

Installation Instructions

Continental Video Jukebox 2nd Amplifier Kit Kit #26679602 (500 watt)

These instructions outline the procedures to install a 2nd Amplifier in your Continental Video Jukebox.

Tools Required

11/32" Nut Driver

Parts Included with this Kit:

<u>Item #</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
1	40991402	500W Amp Assembly (Shown)	1
2	70093401	Cable Clamps 1/2"	2
3	22335601	Mounting Bracket (2 nd Amp)	2
4	87843000	#8-32 Hex Nuts	6
5	34103002	Modular Cable (Red)	1
6	40912015	Harness 110 VAC	1
7	34102008	Modular Cable (Green)	1
8	30934230	Audio Cable	1
		These Instructions	



Figure 1



1. Power off the jukebox and unplug the power cord from the wall outlet.
2. The second amplifier is mounted behind the Front Panel Assembly on the Continental Video Jukebox. Refer to Figure 2. Open the UI Panel and remove the Front Graphic Panel.
3. Install the two Mounting Brackets (item #3) and two Cable Clamps (item #2) using four #8-32 hex nuts (item #4) on the studs located on the cabinet back.
4. Install the 2nd Amplifier to the Mounting Brackets with the remaining two #8-32 hex nuts.
5. Remove and discard the Modular Cable (Green) running from the ROWELINK connector on the main amplifier to the core computer. Install the Modular Cable (Red) (item #5) from the main amplifier ROWELINK connector to the 2nd Amplifier ROWELINK OUT connector.
6. Install the new Modular Cable (Green)(Item #7) from the ROWELINK IN connector on the 2nd amplifier to the core computer and plug it where the original modular cable was connected.
7. Unplug the three-pin power connector from the main amplifier and connect it to the short branch of the 110VAC Harness (Item #6). Connect the Long Branch of the 110VAC harness to the three-pin housing of the 2nd amplifier. Connect the remaining connector on the 110VAC harness to the three-pin housing on the main amplifier.
8. Connect the Audio Cable (Item #8) to the CH3 and CH4 outputs of the main amplifier (connecting white to white and red to red). Connect the other end of the audio cable to the CH1/3 and CH2/4 inputs of the 2nd amp.
9. Route your speaker wires into the jukebox and connect the speaker wires to the 2nd amplifier.
10. Plug the power cord of the jukebox back into the wall outlet and turn the jukebox on. After power up, verify the jukebox is functioning properly.
11. Reinstall the Front Panel Assembly and close up the UI Panel.



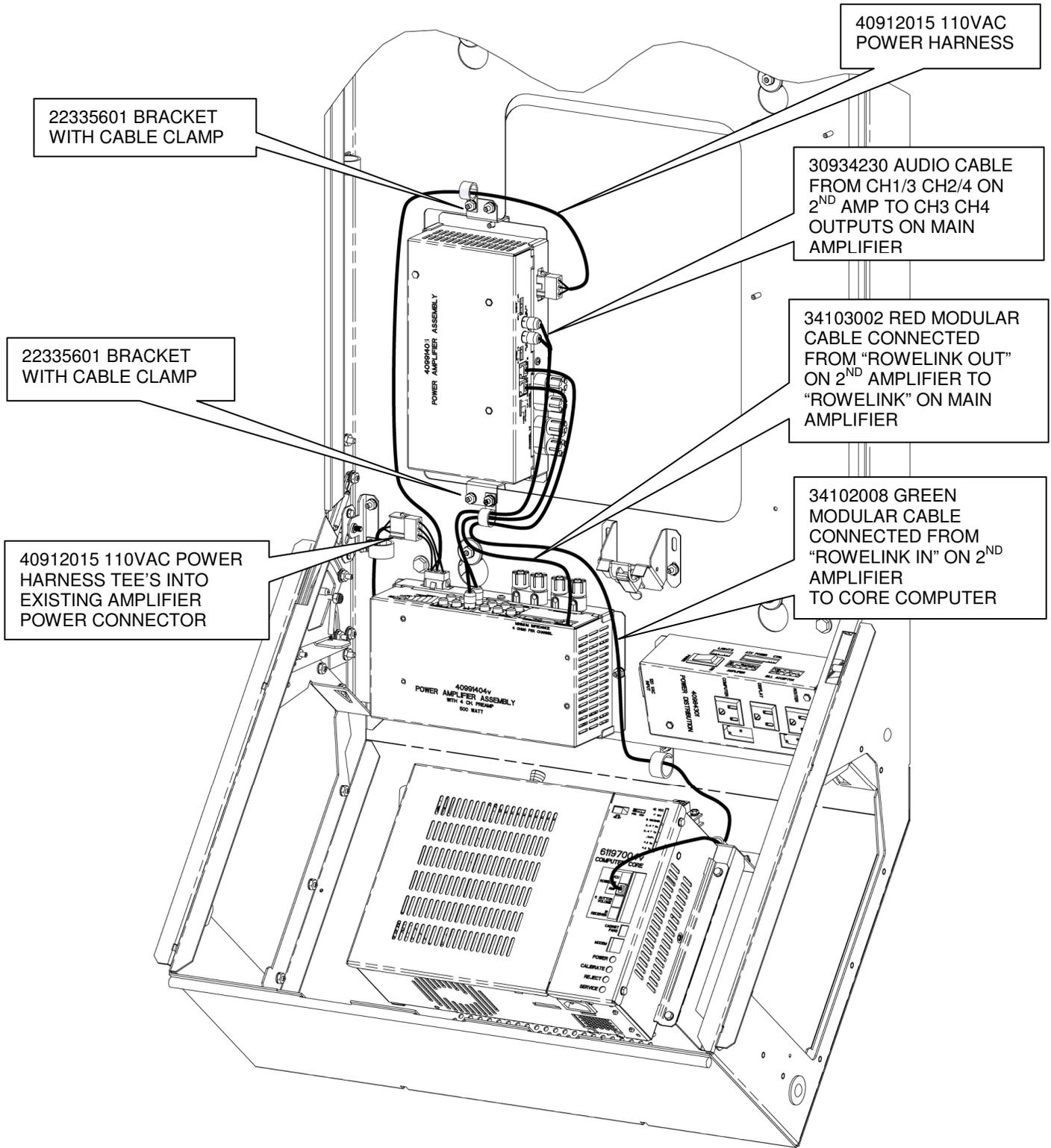


Figure 2



Sound System Set Up

This 2nd amplifier kit for your Continental jukebox is powered by an ICEpower 250ASX2 (500 Watt) Class 2 power amplifier. Speaker terminals are provided to connect extension speakers directly to the amplifiers. An Audio Output Transformer kit (part number 22180806) is available if your installation uses 70 volt speakers or you need to connect extension speakers using various power taps.

Refer to Section C in the jukebox Service Manual for information regarding the selection of extension speakers and power consumption calculations. Use the tables and worksheets for each amplifier separately.

Ensure that your speaker load does not exceed 250 watts per channel.

Amplifier Indicators

There are three indicator LEDs visible on the front of the secondary amplifier.

Power – when lit, indicates power is applied to the amplifier

Thermal – when lit, indicates the amplifier shut down due to overheating

Over Current – when lit, indicates the amplifier shut down due to a speaker overload

Amplifier Switches

Primary amplifier – there are no switches on the primary amplifier.

Secondary amplifier – **MUTING**: This switch must be set to the “A” position when the amplifier is used as a secondary amplifier.

Secondary amplifier – **OUTPUT**: the Output switch on the front of the secondary amplifier is used to choose bridged or unbridged output mode. Move the switch to the “Non Bridge” position for normal unbridged output. Move the switch to the “Bridge” position for bridged mode. This switch affects only the secondary amplifier. Note: In some early amplifiers the Non Bridge position was labeled “Stereo”.

Bridge Mode

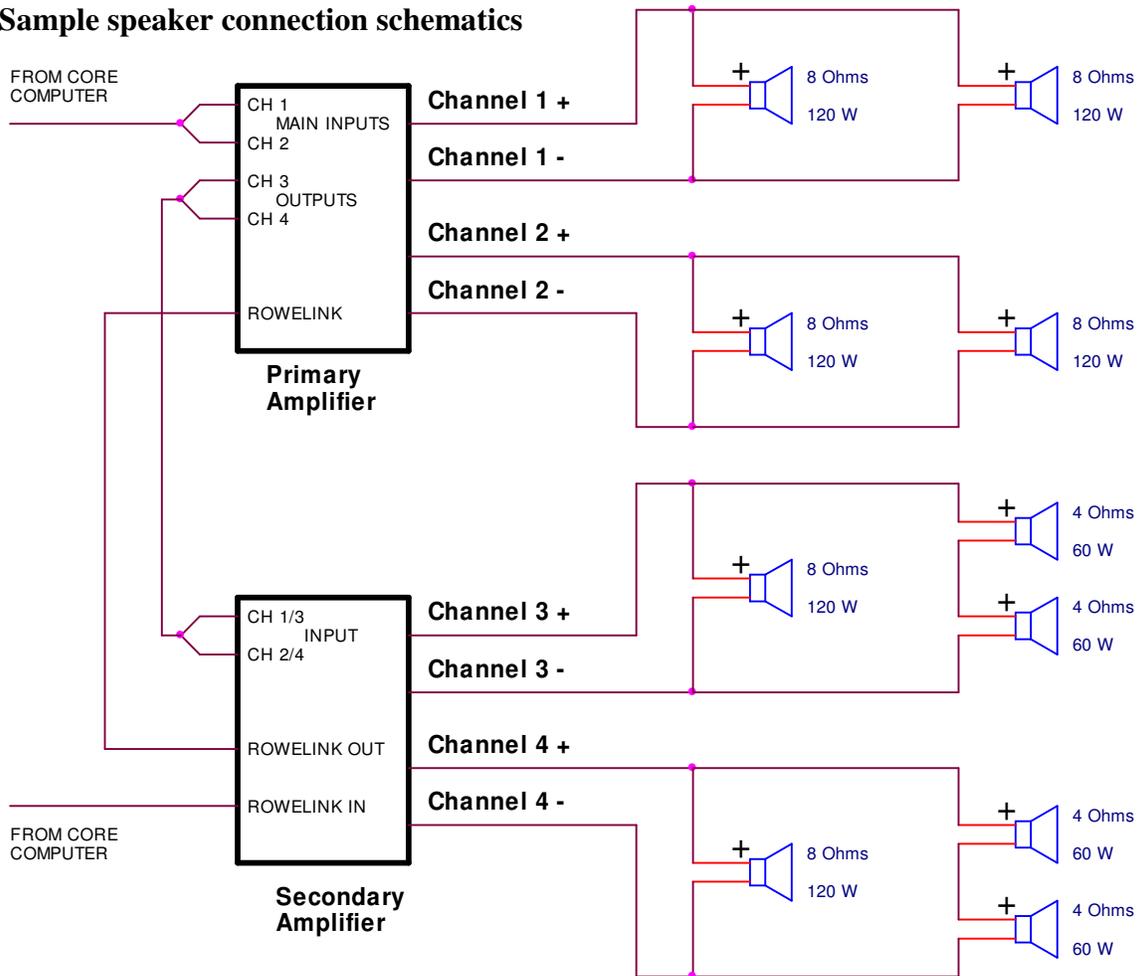
The secondary amplifier can be configured to run in bridged mode. In this mode, the audio signal to Channel 1/3 is inverted. This allows speaker connections directly across the Channel 1/3 + and Channel 2/4 + terminals. In this configuration, the full 500 watt amplifier power can be used to drive appropriate speakers or a sub-woofer. **In bridge mode the minimum speaker impedance is 8 ohms.** If driving a sub-woofer, choose one that incorporates a low pass filter and make sure it can handle 500 watts.



Sound System Configuration

The NGX sound system with a secondary amplifier can be configured to operate up to four separate zones. When the system is configured for three or four zones, the Stereo/Mono Select options for both CH1/2 and CH3/4 should be set to the “Mix (Mono)” position. Refer to Section 3 - Subsection 6.6 “VCU Setup” and Subsection 6.9 “Audio Modes” in the NGX *Jukebox Operation* manual for information on setting up Mode Linkage, Channel Linkage, and volume control unit configurations.

Sample speaker connection schematics



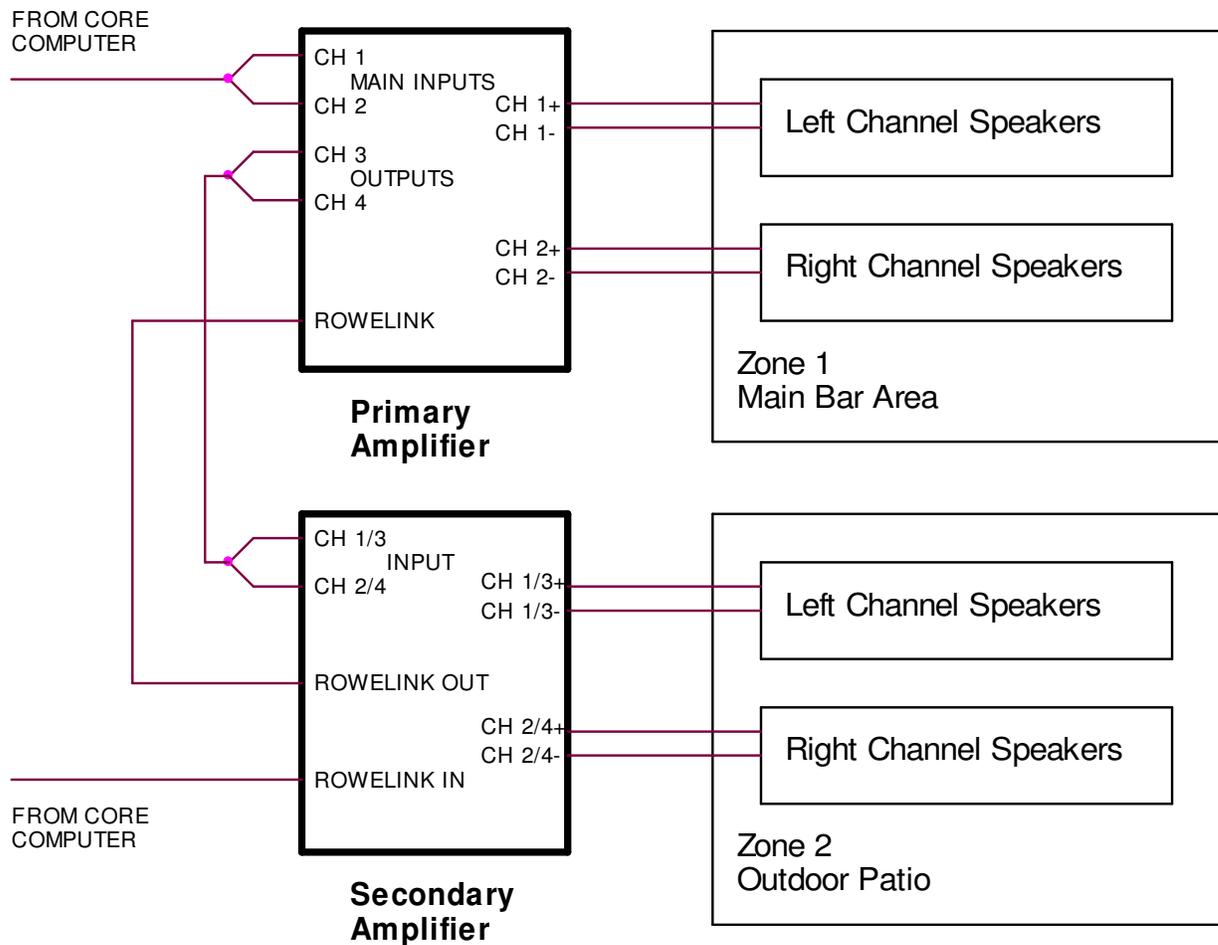
**Load as shown is
240 W per channel (all four channels).
Maximum power capacity is achieved.**

Figure 3

Figure 3 demonstrates speaker connections using maximum speaker load on all four channels, both primary and secondary. In this configuration the Stereo/Mono Select for CH1/2 can be set to either the Stereo or Mix (Mono) mode. If configured for other than two zones, Mix (Mono) mode should be used.

The MUTE switch on the Secondary Amplifier must be set to the “A” position. The OUTPUT switch should be set to the NON BRIDGE position for unbridged operation.





Two Stereo Zone Configuration

Audio Mode Setup

Ch1/2 Stereo
Ch3/4 Stereo

Secondary Amplifier Switches

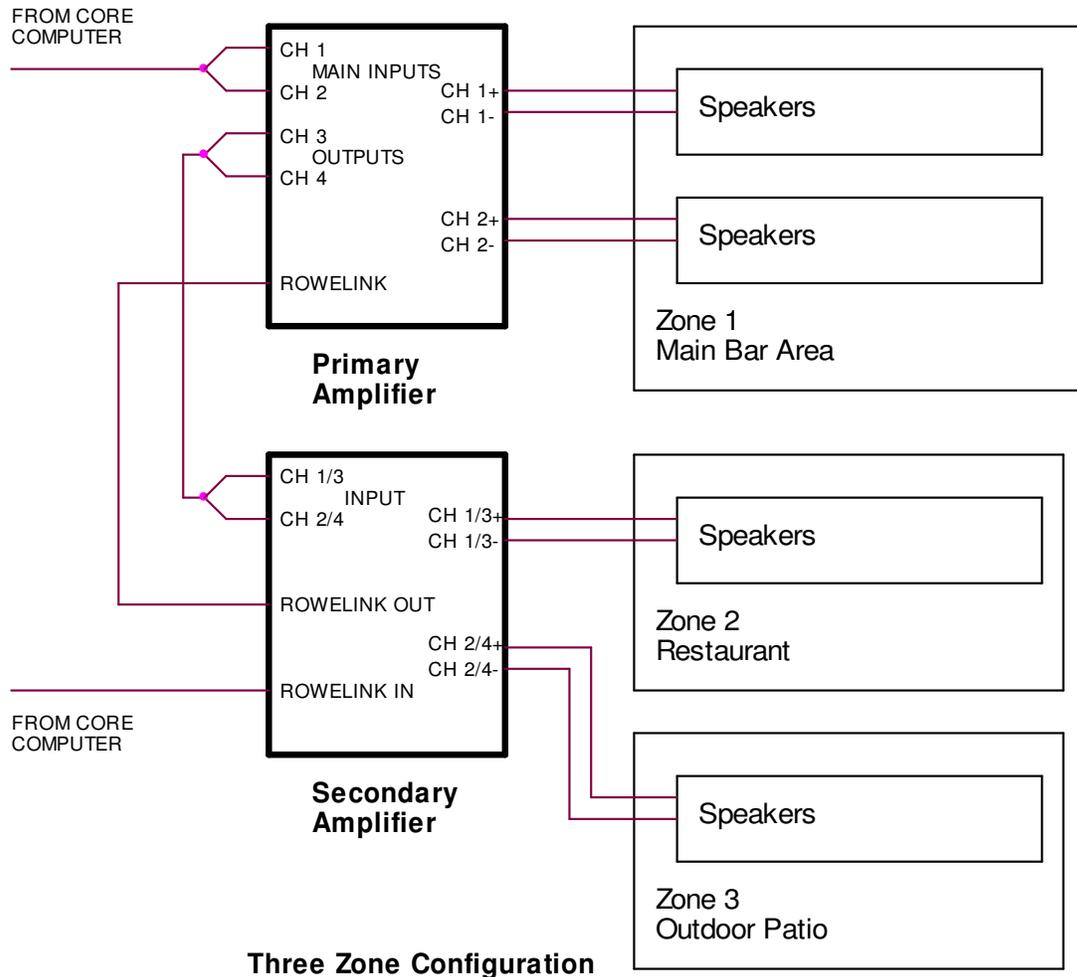
- Mute = A
- Output = Non Bridge

Channel Linkage

(Ch1 + Ch2) (Ch3 + Ch4)

Figure 4

Figure 4 shows a two zone stereo configuration with each amplifier controlling one stereo zone. Speaker connections should be made based on the example in Figure 3. Be sure to calculate speaker power so that no more than 250 watts are consumed by any single channel. Also be sure speakers are properly connected with respect to polarity.



Audio Mode Setup
 Ch1/2 Stereo
 Ch3/4 Mix (Mono)

Secondary Amplifier Switches
 - Mute = A
 - Output = Non Bridge

Channel Linkage
 (Ch1 + Ch2) (Ch3) (Ch4)

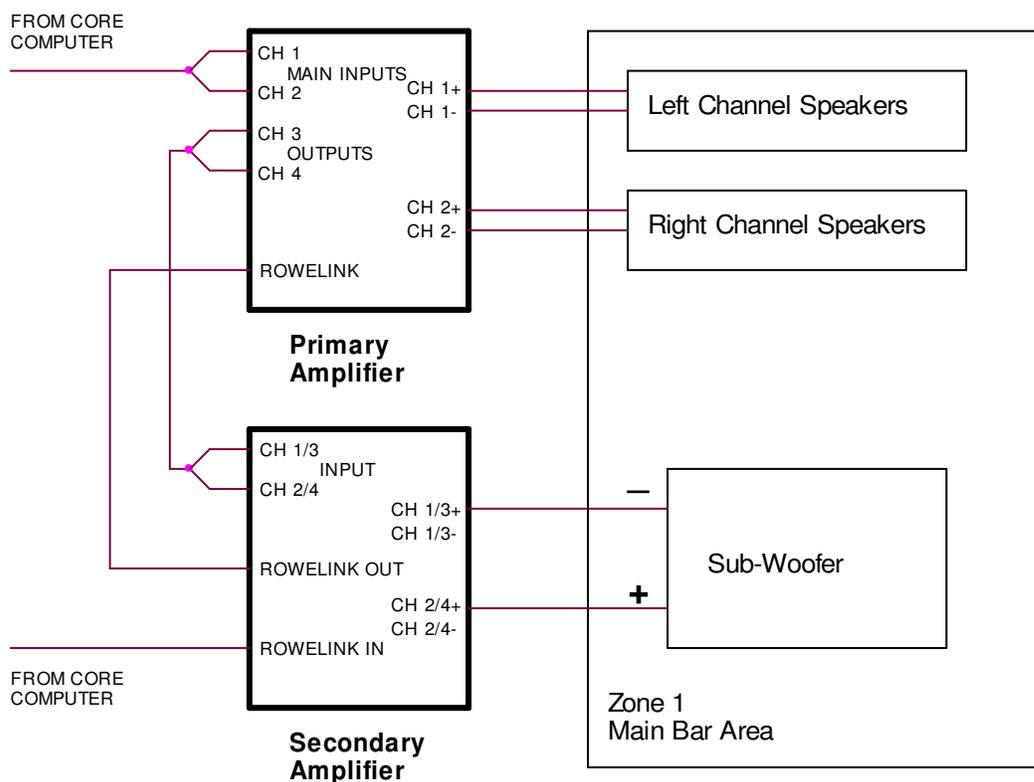
Figure 5

Figure 5 shows a three zone configuration. The primary amplifier is used to drive the speakers in the main bar area. The secondary amplifier is used to drive speakers in the restaurant and outdoor patio areas. The output mode of the secondary amplifier is set to NON BRIDGE for unbridged operation.

The volume in each of the three areas is controlled independently based on the Channel Linkage setup.

Speaker connections should be made based on the example in Figure 3. Be sure to calculate speaker power so that no more than 250 watts are consumed by any single channel. Also be sure speakers are properly connected with respect to polarity.





Single Stereo Zone with Sub-Woofer Configuration

Audio Mode Setup

Ch1/2 Stereo
Ch3/4 Stereo

Secondary Amplifier Switches

- Mute = A
- Output = Bridge

Channel Linkage

(Ch1 + Ch2 + Ch3 + Ch4)

Figure 6

Figure 6 shows a single stereo zone with a separate sub-woofer driven by the secondary amplifier. The secondary amplifier is configured for Bridge mode. The Left Channel and Right Channel speakers are connected based on the example in Figure 3.

Notice the Sub-Woofer speaker is connected (bridged) across the output of the secondary amplifier. When the secondary amplifier is set to Bridged mode, the Channel 1 audio signal is inverted. Be sure to connect the Channel 1/3 positive terminal to the negative terminal of the Sub-Woofer. Connect the Channel 2/4 positive terminal to the positive terminal of the Sub-Woofer.

Note: In bridged mode the minimum speaker impedance for the secondary amplifier is 8 ohms.



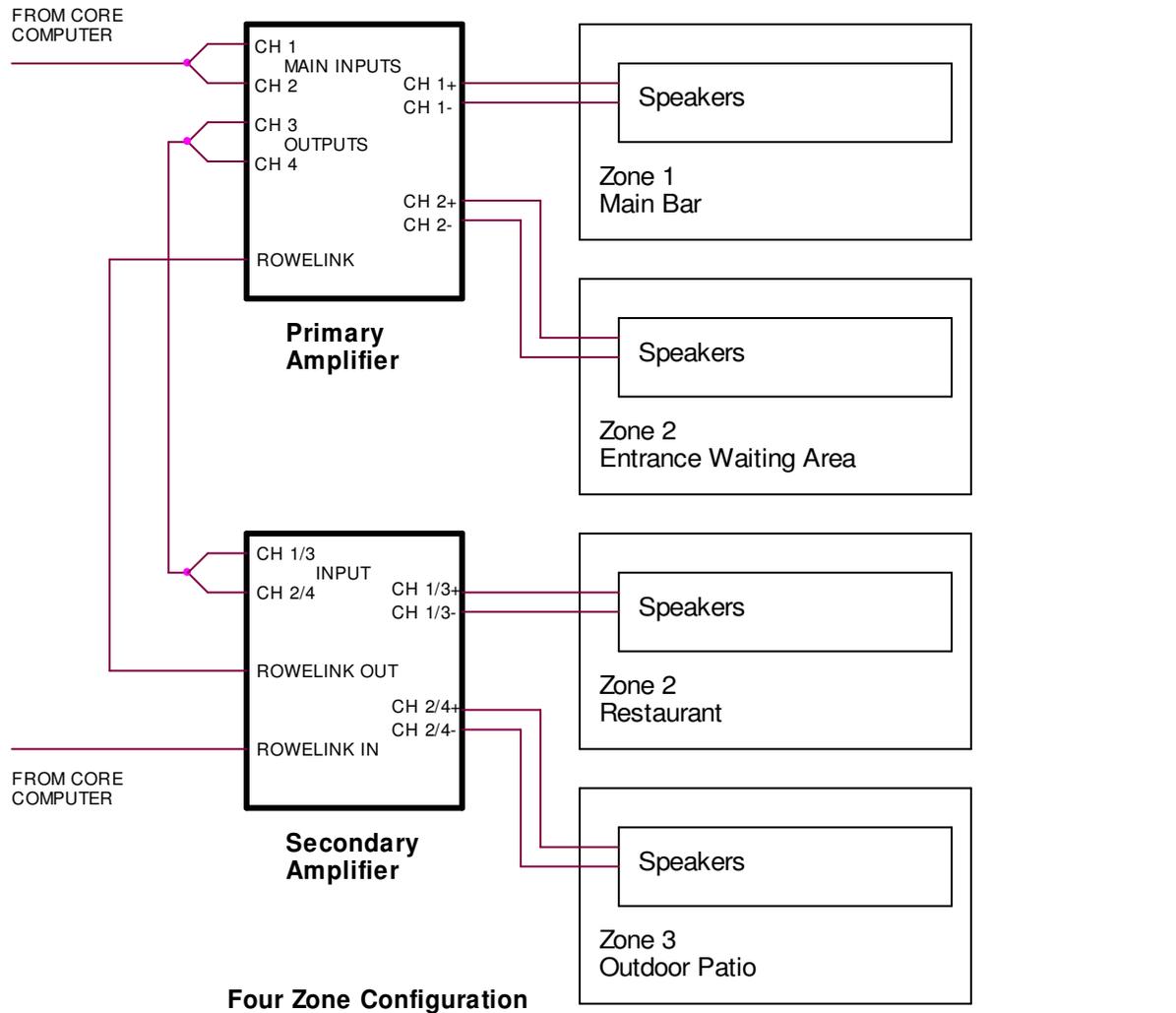


Figure 7

Figure 7 shows a four zone configuration. The primary amplifier is used to drive speakers in the main bar and the restaurant waiting area. The secondary amplifier is used to drive speakers in the restaurant and outdoor patio areas. The output mode of the secondary amplifier is set to NON BRIDGE for unbridged operation.

This configuration requires all channels to be set to Mix (Mono) mode. The volume in each of the four areas is controlled independently based on the Channel Linkage setup.

Speaker connections should be made based on the example in Figure 3. Be sure to calculate speaker power so no that more than 250 watts are consumed by any single channel. Also be sure speakers are properly connected with respect to polarity.

