

DIGILINX™ Application Note

The
IP-Based
Distributed
Entertainment
Company.

KeyLinX™ Programming and Operation

Products Included:

KeyLinX

How a KeyLinX Works

When designing a Multi-Room Audio Distribution and Control system, each room has its own specific requirements. Heavily used rooms like the kitchen or the living rooms need interface devices that are visually interesting and provide an extensive array of features. However, some rooms may only require basic controls for that room. The *KeyLinX* easily meets this requirement, by providing a basic 10-button control interface to that room.

KeyLinX provides a way of controlling the audio in a room using a 10-button keypad.

The keypad allows you to:

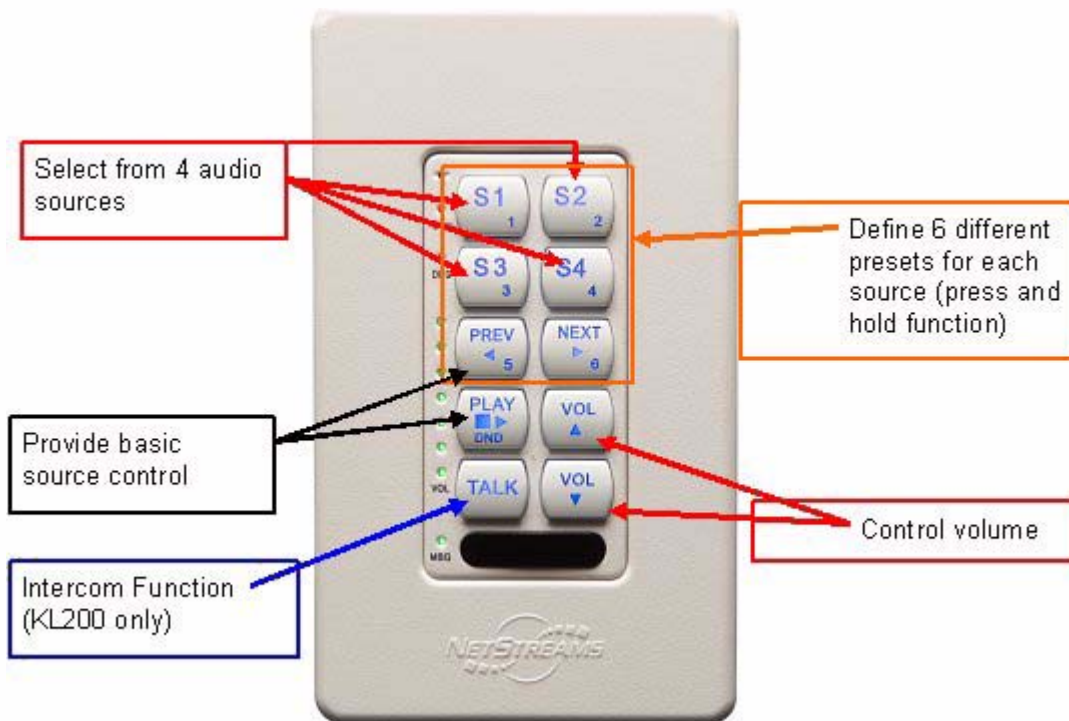


Figure 1



Wiring for a *KeyLinX* Installation

When you wire for a *KeyLinX*, you need to run a CAT5 cable (terminated using the 568a standard) from the EIM port on the *SpeakerLinX*[™] to the *SpeakerLinX* jack on the EIM splitter. Run another CAT5 cable from the *KeyLinX* jack to the EIM IN port on the *KeyLinX*.

If you choose to install an Audio Port or an MU290 power amplifier in that room, the EIM splitter provides a second port for the cable going to the Audio Port.

NOTE: Always install the EIM splitter, regardless of whether an Audio Port or MU290 is installed.

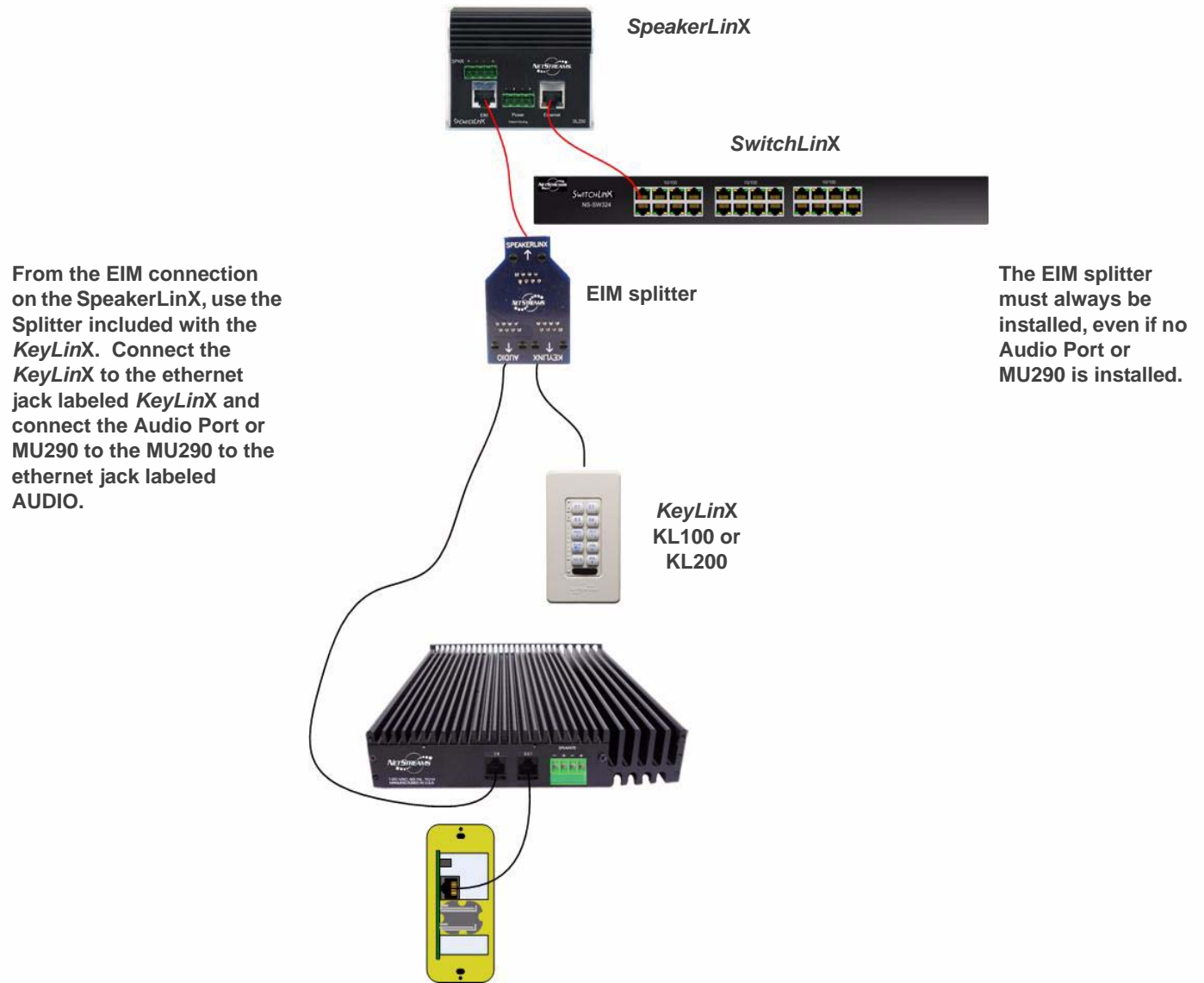


Figure 2

Configuring a *KeyLinX* in the *DigiLinX* Dealer Setup Program

Configuring a *KeyLinX* is a two part process. The *KeyLinX* itself has options that must be configured in the *SpeakerLinX*. The other part of the process is configuring the presets and controls for the source. For each source or stream, the presets must be defined within the device supporting that source or stream (i.e., the *MediaLinX*TM or *SpeakerLinX*).

Setting Sources and Options in the *KeyLinX* Tab

The *KeyLinX* has several definable features that are configured in Dealer Setup. Because the *KeyLinX* is an extension of the *SpeakerLinX*, these features are set on the *KeyLinX* tab in the *SpeakerLinX* device in *DigiLinX* Dealer Setup.

From this tab you can set:

- **Model Number:** Which type of *KeyLinX* being installed. The KL100 or the KL200.
- **Active Button Intensity:** A slider that allows you to set the brightness of the buttons when the keypad is being used.
- **Inactive Button Intensity:** A slider that allows you to set the brightness of the button after the keypad has been inactive for a specified period of time.
- **Inactivity Timeout:** sets how long the *KeyLinX* must remain inactive before changing the brightness to the Inactive Button Intensity levels.
- **Backlight LED:** option to permanently disable the backlight on the buttons.
- **Service Name:** this is an identifier used by *DigiLinX* to reference the *KeyLinX*.
- ***KeyLinX* Source Button:** determines which *KeyLinX* source button is assigned to which source. A source can be a local source, *MediaLinX*, or an individual stream.

Run the Design Rules Check function and save the project file.

Once the settings are made click the **Apply** button and send the configuration to the *SpeakerLinX*.



Figure 3

Configuring the Source to work with the *KeyLinX*

A *KeyLinX* allows you to control the source by using control buttons or by using presets. What each button does is dependent on the source that is selected for playback. Here is a general overview of how to configure the buttons for each of these sources or streams:

Configuring a *KeyLinX* for a Tuner:

When a *KeyLinX* is used to control a tuner:

- **Buttons 1-6** are assigned to the presets configured in the *MediaLinX*. By pressing and holding the buttons down the presets are executed. You can release the key when the keypad blinks.
- **PREV** and **NEXT** are special buttons that can be defined as any IR command. During the IR learning process, select the **PREV** and the **NEXT** commands and teach them any IR command. Typically, tuners are taught PRESET UP and PRESET Down.
- **Volume UP** and **DOWN** adjusts the volume for that room

The presets are defined in the *MediaLinX* on the Source tab.

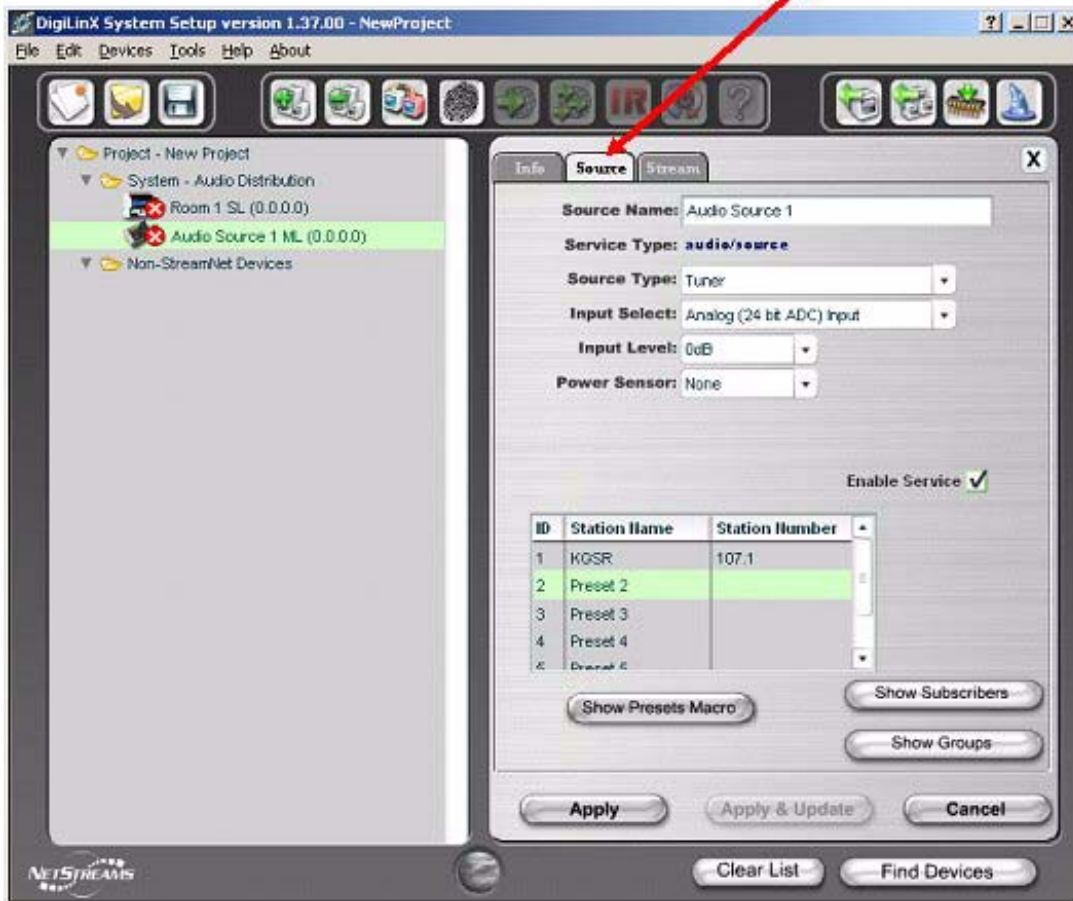


Figure 4

Configuring a *KeyLinX* for a CD Player

- When a *MediaLinX* is defined as a CD Player, the **PLAY**, the **PREV** (button 5), and the **NEXT** (button 6) are used to control the CD player.
- The **PLAY** button toggles between the IR command **PLAY** and **PAUSE**. These IR commands will need to be learned into the *MediaLinX*.
- **PREV** and **NEXT** are special buttons that can be defined as any IR command. During the IR learning process, select the **PREV** and the **NEXT** commands and teach them any IR command. Typically, the IR codes for Next Track and Previous Track are used.

Configuring a *KeyLinX* for an XM[®] Tuner

XM tuners work very much like a regular tuner.

- **Buttons 1-6** are assigned to the presets configured in the *MediaLinX*. By pressing and holding the buttons down, the presets are executed. You can release the key when the keypad blinks.
- The **PLAY** button is not used by the tuner.

- PREV and NEXT are already defined as Channel Up and Channel Down.
- Volume Up and Down adjusts the volume for that room.

The presets are defined in the *MediaLinX* on the Source tab



Figure 5

Configuring a *KeyLinX* for Stream from a Compatible Digital Audio Server

Compatible digital audio servers send the audio via streams. Each Source button on a *KeyLinX* can be defined to a specific stream, and each stream can be configured to execute 6 different presets. For example, Joe's Stream can be assigned to the button Source 1 on the Living Room *KeyLinX*. When Source 1 is active on the *KeyLinX*, Preset 1 can be used to start playing a particular play list, preset 2 can play a specific genre and presets 3 through 6 can each have their own specific functions all defined to that particular stream.

To configure the presets for a particular stream, you will need to locate the device hosting that stream. This will be either a *MediaLinX* or a *SpeakerLinX*. The easiest way to determine the hosting device is to open the **Streams** tab on the media server and look it up in the table.

NOTE: Make sure you assign the streams for the media server. The easiest way is to select the media server and in the Streams tab, click on the **Auto Assign** button.



Figure 6

Then go to the device hosting the stream you want as a source for your *KeyLinX* and select the Streams tab. The Presets for this stream can be built in the table at the bottom of the Streams tab page.



Figure 7

When a stream is selected for playback on the *KeyLinX*, the buttons on the *KeyLinX* control have the following function:

- **Buttons 1-6** are assigned to the presets configured in the *MediaLinX* or *SpeakerLinX*. The presets are executed by pressing and holding the buttons down. You can release the key when the keypad blinks.
- The **PLAY** button is a toggle button between the command **PLAY** and **PAUSE**.
- **PREV** and **NEXT** are used to go to the NEXT or PREVIOUS song within that category (i.e. the next song in that Genre or in the playlist).
- **Volume Up** and **Down** adjusts the volume for that room



Figure 8