accept** and then select **Next**.

    You are prompted to select a location for the file to download (see Figure 2-6).

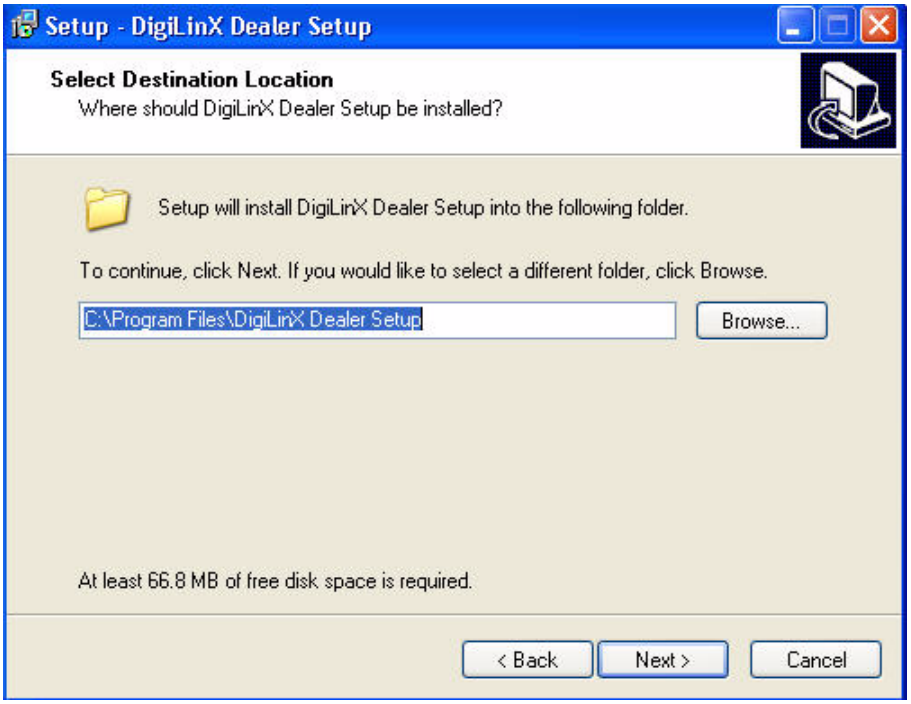

Figure 2-6 Destination prompt

17. Keep the default entry and select **Next**.

    You are asked where the application shortcut should be placed (see Figure 2-7).

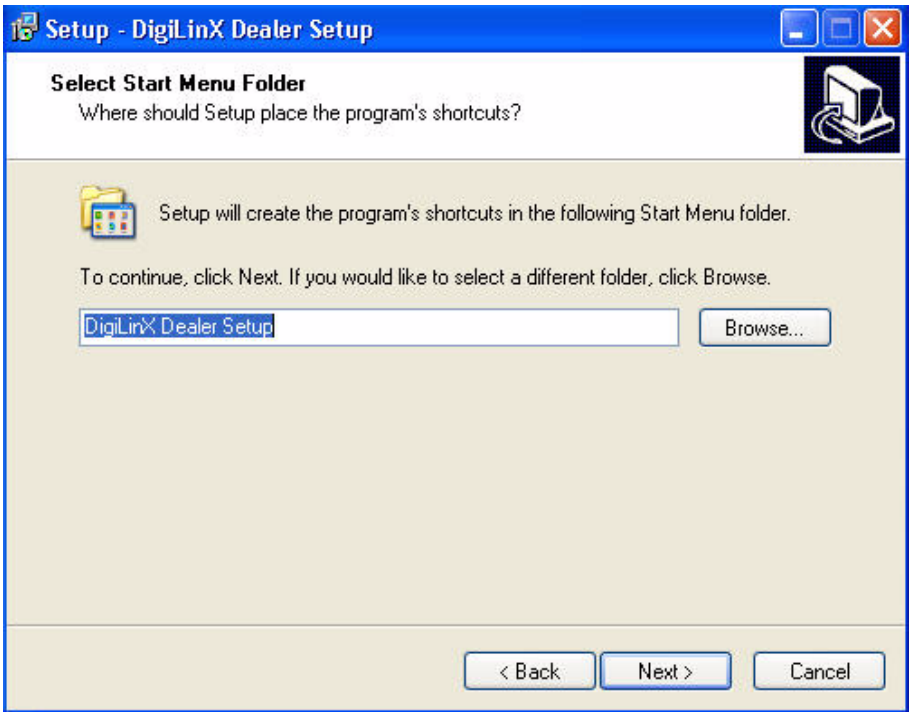

Figure 2-7 Shortcut destination prompt

18. Keep the default entry and select **Next**.

    You are asked where you want additional application icons placed (see Figure 2-8).

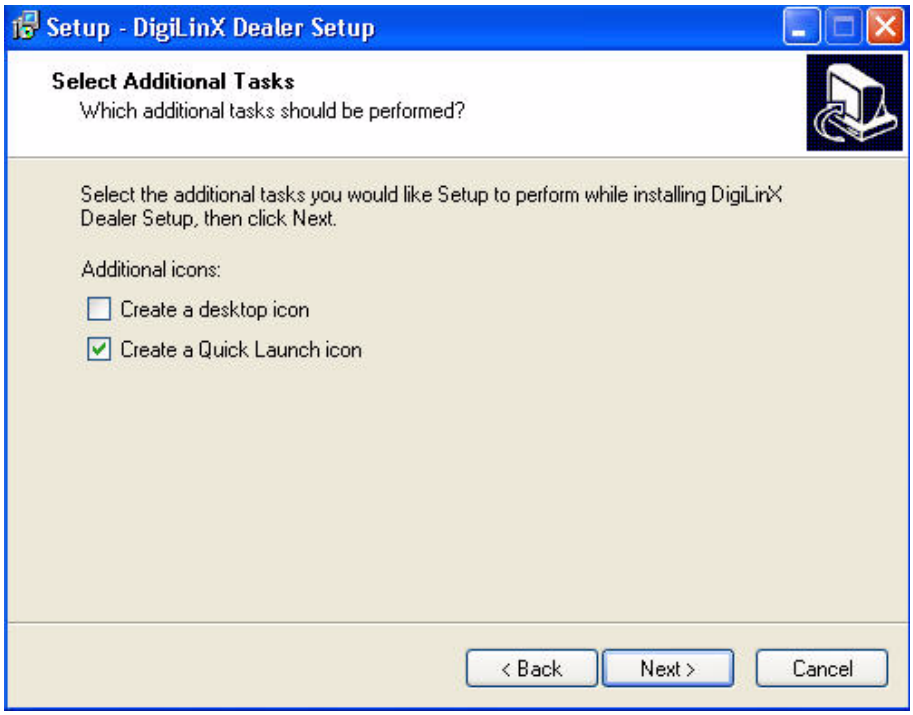

Figure 2-8 Additional icon placement

19. Select:

    - **Create a desktop icon** if you want to place an icon on your computer's desktop

- C**reate a Quick Launch** icon if you want to place an icon in your computer's Quick Launch tray.

20. Select **Next**.

    You are prompted that the application is ready to install (see Figure 2-9).

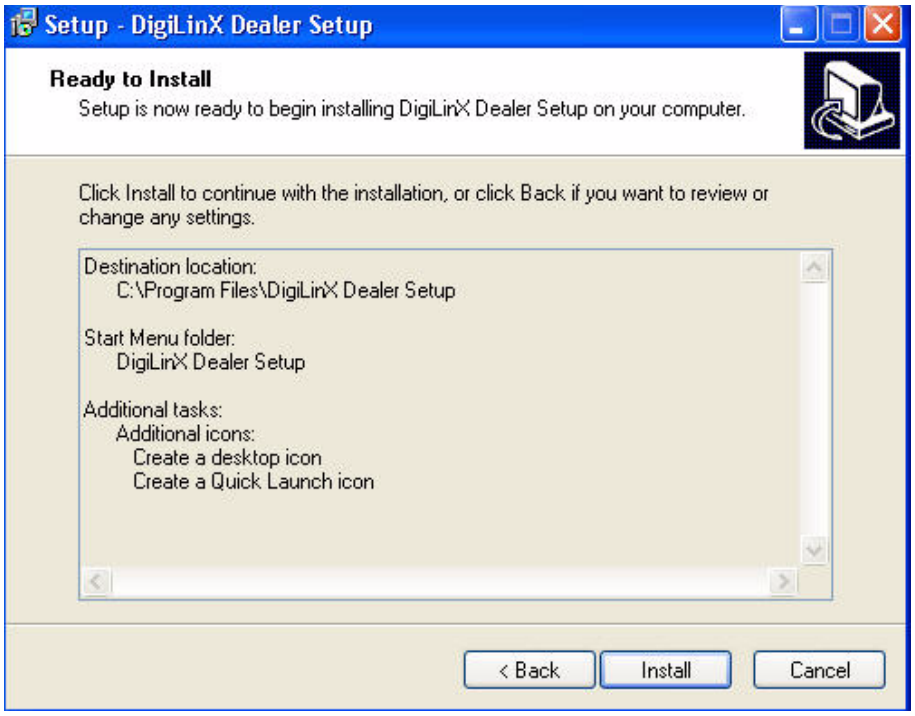

Figure 2-9 Ready to install prompt

21. Select **Install**.

    The application begins installation (see Figure 2-10).

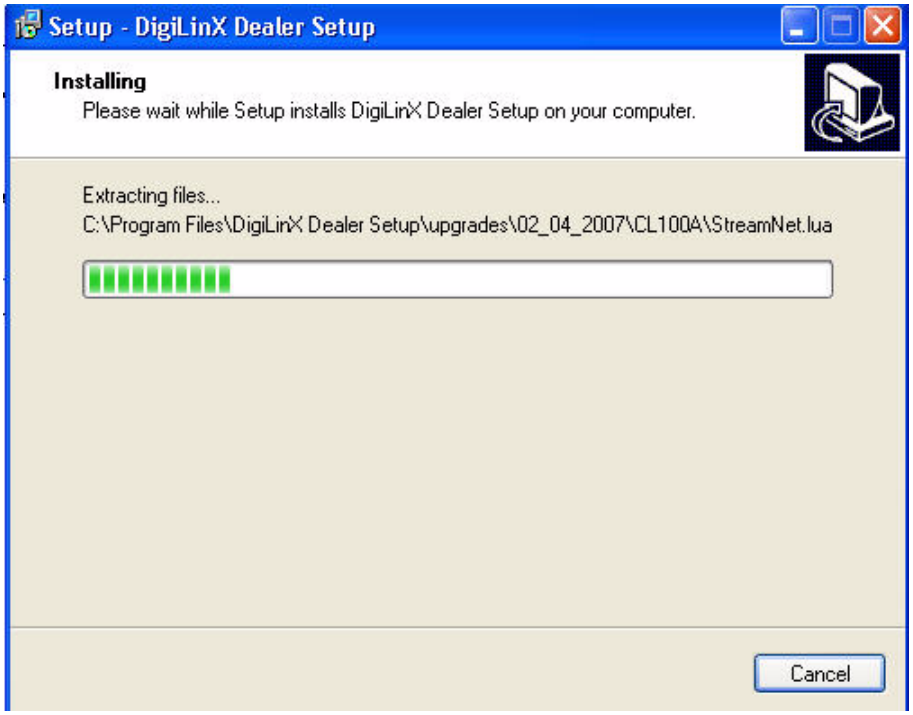

Figure 2-10 Application installation window

When the application finishes installing, you are prompted to restart (see Figure 2-11).

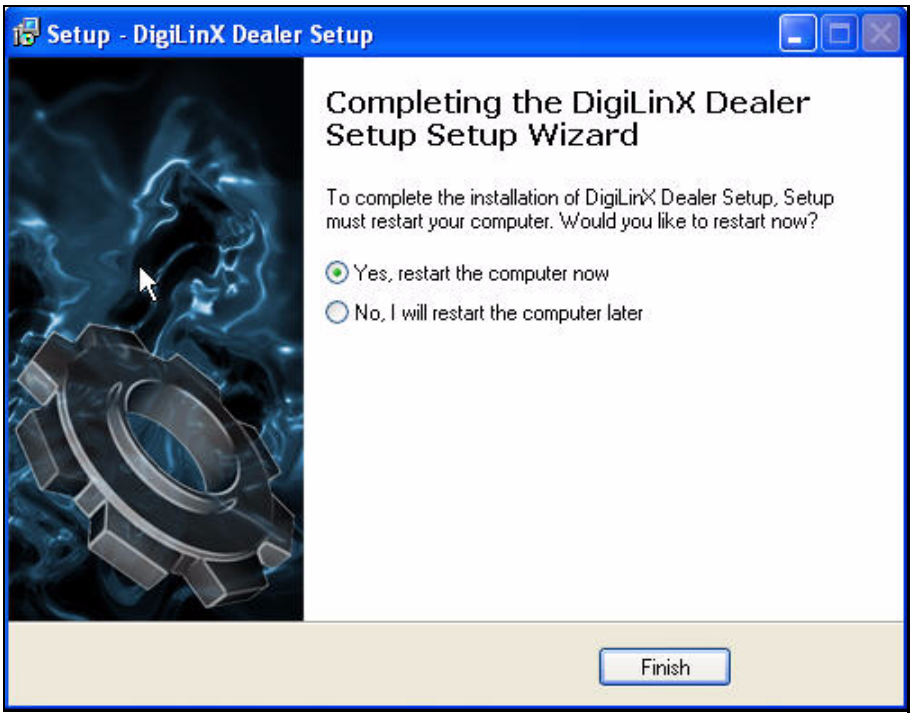

Figure 2-11 Setup Wizard complete

22. Select **Yes, restart the computer now** and then select **Finish**.

    Your computer restarts and the installation is complete.

Configuring the Network Interface Card (NIC) in Windows

Dealer Setup requires a wired connection to the switch to configure a system. To prevent Dealer Setup from inadvertently using a wireless connection, you must temporarily disable the wireless NIC. To set this configuration, complete steps in the following section.

Disable the Wireless NIC

1. From your Windows Start menu, select **Start>Settings>Control Panel>Network Connections**.

   The Network Connections screen displays (see Figure 2-12).

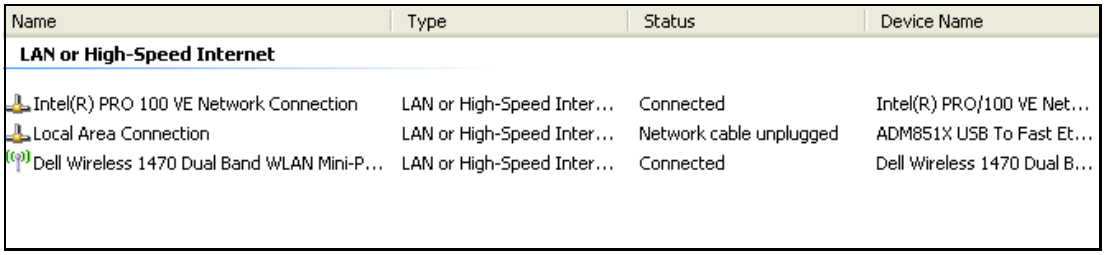

Figure 2-12 Network Connections screen

2. Double-click on the wireless NIC (if any are present).

   A Properties window displays (see Figure 2-14).

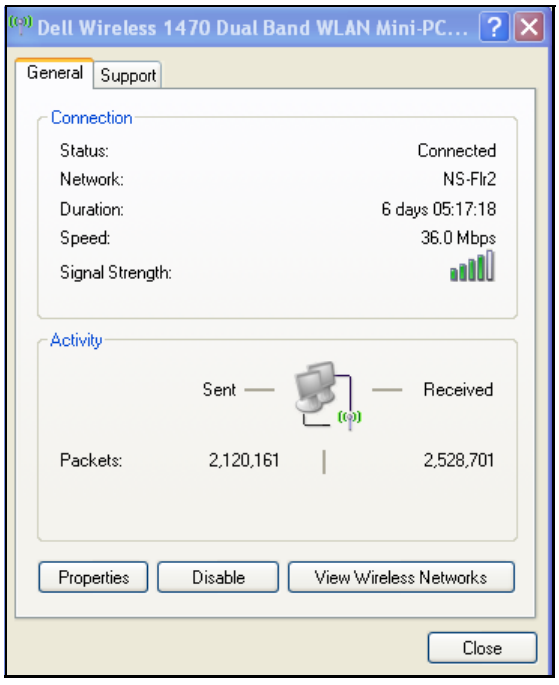

Figure 2-13 Properties window

3. Select **Disable** and close the window.

Setting the IP Address

The NIC used to connect to the DigiLinX system needs the IP address set to dynamic. To make this change, complete the following steps:

1. Right-click the NIC you are configuring and select **Properties**.

   A Properties window displays (see Figure 2-14).

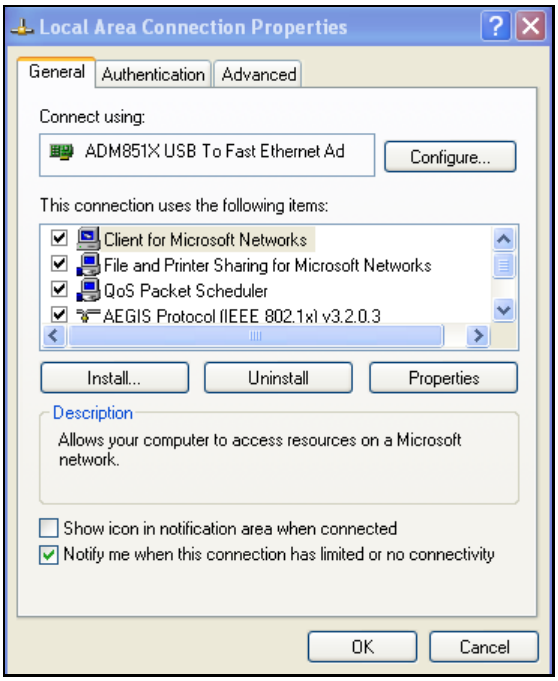

Figure 2-14 Properties window

2. In the “This connection uses the following items” area, scroll until Internet Protocol (TCP/IP) displays.
3. Double-click on **Internet Protocol (TCP/IP)**.

   The TCP/IP Properties window displays (see Figure 2-15).

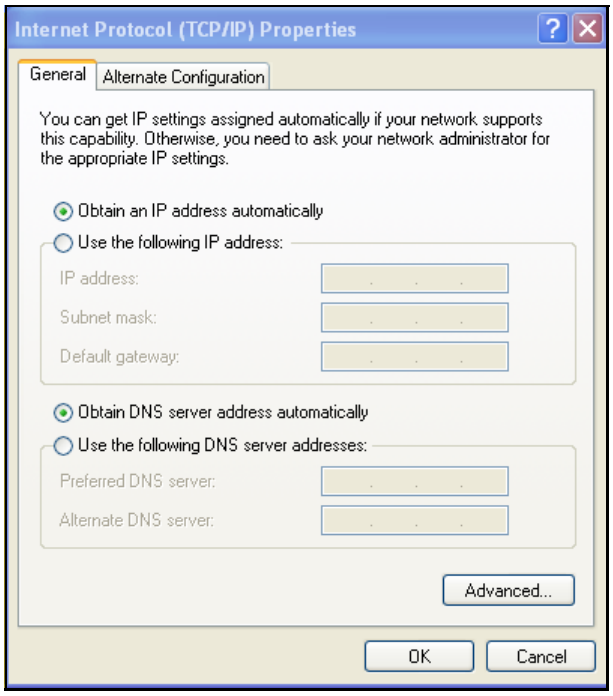

Figure 2-15 TCP/IP Properties window

4. Ensure that **Obtain an IP address automatically** is checked.
5. Select **OK**.

   You are returned to the Properties window.
6. Select **OK**.

   Your changes are applied.

Running DigiLinX Dealer Setup

To start the DigiLinX Dealer Setup program, complete the following steps:

1. Select **Start>All Programs>DigiLinX Dealer Setup>DigiLinX Dealer Setup** (or double-click the Dealer Setup desktop icon).

   The DigiLinX Dealer Setup application window displays (see Figure 2-16). You are prompted to start the Wizard.

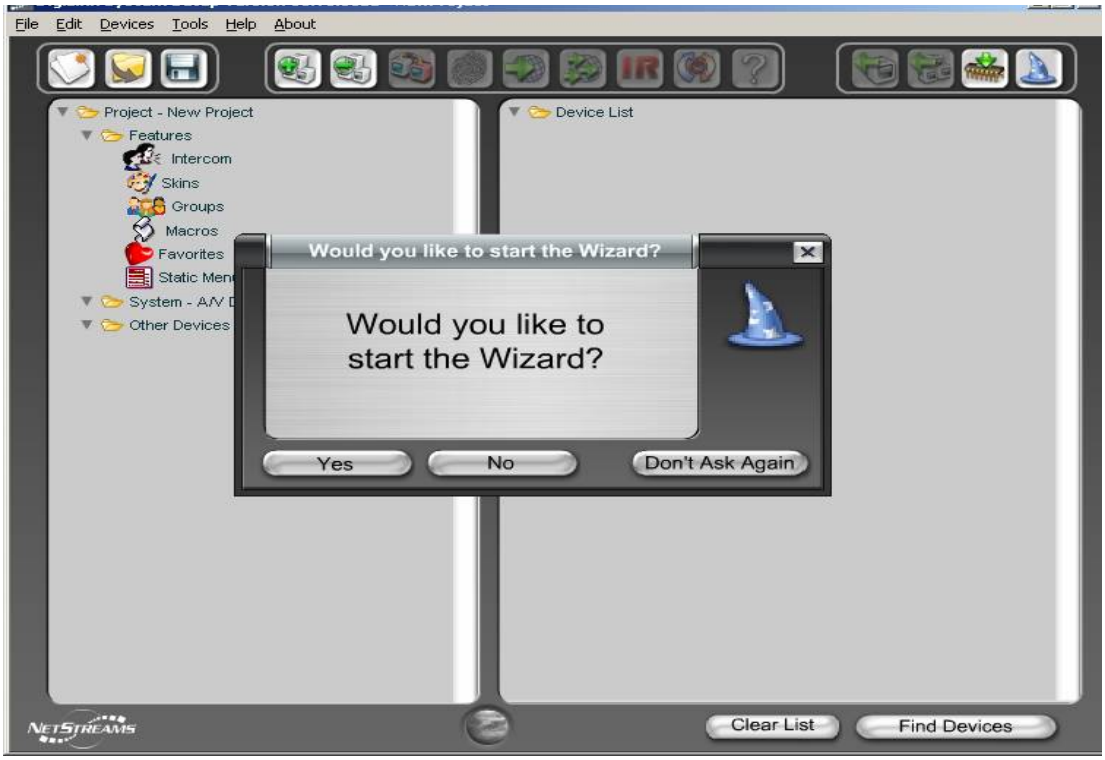

Figure 2-16 Application window

2. Select **No**.

Configuring the NIC in Dealer Setup

For systems that have multiple NICs, you can tell Dealer Setup which is being used to interface with DigiLinX. To identify which card to use, complete the following steps:

1. From the main window of Dealer Setup, select **Edit >Preferences**.

   The Preferences window displays (see Figure 2-17).

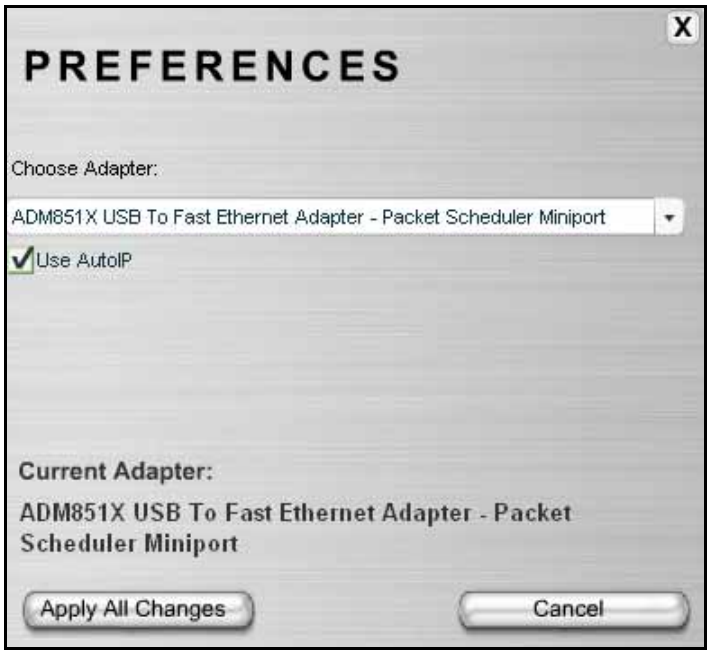

Figure 2-17 Preferences window

2. From the Choose Adapter dropdown list, select the specific NIC you are using to create DigiLinX projects (see Figure 2-18).

IMPORTANT! Remember, any wireless NIC should be disabled when using Dealer Setup. Also, do not make the selection "Use all NIC Cards."

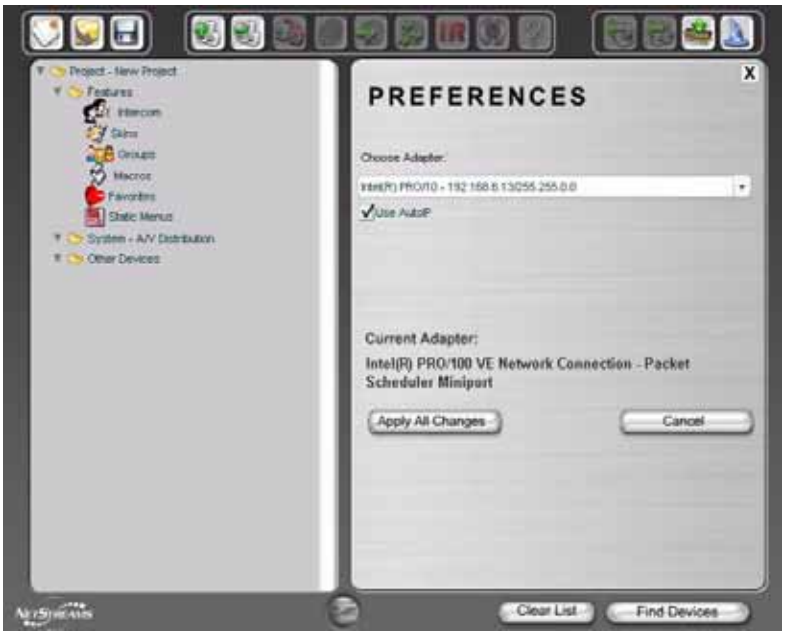

Figure 2-18 Selecting a NIC from the dropdown list

3. Select **Apply All Changes**.
4. Exit Dealer Setup.
5. Re-open Dealer Setup.

   The DigiLinX Dealer Setup application window displays (see Figure 2-16). You are prompted to start the Wizard.

6. Select **Yes**.

   You are ready to begin creating your project. Before you begin project creation, review the process for determining an IP address on the DigiLinX network.

IP *and DigiLinX* Tutorial

DigiLinX communicates with control devices, amplifiers, audio sources and computers using Transmission Control Protocol/Internet Protocol. TCP/IP is a means of sending and receiving information on a computer network. For example, with DigiLinX you can take a song from a CD player and send it via TCP/IP to an amplifier. This is an oversimplification of the process. IP is a much more complicated process, but how it applies to DigiLinX is not.

In Figure 2-19, you have control devices (*TouchLin*X), legacy source devices (*MediaLin*X), and output devices (*SpeakerLin*X) connected together. For these devices to communicate using TCP/IP each device must have a unique identifier or IP address.

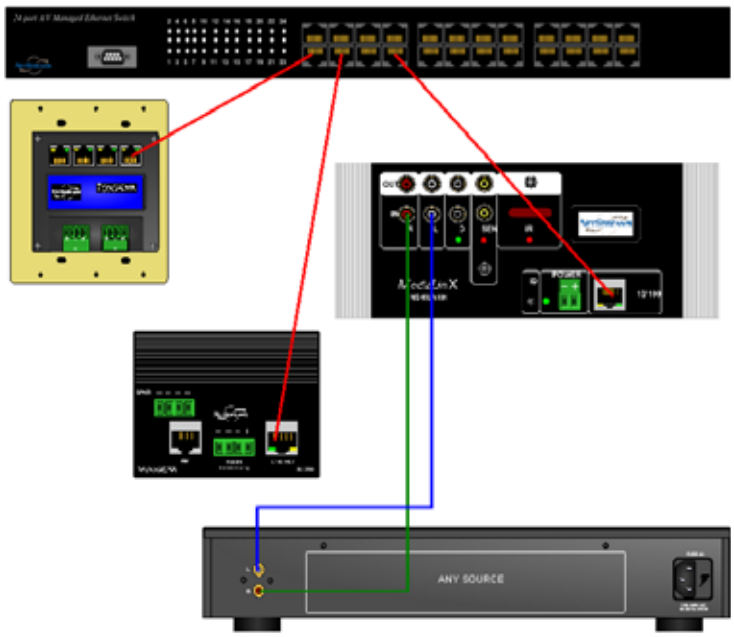

Figure 2-19 DigiLinX Network Diagram

IP Address and the Subnet Mask

On a network, all the devices must use the same IP address scheme so that they know where to send information. This scheme is determined by the subnet mask (for example, 255.255.255.0) and the IP address (for example, 192.168.1.110). The IP address has four octets that can be divided into two sections that determine the network and the device. You can tell which octets in an address are the network identifiers by

referring to the subnet mask. In the subnet you also have four octets containing either the number 255 or the number 0. This denotes which octet in the IP address is part of the network number. For example:

- If the IP address is 10.15.20.13 and the subnet is 255.0.0.0 Then this device is on the 10 network and it is device 15.20.13
- If the IP address is 10.15.20.13 and the subnet is 255.255.0.0 Then that device is on the 10.15 network and it is device 20.13
- If the IP address is 10.15.20.13 and the subnet is 255.255.255.0 Then that device is on the 10.15.20 network and it is device 13
- If the IP address is 192.168.1.100 and the subnet is 255.255.255.0 Then that device is on the 192.168.1 network and it is device 100.

For devices to communicate with each other they must all have the same network number but have unique device numbers. On a DigiLinX network, devices have a subnet mask of 255.0.0.0 and an IP address of 10.x.x.x. This means that all devices on a DigiLinX network must have an IP address starting with 10 and the remaining numbers must be unique. Table 2-1 shows three devices and whether they can communicate with each other.

Table 2-1
IP Addressing Examples

DEVICE 1		DEVICE 2		
IP ADDRESS	**Subnet Mask**	**IP ADDRESS**	**Subnet Mask**	**Results**
10.15.1.110	255.0.0.0	10.16.5.25	255.0.0.0	Yes they can talk.
10.15.1.110	255.255.0.0	10.16.5.25	255.255.0.0	No, the subnet makes the first 2 octets the network number and in this example the first two octets are not the same so they are not part of the same system.
10.15.1.110	255.255.255.0	192.168.1.110	255.255.255.0	No, the network numbers are not the same. The subnet requires that the first three octets be the same. These are clearly not.

This explanation of TCP/IP explains key networking concepts of DigiLinX. The next section explains how a DigiLinX network is assembled.

Building a DigiLinX IP Network

By default, *DigiLinX* automatically assigns IP addresses using a *NetStreams* AutoIP process (not to be confused with Dynamic Host Configuration Protocol - DHCP). This allows DigiLinX to function as a standalone system. Figure 2-20 is a simple DigiLinX network with sample IP addresses:

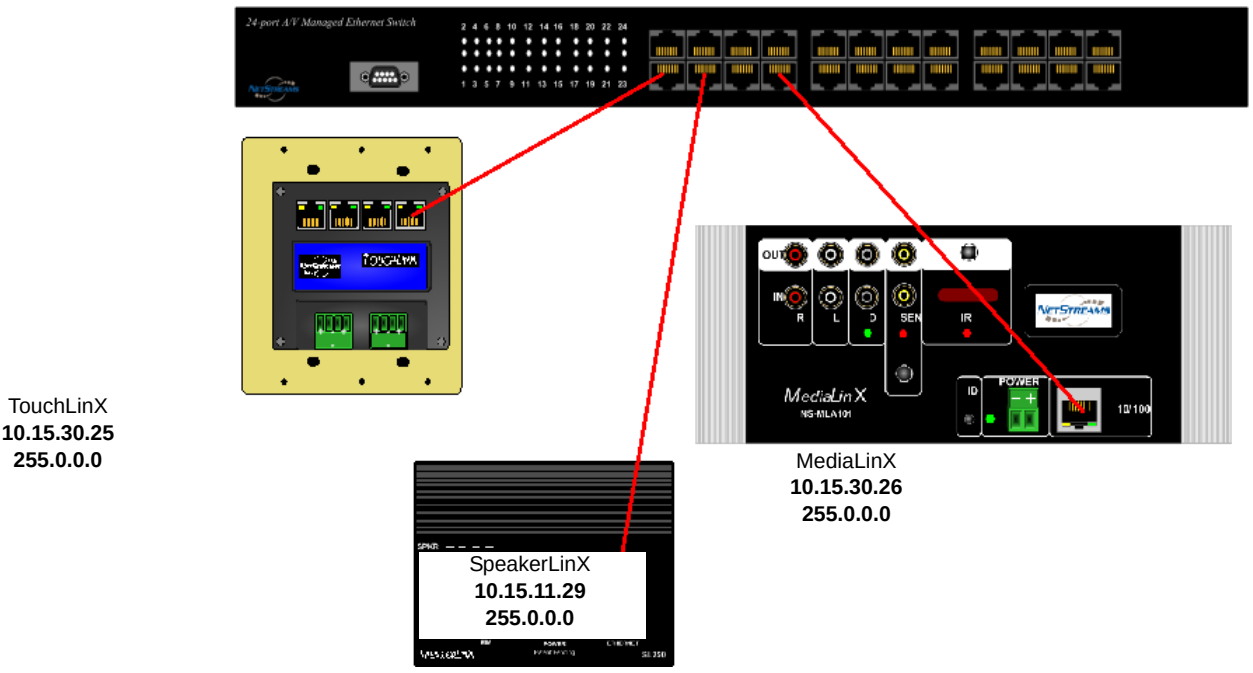

Figure 2-20 Building a DigiLinX IP Network (1 of 5)

The IP addresses in Figure 2-20 all work in the same IP range (as defined by the subnet). Given these settings, this is a working DigiLinX system. However, it's not a practical one. There are no sources or speakers, and it only has one room. Figure 2-21 is a somewhat more realistic network diagram with IP addresses that are consistent with a default DigiLinX system.

Notice that they all work in the same IP range and a PC (for configuring the system) also exists on the network. When DigiLinX Dealer Setup is started on a PC, it determines what IP address range to use, and will automatically assign itself a valid IP address. You do not need to make an address change to your PC when you use the DigiLinX Dealer Setup program; however, you **must** assign a network card (see *Configuring the NIC in Dealer Setup* on page 2-11).

DigiLinX requires very little knowledge of IP, but adding non-DigiLinX devices is a little more complex. These devices can't configure valid IP addresses by themselves. You must create and assign addresses manually. In Figure 2-21, a digital media server and an IP camera have been added. The IP address on the media server and IP camera must be changed so that they use a valid address that follows the correct IP addressing scheme.

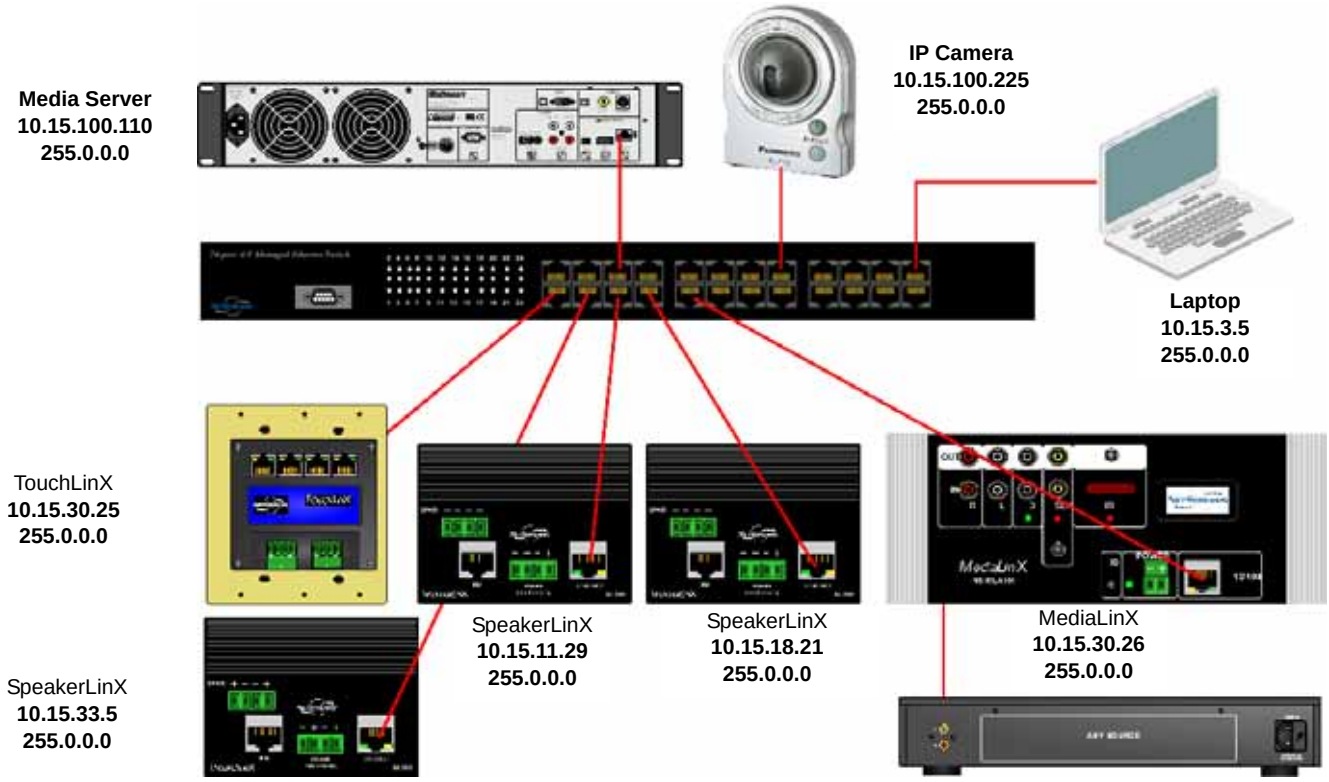

Figure 2-21 Building a DigiLinX IP Network (2 of 5)

All of these DigiLinX examples are based on using DigiLinX to assign IP addresses using factory defaults. However, in many installations the customer wants to integrate DigiLinX into the home network. This level of integration requires the installer to change the default DigiLinX IP address scheme to one that matches the home network's IP address scheme. See Figure 2-22.

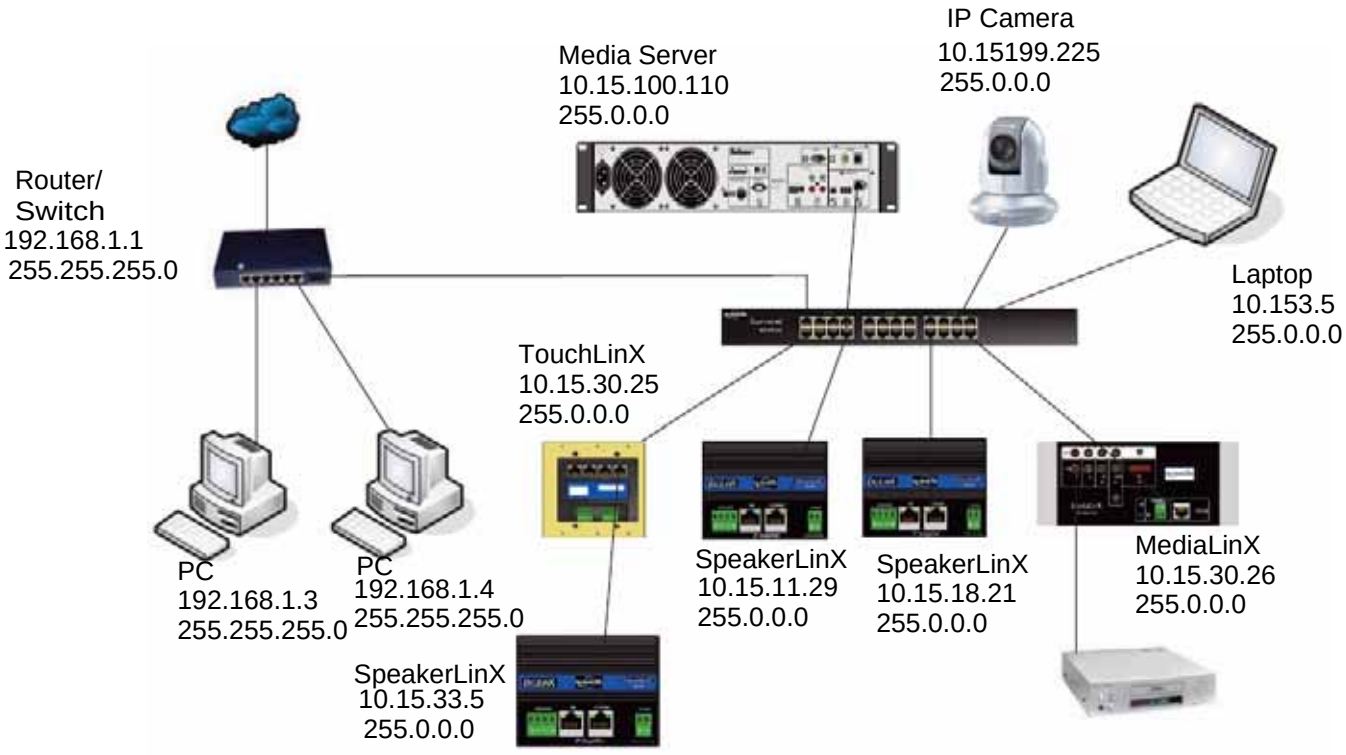

Figure 2-22 Building a DigiLinX IP Network (3 of 5)

Notice that the address for the home network does not match the IP address scheme for the DigiLinX network. Left this way, the DigiLinX network would work independently of the Home network, but the home network would not be able to control the DigiLinX system.

Configuring the Home Network and DigiLinX

To change the IP range for DigiLinX so that it matches the home network's IP address range, refer to Figure 2-22. In this example, the home network has a subnet of 255.255.255.0. This means that all addresses on the home network must use the same numbers in the first three octets. In this case, all IP address must start with 192.168.1 and the final octet must be unique. To make DigiLinX work with this network all devices on the DigiLinX network must also start with 192.168.1 and the fourth octet must also be unique.

To change the system IP address range and subnet range, complete the following steps:

1. With the system live, highlight **System-A/V Distribution** from Dealer Setup.
2. Select **Advanced Option**s.

   System information displays (see Figure 2-23).

Figure 2-23 Building a DigiLinX IP Network (4 of 5)

3. Enter the appropriate address range for the system. In this case, it's 192.168.1.20 to 192.168.1.100 with a system subnet mask of 255.255.255.0.
4. Select **Apply Changes**.

   The IP address is applied across the network (see Figure 2-24).

IP Camera

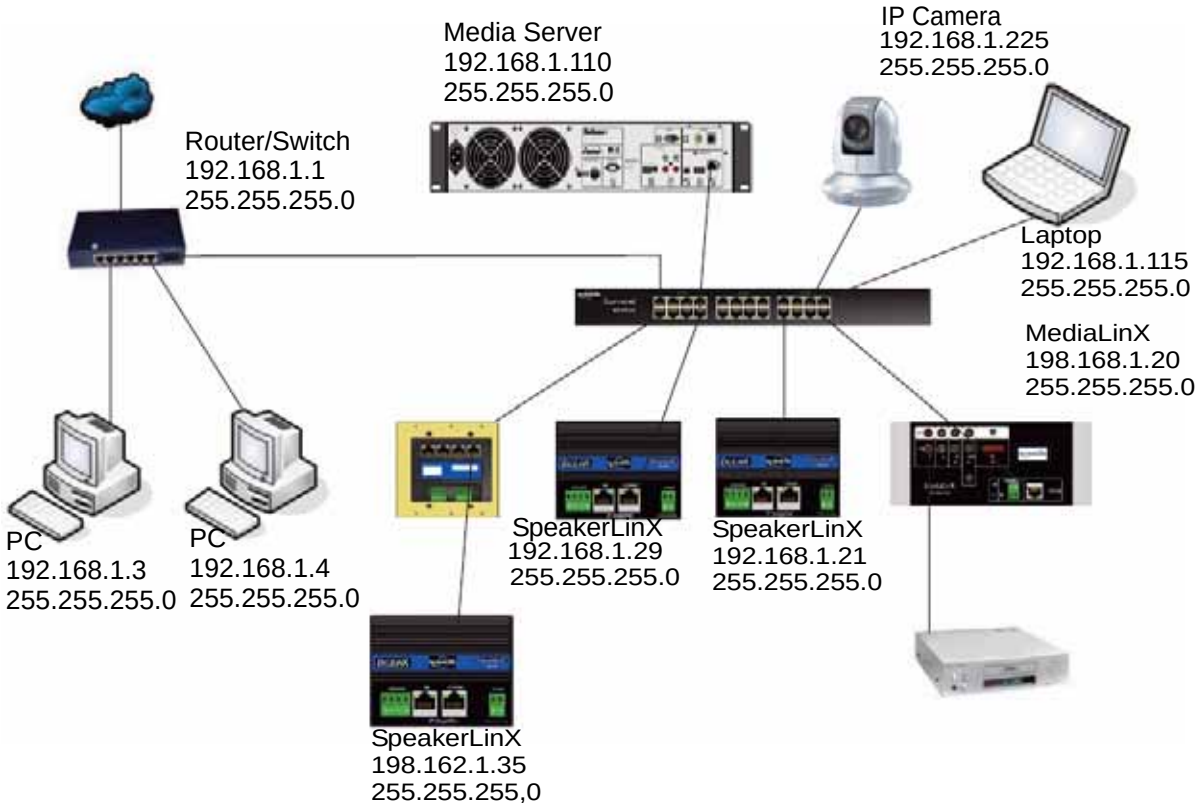

Figure 2-24 Building a *DigiLinX* IP Network (5 of 5)

NOTE: Some devices on the DigiLinX network may require access to the Internet like the digital media server. These devices require additional IP settings like the Gateway IP and DNS address on the digital media server. For more details on configuring DigiLinX to work on the home network refer to the Application Note titled: *DigiLinX Home PC Network Integration* from the Dealer section of the *NetStreams* website, www.netstreams.com).

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