



The Leader in Architectural Audio™

PN.33-3052 4.03

INTRODUCTION

The AF12 is a 200 watts (RMS) impedance matching system that allows the connection of up to 12 pairs of 8 ohm speakers to one amplifier or receiver, while maintaining a safe operating impedance (nominal 8 ohms at the amplifier). Screw-less quick connectors allow for speedy install of this device.

IMPORTANT NOTE: TURN YOUR AMPLIFIER/RECEIVER OFF BEFORE ATTEMPTING THE FOLLOWING HOOK-UP PROCEDURES.

AMPLIFIER RECOMMENDATION

It is possible to use the Sonance AF12 with an amplifier or receiver from any manufacturer provided the amplifier delivers sufficient power to drive the speakers. Because of the differences in amplifiers and receivers from any manufacturers, Sonance recommends using an amplifier with a minimum power rating of 50 watts per channel.

AF12 PLACEMENT

A major benefit of the AF12 is the versatility in placement options. Because there is no house current (AC) required for operation, it may be placed anywhere that is convenient. Make sure to place the unit somewhere that is accessible for servicing or wiring changes.

With no AC required, the AF12 can be installed anywhere that is convenient for connection of all speakers, for example, in a wall, attic, basement, utility room, soffits, and crawl spaces.

WIRING

Important: Always use high grade Sonance speaker wire. We recommend at least 18 gauge wire for runs of 50 feet or less, 16 gauge wire for runs of 50-100 feet, and 14 gauge wire for runs over 100 feet.

SOURCE CONNECTION

Connect the left and right speaker output of the receiver or amplifier to the left and right inputs of the AF12. Make sure to match positive (+) and negative (-) polarities. Simply strip off 1/2" of the wire jacket and push it into the screw-less quick connector. To remove a wire, simply push the black tab and pull the wire out.

SPEAKER CONNECTION

Connect your first set of speakers to the terminals marked Output 1. Continue this process in succession for up to 12 pairs of speakers. Make sure to match positive (+) and negative (-) polarities.

INSTALLATION INSTRUCTIONS

AF12 IMPEDANCE MATCHING SYSTEM

PAIRS OF 8 OHM SPEAKERS	TAP POSITION
2-3	4 ohms
4-7	2 ohms
8-12	1 ohm

Figure 1 - Impedance Chart

POSITIONING OF OUTPUT TAPS

Impedance of the speaker system is set manually by the installer. A set of output taps are located on the AF12 board. The installer sets the proper position of the taps according to the total speaker impedance. Each impedance setting is shown (See Figure 1) with both an impedance value and speaker quantity for reference. Simply place the push connection in the desired location.

USING OTHER THAN 8OHM SPEAKERS

If speakers other than nominal 8 ohm speakers are used in the system, it is necessary to calculate their total impedance of the speakers used.

When using an 8 ohm pair of speakers use the value .125

When using a 6 ohm pair of speakers use the value .167

When using a 4 ohm pair of speakers use the value .25

1. Add up the valuse of the speakers in the system. For example, if the system had four pairs of 8 ohm speakers, one pair of 6 ohm speakers and one pair of 4 ohm speakers the formula would be:

$$(4 \times .125) + (1 \times .167) + (1 \times .25) = .917$$

2. Divide 1 by this number (1 / .917 = 1.09) The answer is the total resistance of the speaker system.

For answers between:

8.0 and 4.0, the proper output tap position is the 4 ohm position.

4.0 and 2.0, the proper output tap position is the 2 ohm position.

2.0 and 1.0, the proper output tap position is the 1 ohm position.

SPECIFICATIONS

Power Rating:	200 Watts RMS max input/ch 350 Watts program max input/ch
Switch Type:	12 Position light touch silent rotary switch
Terminal Type:	Screw-less quick connectors 12-18 AWG
Frequency Response:	20-20KHz \pm 1dB
Speaker Impedance:	8 Ω
Dimensions (WxHxD)	1-1/2" x 4" x 3" (38mm x 102mm x 76mm)

TECHNICAL ASSISTANCE

If you any have questions about the operation or installation of your Sonance volume controls, please call our Technical Assistance Department on any business day at:

(800) 582-0772 or (949) 492-7777; from 7 a.m. to 5 p.m., PST.

OBTAINING SERVICE

If your product should need repair or service, contact your authorized Sonance dealer for help or use the following procedure:

1. Prior to calling, note the product's model number, purchase date, and original dealer's name and address.

2. Contact our Technical Assistance Department at the above number(s) and describe the problem the unit is experiencing. If applicable, they will issue a Return Authorization Number.

IMPORTANT: Do not return the unit to Sonance without first obtaining a Return Authorization Number.

3. If you're directed to return the unit to Sonance for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. Note: it is best if you place it into an additional outer "overcarton" before shipment to minimize a chance of theft in shipment.

4. Contact United Parcel Service, Federal Express, or RPS to arrange prepaid (not collect) shipping. Do not use the U.S. Mail Service.

IMPORTANT: Freight collect shipments will be refused.

5. Write the Return Authorization Number on the outside of the shipping carton. For warranty work, please include a copy of the original bill of sale inside the package.

6. Ship the packaged unit to:

Returns Department

Sonance
212 Avenida Fabricante
San Clemente, CA 92672-7531

WARRANTY COVERAGE (USA ONLY)

If, within five (5) years from the date shown on the bill of sale, the unit fails, due to a defect in workmanship or material, Sonance will, at its option and at no charge, repair or replace the components of such unit which prove to be defective.

For this warranty to be effective, the bill of sale must show that the unit was purchased from an "Authorized Sonance Dealer" and must list the price paid. This warranty shall apply exclusively to the original purchaser and shall not apply to units purchased for industrial or commercial use.

Furthermore, this warranty shall not apply if:

1. Damage to the unit was caused by accident, abuse, or misuse;
2. The unit was opened, modified, or repaired by unauthorized personnel; or
3. The unit was not used as outlined in the operating instructions.

EXCLUSIONS AND LIMITATIONS

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose, or otherwise. The warranty is limited to Sonance products registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product.

Sonance shall, in no event, be liable for incidental or consequential damages arising from any breach of this warranty or otherwise. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.