Russound
A/V DISTRIBUTION & CONTROL SYSTEMS

SS-4.2 / SS-6.2
Instruction Manual

Impedance Matching
Speaker Selector

Introduction

Thank you for purchasing a quality Russound product. The Russound SS-4.2 and SS-6.2 speaker selectors permit either four or six pair of speakers to be turned on and off through individual switches on the front panel. Multiple pairs may be engaged simultaneously if desired. When multiple pairs are engaged, impedance matching protection must be employed to protect the amplifier from damage.

The SS-4.2 and SS-6.2 have this impedance matching protection built in, when selected by the Impedance switch on the rear panel. They also have built-in circuit overload protection that disengages the amplifier signal if it exceeds the limits of the selector. After being tripped, the amplifier must be shut off before the SS-4.2 or SS-6.2 will automatically reset itself. If this occurs, check all system components for proper connections and use.

Features

- Designed for quality audio performance and long-term reliability
- Impedance matching and automatic overload protection compatible with high-powered amplifiers
- Bypass mode for higher efficiency when using remote impedance-matching volume controls
- Isolated inputs provide safe connection to bridge or floating type amplifiers
- Spring-loaded speaker terminals accommodate up to 12-gauge wire
- Designed for use with 8 ohm speakers

Modes of Operation

The SS-4.2 and SS-6.2 may be used in one of two modes of impedance matching: (Please note: impedance matching is required, but only once in the system.)

With internal impedance matching (Impedance switch set to "IN")
This method of impedance matching uses the SS-4.2/6.2's internal high-powered resistors to eliminate the need for external impedance matching devices.

With external impedance matching (Impedance switch set to "BYPASS")
This method requires the use of external impedance matching devices such as the Russound LPTx or ALTx volume controls, as the selector's overload protection and impedance matching will be bypassed. In this mode, using external impedance matching volume controls will allow higher system efficiency and a configurable level of impedance matching for specific amplifier needs beyond the scope of the selector alone.

Speaker Requirements

All speakers should be 8 ohms minimum.

Amplifier Requirements

With internal impedance matching (switch set to "IN")
A 4-ohm stable amplifier is required.

With external impedance matching volume controls (switch set to "BYPASS")
A 4 to 8-ohm stable amplifier may be used.
(Note: overdriving your amplifier will potentially cause damage to the amplifier, selector, and volume controls, as overload protection is bypassed.)

Amplifier Connection

Note: use ONLY the amplifier's A or Speaker 1 output. Do not use the B or Speaker 2 output.

Using 4-conductor speaker wire (16-12 gauge), connect the A or Speaker 1 output of an audio amplifier to the amplifier input connection on the SS-4.2/6.2. Strip off 1/4" of insulation from the wire and tightly twist the copper conductor to eliminate loose or frayed ends. Press down the spring terminal tab on the SS-4.2/6.2 and insert the wire, being careful to keep channel identity and polarity consistent.

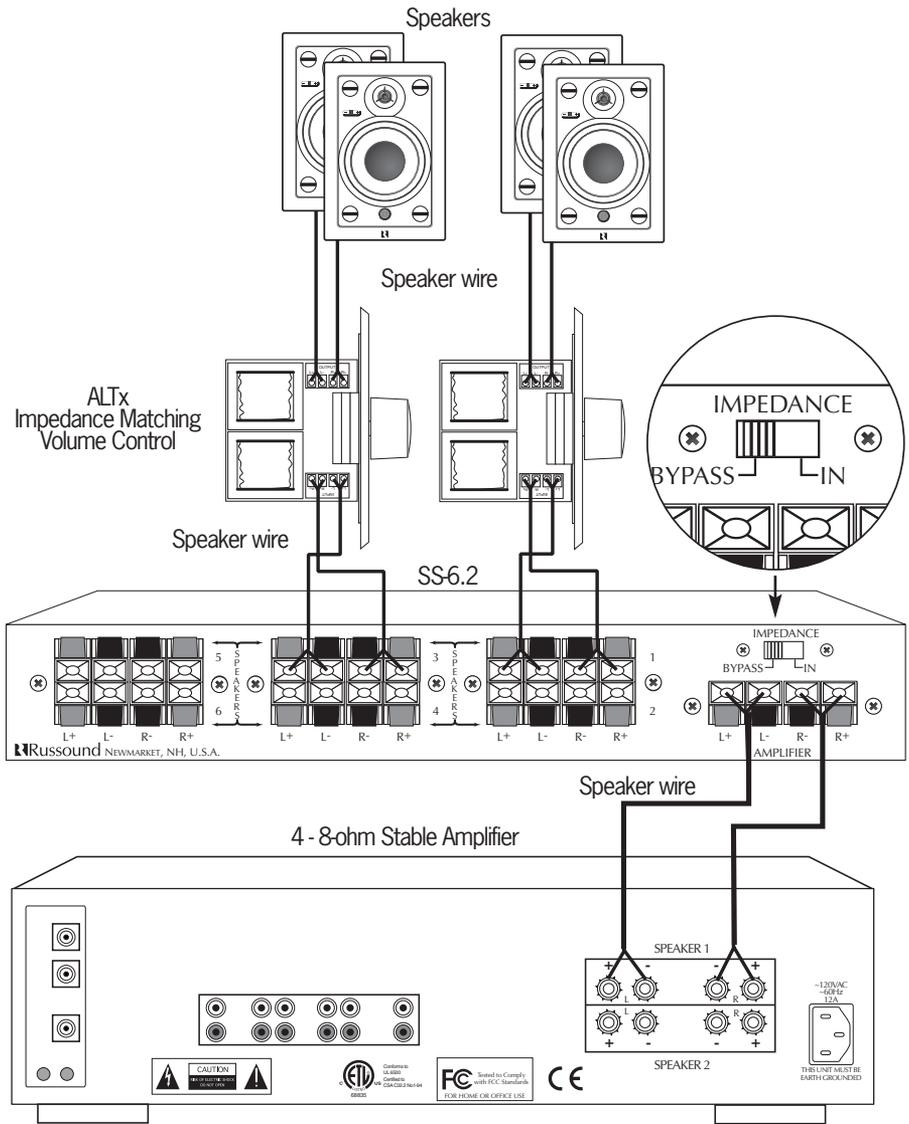# Speaker Connection

With internal impedance matching
Using 4-conductor speaker wire (16-12 gauge), connect the first pair of speakers to the Speaker 1 inputs on the SS-4.2/6.2. Strip off 1/4" of insulation from the wire and tightly twist the copper conductor to eliminate loose or frayed ends. Press down the spring terminal tab of the SS-4.2/6.2 speaker 1 output and insert the wire. Connect the other end of the wire to each speaker, being careful to keep channel identity and polarity consistent.

Repeat the procedure for each pair of speakers that will be connected to the SS-4.2/6.2.

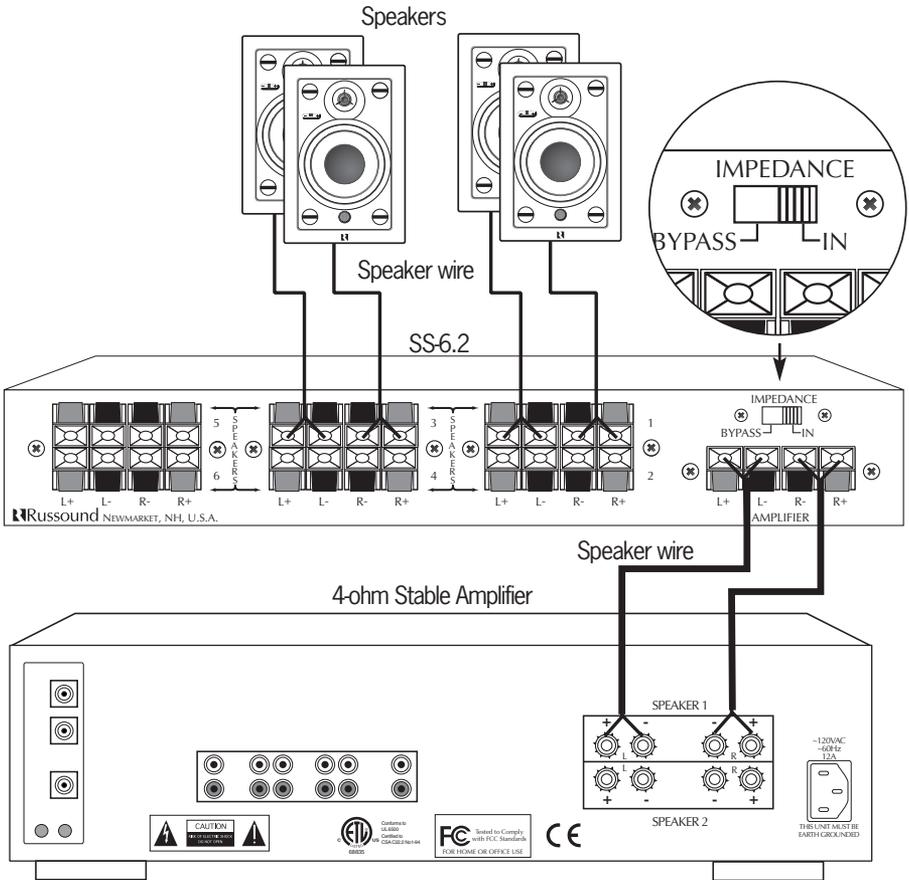With external impedance matching volume controls
Note: The recommended volume controls for the SS-4.2/6.2 are the Russound series LPTx and ALTx. Consult the instruction manual of the impedance matching volume control to determine the correct impedance matching settings to employ for the specific amplifier and speakers.

Using 4-conductor speaker wire (16-12 gauge) connect one end of the wire to the speaker output of the SS-4.2/6.2. Connect the other end of the wire to the input connector of the impedance matching volume control. Using a section of 2-conductor (16-12 gauge) speaker wire, connect the wire from the output of the volume control to each speaker.

Speakers

Speaker wire

ALTx
Impedance Matching
Volume Control

IMPEDANCE

BYPASS — — IN

Speaker wire

SS-6.2

IMPEDANCE

BYPASS — IN

5 S P E A K E R S 6

3 S P E A K E R S 4

1

2

L+   L-   R-   R+

L+   L-   R-   R+

L+   L-   R-   R+

L+   L-   R-   R+
AMPLIFIER

Russound NEWMARKET, NH, U.S.A.

Speaker wire

4 - 8-ohm Stable Amplifier

SPEAKER 1

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

Conforms to
UL6500
Certified to
CSA C22.2 No.1-94

FC Tested to Comply
with FCC Standards
FOR HOME OR OFFICE USE

CE

SPEAKER 2

~120VAC
~60Hz
12A

THIS UNIT MUST BE
EARTH GROUNDED

Typical connections with external impedance matching
(Impedance switch set to BYPASS)

Impedance matching volume controls are connected between the SS-6.2 and
the speakers, providing external impedance matching. Impedance matching
devices are required for all speakers regardless of ohm rating.

Typical connections with internal impedance matching (Impedance switch set to IN)

With internal impedance matching (impedance switch set to IN, speakers are connected directly to the SS-6.2 with no need for additional impedance matching volume controls.

Room Labels

Choose the appropriate room label from the included label sheet and place it above the appropriate switch on the front panel of the SS-4.2/6.2. The labels are non-adhesive and slide into a groove machined into the aluminum front panel. This allows for easy re-assignment.

Technical Specifications

Power Handling:	**SS-4.2** 200 W/CH peak, 100 W/CH RMS
	SS-6.2 200 W/CH peak, 70 W/CH RMS
Frequency Response:	+/- 0dB 20Hz to 20kHz
Wire:	16 AWG to 12 AWG standard speaker wire
Dimensions:	**SS-4.2** 8.5"W X 1.80"H X 6.25"D
	(216 x 45 x 159 mm)
	SS-6.2 11.5"W X 1.80"H X 6.25"D
	(292 x 45 x 159 mm)
Weight:	**SS-4.2** 2.75 lb.(1.2 kg)
	SS-6.2 3.5 lb. (1.6 kg)

Warranty

The Russound SS-4.2 and SS-6.2 are fully guaranteed against all defects in materials and workmanship for Ten (10) years from the date of purchase. During this period, Russound will replace any defective parts and correct any defect in workmanship without charge for either parts or labor.

For this warranty to apply, the unit must be installed and used according to its written instructions. If service is necessary, it must be performed by Russound. The unit must be returned to Russound at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damage resulting from abuse or from servicing by an agency or person not specifically authorized in writing by Russound.

This Warranty does not cover:

- Damage caused by abuse, accident, misuse, negligence, or improper installation or operation
- Power surges and lightning strikes
- Normal wear and maintenance
- Products that have been altered or modified
- Any product whose identifying number, decal, serial number, etc. has been altered, defaced or removed

Russound sells products only through authorized Dealers and Distributors to ensure that customers obtain proper support and service. Any Russound product purchased from an unauthorized dealer or other source, including retailers, mail order sellers and online sellers will not be honored or serviced under existing Russound warranty policy. Any sale of products by an unauthorized source or other manner not authorized by Russound shall void the warranty on the applicable product.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, the unit must be shipped to Russound at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the unit in a corrugated container with at least three (3) inches of resilient material to protect the unit from damage in transit.

Before returning a unit for repair, call Russound at (603) 659-5170 for a Return Authorization number. Write this number on the shipping label and ship to:

Russound
ATTN: Service
5 Forbes Road
Newmarket, NH 03857

Due to continual efforts to improve product quality as new technology and techniques become available, Russound/FMP, Inc. reserves the right to revise system specifications without notice.

Russound®

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