

Installation Instructions

NGX Dual Amplifier Kit (1000 Watt) Kit #26679603

These instructions outline the procedures to install a 2nd amplifier (1000 Watt) in your NGX 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	40991701	Mounting Bracket (2 nd Amp)	1
2	40991406	1000W Amp Assembly	1
3	40912014	Harness 110 VAC	1
4	30934230	Audio Cable	1
5	34103002	Modular Cable (Red)	1
6	87843000	#8-32 Hex Nuts (Not Shown)	4
		These Instructions	



Figure 1



Power off the jukebox then unplug the power cord from the wall outlet.

1. Mount the 2nd 1000W Amplifier (Item #2) to the Amplifier Mounting Bracket (Item #1) using two #8-32 hex nuts (Item #6).

Note: If you have a router kit installed you must remove the lower router-mounting bracket. The Amplifier Mounting Bracket will double as the router-mounting bracket.

2. Mount the 2nd Amplifier and bracket assembly to the two studs located to the lower right of the main amplifier with the remaining two #8-32 hex nuts. See Figure 2.
3. Unplug the Modular Cable from the jack labeled “ROWELINK” on the main amplifier. Reroute this cable to the 2nd Amplifier and connect it to the modular jack labeled “ROWELINK IN”. See Figure 2.
4. Connect the 34103002 Modular Cable (Item #5) to the modular jack on the 2nd amplifier labeled “ROWELINK OUT”. Connect the other end of this cable to the main amplifier modular jack labeled “ROWELINK”. See Figure2.
5. Unplug the three-pin power connector from the main amplifier and connect it to the short branch of the 110VAC Harness 40912014 (Item #3). 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. See Figure 2.
6. Connect the Audio Cable 30934230 (Item #4) to the “CH3 & CH4 OUTPUT” of the main amplifier (connecting white to white and red to red). Connect the other end of the audio cable to the “CH 1/3 INPUTS” and the “CH 2/4 INPUTS”. See Figure 2.
7. Connect your speakers to the new 2nd amplifier. See *Second Amplifier Setup* below for more details.
8. 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.



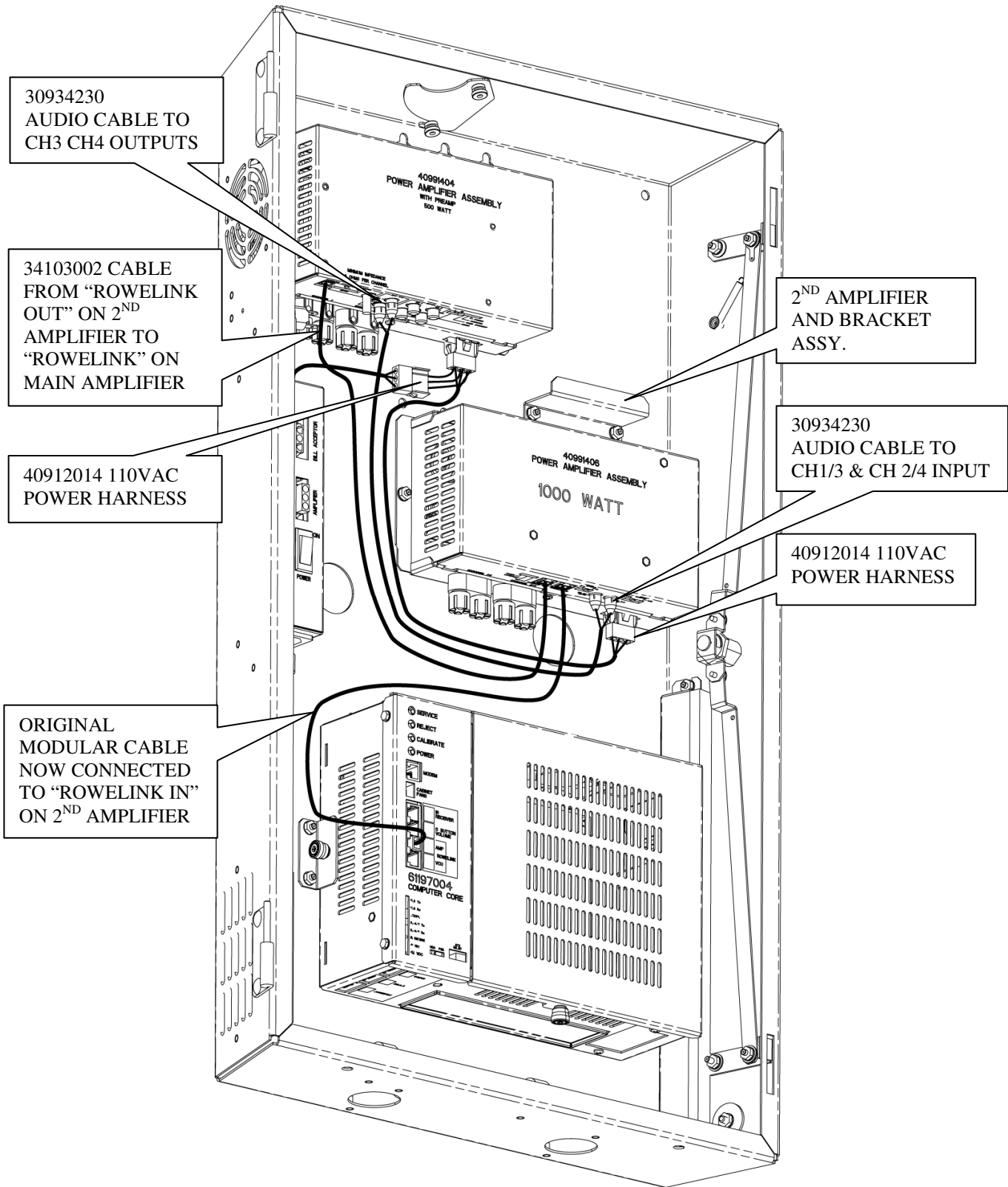


Figure 2



Second Amplifier (1000 Watt) Set Up

The 1000 Watt second amplifier kit is powered by a 1000 Watt Pascal S-PRO2 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.

Ensure that your speaker load does not exceed 500 watts per channel for the 1000W amplifier.

Dual Amplifier Configuration

The installation of a second amplifier brings the total number of driven channels in the NGX to four. The preamplifier in the primary amplifier is used to drive the inputs of the second amplifier.

Second 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

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

Second Amplifier Switches

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

OUTPUT: the Output switch on the front of the 1000 Watt secondary amplifier is used to select the speaker load. Choose 2 Ohm or 4 Ohm mode. This switch affects only the secondary amplifier.

Bridge Mode

The secondary 1000 Watt amplifier can drive speakers in bridge mode. This allows speaker connections directly across the **Channel 1/3-** (Black) and **Channel 2/4+** (Red) output terminals. In this configuration, the full 1000 watt amplifier power can be used to drive appropriate speakers or a sub-woofer. **In bridge mode the minimum speaker impedance is double the OUTPUT switch setting, 8 ohms or 4 ohms.** If driving a sub-woofer, choose one that incorporates a low pass filter and make sure it can handle 1000 watts.



Sound System Configuration

The NGX sound system with a secondary amplifier can be configured to operate up to four separate zones. Refer to Section 3 - Subsection 6.6 and 6.9 in the NGX *Jukebox Operation* manual (P/N 21822707 Rev. C) for information on setting up Mode Linkage, Channel Linkage, Volume Control Units, and Audio Mode configurations.

Sample speaker connection schematics

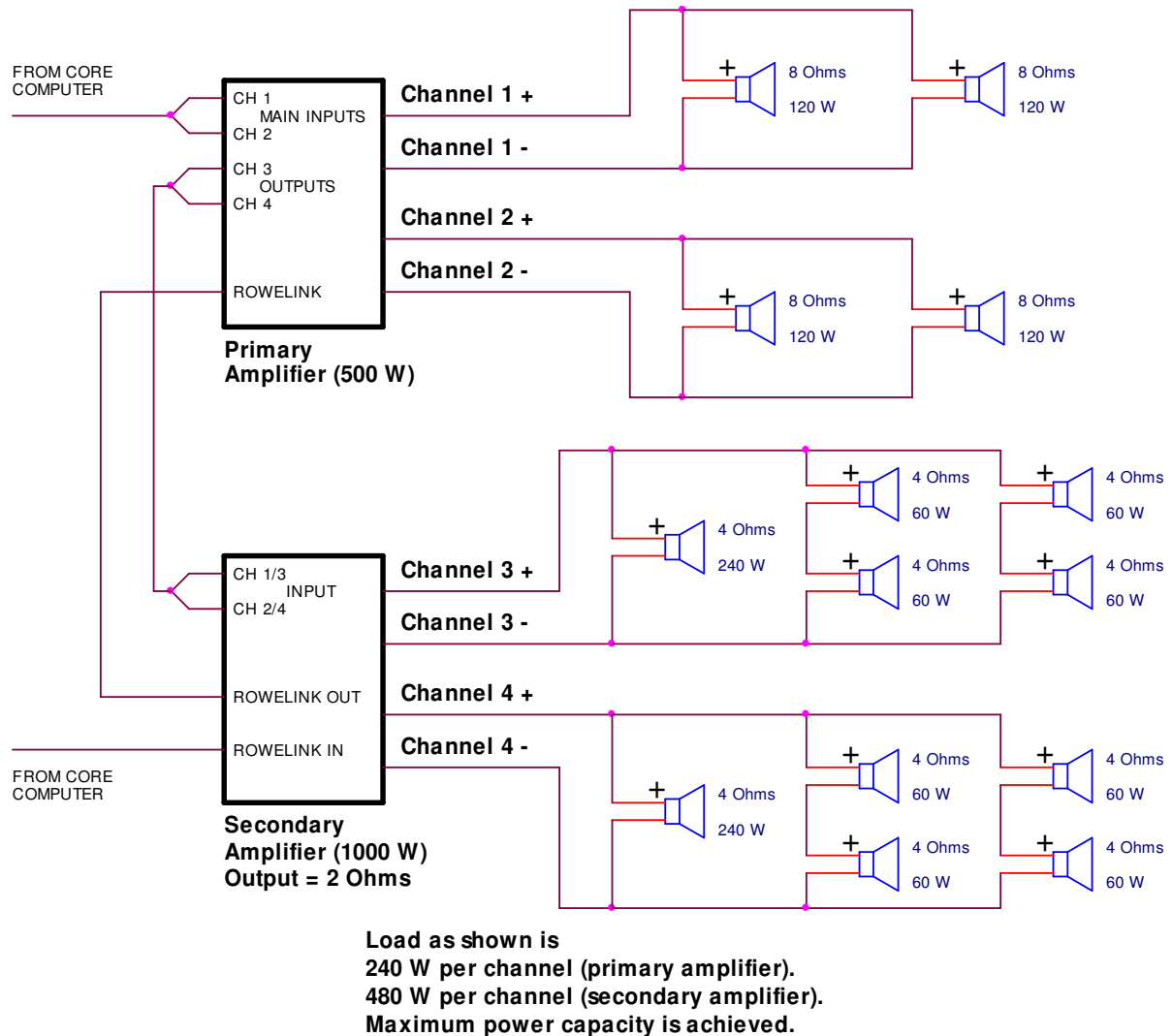
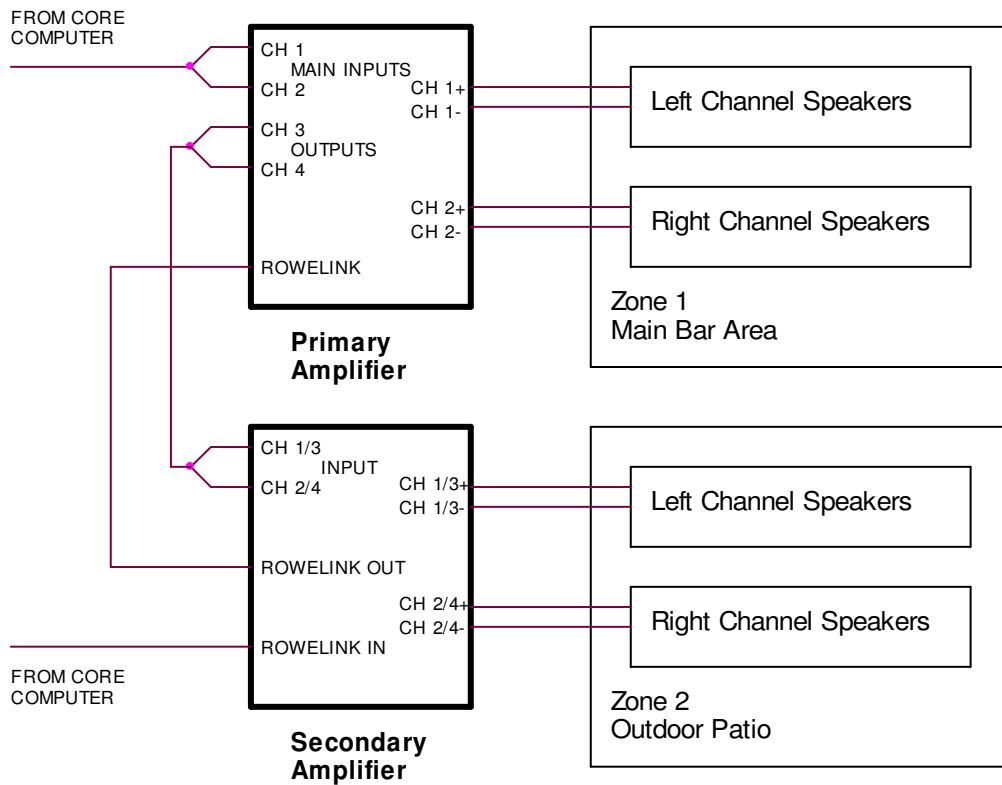


Figure 3

Figure 3 demonstrates speaker connections using maximum speaker load on all four channels. In this configuration the Primary and Secondary amplifiers can be set to either the Stereo or Mono mode. If configured for other than two zones, Mono mode should be used.



Multi-Zone Configuration Examples



Two Stereo Zone Configuration

Audio Mode - Stereo/Mono

Ch 1/2 = Stereo

Ch 3/4 = Stereo

Audio Mode - Output Routing

Ch1 In → Ch1 & Ch3 Out

Ch2 In → Ch2 & Ch4 Out

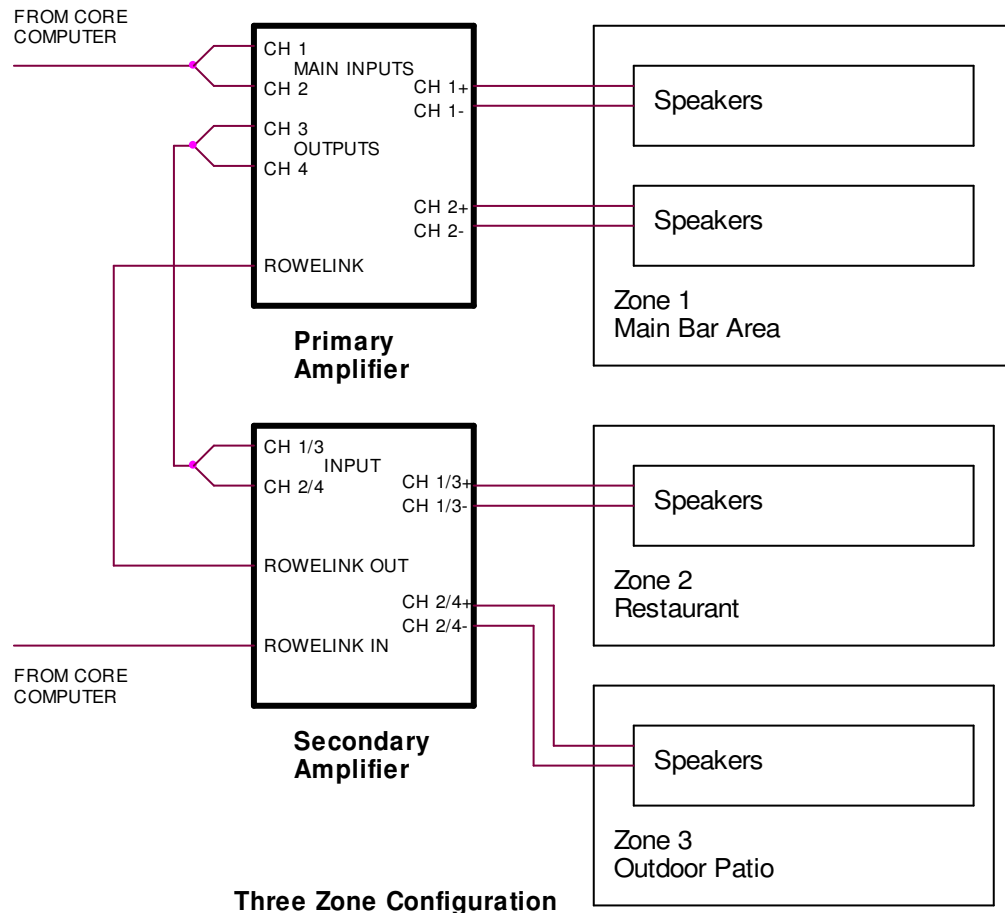
Channel Linkage

(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 500 watts are consumed by any single channel of the secondary amplifier. Also be sure speakers are properly connected with respect to polarity.





<u>Audio Mode - Stereo/Mono</u>	<u>Audio Mode - Output Routing</u>	<u>Channel Linkage</u>
Ch 1/2 = Stereo or Mono	Ch1 In → Ch1 & Ch3 Out	(Ch1 + Ch2) (Ch3) (Ch4)
Ch 3/4 = Mono	Ch2 In → Ch2 & Ch4 Out	

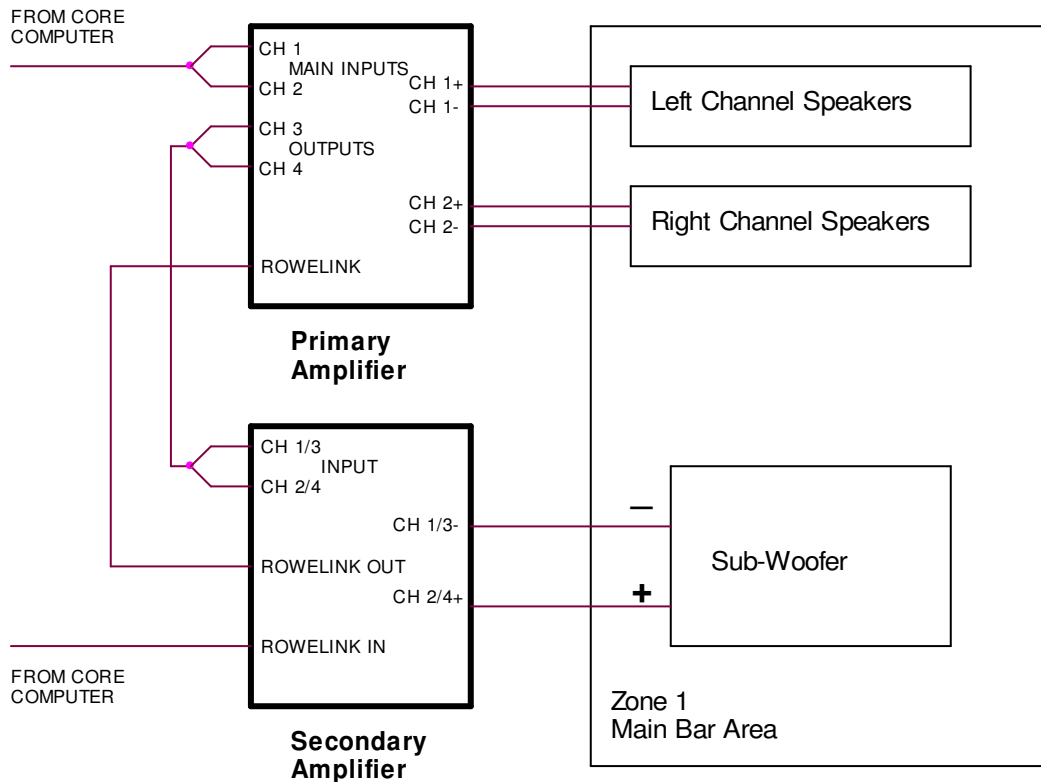
Figure 5

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.

This configuration requires the secondary amplifier be set to Mono mode. The volume in each of the three zones 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 500 watts are consumed by any single channel of the secondary amplifier. Also be sure speakers are properly connected with respect to polarity.





Single Stereo Zone with Sub-Woofer Configuration

<u>Audio Mode - Stereo/Mono</u>	<u>Audio Mode - Output Routing</u>	<u>Channel Linkage</u>
Ch 1/2 = Stereo	Ch1 In → Ch1 & Ch3 Out	(Ch1 + Ch2 + Ch3 + Ch4)
Ch 3/4 = Stereo or Mono	Ch2 In → Ch2 & Ch4 Out	

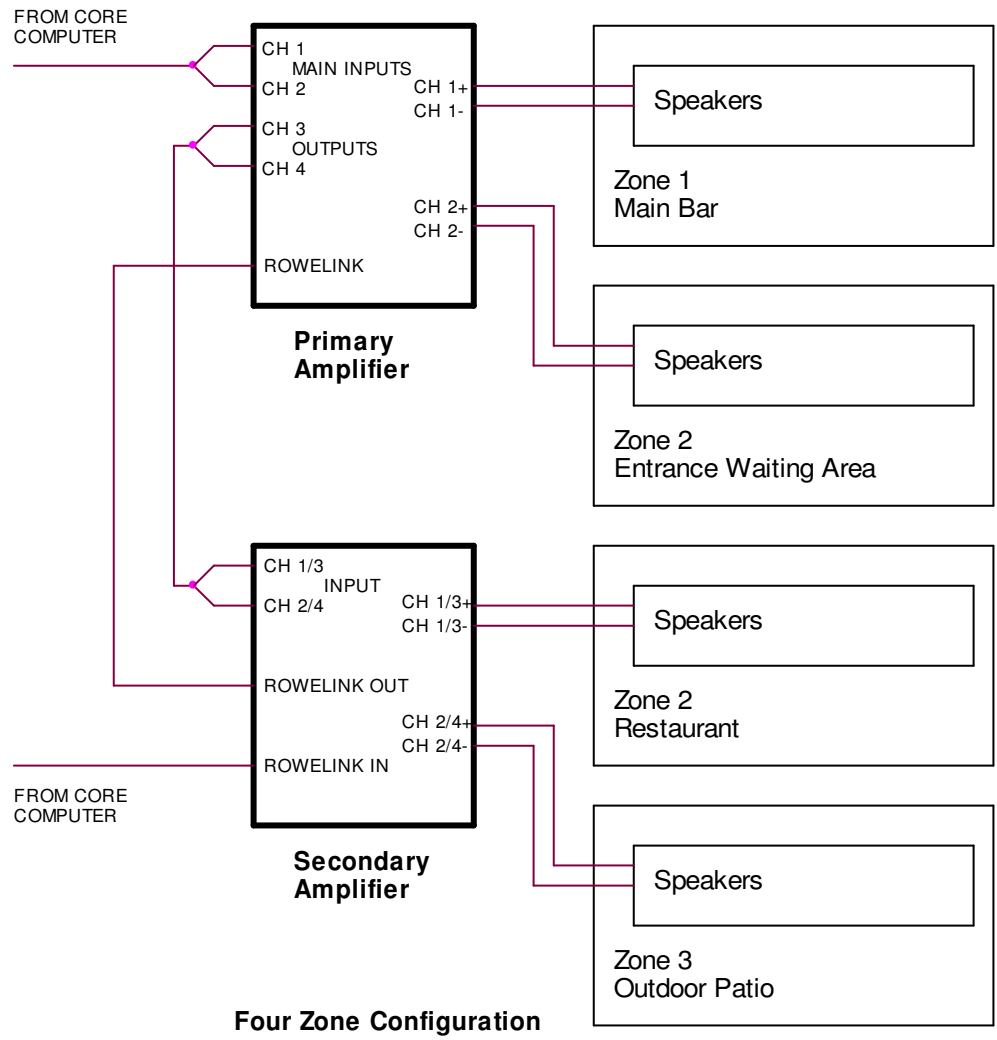
Figure 6

Figure 6 shows a single stereo zone with a separate sub-woofer driven by the secondary amplifier.

Notice the Sub-Woofer speaker is connected (bridged) across the output of the secondary amplifier. When the secondary amplifier is used in bridged mode, be sure to connect the Channel 1/3 **negative** (black) terminal to the negative terminal of the Sub-Woofer. Connect the Channel 2/4 **positive** (red) terminal to the positive terminal of the Sub-Woofer.

Note: In bridged mode the minimum speaker impedance for the secondary amplifier is double the switch setting, 8 ohms or 4 ohms.





<u>Audio Mode - Stereo/Mono</u>	<u>Audio Mode - Output Routing</u>	<u>Channel Linkage</u>
Ch 1/2 = Mono	Ch1 In → Ch1 & Ch3 Out	(Ch1) (Ch2) (Ch3) (Ch4)
Ch 3/4 = Mono	Ch2 In → Ch2 & Ch4 Out	

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.

This configuration requires the primary and secondary amplifiers to be set to Mono mode. The volume in each of the four areas is controlled independently based on the Channel Linkage setup.



