The IP-Based Distributed Entertainment Company.

Products Included:

DigiLinX

DIGILINX™ Technical Bulletin

Top *DigiLinX* Solutions

This technical bulletin provides information on the most common *DigiLinX* technical support calls. These include:

Devices Not Displaying During Auto Discovery

Reason

The network interface card (NIC) has not been assigned in the *DigiLinX* Dealer Setup Program. When a new version of *DigiLinX* Dealer Setup is installed, the previous NIC settings are overwritten with a new default.

Solution

1. From the *DigiLinX* Dealer Setup Program, select **Edit>Preferences**.
2. From the **Choose Adapter** dropdown list, select the hard-wired NIC.
3. Ensure the **Use AutoIP** box is checked.
4. Select **Apply All Changes**.
5. Close and re-open the *DigiLinX* Dealer Setup Program.
   Devices should now appear in the auto discovery field.

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Unable to Make Socket Connection

This error message displays when sending configuration to devices and the NIC card is not assigned properly.

Reason

The NIC is using the wrong IP address or there is an IP overlap. For networked devices to recognize each other, they must all be in the same IP range.

Solution

1. Ensure the wireless NIC, firewalls and security are disabled.
2. Ensure all devices are connected directly to the *SwitchLinX*™.
3. From the *DigiLin*X Dealer Setup Program, select **Edit>Preferences**.
4. Ensure that **AutoIP** is checked. If it isn't checked, select the checkbox to check the option.
5. Select **Apply All Changes**.
6. Close and re-open the *DigiLin*X Dealer Setup Program.

Inability to Control *DigiLin*X Using the Web Interface

The customer cannot control *DigiLin*X from their home computer, PDA, or web tablet.

Reason

The *DigiLin*X IP range is not set correctly.

IMPORTANT! *DigiLin*X devices are not DHCP devices. IP addresses for *DigiLin*X products are AutoIP. Their address is derived from a hex to decimal conversion of the last two values of the MAC address (see step 2 below).

Solution

Devices have a default IP range of 10.15.0.1 to 10.15.255.255; whereas, most home networking routers will be in the 192.168.x.x range. If your home network has a different IP addressing scheme, complete the following steps:

1. See *DigiLin*X Application Note 030022 in the Dealer Documents section of the *NetStreams* web site (www.net-streams.com) to determine the IP address range.
2. See the *DigiLin*X Application Note titled *Configuring Multiple SwitchLinX* in the Dealer Documents section of the *NetStreams* web site (www.netstreams.com) to convert hex to decimal IP values.
3. Open the *DigiLin*X Dealer Setup Program.
4. From the left window pane, select **System-Audio Distribution**.
5. Select **Show Advanced Options**.
6. In the System IP Address Range field, enter the correct IP address range.

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7. Select **Apply All Changes**.
   You are prompted that changes have been made to system information.
8. Select **OK** to accept the changes.
9. Close and re-open the *DigiLin*X Dealer Setup Program.

No Sources Display on the *TouchLin*X

Reason

Dynamic menuing means that the sources are updated automatically on the *TouchLin*X. This may take awhile. To circumvent the wait, you can add them manually.

Solution

1. Open the *DigiLin*X Dealer Setup Program.
2. Ensure the project is open.
3. From the left window pane, highlight a *TouchLin*X.
4. Select the **User Interface** tab.
5. From the Static Menus dropdown list, select **Sources**.
6. Select **Edit**.
   Available sources display on the left and the sources that will be displayed on the *TouchLin*X are on the right.
7. Select **Add All**.
   This moves any sources from the left (available) to the right (displayed) part of the screen.
8. Select **Copy Menu to Other Rooms**.
   A dialog box displays.
9. Select **Select All**.
10. Select **OK**.
    All sources are available to all rooms.
11. Select **Apply**.
12. Repeat the process for each *TouchLin*X and each *SpeakerLin*X™ that are not associated with the same room name.
13. Save the project.
14. Wait until all required devices are programmed using these procedures, then send the configuration using the Send Configuration button ().

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Cannot See Rooms from *TouchLin*X

Dynamic menuing means that the rooms are updated automatically on the *TouchLin*X. This may take awhile. To circumvent the wait, you can add them manually.

Solution

1. Open the *DigiLin*X Dealer Setup Program.
2. Ensure the project is open.
3. From the left window pane, highlight a *SpeakerLin*X.
4. Select the **Audio** tab.
5. From the Static Menus dropdown list, select **Rooms**.
6. Select **Edit**.
   Available sources display on the left and the sources that will be displayed on the *TouchLin*X are on the right.
7. Select **Add All**.
   This moves any sources from the left (available) to the right (displayed) part of the screen.
8. Select **Copy Menu to Other Rooms**.
   A dialog box displays.
9. Select **Select All**.
10. Select **OK**.
    All sources are available to all rooms.
11. Select **Apply**.
12. Repeat the process for each *TouchLin*X and each *SpeakerLin*X that are not associated with the same room name.
13. Wait until all required devices are programmed using these procedures, then send the configuration using the Send Configuration button ().

Multi-Room Not Enabled

Reason

Multi-Room is not enabled by default in the *DigiLin*X Dealer Setup Program.

Solution

1. Open the *DigiLin*X Dealer Setup Program.
2. Ensure the project is open.
3. From the left window pane, highlight a *SpeakerLin*X.
4. Select the **Audio** tab.
5. From the Static Menus dropdown list, select **Multi-Room**.

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NOTE: The **Rooms** selection in the dropdown list in Static Menus can be used to restrict browser access to specified *TouchLin*X' or *SpeakerLin*X'. You can also restrict access to sources from specific *TouchLin*X' or *SpeakerLin*X' by selecting **Sources**.

6. Select **Edit**.
   Available sources display on the left and the sources that will be displayed on the *TouchLin*X are on the right.
7. Select **Add All**.
   This moves any sources from the left (available) to the right (displayed) part of the screen.
8. Select **Copy Menu to Other Rooms**.
   A dialog box displays.
9. Select **Select All**.
10. Select **OK**.
    All sources are available to all rooms.
11. Select **Apply**.
12. Repeat the process for each *TouchLin*X and each *SpeakerLin*X that does not have a *TouchLin*X associated with it.
13. Wait until all required devices are programmed using these procedures, then send the configuration using the Send Configuration button ().

System Running Slowly

Reason

Possible reasons include:

- Wiring is not installed according to IEEE 802.3 networking standards.
- There may be non-maintained twist ratios that will cause slow packet transmission.
- There could be bends, nicks, shorts, or stretches of the wire.
- There may be too many devices connected through the switch on the *TouchLin*X. The *TouchLin*X switch is non-managed non-IGMP. Too many connections cause data collision and packet loss. This causes the devices send and resend information until they receive a valid packet.
- If a *SpeakerLin*X connected through a *TouchLin*X is hosting a stream and playing a stream at the same time, the data transmission through that device has just quadrupled.

Solution

Possible solutions include:

- Purchase a Test-Um® Validator NT950 or similar network certification device to ensure the wiring is sound and performing at maximum capability. This also reduces calls and returns to the job.

NOTE: Do not buy an inexpensive continuity tester.

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- If you run devices through the *TouchLin*X, assign the streams for media servers, that exclude that device from hosting a stream.

NOTE: Do not host streams on devices that are connected to a *TouchLin*X.

Media Server Presets Not Assigned

Reason

The media server is programmed with incorrect syntax.

Solution

To use the media server presets you first have to identify a few things. Keep in mind that the presets are stream specific. This means that there are a number of presets for each individual stream.

1. You need to know:
   - which device is hosting which stream.
     - Open the *DigiLin*X Dealer Setup Program.
     - Open the project.
     - Select the media server on the left.
     - Select the **Streams** tab.
     - Note the proxy device of each stream.
   - exact syntax of a playlist, artist, etc.
2. Program the presets for stream.
   - Open the *DigiLin*X Dealer Setup Program.
   - Open the project.
   - Select the device hosting the stream on the left.
   - Select the **Stream** tab.

     The presets display at the bottom of the page.
   - Label the preset button accordingly.

NOTE: For example, if you have a playlist called “Rock” on your server, label that button “Rock.”

   - Select where that playlist is located.

NOTE: In this example, it’s under “Playlists.”

   - Select playlist from the dropdown list.
3. Enter the exact name of that playlist into the **Details** column.

NOTE: The exact syntax must be used.

4. Send the configuration to the devices.

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Intercom Not Enabled

Reason

The intercom feature is not enabled by default. You must enable the intercom in *DigiLin*X Dealer Setup for IP to be active.

Solution

1. Open the *DigiLin*X Dealer Setup Program.
2. Ensure the project is open.
3. From the left window pane, select **Intercom**.
4. Select the **Show Advanced Options** button.
5. Select **Enable Intercom for All Rooms**.
6. Select **Apply**.
7. Select the **Send Configuration** icon () to send the configuration to all devices.

Poor Sound Quality

Reason

There may be several reasons why the sound quality is poor:

- The *SpeakerLin*X model in use may not offer maximum amplification,
- the impedance of the speakers may not match the *SpeakerLin*X,
- the equalizer in the SL250 is adjusted improperly,
- low quality speakers,
- low quality input (such as MP3).

Solution

- The SL250 (which has a 2 x 50 Watt IP-Based amplifier) offers higher amplification than the SL220 (which has a 2 x 20 Watt IP-Based amplifier),
- Ensure that the impedance of the *SpeakerLin*X is matched to that of the speakers.
- Some speakers use four ohm impedance. Most manufacturers use eight ohm impedence. Speaker impedance matching can be configured by:
  - Open the *DigiLin*X Dealer Setup Program.
  - Open the project.
  - Select the *SpeakerLin*X on the left.
  - Select the **Audio** tab.
  - Select the proper impedance.

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NOTE: If there is more than one pair of speakers (two in parallel per channel), the impedance will usually need to be set at four ohms.

- ❒ Select **Apply**.
- ❒ Send the configuration to the device.

- ❍ The equalizer in the SL250 can be adjusted improperly. For example, the 80Hz and 300 Hz may be up too high for a 6-inch, 10 ounce cone speaker. Use a subwoofer rather than turning up the bass until it distorts.
- ❍ Purchase high quality speakers.
- ❍ Though MP3 may sound ok over earbud headphones, the difference in quality becomes markedly different over high-quality speakers. Visit *NetStreams*' website at http://www.netstreams.com/demos.aspx for a demonstration in sound quality difference.

Problems of Unspecified Origin

Reason

Unknown.

Solution

Run the Design Rules Check function to validate the network.

To run the Design Rules Check function, complete the following steps:

1. Open the *DigiLin*X Dealer Setup Program.
2. With the project open, select **Tools>Design Rules Check**.
   A popup window displays showing any errors in your project file (see Figure 1).

NOTE: This example shows a duplicate service name error and an IP addressing problem.

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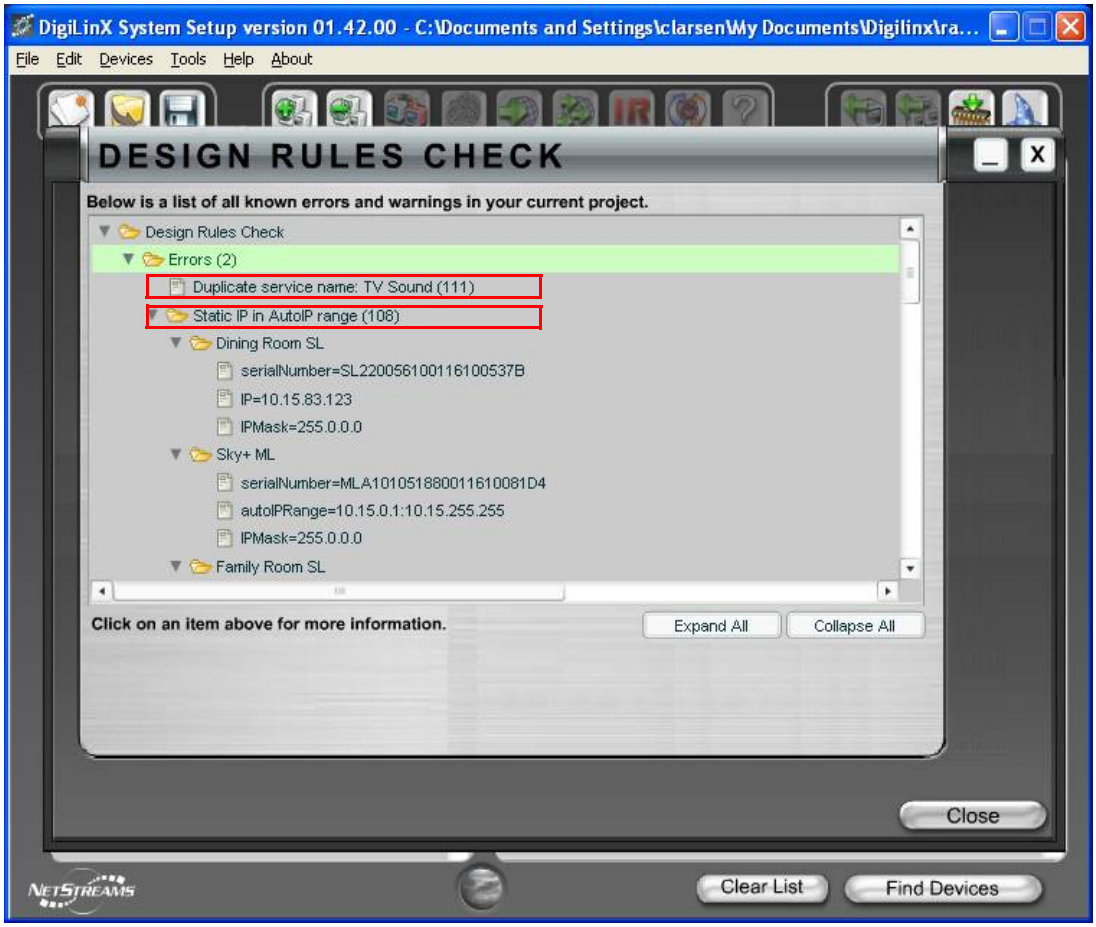

Figure 1 Design Rules Results Screen

3. Note and fix any issues.
4. Rerun the Design Rules Check function until you have cleared all errors.

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