

SpeakerCraft MRA

Training Guide

Version 1.4



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Document Revision: 3/11/2015

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Your Resources at SpeakerCraft

In addition to the information in this Training Guide, be sure to check out SpeakerCraft's website at www.speakercraft.com/techsupport. 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: techsupport@speakercraft.com

Lesson 1

Training Setup



Overview

This lesson prepares your computer for the programming the MRA-664 as detailed in the lessons to follow.

You will:

- Install the SpeakerCraft Software, which allows you to View and Configure your customers system.
- Check the installation of the SpeakerCraft 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.speakerCraft.com/techsupport, the iTunes App Store, or the Android Market Place)

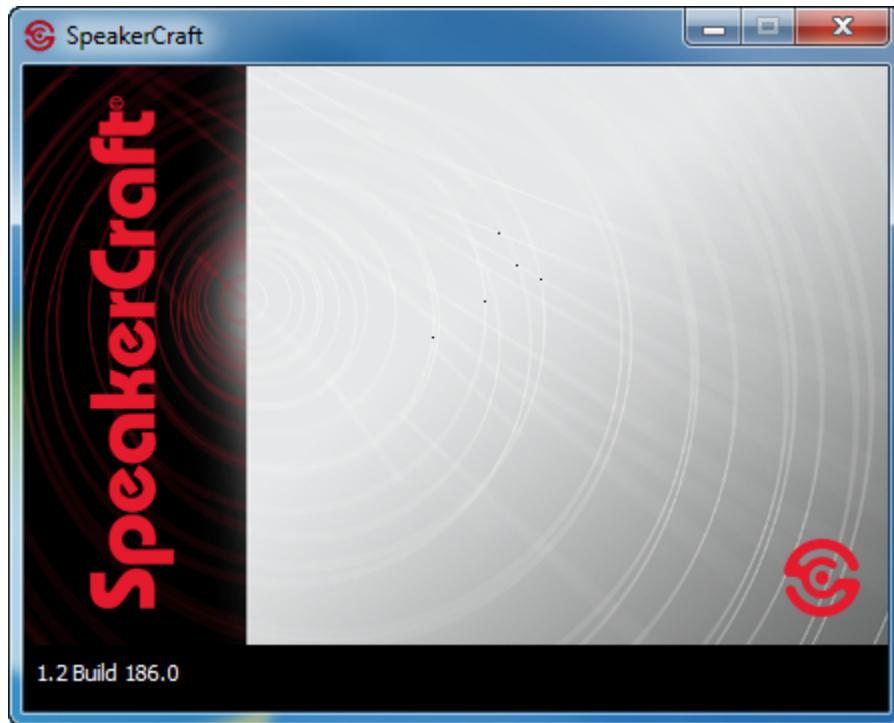
Exercise 1: Install SpeakerCraft Software PC

Overview The SpeakerCraft Software is a valuable resource for the dealer setting up a SpeakerCraft MRA-664. The SpeakerCraft Software allows dealers to easily and quickly configure a multi-zone audio system and a single home theater area. The SpeakerCraft Viewer allows the end user an easy and consistent user interface experience.

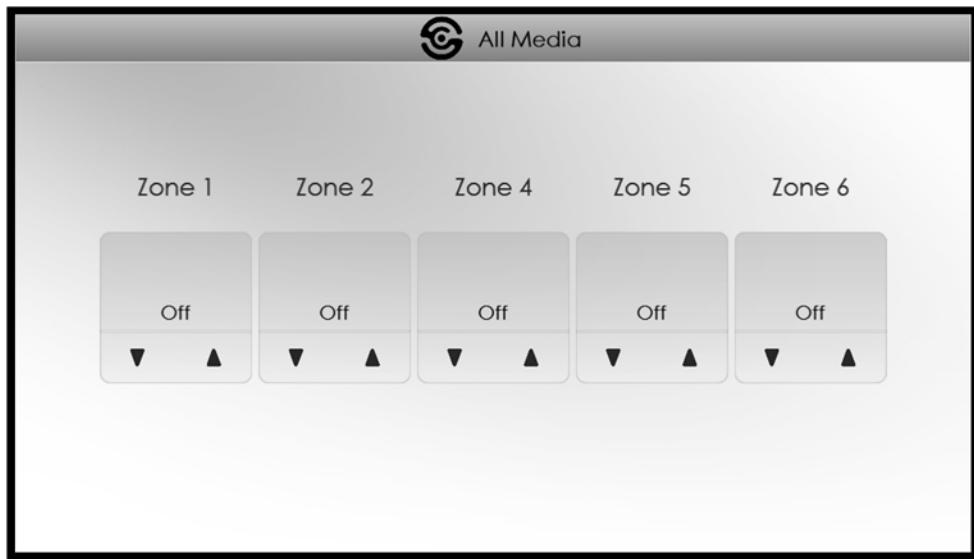
- How-to*
1. Navigate to www.speakerCraft.com/techsupport to download the SpeakerCraft Software. Save the file to an easy to remember location on your Windows, or MAC, PC. Run the installer to begin the installation.

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

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



- Once the installation is complete, the SpeakerCraft Viewer appears and the SpeakerCraft Icon is placed on the PC's desktop.



Note: The MRA-664 must be powered On and on the same network as the PC/Tablet running the SpeakerCraft Software.

Exercise 2: Installing SpeakerCraft Software iOS/Android Device

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

When configuring a SpeakerCraft MRA-664 with the SpeakerCraft 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 SpeakerCraft App.
 3. Download the app to your mobile device.
 4. With the mobile device connected to the same network as the MRA-664, open the SpeakerCraft App to access the SpeakerCraft Viewer.



Notes:

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 MRA-664.
- Learn the Passcode needed to proceed to the System Configuration Wizard.

Requirements

- SpeakerCraft MRA-664 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running SpeakerCraft Software.
-or-
- Tablet running the SpeakerCraft Software App.

About the System Configuration Wizard

Overview

The **SpeakerCraft Software** allows for controlling the MRA-664 and the sources connected to the MRA-664. The **SpeakerCraft Software** allows control of a single home theater zone. The setup for the MRA-664 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 SpeakerCraft Viewer, the System Configuration Wizard requires an active connection to an MRA-664 and makes real-time changes to the system. The SpeakerCraft Software cannot be used for off-line system configuration.

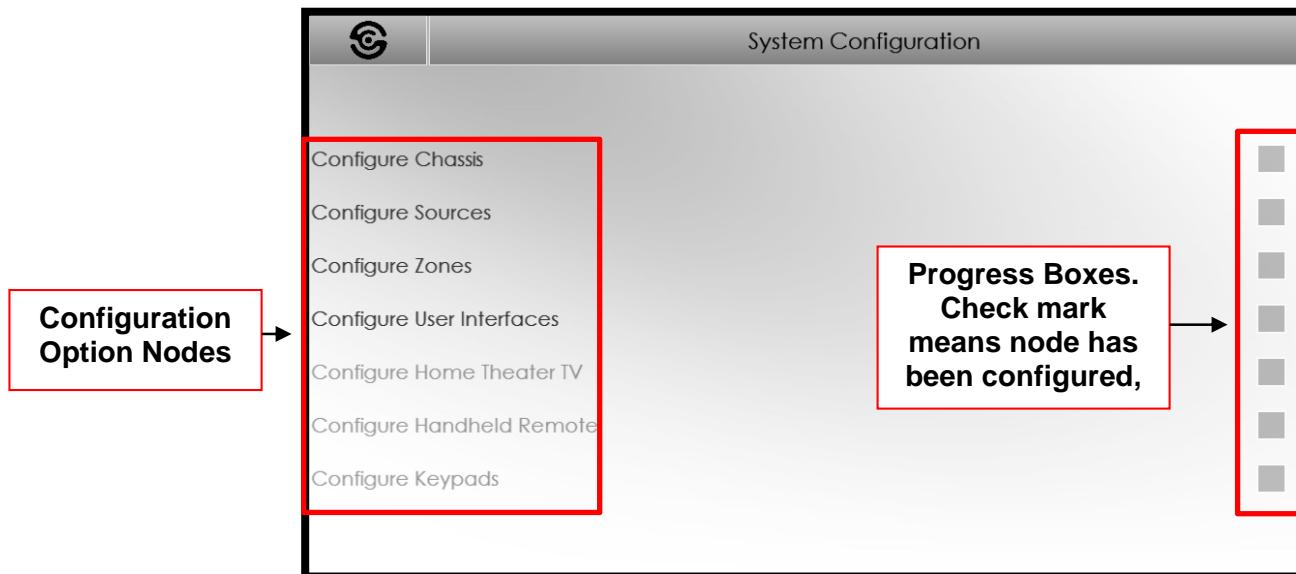
Before starting the System Configuration Wizard make sure the Project Documentation Worksheet, included in the MRA-664 box, is filled out and nearby.

MULTI ROOM CONTROLLER																																			
12. PROJECT DOCUMENTATION WORKSHEET																																			
Network																																			
DHCP-Range		Unit 1 IP Address																																	
Sub-Net Mask		Unit 1 MAC Address																																	
Gateway		Unit 2 IP Address																																	
Wireless SSID		Unit 2 MAC Address																																	
Passkey		Misc Network Device	IP Address																																
		Misc Network Device	IP Address																																
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<table border="1"> <thead> <tr> <th colspan="2">PRIMARY CHASSIS</th> <th colspan="2">SECONDARY CHASSIS (for expansion)</th> </tr> <tr> <th>Sources</th> <th>Name</th> <th>IR Outputs Unit 1</th> <th>Name</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td>2</td> <td></td> </tr> <tr> <td>3</td> <td></td> <td>3</td> <td></td> </tr> <tr> <td>4</td> <td></td> <td>4</td> <td></td> </tr> <tr> <td>5</td> <td></td> <td>5</td> <td></td> </tr> <tr> <td>6</td> <td></td> <td>6</td> <td></td> </tr> </tbody> </table>				PRIMARY CHASSIS		SECONDARY CHASSIS (for expansion)		Sources	Name	IR Outputs Unit 1	Name	1		1		2		2		3		3		4		4		5		5		6		6	
PRIMARY CHASSIS		SECONDARY CHASSIS (for expansion)																																	
Sources	Name	IR Outputs Unit 1	Name																																
1		1																																	
2		2																																	
3		3																																	
4		4																																	
5		5																																	
6		6																																	

*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 SpeakerCraft 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 **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 SpeakerCraft Viewer displays 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:



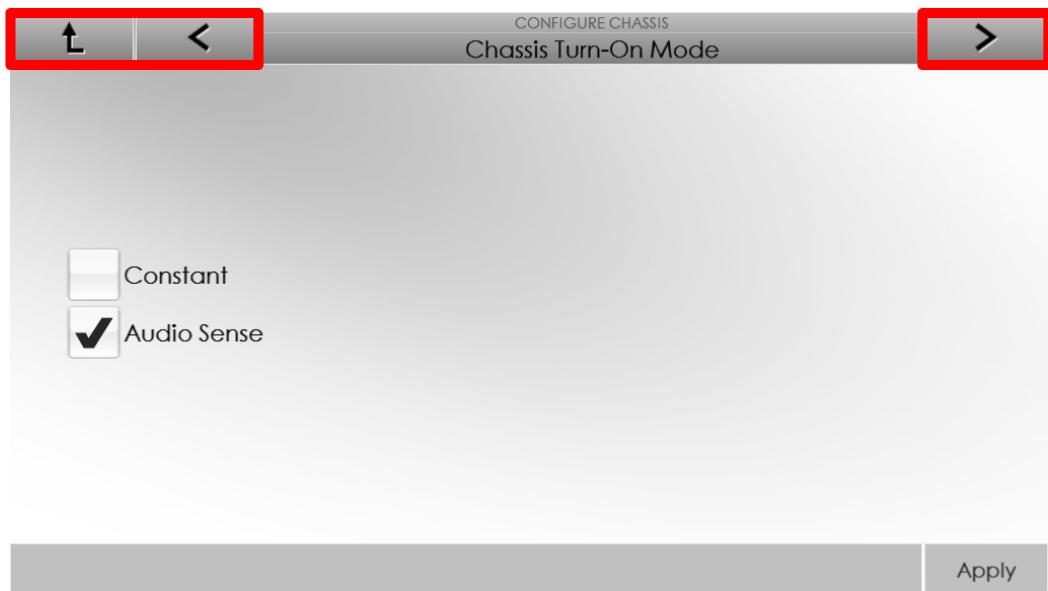
- **Configure Chassis:** includes on-mode settings, IP settings, extender settings, & home theater chassis settings. See Lesson 3, *Configure Chassis*, for more information
- **Configure Sources:** adding, removing, and configuring IP and IR Controlled source devices, including managing favorite TV channel 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 SpeakerCraft Software in a Home Theater zone. See Lesson 5, *Configure a Home Theater Zone*, for more information.
- **Configure Handheld Remote:** add and setup a SpeakerCraft sHR200 Wi-Fi Remote Control for a home theater zone in a SpeakerCraft System. See Lessons 5, *Configure Home Theater Zone*, for more information.
- **Configure Keypads:** allows for configuring each sKP7, 7 button keypad, to control of a zone. See Lesson 8, *Configure Keypads*, for more information.

Configure Node Layout:

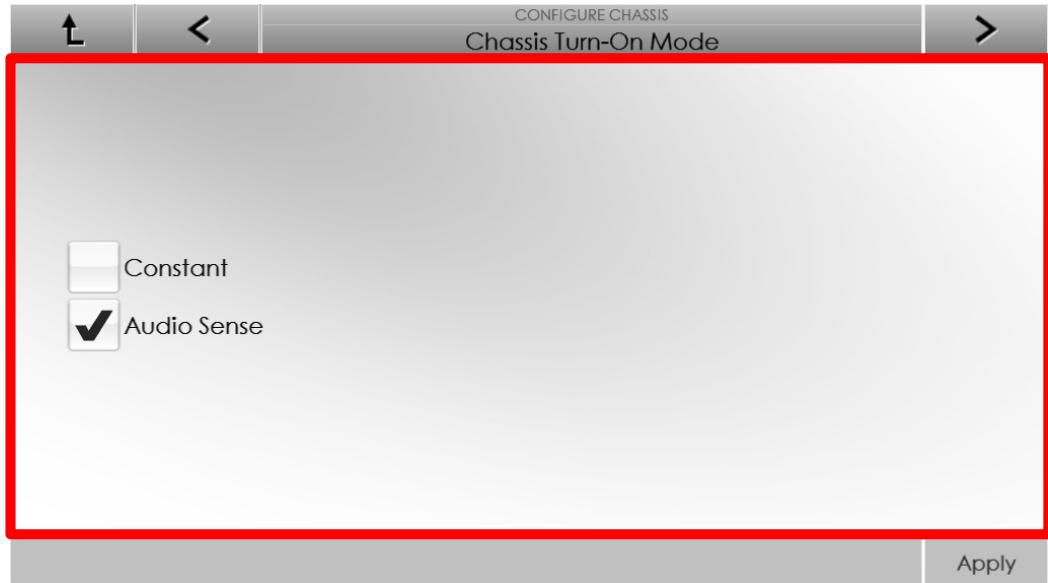
Identification: Shows which Configure Node was selected and the name of the page currently being shown.



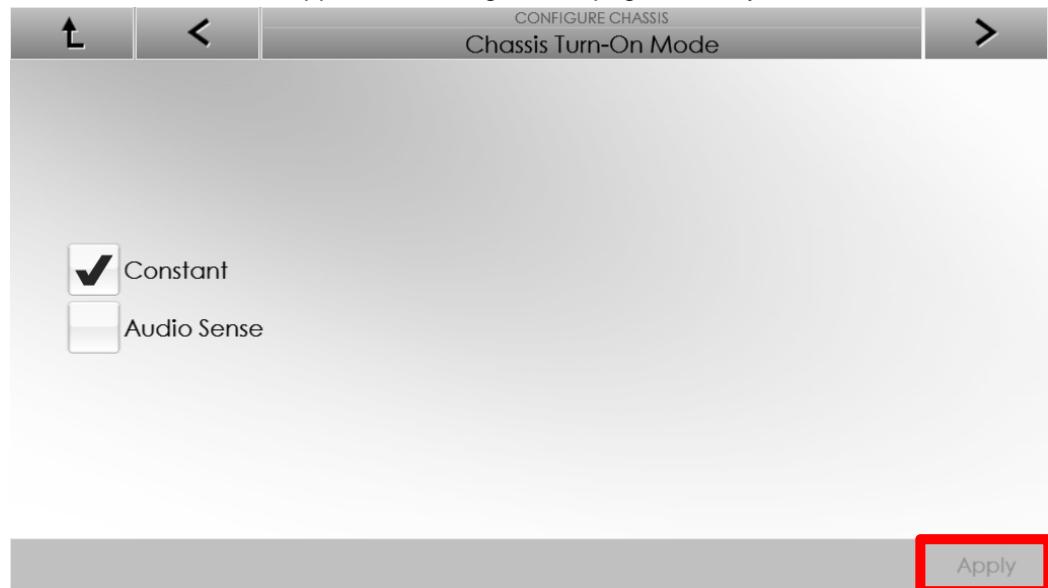
Navigation Arrows: Allows you to navigate between pages for the selected node and to return to the System Configuration Main Menu.



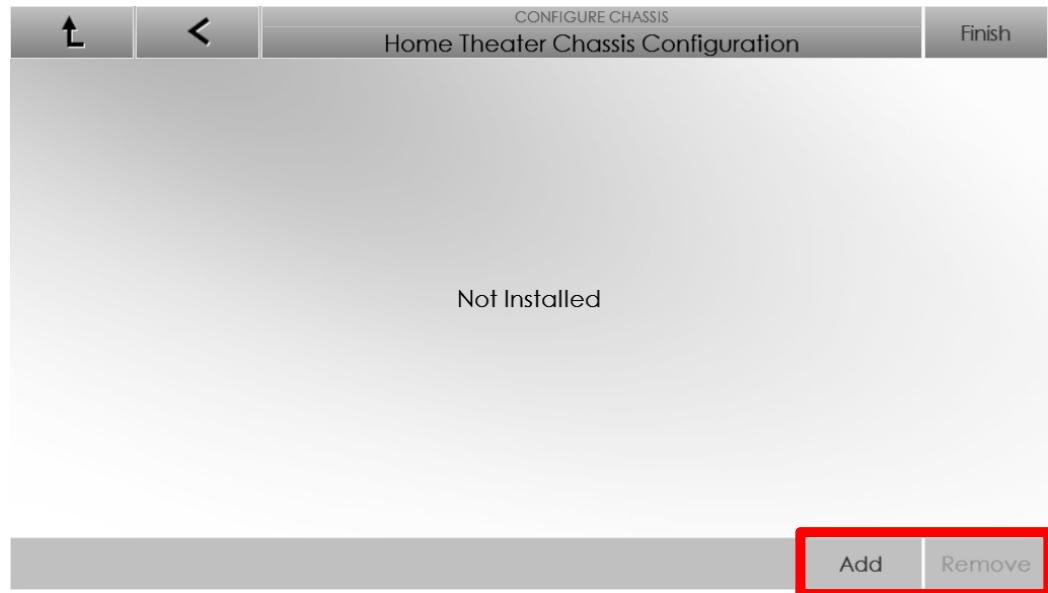
Configuration Options: This area is where the available configuration options for the selected page are displayed.



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

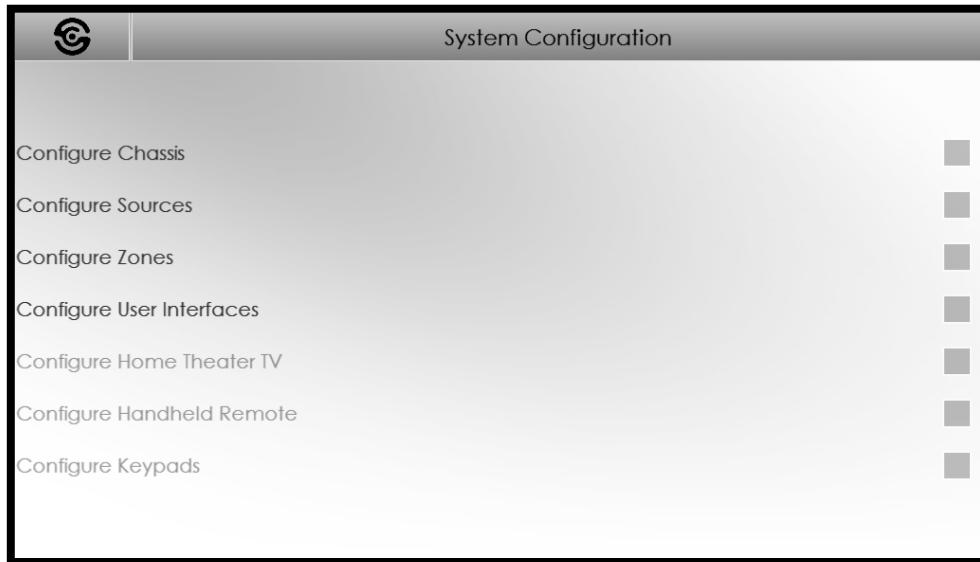
1. From the **Main Menu** (All Media page) of the SpeakerCraft Viewer, press and hold the **Menu Title Bar** for 5 seconds.



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 MRA-664 MUST be powered on and connected to the same network as the devices being used to setup the SpeakerCraft 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

- SpeakerCraft MRA-664 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running SpeakerCraft Software.
-or-
- Tablet running the SpeakerCraft App.

About the Configure Chassis Node

Overview

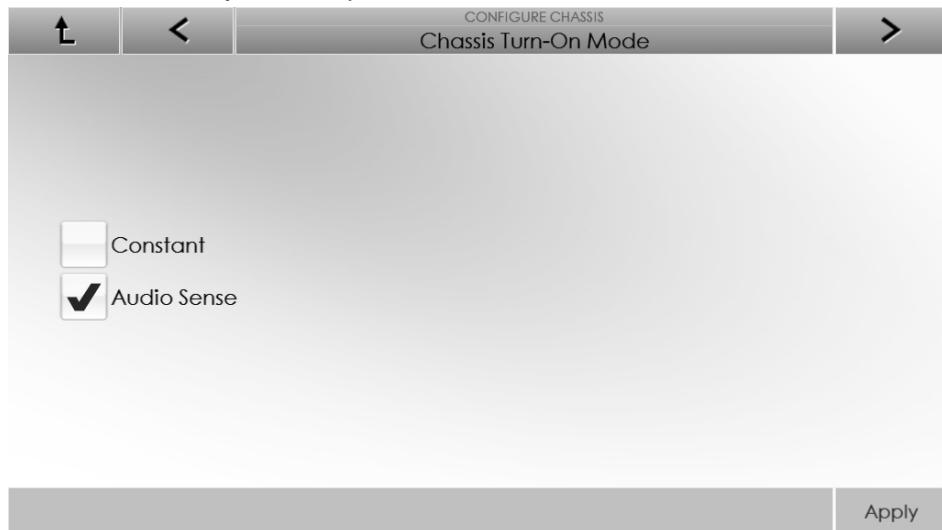
The **Configure Chassis** node sets up how the MRA-664 behaves. This node is used to setup how the unit will remain powered on, how it will connect to a network, if it is used as an extender, and if there is a home theater receiver being controlled by the SpeakerCraft interface.

The Configure Chassis node has a simple point and click interface to allow you to make changes easily to the system. Like the SpeakerCraft Viewer, the System Configuration Wizard requires an active connection to an MRA-664 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 MRA-664 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 MRA-664. SpeakerCraft 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 MRA-664. A static IP address will be necessary if using the SpeakerCraft sHR200 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.

CONFIGURE CHASSIS
Chassis Ethernet Configuration

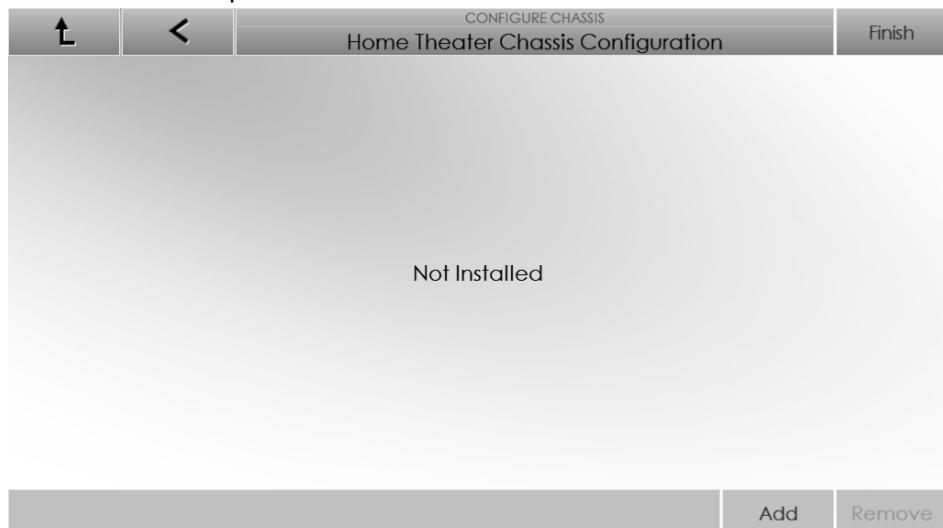
Enable DHCP	<input type="button" value="Yes"/> <input type="button" value="No"/>
Address	0.0.0.0
Subnet	0.0.0.0
Gateway	192.168.0.1
DNS	192.168.0.1

- **Extender Chassis Configuration:** Allows for adding a second MRA-664 chassis to a system for adding zones 7-12. Selecting Add will scan the network for the additional MRA-664 chassis on the network. When available select the additional MRA-664 to place it in **Extender Mode**. Note each MRA-664's MAC Address for identification of each chassis.

CONFIGURE CHASSIS
Extender Chassis Configuration

Not Installed	<input type="button" value="Add"/> <input type="button" value="Remove"/>
---------------	--

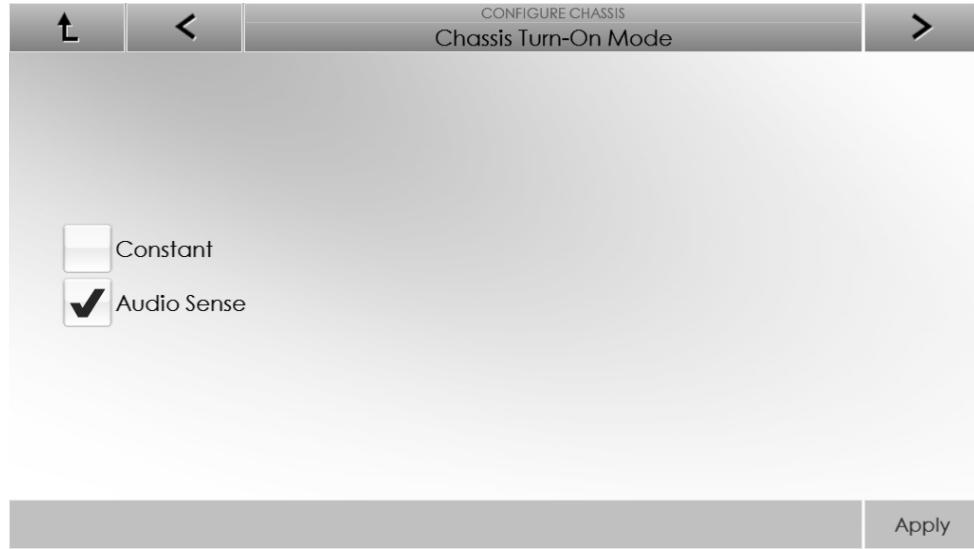
- **Home Theater Chassis Configuration:** This page allows adding of a compatible IP controllable home theater receiver. This will allow the SpeakerCraft interface to control a home theater zone. Select Add to view IP drivers for the compatible home theater receivers.



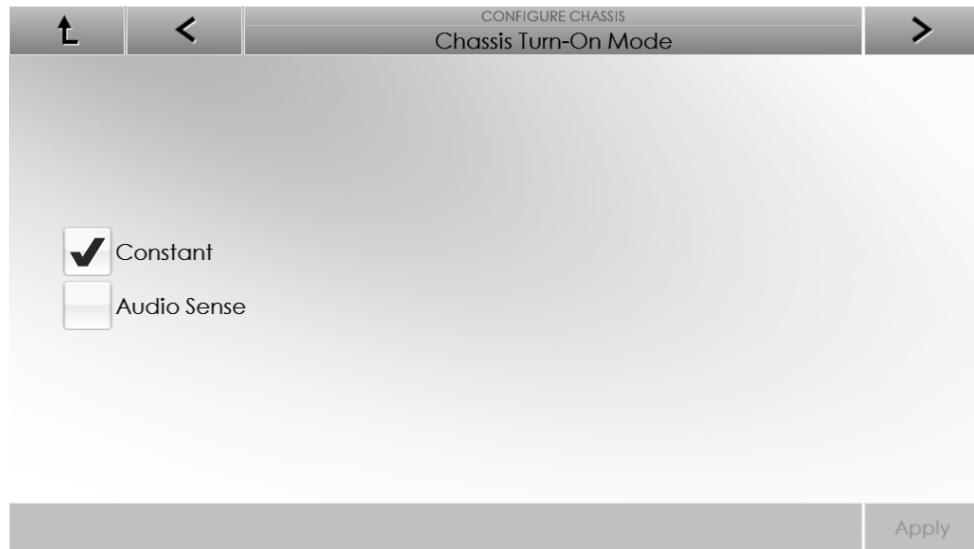
Exercise 1: Changing the Turn-On Mode

Overview Exercise 1 demonstrates how to change the chassis Turn-On mode for the MRA-664.

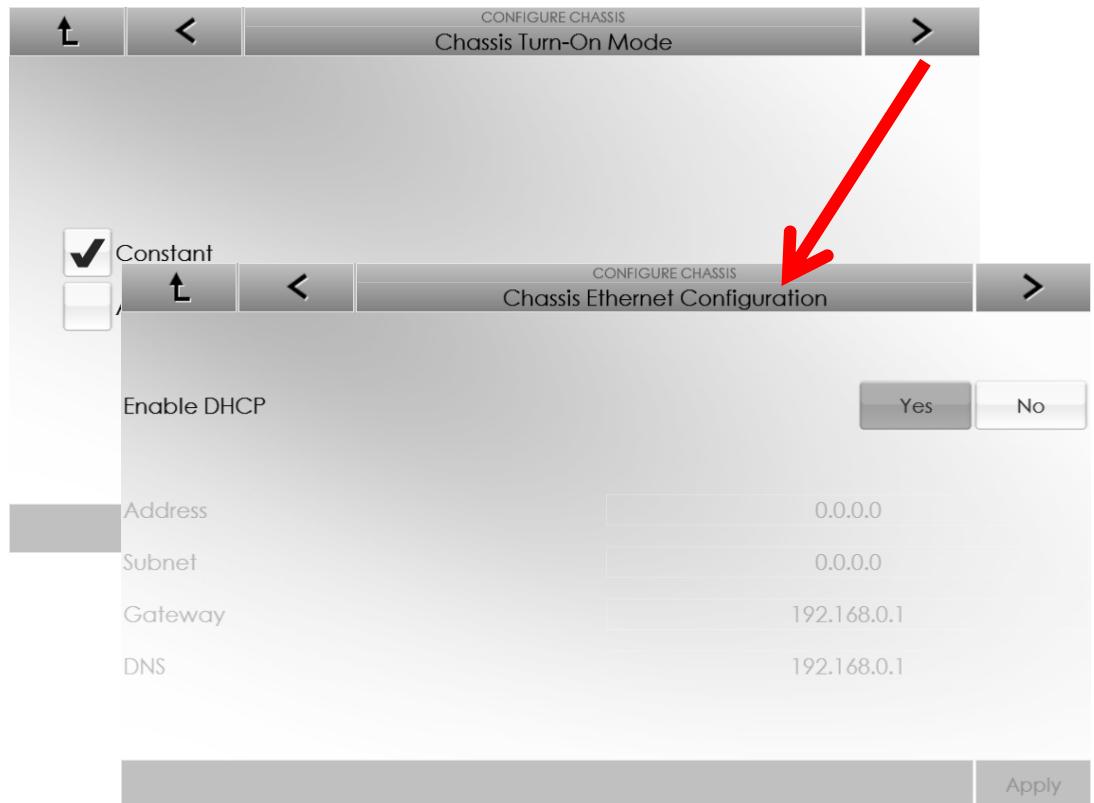
- How-to*
1. From the System Configuration main page, select the **Configure Chassis** node. The Chassis Turn-On Mode page will display as follows, showing the Turn-On Mode options.



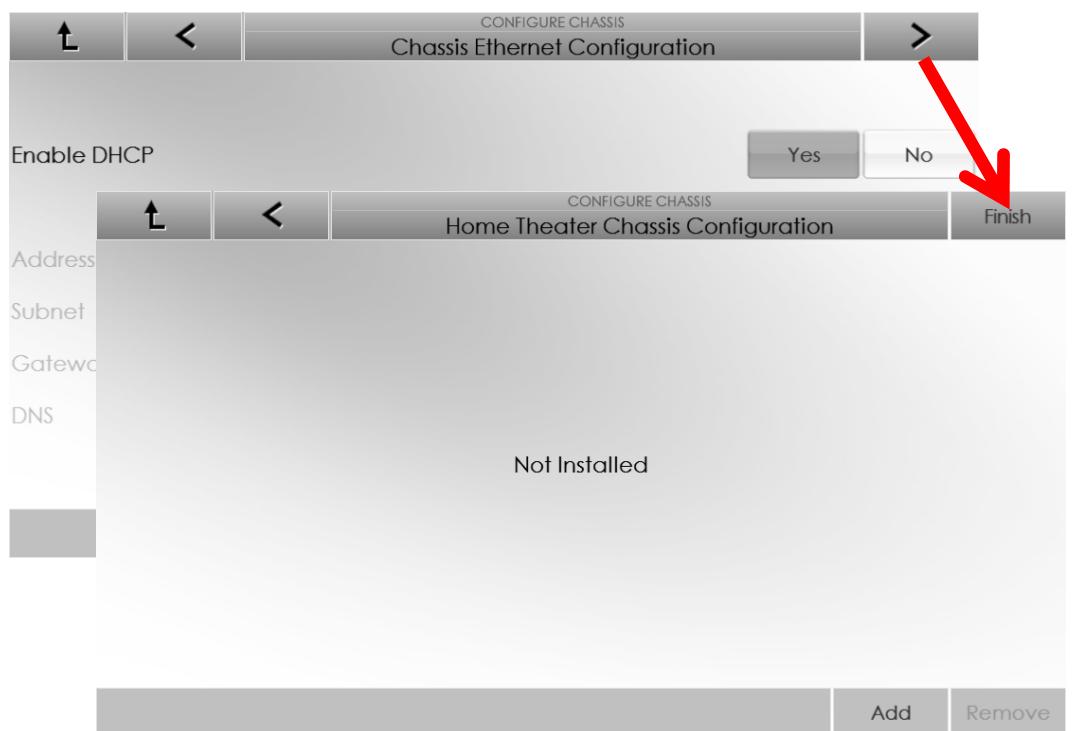
2. Select **Constant** and select **Apply** to save changes.



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 **check mark** in the Progress Box for the Configure Chassis node.

System Configuration	
Configure Chassis	<input checked="" type="checkbox"/>
Configure Sources	<input type="checkbox"/>
Configure Zones	<input type="checkbox"/>
Configure User Interfaces	<input type="checkbox"/>
Configure Home Theater TV	<input type="checkbox"/>
Configure Handheld Remote	<input type="checkbox"/>
Configure Keypads	<input type="checkbox"/>

Exercise 2: Setting a Static IP Address

Overview Exercise 2 explains how assign a static IP address to the MRA-664.

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 the title, there is a section for 'Enable DHCP' with 'Yes' and 'No' buttons. Underneath, there are fields for 'Address' (0.0.0.0), 'Subnet' (0.0.0.0), 'Gateway' (192.168.0.1), and 'DNS' (192.168.0.1). At the bottom, there are 'Apply' and 'Cancel' buttons.

2. Click on **No** to assign a static IP address to the MRA-664.

The screenshot shows the 'Chassis Ethernet Configuration' screen. At the top, there are navigation buttons: a left arrow, a left arrow with a double slash, a right arrow with a double slash, and a right arrow. The title 'CONFIGURE CHASSIS' and 'Chassis Ethernet Configuration' are centered above the form. Below the title, there is a section labeled 'Enable DHCP' with two buttons: 'Yes' (white background) and 'No' (gray background). The main configuration area contains four fields: 'Address' (0.0.0.0), 'Subnet' (0.0.0.0), 'Gateway' (192.168.0.1), and 'DNS' (192.168.0.1). At the bottom right of the configuration area 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 MRA-664.

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 MRA-664.

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 MRA-664.

5. 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 MRA-664 your screen should look similar to this.

CONFIGURE CHASSIS
Chassis Ethernet Configuration

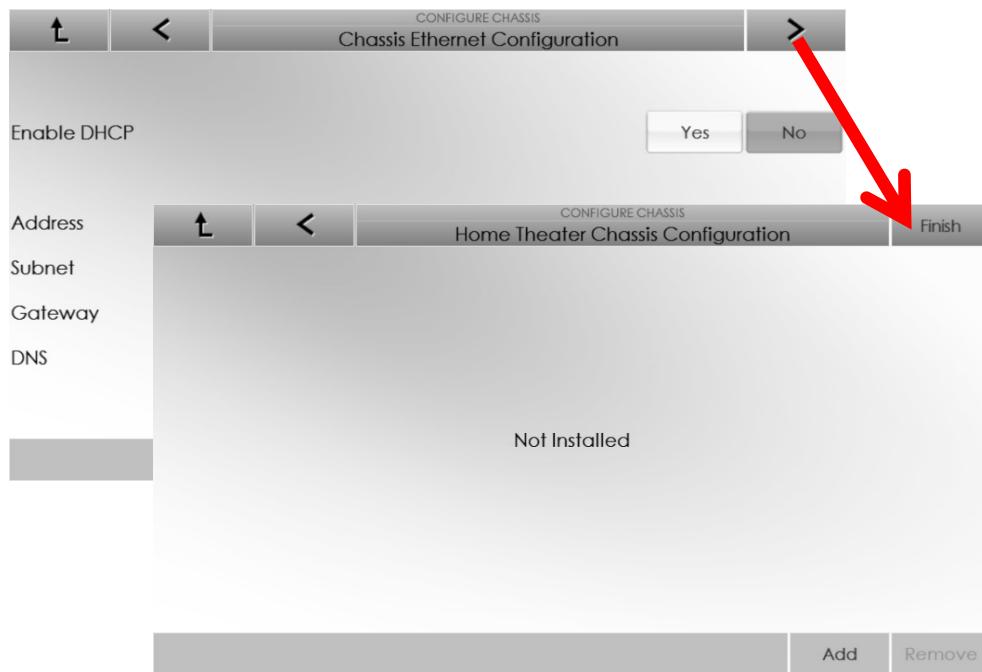
Enable DHCP	<input type="button" value="Yes"/> <input type="button" value="No"/>
Address	192.168.0.18
Subnet	255.255.255.0
Gateway	192.168.0.1
DNS	192.168.0.1

6. Select **Apply** to save the changes to the MRA-664.
7. A message pops up reminding you to reboot the MRA-664 for the network changes to take effect. Select **OK**.

CONFIGURE CHASSIS
Chassis Ethernet Configuration

Enable DHCP	<input type="button" value="Yes"/> <input type="button" value="No"/>
Address	Note: Chassis needs to reboot for settings to take affect
Subnet	255.255.255.0
Gateway	192.168.0.1
DNS	192.168.0.1

8. 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.



9. Re-boot the MRA-664 using the **Power Button** for the Ethernet Configuration changes to take effect.

Exercise 3: Reset the MRA-664 to DHCP

Overview In some instances the MRA-664 may need to have its Ethernet settings reset to DHCP. This exercise will walk you through how to reset the MRA-664 to DHCP Enabled.

How-to To return the MRA-664 to DHCP Enabled:

1. Ensure that the MRA-664 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 MRA-664 is On.



2. On the front panel of the MRA-664, **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.

Notes:

Lesson 4

Configure Sources Node



Overview

This lesson shows you how to add and set up sources for use in the SpeakerCraft 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

- SpeakerCraft MRA-664 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running SpeakerCraft software.

-or-

- Tablet running the SpeakerCraft 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 SpeakerCraft MRA-664 system controller.



The MRA-664 provides the end user with high-quality sound of their favorite sources. The SpeakerCraft Viewer gives the end user a proven, easy-to-use interface compatible with many of today's popular mobile devices and tablets, PCs, and SpeakerCraft-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

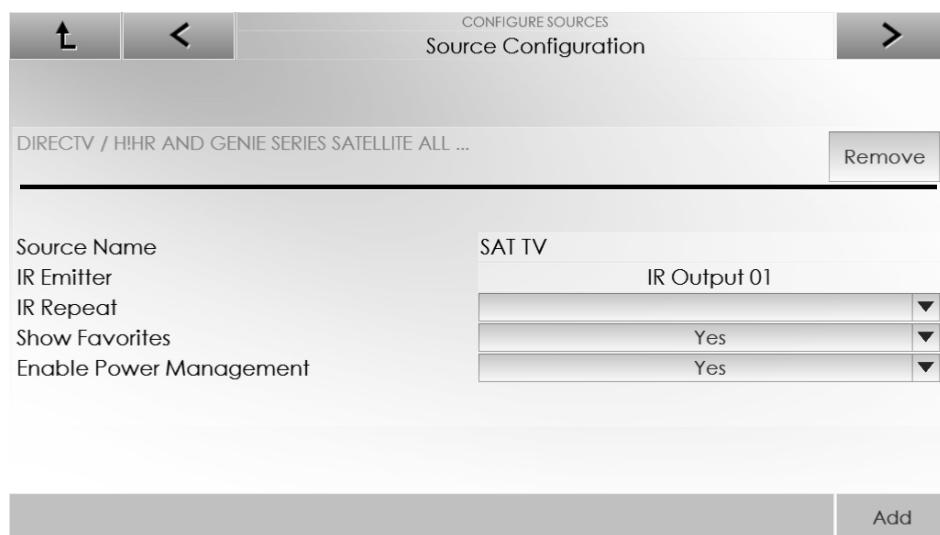
The **Configure Sources** node sets up the source for access and control using the SpeakerCraft software. Please note, it is recommended that all connectivity to the MRA-664 be completed before beginning this lesson.

The Configure Sources node has a simple point and click interface to allow you to make changes easily to the system. Like the SpeakerCraft Viewer, the System Configuration Wizard requires an active connection to an MRA-664 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 SpeakerCraft system.



Note: Sources must be physically connected to the MRA-664 for audio playback and for IR control. IP control is done thru the LAN.

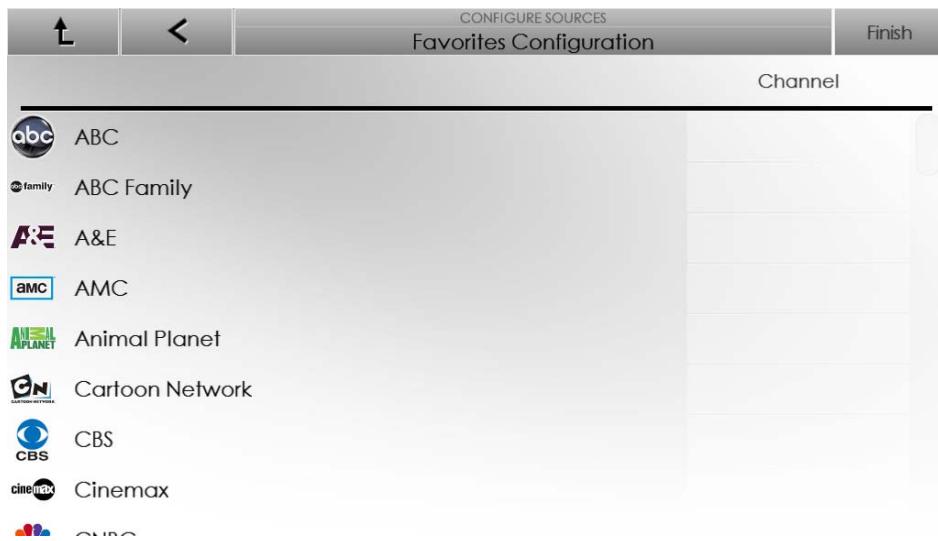
Quick Reference: Source Configuration page	
Source Name	Allows for personalization of the Name of the source displayed in the SpeakerCraft Viewer.
IR 1-6	IR routing matrix. This matrix allows configuration of IR routing through the MRA-664 chassis. Select the IR output jack the source is physically connected 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 MRA-664. The source Input Level may be adjusted from +/- 6dB to ensure the volume is consistent when switching between sources.

CONFIGURE SOURCES			Finish
Master Chassis Source Assignment			
	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 ▼

Quick Reference: Master Chassis Source Assignment page	
Source Name	Assigns a source to the source input on the MRA-664.
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 SpeakerCraft 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

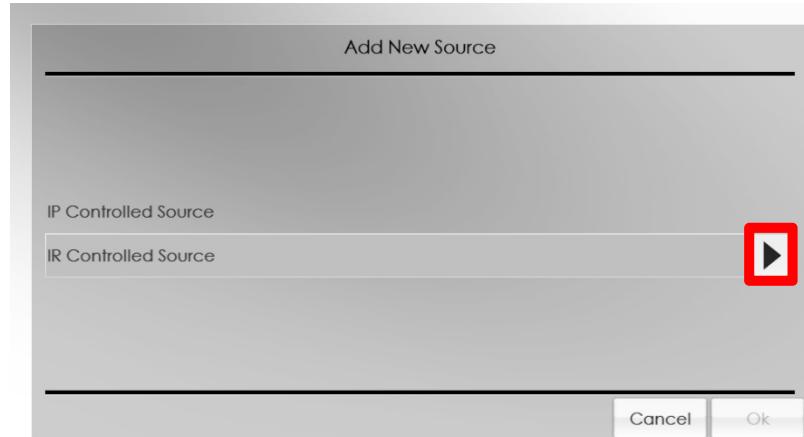
Overview In Exercise 1, we will add an IR Controlled source to the system. This source may be a cable, or satellite box, a DVD, or Blu-Ray player, or many other IR controlled devices. This exercise will show you how to add a DirecTV box to the SpeakerCraft interface.



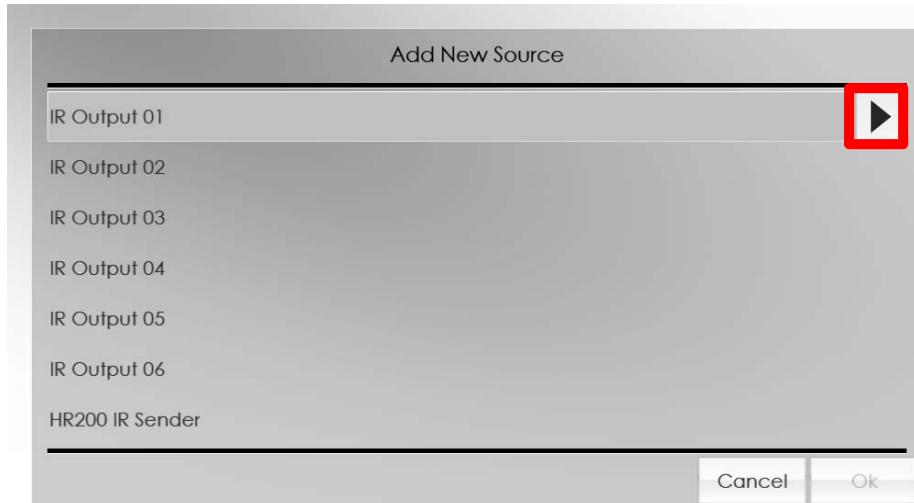
How-to 1. Access the Source Configuration Page in the SpeakerCraft Viewer and select **Add**.



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

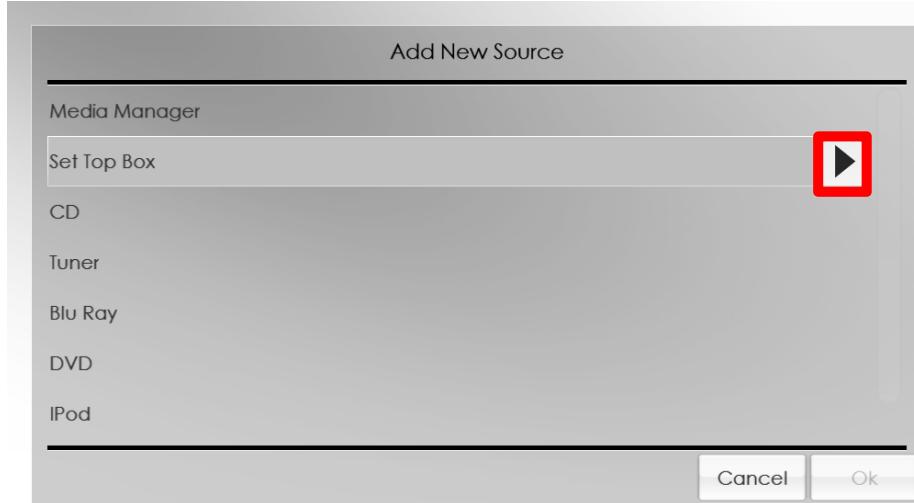


3. Select the **IR Output** that the IR controlled device is connected to and select the **Right Arrow**.

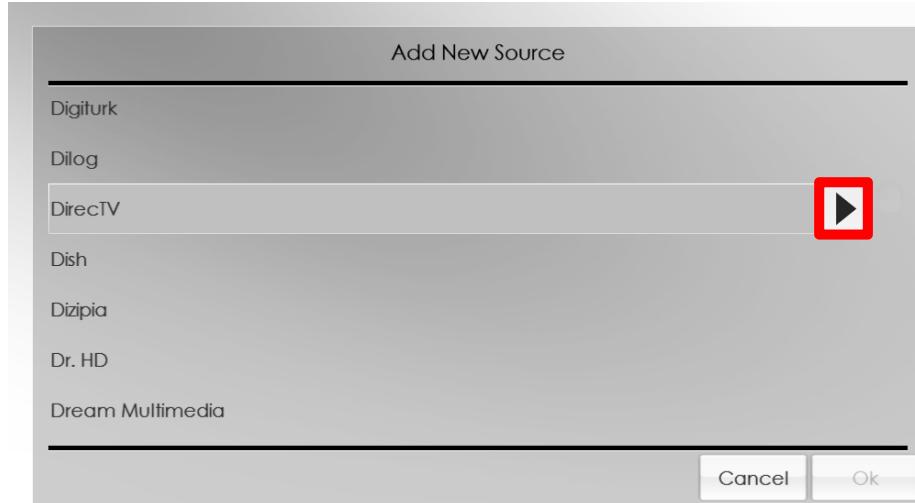


Note: The IR Output assigned to the source **MUST** be the IR Output that the source device is physically connected to on the rear panel of the MRC-6430. If the IR Output assigned to the IR device does not match the physical connection then the IR device cannot be controlled from the Auriel Viewer.

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.



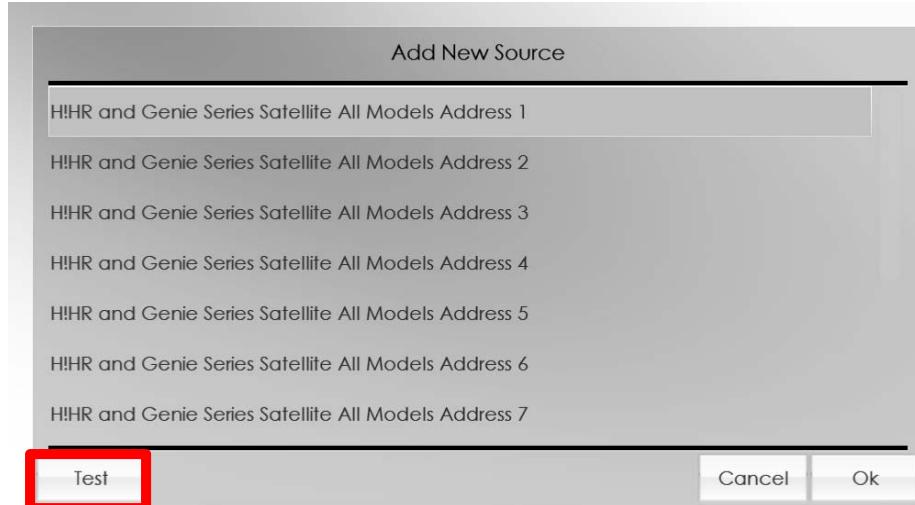
5. This page shows all available manufacturers of Set Top Boxes in the SpeakerCraft database. Use the scroll bar to the right to scroll down until you find DirecTV. Select **DirecTV** and then select the **Right Arrow**.



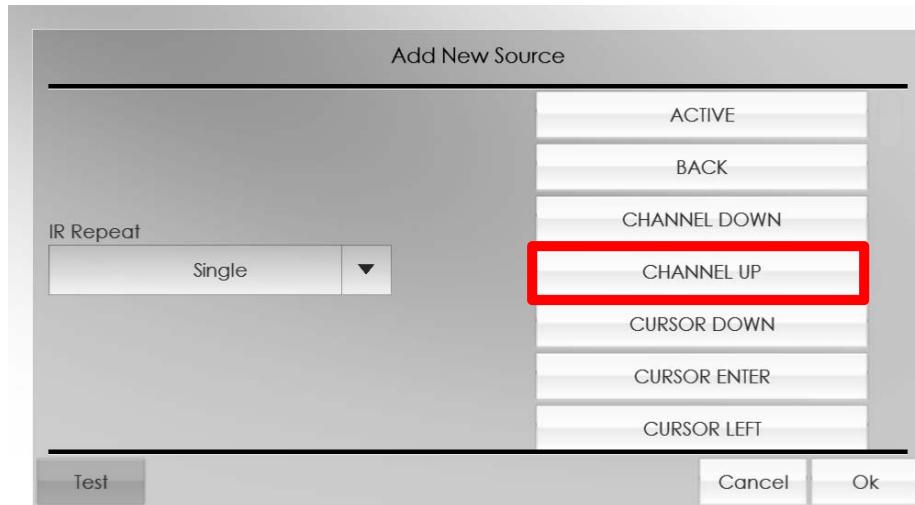
6. The available IR code sets in the SpeakerCraft MRA database are shown, select the **correct IR code set** for the device being used.

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

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

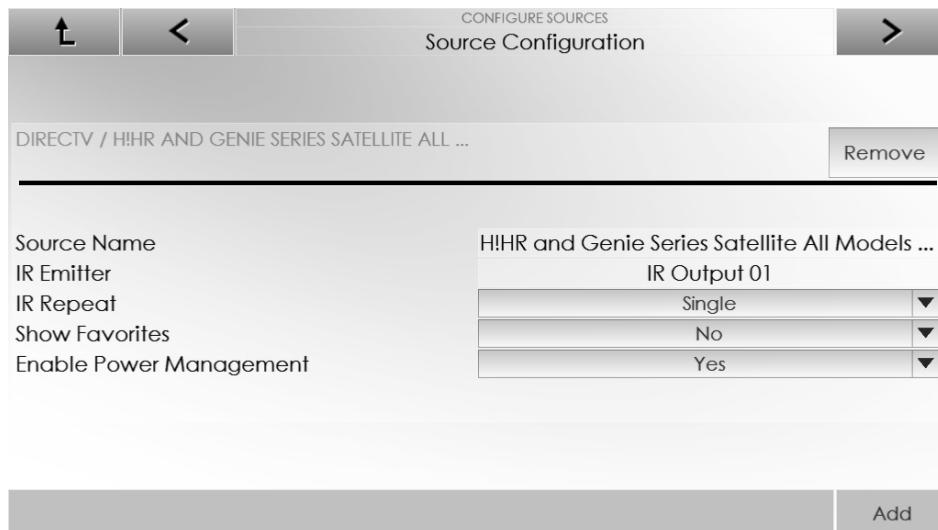


- b. In the Test IR window, select an **IR command** on the right to test.



Note: Before testing an IR command ensure the IR device is physically connected to the assigned IR output on the MRA-664. 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.

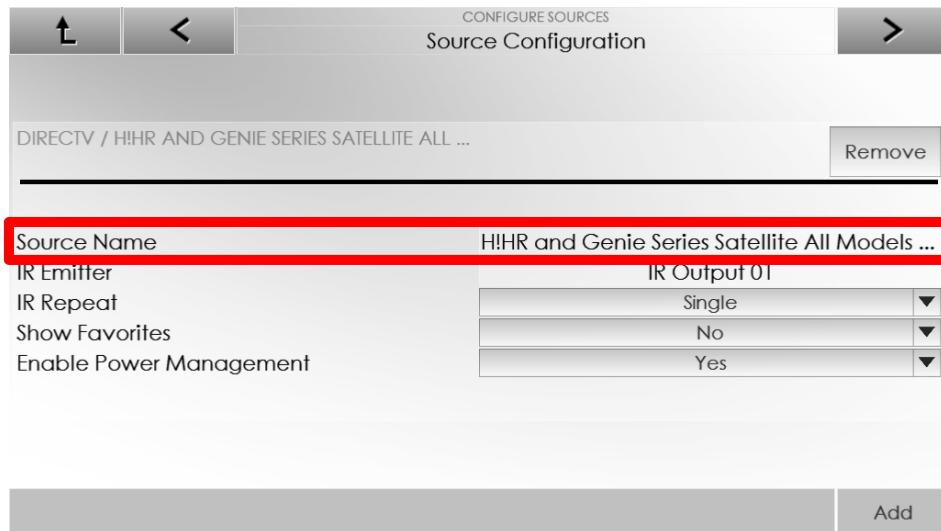
Exercise 2: Renaming Sources

Overview

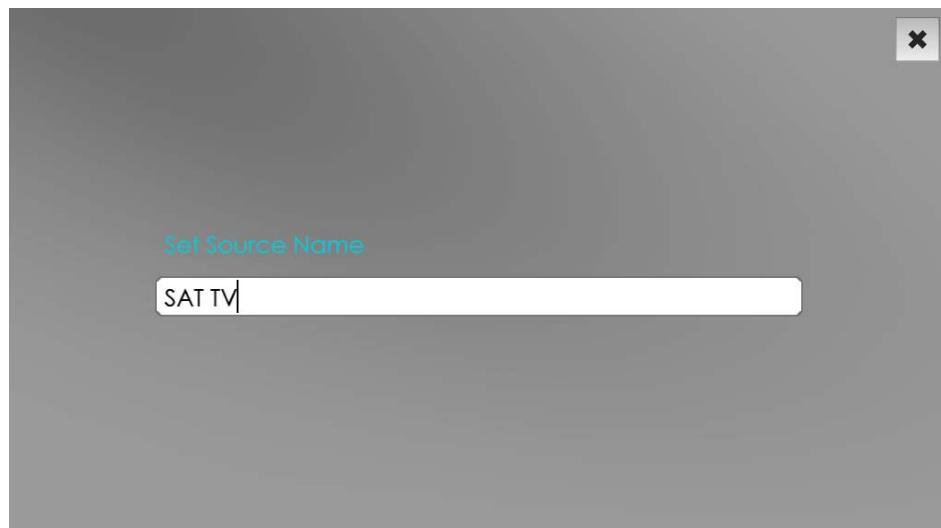
In Exercise 3, you will rename the IR source added in exercise 1. The Source Name is the name that will be displayed in the SpeakerCraft Viewer for the source. SpeakerCraft recommends renaming the source something that the user will easily recognize and remember.

How-to

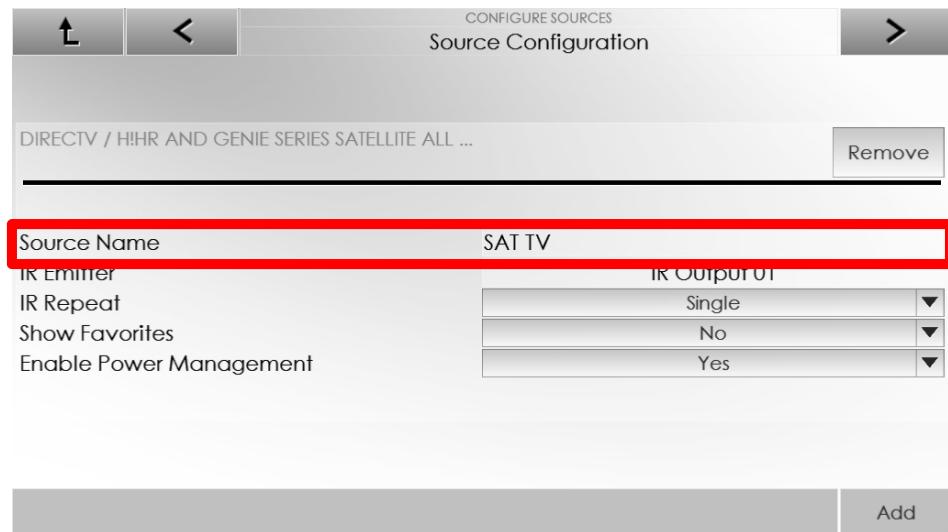
1. On the Source Configuration page locate and select the Source Name field.



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



3. 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.



4. 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 MRA-664. This exercise will use the IR source device added in exercise 1.



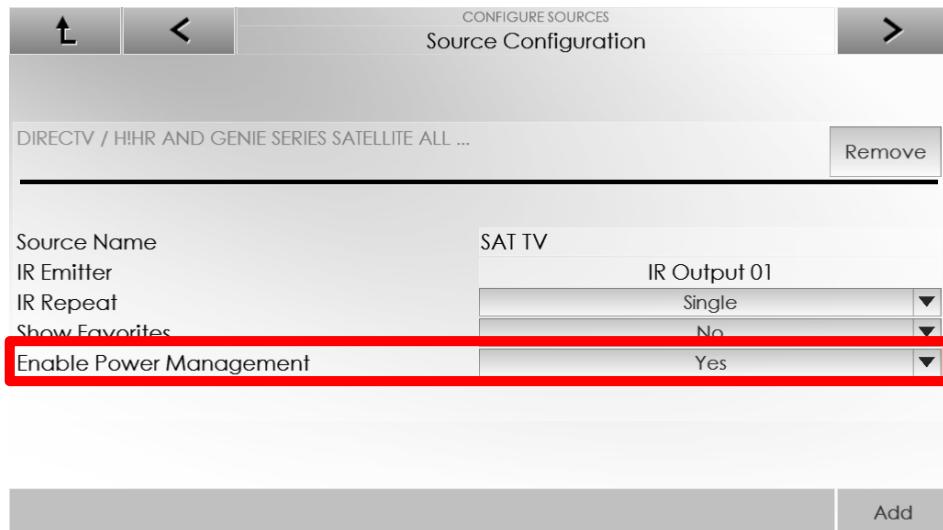
Power Management works using a Source Devices discreet Power On and Off commands allowing the SpeakerCraft MRA Software to manage the power status of the source device depending on source selection in a zone and zone power status. When enabled; When a source is selected in a zone, the SpeakerCraft MRA Software will send the discreet On command for the selected source device. When a zone is powered Off the SpeakerCraft MRA Software will send the discreet Off command for all source devices assigned to the MRA-664.

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

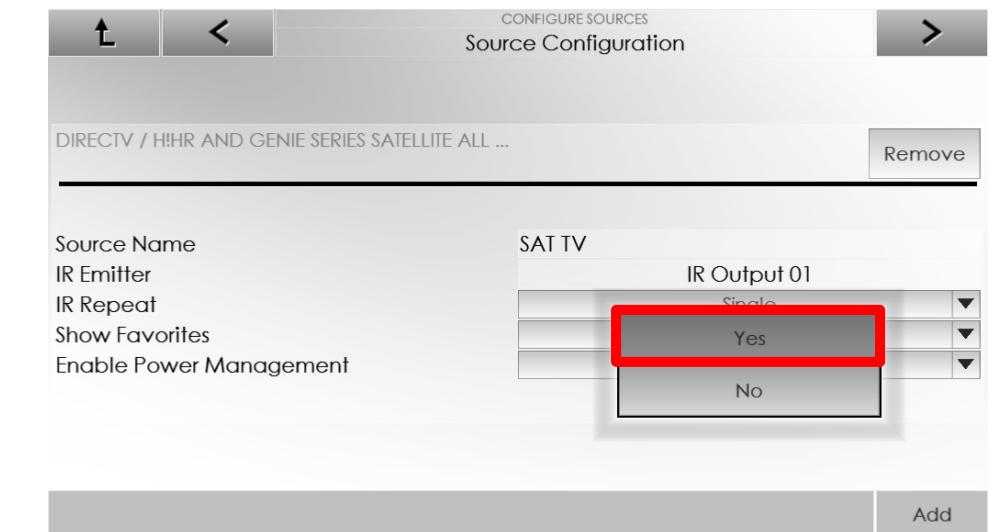
Note: The Source Device **MUST** have discreet Power On/Off commands in order for Power Management to work.

How-to

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

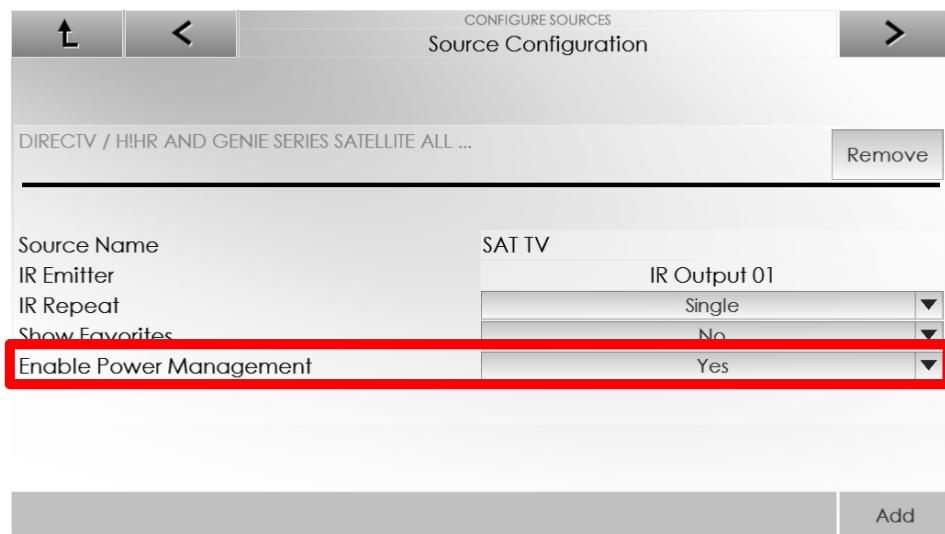


2. *The Power Management Yes/No window pops up. Select the Yes to enable Power Management (Factory Default) or select No to dis-able Power Management. This exercise we are leaving Power Management enabled, select Yes.*



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.



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

Exercise 4: Adding an IP Source

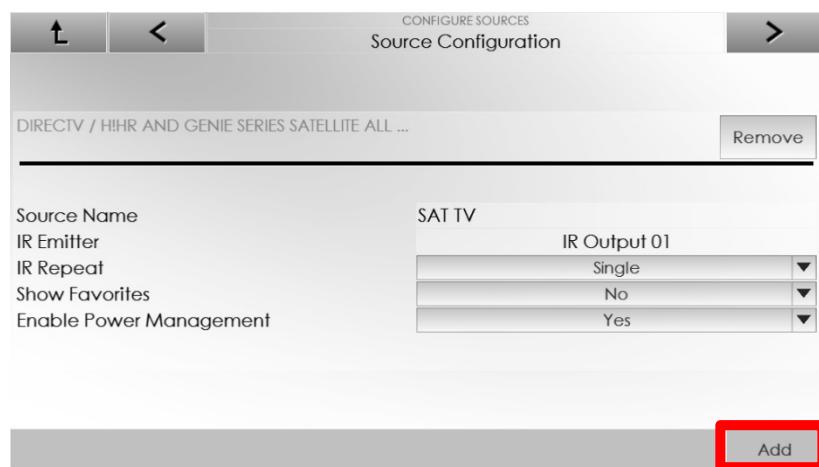
Overview

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, Sonos Connect media players, 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 a Sonos Connect media play to the SpeakerCraft interface.

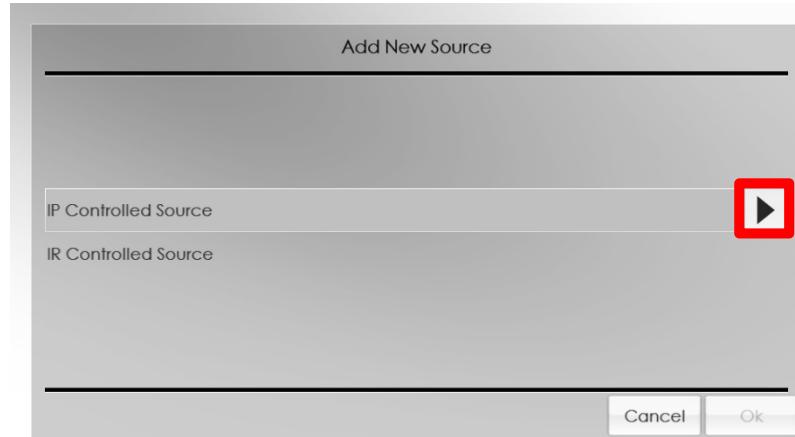
Before adding IP sources make sure they are completely setup as per the manufacturer's instructions, operating correctly, and connected to the same network as the MRA-664. Note all network settings for the device in the Project Documentation Worksheet, included with the MRA-664.

How-to

1. Access the Source Configuration Page in the SpeakerCraft Viewer and select **Add**.



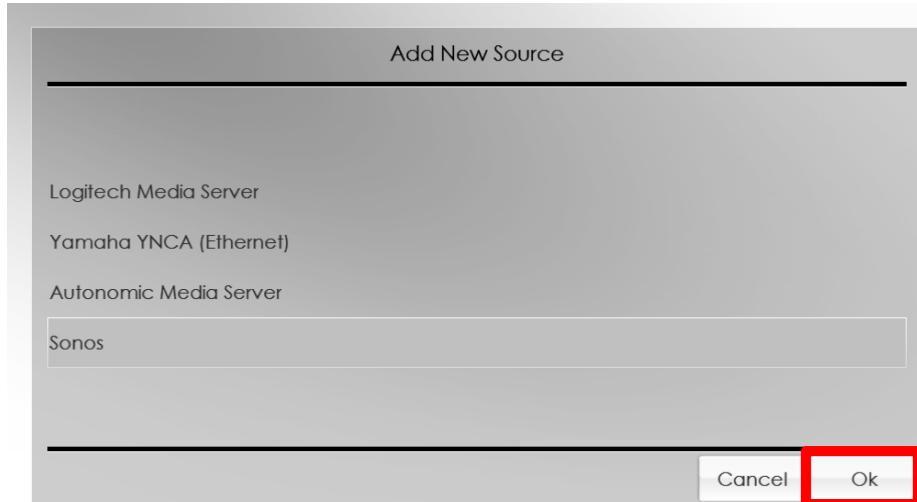
2. Select **IP Controlled Source** in the Add New Source window and select the **Right Arrow**.



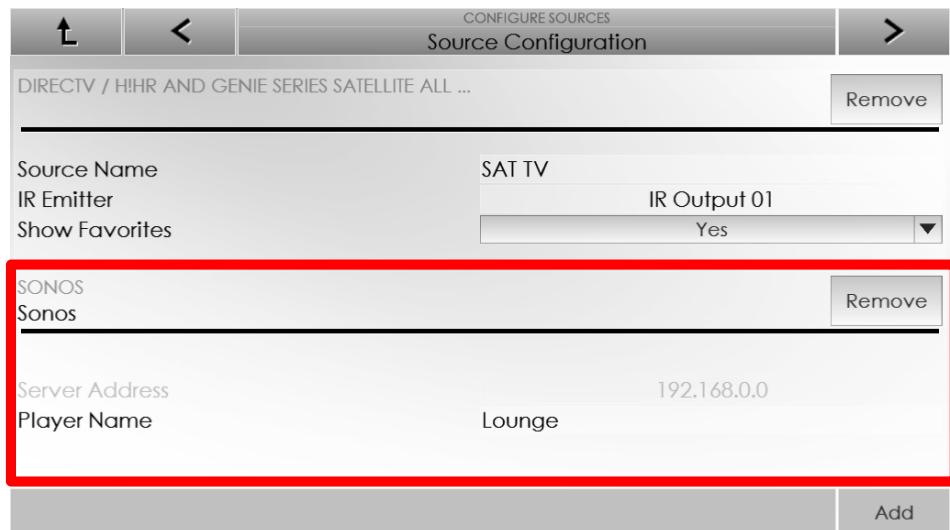
3. This page shows the available interface template types for IP controlled devices. Select **Media Server** when using supported devices for streaming media and then select the **Right Arrow**.



4. This page shows the available options for streaming media players in the SpeakerCraft database. Select **Sonos** and then select **OK**.

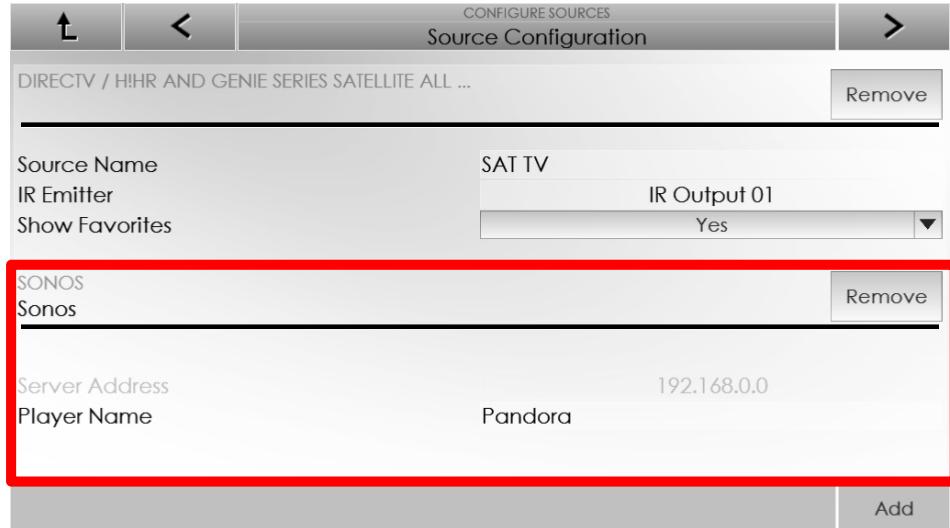


5. The Source Configuration page will update with the available Sonos Connect units discovered on the network. *Sonos is automatically added to the Source Configuration page.*



Note: Some media servers, such as Autonomic, should be assigned a **static IP address** for reliable communication between the SpeakerCraft MRA and the media server.

6. The Sonos Connect will populate with the name assigned during the Sonos setup process. **Rename** each Sonos Connect as desired. When finished select the **Right Arrow** to proceed to the next page.



Note: The SpeakerCraft MRA-664 supports up to **6** Sonos Connect units.

Exercise 5: Assigning Sources in the SpeakerCraft Software to inputs on the MRA-664

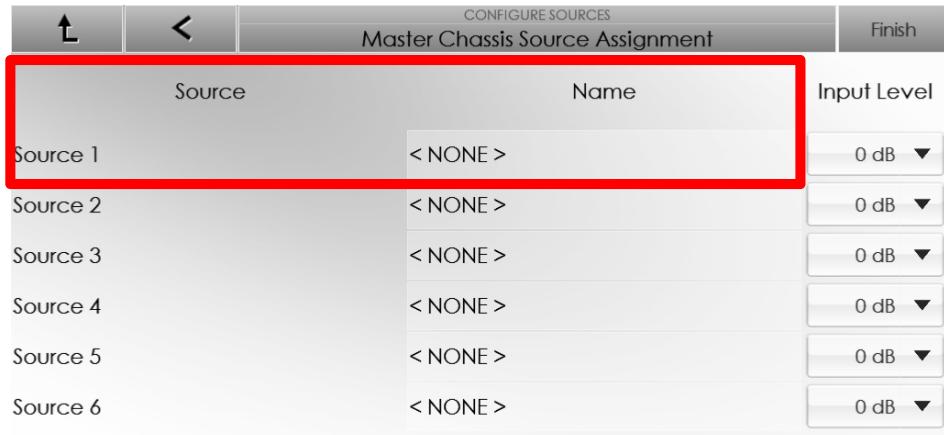
Overview In a typical installation, sources are assigned to specific inputs on the zone controller. The SpeakerCraft software needs to know which sources are physically connected to each input so that the correct signals can be sent to the zone controller based on source selection from the Viewer interface.

For Exercise 5, you will assign the source input on the MRA-664 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 ▼

4. Repeat steps 1 thru 3 of this exercise to **assign additional source interfaces** to source inputs on the MRA-664.

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

5. 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.

6. 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.

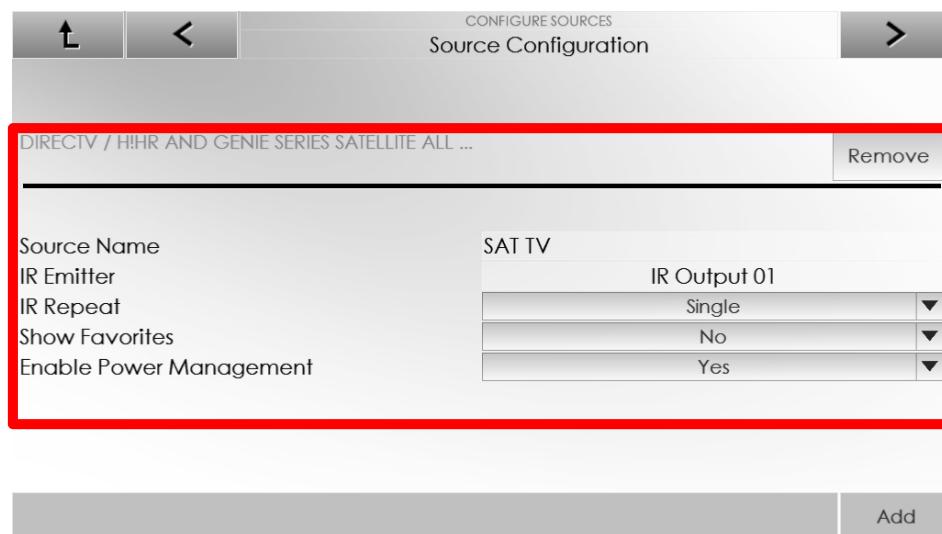
Exercise 6: Load TV Channel Icon Groups

Overview Exercise 6 describes how to load favorite TV channel icons for source devices that support favorite TV channel icons in to the MRA-664.

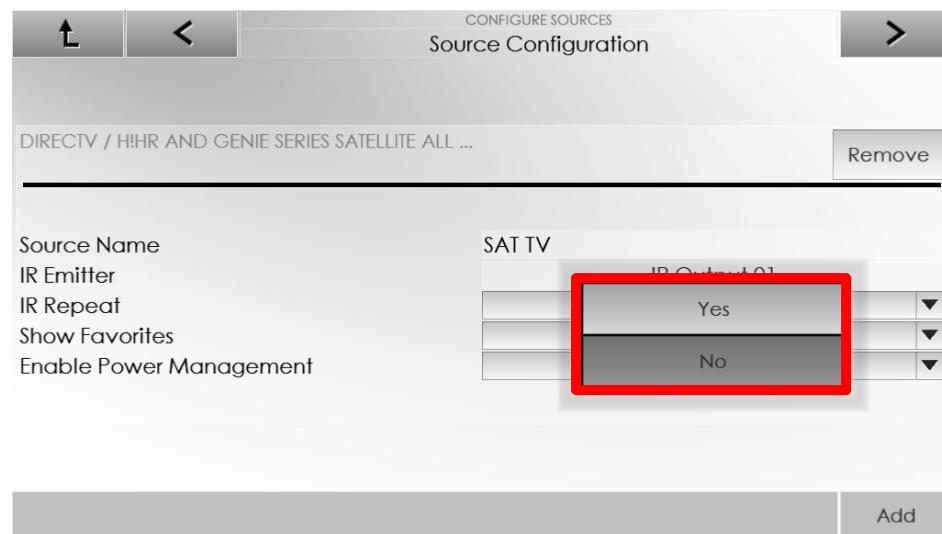
Favorite TV channel icons are used to enable one-touch, easy access, to the end user's favorite TV channels. Discuss with your client to determine their favorite TV channels.

How-to

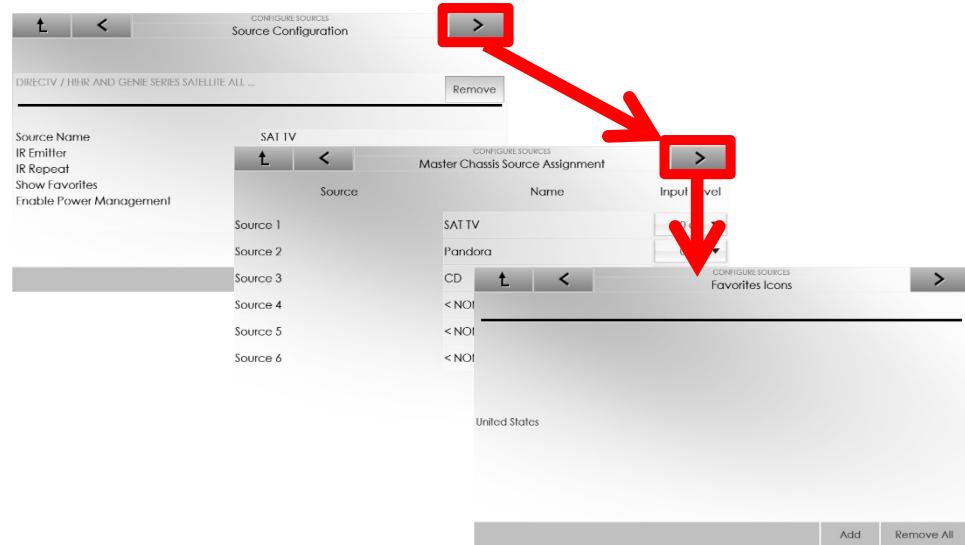
1. Access the Source Configuration main page and locate the **Set Top Box source, SAT TV**.



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.



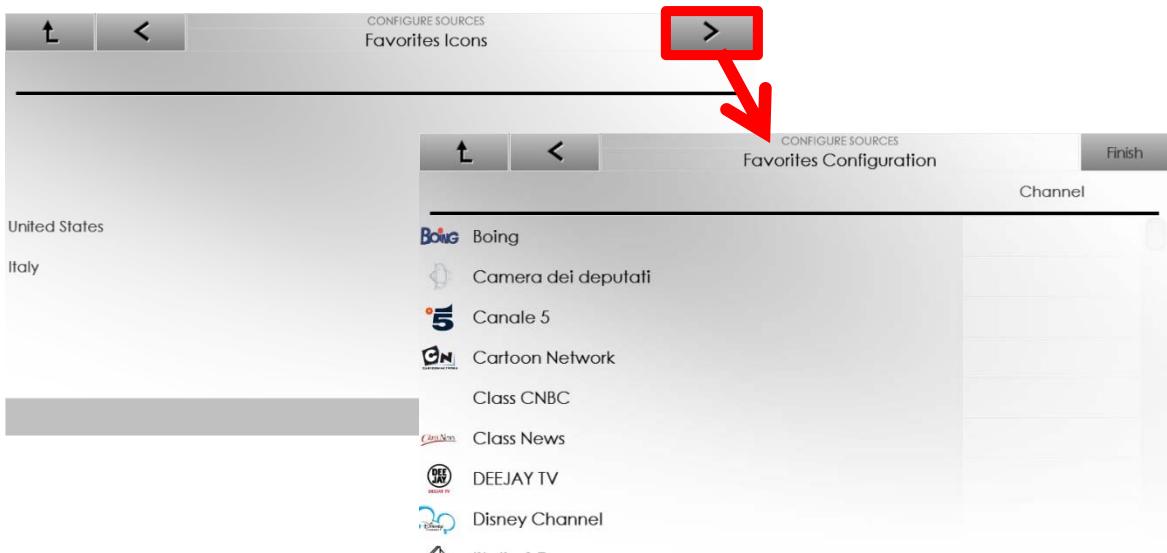
5. In the Add Favorites Icons window select the country you are in and then select the **Right Arrow**.



6. 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.



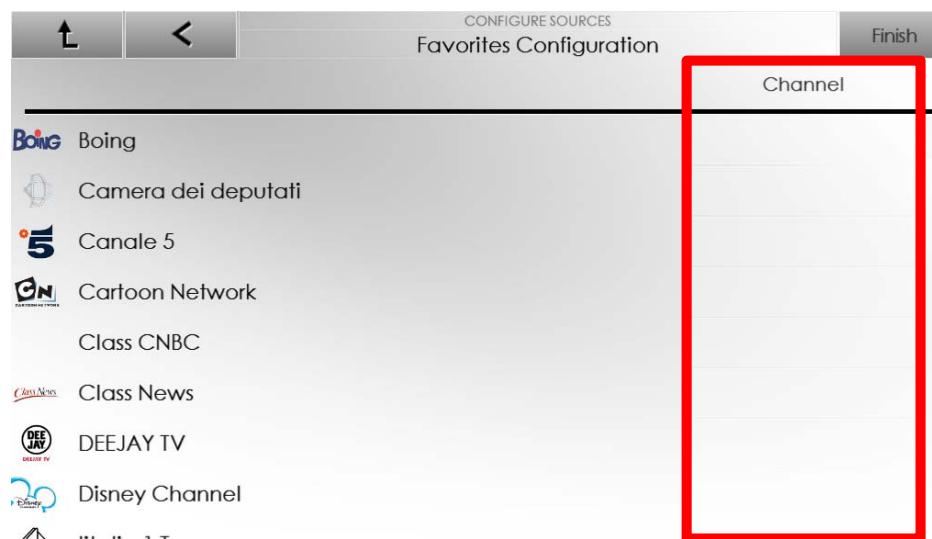
Exercise 7: Favorite TV Channel Icons

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.

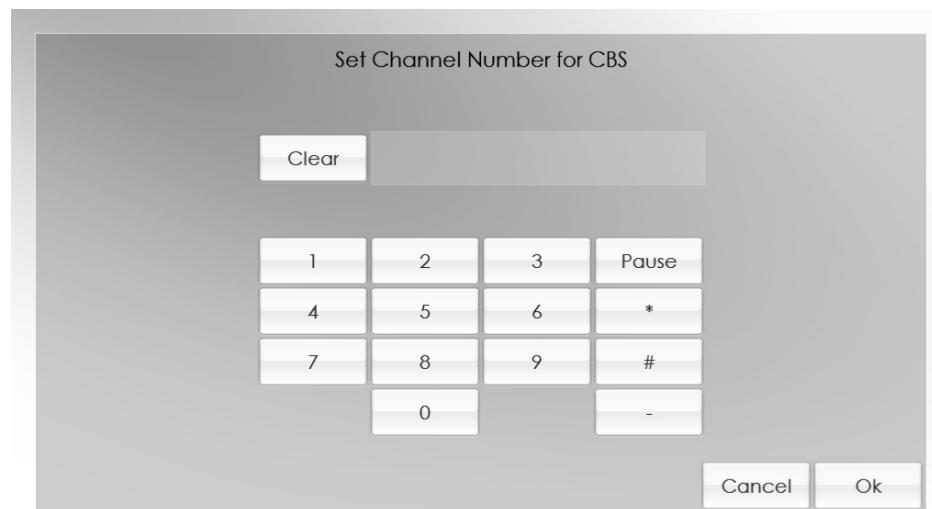
Favorite TV channel icons are used to enable one-touch, easy access, to the end user's favorite TV channels. Discuss with your client to determine their favorite TV channels.

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.



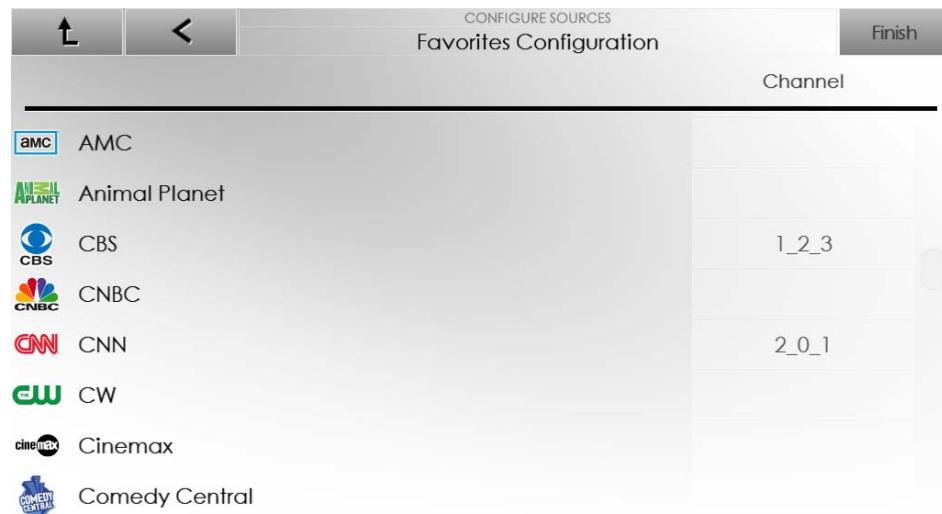
2. The Set Channel Number window appears. Use the **number keypad** to enter the channel number.



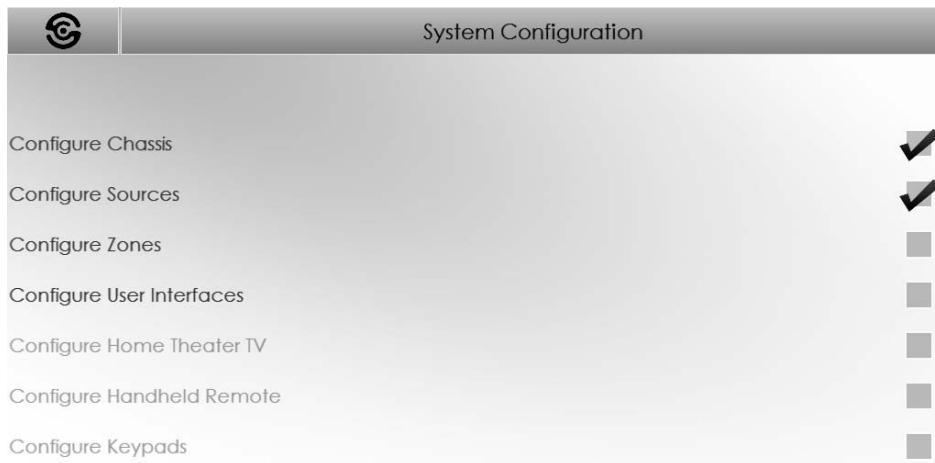
3. Use the **Pause button** to enter a 250ms delay between numbers. Once the channel number has been entered select **OK**.

The image shows a television screen displaying a numeric keypad overlay titled "Set Channel Number for CBS". The keypad includes a "Clear" button, a numeric grid (1-9, *, #), and a "Pause" button. Below the keypad are "Cancel" and "Ok" buttons, with "Ok" highlighted by a red box and a red arrow pointing from the "Favorites Configuration" list below. The main menu at the bottom is titled "CONFIGURE SOURCES Favorites Configuration". The "Channel" section lists favorite channels with their logos and names: A&E (A&E TV), AMC (AMC), Animal Planet (Animal Planet), CBS (CBS), CNBC (CNBC), CNN (CNN), CW (CW), Cinemax (Cinemax), and Comedy Central (Comedy Central). The channel "1_2_3" is selected, as indicated by a red arrow pointing to its name.

7. 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.



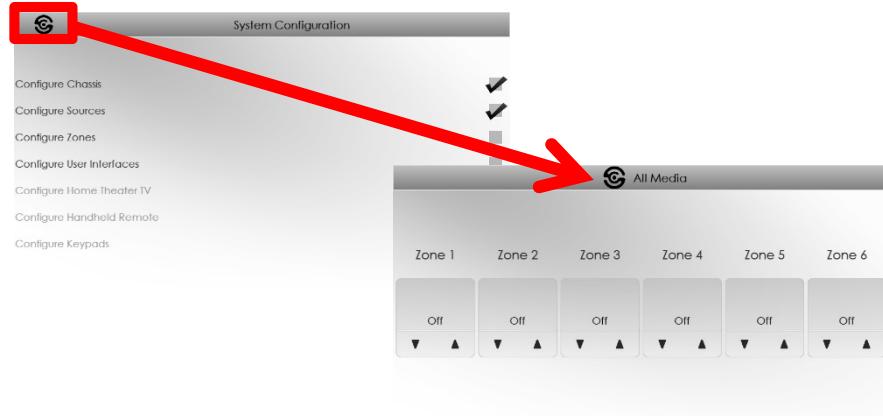
Quick Reference: Favorites Configuration	
Channel	The numeric value used to access the TV channel.
Finish	Used to complete the configuration of a node and return to the System Configuration Wizard main page. Use the Left Arrow to navigate to previous pages if node configuration is not complete.



Exercise 8: Check the SpeakerCraft Viewer

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

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



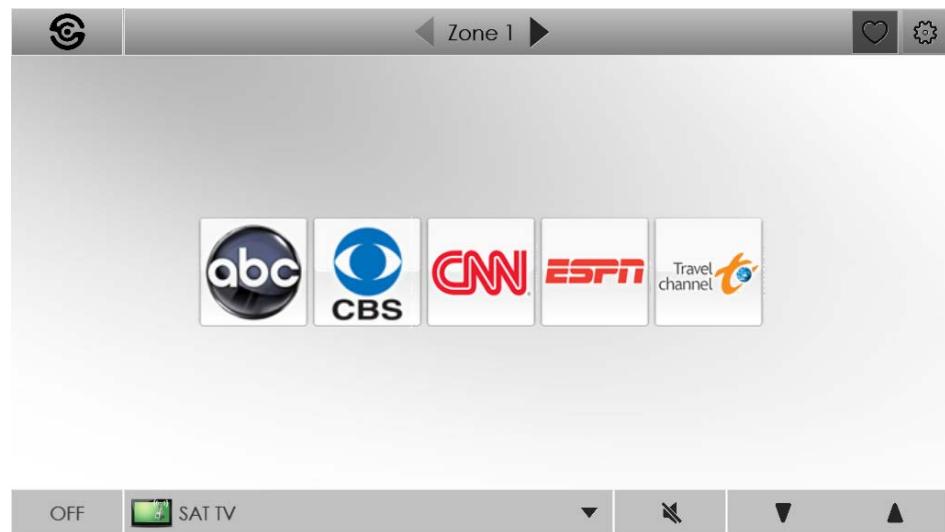
2. On the **All Media** page, select **Zone 1**. Zone 1 will be displayed showing available sources.



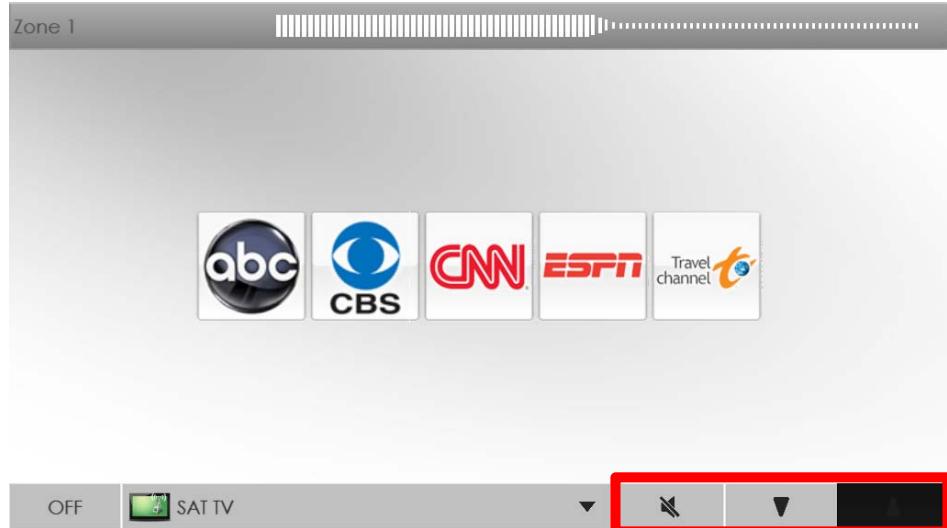
3. Select **SAT TV** to view the SAT TV interface. Verify IR control of SAT TV.



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.



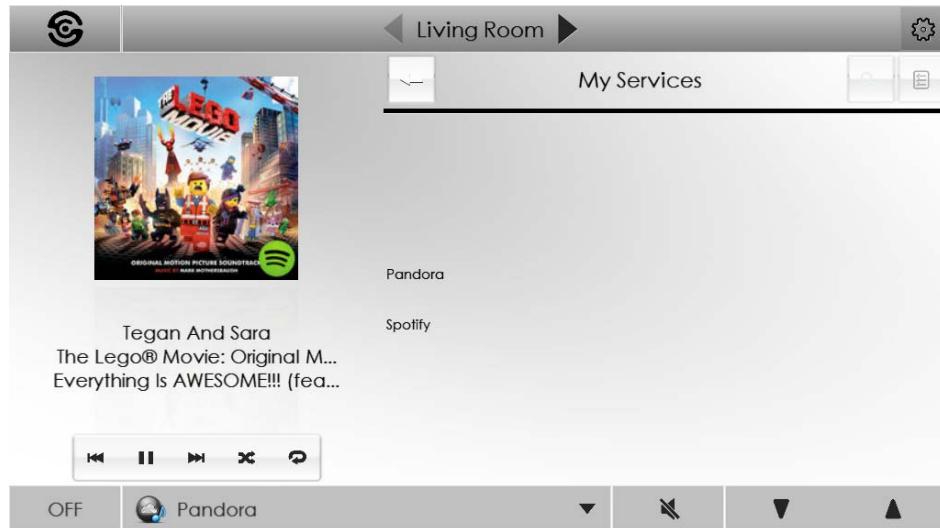
6. Bring up the source selection page by selecting the **Source Drop Down Menu**.



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



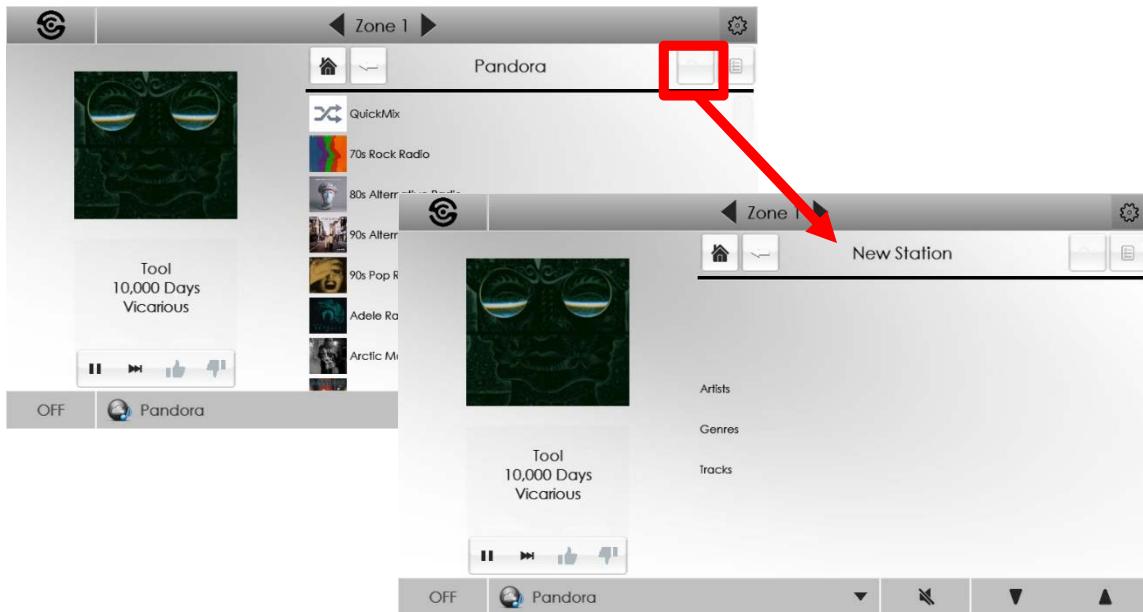
8. Select **My Services** and select a streaming source. For this exercise select Pandora.



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

9. Choose from one of the Pandora Favorite stations associated with the Pandora account used on the Sonos Connect.

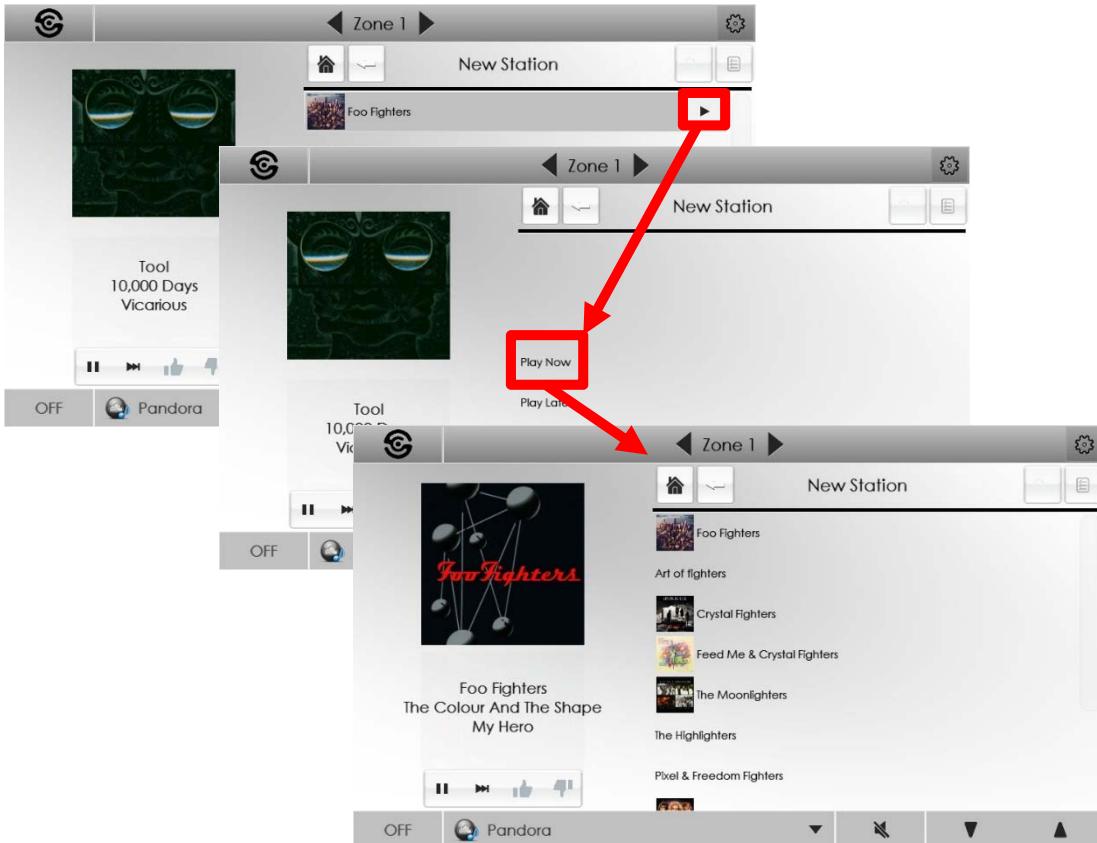
10. You may also search available stations. Select the **Search** button to search by Artists, Genres, or Tracks.



11. Select the desired search type, use the keyboard associated to the SpeakerCraft interface, enter the desired search word(s), and press Enter when finished.



12. Choose the desired station and select Play Now.



13. **Repeat** checking additional sources in the SpeakerCraft Viewer and verifying their operation.
14. 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.

Notes:

Lesson 5

Integrating a Home Theater System



Overview

This lesson shows you how to add a basic Home Theater system to the SpeakerCraft 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

- SpeakerCraft MRA-664 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running SpeakerCraft software.
-or-
- Tablet running the SpeakerCraft App.

Home Theater Integration Overview

Overview The following diagram shows how the equipment in a home theater system may be connected to allow the SpeakerCraft 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 SpeakerCraft MRA-664 provides the end user with control of their home theater system through the SpeakerCraft Viewer. Using the SpeakerCraft 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

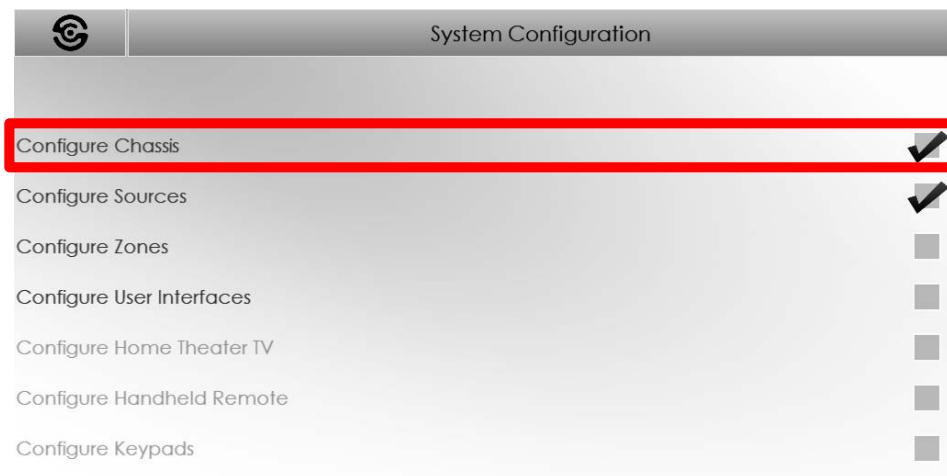
Exercise 1: Add the Audio/Video Receiver Chassis to the SpeakerCraft Viewer

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

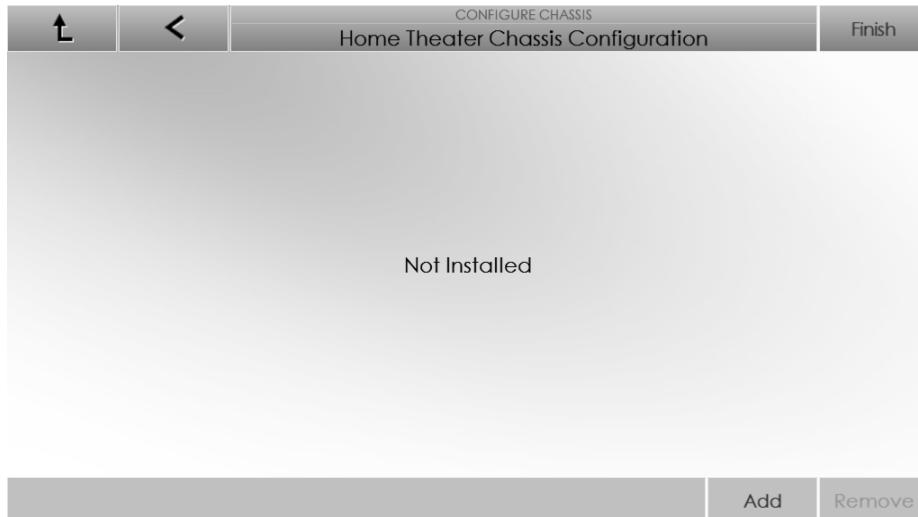
Note: SpeakerCraft only supports integration of compatible IP controlled audio/video receivers. The audio/video receiver should be setup with a static IP address as per the manufacturer's instructions before integrating with the SpeakerCraft software. Note all network settings for this device in the Project Documentation Worksheet, included with the MRA-664. Visit www.speakercraft.com/techsupport for a complete list of compatible IP controlled audio/video receivers.

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

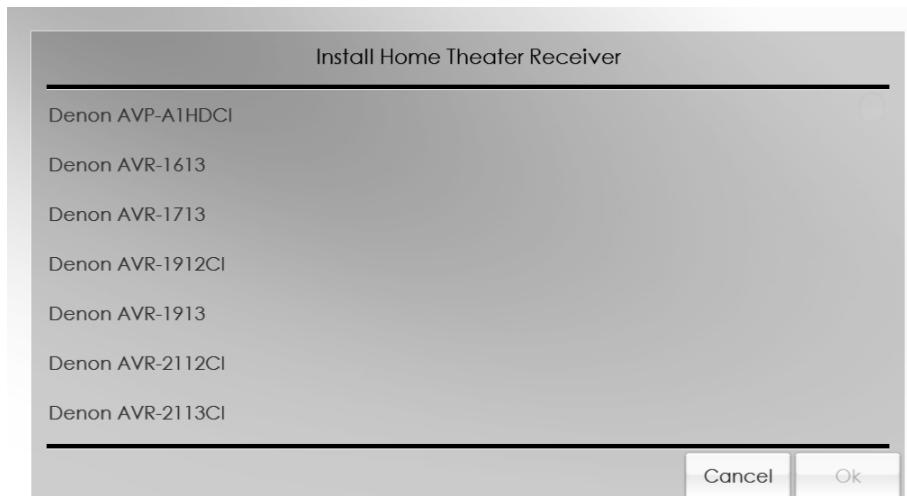
1. Access the System Configuration Wizard and select the **Configure Chassis** node.



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



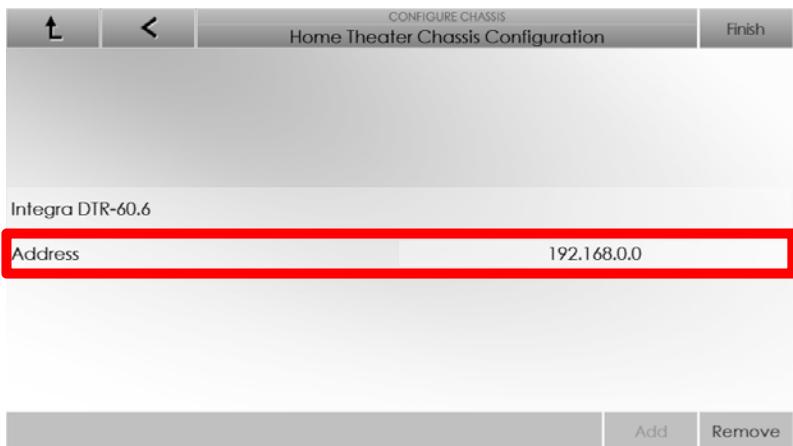
3. Click **Add**. The *Install Home Theater Receiver* page appears.



4. 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**.



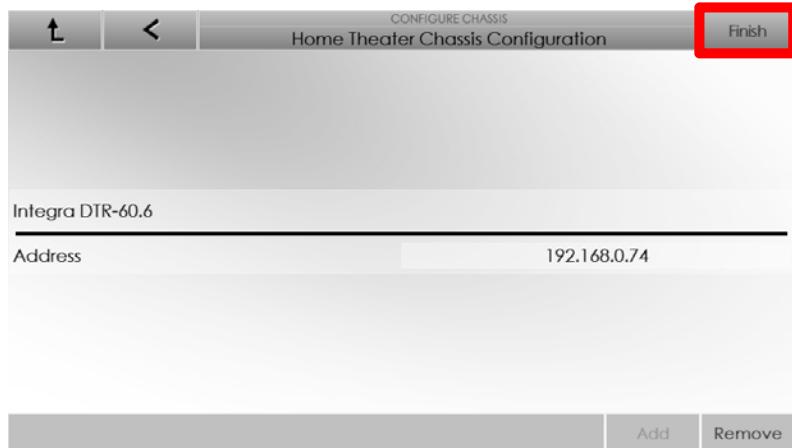
5. Select the **IP Address** field.



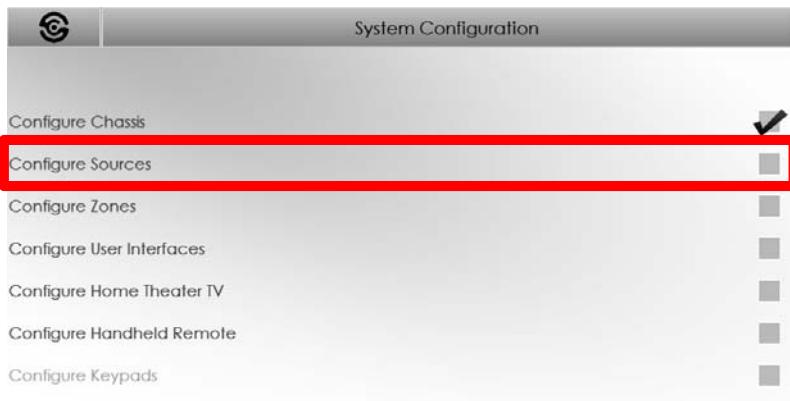
6. *The Set Chassis IP Address window appears. Enter the **IP Address** of the Home Theater Receiver and select **OK**.*



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 SpeakerCraft 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 SpeakerCraft 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.

CONFIGURE SOURCES	
Home Theater Source Assignment	
STB/DVR	< NONE >
CBL/SAT	< NONE >
Game/Game 1	< NONE >
Aux	< NONE >
PC	< NONE >
BD/DVD	< NONE >
Phono	< NONE >
TV/CD	< NONE >
AM/FM	< NONE >
IIRC	< NONE >

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

CONFIGURE SOURCES	
Home Theater Source Assignment	
STB/DVR	< NONE >
CBL/SAT	< NONE >
Game/Game 1	< NONE >
Aux	< NONE >
PC	< NONE >
BD/DVD	< NONE >
Phono	< NONE >
TV/CD	< NONE >
AM/FM	< NONE >
IIR	< NONE >

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.

CONFIGURE SOURCES Home Theater Source Assignment	
STB/DVR	< NONE >
CBL/SAT	Theater TV
Game/Game 1	< NONE >
AUX	Theater Music
PC	< NONE >
BD/DVD	Theater Movie
Phono	< NONE >
TV/CD	< NONE >
AM/FM	< NONE >
IRCR	< NONE >

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

CONFIGURE SOURCES Favorites Configuration	
	Channel
 ABC	1_0_1_2
 ABC Family	
 A&E	
 AMC	
 Animal Planet	
 Cartoon Network	
 CBS	1_2_3
 Cinemax	
 Syfy	

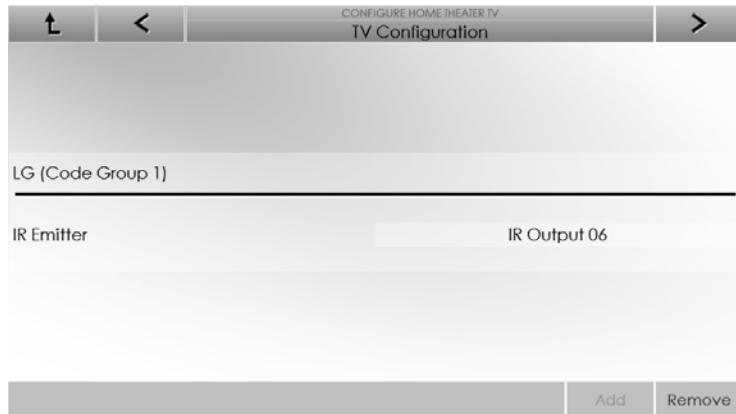
Configure Home Theater TV Node

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 SpeakerCraft 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.

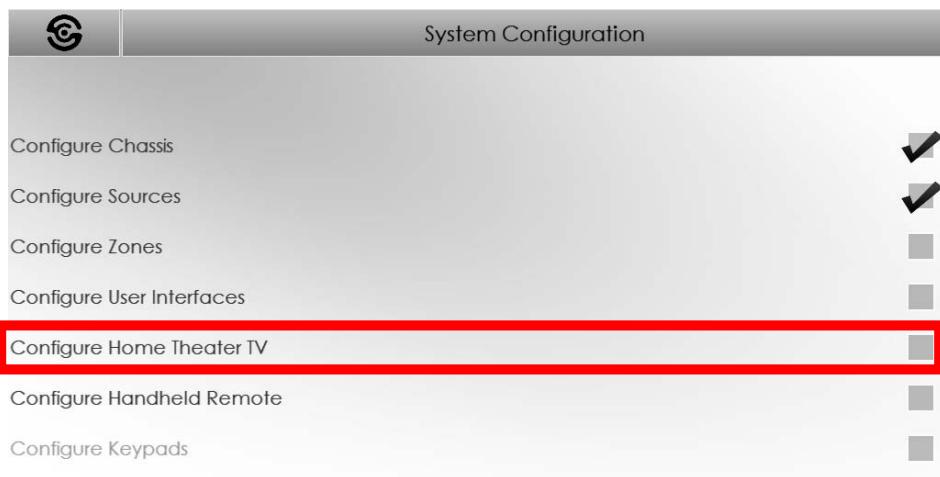
CONFIGURE HOME THEATER TV		
TV Control Configuration		
Source	TV Power	TV Source
Theater TV	Don't Change	Don't Change
Theater Music	Don't Change	Don't Change
Theater Movie	Don't Change	Don't Change

Exercise 3: Add a Home Theater TV

Overview In Exercise 3, a TV will be added for IR control by the SpeakerCraft System. This exercise will use LG as the TV example.

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

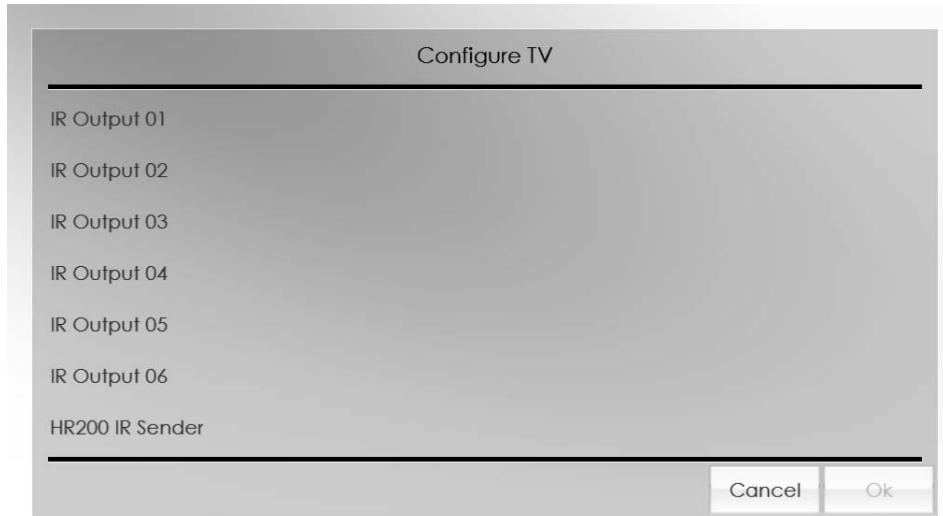
1. From the System Configuration Wizard main page, select the **Configure Home Theater TV** node.



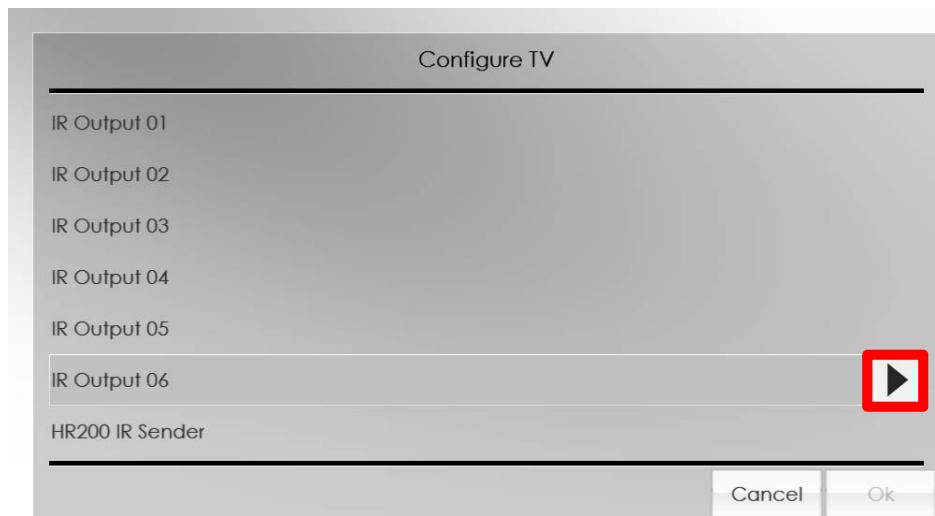
2. *The TV Configuration page appears. Select Add.*



3. *The Configure TV window appears with the list of IR Outputs. Assign the IR Output on the MRA-664 being used to send the IR commands to the Home Theater Zone by selecting the **IR Emitter** field.*

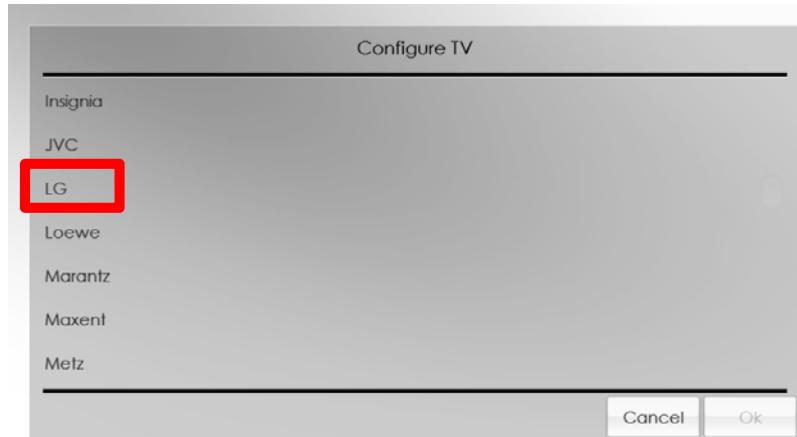


4. *The Select IR Emitter window appears. Select the **IR Output** being used and select **Right Arrow**. This exercise uses IR Output 6 as an example.*

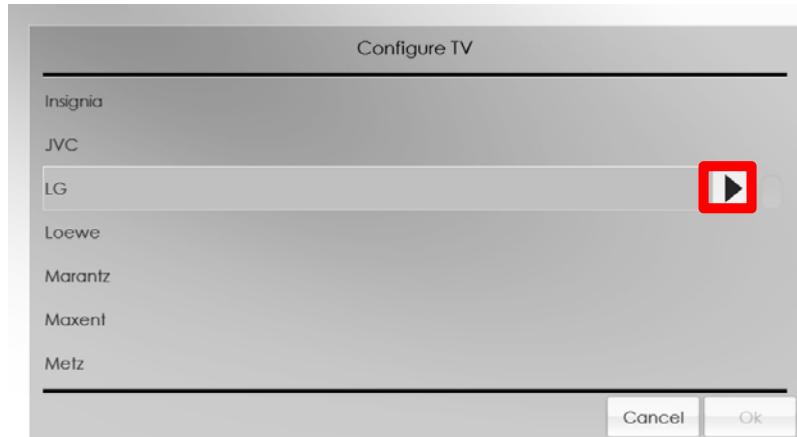


Note: The IR Output chosen should match the IR Output being used to control all IR devices in the Home Theater Zone. A Powered IR Connecting Block should be used to accommodate all IR devices in the theater zone.

5. *The Configure TV window appears. 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.



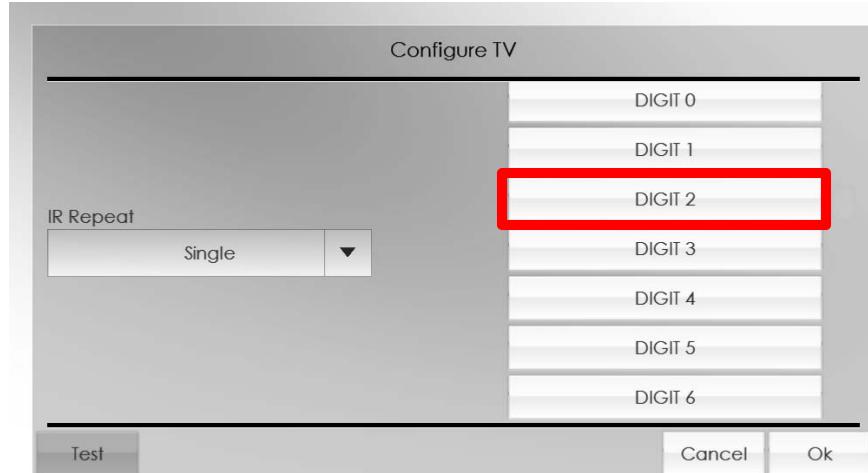
7. Select the **IR code set** for the TV being used.

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.

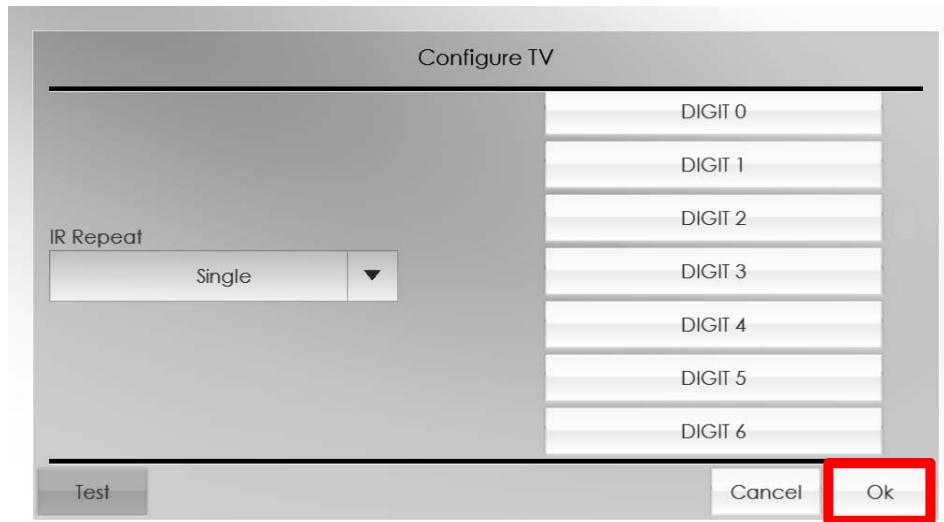


- b. In the Test IR window, select an **IR command** on the right to test.

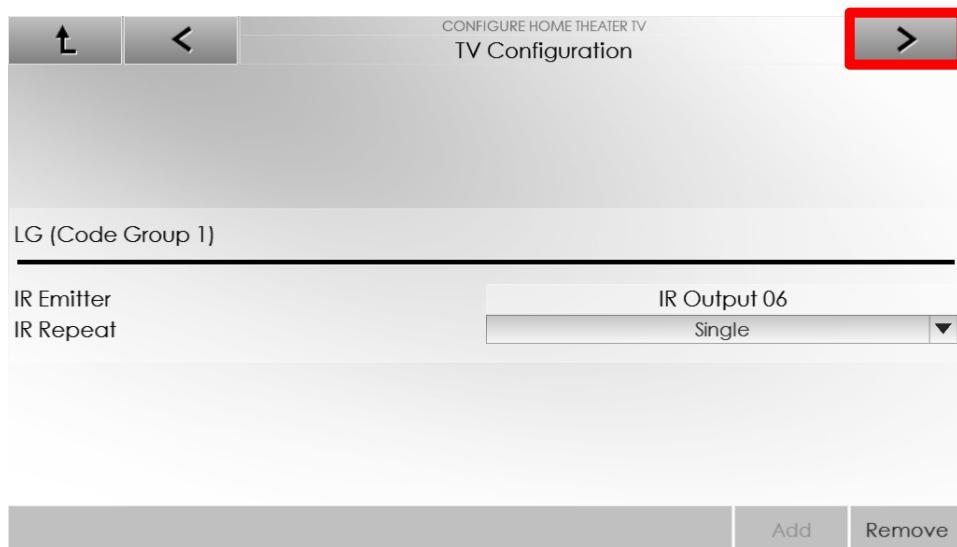


Note: Before testing an IR command ensure the TV is physically connected to the assigned IR output on the MRA-664. Power On the TV before testing an IR command.

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

- a. **Source Column:** Names of the sources assigned to the inputs on the Home Theater Receiver.
- b. **TV Power Column:** Lets you set the Power status of the TV depending on source selection.
- c. **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 TV	Don't Change	Don't Change
Theater Music	Don't Change	Don't Change
Theater Movie	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.*

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

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.

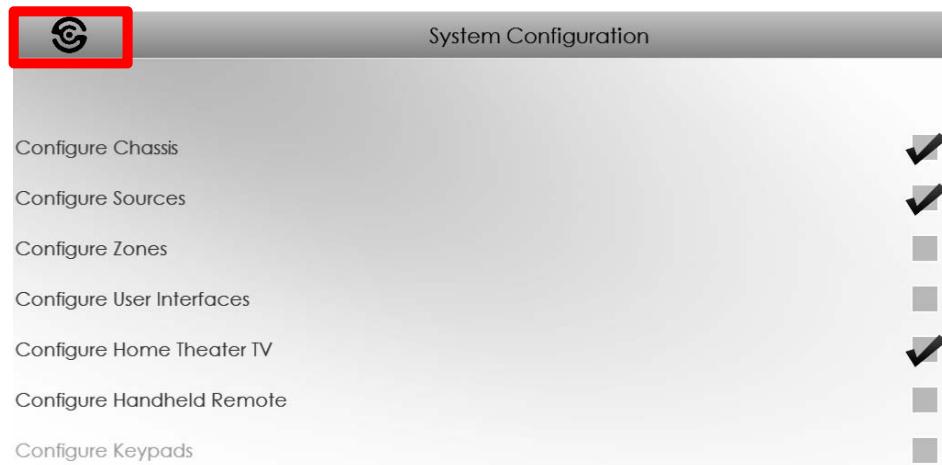
CONFIGURE HOME THEATER TV TV Control Configuration		
Source	TV Power	TV Source
Theater TV	Turn On	INPUT HDMI 1
Theater Music	Turn On	INPUT HDMI 1
Theater Movie	Turn Off	

Exercise 4: Check the Viewer Interface

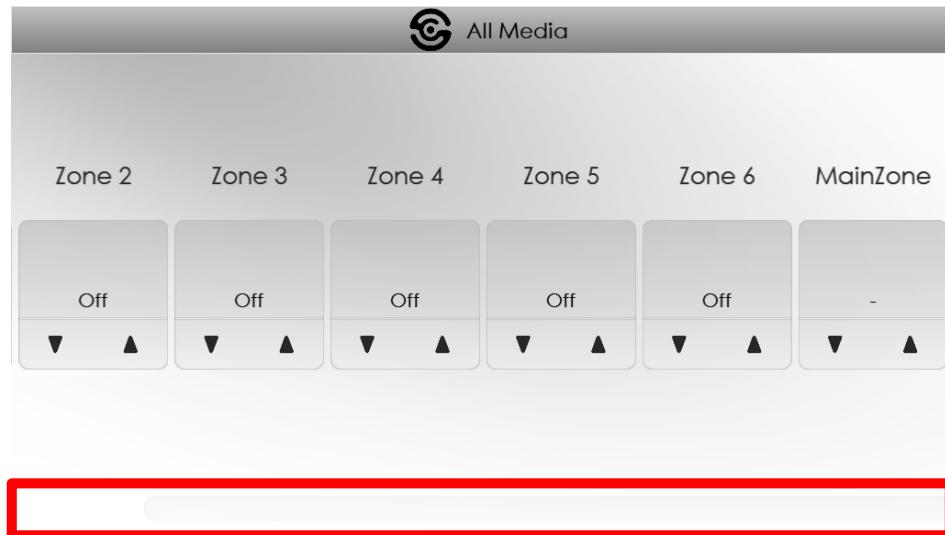
Overview In Exercise 4, you will check your work in the Viewer. Before beginning, be sure you have completed all of the previous exercises in this lesson.

How-To **Check the SpeakerCraft Viewer**

1. Access the **SpeakerCraft Viewer**. If you are in the setup wizard press the SpeakerCraft 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 **SpeakerCraft sHR200 Handheld Remote** proceed to the **Configure Handheld Remote Node**, otherwise proceed to Lesson 6, **Configure Zones Node**.

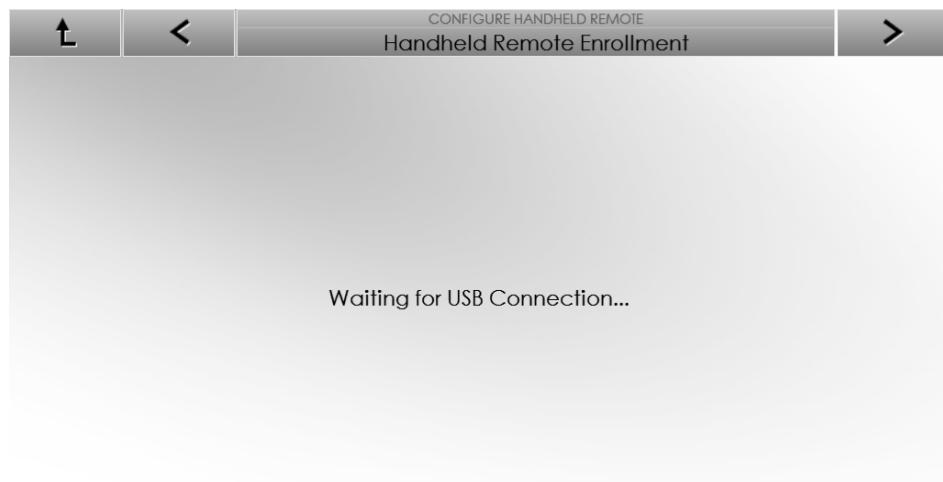
Configure Handheld Remote Node

Overview
SpeakerCraft allows you to offer your clients the best-in-class sHR200 Wi-Fi Remote Control. By adding the Home Theater Zone in the SpeakerCraft software you are able to add the SpeakerCraft sHR200. The sHR200 controls the theater zone and can be setup to control other zones throughout the whole house audio system. The sHR200 delivers the same consistent user experience as from a SpeakerCraft Touch Panel or from a SpeakerCraft 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 a sHR200.

Configure Handheld Remote pages:

Handheld Remote Enrollment: This page allows you to setup a sHR200 for use with the SpeakerCraft system. See the sHR200 Quick Install Guide for sHR200 setup information.



Note: The sHR200 must be powered off when connected to the MRA-664. When powered On the sHR200 will ask for a passkey. Enter 3 5 2 6 to connect the sHR200 to the MRA-664 to add it to the SpeakerCraft software.

Handheld Remote Enrollment Continued: After the sHR200 connects to the MRA-664 the Handheld Remote Enrollment page displays the sHR200 and the fields that are required to be set before the sHR200 can be used with the system.

HR200 Address	192.168.0.10
HR200 NetMask	255.255.255.0
HR200 Gateway	192.168.0.1
HR200 Controller	192.168.0.18
SSID	SpeakerCraft
Encryption Type	WPA/PSK
Passphrase	AIM2

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 SpeakerCraft MRA is on. Note all network settings for this device in the Project Documentation Worksheet, included with the MRA-664. To ensure proper control, it is recommended that a Wi-Fi network be properly mapped out and installed before installation of the sHR200. 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 sHR200. The Primary Locations are the Theater Receiver zones and the Secondary Locations are the MRA-664 zones.

Primary Location	MainZone
HR200@192.168.0.10	Zone 1
Secondary Locations	Zone 4

Remove

-

+

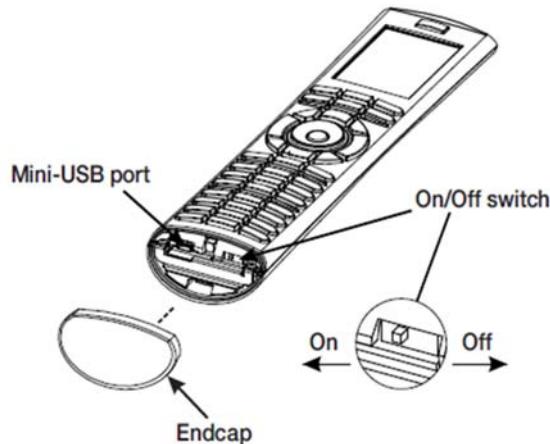
Exercise 5: Add the sHR200 Remote

Overview In Exercise 5, you will add the SpeakerCraft sHR200 Wi-Fi Remote Control.

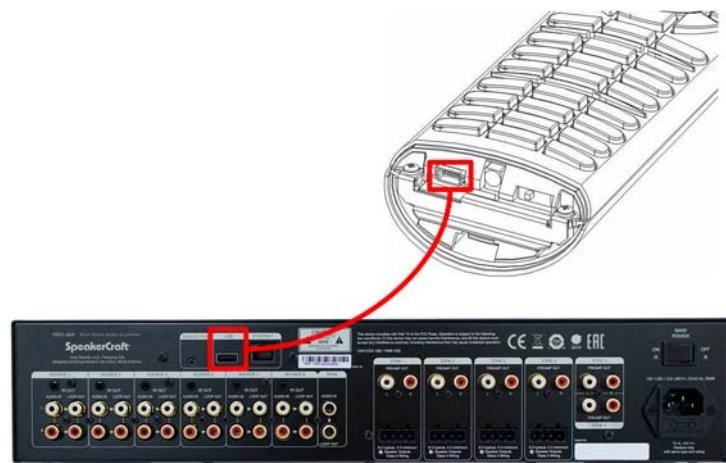
By adding SpeakerCraft sHR200 Wi-Fi remote control to control the theater zone you are giving your client's one of the best control interfaces on the market today, and we're not biased... Ok, we are a little biased, but the sHR200 is still one of the best remote controls on the market today. The sHR200 delivers best-in-class performance and the same consistent user experience as from a SpeakerCraft Touch Panel or from a SpeakerCraft interface on a mobile device, but with the added benefit of having instant access to control via hard buttons.

How-To **Add the sHR200 Wi-Fi Remote Control**

1. Unbox the sHR200 and remove the **Endcap** to access the On/Off switch and the Mini-USB port.



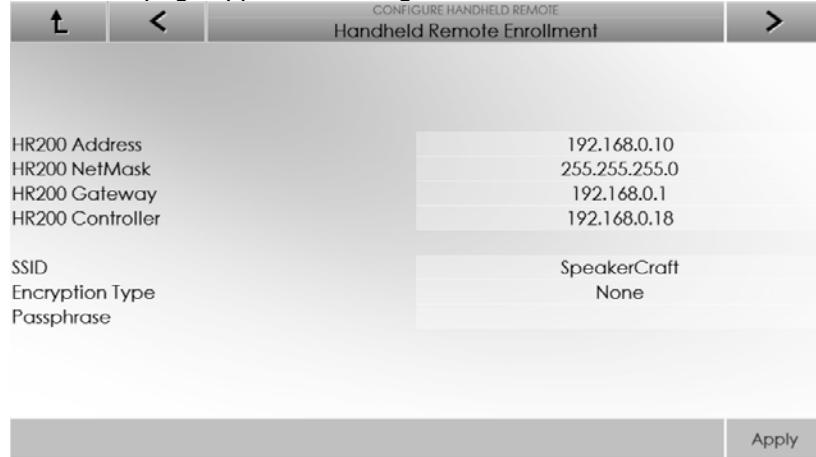
2. **Before** powering the sHR200 on connect the sHR200 to the **USB port** on the rear panel of the MRA-664 using the **USB cable included** with the sHR200.



3. **Power on** the sHR200.

Note: The sHR200 may come out of the box with a charge. SpeakerCraft recommends giving the remote a charge for at least 45 minutes before beginning setup.

4. The sHR200 will ask for a password before connecting to the MRA-664. Use the number pad on the sHR200 to enter **3, 5, 2, 6** and then press **Enter**. The sHR200 will connect to the MRA-664.
5. In the SpeakerCraft software navigate to the System Configuration Wizard and select the **Configure Handheld Remote** node. *The Handheld Remote Enrollment page appears showing the sHR200's default network settings.*



6. Proceed to **Exercise 5, sHR200 Network Settings**, before disconnecting the sHR200 from the MRA-664.

Exercise 6: sHR200 Network Settings

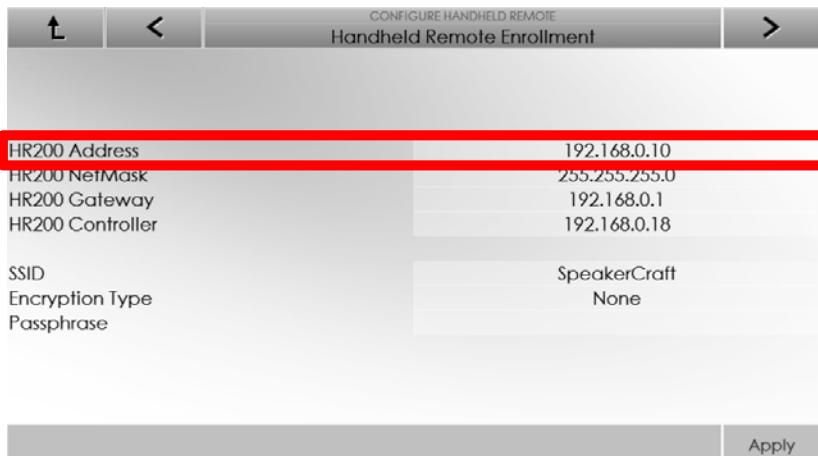
Overview In this exercise we will setup the sHR200s network settings. This will allow the sHR200 to connect to the wireless network for communication with the MRA-664 and control of the Home Theater Zone system.

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 MRA-664. The MRA-664 **MUST** have a static IP address assigned to it in order for the sHR200 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 sHR200 up for connection to the Wireless Network**

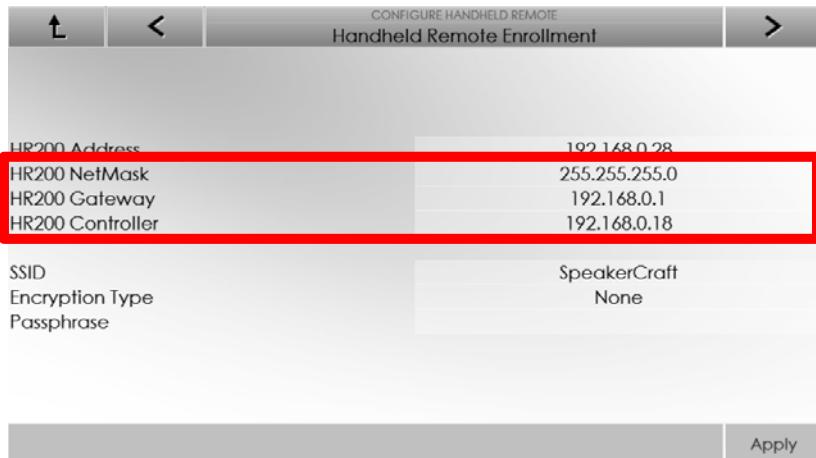
1. On the Handheld Remote Enrollment page, select the sHR200 **Address** field.



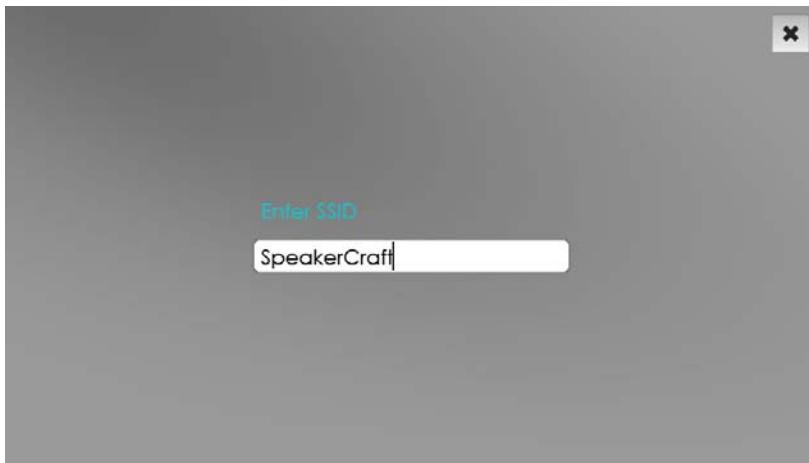
2. *The Set sHR200 Address window appears. Enter the desired **static IP address** for the sHR200. Please remember to use an IP address that does not conflict with the IP addresses in the DHCP range. Select **OK** when finished.*



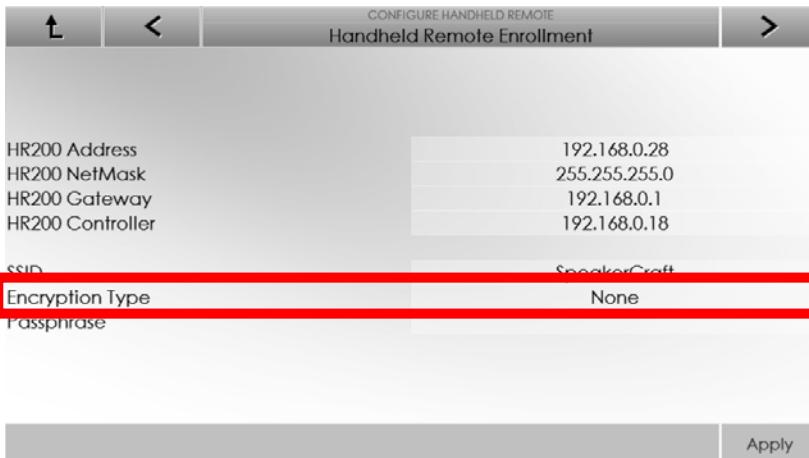
3. Verify the **NetMask**, **Gateway**, and **Controller** fields are correct.



4. Select the **SSID** field and enter the **SSID of the wireless network** the sHR200 will connect to. Remember that the SSID is case sensitive. When finished press enter on the keyboard.



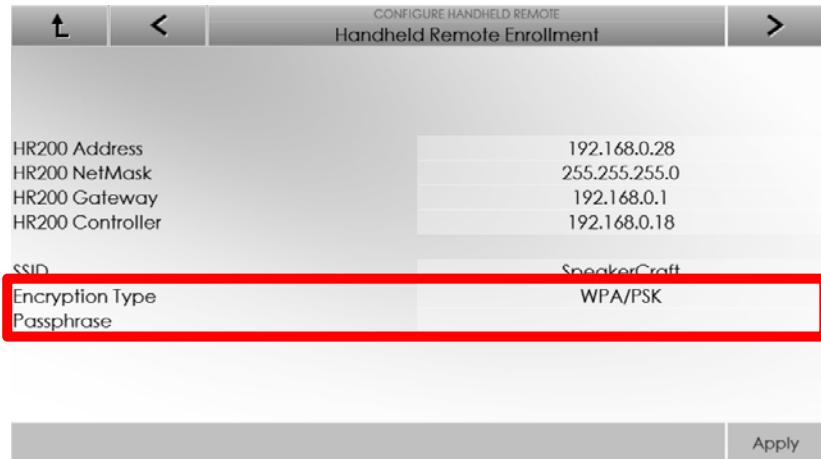
5. Verify the **SSID** is correct and select the **Encryption Type** field.



6. *The Set sHR200 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 sHR200 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.*



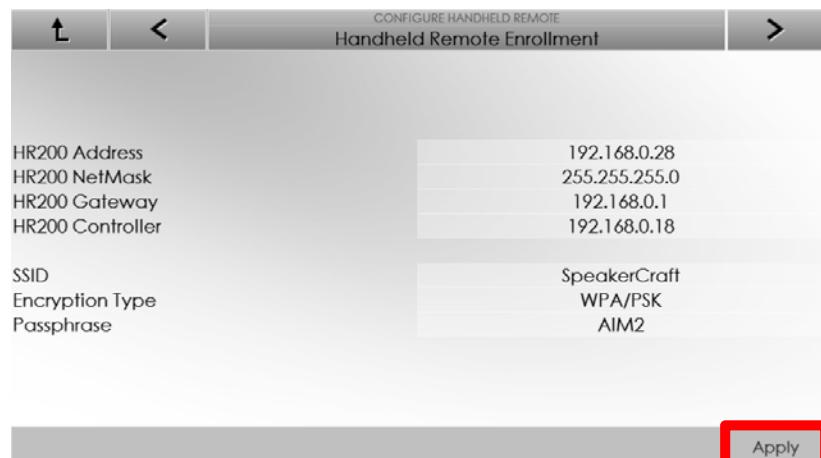
7. Verify the Encryption Type is correct and select the **Passphrase** field.



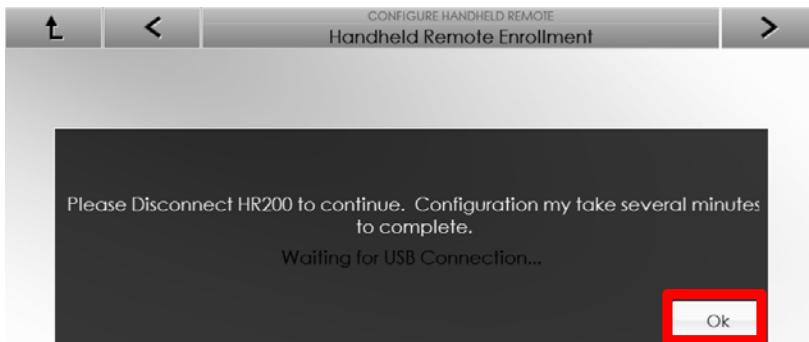
8. The *Set sHR200 Passphrase* window appears. Enter the Passphrase used by the wireless network to allow the sHR200 authorization to connect to the network. Remember the passphrase is a case sensitive, alphanumeric character unique identifier. When finished press enter on the keyboard.



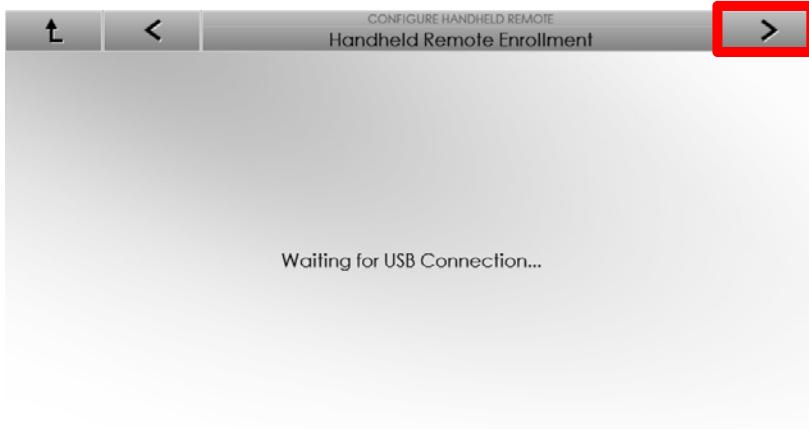
9. Verify the SSID, Encryption Type, and Passphrase are all set correctly and select **Apply** to save changes.



10. Disconnect the sHR200 from the MRA-664 and select **OK**.



11. Wait for the sHR200 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 sHR200** for more information on setting up the sHR200.

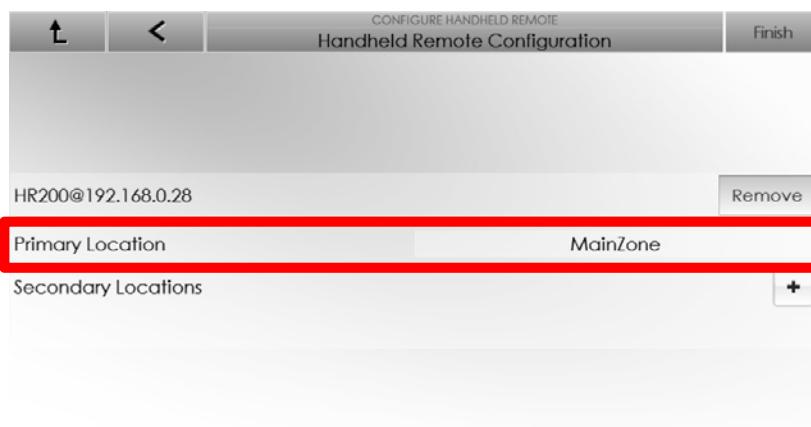
Exercise 7: Assigning Zones sHR200

Overview This exercise will show you how to assign a single, or multiple zones to the sHR200. See Lesson 6 for renaming zones in the system.

How-to

Assign zones to the sHR200

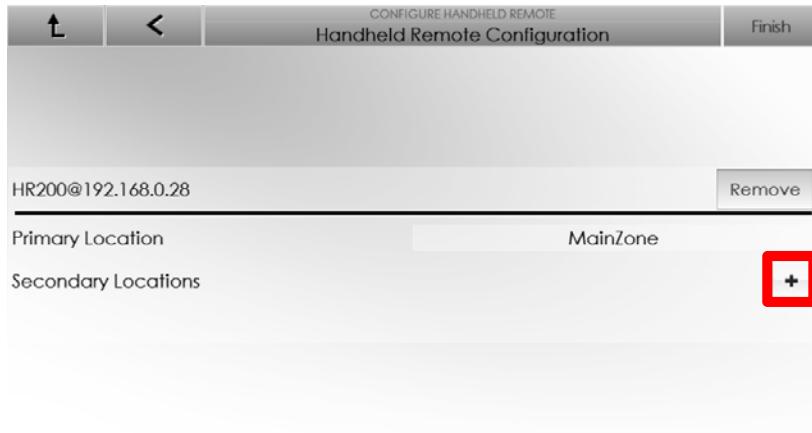
1. Navigate to the Handheld Remote Configuration page and select the **Primary Location** field.



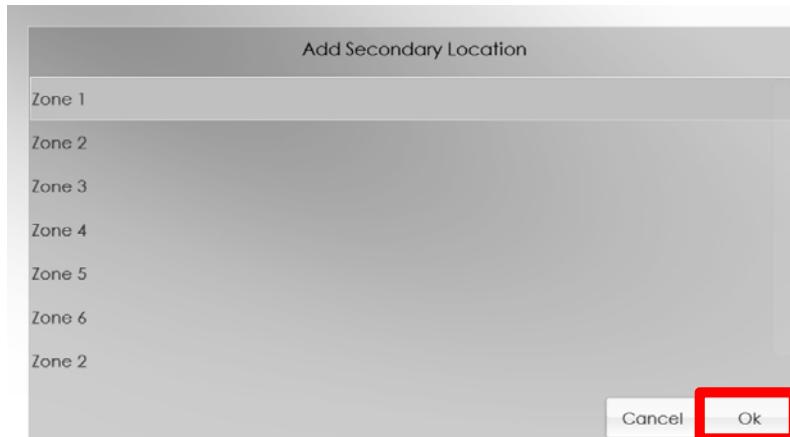
2. The Select sHR200 Primary Location window appears. Select the sHR200's **primary default zone**, Main Zone in this exercise. The Main Zone will be the main zone of the home theater receiver for this exercise. Select **OK** when finished.



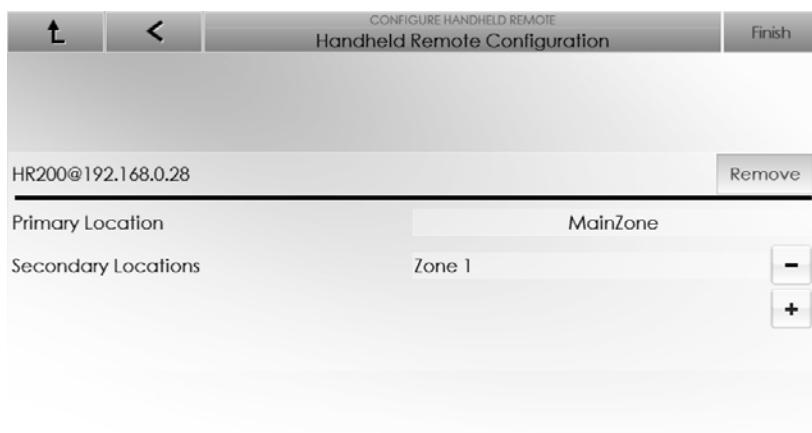
3. Verify the Primary Location is the desired zone on the home theater receiver.
Now add zones from the MRA-664 by selecting the **plus sign** to the right of Secondary Locations.



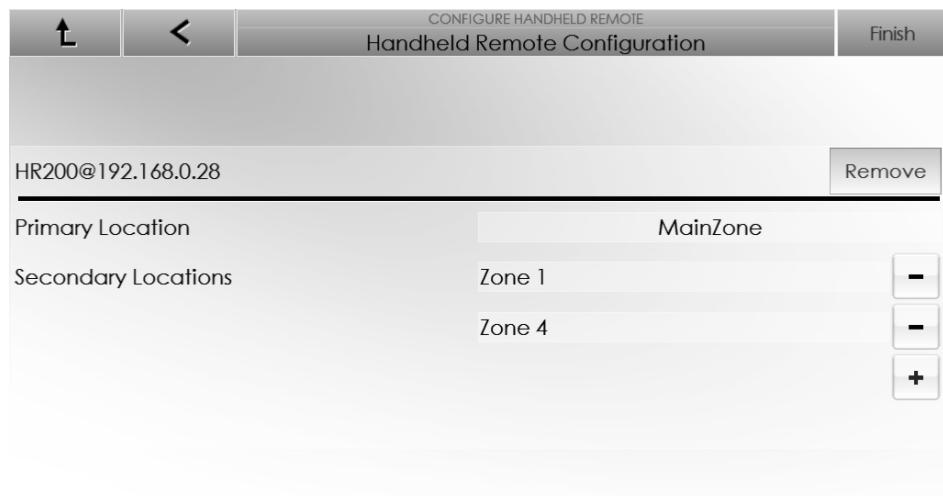
4. The Select sHR200 Secondary Location window appears. Select the **secondary zone** to add to the sHR200 and select **OK** when finished.



5. Verify the Secondary Location.



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



7. Verify operation of the sHR200.

Notes:

Notes:

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:

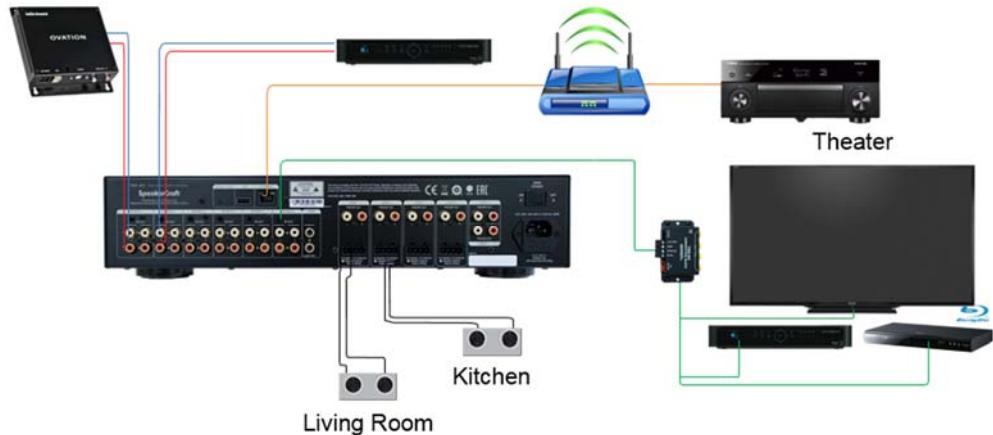
- Living Room
- Kitchen
- Theater

Requirements

- SpeakerCraft MRA-664 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running SpeakerCraft software.
-or-
- Tablet running the SpeakerCraft App.

About the Configure Zones Node

Overview The **Configure Zones** node allows you to set up how each zone is named in the SpeakerCraft 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 SpeakerCraft 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. SpeakerCraft recommends working with the end user to determine zone names that are easily recognizable.

CONFIGURE ZONES	
Zone Name	
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

Zone Name	The name of a zone that is shown in the SpeakerCraft Viewer. See Exercise 1 for more details.
-----------	---

- Tone Defaults:** This page allows for setting the MRA-664's Power On Behavior for each zone's Tone adjustments.

CONFIGURE ZONES
Tone Defaults

Zone	Bass	Treble	Loudness	Power On Behavior		
Zone 1	0	▼ ▲	0	▼ ▲	Off ▼	Default ▼
Zone 2	0	▼ ▲	0	▼ ▲	Off ▼	Default ▼
Zone 3	0	▼ ▲	0	▼ ▲	Off ▼	Default ▼
Zone 4	0	▼ ▲	0	▼ ▲	Off ▼	Default ▼
Zone 5	0	▼ ▲	0	▼ ▲	Off ▼	Default ▼
Zone 6	0	▼ ▲	0	▼ ▲	Off ▼	Default ▼

Apply

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 at low listening levels to compensate for the ears' lower sensitivity to extreme high and low frequencies. Default = Off
Power On Behavior	<p>Determines how a zone's Tone settings will respond when the zone is powered On.</p> <p>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.</p> <p>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 SpeakerCraft Viewer before the zone was powered off.</p>

- Volume Defaults:** This page is used for setting the MRA-664 Line Out (Pre-Amp) Volume, Zone On Volume, and Max Zone Volume.

CONFIGURE ZONES
Volume Defaults

Zone	Line Out Volume	Zone On Volume	Max Volume
Zone 1	Variable ▼	35 ▼ ▲	100 ▼ ▲
Zone 2	Variable ▼	35 ▼ ▲	100 ▼ ▲
Zone 3	Variable ▼	35 ▼ ▲	100 ▼ ▲
Zone 4	Variable ▼	35 ▼ ▲	100 ▼ ▲
Zone 5	Variable ▼	35 ▼ ▲	100 ▼ ▲
Zone 6	Variable ▼	35 ▼ ▲	100 ▼ ▲

Apply

Line Out Volume	Settings for the Pre-Amp Output on the MRA-664. The Variable (factory default) setting should be used when the volume control of the pre-amp output is from a SpeakerCraft 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 a SpeakerCraft Interface.

- WHM & Paging Configuration:** This page allows for setting zones up on the MRA-664 for WHM and Doorbell/Paging events.

CONFIGURE ZONES
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

WHM Enabled	Enables a zone to be a part of Whole House Mode, WHM, when activated from the SpeakerCraft 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

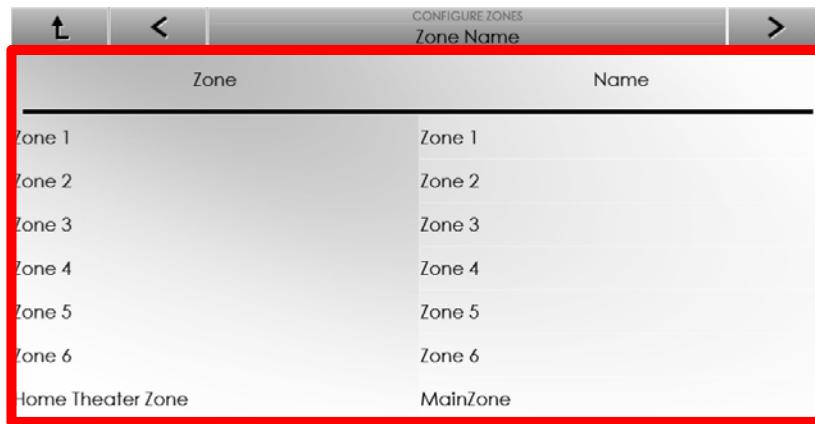
Overview

In this exercise you will rename a zone on the MRA-664 to be easily recognizable in the SpeakerCraft Viewer.

How-to

Rename a Zone

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



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 appears.*



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



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

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

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

Zone	Name
Zone 1	Living Room
Zone 2	Kitchen
Zone 3	Zone 3
Zone 4	Zone 4
Zone 5	Zone 5
Zone 6	Zone 6
Home Theater Zone	Theater

Exercise 2: Setting the Tone Defaults

Overview In Exercise 2, you will learn how to set the Tone defaults for each zone on the MRA-664. Please note this page only applies to a zone on the MRA-664.

How-to Set the Tone Defaults per zone.

1. Access **Tone Defaults** page.

Zone	Bass	Treble	Loudness	Power On Behavior
Living Room	0	▼ ▲	0	Off ▼
Kitchen	0	▼ ▲	0	Off ▼
Zone 3	0	▼ ▲	0	Off ▼
Zone 4	0	▼ ▲	0	Off ▼
Zone 5	0	▼ ▲	0	Off ▼
Zone 6	0	▼ ▲	0	Off ▼

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 MRA-664.

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 SpeakerCraft Viewer.

5. When finished select **Apply** to save changes and then select the **Right Arrow** to proceed to the next page.

Zone	Bass	Treble		Loudness	Power On Behavior
		▼	▲		
Living Room	4	▼	▲	2	On ▼
Kitchen	0	▼	▲	0	Off ▼
Zone 3	0	▼	▲	0	Off ▼
Zone 4	0	▼	▲	0	Off ▼
Zone 5	0	▼	▲	0	Off ▼
Zone 6	0	▼	▲	0	Off ▼

Apply

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 MRA-664 zone.

How-to

Set the Volume Defaults per zone

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

CONFIGURE ZONES Volume Defaults					
Zone	Line Out Volume	Zone On Volume	Max Volume		
Living Room	Variable ▼	35	▼	▲	100
Kitchen	Variable ▼	35	▼	▲	100
Zone 3	Variable ▼	35	▼	▲	100
Zone 4	Variable ▼	35	▼	▲	100
Zone 5	Variable ▼	35	▼	▲	100
Zone 6	Variable ▼	35	▼	▲	100

Apply

2. Set **Line Out Volume** per zone:

- a. Variable – (Factory Default) allows SpeakerCraft Interfaces to adjust the volume level when using the Pre-Amp Outputs on the MRA-664.
- 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 SpeakerCraft Interface.

5. When finished select **Apply** to save changes and then select the **Right Arrow** to proceed to the next page.

CONFIGURE ZONES Volume Defaults					
Zone	Line Out Volume	Zone On Volume	Max Volume		
Living Room	Variable ▼	40	▼	▲	100
Kitchen	Variable ▼	30	▼	▲	60
Zone 3	Variable ▼	35	▼	▲	100
Zone 4	Variable ▼	35	▼	▲	100
Zone 5	Variable ▼	35	▼	▲	100
Zone 6	Variable ▼	35	▼	▲	100

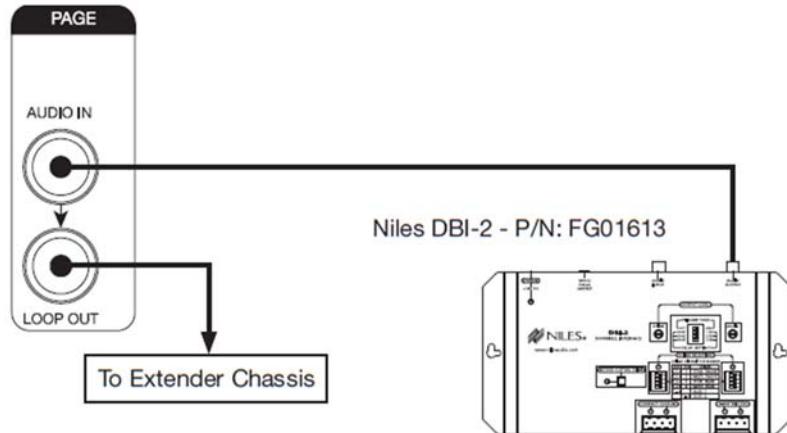
Apply

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 MRA-664 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 WHM & Paging Configuration				Finish
Zone	WHM Enabled	Paging Enabled	Paging Volume	
Living Room	Yes ▼	Yes ▼	35	▼ ▲
Kitchen	Yes ▼	Yes ▼	35	▼ ▲
Zone 3	Yes ▼	Yes ▼	35	▼ ▲
Zone 4	Yes ▼	Yes ▼	35	▼ ▲
Zone 5	Yes ▼	Yes ▼	35	▼ ▲
Zone 6	Yes ▼	Yes ▼	35	▼ ▲

Apply

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

Zone	WHM Enabled	Paging Enabled	Paging Volume
Living Room	Yes ▼	Yes ▼	35 ▼ ▲
Kitchen	Yes ▼	Yes ▼	35 ▼ ▲
Zone 3	No ▼	Yes ▼	35 ▼ ▲
Zone 4	No ▼	Yes ▼	35 ▼ ▲
Zone 5	No ▼	Yes ▼	35 ▼ ▲
Zone 6	No ▼	Yes ▼	35 ▼ ▲

Apply

3. 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.

Zone	WHM Enabled	Paging Enabled	Paging Volume
Living Room	Yes ▼	Yes ▼	35 ▼ ▲
Kitchen	Yes ▼	Yes ▼	35 ▼ ▲
Zone 3	No ▼	No ▼	35 ▼ ▲
Zone 4	No ▼	No ▼	35 ▼ ▲
Zone 5	No ▼	Yes ▼	35 ▼ ▲
Zone 6	No ▼	No ▼	35 ▼ ▲

Apply

4. Select **Apply** to save changes to the MRA-664 before proceeding.

Zone	WHM Enabled	Paging Enabled	Paging Volume
Living Room	Yes ▼	Yes ▼	35 ▼ ▲
Kitchen	Yes ▼	Yes ▼	35 ▼ ▲
Zone 3	No ▼	No ▼	35 ▼ ▲
Zone 4	No ▼	No ▼	35 ▼ ▲
Zone 5	No ▼	Yes ▼	35 ▼ ▲
Zone 6	No ▼	No ▼	35 ▼ ▲

Apply

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

Zone	WHM Enabled	Paging Enabled	Paging Volume
Living Room	Yes	Yes	70 60 35 35 55 35
Kitchen	Yes	Yes	
Zone 3	No	No	
Zone 4	No	No	
Zone 5	No	Yes	
Zone 6	No	No	

Apply

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

Zone	WHM Enabled	Paging Enabled	Paging Volume
Living Room	Yes	Yes	70 60 35 35 55 35
Kitchen	Yes	Yes	
Zone 3	No	No	
Zone 4	No	No	
Zone 5	No	Yes	
Zone 6	No	No	

Apply

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

System Configuration

Configure Chassis	<input checked="" type="checkbox"/>
Configure Sources	<input checked="" type="checkbox"/>
Configure Zones	<input checked="" type="checkbox"/>
Configure User Interfaces	<input type="checkbox"/>
Configure Home Theater TV	<input checked="" type="checkbox"/>
Configure Handheld Remote	<input checked="" type="checkbox"/>
Configure Keypads	<input type="checkbox"/>

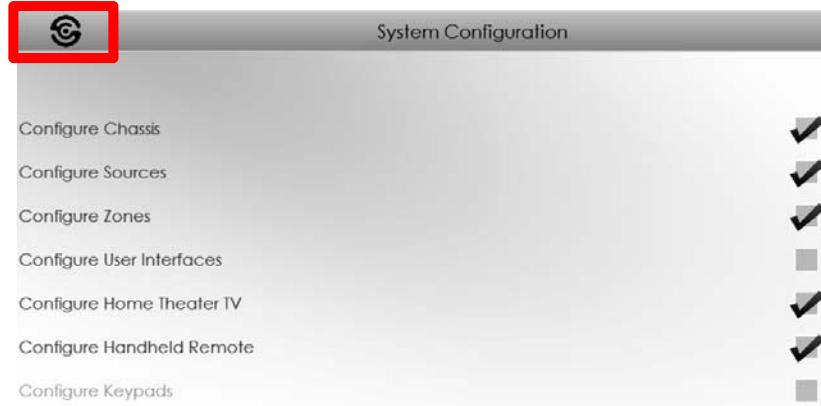
Exercise 5: Check the Viewer Interface

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 SpeakerCraft Viewer**

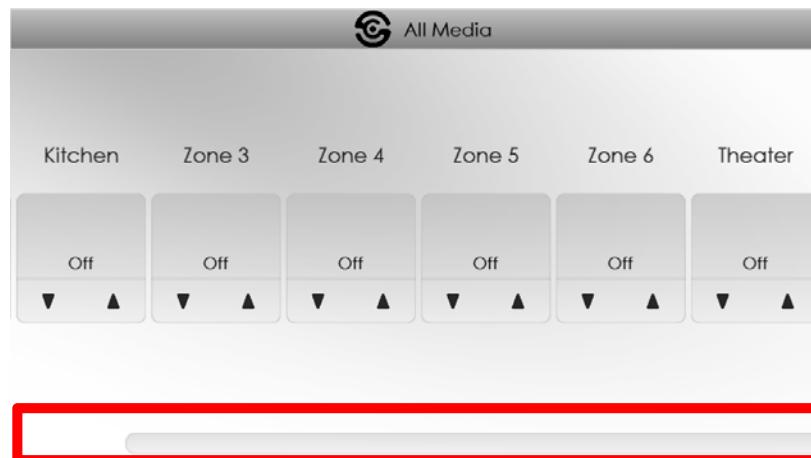
1. Access the **SpeakerCraft Viewer**. If you are in the setup wizard press the SpeakerCraft Logo in the upper left corner.



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.



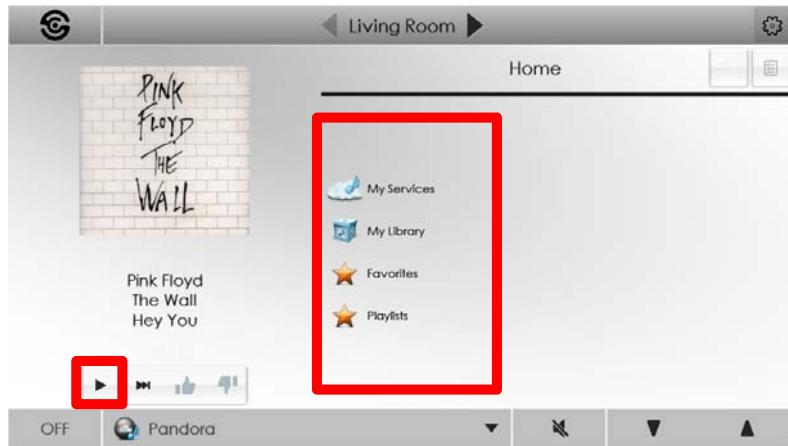
4. Verify Zone Turn On settings for each zone. Start with the first zone by selecting the **Living Room** zone.



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



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



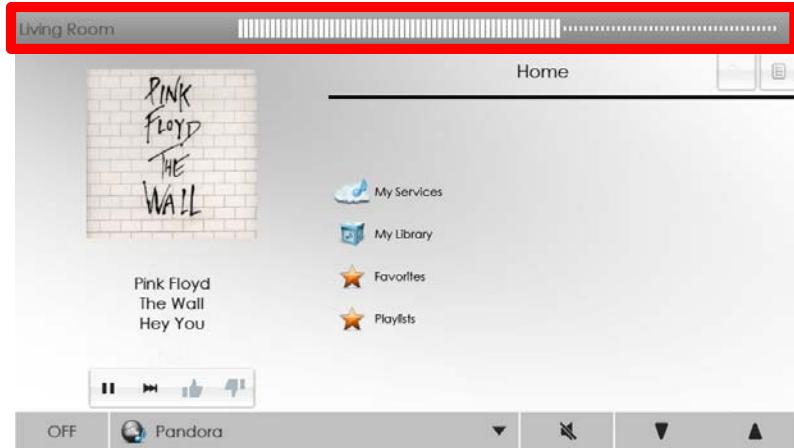
7. Select the **Gear Icon** in the upper right corner to access the Settings page for the active zone. Verify settings match what was set in the Turn On Defaults page.



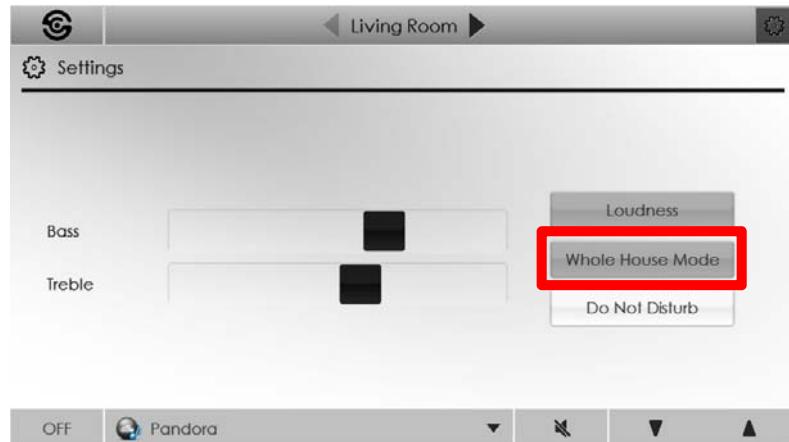
8. Select the **Gear Icon** again to exit the Settings page.



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



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



11. Select the **SpeakerCraft 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 MRA-664 zone to verify settings made in the Configure Zones node.



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

- Press a **doorbell** to test door chime volume in each zone.
- 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.
----------------	---

Notes:

Lesson 7

Configure User Interfaces Node



Overview

This lesson goes over how to assign zones to each compatible SpeakerCraft 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 MRA Viewer language type

Requirements

- SpeakerCraft MRA-664 powered on and connected to a local area network (same network the programming device will be connected to).
- A PC running SpeakerCraft software.

-or-

- Tablet running the SpeakerCraft 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 SpeakerCraft compatible user interfaces include:

- In-Wall Touch Screens – sTP7
- In-Wall Keypads – sKP7
- Computers in the home (on the local network)
- iOS Devices
- Android Devices
- sHR200 Remote (see Integrating A Home Theater System, Lesson 5-19, for sHR200 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.

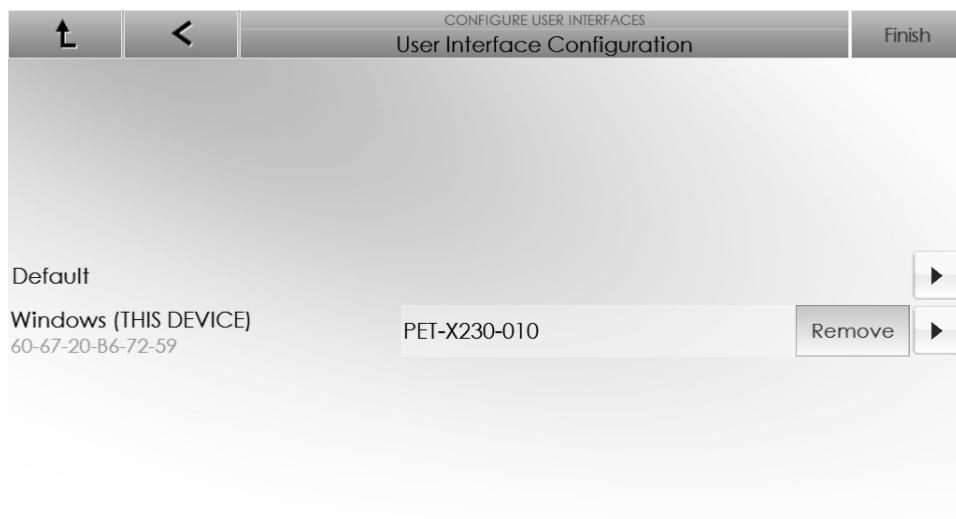
Primary Zone: The Primary Zone is the zone a compatible user interface is mainly used in, or physically installed in. When the Primary Zone is set for a UI the interface will automatically show the Primary Zone when the SpeakerCraft Viewer is first started.

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. SpeakerCraft interfaces can have all zones, or specific zones, assigned to them.

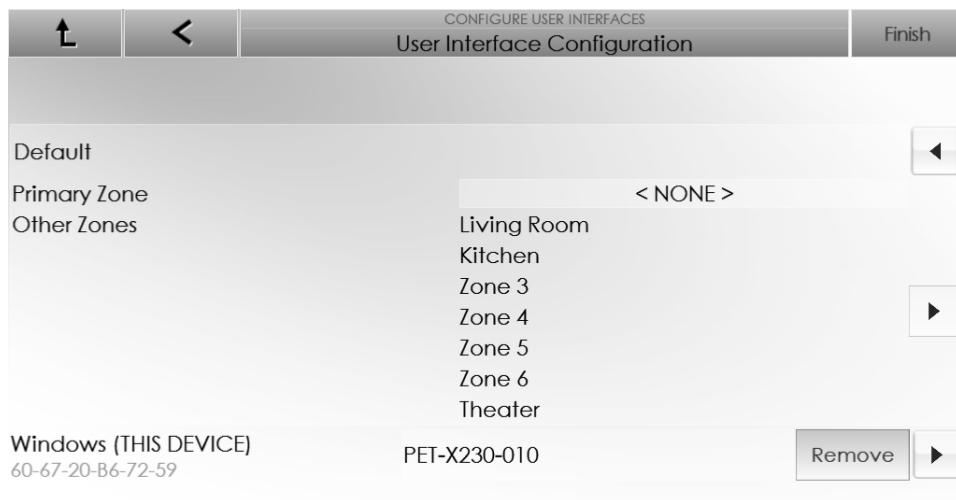
*Navigating
the
Configure
User
Interfaces
Node*

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

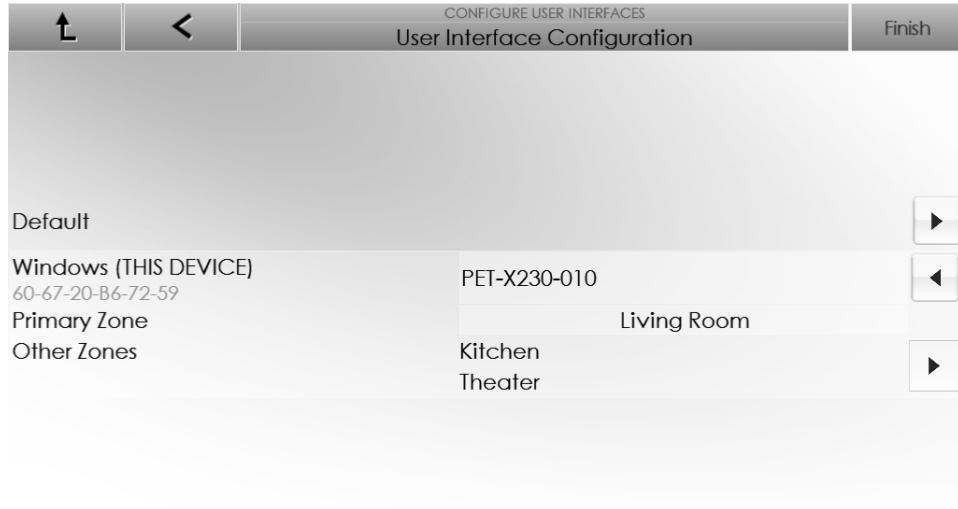
- **User Interface Configuration:** This page displays all the available user interfaces connected to the SpeakerCraft MRA-664. Each viewer may have the zone availability customized.



- **Default Viewer:** The Default interface is used for assigning primary and other zones to a compatible SpeakerCraft Interface. When a compatible SpeakerCraft 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 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.



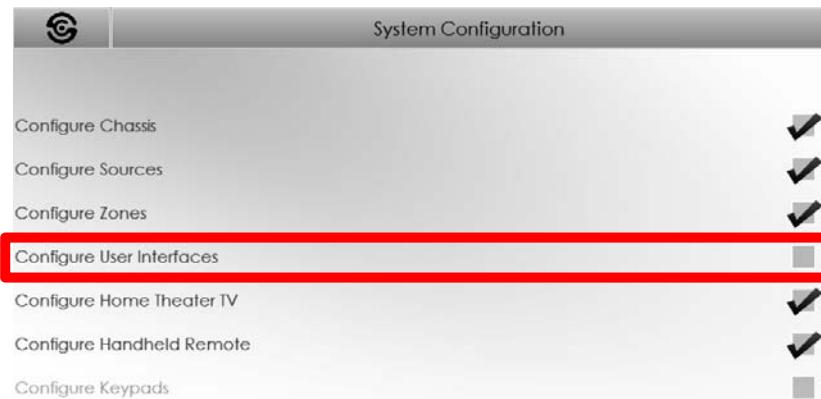
Exercise 1: Rename the User Interface

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 MRA-664, to note each user interfaces MAC address.

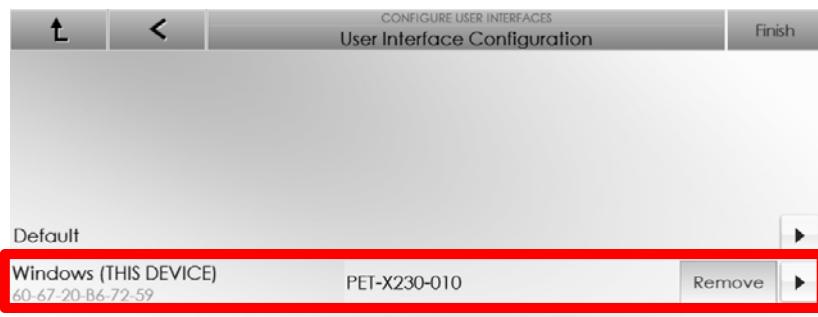
How-to **Rename a user interface.**

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.*

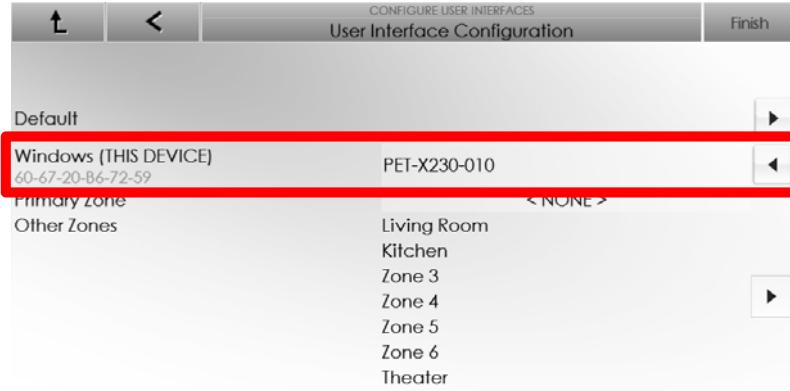
- a. Match the MAC address of other User Interfaces to rename them from a single location.



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.



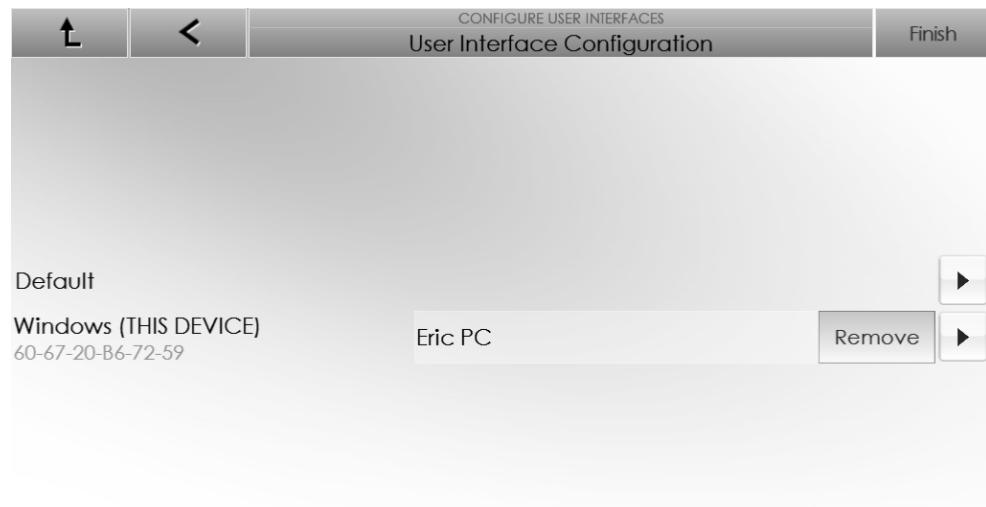
4. *The Set Device Name window appears. Use the keyboard on the device configuring the SpeakerCraft system to enter a name for the selected User Interface.*



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.



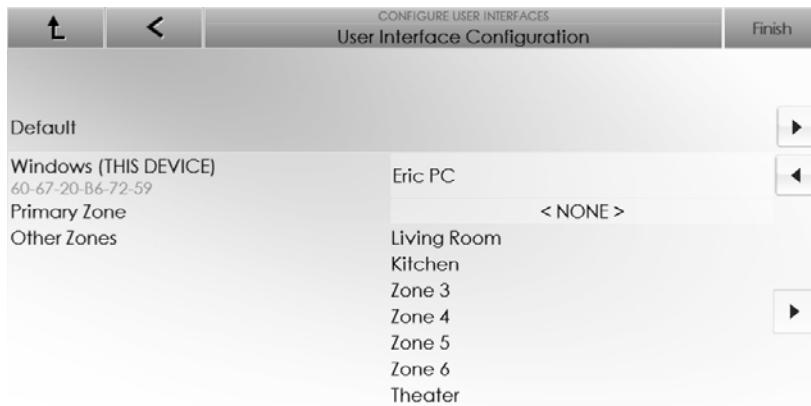
Exercise 2: Assigning the Primary Zone

Overview A Primary Zone may need to be assigned to a user interface for navigating directly into the primary zone when the SpeakerCraft 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 SpeakerCraft Logo.

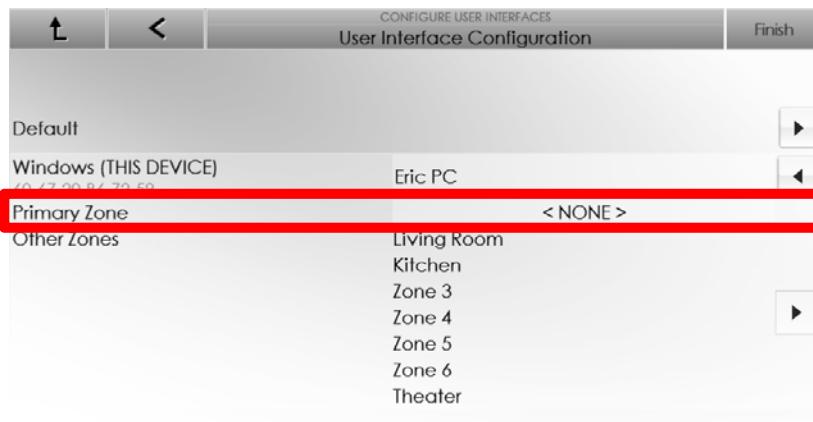
If manually accessing a zone from a list of all zones that are assigned to the user interface is desired then leave, or set, the Primary Zone field to <NONE>.

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

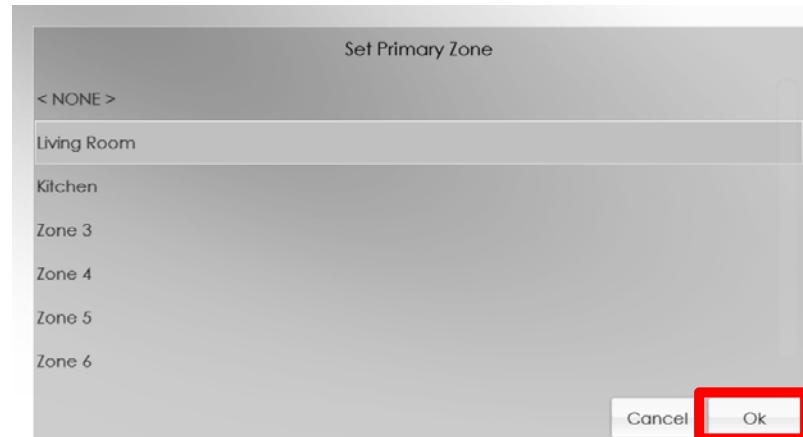
1. Access the desired interface's configuration options by selecting the **Arrow Box** to the right of the user interface.



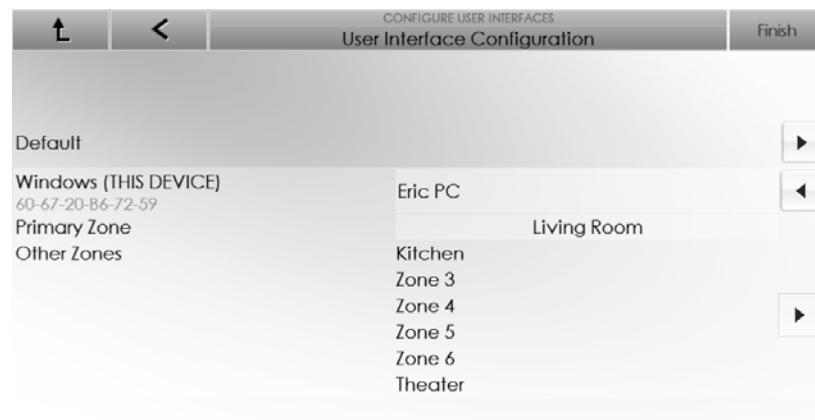
2. Locate and select the **Primary Zone** field.



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



4. Verify the Primary Zone was set as desired.



5. 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 SpeakerCraft Viewer for the selected user interface will not display the SpeakerCraft Logo in the upper left corner when only 1 zone is assigned to the selected user interface.

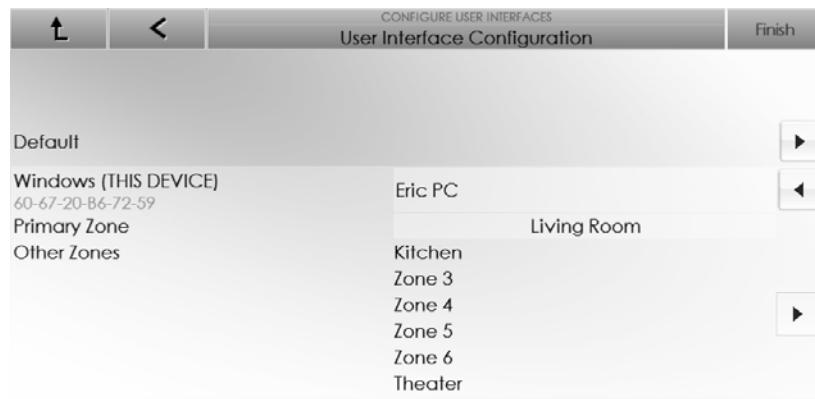


Exercise 3: Assigning Other Zones

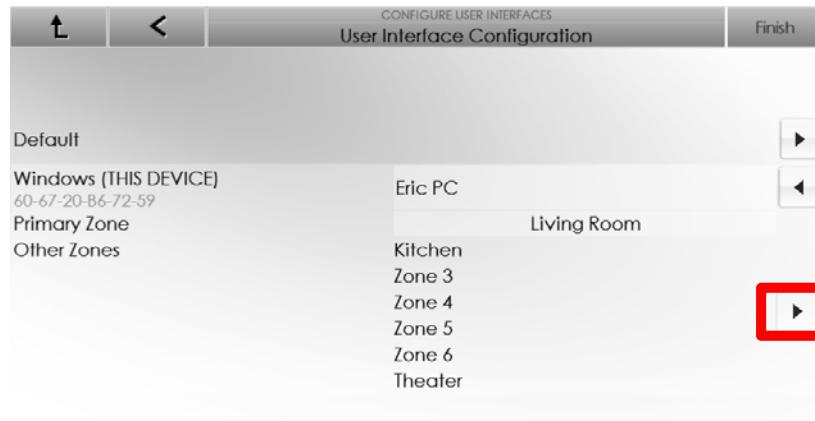
Overview Other Zones are zones that a user interface has access to on the All Media page. Access the All Media page by selecting the SpeakerCraft Logo.

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

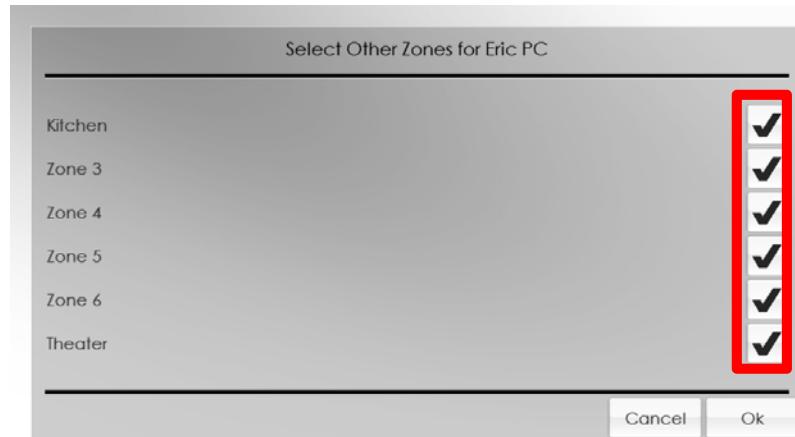
1. Access the desired interface's configuration options by selecting the **Arrow Box** to the right of the user interface.



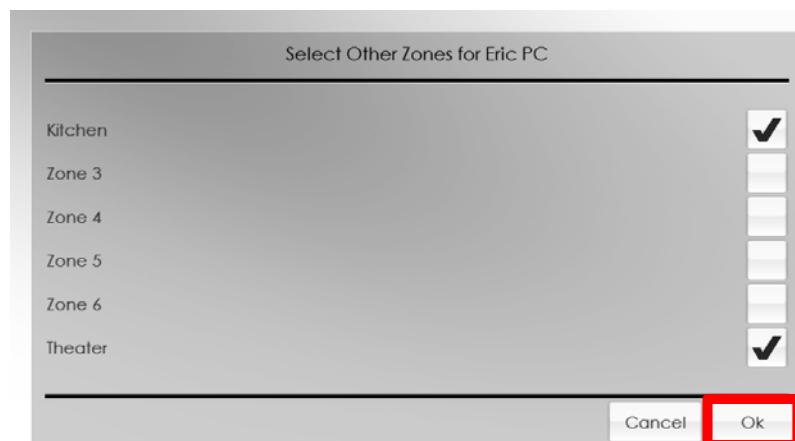
2. Locate and select the **Arrow Box** for Other Zones.



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.

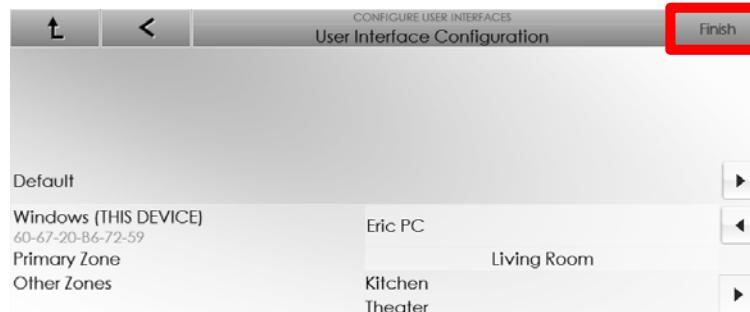


5. Verify the Other Zones are set as desired for the selected User Interface.

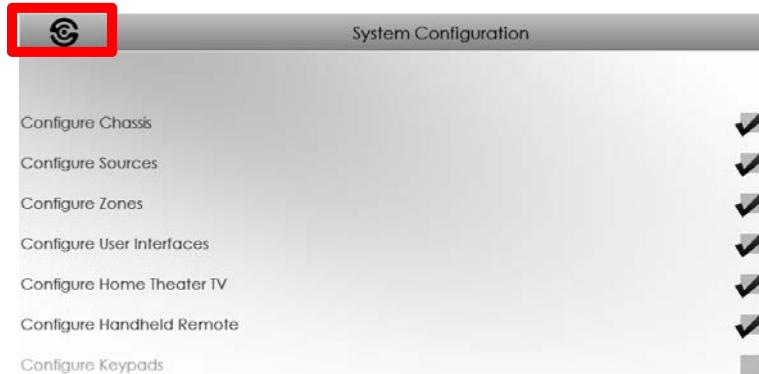


6. Repeat steps 1 – 5 to assign Other Zones to additional user interfaces.

7. When finished assigning zones to user interfaces select **Finish**.



8. The System Configuration Wizard main page appears. Exit the Configuration Wizard by selecting the **SpeakerCraft 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 SpeakerCraft Viewer for the selected user interface will not display the SpeakerCraft Logo in the upper left corner when only 1 zone is assigned to the selected user interface.

Default

Windows (THIS DEVICE)
60-67-20-B6-72-59

Primary Zone
< NONE >

Other Zones
Living Room

Living Room

Source

SAT TV Pandora CD

Exercise 4: Change the UI Language

Overview

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

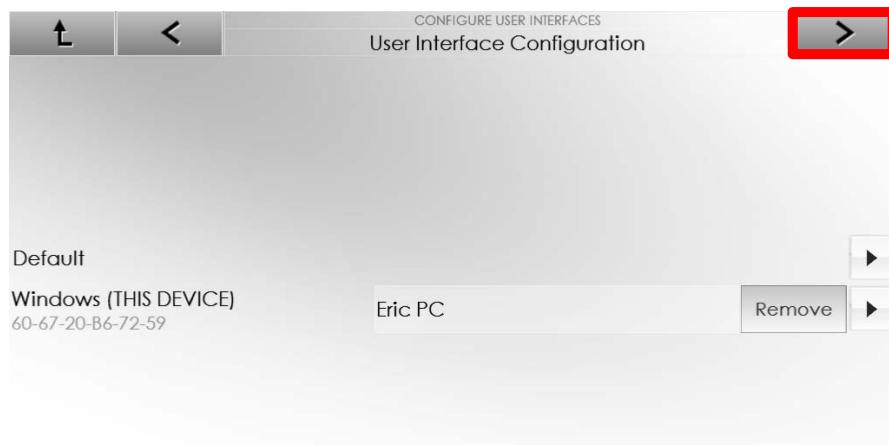
Note: Some two-device interfaces are only available in English.

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

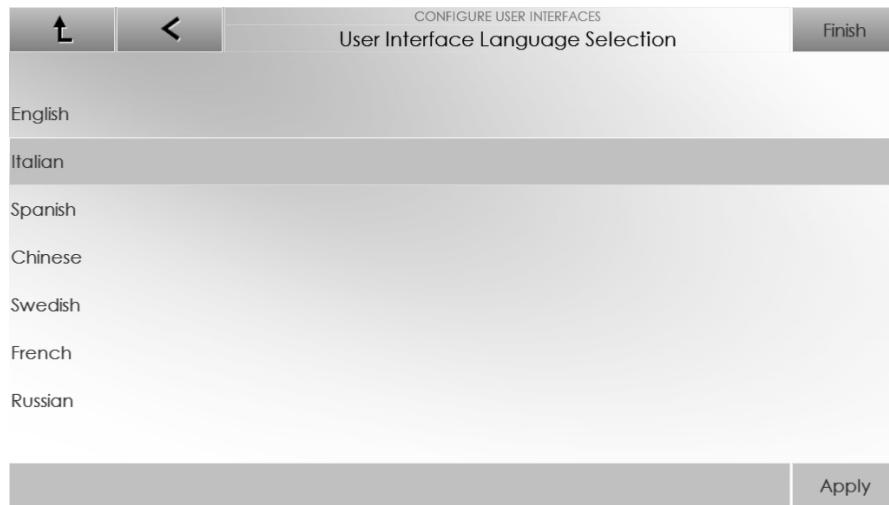
How-to

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 SpeakerCraft Viewer's to display. *This exercise will use Italian as an example.*



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

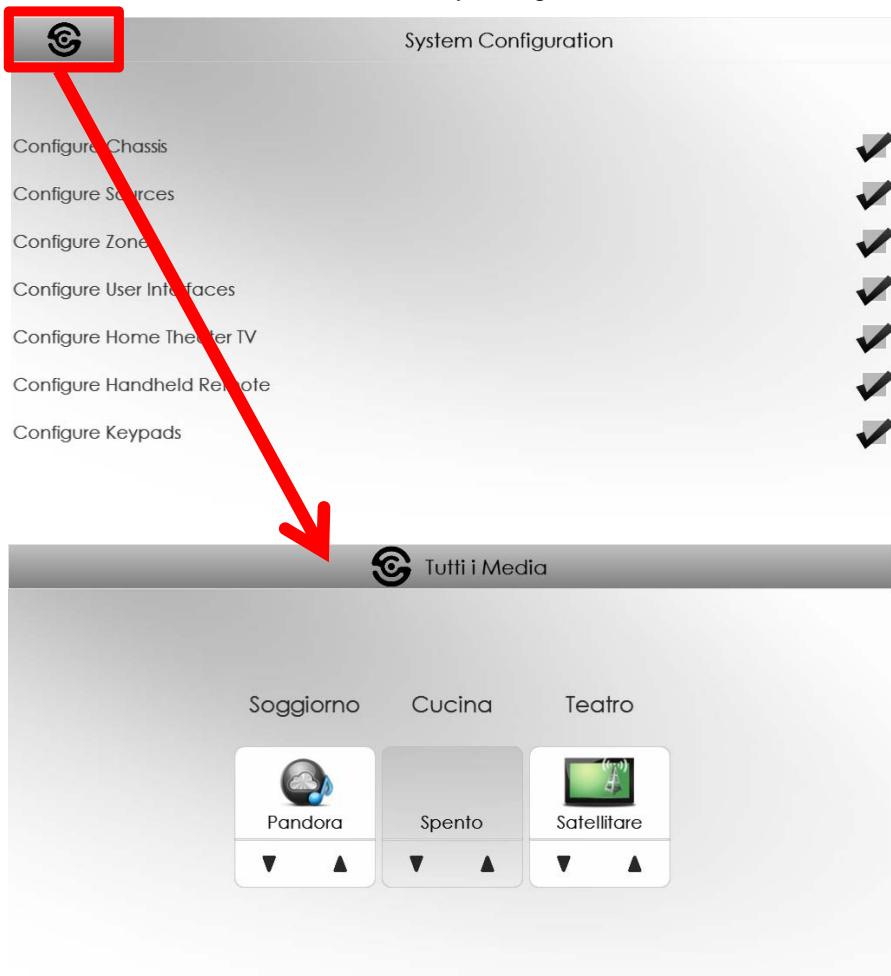


Note: Source and Zone names should be spelled in the native language. Some device interfaces provide two-way metadata and are only available in English.

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



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

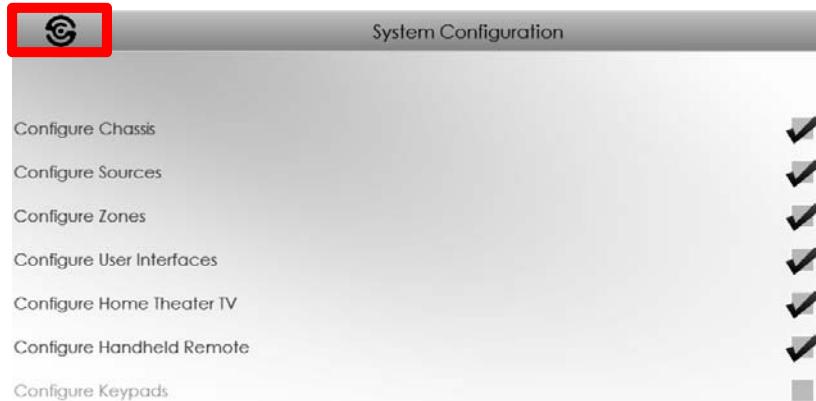


Exercise 5: Check the Viewer Interface

Overview Once all user interfaces have zones assigned to them the SpeakerCraft viewer on each interface should be checked to verify the settings.

How-to **Check the SpeakerCraft Viewer**

6. Access the **SpeakerCraft Viewer**. If you are in the setup wizard press the SpeakerCraft 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**.



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



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

Notes:

Lesson 8

Configure Keypads Node



Overview

This lesson goes over how to configure sKP7s for use in a SpeakerCraft 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

- SpeakerCraft MRA-664 powered on and connected to a local area network (same network the programming device will be connected to).
- SpeakerCraft sKP7 connected to the same network as the MRA-664. (sKP7 is powered thru PoE, using PoE injectors or a PoE injecting network switch)
- A PC running SpeakerCraft software.

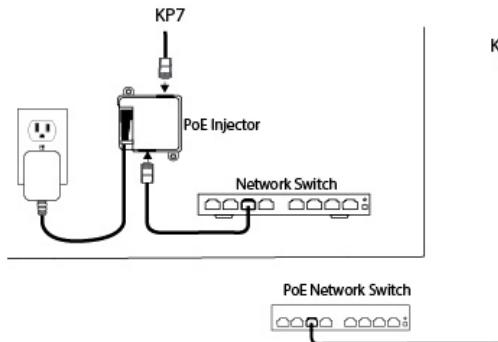
-or-

- Tablet running the SpeakerCraft App.

About the Configure User Interfaces Node

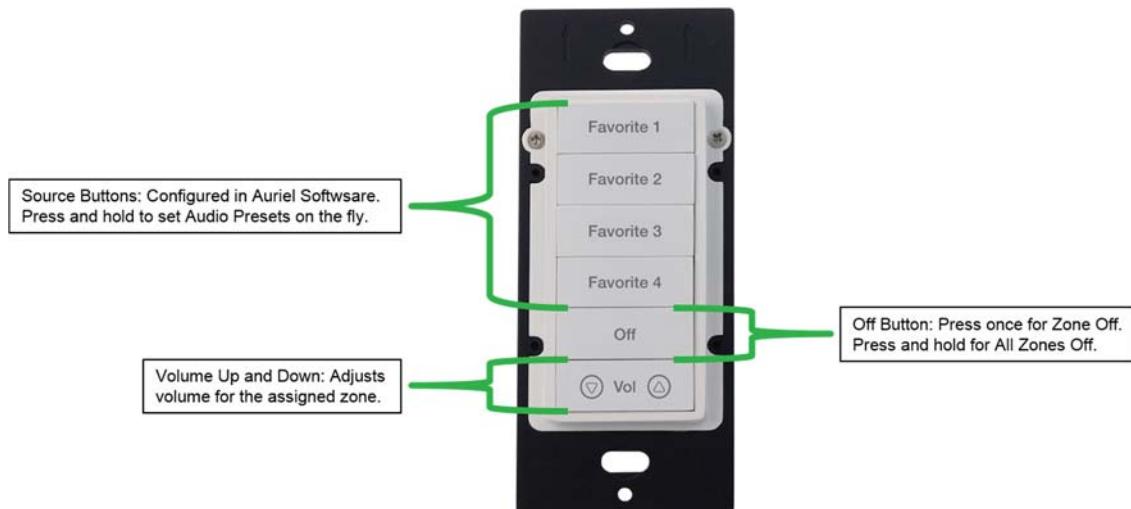
Overview

This lesson explores the Configure Keypads node and how to assign zones and source access to the hard buttons on a SpeakerCraft sKP7. The SpeakerCraft sKP7 is a single gang hard button keypad that communicates to the MRA-664 thru the local area network. The sKP7 requires a connection to a PoE, Power over Ethernet, switch or to a PoE injector.



The SpeakerCraft sKP7 features include:

- Single-gang hard button keypad.
- 4 configurable hard buttons.
- Volume Up, Volume Down, & Zone Off buttons are automatically configured when the sKP7 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 sKP7s connected to the same network as the MRA-664. Each sKP7 lists a MAC address for identification. The sKP7 automatically appears in the Configure Keypads node when connected to the network. Select Remove to delete an sKP7 from a system.



- **Keypad Configuration (expanded):** From this page the sKP7 is renamed for easy identification, a zone is assigned to the sKP7, and sources are assigned to one of the four configurable buttons on the sKP7. Some source types may also have additional actions assigned to them in the Favorite column.



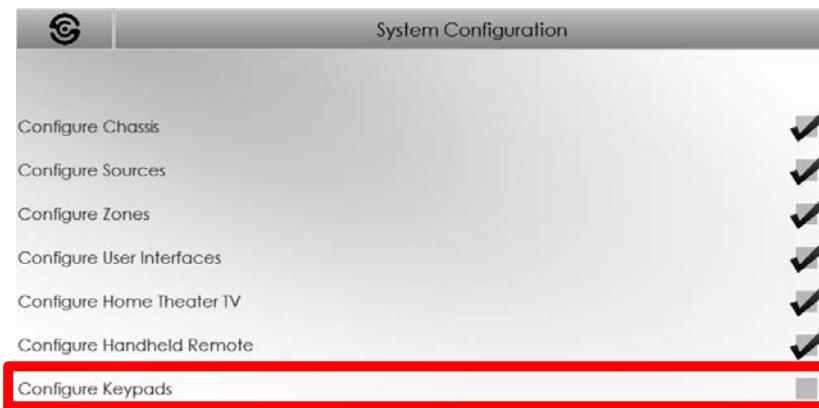
Exercise 1: Rename the User Interface

Overview Each sKP7 is automatically added to the system and displays its MAC address. The sKP7 may have a name assigned to it for easier recognition by the installer when in the System Configuration Wizard.

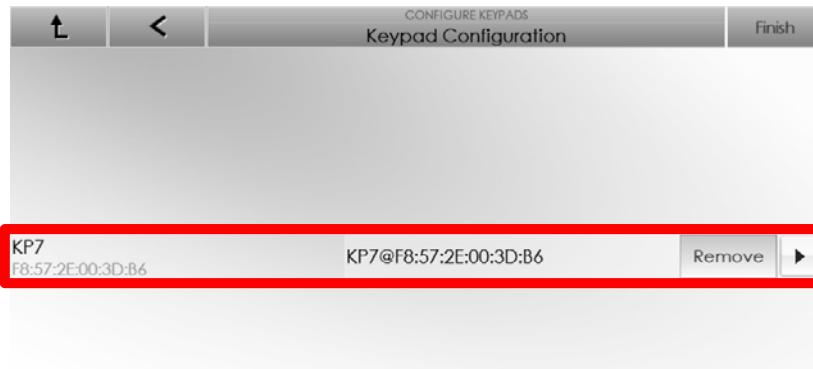
Each sKP7 has its MAC address on the front of the device. Use the Project Documentation Worksheet, included with the MRA-664, and note each sKP7 MAC address for easy identification of the sKP7 in the Auirel software.

How-to **Rename an sKP7.**

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

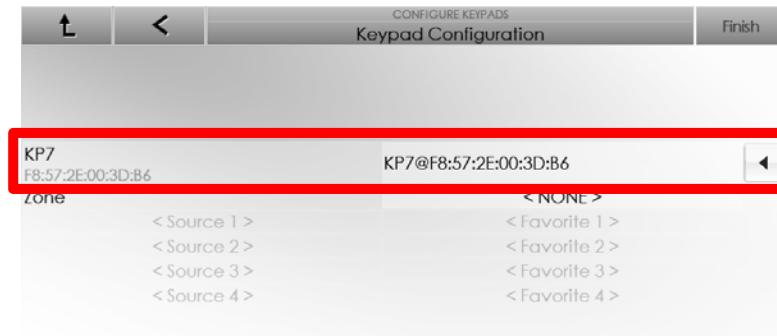


2. *The Keypad Configuration page appears. Select the Arrow Box to the right of the desired sKP7.*
 - a. Match the MAC address of other sKP7s to rename them from a single location.

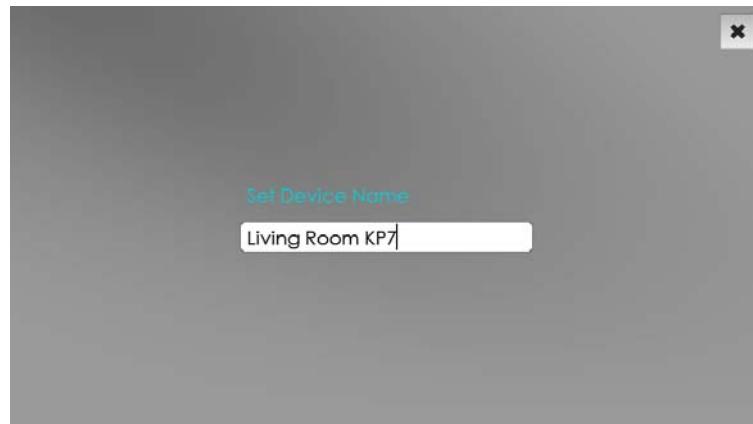


Quick Reference: Terms	
MAC Address	Hardware, or physical, ID code assigned to a network adaptor or any device with built-in networking capability.

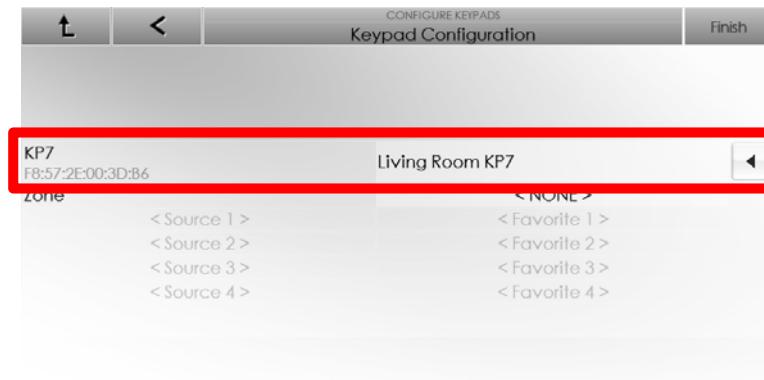
3. Select the **KP7@MACAddress Name field**. Each sKP7 will have a unique MAC address.



4. *The Set Device Name window appears. Use the keyboard on the device configuring the SpeakerCraft system to enter a name for the selected sKP7.*



5. When finished naming the sKP7, 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 sKP7s.

Exercise 2: Assigning a Zone to the sKP7

Overview A zone will need to be assigned to the sKP7 to activate the keypad in the system. Once a zone is assigned to the sKP7 the volume up, volume down, and Off buttons are automatically configured to control the assigned zone.

How-to **Assign a Zone to a sKP7.**

1. Access the desired sKP7'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 sKP7 and select **OK**.



4. Verify the Zone was set as desired.



5. Repeat steps 1 – 4 to assign Zones to additional sKP7s.

Note: When a zone is assigned to an sKP7 the volume up, volume down, and off buttons are automatically configured to control the assigned zone.

Exercise 3: Assigning Sources

Overview The sKP7 may be used to access pre-determined sources in a zone. When a source is assigned to a source button on the sKP7 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. SpeakerCraft recommends working with the end user to determine the desired sources to be accessed by the sKP7.

When using a source button's Press & Hold feature on the sKP7 do not configure the desired source button(s) in the SpeakerCraft software. See *Exercise 5: Setting Audio Presets* for more information.

How-to

Assign Sources to a sKP7.

1. Access the desired sKP7'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 sKP7. Some source types, such as Set Top Box, have additional control options on the sKP7.

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 sKP7.



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 sKP7. Source device types that support adding Favorites on the sKP7 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 SpeakerCraft Viewer software before configuring the sKP7. 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 sKP7.

How-to

Assign a Favorite Channel

1. Access the desired sKP7'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.



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



4. Verify the desired Favorite channel was added correctly.

CONFIGURE KEYPADS		Keypad Configuration	Finish
KP7	F8:57:2E:00:3D:B6	Living Room KP7	◀
Zone	SAT TV	Living Room	
	Radio	Travel Channel	
	CD	< Favorite 2 >	
	< Source 4 >	< Favorite 3 >	
		< Favorite 4 >	

5. 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 sKP7s have been configured.

CONFIGURE KEYPADS		Keypad Configuration	Finish
KP7	F8:57:2E:00:3D:B6	Living Room KP7	◀
Zone	SAT TV	Living Room	
	Radio	Travel Channel	
	CD	Rock	
	< Source 4 >	< Favorite 3 >	
		< Favorite 4 >	

Exercise 5: Setting Audio Presets

Overview The sKP7 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 SpeakerCraft Viewer software before setting the Audio Preset on the sKP7.

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 SpeakerCraft viewer, such as an nTP7, mobile device, or PC.



2. Once the source is setup in the zone press and hold the desired source button for 5 seconds. The sKP7 will flash once indicating that the audio preset was successfully saved.



Note: If the sKP7 flashes 3 times the audio preset was unable to be saved.

3. Test the newly saved audio preset by going to the sKP7, 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 sKP7 will flash 3 times and the preset will not be executed.

4. Repeat as necessary for each additional audio preset desired on the sKP7.

Setting Audio Preset Quick Reference (Press & Hold)	
sKP7	Meaning
Source Button Flashes 1 Time	Preset saved successfully
Source Button Flashes 3 Times	Preset save was unsuccessful

Troubleshooting (Activating Audio Preset)	
sKP7 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



Notes: