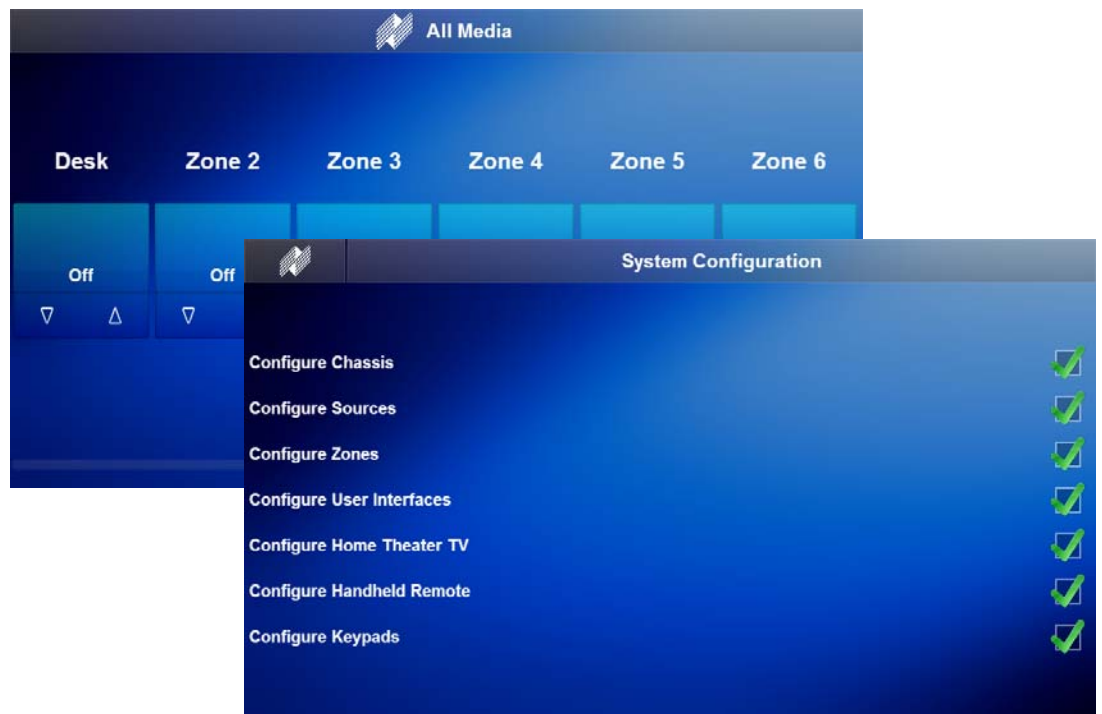




Auriel

Training Guide

Version 1.4



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Your Resources at Niles

In addition to the information in this Training Guide, be sure to check out Niles's website at www.nilesaudio.com/aurielsupport. The website provides access to a wealth of documentation including training videos.

Our **Technical Support** staff can assist you Monday through Friday from 9:00 a.m. to 7:00 p.m. EST and 6:00 a.m. to 4 p.m. Pacific at **800-289-4434**.

Email: support@nilesaudio.com

Lesson 1

Training Setup



Overview

This lesson prepares your computer for the programming the MRC-6430 as detailed in the lessons to follow.

You will:

- Install the Niles Auriel Software, which allows you to View and Configure your customers system.
- Check the installation of the Niles Auriel Software.

Requirements

- A computer - Windows® or MAC based

OR

- A iOS/Android tablet with a 7" or larger screen

(The software may be found at www.nilesaudio.com/aurielsupport, the iTunes App Store, or the Android Market Place)

Exercise 1: Install Auriel Software PC

Overview The Auriel Software is a valuable resource for the dealer setting up a Niles MRC-6430.

The Auriel Software allows dealers to easily and quickly configure a multi-zone audio system and a single home theater area. The Auriel Viewer allows the end user an easy and consistent user interface experience.

How-to

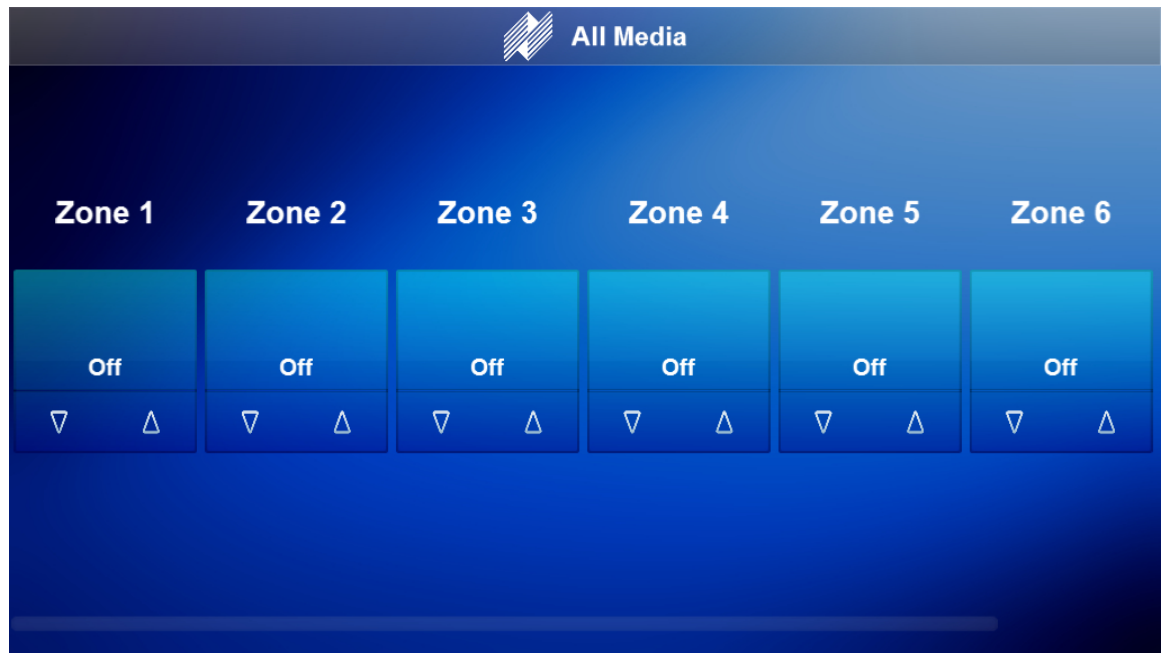
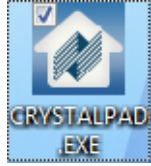
1. Navigate to www.nilesaudio.com/aurielsupport to download the Niles Auriel Software. Save the file to an easy to remember location on your Windows, or MAC, PC. Run the installer to begin the installation.

Note: If you are using Windows Vista/7, right-click the installer and select Run as Administrator.

2. The Auriel Software Splash Screen pops up for a moment.



3. Once the installation is complete, the Niles Auriel Viewer appears and the Auriel Icon is place on the PC's desktop.



Note: The MRC-6430 must be powered On and on the same network as the PC/Tablet running the Niles Auriel Software.

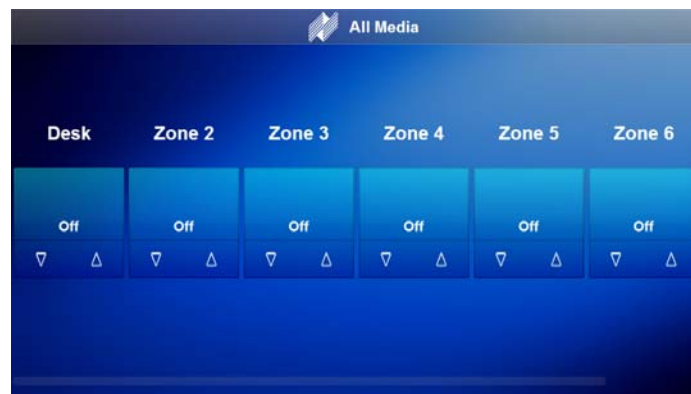
Exercise 2: Installing Auriel Software iOS/Android Device

Overview The same Auriel Software ran on PCs may also be run on iOS and Android based devices, including mobile phones.

When configuring a Niles MRC-6430 with the Auriel Software it is recommended to use a tablet device with a 7" or larger screen.

How-to

1. Go to the iTunes App Store or Android Market Place.
2. Search for Niles Auriel.
3. Download the app to your mobile device.
4. With the mobile device connected to the same network as the MRC-6430, open the Niles Auriel App to access the Auriel Viewer.



Lesson 2

System Configuration Wizard Overview



Overview

This lesson provides information on how to access the System Configuration Wizard.

In this lesson you will:

- Learn about the System Configuration Wizard
- Learn how to navigate the System Configuration Wizard
- Learn how to access the Installer Access interface.
- Learn how to verify the software and MCU version on the MRC-6430.
- Learn the Passcode needed to proceed to the System Configuration Wizard.

Requirements

- Niles MRC-6430 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running Niles Auriel software.

-or-

- Tablet running the Niles Auriel App.

About the System Configuration Wizard

Overview

The **Niles Auriel** software allows for controlling the MRC-6430 and the sources connected to the MRC-6430. The **Niles Auriel** allows control of a single home theater zone. The setup for the MRC-6430 and control of all devices is done thru the System Configuration Wizard.

The System Configuration Wizard provides a simple point and click interface to allow you to configure, or edit, items easily. Like the Auriel Viewer, the System Configuration Wizard requires an active connection to an MRC-6430 and makes real-time changes to the system. The Niles Auriel software cannot be used for off-line system configuration.

Before starting the System Configuration Wizard make sure the Project Documentation Worksheet, included in the MRC-6430 box, is filled out and nearby.

MULTI ROOM CONTROLLER

12. PROJECT DOCUMENTATION WORKSHEET

Network

DHCP-Range		Unit 1 IP Address	
Sub-Net Mask		Unit 1 MAC Address	
Gateway		NOTES	
Wireless SSID			
Passkey			

Unit 2 IP Address			
Unit 2 MAC Address			

Misc Network Device	IP Address	
Misc Network Device	IP Address	
Misc Network Device	IP Address	
Misc Network Device	IP Address	
Misc Network Device	IP Address	

Sources	Name
1	
2	
3	
4	
5	
6	

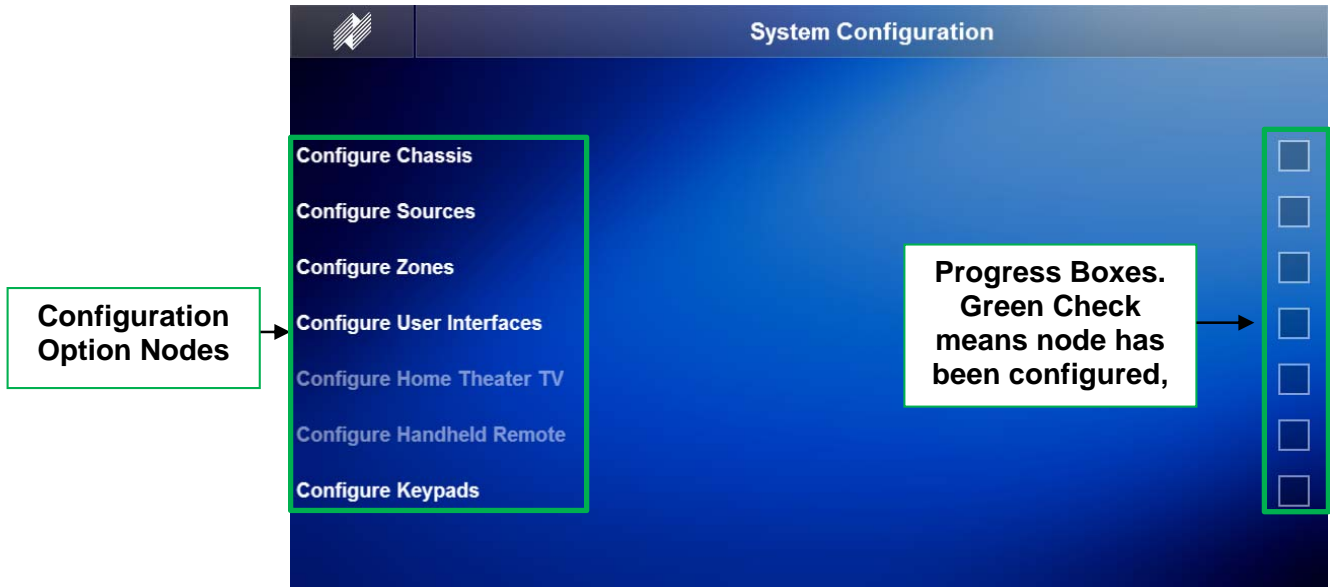
PRIMARY CHASIS		SECONDARY CHASIS (for expansion)	
IR Outputs Unit 1	Name	IR Outputs Unit 2	Name
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	

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Navigating the Configurator

The System Configuration Wizard Main Page is comprised of two sections:

- **Configure Option Nodes:** These options pertain to specific parts of the Niles system and allow for step-by-step setup.
- **Progress Boxes:** These boxes are blank when a node has not been setup. After a node has been configured a **green** check mark appears in the box. This indicates that the node has been properly configured.



Configuration takes place from top to bottom. When configuring each node the information flows to the right of the screen. When you select a Configuration Option Node the Auriel Viewer display information pertinent to that node on a page-by-page basis.

Configuration Option Nodes

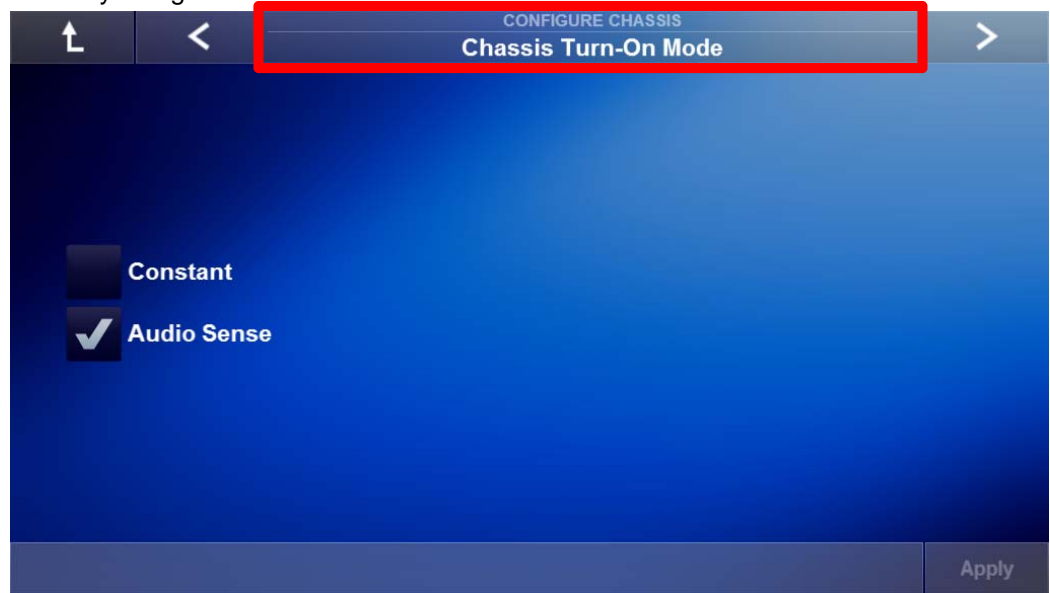
The Configuration Option Nodes on the screen are your primary navigation elements. The nodes include the following:



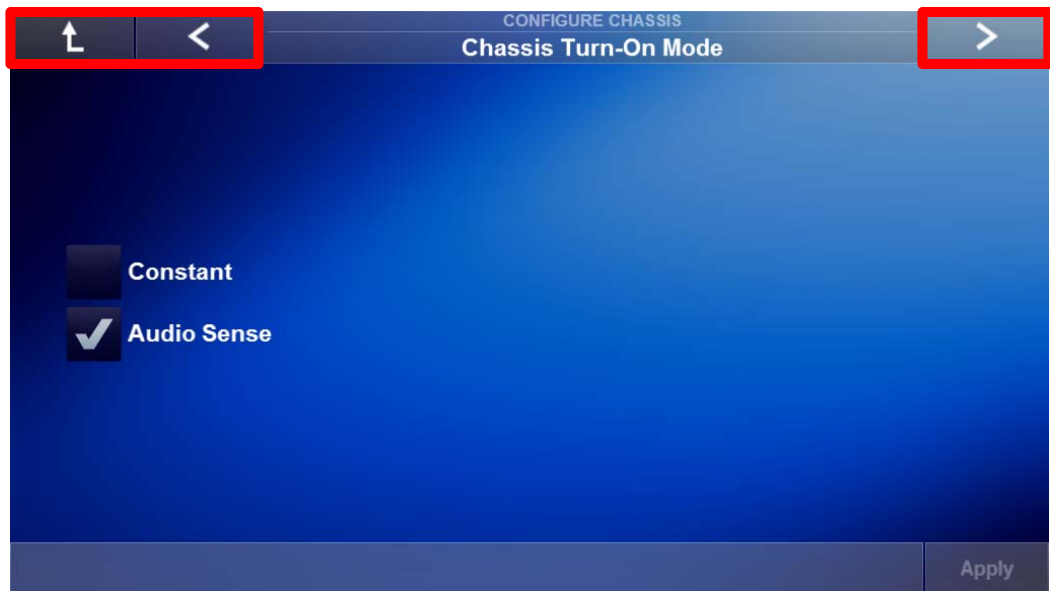
- **Configure Chassis:** includes on-mode settings, IP settings, extender settings, & home theater chassis settings. See Lesson 3, *Configure Chassis*, for more information
- **Configure Sources:** adding, removing, and configuring IP and IR Controlled source devices, including managing favorite TV channel icons. See Lesson 4, *Configure Sources*, for more information.
- **Configure Zones:** name zones, set turn on Tone settings, set Volume Defaults, and configure Whole House Mode, WHM, and Paging/Door Bell information. See Lesson 6, *Configure Zones*, for more information.
- **Configure User Interfaces:** setup each user interface for default zones and customize which zones are displayed on which user interfaces. See Lesson 7, *Configuring User Interfaces*, for more information.
- **Configure Home Theater TV:** configure a TV for control by Auriel in a Home Theater zone. See Lesson 5, *Configure a Home Theater Zone*, for more information.
- **Configure Handheld Remote:** add and setup a Niles HR200 Wi-Fi Remote Control to a home theater zone in an Auriel System. See Lessons 5, *Configure Home Theater Zone*, for more information.
- **Configure Keypads:** allows for configuring each nKP7, 7 button keypad, to control of a zone. See Lesson 8, *Configure Keypads*, for more information.

Configure Node Layout:

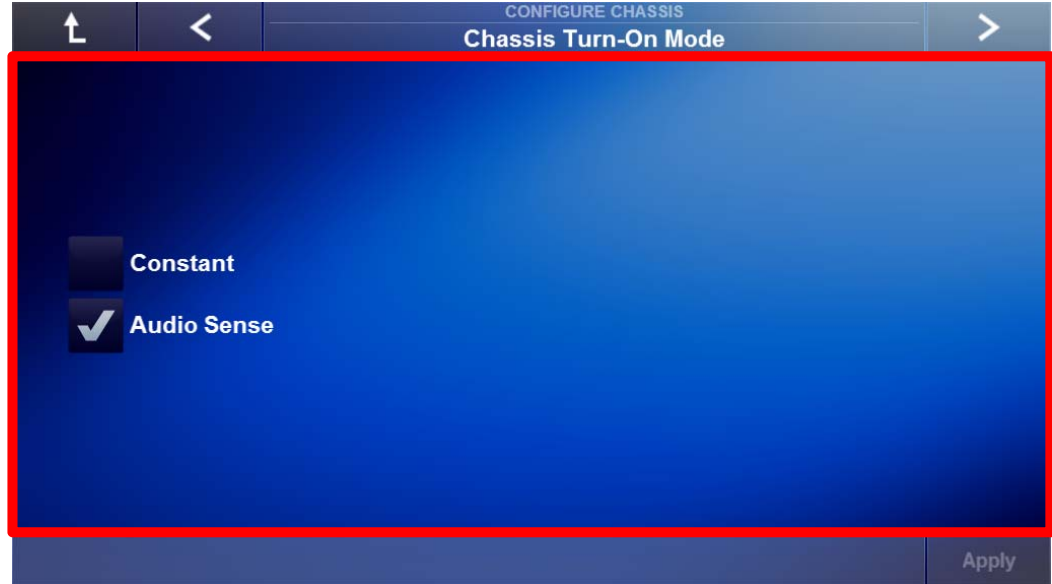
Identification: Shows which Configure Node was selected and the name of the page currently being shown.



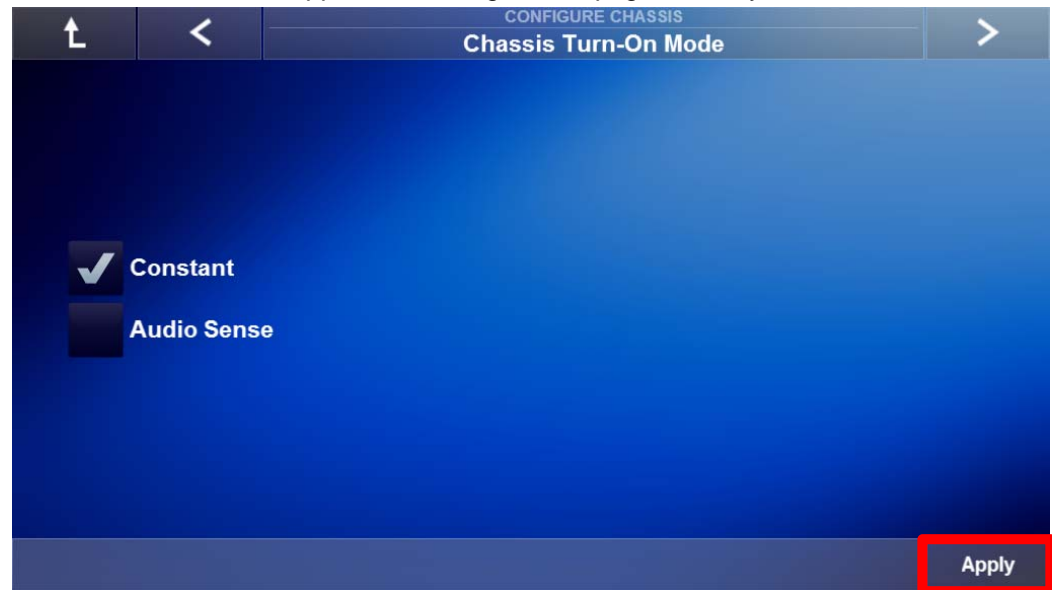
Navigation Arrows: Allows you to navigate between pages for the selected node and to return to the System Configuration Main Menu.



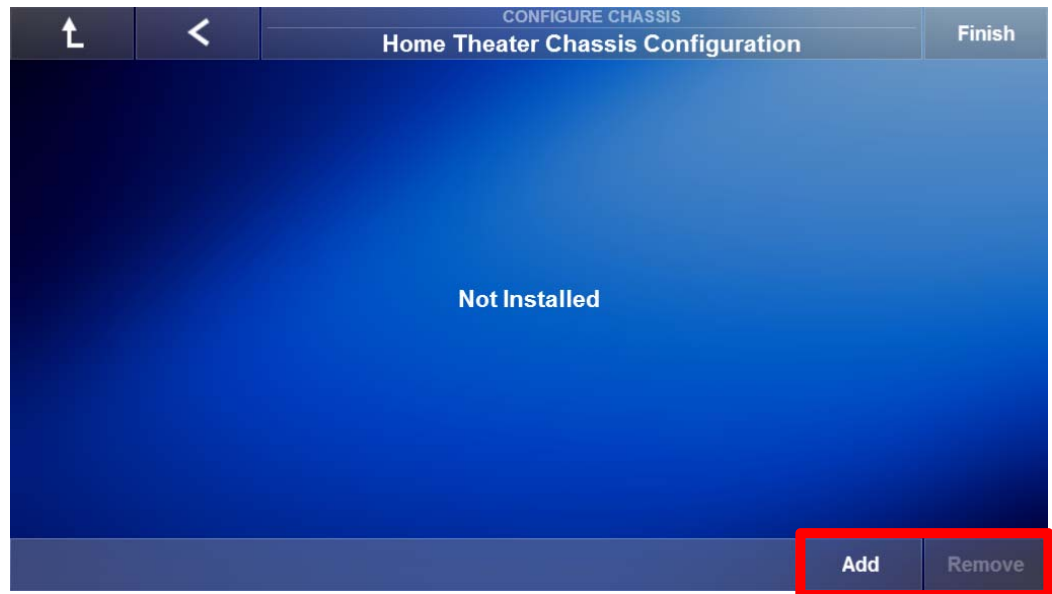
Configuration Options: This area is where the available configuration options for the selected page are displayed.



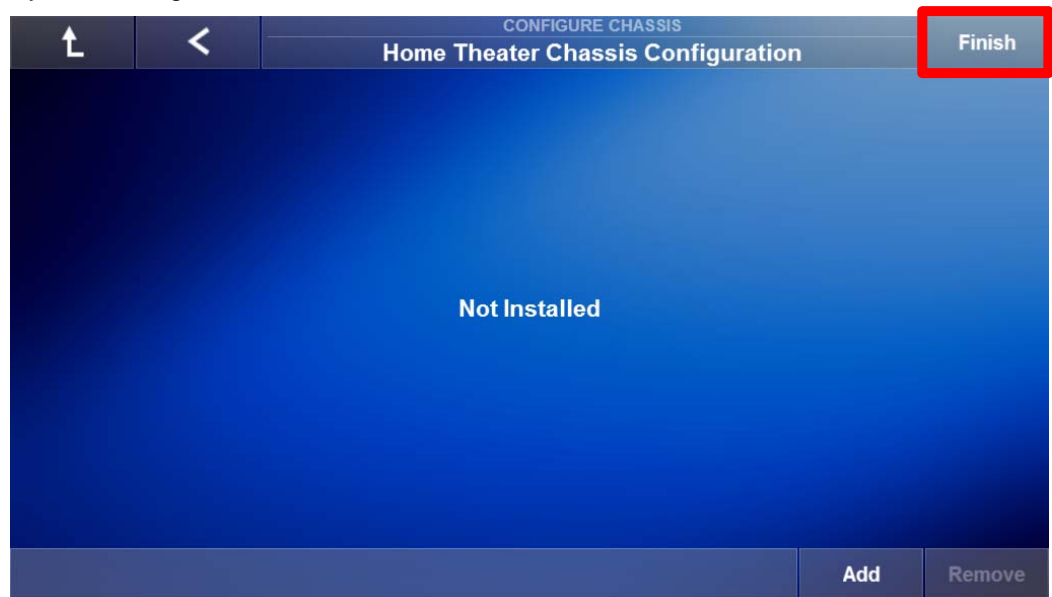
Confirmation Button: Applies the changes on a page to the system.



Add & Remove Button: Adds or removes items from the selected node. Items include, IR or IP controlled source devices.



Finish Button: Displayed when the last page of a selected node is reached. Press Finish to complete the setup of the selected node and return to the main page of System Configuration Wizard.



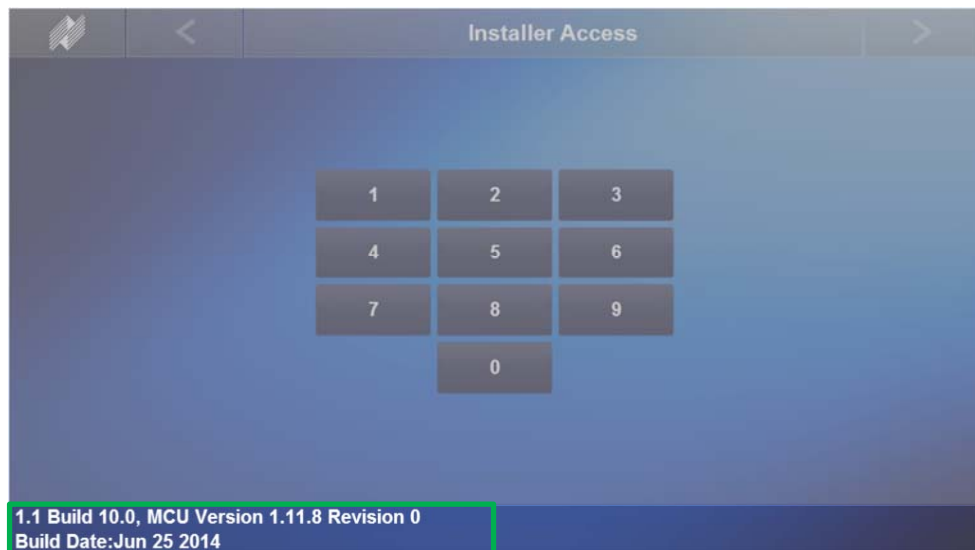
Exercise 1: Installer Access

Overview Exercise 1 demonstrates how to access the Installer Access screen.

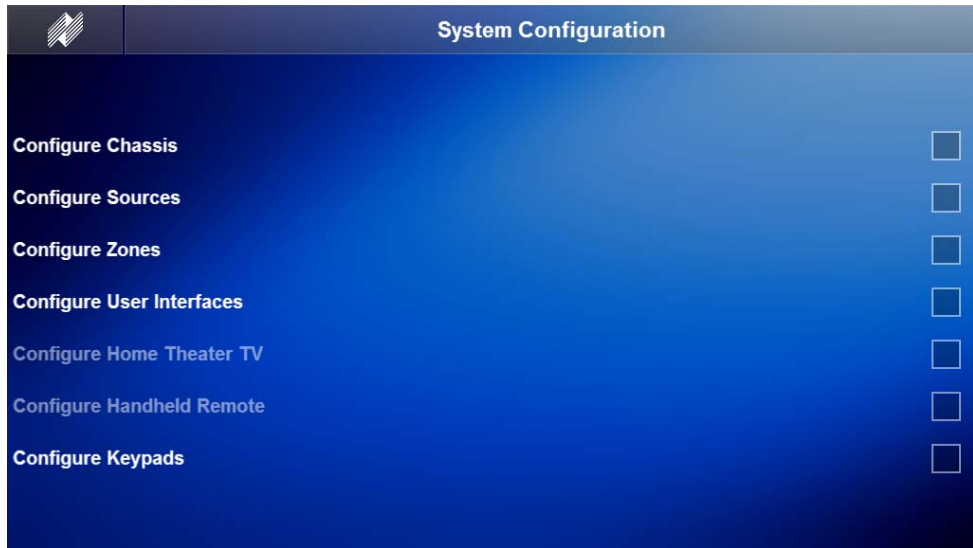
How-to 1. From the **Main Menu** (All Media page) of the Auriel Viewer, press and hold the **Menu Title Bar** for 5 seconds.



2. The **Installer Access** page appears. On the bottom left of the screen is the software version, MCU version, and build date information.



3. Enter the passcode **3 – 5 – 2 – 6** to access the System Configuration Wizard.



Note: The MRC-6430 MUST be powered on and connected to the same network as the devices being used to setup the Auriel system.

Lesson 3

Configure Chassis Node



Overview

This lesson provides an overview of how to setup the Configure Chassis node.

In this lesson you will:

- Learn about the Configure Chassis node.
- Learn about each page of the Configure Chassis node.
- Learn how to set the Turn-On Mode.

Requirements

- Niles MRC-6430 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running Niles Auriel software.

-or-

- Tablet running the Niles Auriel App.

About the Configure Chassis Node

Overview

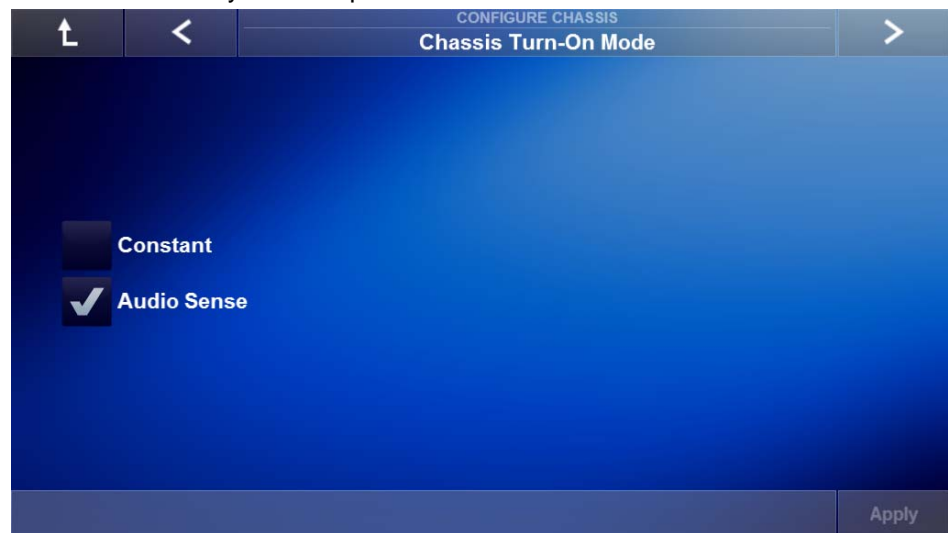
The **Configure Chassis** node sets up how the MRC-6430 behaves. This node is used to setup how the unit will remain powered on, how it will connect to a network, if it is used as an extender, and if there is a home theater receiver being controlled by the Auriel interface.

The Configure Chassis node has a simple point and click interface to allow you to make changes easily to the system. Like the Auriel Viewer, the System Configuration Wizard requires an active connection to an MRC-6430 and makes real-time changes to the system. The system cannot be used for off-line system configuration.

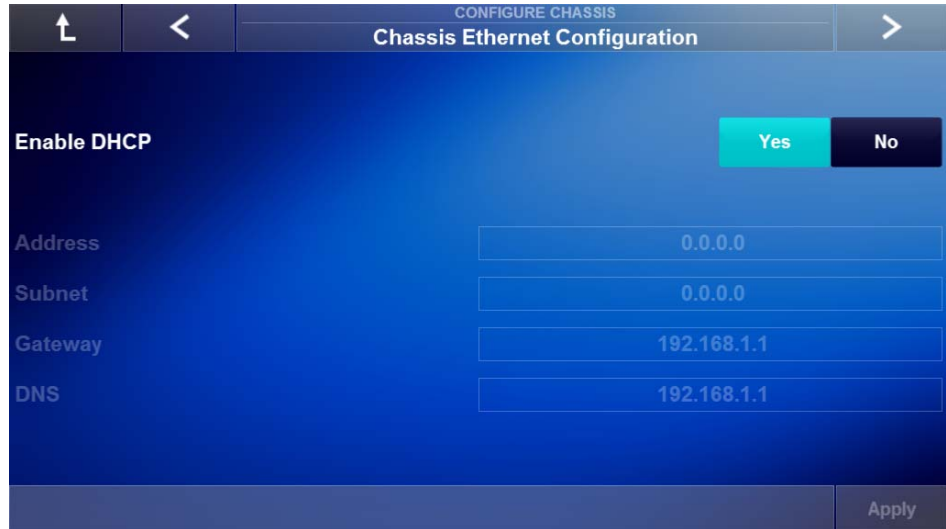
Navigating the Configure Chassis Node

The Configure Chassis node is comprised of four pages:

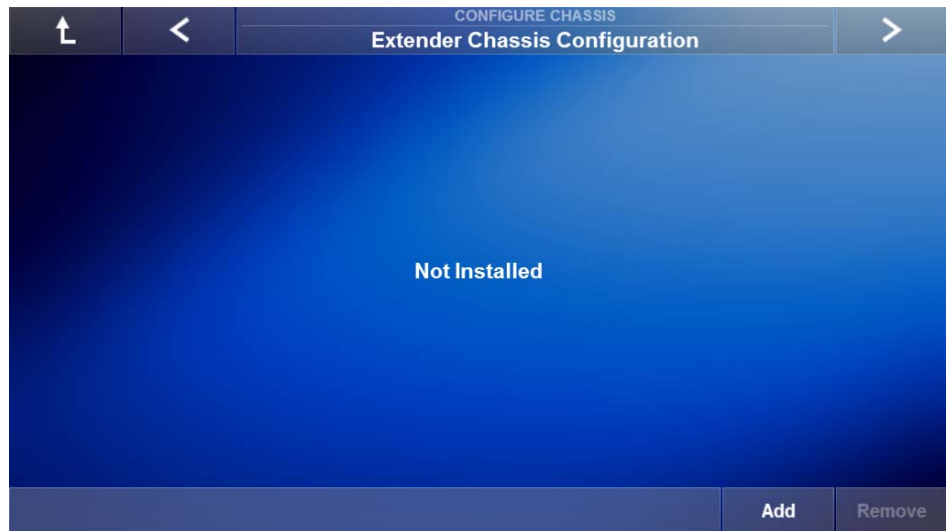
- **Chassis Turn-On Mode:** Sets how the MRC-6430 will remain powered on. The factory default is **Audio Sense**. Audio Sense means the controller will power off after 15 minutes if no audio is detected on any of the audio inputs of the MRC-6430. Niles recommends setting this to **Constant**. Constant means the controller will always remain powered on.



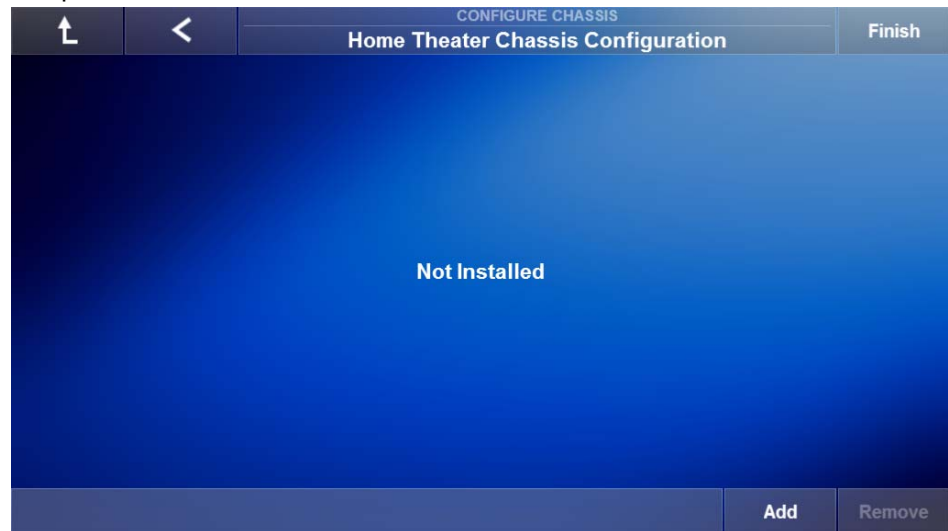
- Chassis Ethernet Configuration:** This page allows a static IP address to be assigned to the MRC-6430. A static IP address will be necessary if using the Niles HR200 Wi-Fi remote control. The factory default setting is Dynamic Host Configuration Protocol, or DHCP. DHCP means the controller will automatically pull an IP address from the DHCP server on the network, typically the DHCP server is part of the router.



- Extender Chassis Configuration:** Allows for adding a second MRC-6430 chassis to a system for adding zones 7-12. Selecting Add will scan the network for the additional MRC-6430 chassis on the network. When available select the additional MRC-6430 to place it in **Extender Mode**. Note each MRC-6430s MAC Address for identification of each chassis.



- **Home Theater Chassis Configuration:** This page allows adding of a compatible IP controllable home theater receiver. This will allow the Auriel interface to control a home theater zone. Select Add to view IP drivers for the compatible home theater receivers.

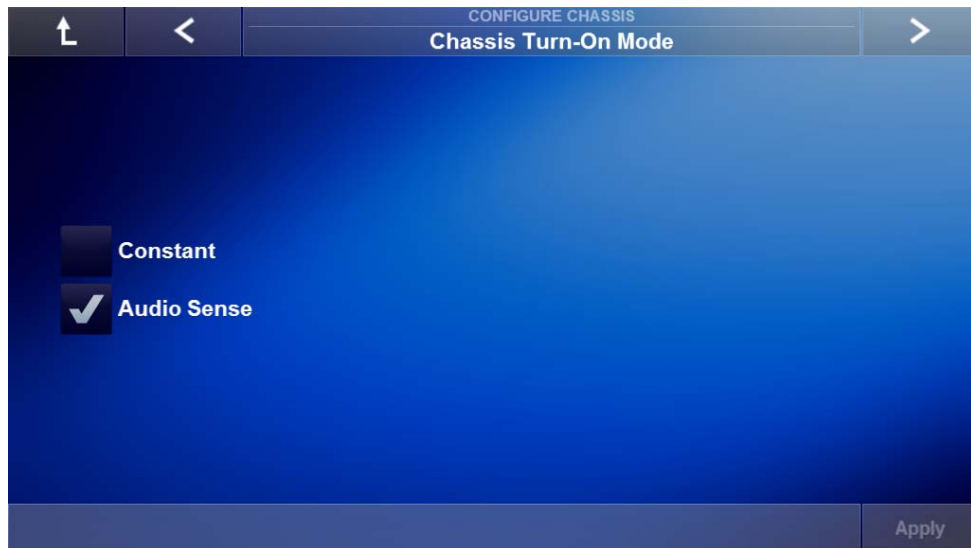


Exercise 1: Changing the Turn-On Mode

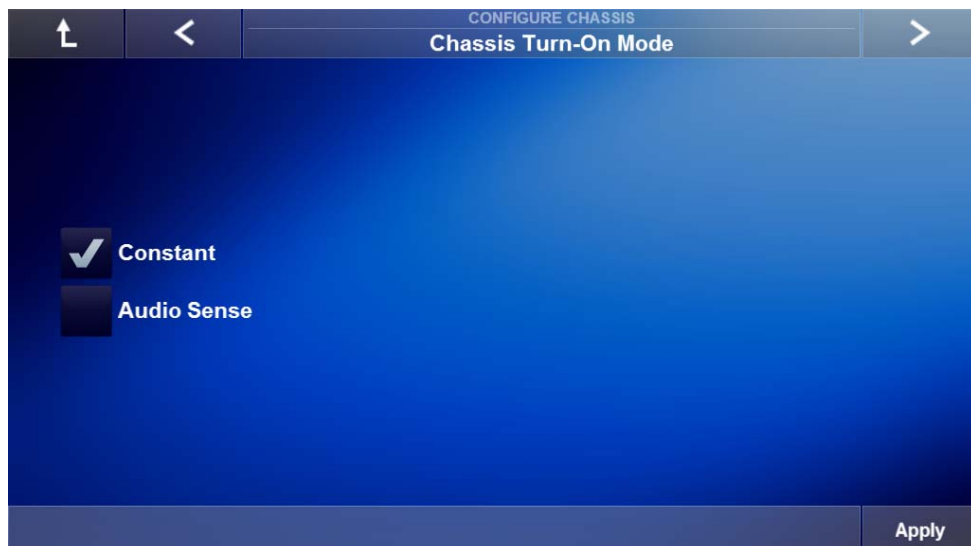
Overview Exercise 1 demonstrates how to change the chassis Turn-On mode for the MRC-6430.

How-to

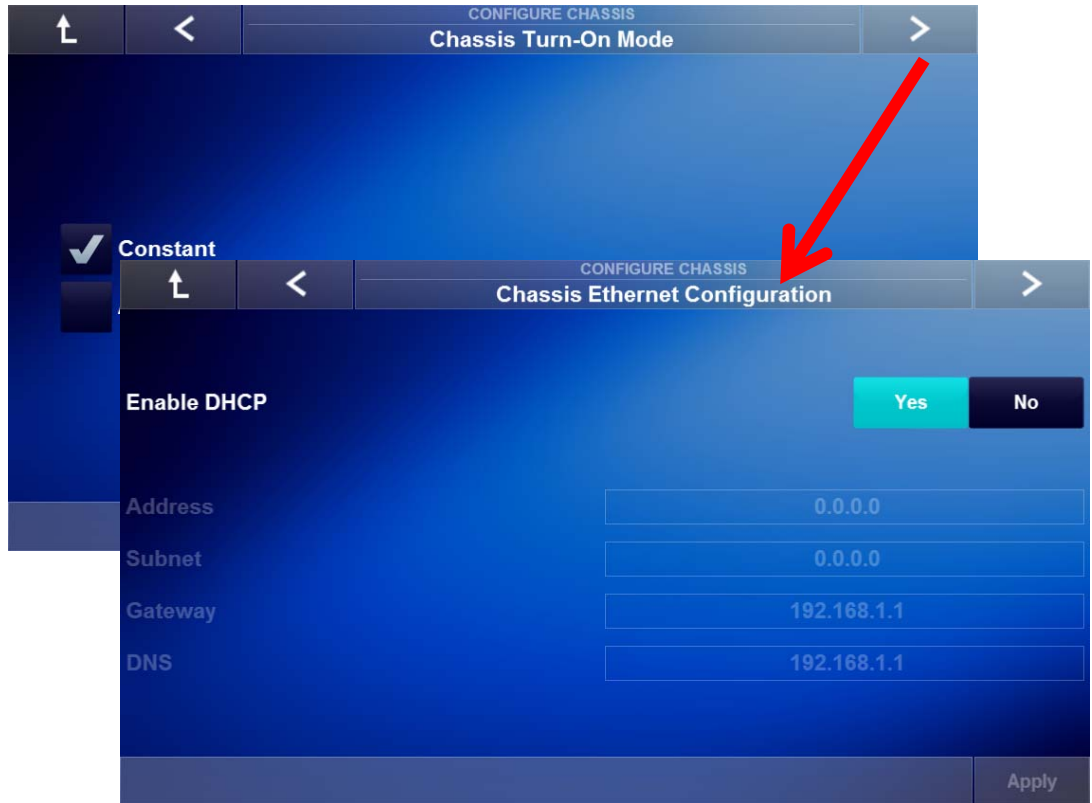
1. From the System Configuration main page, select the **Configure Chassis** node. The Chassis Turn-On Mode page will display as follows, showing the Turn-On Mode options.



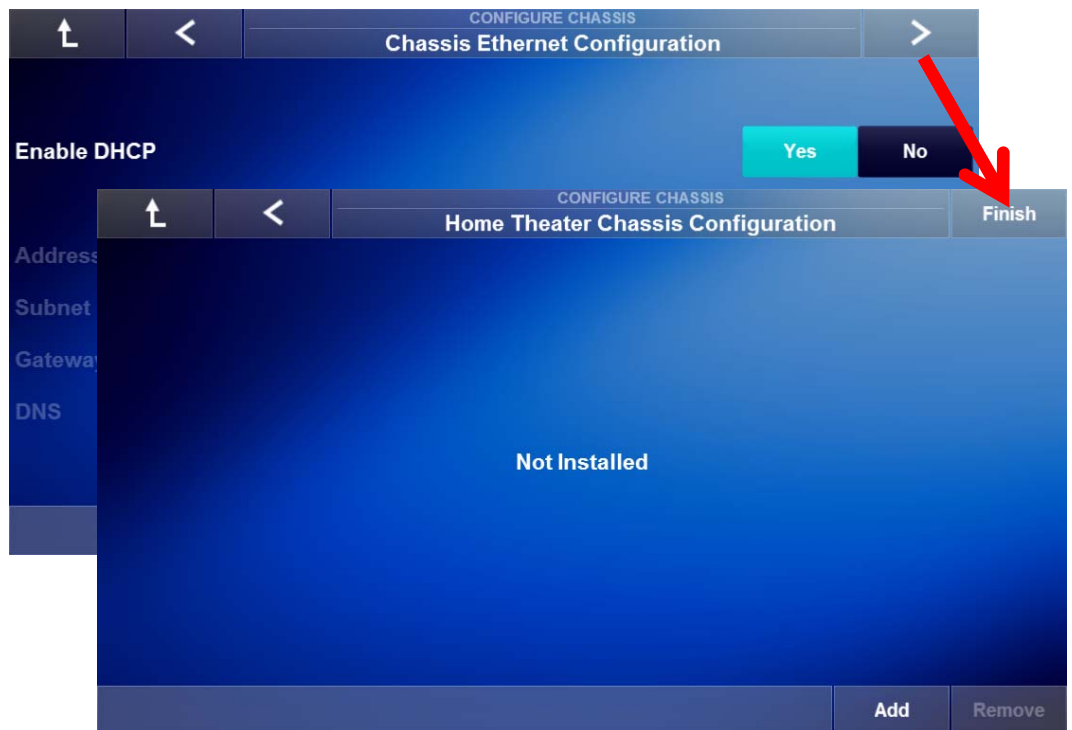
2. Select **Constant** and select **Apply** to save changes.



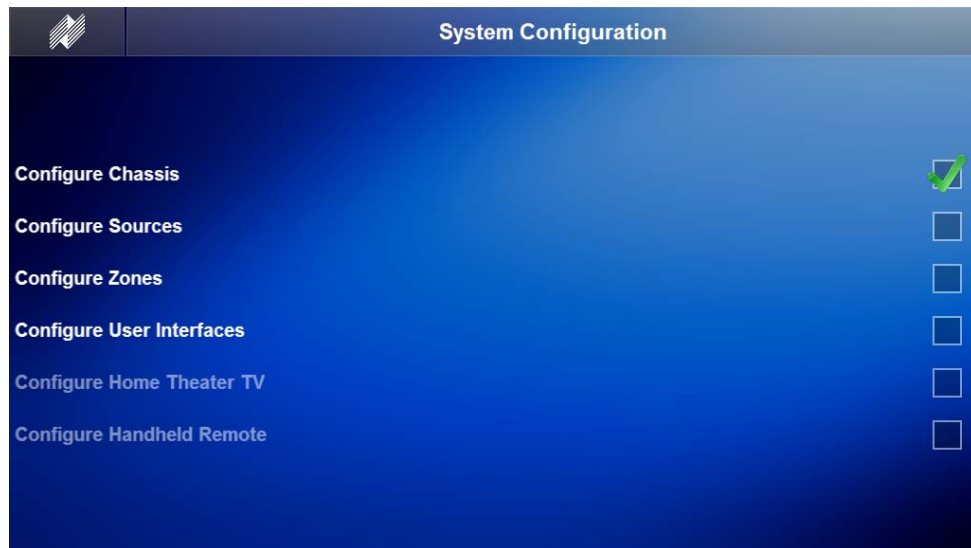
3. Select the **Right Arrow** to proceed to the next page.



4. See Exercise 2 for setting a static IP address. If setting the Chassis Turn-On mode was all that needed to be configured select the Right Arrow to advance pages until **Finish** is shown. Select Finish, to complete the Configure Chassis node.



5. Note that after you select Finish you are returned to the System Configuration Wizard main page and there is a **green check mark** in the Progress Box for the Configure Chassis node.



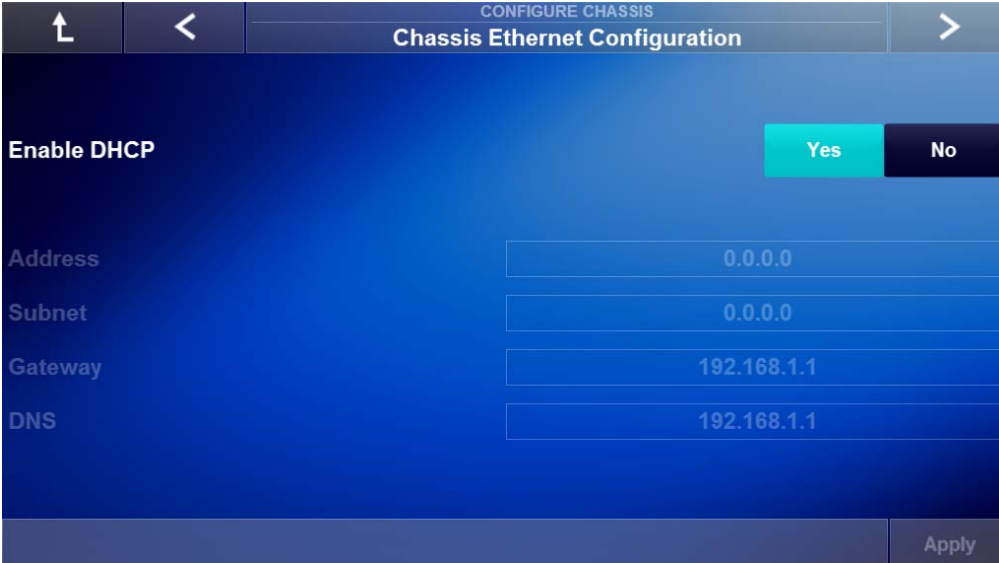
Exercise 2: Setting a Static IP Address

Overview Exercise 2 explains how assign a static IP address to the MRC-6430.

Terms The following terms are important to know for this exercise:

- **DHCP:** Dynamic Host Configuration Protocol. Allows devices to automatically receive an IP address when connected to a network from a DHCP server, typically included in the router.
- **IP Address:** A numerical label assigned to a device on a network. Since IP address numbers are unique per device, an IP address allows us to know where a specific device is located at in a network.
- **Subnet:** A portion of a network that shares a common address component. Typically, all devices with addresses that start with 192.168.0 would be part of the same subnet. A typical Class C Subnet would be 255.255.255.0. However it is important to note that some networks may use different subnets.
- **Gateway:** A node on a network that serves as an entrance to another network. In a residential installation a router is the gateway for devices on the local area network, LAN, to access the internet, or wide area network, WAN.
- **DNS:** Domain Name Server is an internet service that translates domain names into IP addresses. This may be the IP address of the router in a residential installation.

How-to 1. Access the **Chassis Ethernet Configuration** page.



The screenshot shows the 'Chassis Ethernet Configuration' page. At the top, there are navigation arrows and the title 'CONFIGURE CHASSIS Chassis Ethernet Configuration'. Below this, there is a section for 'Enable DHCP' with two buttons: 'Yes' (highlighted in red) and 'No'. Underneath, there are four input fields for configuration: 'Address' (0.0.0.0), 'Subnet' (0.0.0.0), 'Gateway' (192.168.1.1), and 'DNS' (192.168.1.1). At the bottom right, there is an 'Apply' button.

2. Click on **No** to assign a static IP address to the MRC-6430.

The screenshot shows the 'Chassis Ethernet Configuration' screen. At the top, there are navigation arrows and the title 'CONFIGURE CHASSIS Chassis Ethernet Configuration'. Below this, the 'Enable DHCP' section has two buttons: 'Yes' (black) and 'No' (cyan), with 'No' selected. Underneath, there are four input fields: 'Address' (0.0.0.0), 'Subnet' (0.0.0.0), 'Gateway' (192.168.1.1), and 'DNS' (192.168.1.1). At the bottom right, there is an 'Apply' button.

Note: All fields must be filled out with the correct network information or you may have to perform a DHCP Reset on the MRC-6430.

3. Enter the desired IP address into the **Address** field.

Note: Ensure that the IP address entered does not conflict with the IP addresses available in the DHCP range. If the IP Address field is filled out with incorrect network information you may have to perform a DHCP Reset on the MRC-6430.

4. Enter the desired address into the **Subnet** field.

Note: Ensure that the subnet address entered matches the subnet structure being used. If the Subnet field is filled out with incorrect network information you may have to perform a DHCP Reset on the MRC-6430.

- The **Gateway** and **DNS** fields should populate with the IP address of the router being used on the network. When finished assigning a static IP address to the MRC-6430 your screen should look similar to this.

CONFIGURE CHASSIS
Chassis Ethernet Configuration

Enable DHCP

Address 192.168.1.18

Subnet 255.255.255.0

Gateway 192.168.1.1

DNS 192.168.1.1

- Select Apply to save the changes to the MRC-6430.
- Select the **Right Arrow** to advance to the next page, or until **Finish** is shown. Select Finish, to complete the Configure Chassis node and return to the System Configuration Wizard main page.

CONFIGURE CHASSIS
Chassis Ethernet Configuration

Enable DHCP

Address

Subnet

Gateway

DNS

CONFIGURE CHASSIS
Home Theater Chassis Configuration

Finish

Not Installed

- Re-boot the MRC-6430 using the **Power Button** for the Ethernet Configuration changes to take effect.

Exercise 3: Reset the MRC-6430 to DHCP

Overview In some instances the MRC-6430 may need to have its Ethernet settings reset to DHCP. This exercise will walk you through how to reset the MRC-6430 to DHCP Enabled.

How-to **To return the MRC-6430 to DHCP Enabled:**

1. Ensure that the MRC-6430 is **On**. If the front panel light is dim, press and release the power button and wait for the light to stop flashing. Once the light stops flashing it will remain bright to indicate the MRC-6430 is On.



2. On the front panel of the MRC-6430, **press and hold the power button** until a click is heard, approximately 5 seconds. Release the power button.



3. **Press and hold the power button again** for over 5 seconds, then release.
4. If done correctly the unit will reboot with the Ethernet port reset to DHCP enabled.

Lesson 4

Configure Sources Node



Overview

This lesson shows you how to add and set up sources for use in the Niles Auriel Viewer.

You will:

- Learn about the Configure Sources node.
- Learn about each page of the Configure Sources node.
- Configure an IR controlled device.
- Setup favorite TV channel icons.
- Configure an IP controlled device.
- Assign source inputs to source devices.

Requirements

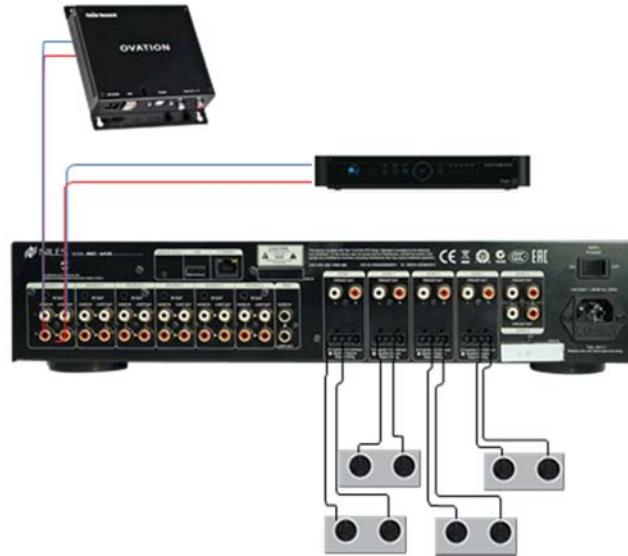
- Niles MRC-6430 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running Niles Auriel software.

-or-

- Tablet running the Niles Auriel App.

Distributed Audio Integration Overview

Overview The following diagram shows the equipment in a two source / four zone distributed Audio system, illustrating the components that are important to the Niles MRC-6430 system controller.



The MRC-6430 provides the end user with high-quality sound of their favorite sources. The Niles Auriel Viewer gives the end user a proven, easy-to-use interface compatible with many of today's popular mobile devices and tablets, PCs, and Niles-branded interfaces.

For each audio zone the end user can:

- Turn the zone on and off
- Select and control a source for the zone
- Adjust the audio volume in the zone
- Change the zone settings, such as bass and treble

About the Configure Sources Node

Overview

The **Configure Sources** node sets up the source for access and control using the Niles Auriel software. Please note, it is recommended that all connectivity to the MRC-6430 be completed before beginning this lesson.

The Configure Sources node has a simple point and click interface to allow you to make changes easily to the system. Like the Auriel Viewer, the System Configuration Wizard requires an active connection to an MRC-6430 and makes real-time changes to the system. The system cannot be used for off-line system configuration.

Navigating the Configure Chassis Node

The Configure Sources node is comprised of three pages:

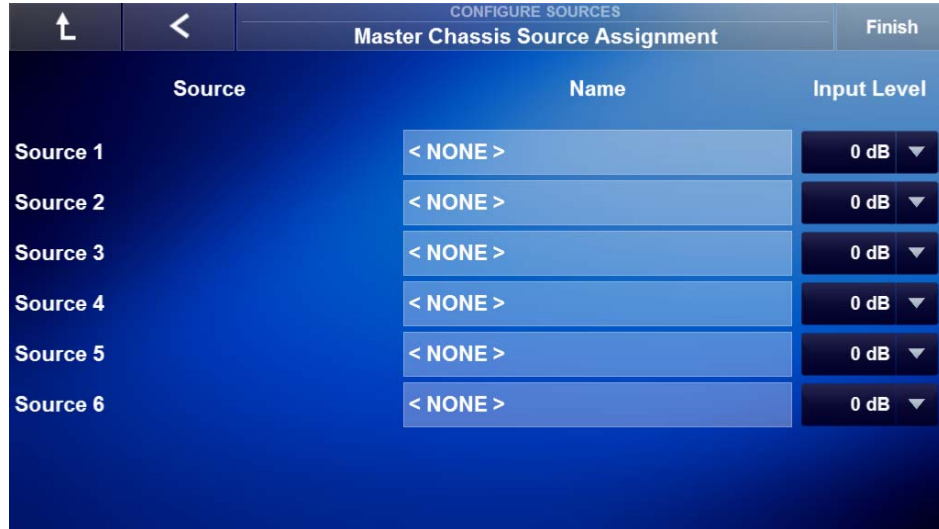
- **Source Configuration:** This page allows you to **Add** IR and IP controlled source devices to the Auriel system.



Note: Sources must be physically connected to the MRC-6430 for audio playback and for IR control. IP control is done thru the LAN.

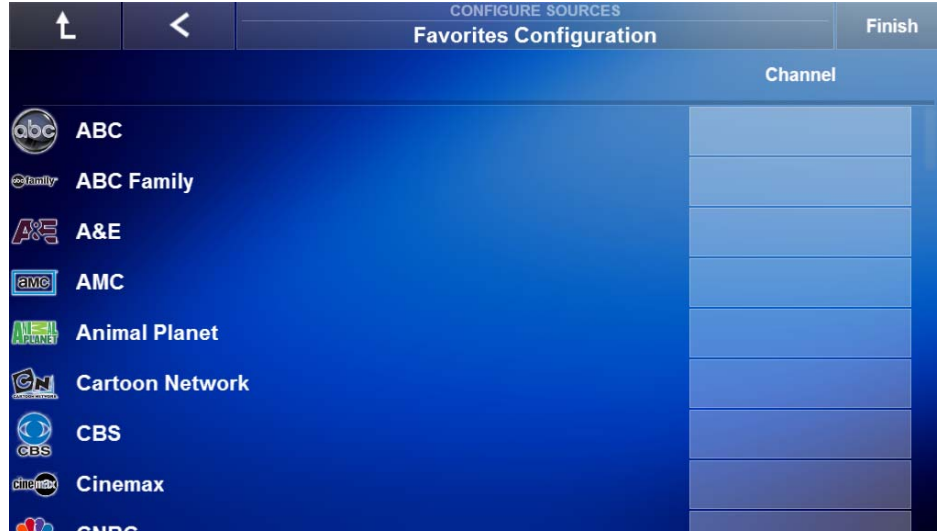
Quick Reference: Source Configuration page	
Source Name	Allows for personalization of the Name of the source displayed in the Auriel Viewer.
IR 1-6	IR routing matrix. This matrix allows configuration of IR routing through the MRC-6430 chassis. Select the IR output jack the source is physically connected to for each source device.
IR Repeat	Adjusts the amount of times the IR command is sent from a user interface to the device.
Enable Power Management	Provides power On/Off IR commands to an IR Device depending on source and zone status. The IR device must have Discreet Power On and Power Off commands.

- Master Chassis Source Assignment:** From here you can assign source interfaces to their physically connected location on the MRC-6430. The source Input Level may be adjusted from +/- 6dB to ensure the volume is consistent when switching between sources.



Quick Reference: Master Chassis Source Assignment page	
Source Name	Assigns a source to the source input on the MRC-6430.
Input Level	The source volume level. Use these to adjust from +, or -, 6 dB on each source to maintain equivalent source volumes when switching between sources.

- Favorites Configuration:** This page allows you to setup the channel number for favorite TV channel icons. Only icons with a channel number will be displayed in the Auriel Viewer.



Note: The Favorites Configuration page is only available in the Configure Sources node when Show Favorites is set to Yes. Show Favorites is not available on all sources.

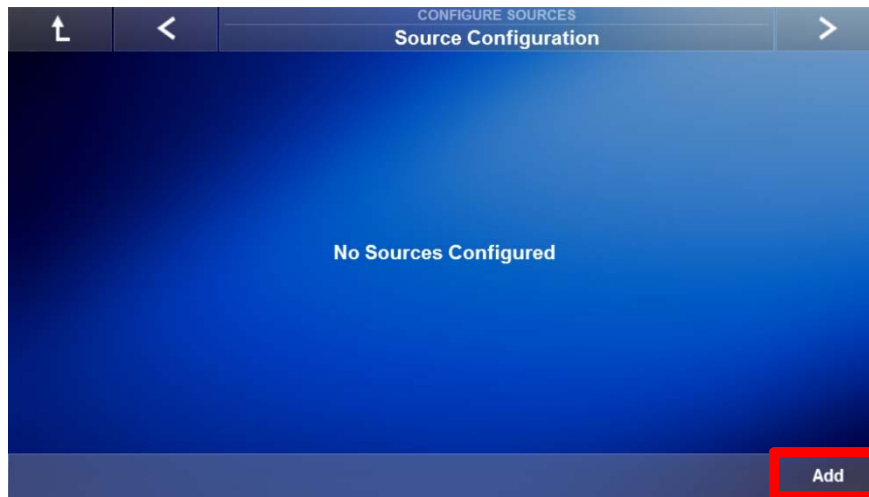
Quick Reference: Favorites Configuration page	
Channel	The numeric value used to access the TV channel.
Finish	Used to complete the configuration of a node and return to the System Configuration Wizard main page. Use the Left Arrow to navigate to previous pages if node configuration is not complete.

Exercise 1: Adding an IR Source

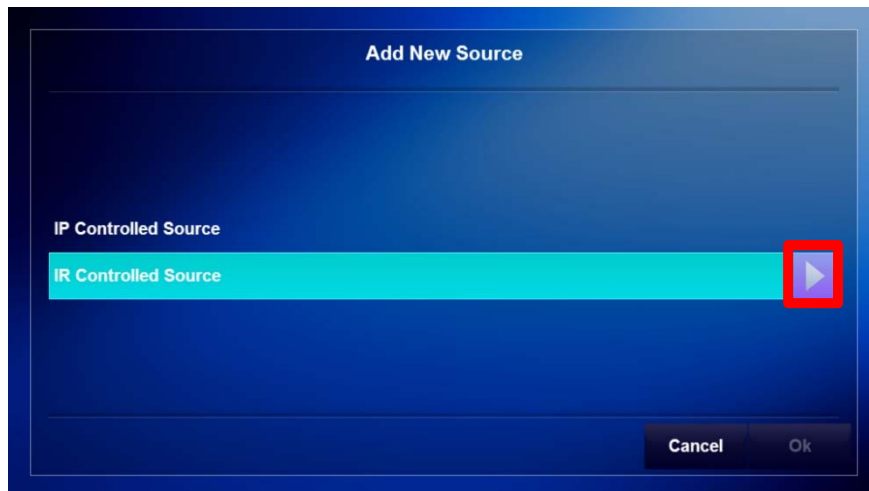
Overview In Exercise 1, we will add an IR Controlled source to the system. This source may be a cable, or satellite box, a DVD, or Blu-Ray player, or many other IR controlled devices. This exercise will show you how to add a DirecTV box to the Auriel interface.



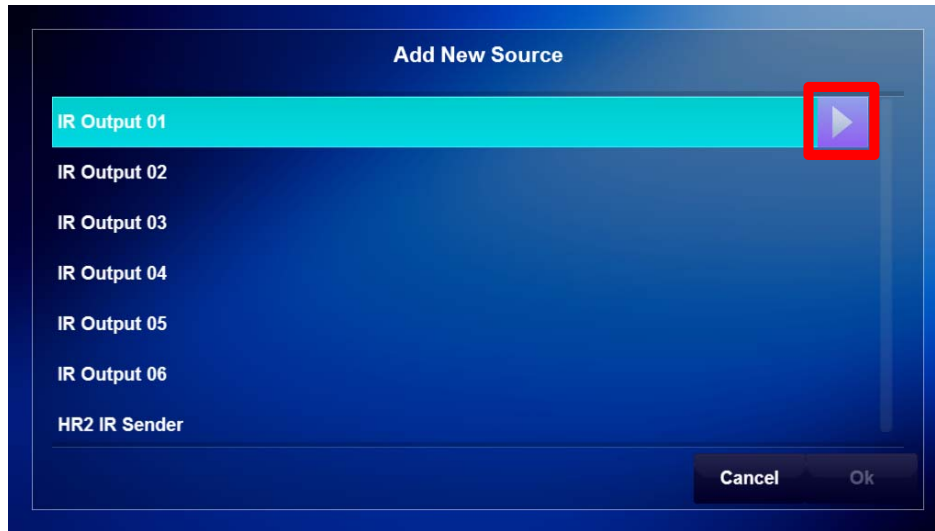
How-to 1. Access the Source Configuration Page in the Auriel Viewer and select **Add**.



2. Select **IR Controlled Source** in the Add New Source window and select the **Right Arrow**.

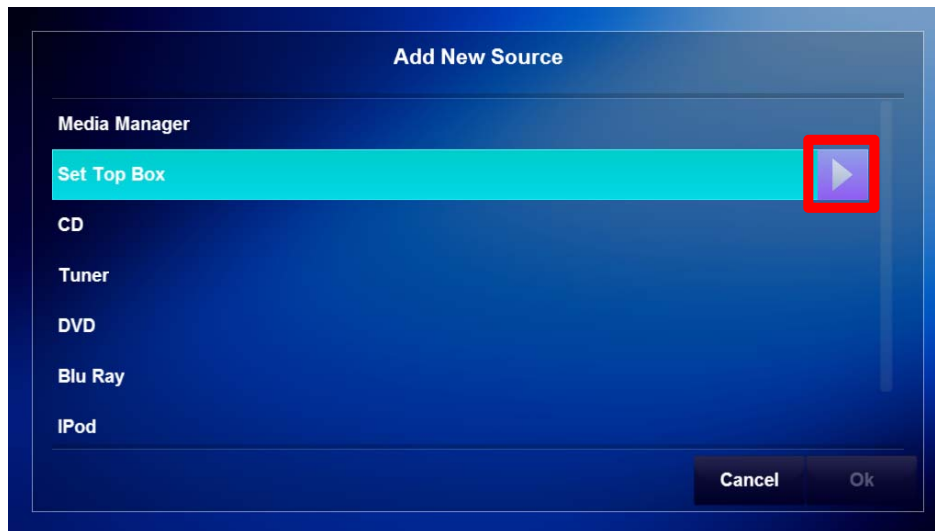


3. Select the **IR Output** that the IR controlled device is connected to and select the **Right Arrow**.

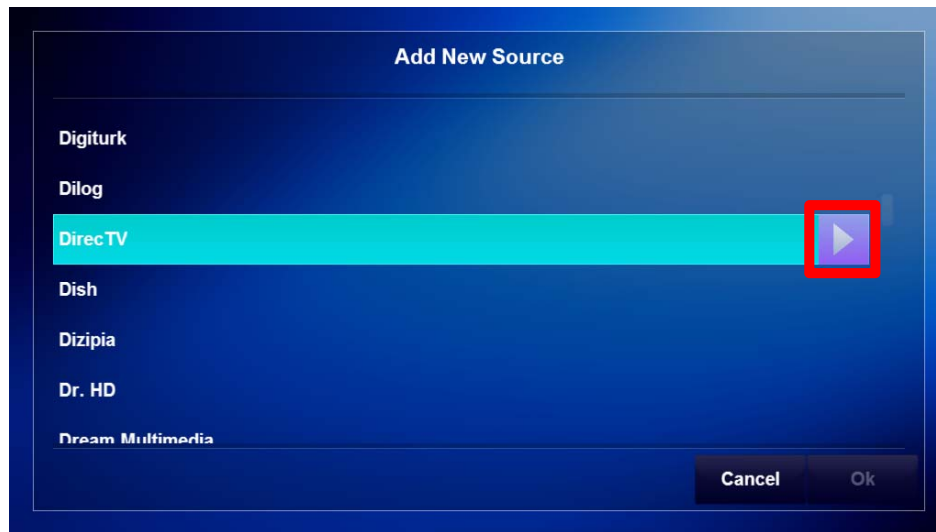


Note: The IR Output assigned to the source **MUST** be the IR Output that the source device is physically connected to on the rear panel of the MRC-6430. If the IR Output assigned to the IR device does not match the physical connection then the IR device cannot be controlled from the Auriel Viewer.

4. This page shows all available interface template types for IR controlled devices. Select **Set Top Box** when using cable, or satellite, boxes and the select the **Right Arrow**. Use the scroll bar on the right to view all available template types.



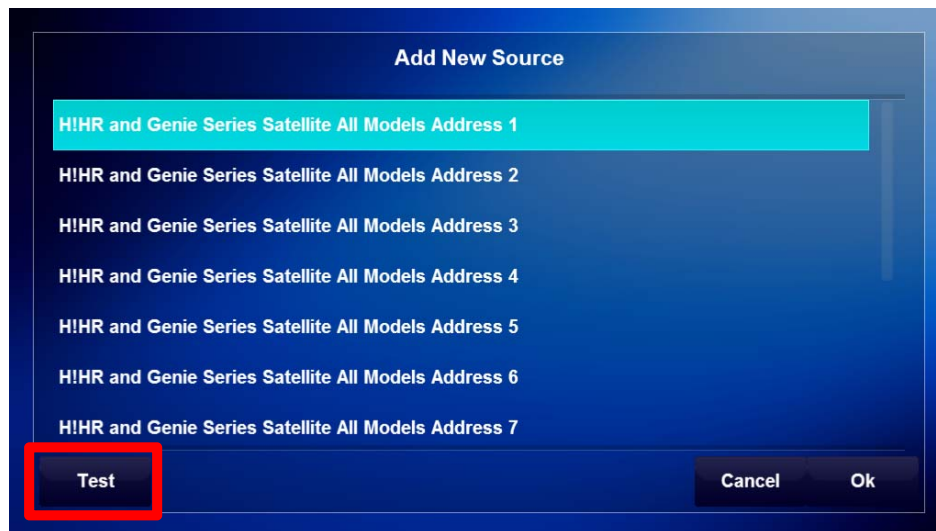
- This page shows all available manufacturers of Set Top Boxes in the Niles Auriel database. Use the scroll bar to the right to scroll down until you find DirecTV. Select **DirectTV** and then select the **Right Arrow**.



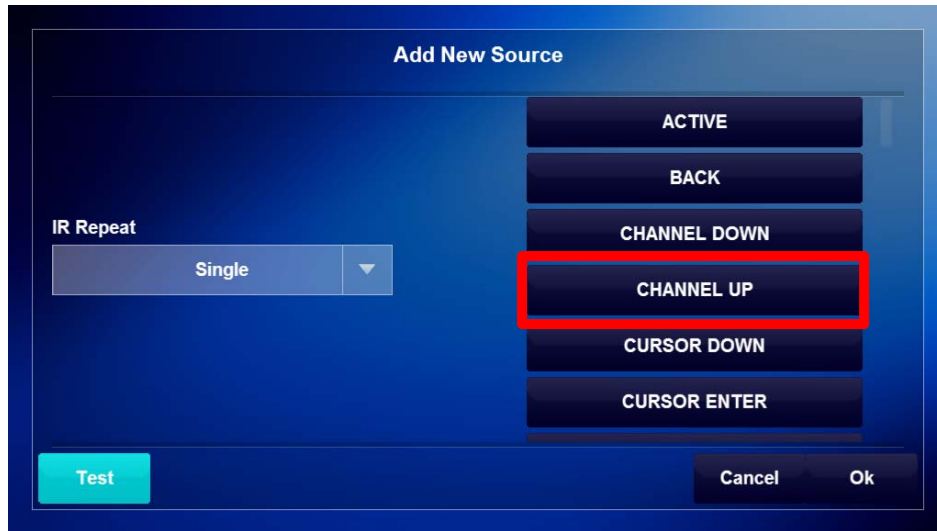
- The available IR code sets in the Niles Auriel database are shown, select the **correct IR code set** for the device being used.

Note: Some IR devices have multiple IR Code Sets available to them. Please choose the correct IR Code Set for the device being used.

- Verify the selected IR code set is correct by selecting the **Test** button.

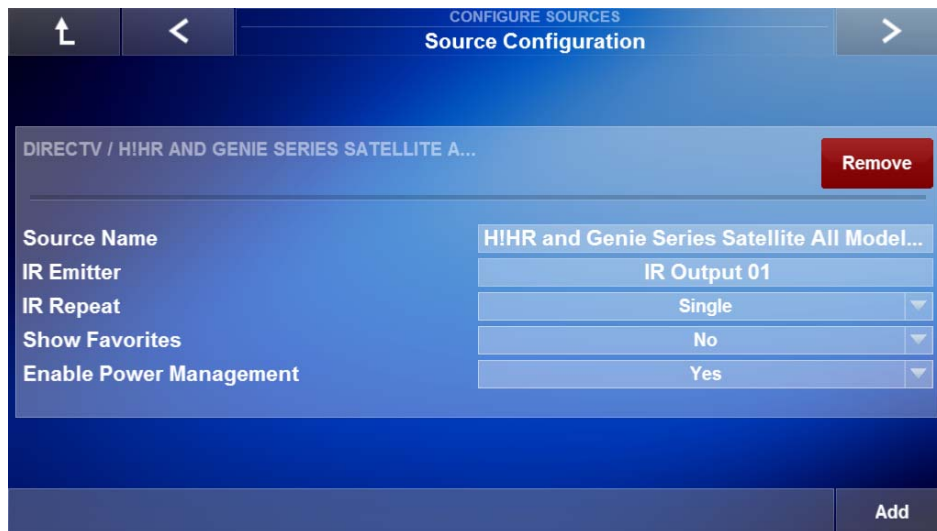


- b. In the Test IR window, select an **IR command** on the right to test.



Note: Before testing an IR command ensure the IR device is physically connected to the assigned IR output on the MRC-6430. If a discreet power On/Off is not available, power On the device before testing an IR command. If the IR device is a video source it is recommended that the device be connected to a video display to ensure that it is operating properly.

- 7. When finished select **OK** to return to the Source Configuration page.



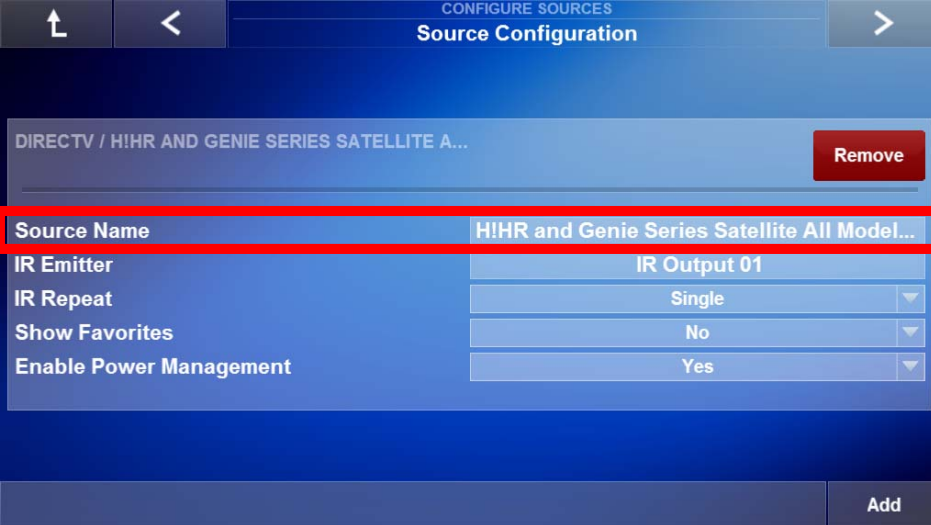
- 8. Repeat steps 1 – 7 to add additional IR Source Devices.

Exercise 2: Renaming Sources

Overview In Exercise 3, you will rename the IR source added in exercise 1. The Source Name is the name that will be displayed in the Auriel Viewer for the source. Niles recommends renaming the source something that the user will easily recognize and remember.

How-to

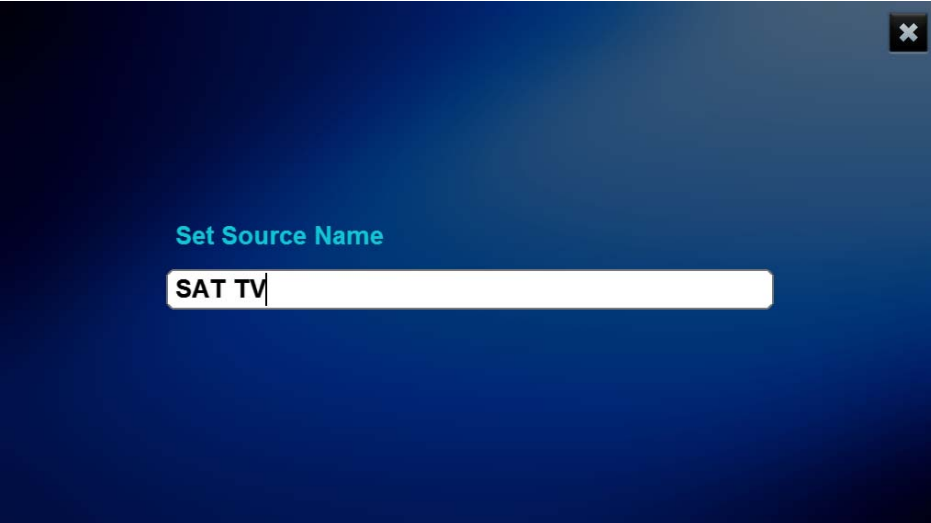
1. On the Source Configuration page locate and select the Source Name field.



The screenshot shows the 'Source Configuration' page for a source named 'DIRECTV / HHR AND GENIE SERIES SATELLITE A...'. A table lists configuration options, with the 'Source Name' field highlighted in red. The table contains the following data:

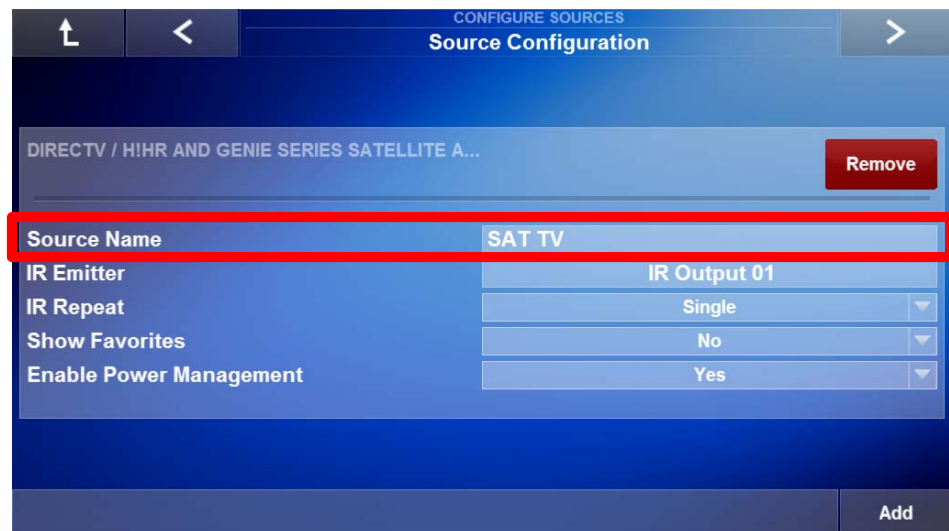
Source Name	HHR and Genie Series Satellite All Model...
IR Emitter	IR Output 01
IR Repeat	Single
Show Favorites	No
Enable Power Management	Yes

2. The Set Source Name window appears. Use the keyboard on the device configuring the Auriel system to enter a name for the source, in the exercise we will enter **SAT TV**.



The screenshot shows the 'Set Source Name' window. The title is 'Set Source Name' in cyan text. Below the title is a white text input field containing the text 'SAT TV'.

- When finished naming the source device, press **Enter** on the keyboard to return to the Source Configuration main page and verify the new source name.



- Repeat this process to rename additional source devices.

Exercise 3: Enabling Power Management

Overview In Exercise 3, you will learn how Power Management of IR devices works on the MRC-6430. This exercise will use the IR source device added in exercise 1.



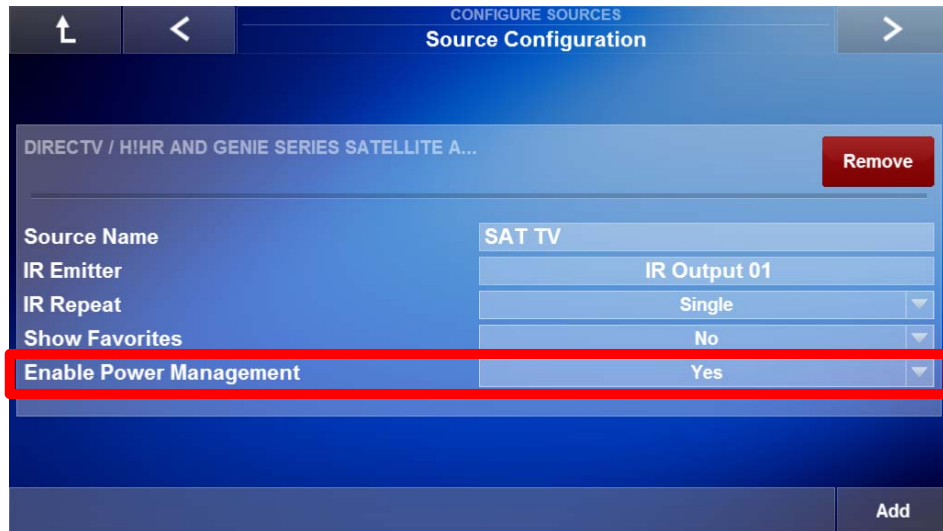
Power Management works using a Source Devices discreet Power On and Off commands allowing the Niles Auriel Software to manage the power status of the source device depending on source selection in a zone and zone power status. When enabled; When a source is selected in a zone, the Niles Auriel Software will send the discreet On command for the selected source device. When a zone is powered Off the Niles Auriel Software will send the discreet Off command for all source devices assigned to the Niles MRC-6430 zones.

When Power Management is disabled the Niles Auriel Software will not issue any Power On or Off commands to the source device.

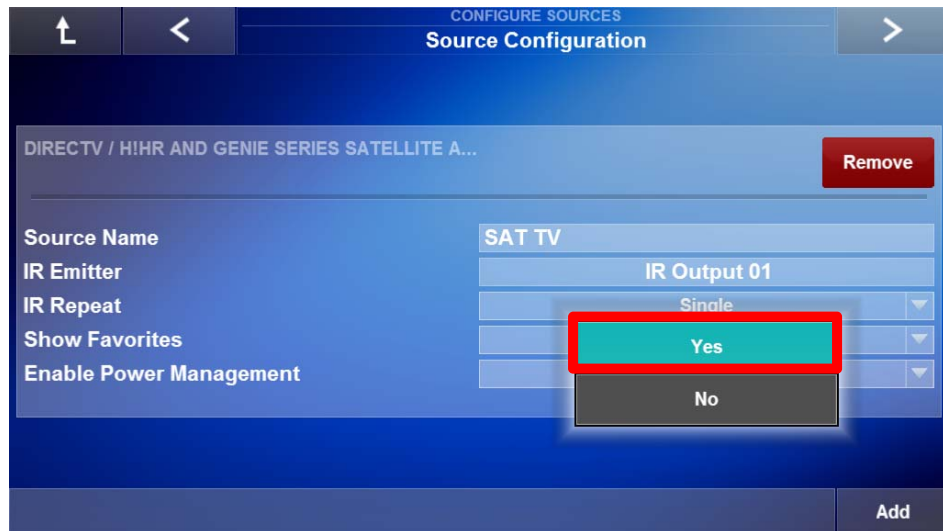
Note: The Source Device **MUST** have discreet Power On/Off commands in order for Power Management to work.

How-to

1. On the main page of the Source Configuration node, select the **Enable Power Management** drop-down.



2. *The Power Management Yes/No window pops up.* Select the Yes to enable Power Management (Factory Default) or select No to dis-able Power Management. This exercise we are leaving Power Management enabled, select **Yes**.



Note: Selecting No disables the Power Management feature. It is recommended to disable Power Management for Source Devices that do not have discreet Power On/Off commands.

3. After selecting Yes you are returned to the Source Configuration main page. Verify that the source device has Enable Power Management set to Yes.

The screenshot shows the 'Source Configuration' screen for a DIRECTV satellite receiver. The screen displays the following configuration details:

Field	Value
Source Name	SAT TV
IR Emitter	IR Output 01
IR Repeat	Single
Show Favorites	No
Enable Power Management	Yes

The 'Enable Power Management' row is highlighted with a red box. The 'Add' button is visible at the bottom right of the screen.

Note: Repeat Exercises 1, 2, and 3 to add additional IR controlled source device interfaces to the Niles Auriel system before selecting the Right Arrow to proceed to the next page.

Exercise 4: Adding an IP Source

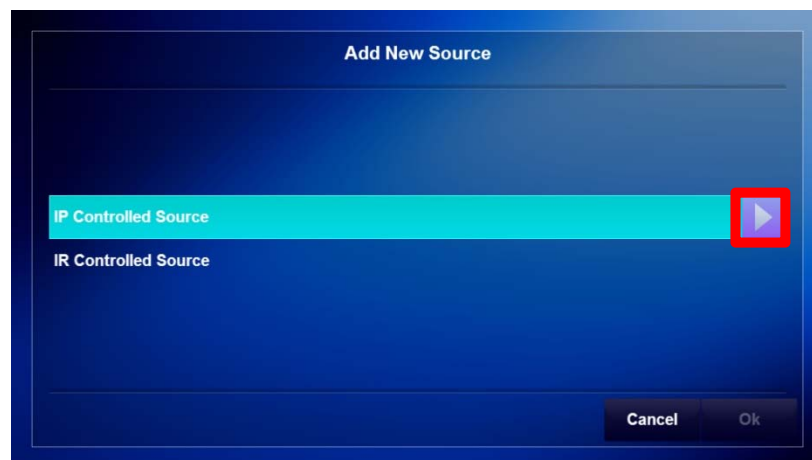
Overview In Exercises 1, 2, & 3 we added renamed, and assigned an IR Emitter output to an IR Controlled source. In exercise 4 we will add an IP Controlled source to the system. IP controlled sources include the ELAN DT11, or DT22, AM/FM/Sirius Ready Tuner, Fusion Ovation series media players, Autonomics Mirage media player, or streaming services from Yamaha audio/video receivers that support the YNCA protocol. This exercise will show you how to add an Autonomic Mirage media play to the Auriel interface.

Before adding IP sources make sure they are completely setup as per the manufacturer's instructions, operating correctly, and connected to the same network as the MRC-6430. Note all network settings for the device in the Project Documentation Worksheet, included with the MRC-6430.

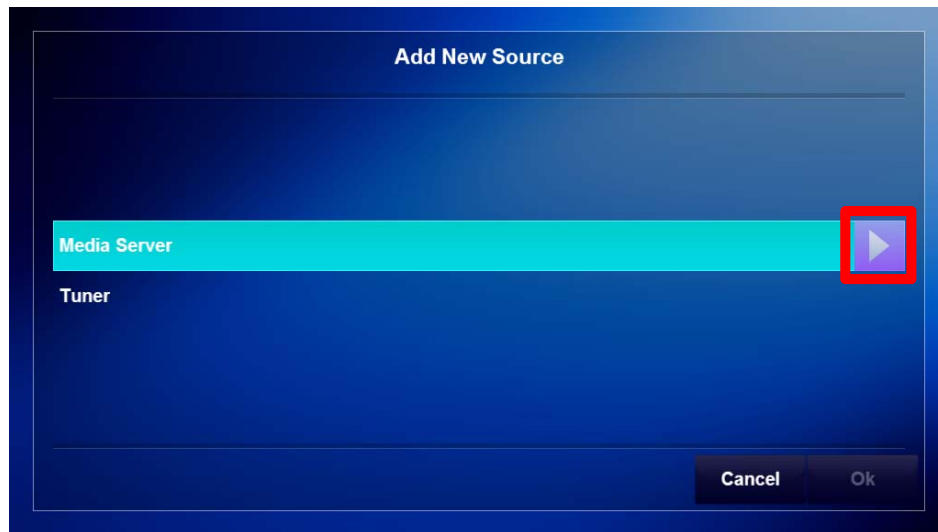
How-to 1. Access the Source Configuration Page in the Auriel Viewer and select **Add**.



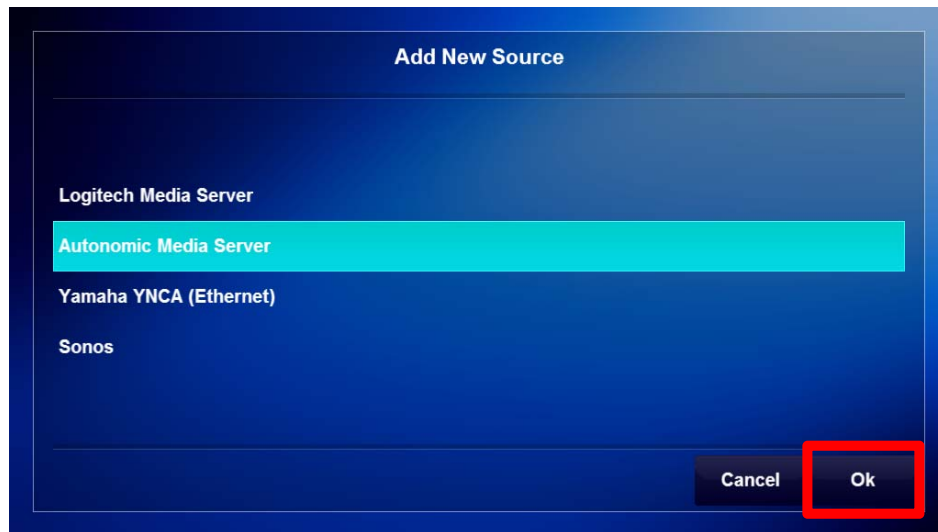
2. Select **IP Controlled Source** in the Add New Source window and select the **Right Arrow**.



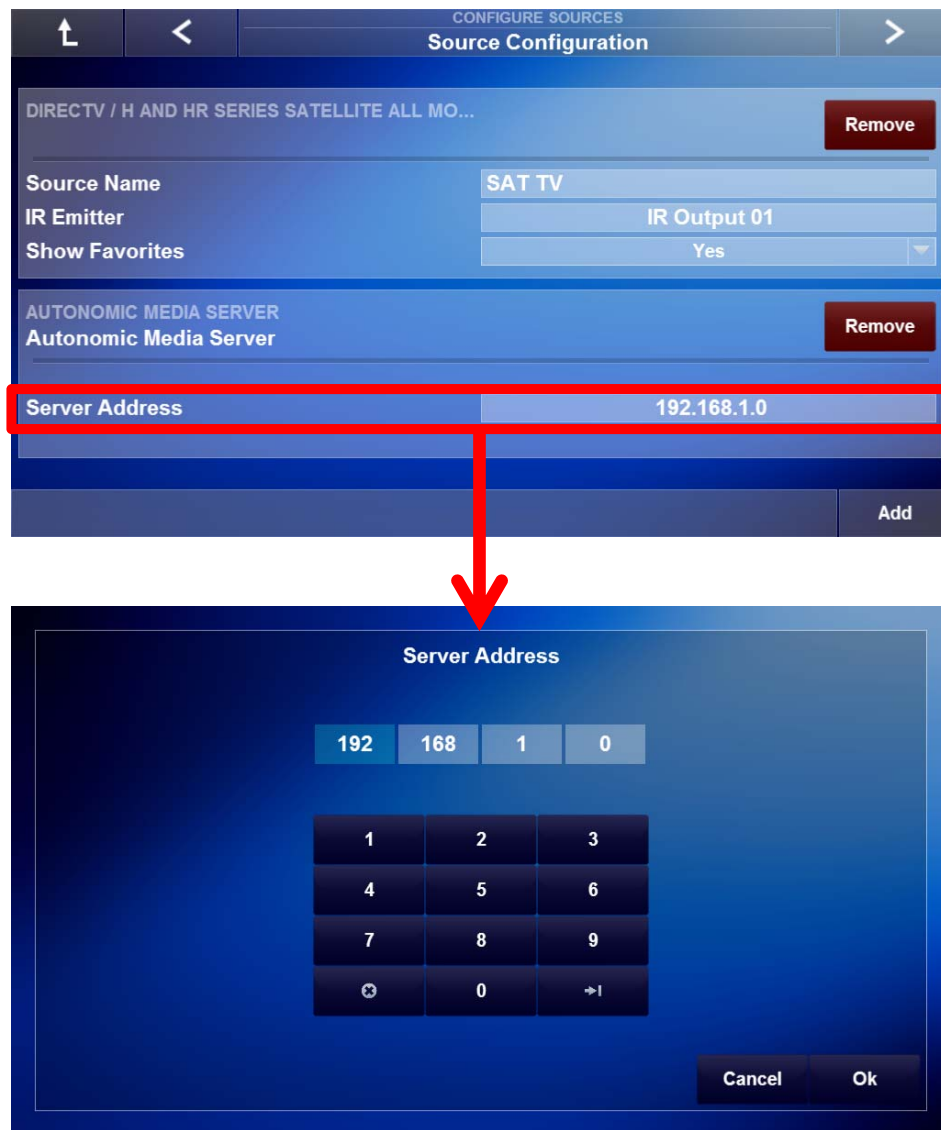
- This page shows the available interface template types for IP controlled devices. Select **Media Server** when using supported devices for streaming media and then select the **Right Arrow**.



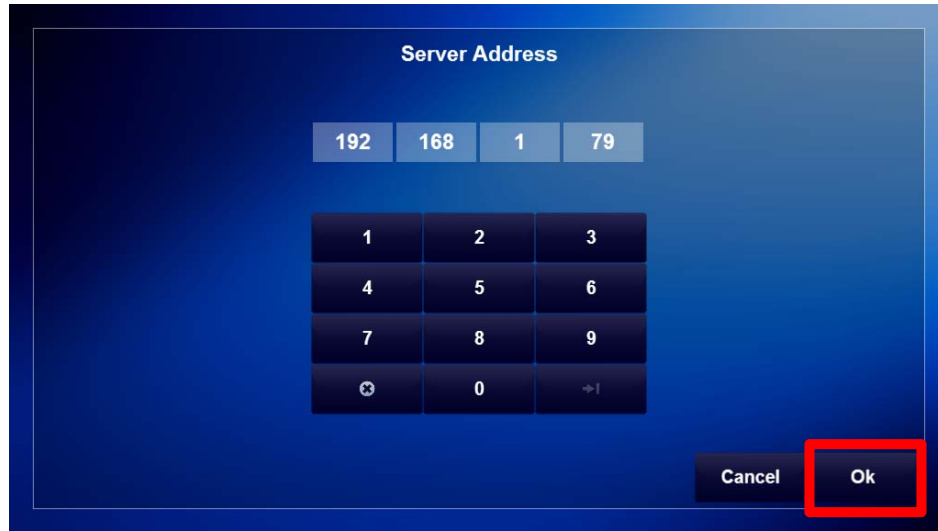
- This page shows the available options for streaming media players in the Niles Auriel database. Select **Autonomic Media Server** and then select the **OK**.



5. You should see the Autonomic Media Server available on the Source Configuration page. Before proceeding **note the IP address** of the media server and then select the **Server Address** field.

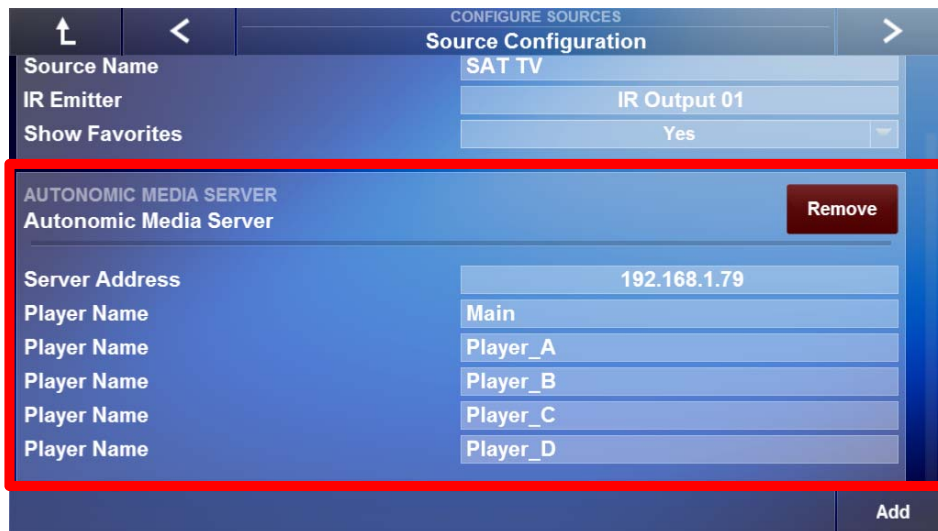


- Enter the **IP Address** of the Media Server. Press **OK** to set the IP address of the media server and return to the Source Configuration page.



Note: The media server being used should be assigned a **static IP address** for reliable communication between Auriel and the media server.

- The Source Configuration page will update with the available outputs for the media server.



- Rename** each source input as desired. Repeat exercise 1 thru 4 to add additional IR and/or IP controlled source devices. When finished select the **Right Arrow** to proceed to the next page.

Exercise 5: Assigning Sources in the Auriel Software to inputs on the MRC-6430

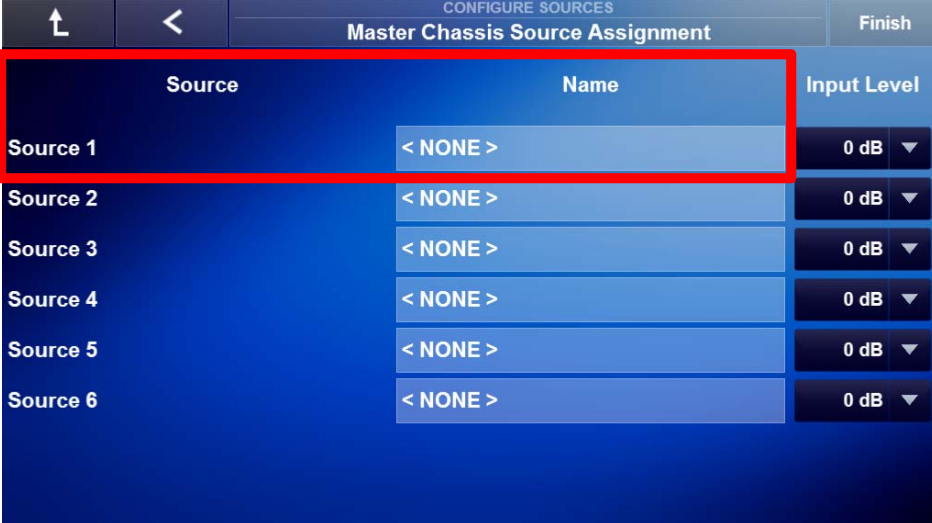
Overview In a typical installation, sources are assigned to specific inputs on the zone controller. The Auriel software needs to know which sources are physically connected to each input so that the correct signals can be sent to the zone controller based on source selection from the Viewer interface.

For Exercise 5, you will assign the source input on the MRC-6430 to the source device added in exercise 1.

Note: Typically all sources are added first and then all source inputs are assigned to the source device.

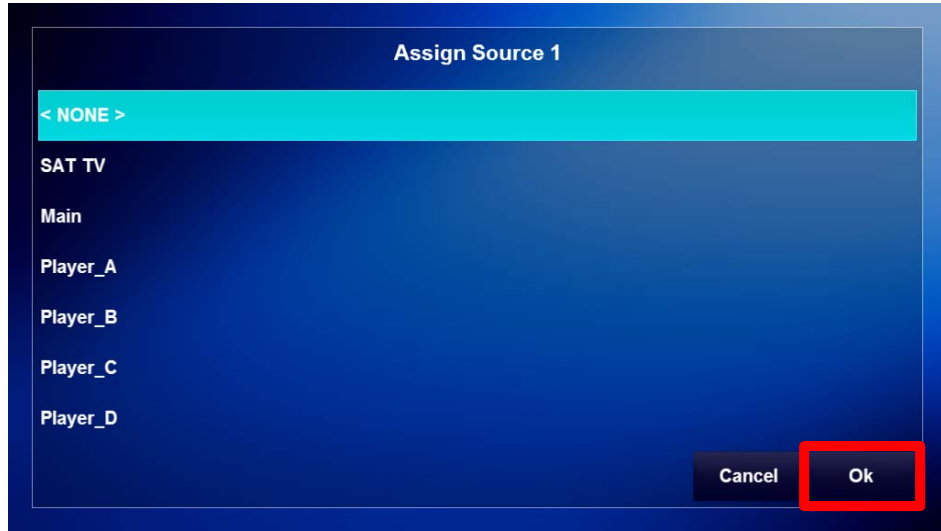
How-to

1. Access the Configure Sources node and navigate to the **Master Chassis Source Assignment** page. Select the **Source 1 Name** field for a list of available sources.



Source	Name	Input Level
Source 1	< NONE >	0 dB ▼
Source 2	< NONE >	0 dB ▼
Source 3	< NONE >	0 dB ▼
Source 4	< NONE >	0 dB ▼
Source 5	< NONE >	0 dB ▼
Source 6	< NONE >	0 dB ▼

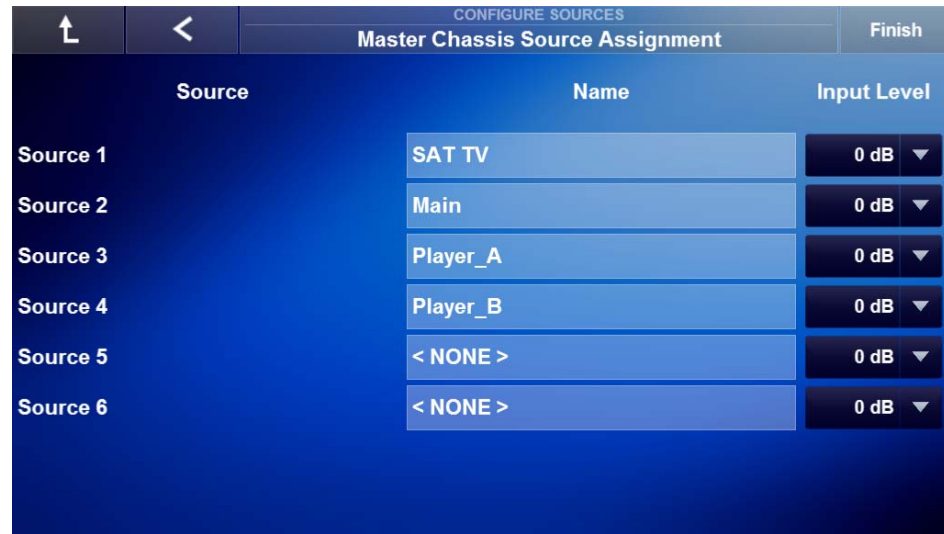
2. The *Assign Source 1* window appears. Select the desired source (**SAT TV**) to assign the source interface to the Source 1 input and then select **OK**.



3. The **Master Chassis Source Assignment** main page appears and **Source 1** displays the chosen source. This exercise is using the SAT TV source previously added in this lesson.

CONFIGURE SOURCES		
Master Chassis Source Assignment		
Source	Name	Input Level
Source 1	SAT TV	0 dB ▼
Source 2	< NONE >	0 dB ▼
Source 3	< NONE >	0 dB ▼
Source 4	< NONE >	0 dB ▼
Source 5	< NONE >	0 dB ▼
Source 6	< NONE >	0 dB ▼

- Repeat steps 1 thru 3 of this exercise to **assign additional source interfaces** to source inputs on the MRC-6430.



- Use the **Input Level** drop down to adjust each source input +/- 6 dB, in 3 dB increments, to allow for a consistent volume when switching between source inputs.

Note: The source Input Level may be adjusted after completion of the System Configuration Wizard.

- If done setting up the Configure Sources node select **Finish** to complete the set up and return to the System Configuration Wizard main page. If additional set up is required for the Configure Sources node, select the **Left Arrow** to return to previous setup pages.

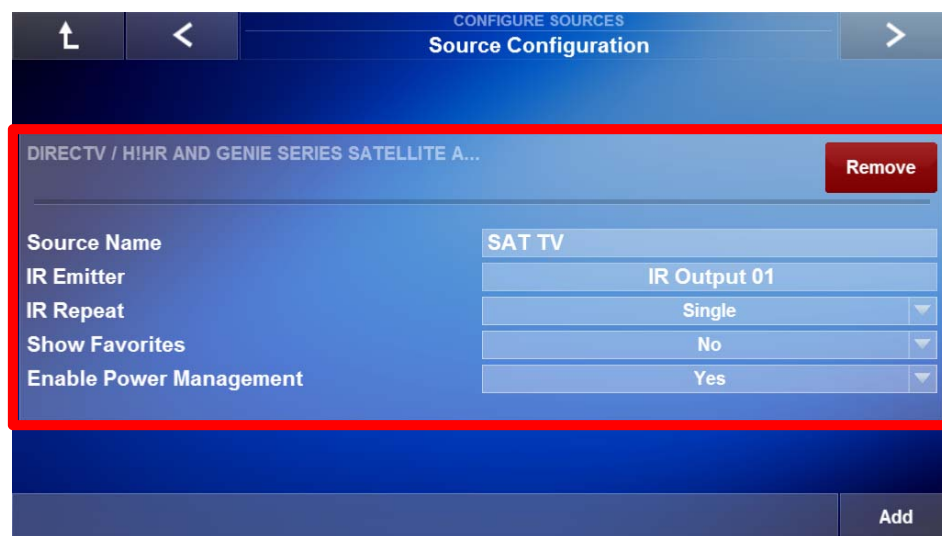
Quick Reference: Master Chassis Source Assignment	
Input Level	The source volume level. Use these to adjust from +, or -, 6 dB on each source to maintain equivalent source volumes when switching between sources.
Finish	Used to complete the configuration of a node and return to the System Configuration Wizard main page. Use the Left Arrow to navigate to previous pages if node configuration is not complete.

Exercise 6: Load TV Channel Icon Groups

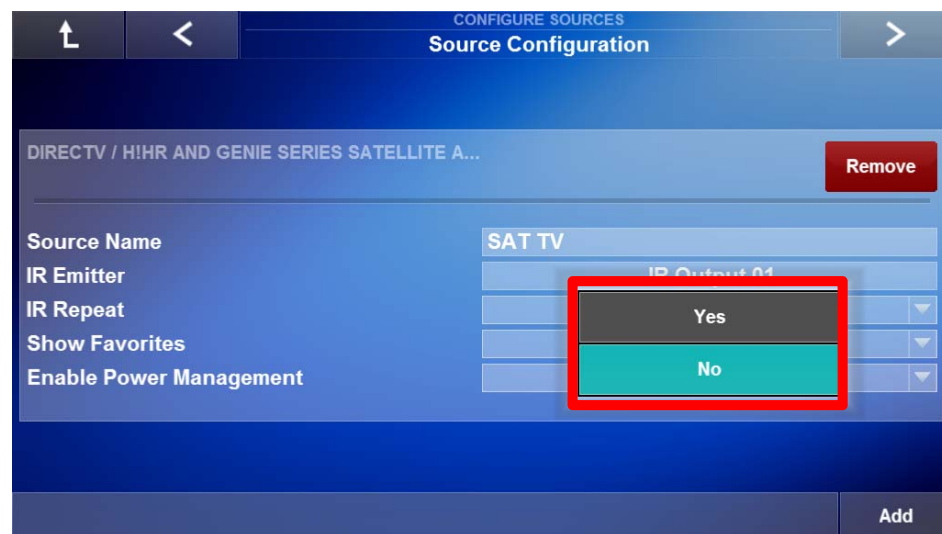
Overview Exercise 6 describes how to load favorite TV channel icons for source devices that support favorite TV channel icons in to the MRC-6430.

Favorite TV channel icons are used to enable one-touch, easy access, to the end user's favorite TV channels. Discuss with your client to determine their favorite TV channels.

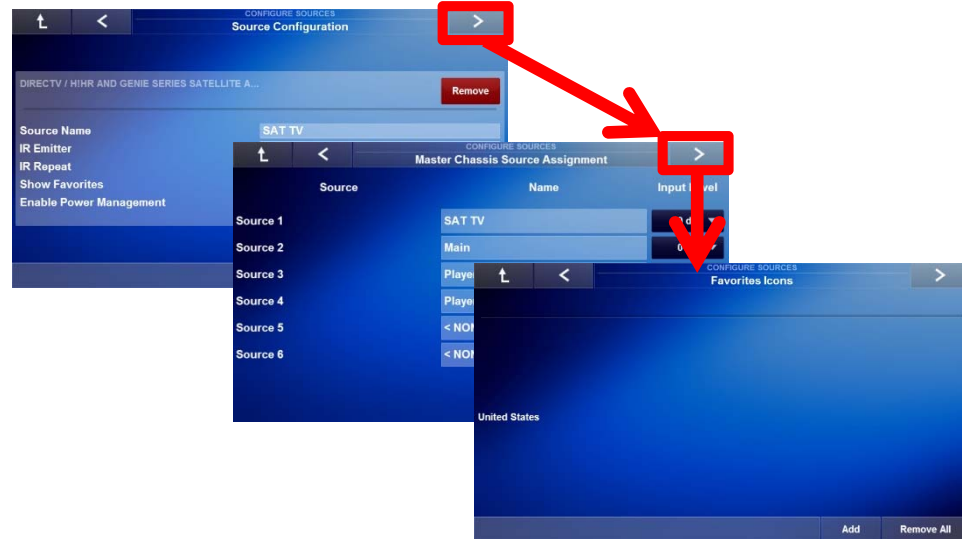
- How-to*
1. Access the Source Configuration main page and locate the **Set Top Box source, SAT TV**.



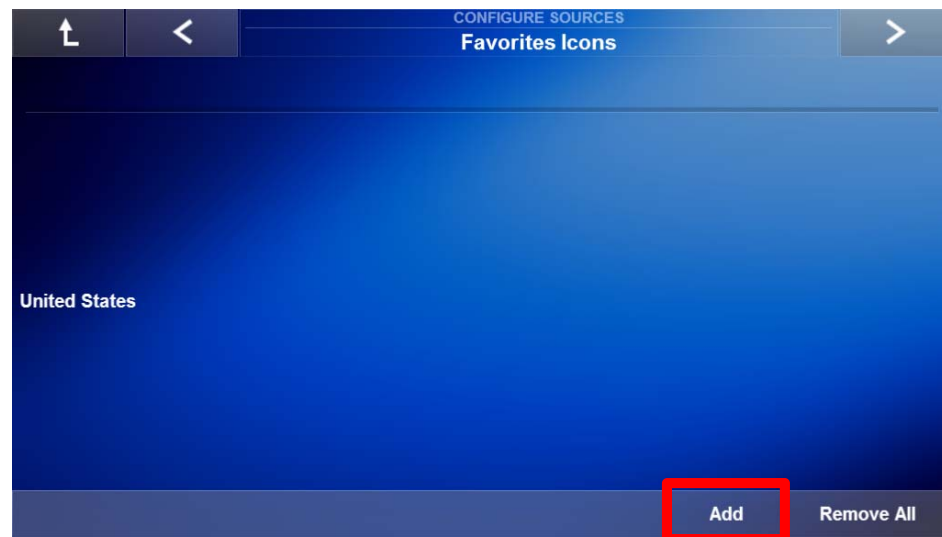
2. Select the **Show Favorite Drop Down arrow**. *The Yes/No option pops up.* Select **Yes** to enable access to the Favorites Icons page.



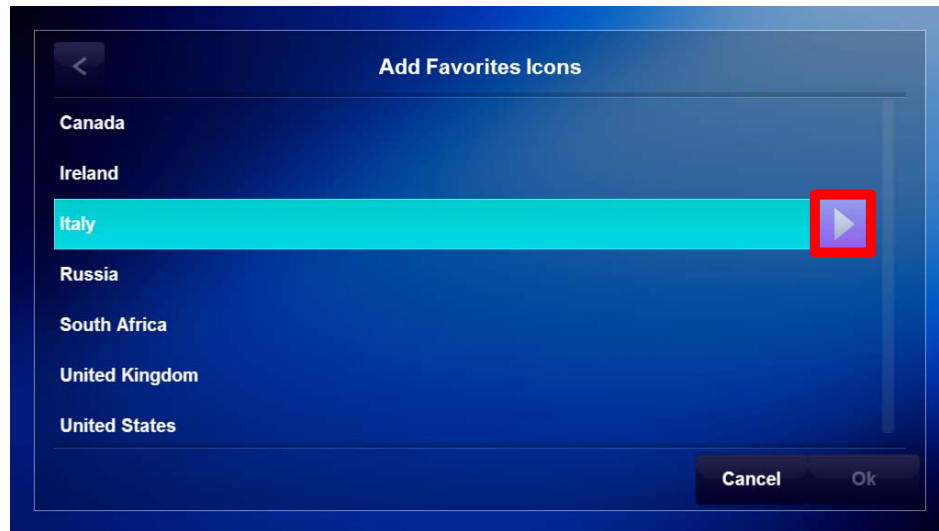
3. Select the **Right Arrow** to navigate to the Favorites Icons page.



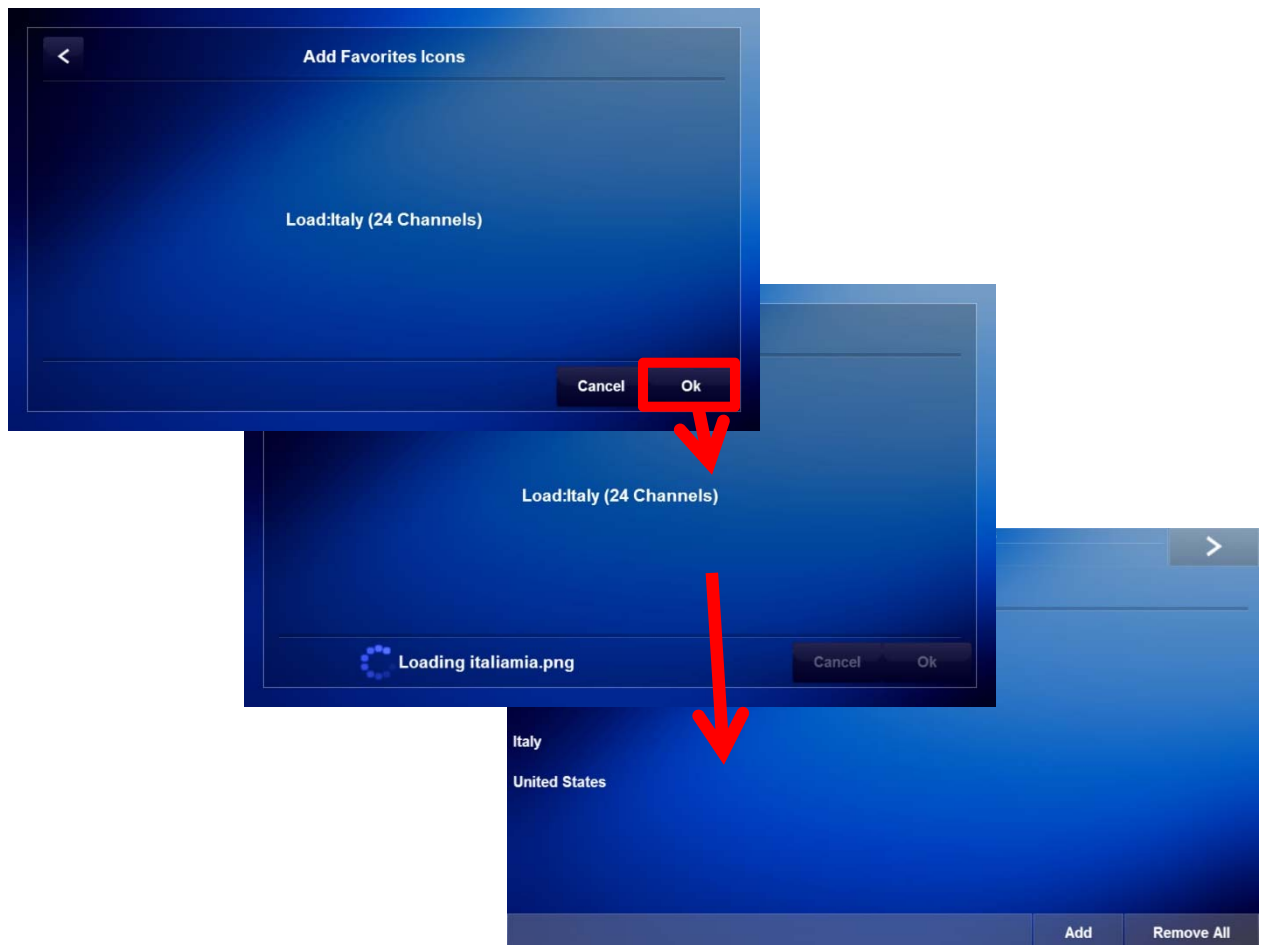
4. On the Favorites Icons page select **Add** to begin adding and downloading TV Channel Icons to the system.



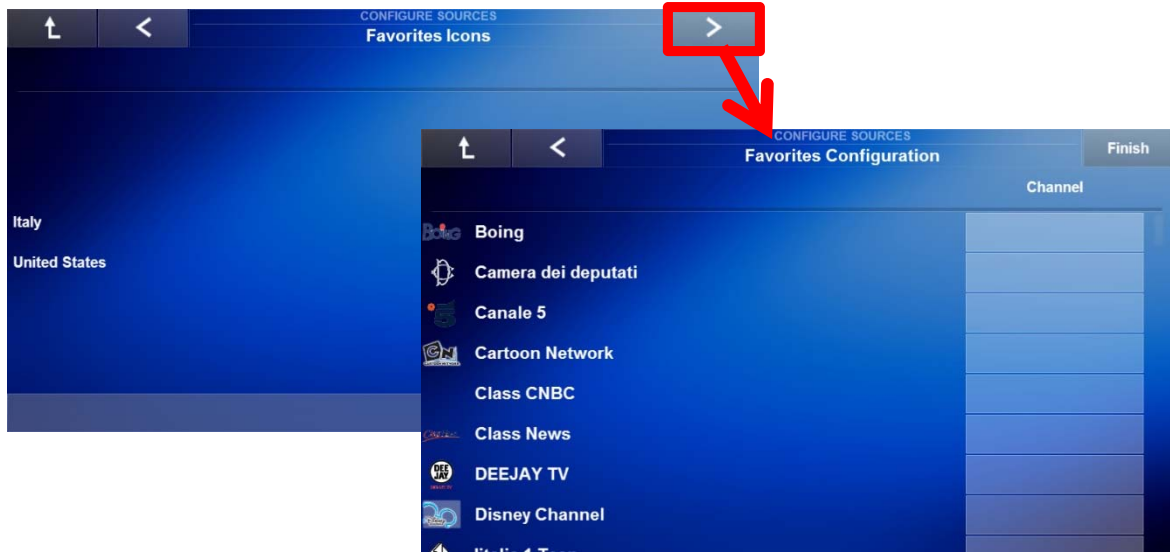
- In the Add Favorites Icons window select the country you are in and then select the **Right Arrow**.



- You will be prompted to download the amount of available channels to the system, select **Ok** to begin.



7. Select the **Right Arrow** to navigate to the Favorites Configuration page.



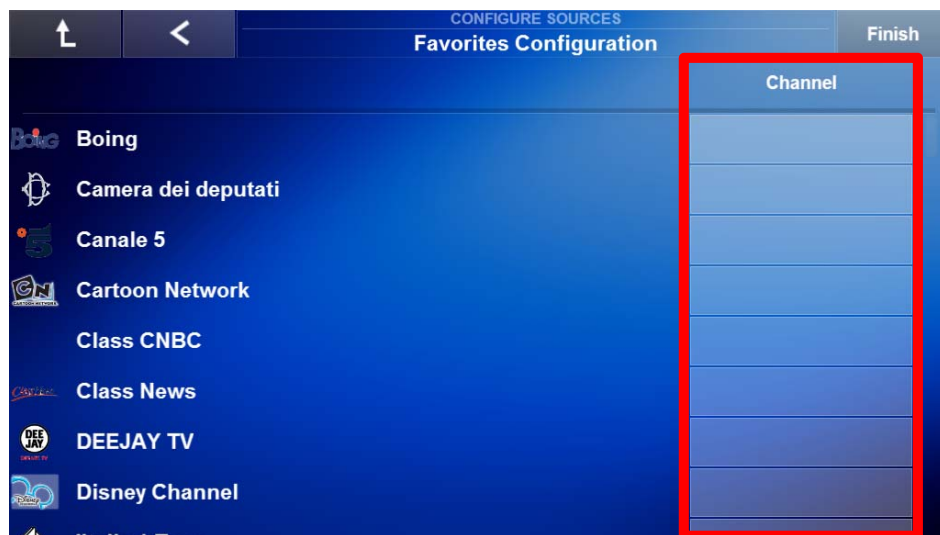
Exercise 7: Add Favorite TV Channel Icons

Overview Exercise 7 describes how to set up favorite TV channel icons loaded in the previous exercise for accessing the favorite TV channel at the press of a button.

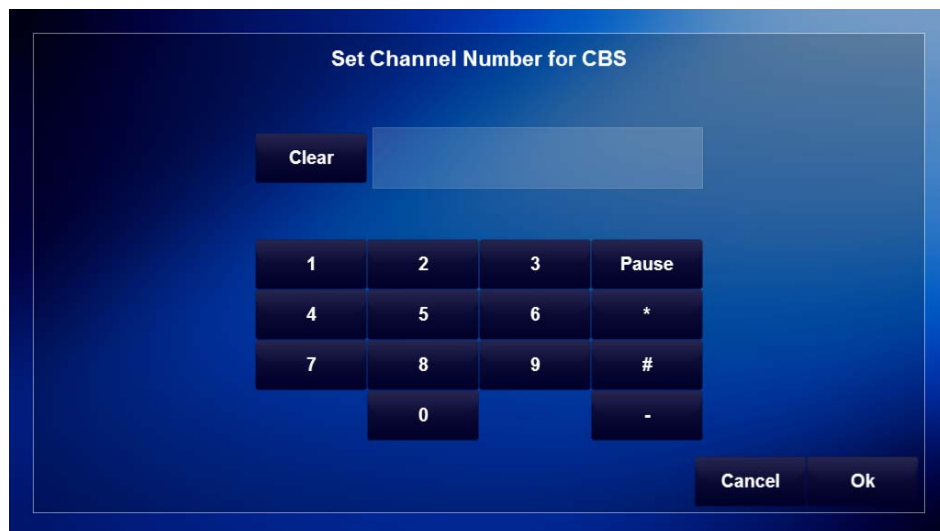
Favorite TV channel icons are used to enable one-touch, easy access, to the end user's favorite TV channels. Discuss with your client to determine their favorite TV channels.

How-to

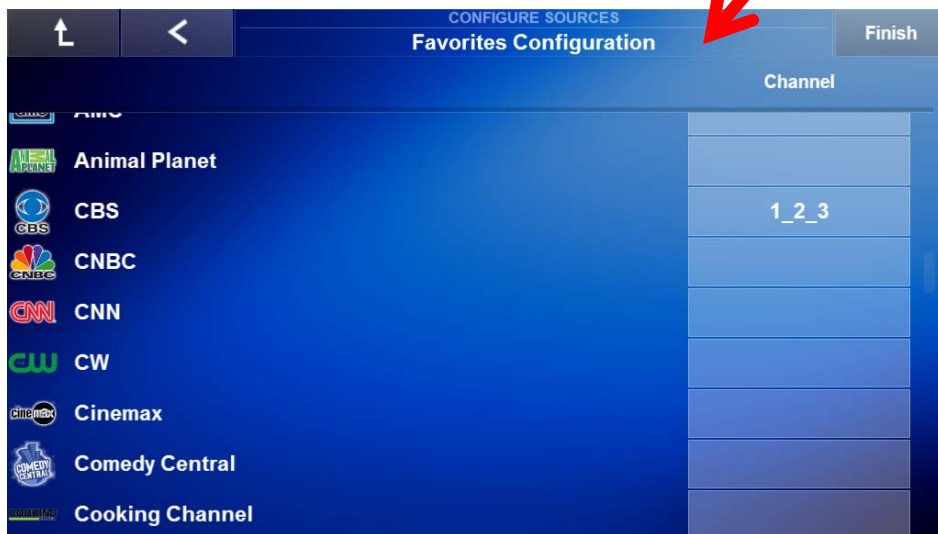
1. On the Favorites Configuration page use the scroll bar on the right to navigate to the desired Channel icon. Select the **Channel** field to assign a channel number to a channel icon.



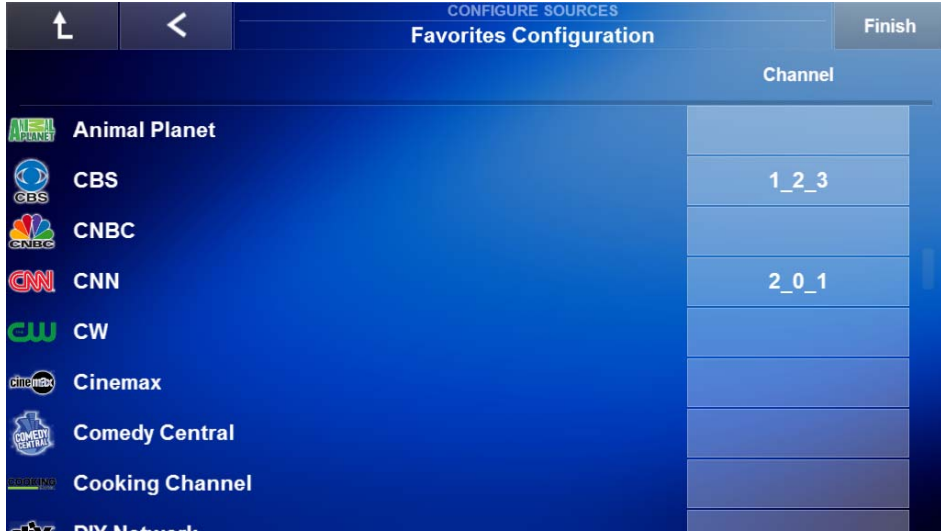
2. The Set Channel Number window appears. Use the **number keypad** to enter the channel number.



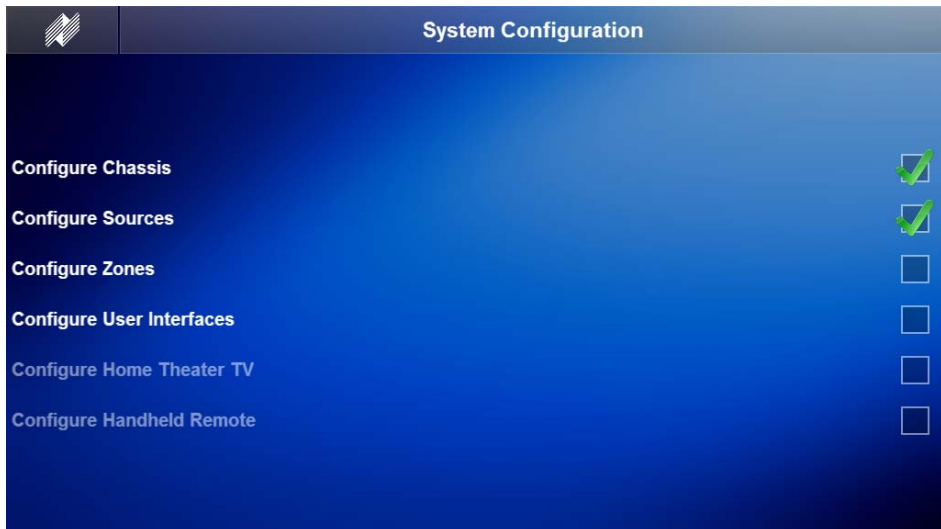
- Use the **Pause button** to enter a 250ms delay between numbers. Once the channel number has been entered select **OK**.



- Repeat to enter additional TV channel numbers for each desired favorite TV channel icon. When finished select **Finish** to complete the set up and return to the System Configuration Wizard main page. If additional set up is required for the Configure Sources node, select the **Left Arrow** to return to previous setup pages.



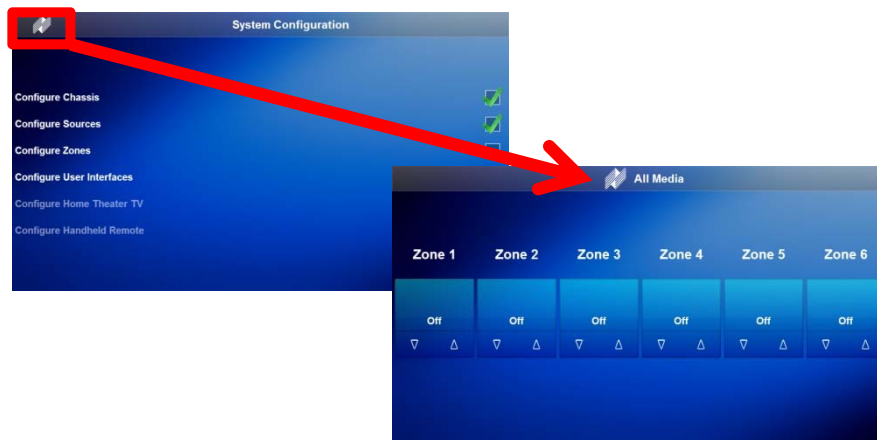
Quick Reference: Favorites Configuration	
Channel	The numeric value used to access the TV channel.
Finish	Used to complete the configuration of a node and return to the System Configuration Wizard main page. Use the Left Arrow to navigate to previous pages if node configuration is not complete.



Exercise 8: Check the Auriel Viewer

Overview In the previous exercises we added source devices for use in the Auriel Viewer. In this exercise you will finally check your configuration in the Viewer.

How-to 1. Click the **Niles Logo** button in the upper-left corner of the System Configuration window to exit the wizard and return to the **All Media** main page.



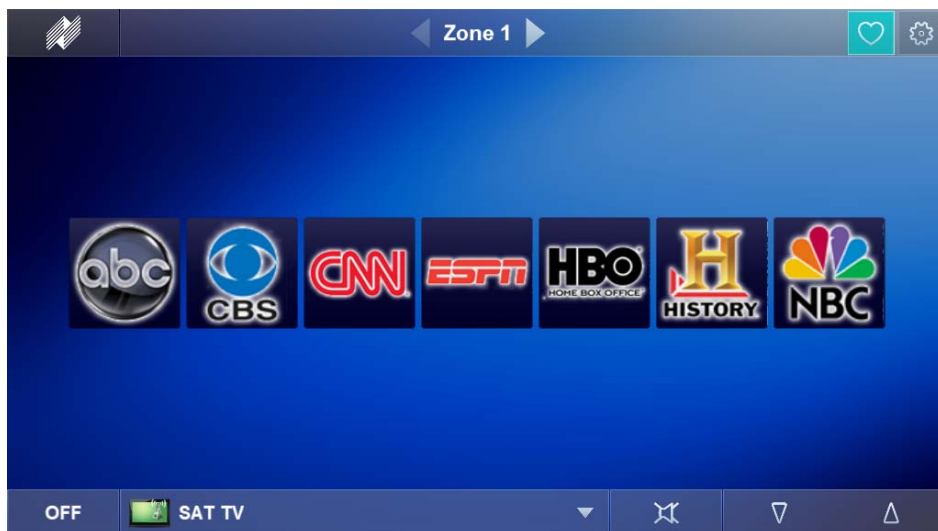
2. On the **All Media** page, select **Zone 1**. *Zone 1 will be displayed showing available sources.*



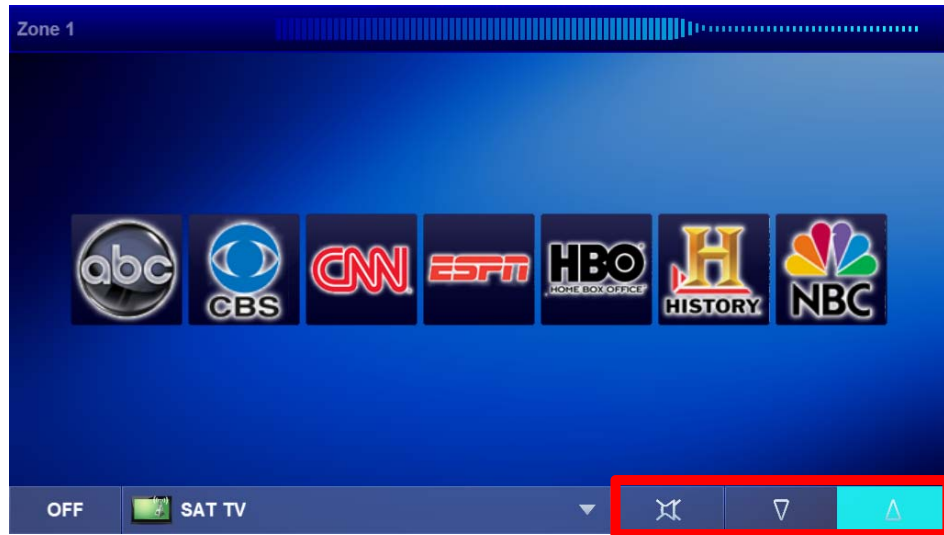
3. Select **SAT TV** to view the SAT TV interface. Verify IR control of SAT TV.



4. Click the ♥ button in the upper right to access the Favorite TV Channel Icons. Verify the TV icons operate properly.



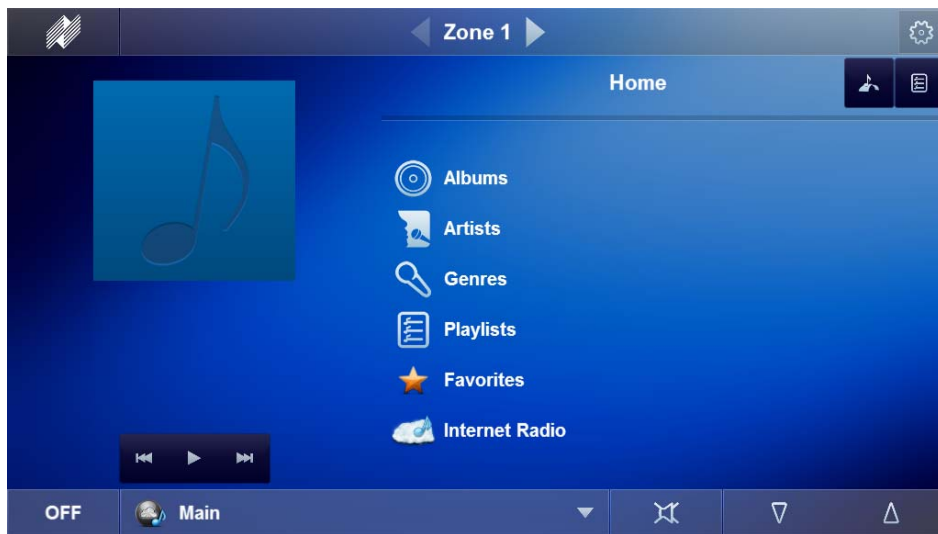
5. Verify the **Volume Control** buttons operate properly.



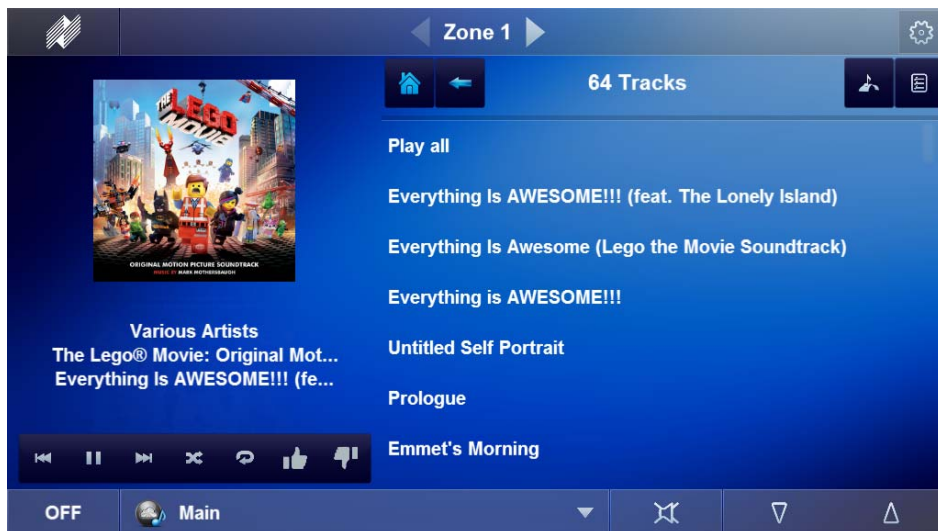
6. Bring up the source selection page by selecting the **Source Drop Down Menu**.



7. Select a **Streaming Media** source and verify its operation.



8. Select **Internet Radio** and select a streaming source.



Note: Streaming service providers should be setup prior to integration with Auriel and according to the Streaming Media Player's owner's manual.

9. **Repeat** checking additional sources in the Auriel Viewer and verifying their operation.
10. When finished verifying operation of the sources return to the **System Configuration Wizard** and proceed to **Lesson 5, Configure a Home Theater Zone**, or **Lesson 6, Configure Zones**, in the training guide.

Lesson 5

Integrating a Home Theater System



Overview

This lesson shows you how to add a basic Home Theater system to the Niles Auriel Viewer.

You will:

- Learn how a home theater system is organized in the Configurator.
- Configure a receiver for the home theater.
- Add the internal tuner as a source.
- Configure sources for the home theater receiver, including the pre-out from another zone controller.
- Add the Video Display to the home theater and configure its behavior.
- Check the Viewer interface to confirm proper configuration.
- Understand the various features available in the Viewer.

Sample House

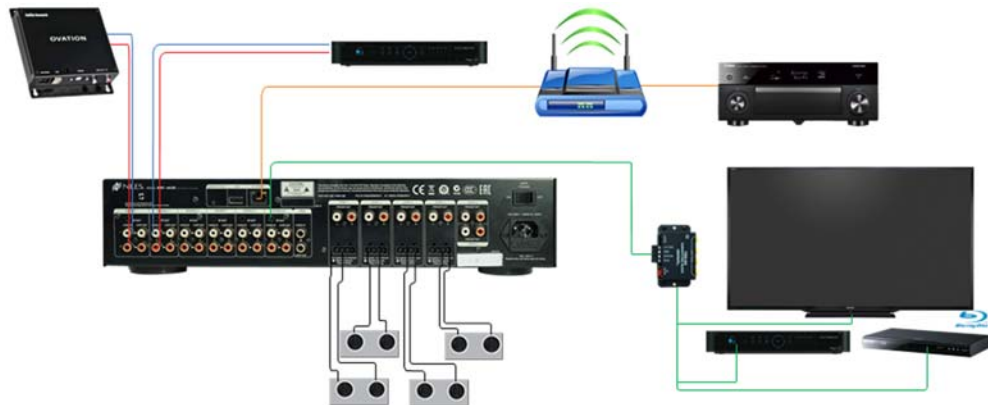
Our sample house will be configured with one home theater zone that includes 1 AVR, 1 Video Display, and three sources.

Requirements

- Niles MRC-6430 powered on and connected to a local area network (same network the programming device will be connected to).
 - A PC running Niles Auriel software.
- or-
- Tablet running the Niles Auriel App.

Home Theater Integration Overview

Overview The following diagram shows how the equipment in a home theater system may be connected to allow the Auriel Viewer to control the home theater system. The AVR is communicating using TCP/IP and the TV and source components are communicating using IR.



Integrating a home theater system with the Niles MRC-6430 provides the end user with control of their home theater system through the Niles Auriel Viewer. Using the Niles Auriel Software, they can:

- Experience the simple, consistent, easy to use interface of their multi-room audio system in their Home Theater.
- Turn a single zone, or all zones, on and off with the push of a button
- Select and control a source for the zone
- Adjust the audio volume in the zone
- Change the zone settings, such as bass and treble

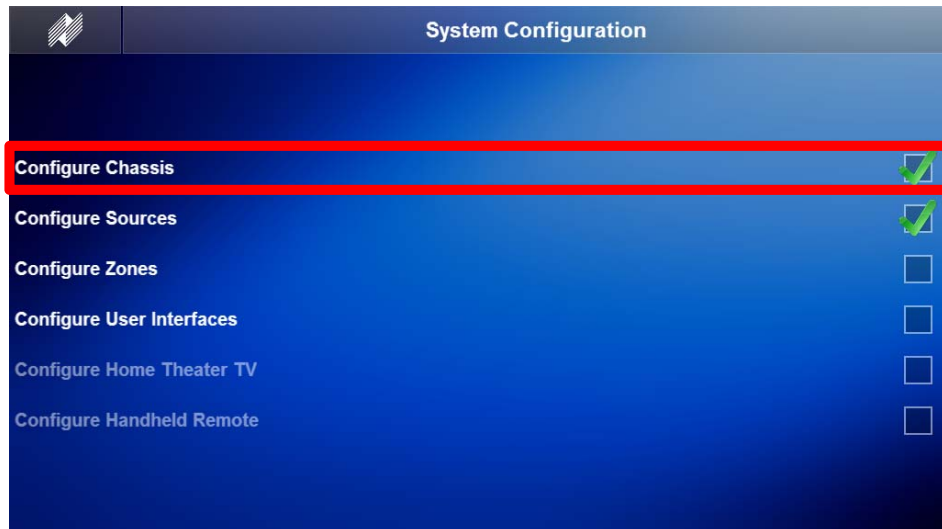
Exercise 1: Add the Audio/Video Receiver Chassis to the Auriel Viewer

Overview This lesson will guide you through how to add a compatible IP-controlled Audio/Video Receiver in a home theater zone to the Niles Auriel Viewer.

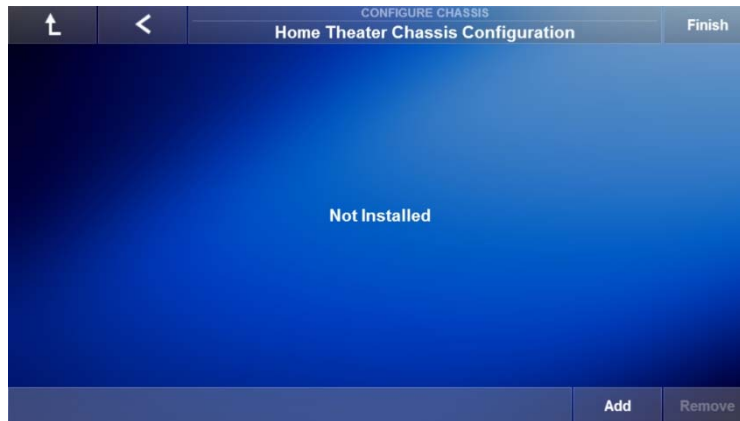
Note: Auriel only supports integration of compatible IP controlled audio/video receivers. The audio/video receiver should be setup with a static IP address as per the manufacturer's instructions before integrating with the Niles Auriel software. Note all network settings for this device in the Project Documentation Worksheet, included with the MRC-6430. Visit www.nilesaudio.com/auriel for a complete list of compatible IP controlled audio/video receivers.

How-to **Adding the Home Theater Chassis driver:**

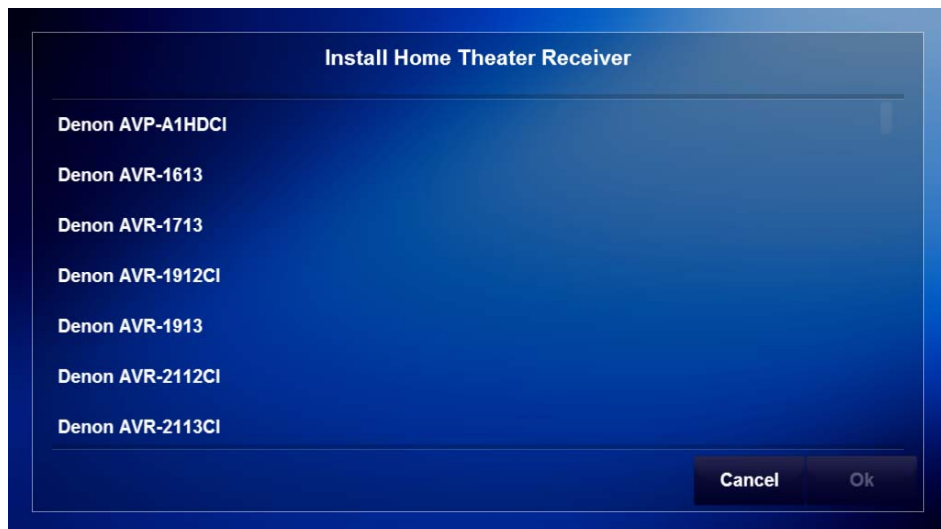
1. Access the System Configuration Wizard and select the **Configure Chassis** node.



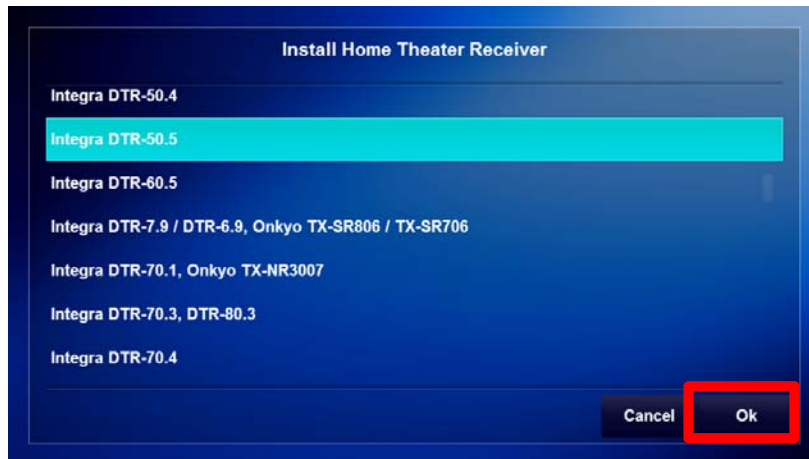
2. Use the **Right Arrow** to navigate to the **Home Theater Chassis Configuration** page.



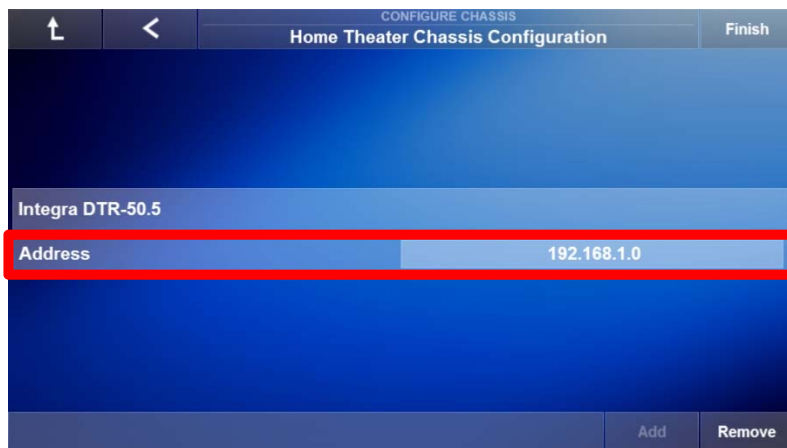
3. Click **Add**. *The Install Home Theater Receiver page appears.*



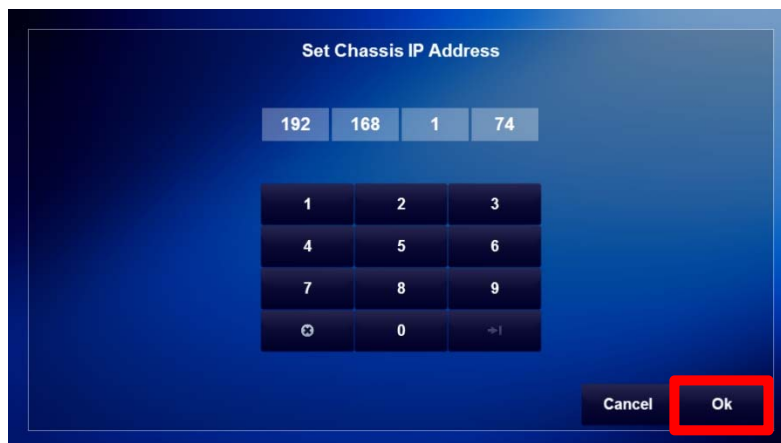
- Use the **scroll bar on the right** to locate the desired Home Theater Receiver IP driver. Select the **Home Theater Receiver IP** driver and then select **OK**.



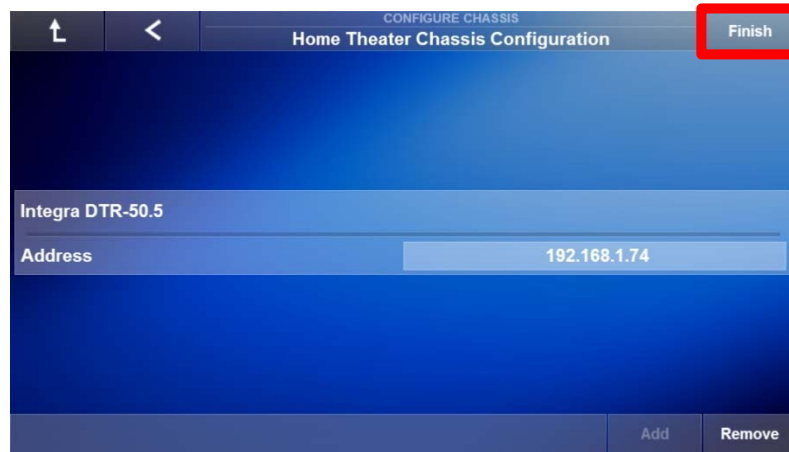
- Select the **IP Address** field.



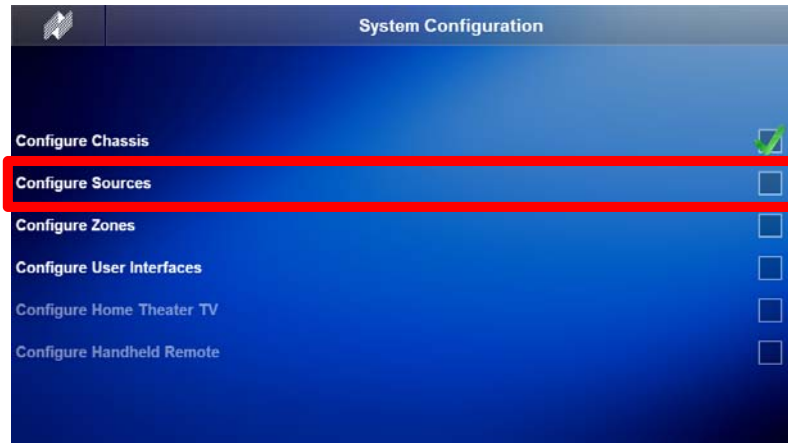
- The *Set Chassis IP Address* window appears. Enter the **IP Address** of the Home Theater Receiver and select **OK**.



7. Verify the IP Address entered was correct and select **Finish** to return to the System Configuration Wizard main page.



8. Proceed to **add the home theater source devices** in the Configure Sources node. See **Lesson 4, Configure Sources**, for more information.



Exercise 2: Assigning sources to the Home Theater Receiver Interface

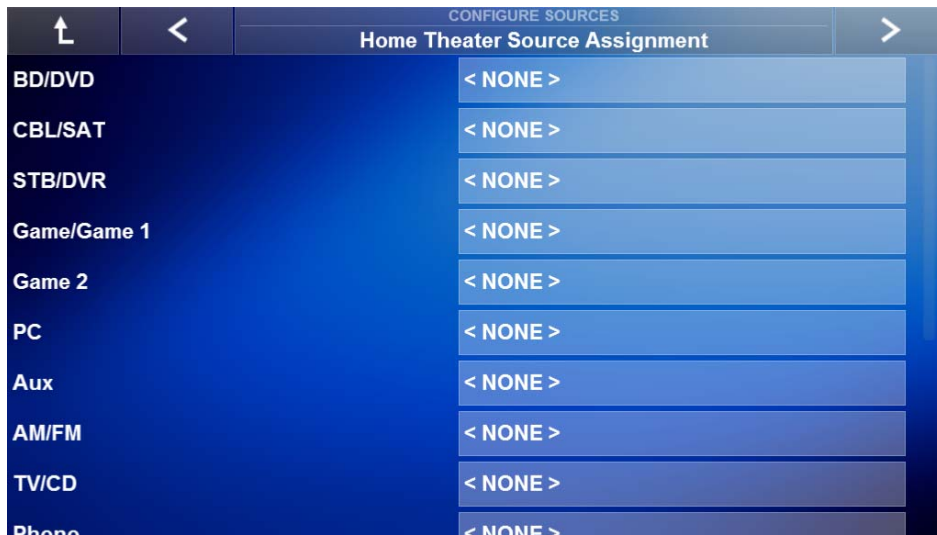
Overview

In Exercise 2, you will assign the sources added for the Home Theater zone to the Home Theater Receiver for viewing and control in the Niles Auriel Viewer. In this exercise we will reference two sources: Theater TV and a Blu-ray player, called Theater Movie. **Please add the necessary sources for the Home Theater Zone as illustrated in Lesson 4.**

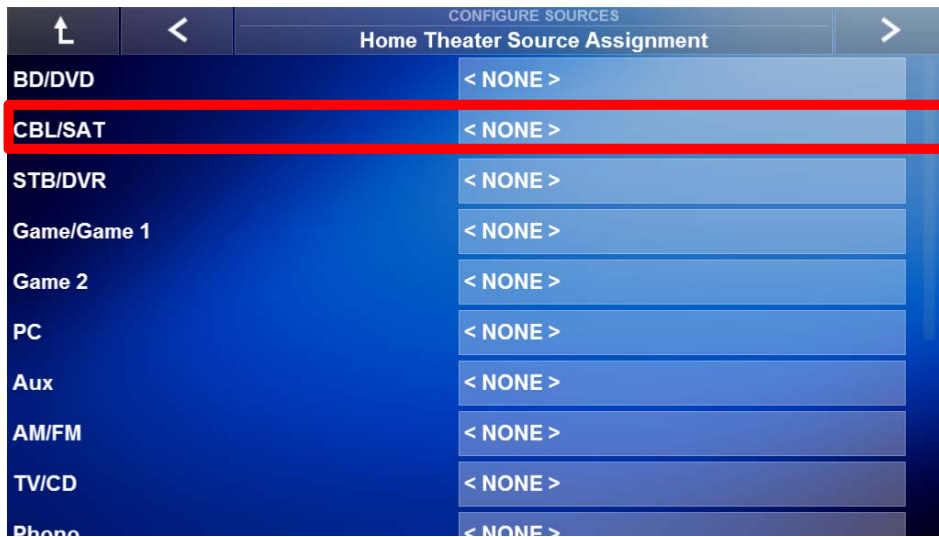
How-To

Assigning sources to the Niles Auriel Viewer for the Home Theater:

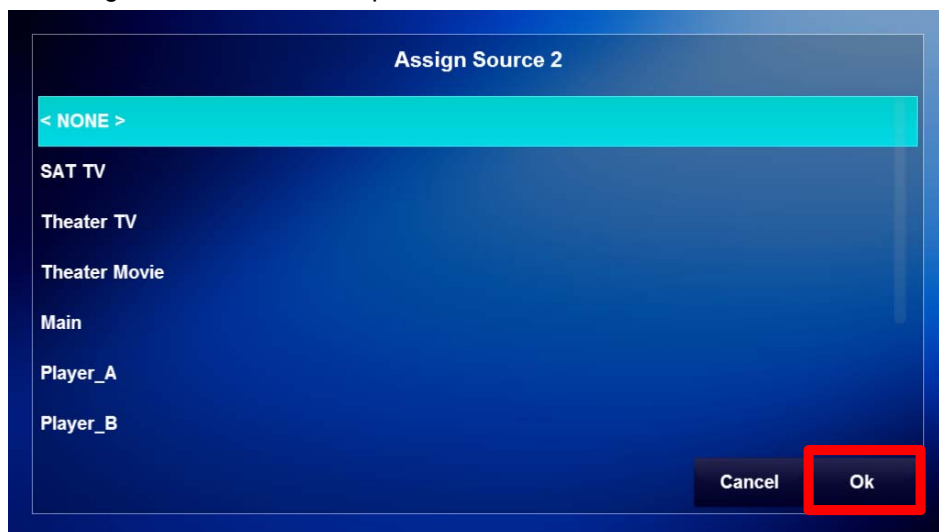
1. Navigate to the **Configure Sources** node.
2. Use the **Right Arrow** to navigate to the **Home Theater Source Assignment** page.



3. Select the **Source Name** field to view available sources.

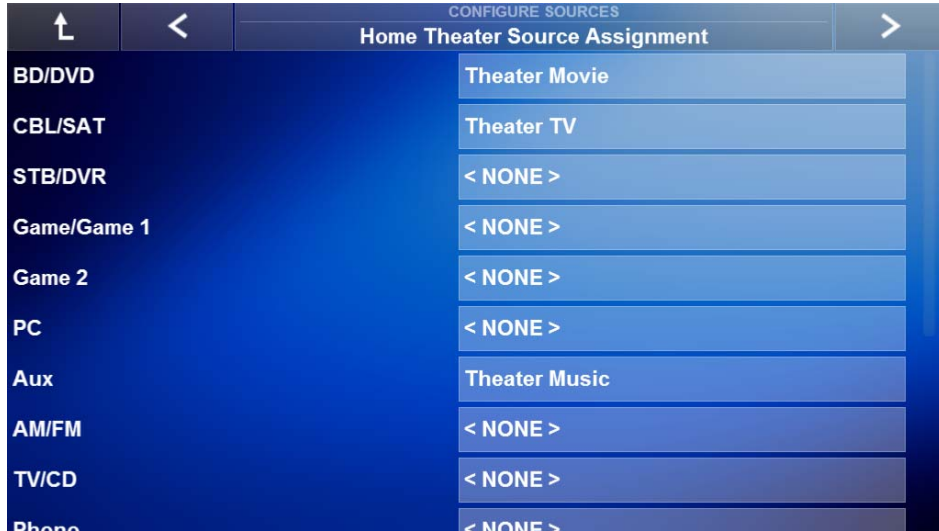


4. *The Assign Source X window appears.* Select the **source device** to be assigned to the selected input and select **OK**.

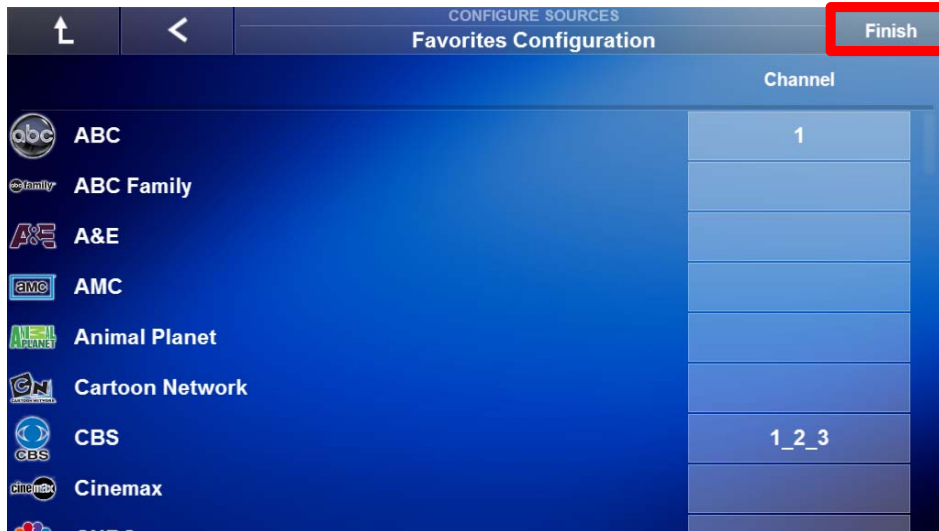


Note: The source interface assigned to the selected Home Theater Receiver input should be **physically connected** to the selected input of the Home Theater Receiver in order for audio and video to be active when the source is selected in the home theater zone.

5. Repeat **Steps 3 & 4** to assign additional source interfaces to source inputs on the Home Theater Receiver. Shown below are sources added for use in this exercise to give you an idea of how the interface should look with sources assigned to the Home Theater Receiver.



6. Select the **Right Arrow** until Finish appears and then select **Finish** to return to the System Configuration Wizard main page.



Configure Home Theater TV Node

Overview Here we will give you an overview of the Configure Home Theater TV node in the System Configuration Wizard. The Configure Home Theater TV node is only available when a Home Theater Receiver has been added in the Configure Chassis node.

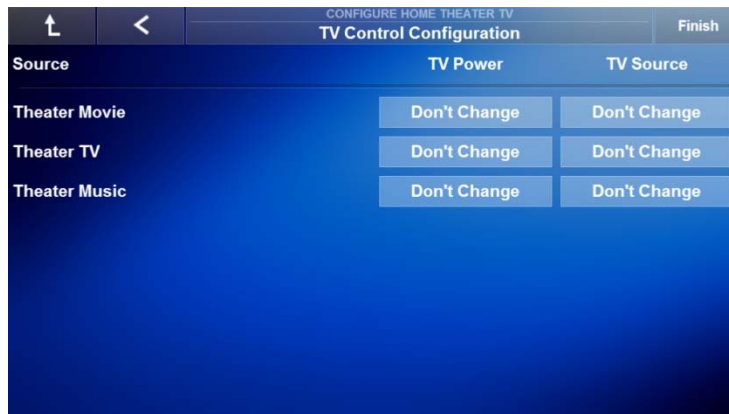
The Configure Home Theater TV node is made up of two pages to allow you to add a TV for IR control by the Niles Auriel system. This node allows you to set up how a TV behaves when sources are selected in the Home Theater Zone.

Configure Home Theater TV Node page:

TV Configuration Page: This page is used to **Add or Remove** IR code sets used to control the TV in a home theater zone.



TV Control Configuration page: This page is used to define how the TV behaves when a source is selected in the home theater zone. The TV may be set to change power status and switch input modes depending on which source is selected in the home theater.

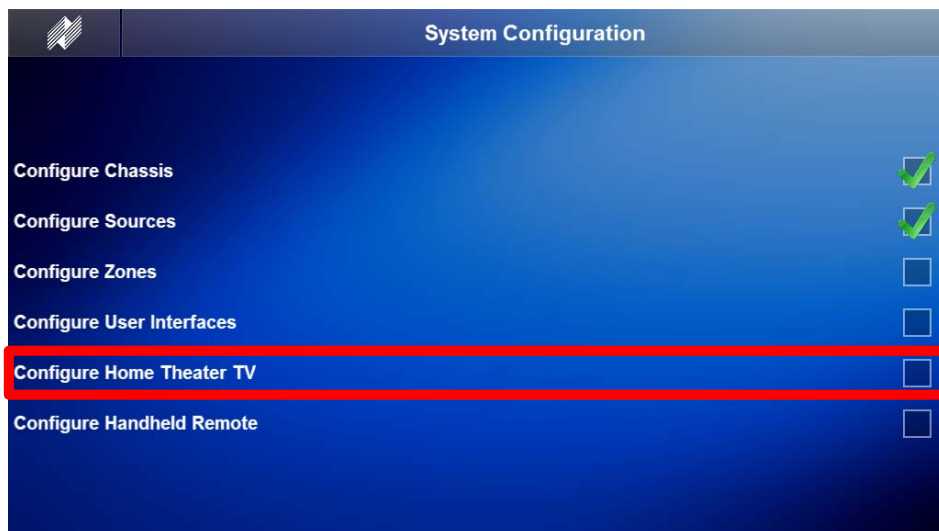


Exercise 3: Add a Home Theater TV

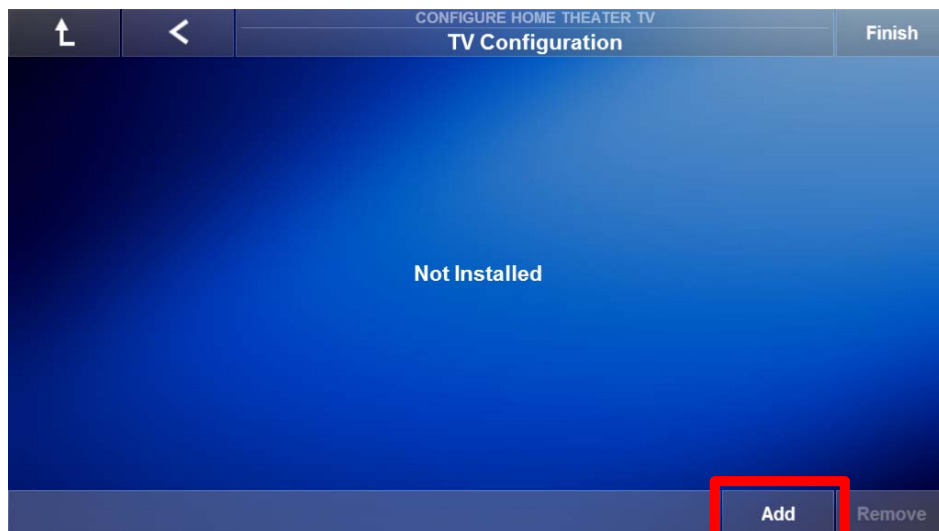
Overview In Exercise 3, an IR controlled TV will be added for control by the Niles Ariel System. This exercise will use LG as the TV example.

How-to **Add a Home Theater Zone TV for control by Ariel:**

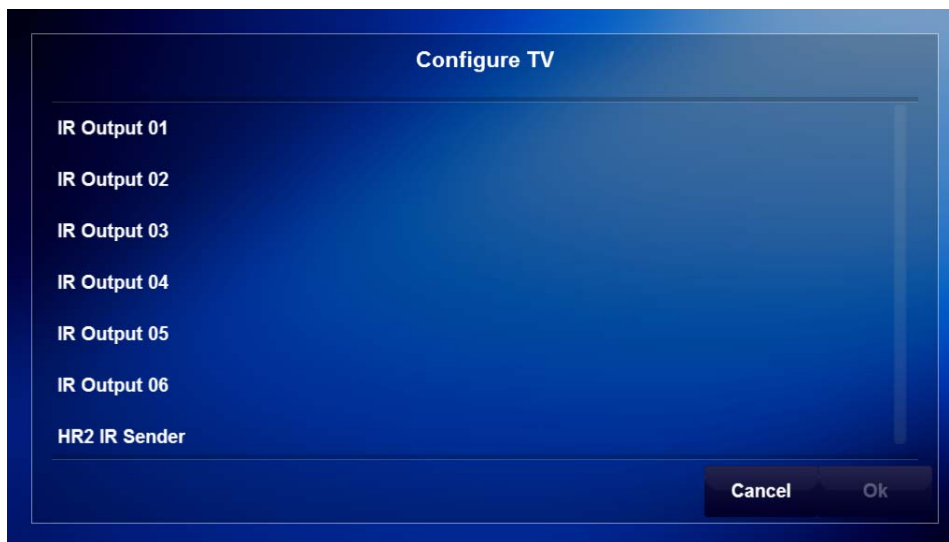
1. From the System Configuration Wizard main page, select the **Configure Home Theater TV** node.



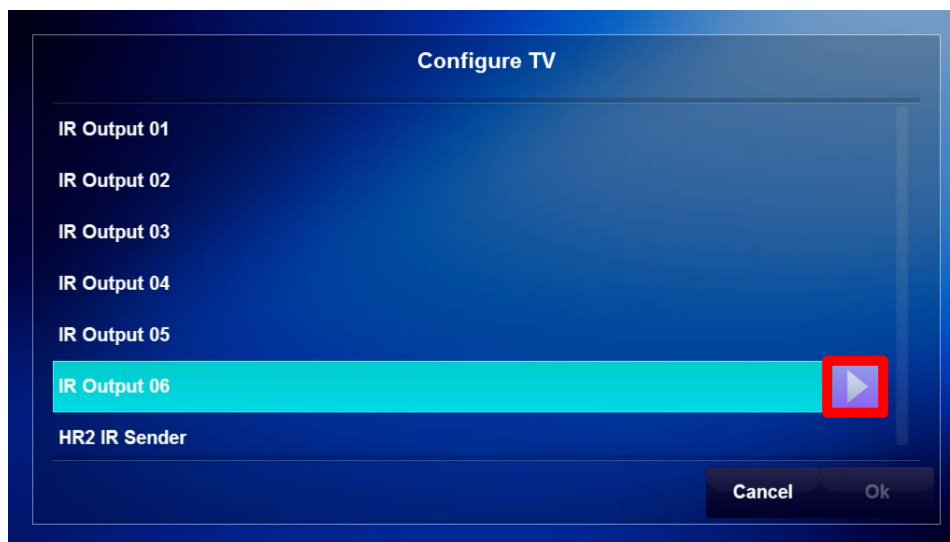
2. The TV Configuration page appears. Select **Add**.



3. *The Configure TV window appears with the list of IR Outputs. Assign the IR Output on the MRC-6430 being used to send the IR commands to the Home Theater Zone by selecting the **IR Emitter** field.*



4. *The Select IR Emitter window appears. Select the **IR Output** being used and select **Right Arrow**. This exercise uses IR Output 6 as an example.*

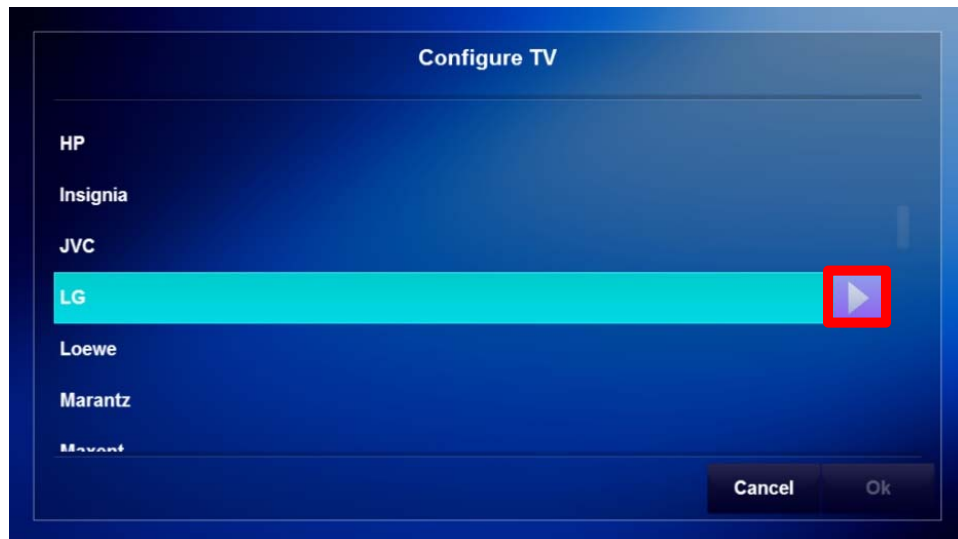


Note: The IR Output chosen should match the IR Output being used to control all IR devices in the Home Theater Zone. A Powered IR Connecting Block should be used to accommodate all IR devices in the theater zone.

5. A list of brands appears in the *Configure TV* window. Use the **scroll bar** on the right to locate the manufacturer of the TV being used and select the **TV Manufacturer**.



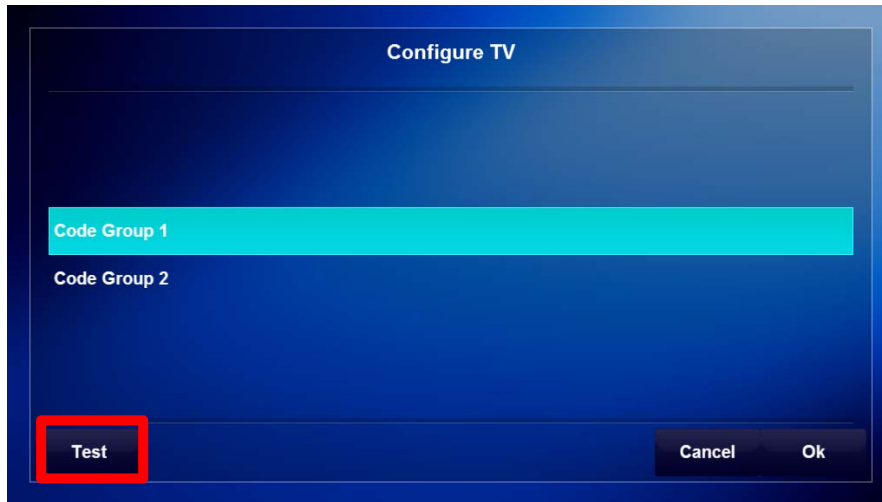
6. Select the **Arrow Box**.



7. Select the **IR code set for the TV** being used.

Note: Some TVs have multiple IR Code Sets available to them. Please choose the correct IR Code Set for the TV being used.

- a. Verify the selected IR code set is correct by selecting the **Test** button.



- b. In the Test IR window, select an **IR command** on the right to test.



Note: Before testing an IR command ensure the TV is physically connected to the assigned IR output on the MRC-6430. Power On the TV before testing an IR command.

8. When finished select **OK** to return to the TV Configuration main page.



9. The TV Configuration page appears. Select the **Right Arrow** to proceed to the **TV Control Configuration** page.



10. Note the following on the TV Control Configuration page:



Source	TV Power	TV Source
Theater Movie	Don't Change	Don't Change
Theater TV	Don't Change	Don't Change
Theater Music	Don't Change	Don't Change

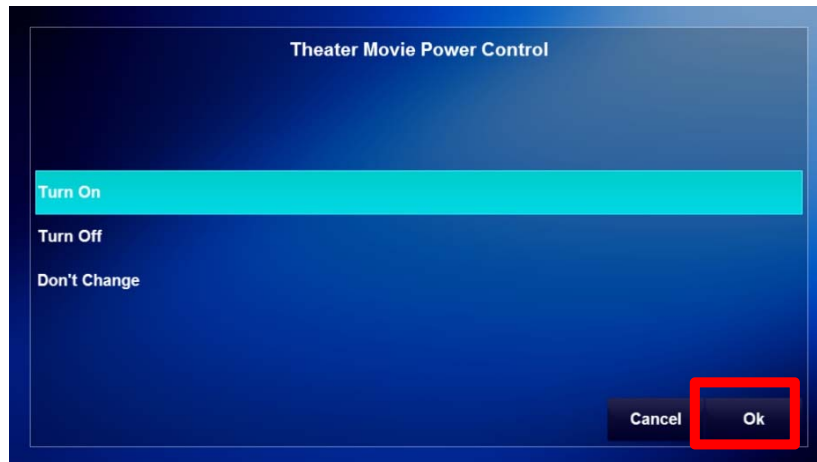
- Source Column:** Names of the sources assigned to the inputs on the Home Theater Receiver.
- TV Power Column:** Lets you set the Power status of the TV depending on source selection.
- TV Source Column:** Lets you set the Input on the TV depending on source selection.

11. Start with the first source and select a **Don't Change** in the TV Power column to set the Power status.



Source	TV Power	TV Source
Theater Movie	Don't Change	Don't Change
Theater TV	Don't Change	Don't Change
Theater Music	Don't Change	Don't Change

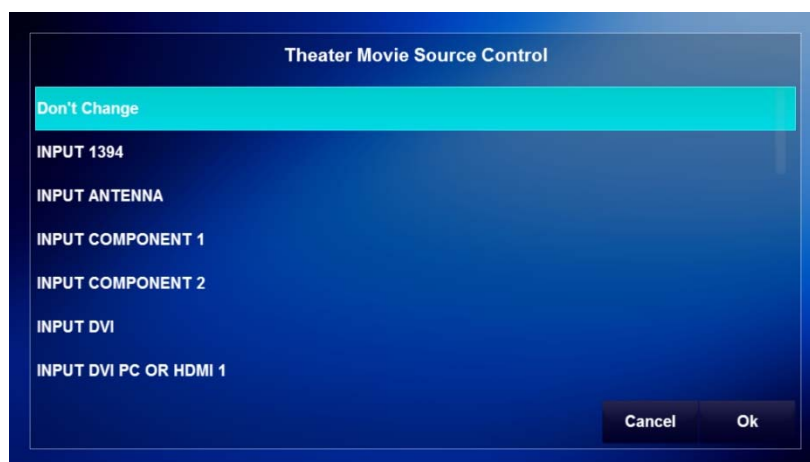
12. *The Power Control window appears.* Select the appropriate Power state for the chosen source and select **OK**.



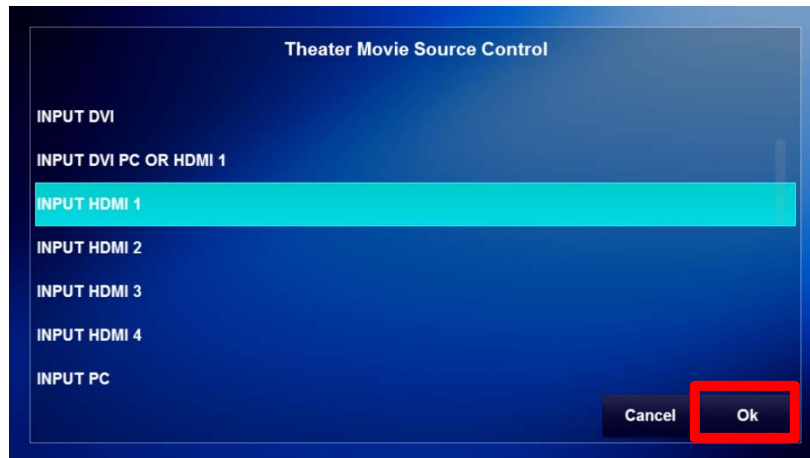
13. Confirm the TV Power setting and select **Don't Change** in the **TV Source** column to the right.



14. *The Source Control window appears.* Use the **scroll bar on the right** to locate the **TV input being used** for the chosen source.



15. Select the **TV input being used** and select **OK**.



16. Confirm the TV Source setting and **repeat steps 10 thru 14** for each additional source in the Home Theater Zone. Select **Finish** when done to return to the System Configuration Wizard main page.

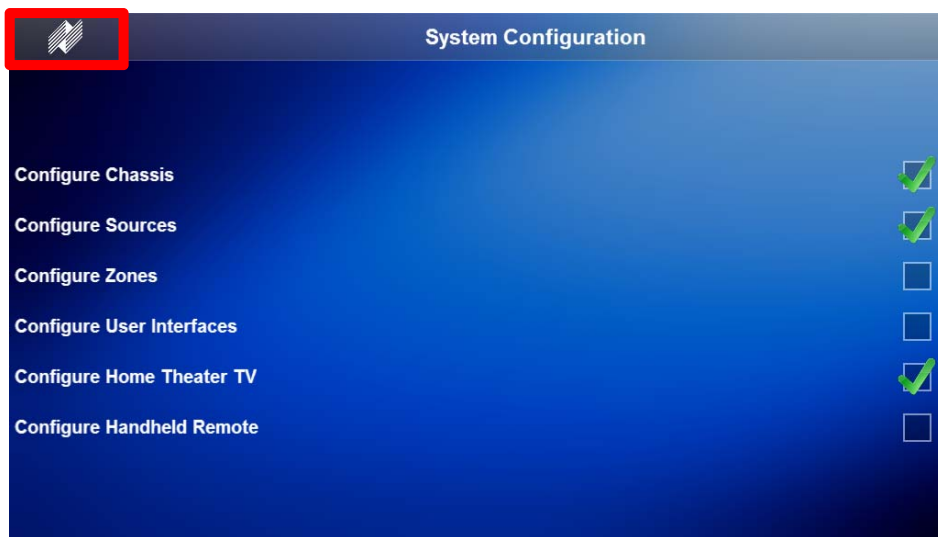


Exercise 4: Check the Viewer Interface

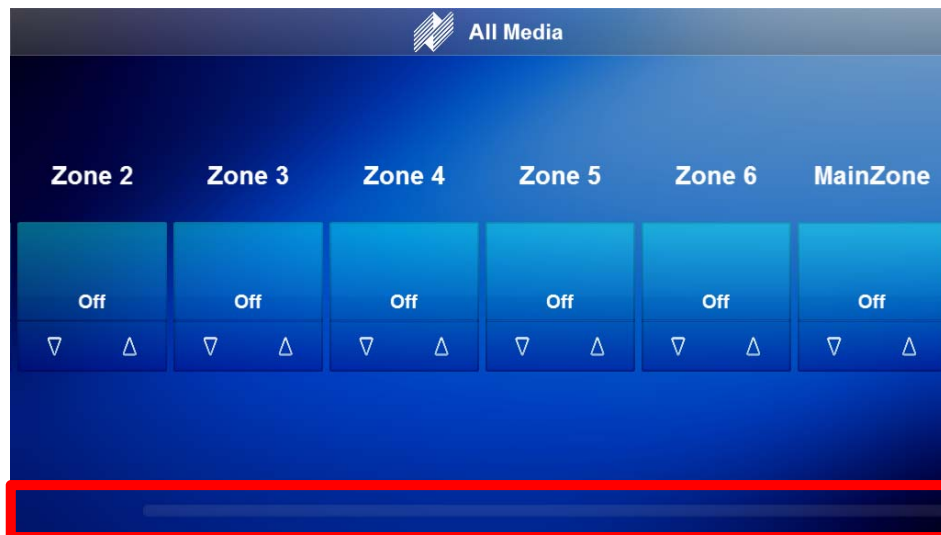
Overview In Exercise 4, you will check your work in the Viewer. Before beginning, be sure you have completed all of the previous exercises in this lesson.

How-To **Check the Auriel Viewer**

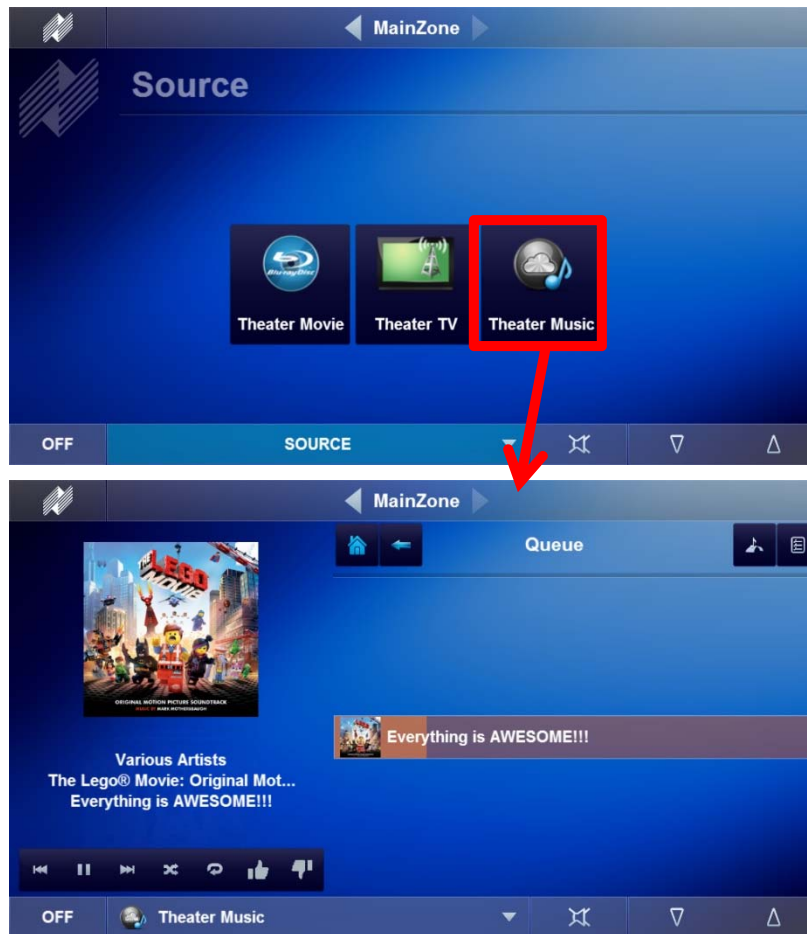
1. Access the **Auriel Viewer**. If you are in the setup wizard press the Niles Logo in the upper left corner.



2. Move the **Scroll Bar** at the bottom of the screen to the right to view additional zones.



3. Select the **Main Theater Zone** and select a **Source** from the sources page.



4. Verify each of the following for the **Theater Zone**:

- Source Selection for each source is correct on the Theater Receiver
- TV Operates as setup in Exercise 3
- Source Control of each source performs as expected
- Volume Control of the Theater Receiver performs as expected

5. If you have a **Niles nHR200 Handheld Remote** proceed to the **Configure Handheld Remote Node**, otherwise proceed to Lesson 6, Configure Zones Node.

Configure Handheld Remote Node

Overview Niles Auriel allows you to offer your clients the best-in-class nHR200 Wi-Fi Remote Control. By adding the Home Theater Zone in the Niles Auriel software you are able to add the Niles nHR200. The nHR200 controls the theater zone and can be setup to control other zones throughout the whole house audio system. The nHR200 delivers the same consistent user experience as from a Niles Touch Panel or Auriel interface on a mobile device, but with the added benefit of having instant access to control via hard buttons.

The Configure Handheld Remote node is made up of two pages to allow you to add and configure an nHR200.

Configure Handheld Remote pages:

Handheld Remote Enrollment: This page allows you to setup an nHR200 for use with the Niles Auriel system. See the nHR200 Quick Install Guide for nHR200 setup information.



Note: The nHR200 must be powered off when connected to the MRC-6430. When powered On the nHR200 will ask for a passkey. Enter 3 5 2 6 to connect the nHR200 to the MRC-6430 to add it to the Niles Auriel software.

Handheld Remote Enrollment Continued: After the nHR200 connects to the MRC-6430 the Handheld Remote Enrollment page displays the nHR200 and the fields that are required to be set before the nHR200 can be used with the system.

CONFIGURE HANDHELD REMOTE	
Handheld Remote Enrollment	
HR200 Address	192.168.1.17
HR200 NetMask	255.255.255.0
HR200 Gateway	192.168.1.1
HR200 Controller	192.168.1.3
SSID	PMRoom2
Encryption Type	WPA/PSK
Passphrase	1010101010
Apply	

Note: The IP Address entered must not conflict with another IP address on the network. The SSID, Encryption Type, and Passphrase must match the network the Niles Auriel is on. Note all network settings for this device in the Project Documentation Worksheet, included with the MRC-6430. To ensure proper control, it is recommended that a Wi-Fi network be properly mapped out and installed before installation of the nHR200. If you are not familiar with networking or wireless networks please see the assistance of network professional to help ensure optimal operation.

Handheld Remote Configuration Page: This page allows you to assign primary and secondary zones for control by the nHR200. The Primary Locations are the Theater Receiver zones and the Secondary Locations are the MRC-6430 zones.

CONFIGURE HANDHELD REMOTE	
Handheld Remote Configuration	
Finish	
HR2@192.168.1.17	Remove
Primary Location	MainZone
Secondary Locations	Zone 1 - Zone 4 - +

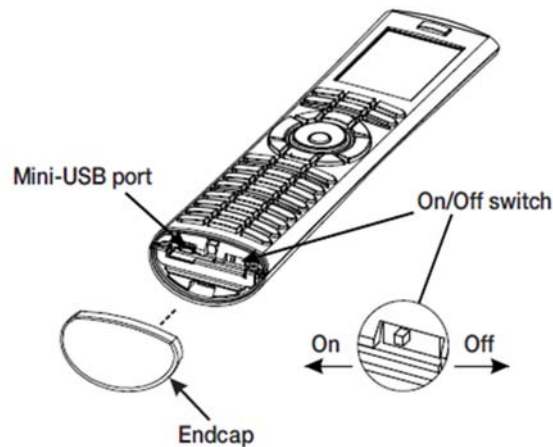
Exercise 5: Add the nHR200 Remote

Overview In Exercise 5, you will add the Niles nHR200 Wi-Fi Remote Control.

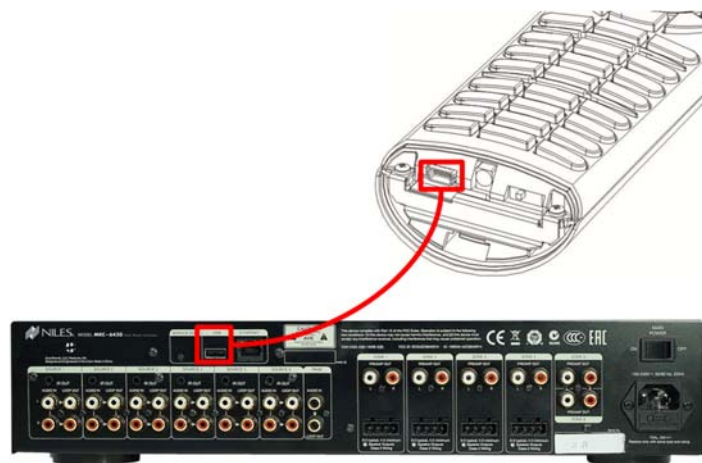
By adding Niles nHR200 Wi-Fi remote control to control the theater zone you are giving your client's one of the best control interfaces on the market today, and we're not biased... Ok, we are a little biased, but the nHR200 is still one of the best remote controls on the market today. The nHR200 delivers best-in-class performance and the same consistent user experience as from a Niles Touch Panel or the Auriel interface on a mobile device, but with the added benefit of having instant access to control via hard buttons.

How-To **Add the nHR200 Wi-Fi Remote Control**

1. Unbox the nHR200 and remove the **Endcap** to access the On/Off switch and the Mini-USB port.



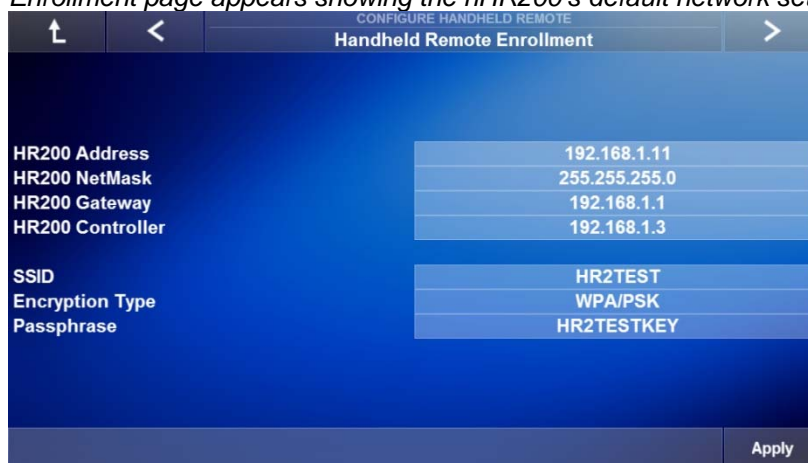
2. **Before** powering the nHR200 on connect the nHR200 to the **USB port** on the rear panel of the MRC-6430 using the **USB cable included** with the nHR200.



3. **Power on** the nHR200.

Note: The nHR200 may come out of the box with a charge. Niles recommends giving the remote a charge for at least 45 minutes before beginning setup.

4. The nHR200 will ask for a password before connecting to the MRC-6430. Use the number pad on the nHR200 to enter **3, 5, 2, 6** and then press **Enter**. The nHR200 will connect to the MRC-6430.
5. In the Niles Auriel software navigate to the System Configuration Wizard and select the **Configure Handheld Remote** node. *The Handheld Remote Enrollment page appears showing the nHR200's default network settings.*



6. Proceed to **Exercise 5, nHR200 Network Settings**, before disconnecting the nHR200 from the MRC-6430.

Exercise 6: nHR200 Network Settings

Overview In this exercise we will setup the nHR200s network settings. This will allow the nHR200 to connect to the wireless network for communication with the MRC-6430 and control of the Home Theater Zone system.

Terms The following terms are important to know for this exercise:

- **IP Address:** A numerical label assigned to a device on a network. Since IP address numbers are unique per device, an IP address allows us to know where a specific device is located at in a network.
- **Subnet:** A portion of a network that shares a common address component. Typically, all devices with addresses that start with 192.168.0 would be part of the same subnet. A typical Class C Subnet would be 255.255.255.0. However it is important to note that some networks may use different subnets.
- **Gateway:** A node on a network that serves as an entrance to another network. In a residential installation a router is the gateway for devices on the local area network, LAN, to access the internet, or wide area network, WAN.
- **Controller:** The controller field is the IP address of the MRC-6430. The MRC-6430 **MUST** have a static IP address assigned to it in order for the nHR200 to work.
- **SSID:** Service Set Identifier, SSID, is a case sensitive, alphanumeric character unique identifier used to differentiate one wireless network from another. All access points and wireless devices use the same SSID as part of the process to be permitted to join the wireless network.
- **Encryption Type:** wireless network encryption is used to secure a wireless network using one of two types of wireless network encryption:
 1. **WEP:** Wired Equivalent Privacy is the oldest and least secure method.
 2. **WPA/PSK:** Wi-Fi Protected Access/Pre-Shared Key uses a passphrase for authentication to allow access to the wireless network. The passphrase is case sensitive and should contain a mix of alphanumeric characters.
 3. **None:** None means that the wireless network is not secure and open to anyone who wishes to connect. This is the least secure option.
- **Passphrase:** The case sensitive, alphanumeric character unique identifier used to access the wireless network.

*How-to***Set the nHR200 up for connection to the Wireless Network**

1. On the Handheld Remote Enrollment page, select the **nHR200 Address** field.

CONFIGURE HANDHELD REMOTE	
Handheld Remote Enrollment	
HR200 Address	192.168.1.11
HR200 NetMask	255.255.255.0
HR200 Gateway	192.168.1.1
HR200 Controller	192.168.1.3
SSID	HR2TEST
Encryption Type	WPA/PSK
Passphrase	HR2TESTKEY
Apply	

2. The *Set nHR200 Address* window appears. Enter the desired **static IP address** for the nHR200. Please remember to use an IP address that does not conflict with the IP addresses in the DHCP range. Select **OK** when finished.

Set HR200 Address

192 168 1 17

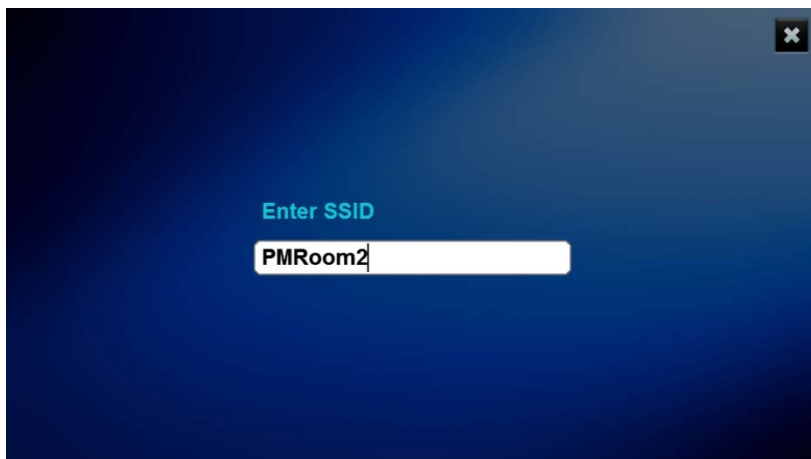
1	2	3
4	5	6
7	8	9
↺	0	⇒

Cancel **Ok**

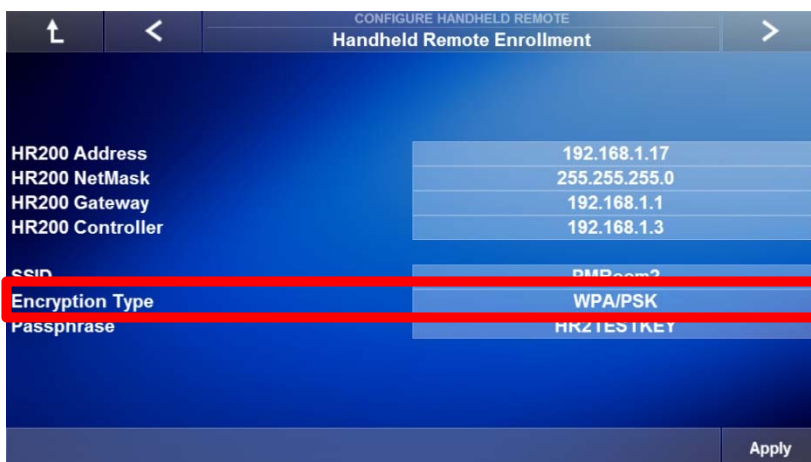
3. Verify the **NetMask**, **Gateway**, and **Controller** fields are correct.

CONFIGURE HANDHELD REMOTE	
Handheld Remote Enrollment	
HR200 Address	192.168.1.17
HR200 NetMask	255.255.255.0
HR200 Gateway	192.168.1.1
HR200 Controller	192.168.1.3
SSID	HR2TEST
Encryption Type	WPA/PSK
Passphrase	HR2TESTKEY
Apply	

4. Select the **SSID** field and enter the **SSID of the wireless network** the nHR200 will connect to. Remember that the SSID is case sensitive. When finished press enter on the keyboard.



5. Verify the **SSID** is correct and select the **Encryption Type** field.



6. *The Set nHR200 Encryption Type window appears.* Note that the Wireless Access Point, WAP, or Wi-Fi Router's encryption type must be set to one of the two options shown in order for the nHR200 to connect. Choose the **encryption type being used** by the wireless network, if no encryption type is being used select none. Select **OK** when finished.



7. Verify the Encryption Type is correct and select the **Passphrase** field.

CONFIGURE HANDHELD REMOTE	
Handheld Remote Enrollment	
HR200 Address	192.168.1.17
HR200 NetMask	255.255.255.0
HR200 Gateway	192.168.1.1
HR200 Controller	192.168.1.3
SSID	PMRoom2
Encryption Type	WPA/PSK
Passphrase	HR2TESTKEY

Apply

8. *The Set nHR200 Passphrase window appears.* Enter the Passphrase used by the wireless network to allow the nHR200 authorization to connect to the network. Remember the passphrase is a case sensitive, alphanumeric character unique identifier. When finished press enter on the keyboard.

Enter Passphrase

1010101010

9. Verify the SSID, Encryption Type, and Passphrase are all set correctly and select **Apply** to save changes.

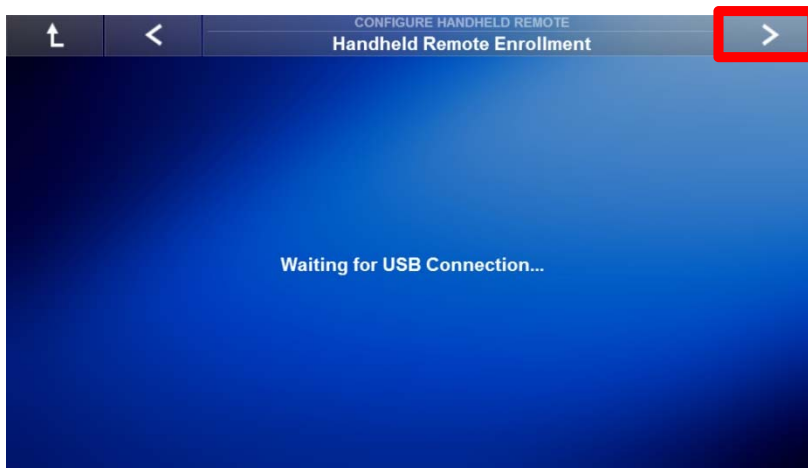
CONFIGURE HANDHELD REMOTE	
Handheld Remote Enrollment	
HR200 Address	192.168.1.17
HR200 NetMask	255.255.255.0
HR200 Gateway	192.168.1.1
HR200 Controller	192.168.1.3
SSID	PMRoom2
Encryption Type	WPA/PSK
Passphrase	1010101010

Apply

10. Disconnect the nHR200 from the MRC-6430 and select **OK**.



11. Wait for the nHR200 to connect to the wireless network, **this may take several minutes**, and then select the **Right Arrow** to proceed.



Proceed to **Exercise 7, Assigning Zones to the nHR200** for more information on setting up the nHR200.

Exercise 7: Assigning Zones nHR200

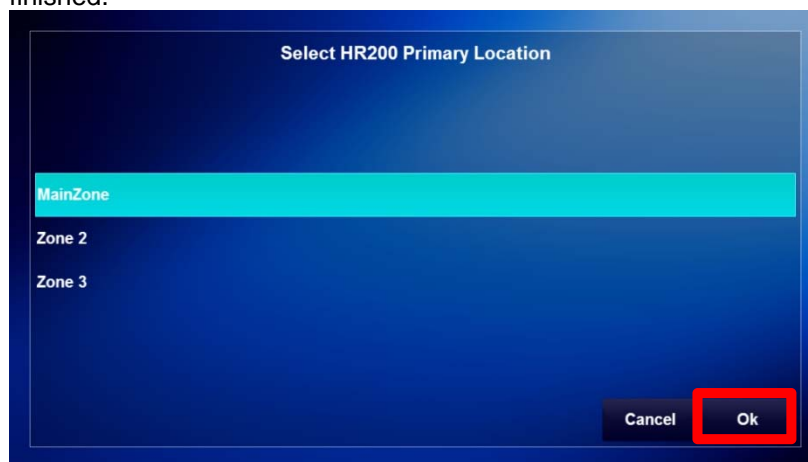
Overview This exercise will show you how to assign a single, or multiple zones to the nHR200. See Lesson 6 for renaming zones in the system.

How-to **Assign zones to the nHR200**

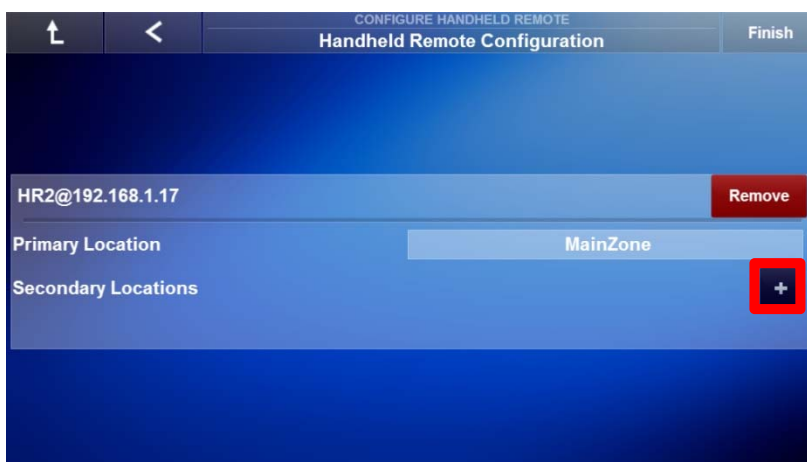
1. Navigate to the Handheld Remote Configuration page and select the **Primary Location** field.



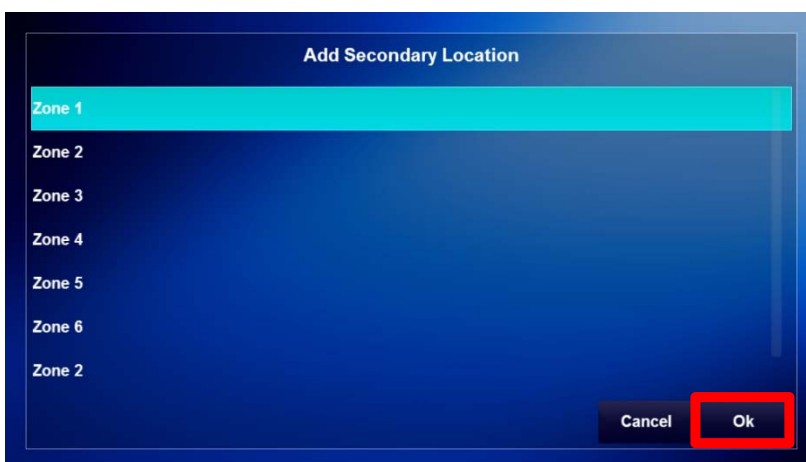
2. *The Select nHR200 Primary Location window appears.* Select the nHR200's **primary default zone**, Main Zone in this exercise. The Main Zone will be the main zone of the home theater receiver for this exercise. Select **OK** when finished.



3. Verify the Primary Location is the desired zone on the home theater receiver. Now add zones from the MRC-6430 by selecting the **plus sign** to the right of Secondary Locations.



4. The Select nHR200 Secondary Location window appears. Select the **secondary zone** to add to the nHR200 and select **OK** when finished.



5. Verify the Secondary Location.



6. Repeat steps 3 and 4 to add additional Secondary Locations.



7. Verify operation of the nHR200.

Lesson 6

Configure Zones Node



Overview

This lesson gives you an overview of how to set up the Configure Zones node.

In this lesson you will learn:

- About each page of the Configure Zones node.
- How to rename zones.
- How to set each zone's turn on behavior.
- How to set each zone's Pre-Amp outputs.
- How to enable Whole House Mode (WHM) and Door Chime/Paging per zone.

Sample House

Our sample house will be configured with two distributed A/V zones and a Home Theater Zone:

- Living Room
- Kitchen
- Theater

Requirements

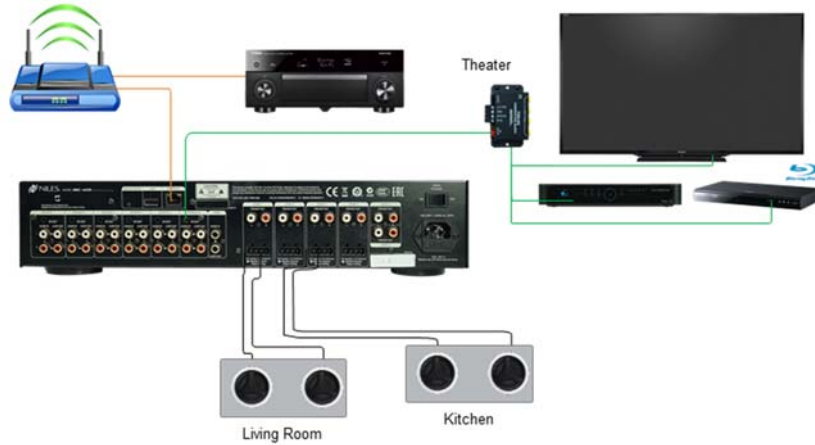
- Niles MRC-6430 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running Niles Auriel software.

-or-

- Tablet running the Niles Auriel App.

About the Configure Zones Node

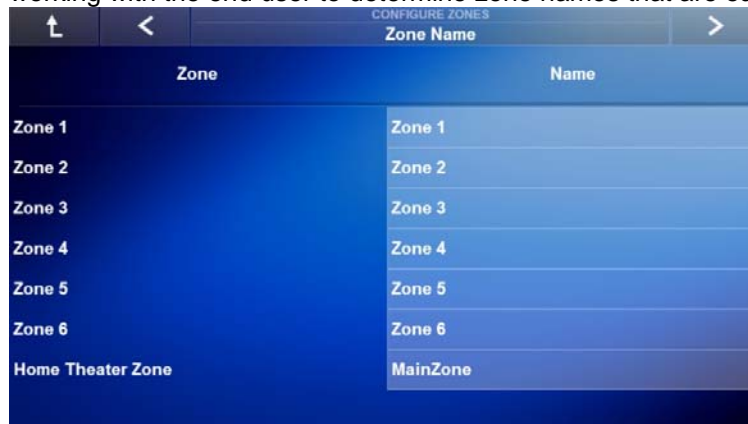
Overview The **Configure Zones** node allows you to set up how each zone is named in the Auriel Viewer, tone default settings per zone, volume control settings, and whether a zone is included in the WHM and door chime/paging feature. Note that door chime/paging features require the use of the Niles DBI-2 Door Bell Interface.



- Terms* The following terms are used in the Configure Zones node:
- **WHM:** This refers to Whole House Mode. When enabled WHM will turn on all zones to the source currently being played.
 - **Do Not Disturb:** Do Not Disturb, or DND, is a setting in the Auriel Viewer for each zone that the end user can turn on or off. When On the zone will not respond to WHM, door chime, or paging events.

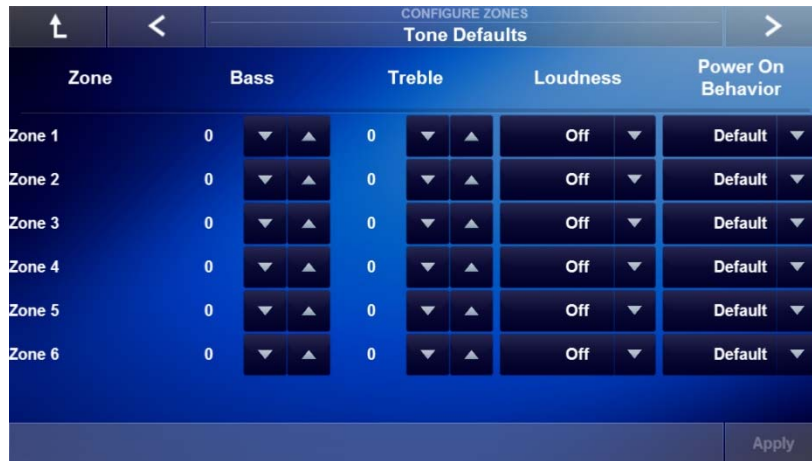
Navigating the Configure Zones Node The Configure Zones node is comprised of 4 pages:

- **Zone Name:** This page allows for renaming each zone. Niles recommends working with the end user to determine zone names that are easily recognizable.



Zone Name	The name of a zone that is shown in the Auriel Viewer. See Exercise 1 for more details.
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- **Tone Defaults:** This page allows for setting the MRC-6430's Power On Behavior for each zone's Tone adjustments.



Bass	Low frequency adjustment. -12dB to +12dB in 1dB increments. Default = 0 dB
Treble	High frequency adjustment. -12dB to +12dB in 1dB increments. Default = 0 dB
Loudness	Increases the level of high and low frequencies. Loudness is intended for use a low listening levels to compensate for the ears lower sensitivity to extreme high and low frequencies. Default = Off
Power On Behavior	Determines how a zone's Tone settings will respond when the zone is powered On. When the Power On Behavior is set to Default , powering on a zone resets the Bass/Treble/Loudness contours to the settings made on this page. When the Power On Behavior is set to Last , powering on a zone resets the Bass/Treble/Loudness contours to the settings made in the Auriel Viewer before the zone was powered off.

- **Volume Defaults:** This page is used for setting the MRC-6430 Line Out (Pre-Amp) Volume, Zone On Volume, and Max Zone Volume.



Line Out Volume	Settings for the Pre-Amp Output on the MRC-6430. The Variable (factory default) setting should be used when the volume control of the pre-amp output is from an Auriel Interface. The Fixed setting should be used when a volume control is used in between the power amplifier and the speakers to adjust the volume.
Zone On Volume	This setting determines the volume level a zone is set to when powered On. 0 – 100% are available to ensure the power On volume level for each zone is set to a comfortable level.
Max Volume	The maximum volume a zone can be set to from an Auriel Interface.

- **WHM & Paging Configuration:** This page allows for setting zones up on the MRC-6430 for WHM and Doorbell/Paging events.



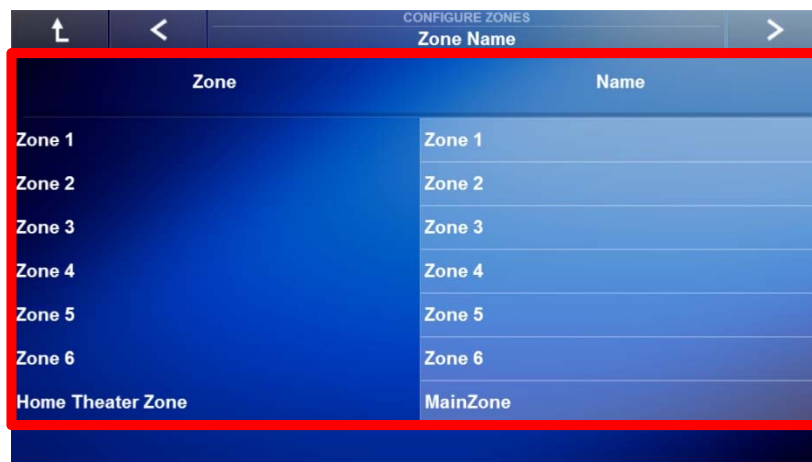
WHM Enabled	Enables a zone to be a part of Whole House Mode, WHM, when activated from the Auriel Viewer. The default setting is Yes. Set to No to remove a zone from WHM participation.
Paging Enabled	Enables a zone to pass thru door chime and/or paging (requires DBI-2) through the speakers in the whole house audio system. Set to No to remove a zone from Paging/Door Chime access.
Paging Volume	Sets the volume level heard over the whole house audio speakers for door chime and paging.

Exercise 1: Rename a Zone

Overview In this exercise you will rename a zone on the MRC-6430 to be easily recognizable in the Auriel Viewer.

How-to Rename a Zone

1. Access the **Configure Zones** node in the System Configuration Wizard. *The Zone Name page appears.*



The screenshot shows a mobile interface titled 'CONFIGURE ZONES' with a 'Zone Name' header. Below the header is a table with two columns: 'Zone' and 'Name'. The table contains the following data:

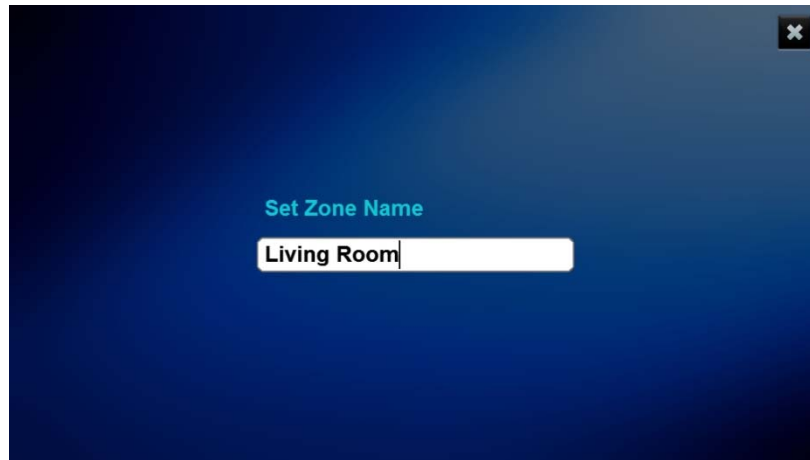
Zone	Name
Zone 1	Zone 1
Zone 2	Zone 2
Zone 3	Zone 3
Zone 4	Zone 4
Zone 5	Zone 5
Zone 6	Zone 6
Home Theater Zone	MainZone

2. Select a **Zone** to rename. This exercise will use Zones 1, 2, and Home Theater Zone. *The Set Zone Name page appears.*

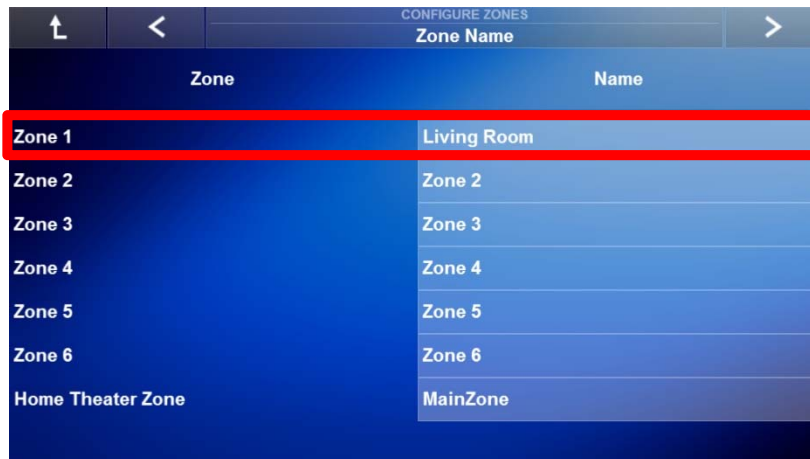


The screenshot shows a dialog box titled 'Set Zone Name' with a close button in the top right corner. Below the title is a text input field containing the text 'Zone 1'.

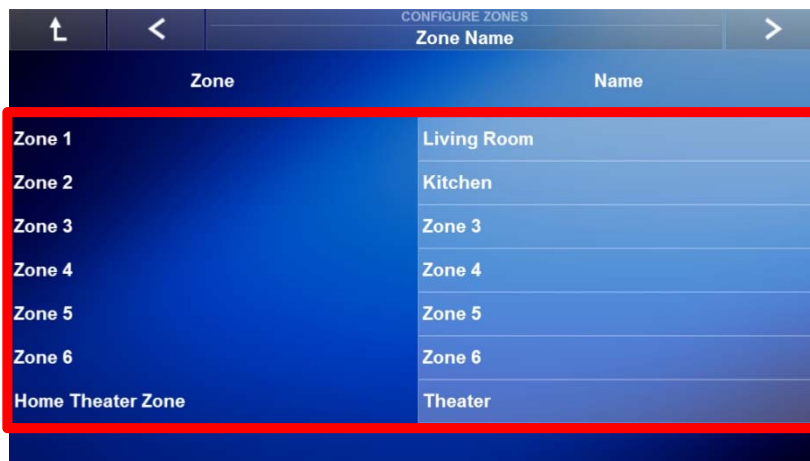
- Use the keyboard on the device configuring the Auriel system to enter a name for zone 1. In the exercise we will enter **Living Room**.



- When finished naming the zone, press **Enter** on the keyboard to return to the Zone Name main page and verify the new zone name.



- Repeat this process to rename additional Zones. Zone 2 and Home Theater Zones in this lesson. Below is a 3-zone example of how the Zone Name page might appear when finished.



Exercise 2: Setting the Tone Defaults

Overview In Exercise 2, you will learn how to set the Tone defaults for each zone on the MRC-6430. Please note this page only applies to a zone coming from the MRC-6430.

How-to **Set the Tone Defaults per zone.**

1. Access **Tone Defaults** page.



2. Set Bass & Treble accordingly per zone:
 - a. +/- 12dB Range
 - b. Adjustments in 1 dB increments
3. Set Loudness per zone:
 - a. Off – (Factory Default) Turns off loudness when the selected zone is powered On
 - b. On – Turns on loudness when the selected zone is powered On

Note: Setting Bass, Treble, and Loudness should be done while in the zone with reference material playing. These settings only apply to zones on the MRC-6430.

4. Set the Power On Behavior:
 - a. Default – (Factory Default) when a zone is powered on the bass, treble, and loudness settings will return to their default setting.
 - b. Last – when a zone is powered on the bass, treble, and loudness settings will remain at their last setting from the Auriel Viewer.
5. When finished select **Apply** to save changes and then select the **Right Arrow** to proceed to the next page.



Exercise 3: Setting Volume Defaults

Overview In Exercise 3, you will setup the Volume Default settings for Pre-Amp output level, Zone On Volume, and Max volume for each MRC-6430 zone.

How-to **Set the Volume Defaults per zone**

1. Access the **Volume Defaults** page.



2. Set **Line Out Volume** per zone:
 - a. Variable – (Factory Default) allows Auriel Interfaces to adjust the volume level when using the Pre-Amp Outputs on the MRC-6430.
 - b. Fixed – Use when a separate Volume Control will be used to adjust volume in an area, such as in a sub-zone configuration.
3. Set the **Zone On Volume** per zone:
 - a. 0 to 100% available for ensuring a zone is powered on to a comfortable listening level.
4. Set the **Max Volume** per zone:
 - a. 0 to 100% available for determining the maximum volume level a zone may be set to from a Auriel Interface.
5. When finished select **Apply** to save changes and then select the **Right Arrow** to proceed to the next page.

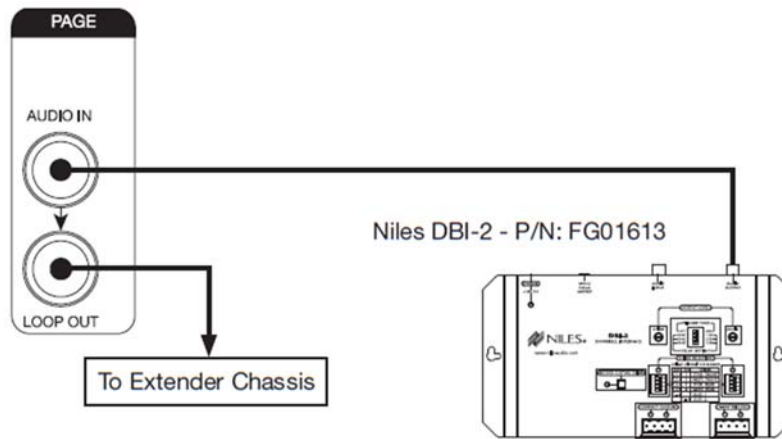


Exercise 4: WHM & Paging Configuration

Overview In Exercise 4, you will configure each zone for Whole House Mode, WHM, and Paging/Door Bell features.

In a distributed audio installation, the zone controller is the heart of the whole house audio system. When WHM is activated all MRC-6430 zones are turned on to the currently selected source.

Door chime and paging features require the use of the Niles DBI-2, Door Bell Interface (FG01613). The DBI-2 allows for door chime and paging information to be played through the whole house audio system speakers.



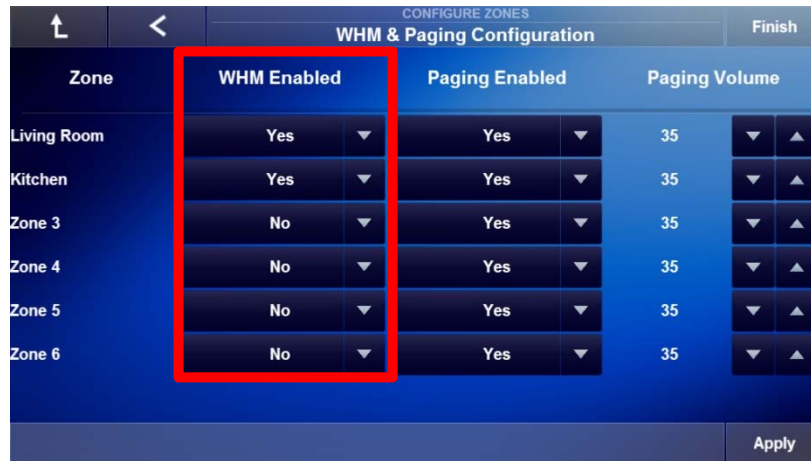
How-to **Setup each zone for WHM and Door Bell/Paging**

1. Access the **WHM & Paging Configuration** page.

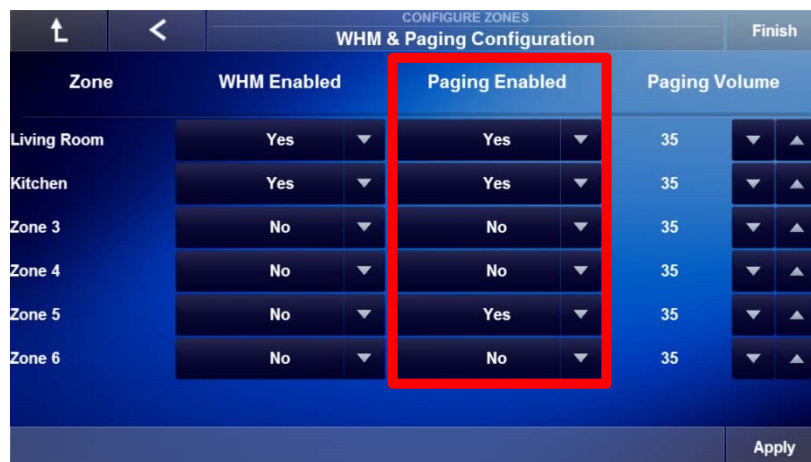
CONFIGURE ZONES					Finish	
WHM & Paging Configuration						
Zone	WHM Enabled		Paging Enabled		Paging Volume	
Zone 1	Yes	▼	Yes	▼	35	▼ ▲
Zone 2	Yes	▼	Yes	▼	35	▼ ▲
Zone 3	Yes	▼	Yes	▼	35	▼ ▲
Zone 4	Yes	▼	Yes	▼	35	▼ ▲
Zone 5	Yes	▼	Yes	▼	35	▼ ▲
Zone 6	Yes	▼	Yes	▼	35	▼ ▲

Apply

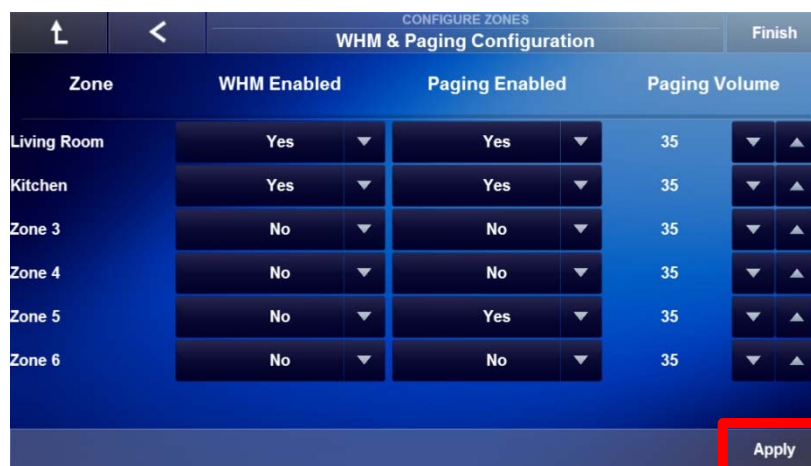
- If certain zones are not needed in WHM, select the zone(s) to **remove** by pressing the **drop down arrow** and selecting No.



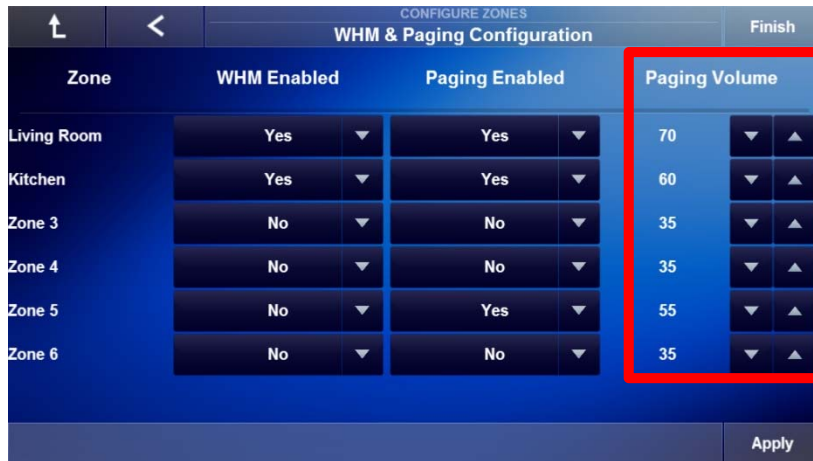
- If certain zones are not needed to pass through door chime and paging information then select the zone(s) to **remove** by pressing the **drop down arrow** and selecting No.



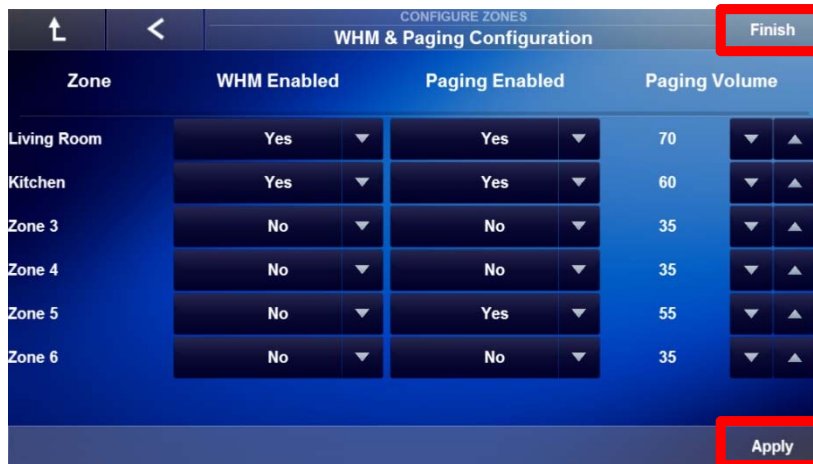
- Select **Apply** to save changes to the MRC-6430 before proceeding.



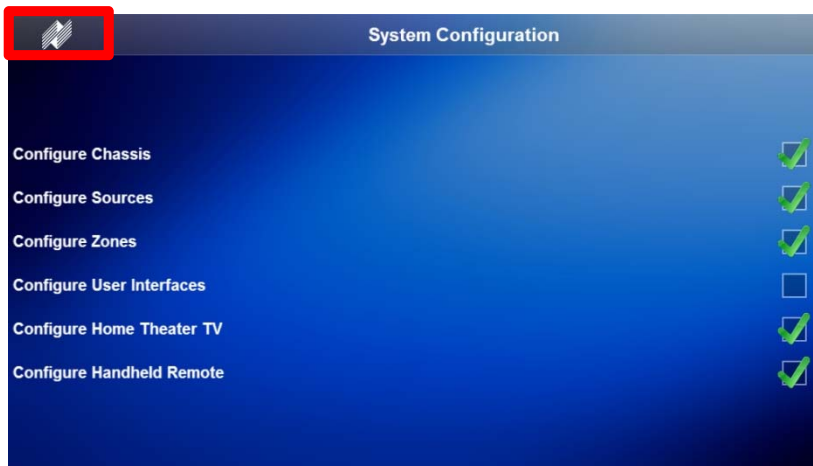
- Set the **Paging Volume** for each zone. This will also apply to the door chime volume.



- When finished select **Apply** and then select **Finish**.



- The *System Configuration Wizard* main page appears. Exit the Configuration Wizard by selecting the **Niles Logo**. See Lesson 7, Configure User Interfaces for information on how to assign zones to Auriel Viewers.



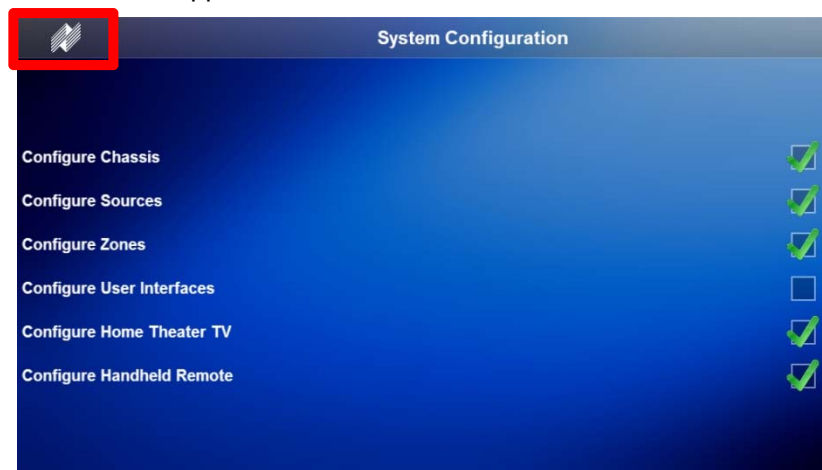
Exercise 5: Check the Viewer Interface

Overview In Exercise 5 you will check your work in the Viewer. This exercise goes over verifying zone names, testing turn one settings, WHM, and doorbell/paging settings performed during previous exercises in this lesson.

Note: This exercise will refer to these zone names: **Zone 1 = Living Room; Zone 2 = Kitchen; Home Theater Zone = Theater**

How-to **Check the Auriel Viewer**

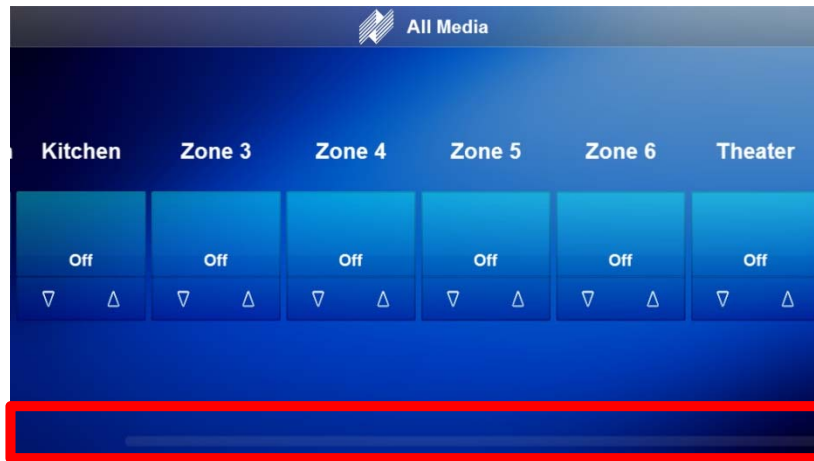
1. Access the **Auriel Viewer**. If you are in the setup wizard press the Niles Logo in the upper left corner.



2. *The All Media page appears.* Verify each zone is labelled correctly and select **Living Room** (Zone 1).



3. Move the **Scroll Bar** at the bottom of the screen to the right to verify additional renamed zones.



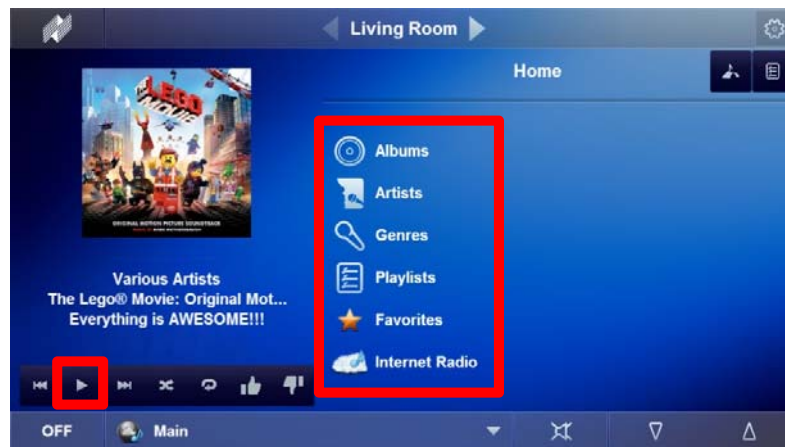
4. Verify Zone Turn On settings for each zone. Start with the first zone by selecting the **Living Room** zone.



5. The *Living Room Source* page appears. Select an **active source**.



- In this case the streaming media source now playing page appears. If there are selections in the queue select **Play**, otherwise select the media to begin playing.



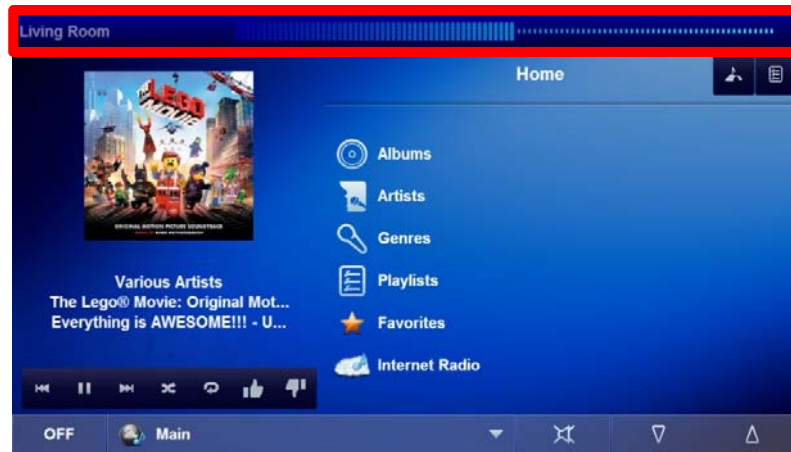
- Select the **Gear Icon** in the upper right corner to access the Settings page for the active zone. Verify settings match what was set in the Turn On Defaults page.



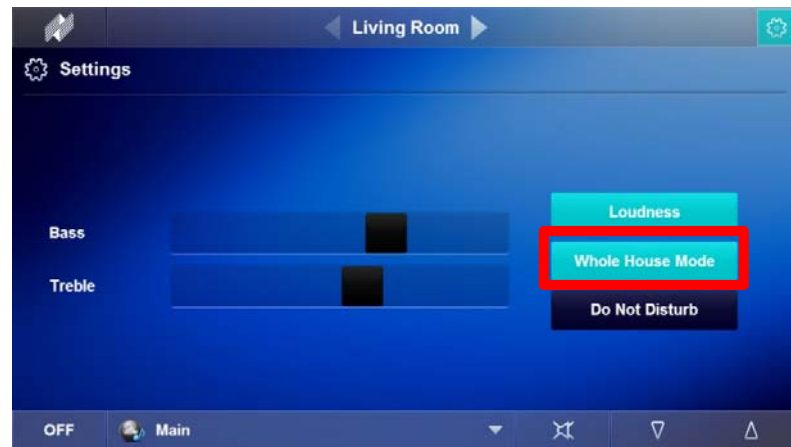
- Select the **Gear Icon** again to exit the Settings page.



- Press and release the Volume Up and/or Volume Down button to verify the turn on volume settings.



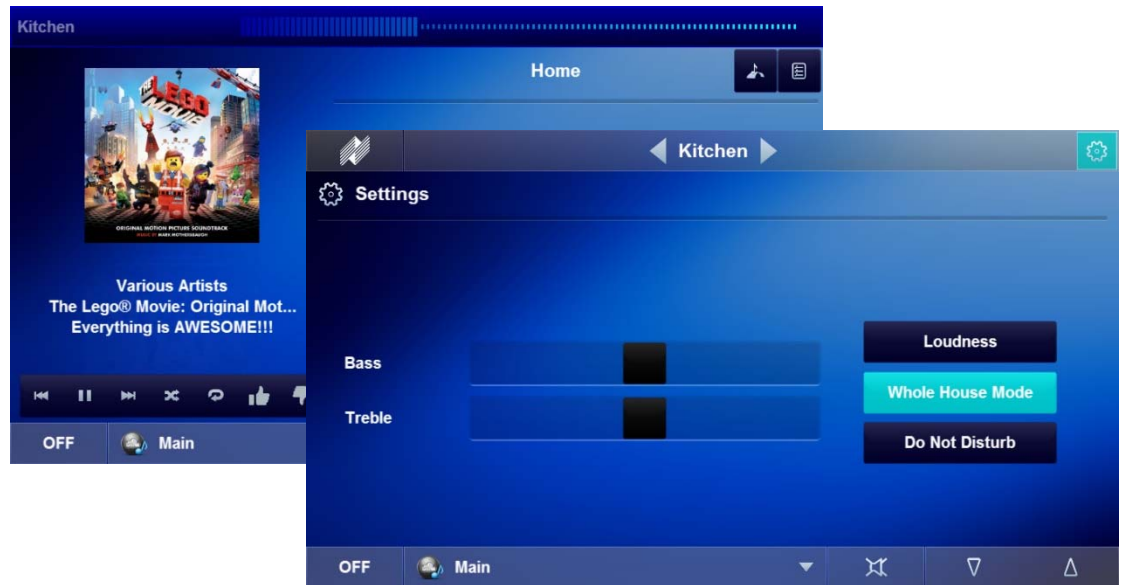
- Verify WHM settings by selecting the **Gear Icon** and then selecting **Whole House Mode** on the settings page.



- Select the **Niles Logo** to return to the All Media page and verify the zones with WHM Enabled are turned on and have the current source selected. Zones shown should match Exercise 4, Step 6 in this lesson.



12. Repeat steps 1 – 11 for each additional MRC-6430 zone to verify settings made in the Configure Zones node.



13. If using the DBI-2 for doorbell or paging features:

- a. Press a **doorbell** to test door chime volume in each zone.
- b. Initiate a page to test paging volume in each zone.

14. Repeat Step 13A and 13B for each zone with Paging Enabled set to Yes.

Additional Information for Zone Settings Page.

Do Not Disturb	When enabled, Do Not Disturb will remove a zone from WHM and paging/door chime features. Do Not Disturb is accessed from the Zone Settings Page in each zone.
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Lesson 7

Configure User Interfaces Node



Overview

This lesson goes over how to assign zones to each compatible Auriel Viewer.

You will learn how to:

- Navigate the User Interface Configuration page
- Rename a User Interface
- Assign a Primary Zone
- Assign additional Zones to the UI
- Change the Auriel Viewer language type

Requirements

- Niles MRC-6430 powered on and connected to a local area network (same network the programming device will be connected to).
 - A PC running Niles Auriel software.
- or-
- Tablet running the Niles Auriel App.

About the Configure User Interfaces Node

Overview This lesson explores the Configure User Interfaces node and how to assign zones to the various compatible user interfaces.

The Niles Auriel compatible interfaces include:

- In-Wall Touch Screens – Coming Soon!
- In-Wall Keypads – Coming Soon!
- Computers in the home (on the local network)
- iOS Devices
- Android Devices
- HR200 Remote (see Integrating A Home Theater System, Lesson 5-19, for HR200 set up information)

Terms **The following terms are used in the Configurator Interface tab when setting up the interfaces for a system:**

MAC Address: Media Access Control address, sometimes referred to as a hardware address or physical address, is a unique ID code assigned by the manufacturer to a network adaptor, or any device with built-in networking capability. While an IP address can potentially be assigned to any device, a MAC address is a static ID code that is unique to each device on the network.

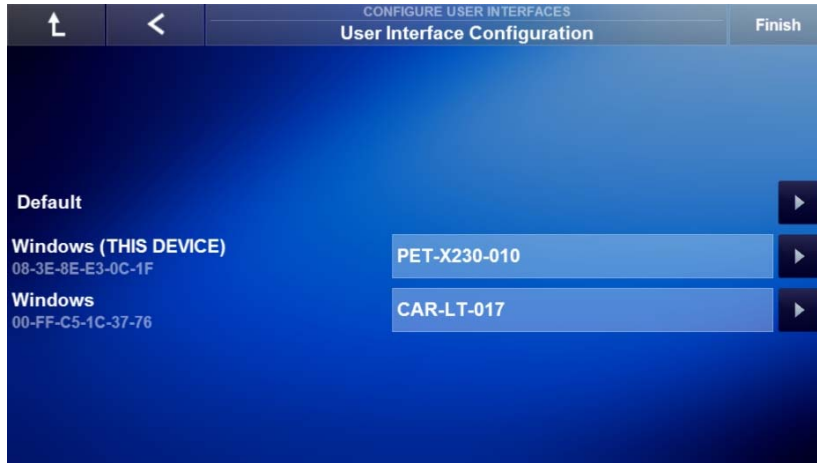
Primary Zone: The Primary Zone is the zone a compatible user interface is mainly used in, or physically installed in. When the Primary Zone is set for a UI the interface will automatically show the Primary Zone when the Auriel Viewer is first started.

Other Zones: Other Zones are zones that a compatible user interface is not mainly used in, or physically installed in, but still has access to. Auriel interfaces can have all zones, or specific zones, assigned to them.

Navigating the Configure User Interfaces Node

The Configure User Interfaces node is made up of 1 page:

- **User Interface Configuration:** This page displays all the available user interfaces connected to the Niles MRC-6430. Each viewer may have the zone availability customized.



- **Default Viewer:** The Default interface is used for assigning primary and other zones to a compatible Auriel Interface. When a compatible Niles Auriel interface is first connected to the system the interface looks at the Default interface for zone assignment. The zones assigned to the Default interfaces are the zones shown on all newly added Auriel interfaces. Each interface may be customized at any time. The Default interface may not be renamed.



- **Other Viewers:** Other compatible viewers may be renamed and have zones assignments changed.



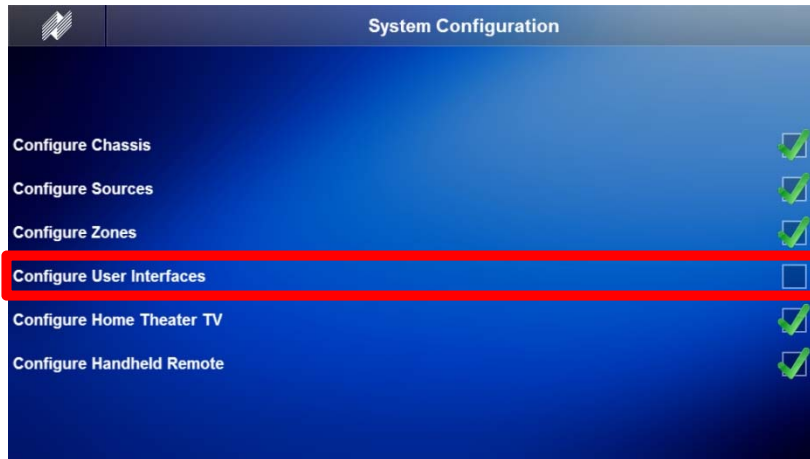
Exercise 1: Rename the User Interface

Overview Each user interface may have a name assigned to it for easy recognition by the installer when in the System Configuration Wizard.

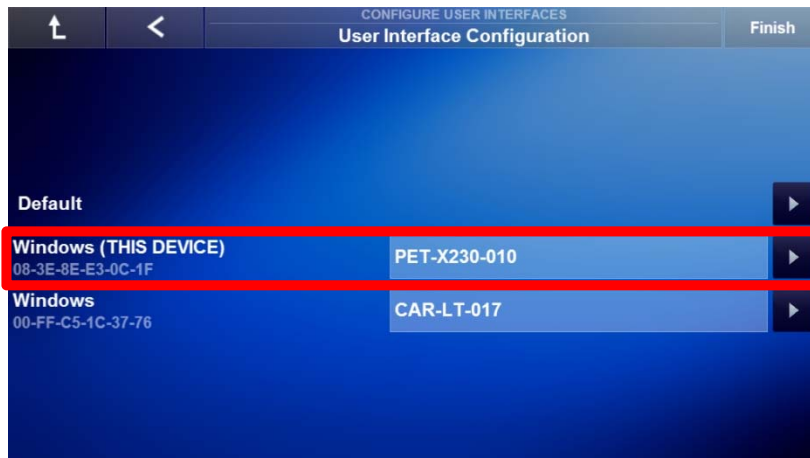
Each Interface option displays the MAC address of the compatible device. User the Project Documentation Worksheet, included with the MRC-6430, to note each user interfaces MAC address.

How-to **Rename a user interface.**

1. Access the **Configure User Interfaces** node from the System Configuration Wizard.

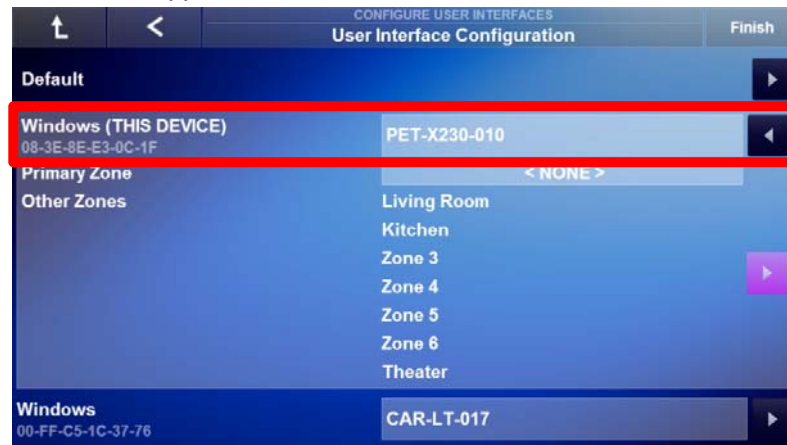


2. *The User Interface Configuration page appears.* Select **Arrow Box** for the **Windows (THIS DEVICE)** node.
 - a. Match the MAC address of other User Interfaces to rename them from a single location.



Quick Reference: Terms	
MAC Address	Hardware, or physical, ID code assigned to a network adaptor or any device with built-in networking capability.

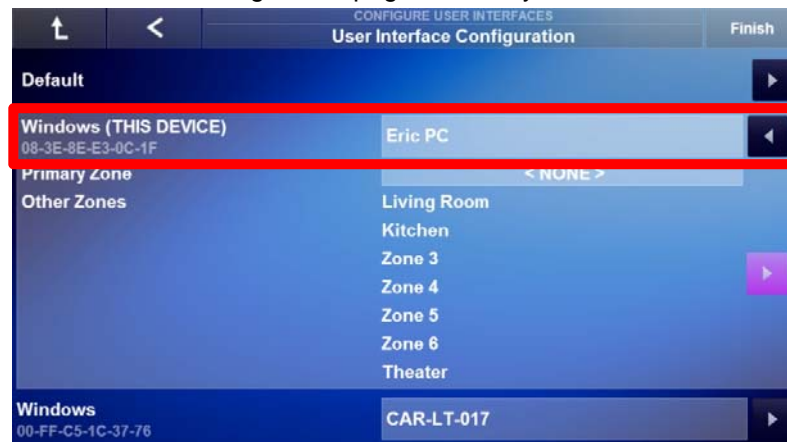
3. Select the **Windows (THIS DEVICE) Name field**. This may be the name of the device as it appears on the network for the selected user interface.



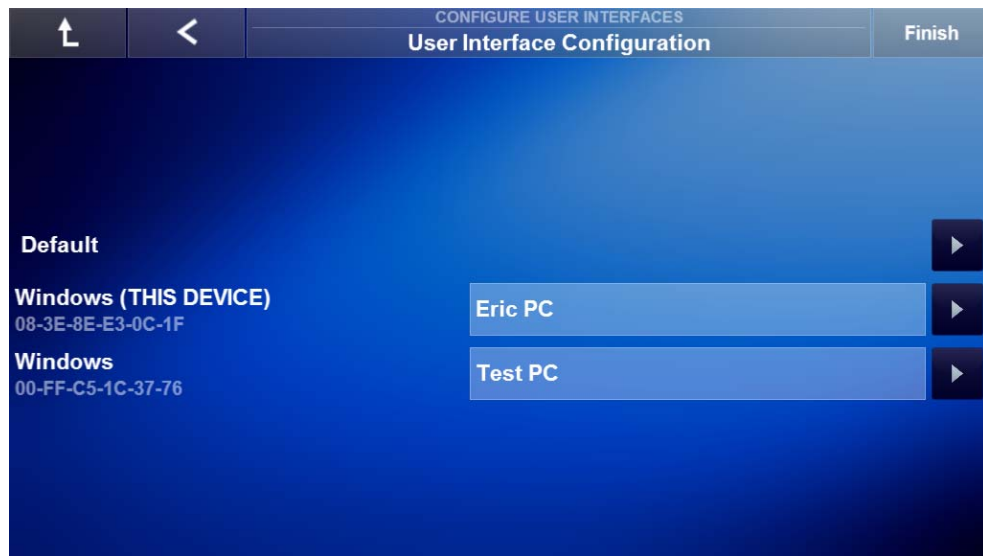
4. *The Set Device Name window appears.* Use the keyboard on the device configuring the Auriel system to **enter a name** for the selected User Interface.



5. When finished naming the zone, press **Enter** on the keyboard to return to the User Interface Configuration page and verify the new interface name.



6. Repeat steps 1 – 5 for renaming additional use interfaces.



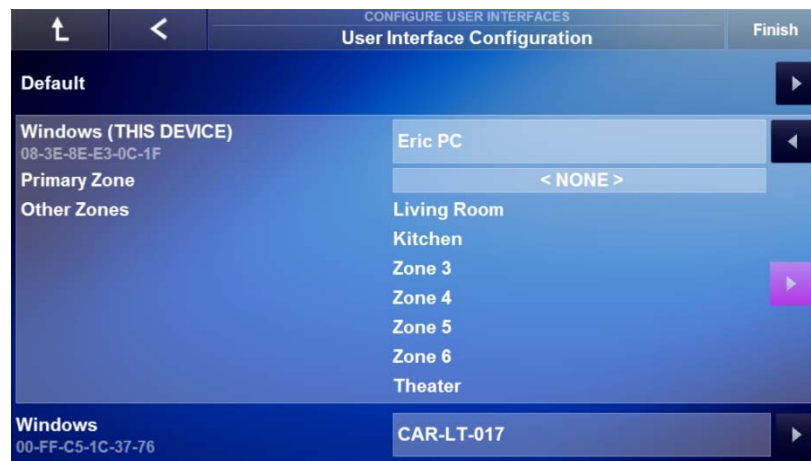
Exercise 2: Assigning the Primary Zone

Overview A Primary Zone may need to be assigned to a user interface for navigating directly into the primary zone when the Auriel Viewer is started. This eliminates having to manually select the zone. All zones assigned to the user interface are still available for viewing by selecting the Niles Logo.

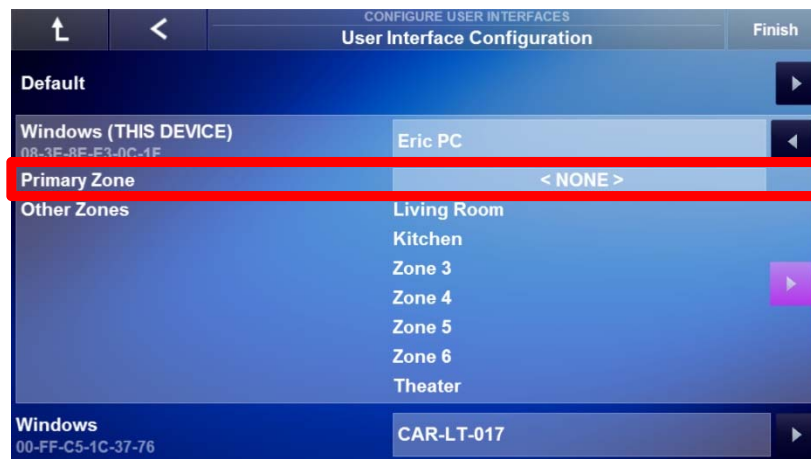
If manually accessing a zone from a list of all zones that are assigned to the user interface is desired then leave, or set, the Primary Zone field to <NONE>.

How-to **Assign a Primary Zone to a user interface.**

1. Access the desired interface's configuration options by selecting the **Arrow Box** to the right of the user interface.



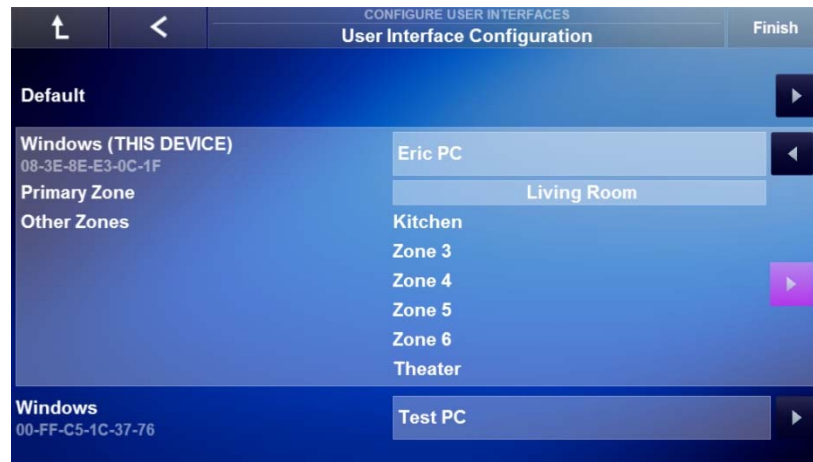
2. Locate and select the **Primary Zone** field.



- The Set Primary Zone window appears. Select the **zone** to be the primary zone and select **OK**.

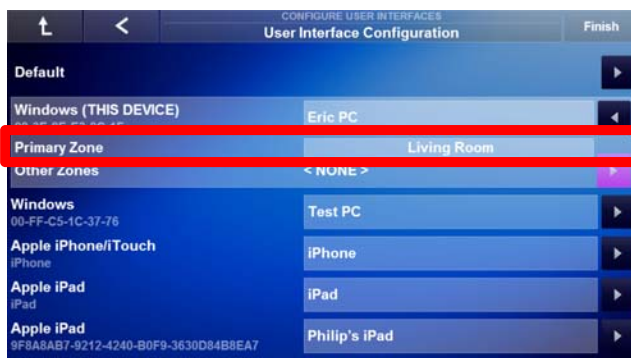


- Verify the Primary Zone was set as desired.



- Repeat steps 1 – 4 to assign a Primary Zone to additional user interfaces.

Note: The images below show the Primary Zone set to Living Room and Other Zones set to <NONE> for one user interface. The Auriel Viewer for the selected user interface will not display the Niles Logo in the upper left corner when only 1 zone is assigned to the selected user interface.

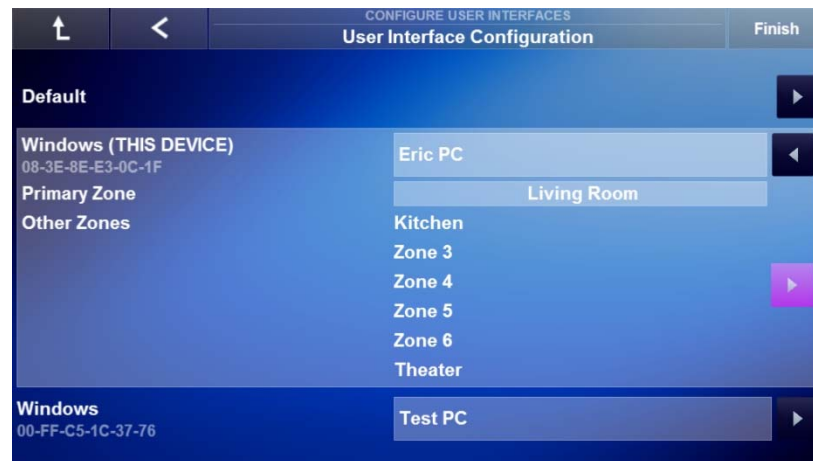


Exercise 3: Assigning Other Zones

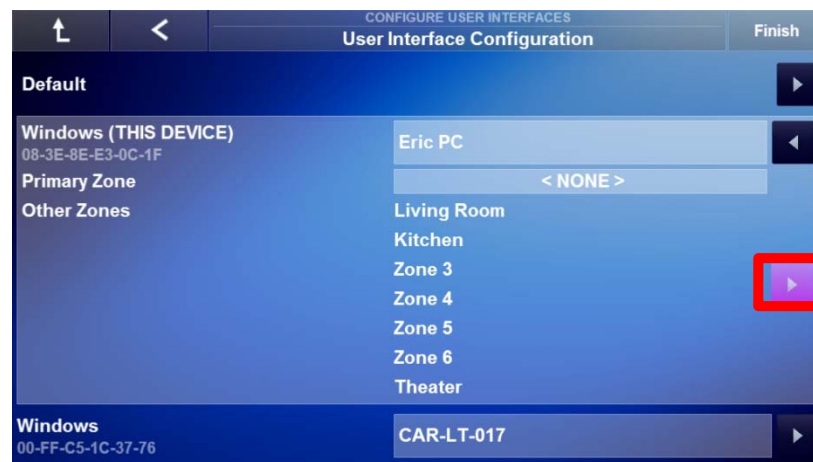
Overview Other Zones are zones that a user interface has access to on the All Media page. Access the All Media page by selecting the Niles Logo.

How-to **Assign Other Zones to a user interface.**

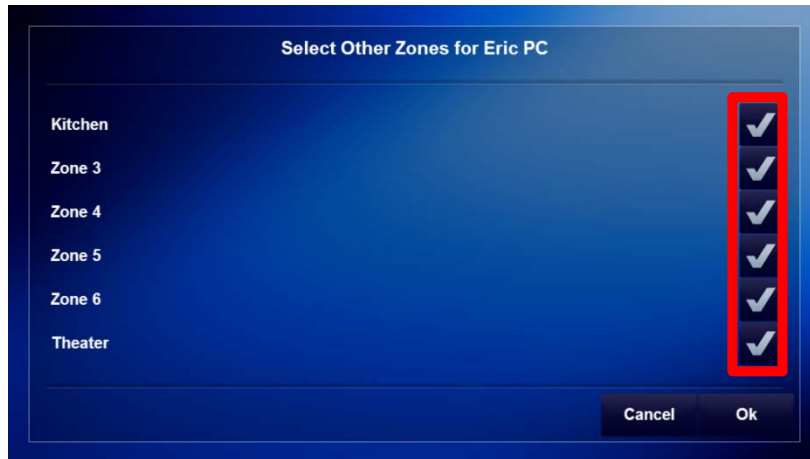
1. Access the desired interface's configuration options by selecting the **Arrow Box** to the right of the user interface.



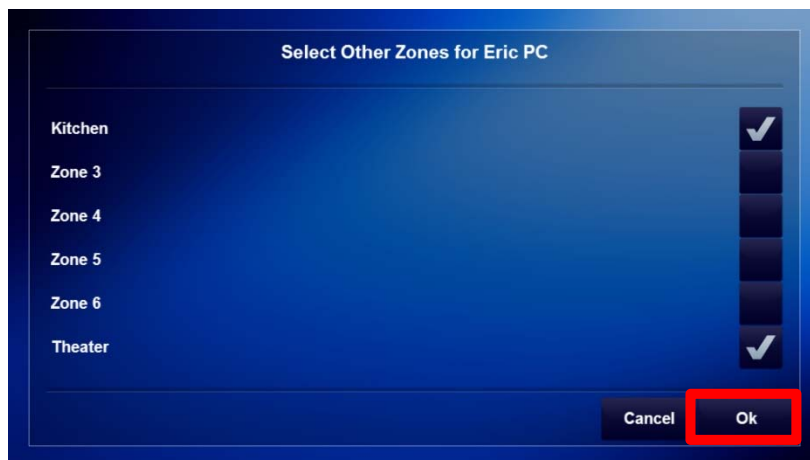
2. Locate and select the **Arrow Box** for Other Zones.



3. The *Set Other Zones* window appears. Select the **zone check boxes** to remove the zone for the User Interface.



4. Once the zones have been removed from the user interface, select **OK** to save the setting.



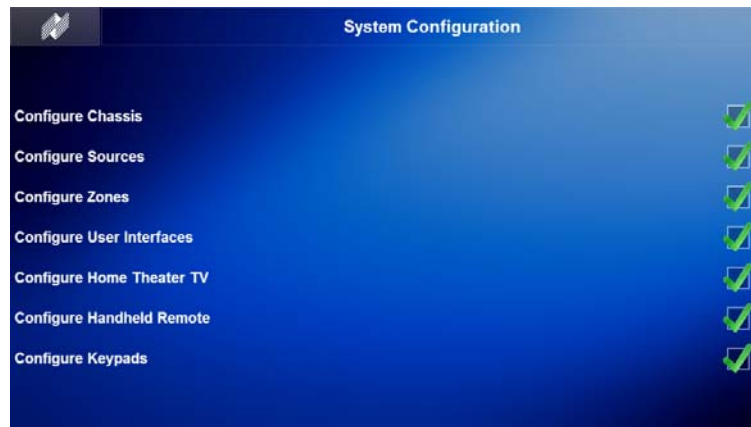
5. Verify the Other Zones are set as desired for the selected User Interface.



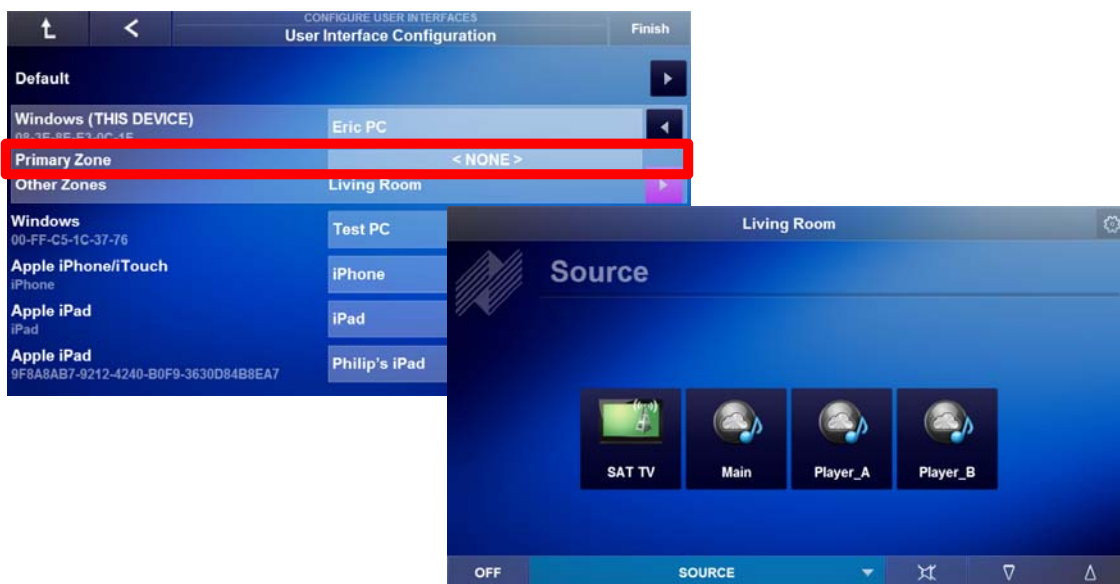
6. Repeat steps 1 – 5 to assign Other Zones to additional user interfaces.
7. When finished assigning zones proceed to the User Interface Language Selection page. If using the default language English then select the **Right Arrow** and select **Finish** to return to the System Configuration Page.



8. *The System Configuration Wizard main page appears. Exit the Configuration Wizard by selecting the **Niles Logo** and verify each user interface has the correct zones assigned.*



Note: The images below show the Primary Zone set to <NONE> and Other Zones set to Living Room for one user interface. The Auriel Viewer for the selected user interface will not display the Niles Logo in the upper left corner when only 1 zone is assigned to the selected user interface.



Exercise 4: Change the UI Language

Overview The Niles Auriel Software allows for changing portions of the text displayed in the viewer to another language. The language choices, besides from English, are Italian, French, Chinese, Swedish, Spanish, or Russian. Once selected portions of the text in the Auriel Viewer will be displayed as the chosen language.

Note: Some two-device interfaces are only available in English.

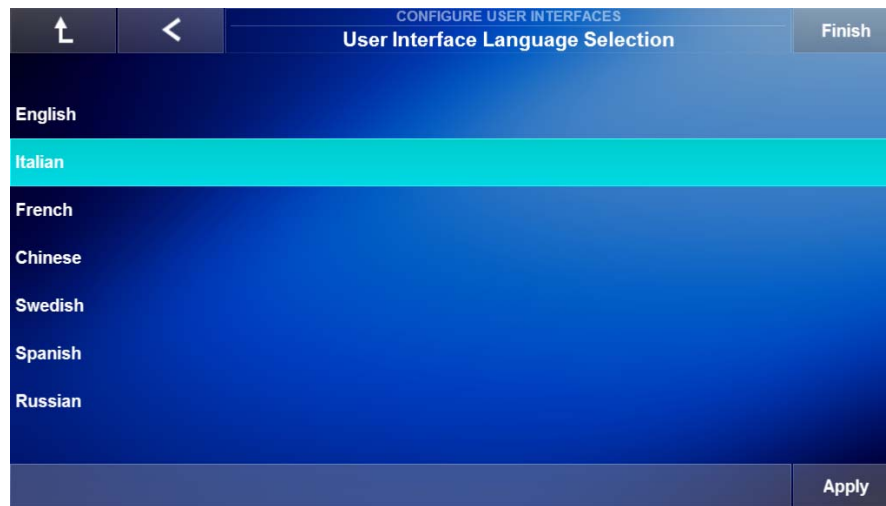
Proceed to Exercise 5 if the default English language will be used in the Auriel Viewer.

How-to **Change the Language for the User Interface**

1. From the User Interface Configuration page select the **Right Arrow** to navigate to the User Interface Language Selection page.



2. On the User Interface Language Selection page select a **desired language** for the Auriel Viewer's to display. *This exercise will use Italian as an example.*

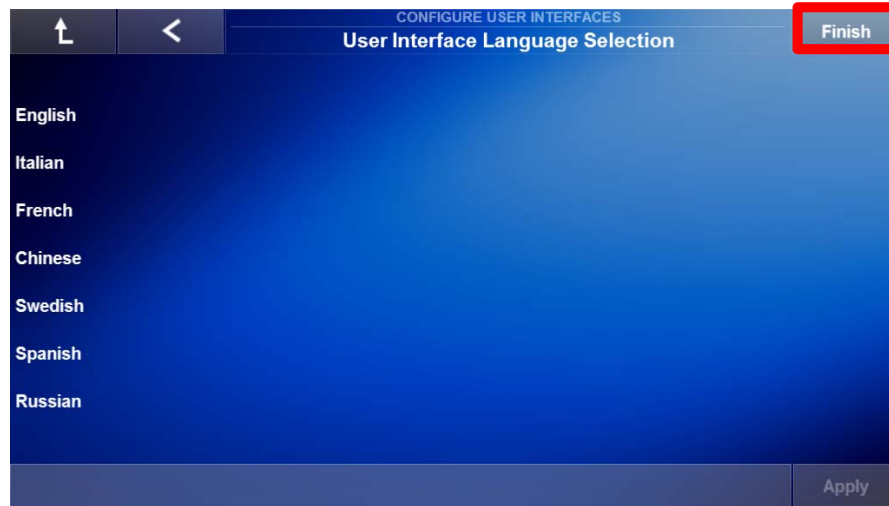


3. Select **Apply** to commit changes.

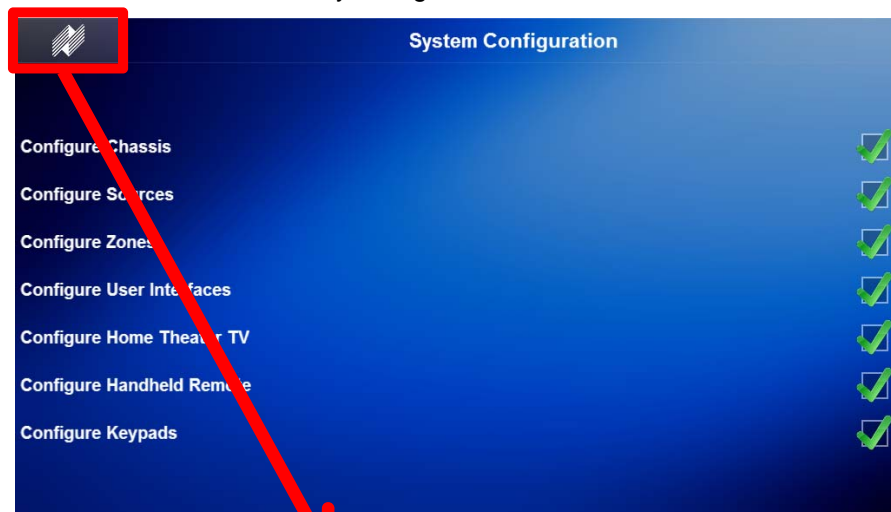


Note: Source and Zone names should be spelled in the native language. Some device interfaces provide two-way metadata and are only available in English.

4. When finished assigning a language select **Finish**.



5. The System Configuration Wizard main page appears. Exit the Configuration Wizard by selecting the **Niles Logo** and verify each user interface is correctly configured.

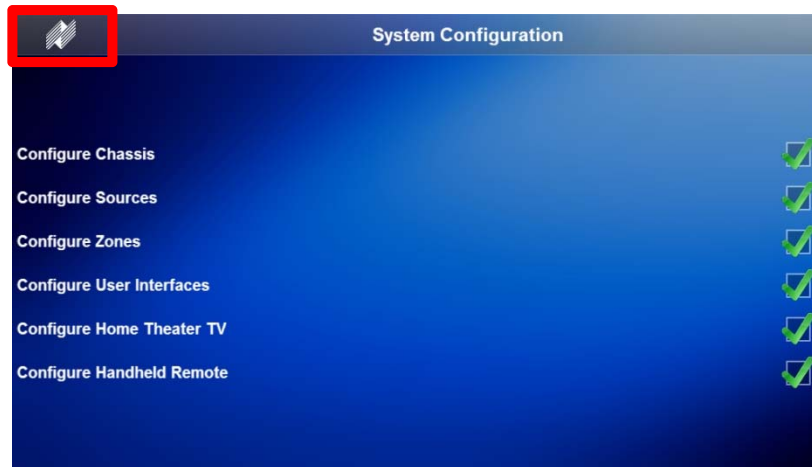


Exercise 5: Check the Viewer Interface

Overview Once all user interfaces have zones assigned to them the Auriel viewer on each interface should be checked to verify the settings. The following steps will be performed with the default English language selection.

How-to **Check the Auriel Viewer**

6. Access the **Auriel Viewer**. If you are in the setup wizard press the Niles Logo in the upper left corner.



7. If a Primary Zone was set then the source selection page, or currently playing source page, will be displayed. Verify the Primary Zone is correct in the **Title Bar**.



- Press the Niles Logo to navigate to the All Media page and verify the Other Zones are set correctly.



- Repeat Steps 1 – 3 to verify zone assignment for additional user interfaces.

Lesson 8

Configure Keypads Node



Overview

This lesson goes over how to configure nKP7s for use in an Auriel system.

You will learn how to:

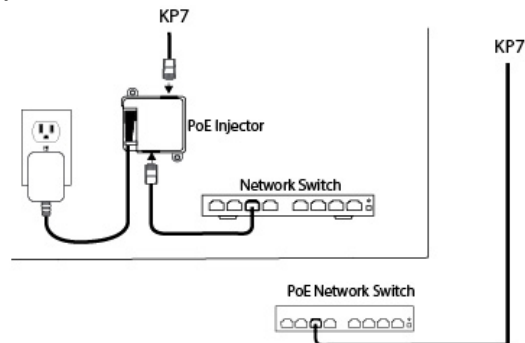
- Navigate the Keypad Configuration page
- Rename the Keypad
- Assign a Zone
- Assign Sources
- Assign Favorite Channel to Set Top Box Source
- Assign an Audio Scene

Requirements

- Niles MRC-6430 powered on and connected to a local area network (same network the programming device will be connected to).
 - Niles nKP7 connected to the same network as the MRC-6430. (nKP7 is powered thru PoE, using PoE injectors or a PoE injecting network switch)
 - A PC running Niles Auriel software.
- or-
- Tablet running the Niles Auriel App.

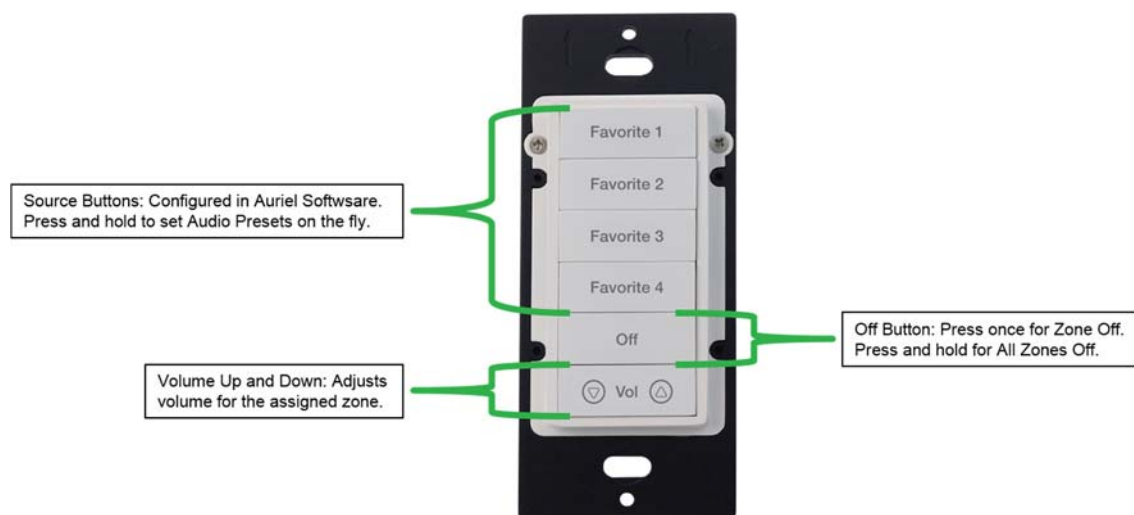
About the Configure User Interfaces Node

Overview This lesson explores the Configure Keypads node and how to assign zones and source access to the hard buttons on a Niles nKP7. The Niles nKP7 is a single gang hard button keypad that communicates to the MRC-6430 thru the local area network. The nKP7 requires a connection to a PoE, Power over Ethernet, switch or to a PoE injector.



The Niles nKP7 features include:

- Single-gang hard button keypad.
- 4 configurable hard buttons.
- Volume Up, Volume Down, & Zone Off buttons are automatically configured when the nKP7 is assigned to a zone.
- Buttons are back lit.
- Press & hold to create Audio Presets on the fly.



Terms

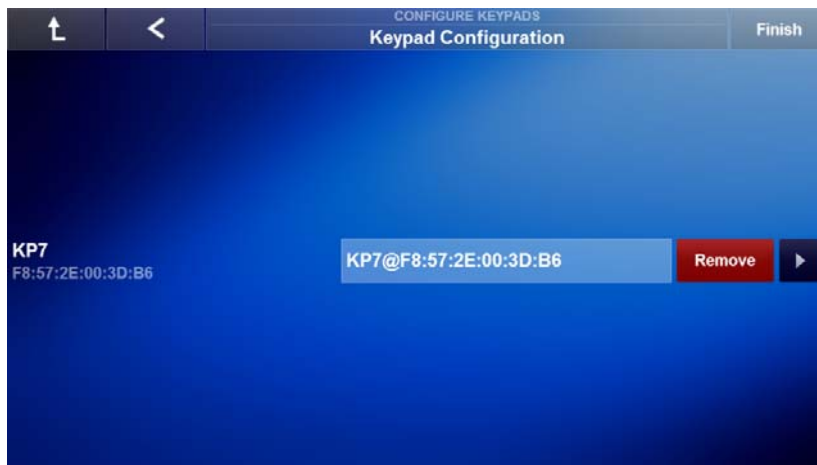
The following terms are used in the Configure Keypads lesson:

MAC Address: Media Access Control address, sometimes referred to as a hardware address or physical address, is a unique ID code assigned by the manufacturer to a network adaptor, or any device with built-in networking capability. While an IP address can potentially be assigned to any device, a MAC address is a static ID code that is unique to each device on the network.

Navigating the Configure Keypads Node

The Configure Keypads node is made up of 1 page:

- **Keypad Configuration (collapsed):** This page displays all the available nKP7s connected to the same network as the MRC-6430. Each nKP7 lists a MAC address for identification. The nKP7 automatically appears in the Configure Keypads node when connected to the network. Select Remove to delete an nKP7 from a system.



- **Keypad Configuration (expanded):** From this page the nKP7 is renamed for easy identification, a zone is assigned to the nKP7, and sources are assigned to one of the four configurable buttons on the nKP7. Some source types may also have additional actions assigned to them in the Favorite column.



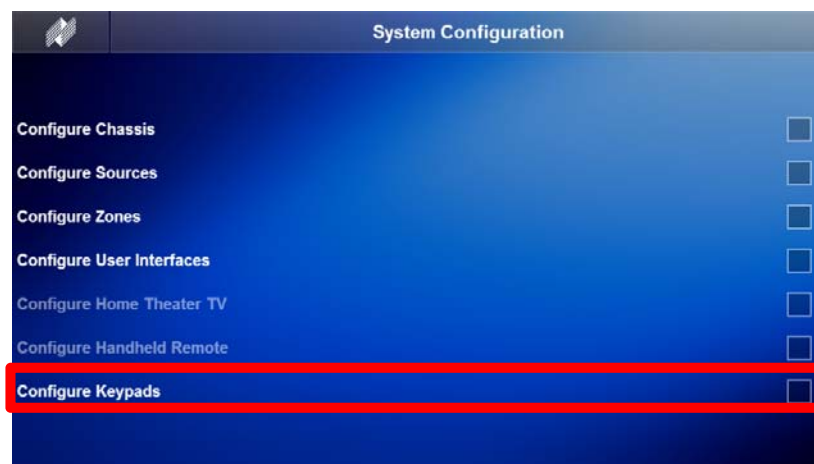
Exercise 1: Rename the User Interface

Overview Each nKP7 is automatically added to the system and displays its MAC address. The nKP7 may have a name assigned to it for easier recognition by the installer when in the System Configuration Wizard.

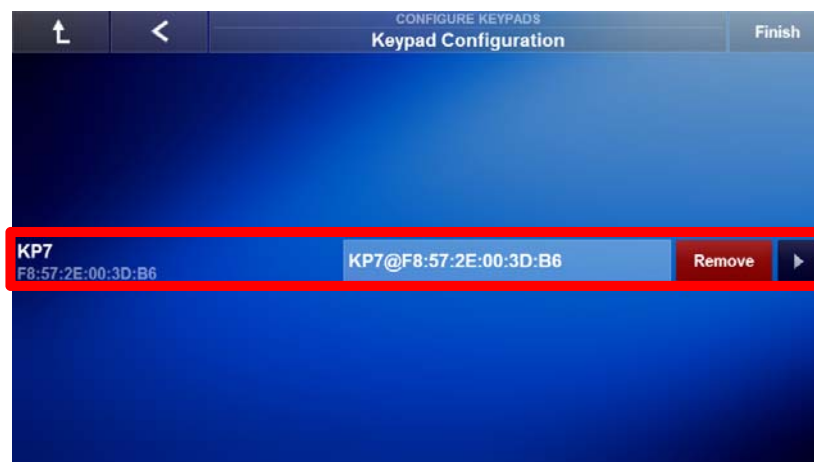
Each nKP7 has its MAC address on the front of the device. Use the Project Documentation Worksheet, included with the MRC-6430, and note each nKP7 MAC address for easy identification of the nKP7 in the Auirel software.

How-to **Rename an nKP7.**

1. Access the **Configure Keypads** node from the System Configuration Wizard.



2. The Keypad Configuration page appears. Select the **Arrow Box** to the right of the desired nKP7.
 - a. Match the MAC address of other nKP7s to rename them from a single location.



Quick Reference: Terms

MAC Address	Hardware, or physical, ID code assigned to a network adaptor or any device with built-in networking capability.
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3. Select the **KP7@MACAddress Name field**. Each nKP7 will have a unique MAC address.



4. The *Set Device Name* window appears. Use the keyboard on the device configuring the Auriel system to **enter a name** for the selected nKP7.



5. When finished naming the nKP7, press **Enter** on the keyboard to return to the Keypad Configuration page and verify the new name.



6. Repeat steps 1 – 5 for renaming additional nKP7s.

Exercise 2: Assigning a Zone to the nKP7

Overview A zone will need to be assigned to the nKP7 to activate the keypad in the system. Once a zone is assigned to the nKP7 the volume up, volume down, and Off buttons are automatically configured to control the assigned zone.

How-to **Assign a Zone to an nKP7.**

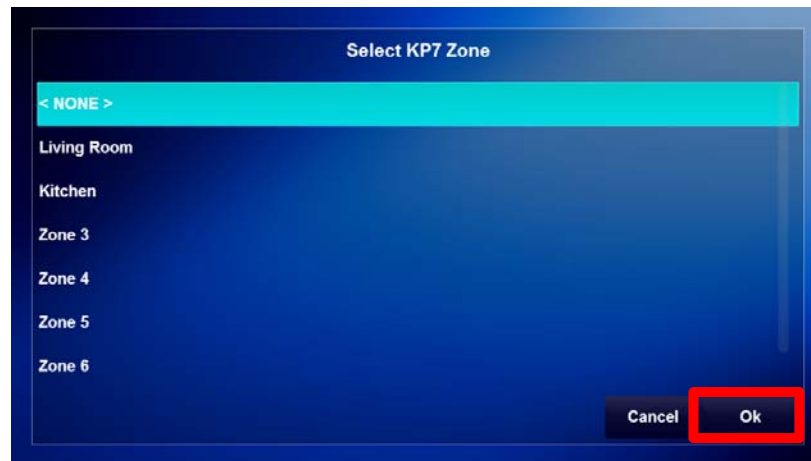
1. Access the desired nKP7's configuration options by selecting the **Arrow Box** to the right.



2. Locate and select the **Zone** field.



3. The *Select KP7 Zone* window appears. Select the **zone** to be assigned to the nKP7 and select **OK**.



4. Verify the Zone was set as desired.



5. Repeat steps 1 – 4 to assign Zones to additional nKP7s.

Note: When a zone is assigned to an nKP7 the volume up, volume down, and off buttons are automatically configured to control the assigned zone.

Exercise 3: Assigning Sources

Overview The nKP7 may be used to access pre-determined sources in a zone. When a source is assigned to a source button on the nKP7 the Press & Hold feature cannot be used for that specific source button. Use pre-determined sources when the source setting is to remain the same, such as when custom engraved buttons are being used. Niles recommends working with the end user to determine the desired sources to be accessed by the nKP7.

When using a source button's Press & Hold feature on the nKP7 do not configure the desired source button(s) in the Auriel software. See *Exercise 5: Setting Audio Presets* for more information.

How-to **Assign Sources to an nKP7.**

1. Access the desired nKP7's configuration options by selecting the **Arrow Box** to the right.



2. Locate and select the **Source 1 Field**.



Note: Each source field represents one of the four buttons on the nKP7. Some source types, such as Set Top Box, have additional control options on the nKP7.

3. The Select KP7 Source 1 window appears. Choose the **desired source** and select **OK**.



4. Verify the source was assigned to the desired source field.



5. Repeat steps 1 thru 4 to assign additional sources to the nKP7.



Note: Sources with Favorites, Set Top Boxes, Media Servers, and AM/FM tuners, have additional functionality. These additional options may not be available until the source has a favorite added. See exercise 4 for more information.

Exercise 4: Assigning Favorites

Overview Certain source types have favorite channel options. Once enabled and setup the favorite channel may be configured for access by the nKP7. Source device types that support adding Favorites on the nKP7 are Set Top Boxes, Tuners, and some Media Servers.

Note: Favorite fields are only available with source types that have a Favorite station/channel option. The Favorites for the desired source must be setup in the Auriel Viewer software before configuring the nKP7. When Blu-Ray/DVD/CD Player source types are assigned to a source button the “Play” command will be sent when that source button is selected on the nKP7.

How-to Assign a Favorite Channel

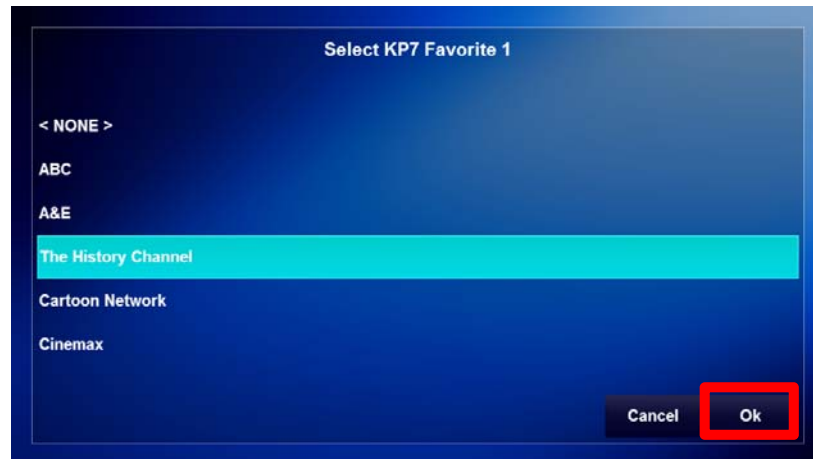
1. Access the desired nKP7's configuration options by selecting the **Arrow Box** to the right.



2. Locate and select the **Favorite 1 Field**. This field corresponds to source 1, which in our example is the **SAT TV** source.



- The Select KP7 Favorite 1 window appears. Choose the **desired favorite TV channel** and select **OK**.



- Verify the desired Favorite channel was added correctly.



- Repeat Steps 1 – 4 to assign additional favorite stations/channels for Tuner, Media Server, and additional Set Top Box source types. Select **Finish** after all nKP7s have been configured.



Exercise 5: Setting Audio Presets

Overview The nKP7 features a press and hold function for each of the 4 source buttons. This feature allows an end user to capture an audio source selection and station setting in a zone for quick access any time after being set. The audio preset will need to be setup from a user interface running the Niles Auriel Viewer software before setting the Audio Preset on the nKP7.

Quick Reference: Press & Hold function for different Source Types	
Selected Source:	Will Store:
Media Server	Source & currently playing streaming service (See Note)
Tuners	Source & currently selected AM/FM station from a Two-Way Tuner
CD/DVD/Blu-Ray	Source & Play command

Note: When the selected media server's streaming service is saved a unique favorite is created in the My Favorites section of the Media Server User Interface. This unique favorite will include the keypad name and source button as the favorite name. Do not delete these favorites as the buttons will no longer work.

How-to **Save the audio preset**

1. Setup a zone with the desired source and station using a compatible Niles Auriel viewer, such as an nTP7, mobile device, or PC.



- Once the source is setup in the zone press and hold the desired source button for 5 seconds. The nKP7 will flash once indicating that the audio preset was successfully saved.



Note: If the nKP7 flashes 3 times the audio preset was unable to be saved.

- Test the newly saved audio preset by going to the nKP7, turning the zone off, and selecting the recently set source button.

Note: If the audio preset save was unsuccessful, or the specific favorite station in the audio preset has been deleted, the selected source button on the nKP7 will flash 3 times and the preset will not be executed.

- Repeat as necessary for each additional audio preset desired on the nKP7.

Setting Audio Preset Quick Reference (Press & Hold)	
nKP7	Meaning
Source Button Flashes 1 Time	Preset saved successfully
Source Button Flashes 3 Times	Preset save was unsuccessful

Troubleshooting (Activating Audio Preset)	
nKP7 Source Button Pressed	Possible Cause
Source Button Flashes 3 Times	Specific station in the Audio Preset was altered or deleted
Preset Not Executed	Specific station in the Audio Preset was altered or deleted



