Technical Information

- Power Rating: 126W, 42W RMS, continuous
- 2-5/8"Wx1-3/4"Hx2-5/8"D • Dimensions: (fits standard double-gang junction box)
- Connectors:
- Removable screw type Accepts up to 14 gauge wire • Attenuation: 12 steps, including "off"

Total attenuation of 43dB Wiring Instructions (Refer to Diagram) CAUTION: DO NOT REVERSE THE INPUT AND **OUTPUT CONNECTIONS!**

- STEP 1: Strip about 1/4" of insulation from the ends of all wires to be connected to the attenuator. If necessary, twist the exposed conductors to ensure that no loose strands exist.
- STEP 2: Connect the leads from the "A" AMPLIFIER to one of the connectors labeled INPUT, with the left L+ and L- wires inserted in the appropriately marked openings in the plug. Tighten the screws firmly, making sure that the exposed bare wire is engaged, not the insulation!



Connection Diagram

- NOTE: To avoid problems with certain types of amplifiers employing bridging outputs or isolated grounds, the L and R (-) grounds are separate. If a 3 wire system or common ground amplifier is used, the L- and the Rinputs of the ACP-1 should be jumpered together. If one channel ground is open, that channel will appear to drop out when the attentuation control is rotated. The L- and the R- connections are placed adjacent to facilitate such a connection, and also reduce chances for troublesome shorts.
- STEP 3: Connect the leads from the "B" Amplifier to the remaining connector marked INPUT in the same manner described in STEP 2 and the following note, if applicable.
- STEP 4: As outlined in STEP 2, connect the Speaker wires to the connector labeled OUTPUT, observing channel and polarity identification.
- STEP 5: Insert the modular connectors into the appropriate sockets on the PC board. Make sure that the plugs marked INPUT (from amp) connect to the sockets marked INPUT (from amp) on the attenuator! Insert firmly until assembly is fully seated and the locking tabs are engaged.
- STEP 6: Install the completed assembly in the junction box. Insert carefully to avoid excessive strain on the plugs. If necessary, pre-dress the wires for easier mounting.

(1) Volume Control (3) Plugs (4) Mounting Screws (1) Instruction

Limited Warranty

The Russound ACP-1DU is fully guaranteed for a lifetime warranty from the date of purchase against all defects in materials and workmanship. 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 under the terms of the warranty. Russound assumes no responsibility for defects resulting from abuse or servicing performed by an agency or person not specifically authorized in writing by Russound. Damage to or destruction of components due to improper use voids the warranty. In these cases, the repair will be made at the owner's expense. To return for repairs, the unit must be shipped to Russound at the owner's expense, along with a note explaining the nature of the service required. Be sure to pack in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.



Russoun ACP-1DU Instruction Manual



Wall Mount Stereo Volume Control with A / B Switch

Parts List

Product Overview

The Russound ACP-1DU is a wall mount UltraMatch™ stereo volume control combined with an A / B source selector switch. This product allows you local selection and volume control of one of two amplifiers (sources) through a single pair of speakers, available in a Decora® style double-gang plate.

The volume control is ideal for residential or commercial application. It can be used with 4 to 8 Ohm speakers.

The A / B switch is equipped with screw terminal modular connectors for ease of installation. These connectors may be pre-wired separately and simply plugged in. The interlocking feature assures that the connection is safe and permanent. Connectors are packaged and supplied separately.

UltraMatch™

The UltraMatch™ Volume Control you have just purchased connects between the speaker outputs of an amplifier or receiver and a pair of speakers. The 1X setting allows the volume control to be used as a standard control. The 2X, 4X, and 8X settings allow it to be used as an UltraMatch[™] control. The UltraMatch[™] volume control provides a method of matching the minimum output impedance of the amplifier or receiver, in addition to adjusting volume. It eliminates the need for a speaker selector or impedance matching equipment. The volume is adjusted by attenuating the amplifier signal output of the control to the speakers. All Russound Volume Controls are manufactured using a high-guality autoformer design which provides long life, excellent frequency response, no heat build-up, and maximum power transfer from the amplifier to the speakers. All Russound volume controls conform to UL Standard 1492 First Edition, and for Canada Certified to CSA Standard 22.2 No. 1-M94. This certification assures that your volume control has been designed and tested for safety.

Russound UltraMatch[™] volume controls eliminate the need for a speaker selector. By determining the drive capability of the amplifier with a few simple calculations, we can determine the number of speakers the system can safely operate.

DETERMINING THE PROPER JUMPER SETTING FOR IMPEDANCE MATCHING

The jumper must be set in a position that correctly multiplies the impedance of the system to a level that is equal to or greater than the impedance of the amplifier. The jumper setting can be determined using the following simple steps

- Determine the amplifier's minimum impedance. The amplifier's minimum impedance is usually found following Wattage and Frequency Response in the amplifier's specification page of the manual. It may also be listed on the back panel of the amplifier near the speaker terminals. AC impedance is measured in ohms.
- Identify the correct impedance-matching chart according to the amplifier's minimum impedance. There are two impedance matching charts, one for 8 ohm amplifiers and one for 4 ohm amplifiers. Choose the chart that describes your amplifier. If your amplifier is 6 ohm stable, use the 8 ohm chart.
- 3. Determine the impedance for each pair of speakers by referring to its manual.
- 4. Determine the total number of 4 ohm pairs of speakers. (rows on charts)
- 5. Determine the total number of 8 ohm pairs of speakers. (columns on charts)
- 6. Follow the appropriate row and column to determine jumper settings. (ex. see fig 2)

Fig 2 Impedance Matching Charts For UltraMatch™



Example: The table to the right shows an 8 ohm minimum impedance amplifier with 1 pair of 4 ohm speakers and 3 pair of 8 ohm speakers. The chart indicates the jumper setting should be set at 8X

CONSIDERATIONS

- 1. Make sure that your amplifier has adequate wattage for the number of speakers. Watts per channel divided by the number of pairs should equal or exceed the individual speaker's minimum wattage requirements.
- 2. You must use an UltraMatch[™] volume control for each pair of speakers.
- 3. Every jumper setting must be set on the same setting throughout the system.
- A minimum speaker load of 4 ohms can be connected to the output of each UltraMatch[™] volume control.

EZB CONNECTING BLOCKS

The EZB-1 and EZB-2 connecting blocks are Russound accessories that simplify connections of multiple volume controls and speaker pairs. The EZB-1 is a neat, compact wiring device capable of connecting four volume controls to an amplifier's outputs. The EZB-2 expands the EZB-1 to another 4 volume controls. Multiple EZB-2's can be used to expand the system to sixteen volume controls.



Jumper

Settings On

Circuit Boards