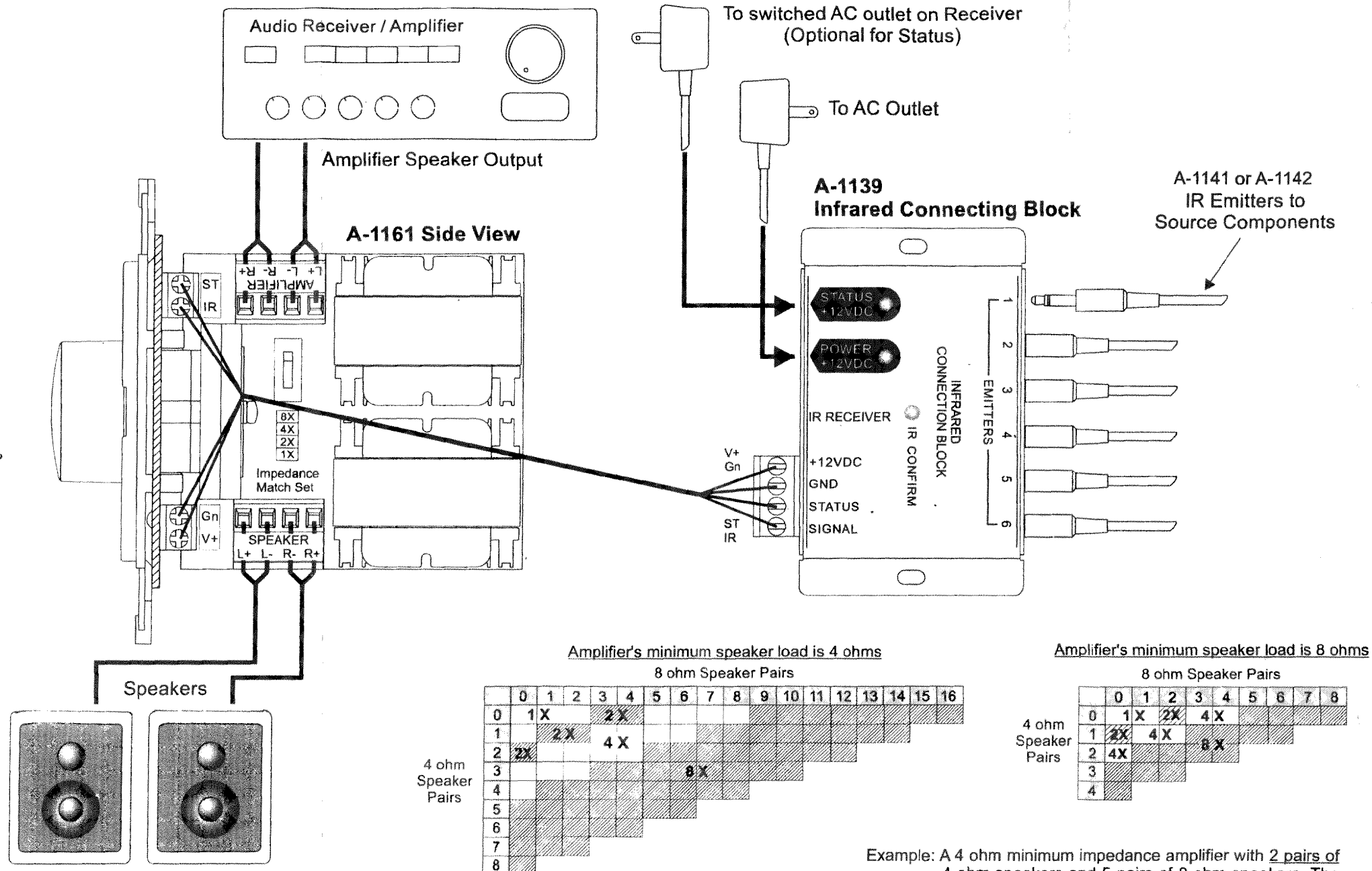




Example: A 4 ohm minimum impedance amplifier with 2 pairs of 4 ohm speakers and 5 pairs of 8 ohm speakers. The chart indicates the switch setting should be at 8X.

The A-1161 Volume Control is a wall-mount stereo speaker-level volume control with built-in IR Receiver. It connects between the speaker outputs of an amplifier or receiver and a pair of speakers.

The A-1161 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.

A-1161 FEATURES

1. Rotary control of volume level and speaker on/off
2. IR receiver
3. LED indicator for source component on/off status
4. Impedance matching
5. Fits standard faceplates

SPECIFICATIONS

Volume Control Component

Power Handling (/ch):	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
Weight:	456g

Infrared Component

Receiver Frequency:	34 kHz to 40 kHz
Transmit Frequency:	34 kHz to 40 kHz
Range On-Axis:	55 ft. to 80 ft.
Range off-Axis:	30 ft.
Main Power:	12 VDC, 31 mA max.
Status Power:	12 VDC, 3 mA max.
Wire Requirements:	2 twisted pair, with or without shield

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 A-1161 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 A-1161 volume control.

A-1139 IR CONNECTING BLOCK (OPTIONAL)

The A-1139 IR connecting block allows IR signals received by the A-1161 to be easily distributed to multiple source components via A-1141 and/or A-1142 emitters.

SET THE CORRECT SWITCH POSITION FOR IMPEDANCE MATCHING

Important: A minimum speaker load of 4 ohms can be connected to the output of each A-1161 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)
4. Determine the total number of 8-ohm pairs of speakers (columns on charts)
5. Set the switches on all of the controls (A-1161) 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 A-1161 speaker connections. For wiring runs longer than 100 feet, 12 gauge wire is recommended. Using speaker wire larger than 12 gauge for A-1161 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 A-1161. 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 A-1161 volume controls, it is recommended to wire all speakers to the A output.

2. Connect the OUTPUT on each A-1161 volume control to a pair of speakers.

IR Receiver and Status Line Connections

1. Connect the IR and Status wires to the A-1139 connecting block as illustrated. The A-1139 input connector is designed to accept up to 12 AWG wire. If you are using multiple A-1161 volume controls, use thinner 24 AWG wire and bundle the IR and Status wires together.
2. Use two-pair shielded wire (or equivalent) to extend IR and status wires to the IR connecting block for best results.

INSTALLATION

The total mounting depth from the wallplate/faceplate to the back of the A-1161 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 A-1161 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 A-1161 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 A-1161 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 A-1161 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 A-1161 fully counter-clockwise.

