



AO-520 & AO-620 OUTDOOR SPEAKERS

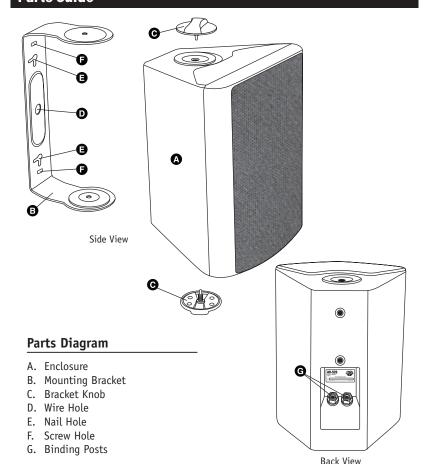
Installation & Operation Manual

Introduction

Congratulations on your purchase of RBH Sound outdoor speakers! Your speakers are the result of many years of research and development dedicated to producing high quality products for home audio and audio/video systems.

This manual contains features, setup recommendations and specifications for the AO-520 and AO-620 outdoor speakers. We recommend you thoroughly read through the material contained in this manual before connecting your speakers. This will ensure you have a good understanding of how to setup your speakers for optimum performance and allow for years of listening enjoyment.

Parts Guide



1

Features

The cabinet of the AO-520 and AO-620 outdoor speaker is constructed of impact resistant fortified ABS which is sealed to provide resistance from the natural elements of the weather. The angled cabinet back is designed for easy placement into a corner. All hardware parts are made from brass, aluminum or stainless steel and the binding posts are plastic to avoid corrosion.

For high frequencies, a 1-inch mylar dome tweeter is used. This tweeter uses Ferro Fluid™ liquid cooling to allow greater power handling. A long throw 5¼ or 6½-inch poly graphite woofer with a butyl rubber surround is used for midrange and bass reproduction.

Steep acoustic slope crossovers are used to integrate drivers. The use of steep crossover slopes allows high power handling, minimizes driver interaction anomalies, and maximizes the clarity with which each driver is able to produce its respective frequency band.

The bracket allows the speaker to be hung either horizontally or vertically, and can be mounted several different ways and swivels for optimum placement.

Break-in Period

Plan on giving your speakers 10-15 hours of playing time to adequately "break in." During this time period the driver suspension will loosen. The result will be an increase in low frequency response and improved definition.

NOTE: This is an important step that is most often disregarded. Allowing your speakers the specified "break in" period can prolong the life of your speakers and enhance their tonal qualities as mentioned above.

Operation

We recommend an amplifier with an output power rating of 25-100 watts per channel. This will help to protect the speaker from being under or over driven, which could cause permanent damage.

When listening to the speakers outdoors, keep in mind that there are very few walls to reinforce the sound. Therefore, be careful not to drive the speakers beyond what they are capable when trying to obtain a desired volume level. You will be able to determine audibly when the speaker is being over driven by the "break-up" or distortion that is coming from the speaker.

System Setup and Placement

In order to extract the best possible sound from your speaker system, it is important to determine where the speakers will sound best in your listening area. Reflections from the ground and walls influence the balance, imaging and overall sonic quality at the listening position. We suggest you experiment with speaker placement to determine which location offers the best overall sound and protection from direct weather elements.

System Setup and Placement (continued)

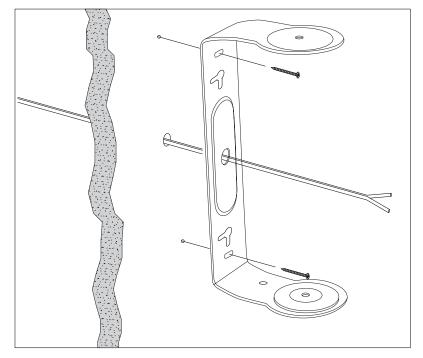
The distance from the listening position to each speaker should be close to the distance that separates the two main speakers. Angling the speakers inward towards the listening position may give a more spacious and realistic sound stage.

Placing the speakers in a corner or under an eave will provide reinforcement for the bass frequencies, resulting in higher bass output. Placing the speakers away from any corners or walls will provide the least amount of reinforcement, resulting in lower bass output.

Installation

As mentioned earlier in this manual, the bracket has the ability to be mounted a variety of different ways. To elaborate on this, it may be mounted with either nails or screws, horizontally or vertically. The hole in the center of the bracket allows speaker wire through so it may be properly attached to the speaker.

It is best to consult your local RBH Sound dealer or installer with any further questions.



Mounting and Connections

- A. The A0-520 and A0-620 speaker can be mounted either horizontally or vertically. Hold the bracket against the mounting surface, so you can mark the locations of the mounting holes, and the wire hole (see the Parts Guide on page 1).
- B. Drill corresponding pilot holes for the included mounting screws or nails (not included), and a hole large enough for speaker wire to pass through.
- C. Pull speaker wire through the hole and through the bracket, aligning the bracket with the holes.
- **D.** Use hardware to attach the bracket to the mounting surface.
- **E.** Use the bracket knobs to attach the speaker to the bracket, being careful to not tighten the knobs; this will allow the speaker to be angled slightly so the rear binding posts are accessible (see the Parts Guide on page 1).
- **F.** Connect one wire to the black terminal and one to the red terminal, paying close attention to the markings on the wires for proper polarity. Each speaker must be connected to the amplifier in the same way.
- **G.** Adjust the speaker for desired position and tighten the bracket knobs.

Troubleshooting

Situation:	Probable Cause:	Solution:
No sound from speakers	Speaker wire not connected	Make sure wire is connected at both the speaker and the amplifier observing proper polarity
	Speaker selector on amplifier is not on	Activate proper selector on amplifier
No sound from one speaker	Balance control on receiver or pre-amp is not centered	Place balance control in the center
	Speaker wire not securely connected	Check all connections at amplifier and speakers
Very little bass and/ or imaging	Speakers are wired out of phase	Check entire system for proper polarity and make adjustments as necessary

Troubleshooting

Model	A0-520	A0-620
Frequency Response:	60 Hz - ± 20kHz 3 dB	60 Hz - 20kHz ±3 dB
Sensitivity:	88 dB (2.83V @ 1 Meter)	89 dB (2.83V @ 1 Meter)
Recommended Power:	10-80 Watts	10-100 Watts
Drive Units:	5¼" (132mm) Poly Graphite Woofer 1" (25mm) Mylar Dome Tweeter	6½" (164mm) Poly Graphite Woofer 1" (25mm) Mylar Dome Tweeter
Crossover Frequency:	2,500 Hz	2,500 Hz
Crossover Slope:	12dB/Octave	12dB/Octave
Impedance:	8 Ohms	8 Ohms
Cabinet Color:	Fortified ABS/Black or White (Includes Styled End Caps)	Fortified ABS/Black or White (Includes Styled End Caps)
Grille:	Black or White Aluminum Micro-perf	Black or White Aluminum Micro-perf
Dimensions:	7.5" W x 9.75" H x 6.5" D (190mm W x 247mm H x 165mm D)	9.5" W x 11" H x 7.5" D (241mm W x 279mm H x 190mm D)
Weight with Bracket:	5 lbs (2.26 kg) each	6 lbs (2.72 kg) each

Warranty

Your RBH Sound Outdoor speakers are covered by a limited warranty against defects in materials and workmanship for a period of 5 years from the original date of purchase. This warranty is provided by the authorized RBH Sound dealer where the speaker was purchased. Warranty repair will be performed only when your purchase receipt is presented as proof of ownership and date of purchase. Defective parts will be repaired or replaced without charge by your dealer's store or by RBH Sound authorized locations to service RBH Sound products. Charges for unauthorized service and transportation cost are not reimbursable under this warranty. This warranty becomes void if the product has been damaged by alteration, misuse or neglect. RBH Sound assumes no liability for property damage or any other incidental or consequential damage whatsoever which may result from the failure of this product. Any and all warranties of merchantability and fitness implied by law are limited to the duration of this express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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