

The PRO1163 Volume Control is a wall-mount stereo speaker-level volume control with impedance matching. It connects between the speaker outputs of an amplifier or receiver and a pair of speakers. The PRO1163 is 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.

**IMPORTANT:** Before installation, review the manuals included with each component in your system. If you are unsure of any of the installation procedures described herein or elsewhere, consult a professional electronics installer.

**PRO1163 FEATURES**

- 1. Rotary control of volume level and speaker on/off
- 2. Impedance matching
- 3. Fits standard faceplates

**SPECIFICATIONS**

Power Handling:  
 .....300 watts max; 100watts RMS continuous  
 Input Impedance:  
 ..... Config. to 1x, 2x, 4x, or 8x impedance matching  
 Quick Connect Terminals:  
 .....Accept up to 12-gauge wire  
 Attenuation:  
 .....12 steps including off; total attenuation 54 dB  
 Frequency Response:  
 .....20 Hz ~ 20 kHz, +/- 2 dB at rated power  
 Mounting:  
 .....Fits most single-gang junction boxes  
 Dimensions:  
 ..... 42W x 103H x 103D mm

**INSTRUCTIONS**

**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 one PRO1163 volume control for each pair of speakers.
- 3. Every switch setting must be set on the same setting throughout the system.
- 4. A minimum speaker load of 4 ohms can be connected to the output of each PRO1163 volume control.

**SET THE CORRECT SWITCH POSITION FOR IMPEDANCE MATCHING**

**Important:** A minimum speaker load of 4 ohms can be connected to the output of each PRO1163 volume control.

The switch 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 amp.

- 1. Determine the amplifier's minimum impedance (as listed in its owner’s manual or on its back panel).
- 2. Choose the correct impedance-matching chart (8 ohm or 4 ohm) shown on the 3rd page. If your amplifier is 6-ohm, use the 8-ohm chart. Count pairs of 6-ohm speakers as 4-ohm pairs.
- 3. Determine the total number of 4-ohm pairs of speakers (rows on charts). Count pairs of 6-ohm speakers as 4-ohm pairs.
- 4. Determine the total number of 8-ohm pairs of speakers (columns on charts)
- 5. See the switches on all of the controls (PRO1163) to the same position (1x, 2x, 4x, or 8x) as shown in the illustrations on the 3rd page.

**WIRING INSTRUCTIONS**

*Type of Speaker Wire*

For most applications, we recommend you use 16 or 18 gauge, stranded copper speaker wire for the PRO1163 speaker connections. For wiring runs longer than 100 feet, 12 gauge wire is recommended. Using speaker wire larger than 12 gauge for PRO1163 Volume Controls is not recommended as the wire may not fit into the connectors.

*Amplifier & Speaker Connections*

- 1. Connect the leads from the amplifier’s speaker outputs to the connector labeled INPUT on the PRO1163. Make sure to maintain polarity (+, -) as well as channel identification (Left, Right).

**CAUTION:** Do not reverse the input and output connections!!

**NOTE:** A majority of receivers are designed to operate at a rating of 8 ohms. On receivers that offer A and B speaker outputs, the A and B connections share the same amplifier. It is important to note, due to the way many receivers are wired, that when using impedance matching devices, such as PRO1163 volume controls, it is recommended to wire all speakers to the A output.

- 2. Connect the OUTPUT on each PRO1163 volume control to a pair of speakers.

## INSTALLATION

The total mounting depth from the wallplate/faceplate to the back of the PRO1163 is 3.2". You must use a minimum of a standard light switch plaster ring (P-Ring) or a standard 20 cu. in. (or larger) electrical box. Suitable P-Rings and electrical boxes are available from your local electrical supply company. Using the P-Ring during new construction is best because it gives you unobstructed access to the full depth of the wall (some building codes require that wall devices be enclosed in electrical boxes; check your local building code).

Do not install the PRO1163 into electrical boxes with 110V devices. Speaker wires can act as an "antenna" for electrical noise.

Locating speaker wires too close to a light switch or dimmer switch may cause a "humming" or "buzzing" sound to be heard through the speakers. If you must locate the Volume Control near electrical devices, install it in a separate metal electrical box, ground the box to the electrical system ground, and route the speaker wires several feet away from the electrical wiring.

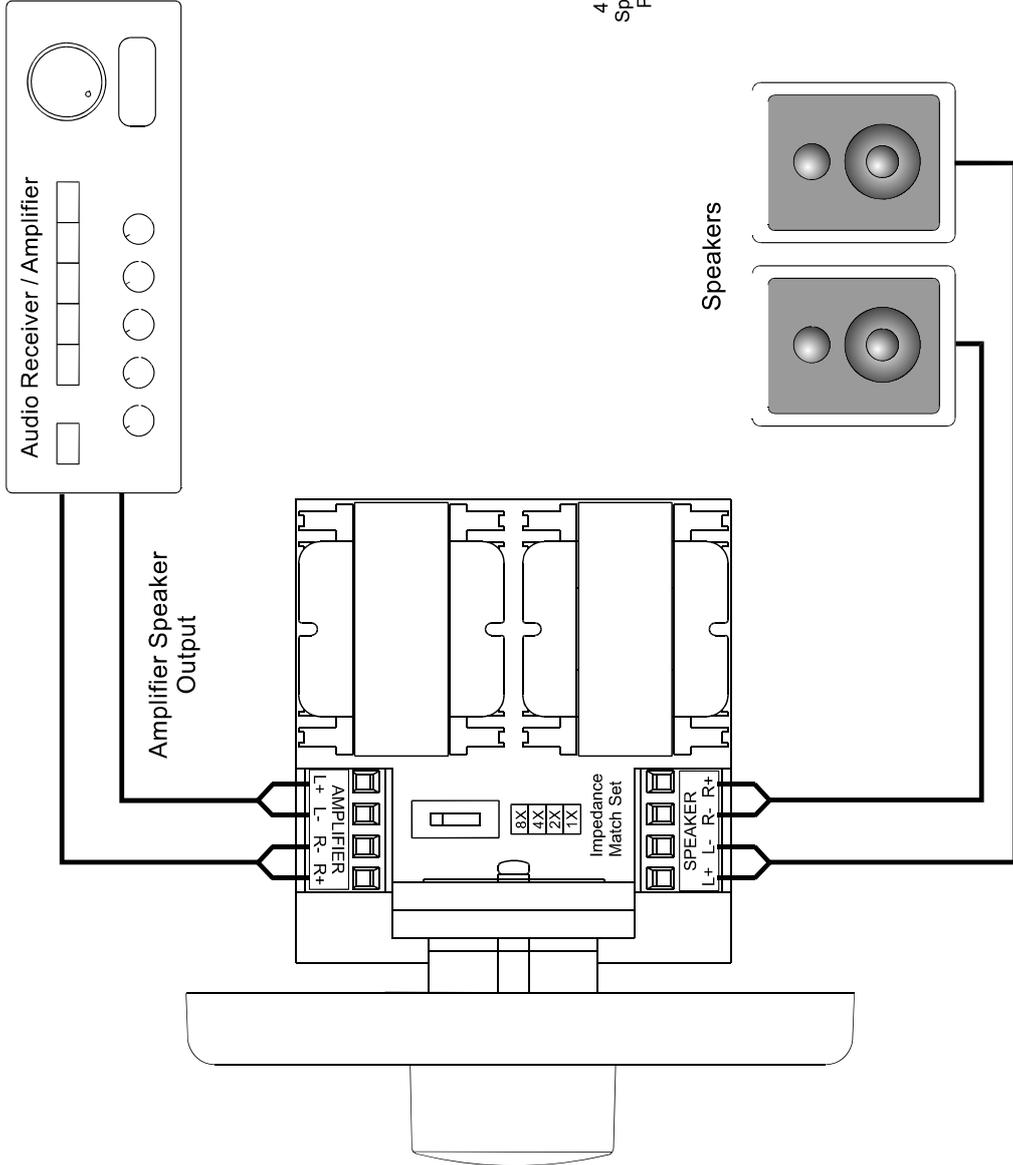
Install the completed PRO1163 assembly in the electrical box. Insert carefully to avoid excessive strain on wire connections. Taking the time to feed excess wire out the back of the electrical box will help you with the final mounting.

## OPERATION

1. Make sure your audio receiver is OFF and set its volume all the way down.
2. Set the PRO1163 volume to maximum (fully clockwise).
3. Make certain the receiver volume is all the way down. Then turn on the receiver and select a music source, such as tuner or CD player.
4. Slowly turn up the receiver volume and set it to a comfortable (not maximum) listening level. Be careful not to overdrive your receiver. If the sound becomes muddy or distorted, you have reached the limit of your receiver's volume capability and should quickly reduce the volume to avoid damaging your speakers.

**NOTE:** 12 o'clock (50%) on most receivers is full volume. A receiver that is being driven beyond its potential will produce DC voltage (clipping) which will not pass through a transformer, resulting in improper signal transfer and possible amplifier shutdown or damage.

5. Use the PRO1163 to adjust the speaker volume to the desired listening level.
6. You can turn off the speakers in each room by turning the knob on the PRO1163 fully counter-clockwise.



Amplifier's minimum speaker load is 8 ohms

		8 ohm Speaker Pairs								
		0	1	2	3	4	5	6	7	8
4 ohm Speaker Pairs	0	1X	2X	4X						
	1	2X	4X							
	2	4X								
	3									
	4									

Amplifier's minimum speaker load is 4 ohms

		8 ohm Speaker Pairs																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4 ohm Speaker Pairs	0	1X																
	1	2X																
	2	4X																
	3																	
	4																	
	5																	
	6																	
	7																	
	8																	

Example: A 4 ohm minimum impedance amplifier with 2 pairs of 4 ohm speakers and 5 pairs of 8 ohm speakers. The chart indicates the switch setting should be at 8X.