

DigiLinX and IP Addresses

Introduction

DigiLinX is designed to function as a standalone IP-Based Multi-Room Audio, Video and Control system that can easily be configured to integrate with the home network. Integrating with the home network allows DigiLinX to be controlled by computers and PDAs, and to provide a conduit for media servers to access the Internet to download metadata. To allow all of the devices to communicate with one another, they must be on the same subnet and have an IP address that is unique.

NOTE: PDAs must be able to run Adobe® Flash® and a wireless web browser.

This chapter discusses the three tasks that need to be accomplished to integrate DigiLinX into the home network:

- Setting static addresses for non-*StreamNet*™ devices
- Configuring the DigiLinX system
- Configuring the home network

NetStreams recommends the general IP address structure shown in Figure 9-1:

Table 9-1. IP Address Allocations

Device Type	IP Address Range
Static (IP cameras, media servers)	192.168.0.2 - 192.168.0.50
DigiLinX	192.168.0.51 - 192.168.0.200
Home Network	192.168.0.201 - 192.168.0.255

Setting Static IP Addresses

There are many non-*StreamNet* devices that use IP addresses and are compatible with DigiLinX. For example, Panasonic IP cameras use the network and media servers usually require an Internet connection to function properly. DigiLinX does not assign IP addresses to these devices. For these devices, you must manually assign a static IP

address to the device that is not in the range of the home network or DigiLinX. Use addresses from 192.168.0.2 through 192.168.0.50 and set the subnet mask to 255.255.255.0.

NOTE: If the media server requires access to the Internet, you may need to set the Gateway and DNS address on the physical digital media server. You can retrieve this information from a home PC.

From a PC, select **Start>Run**. A run popup window displays. Type **CMD** in the Open field. A DOS window displays. Type **IPCONFIG/ALL** at the DOS prompt. This will display the IP address of the gateway and DNS for the home network.

Set the IP address of the device according to the manufacturer's instructions.

Configuring the DigiLinX System

DigiLinX is designed to run out-of-the-box on its own dedicated IP network. When working with the home network is desired, the installer must customize the DigiLinX IP addressing scheme. To set DigiLinX IP addresses in a compatible range with the home network, follow these steps:

1. Open Dealer Setup and create a new project or open an existing project. Do not start the Wizard.
2. Click on **System - A/V Distribution** in the left window pane.
3. In the bottom right corner, click on the **Show Advanced Option** button as shown in Figure 9-1.

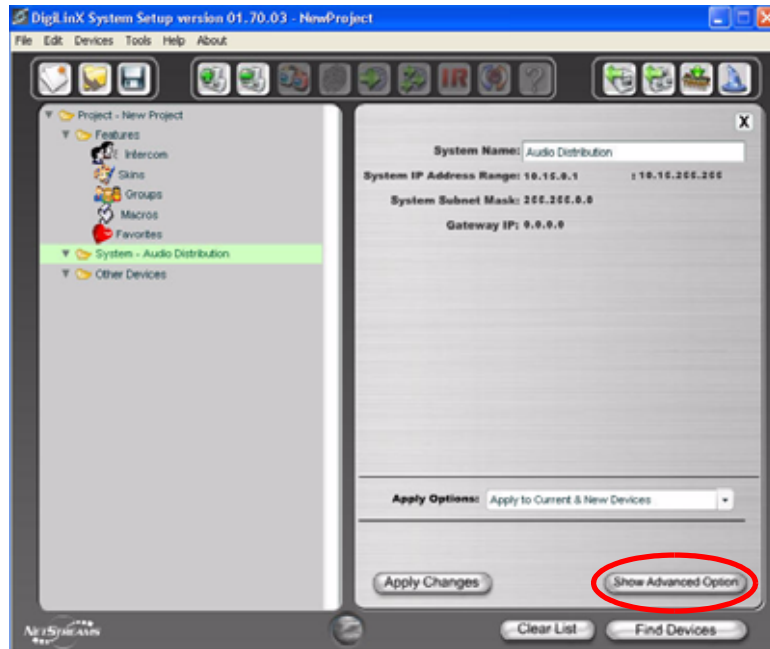


Figure 9-1 Show Advanced Option button

The Advanced Option screen displays (see Figure 9-2). From this screen, you will be able to specify what range of IP addresses that DigiLinX devices will use. Like the home network, DigiLinX needs to use the same address scheme, but it needs to be restricted to a specific range of these addresses to prevent an IP address conflict.



Figure 9-2 Advanced Options screen

The following is the recommended address range for this example to configure DigiLinX to use.

4. Set the System IP address range to: 192.168.0.51 - 192.168.0.200
 5. Set the Subnet Mask to: 255.255.255.0.
- See Figure 9-3.

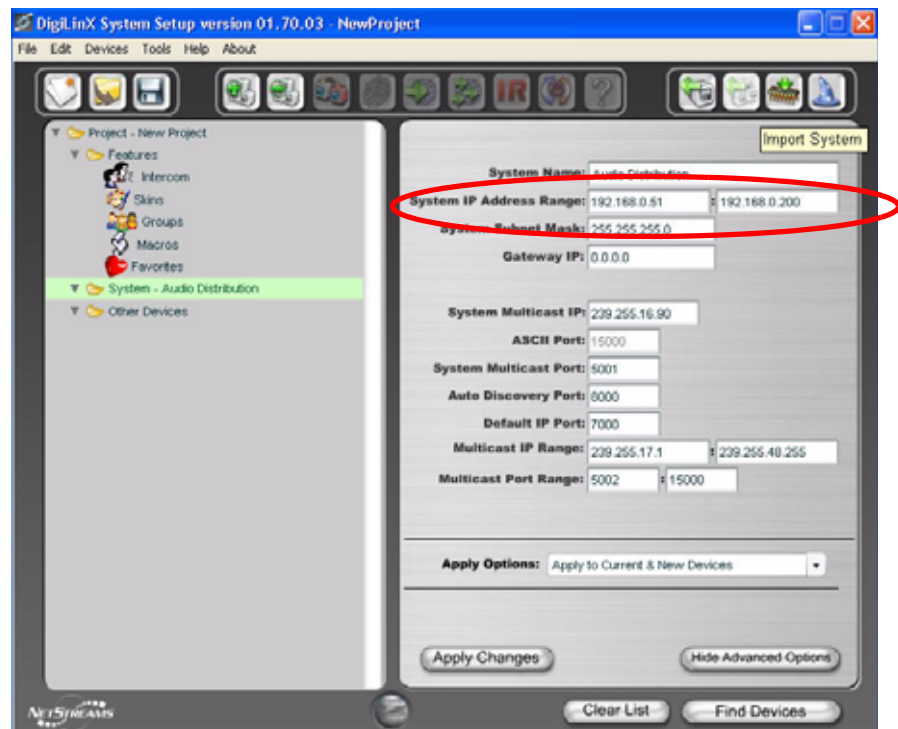


Figure 9-3 Advanced Options screen with IP address set


6. Select **Apply Changes**.

You are warned that changes may affect the system adversely. See Figure 9-4.



Figure 9-4 System Warning

7. Select **OK**.

8. Select **File>Save**.
The project is saved.
9. Send the configuration to all devices by selecting the **Send Configuration to All Devices**  button.

Add *DigiLinX* Devices to the Project

1. Select the **Add Device** () button.
The Devices window displays (see Figure 9-5).

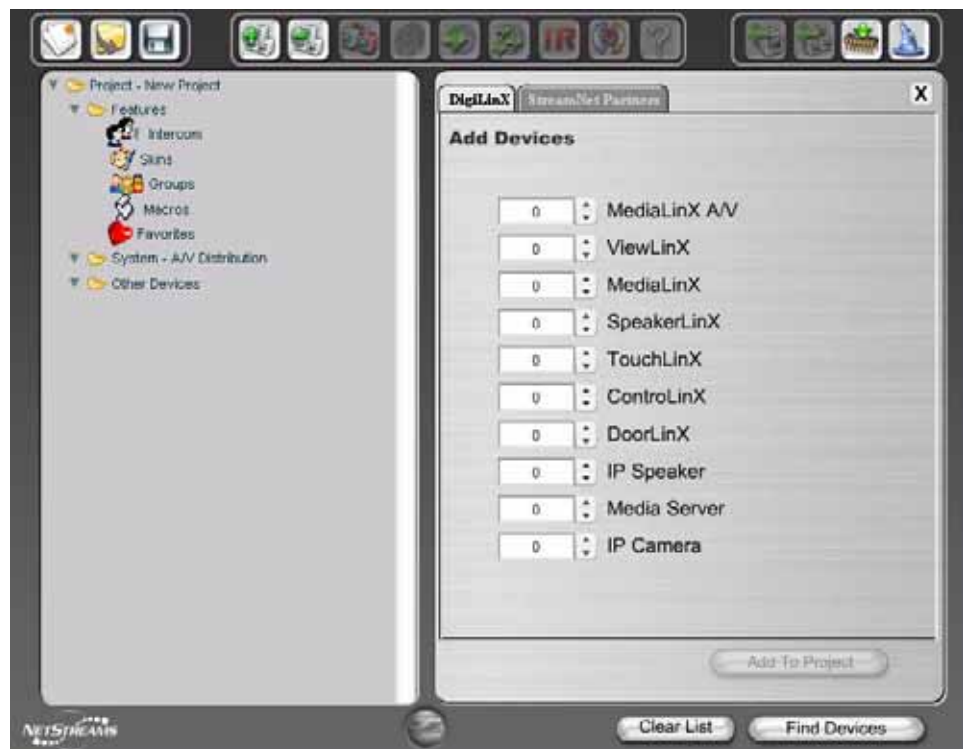



Figure 9-5 Devices window

As you add new devices to the project they will use IP addresses in the appropriate range.

2. Once all the IP addresses are assigned and the project has been configured, select **File>Save**.
The project is saved.
3. Send the configuration to all devices by selecting the **Send Configuration to All Devices**  button.

Configuring the Home PC Network

After DigiLinX and static IP addresses are set, the final step is to configure the home network to match the structure established for other devices. To set the IP address of the home network, complete the following steps.

1. Determine the user ID and the password for the Router/switch that hands out IP addresses to computers on the home network.
2. Login to this device and determine the IP address range and the subnet mask for your home PC network.

Typically, home Router/Switches will hand out addresses in the 192.168.1.100 through 192.168.1.255 range, with a subnet mask of 255.255.255.0 (depending on the manufacturer).

Home routers and switches vary in how they hand out addresses. Consult the owner's manual for your particular device if you have any questions. Typically, you select a starting address and then a number of addresses to make available to networked computers. These settings will be dependent on your home network, but for the normal home, try setting the router/switch to make:

30 IP addresses available
Starting with 192.168.0.201
Using a subnet mask of 255.255.255.0

NOTE: The following are some manufacturer's factory defaults:

BELKIN 192.168.2.1 (100 - 255)
LINKSYS 192.168.1.1 (100 - 255)
DLINK 192.168.0.1 (100 - 255)
NETGEAR 192.168.1.1 (100-255)

3. Save your settings and exit out of your router/switch.