

# RBS-52

#### 2-WAY REFERENCE BOOKSHELF USER'S GUIDE



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The Sound That Will Move You

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# **Safety Instructions**

#### Safety First

This documentation contains general safety, installation, and operating instructions for the RBS Reference Bookshelf Speakers. It is important to read this user's manual before attempting to use this product. Pay particular attention to the safety instructions.

#### Symbols Explained:



Appears on the component to indicate the presence of uninsulated, dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.



Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in injury or death.



Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product.

Note:

Calls attention to information that is essential to highlight.







# Safety Instructions (continued)

- 1) Read these instructions in their entirety.
- 2) Store this manual and packaging in a safe place.
- 3) Heed all warnings.
- 4) Follow instructions (do not take shortcuts).
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. The grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments and accessories specified by the manufacturer.
- 12) Use only a compatible rack or cart for the final resting position.
- 13) Unplug this apparatus during lightning storms or when unused for a long period of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in a way such as: powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

# **Unpacking System Components**

- Keep the original carton and packing materials for future shipment or storage.
- Check for any visual signs of damage. If you encounter any concealed damage, consult your Earthquake Sound dealer before proceeding with unit installation.
- Retain the sales receipt as it establishes the duration for the limited warranty and provides information for insurance purposes.

#### Introduction

Thank you for purchasing the RBS Reference Bookshelf Speakers.

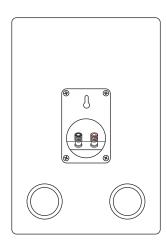
Engineered and designed to maintain high fidelity sound quality in a compact enclosure, each component of the RBS Reference Bookshelf Speakers was carefully selected to deliver just that.

The 1" silk dome NEO tweeters mounted on each of the RBS speakers were chosen for their fast response and higher flat bandwidth, allowing these bookshelf speakers to have better frequency range.

The 5.25" woofers installed in the RBS speakers use low mass carbon fiber cones that are rigid, allowing them to have low harmonic distortion. These woofers also utilize the patented PistonMax™ Technology to achieve more sound and up to 25% more accurate sound pressure level.

With an enforced bass reflex enclosure design (tuned to 40Hz), the RBS speakers have superb low frequency extensions without resonance. Gold plated binding posts ensure the highest possible signal transfer.





# **Placing Your RBS Speakers**

#### Front Speaker Placement

In a home theater system, front speakers are responsible for movies' sound tracks and dynamic actions. The front speakers need to sync the video event with the audio. For instance, when there is a moving vehicle from the left to the right of the screen, the sound should travel from the left front speaker to the right front speaker.

In a two channel stereo system, the front speakers are responsible for producing all of the sound: staging, imaging, and depth of field. Placing the speakers too close to each other will compromise the stage, while placing them too far from each other will break the images.

Ideally, front speakers should be placed at an equal distance from the TV and the primary listening spot (sweet spot). Together with the center channel speaker, they should form a slight arc with all three speakers at exactly the same distance from where you sit, as illustrated in Figure 1.

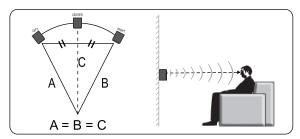
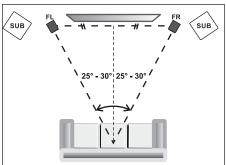


Figure 1. Front speaker placement

In an ideal home theater setup, the tweeters from all front speakers should have the same elevation as your ears while seated. Any deviation will work but it may reduce the performance. Make sure there are no solid objects (i.e. furniture) blocking the pathway of the sound traveling to your listening location.



**Figure 2.** Typical speaker & subwoofer placement in 2.1/2.2 theater system

# Placing Your RBS Speakers (continued)

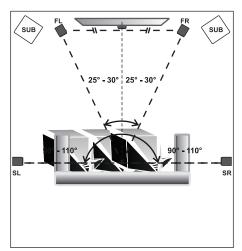
For better bass response, the back of the speakers need to be about 6 inches (15 centimeters) away from the wall.

#### Surround Speaker Placement

Surround speakers are there to envelop three dimensional sound that places you in the middle of the action. Ideally, your primary pair of surround speakers should be placed to the left and right of your listening position — either in line with it, or just behind it. They should form a 90°-110° angle with respect to your television. In a 7.1-channel system with more than two surround speakers, or if side placement is not available for your surrounds in a standard 5.1-channel setup, consider placement behind your listening position, facing the front of the room.

Surround speakers should be placed high enough so that the drivers do not fire directly at your ears when you're sitting down. As a rule of thumb, place them at ear level while you are in standing position. Most people tend to over amplify the rear speakers. This is not recommended as it can over power the front speakers. Most of the time, the rear speakers are relatively quiet. They simply come on when there are special effects.

Since every room has different acoustics, you might need to experiment with the speakers' aiming. You may get good results by pointing them at the ceiling or toward the rear corners of the room. If no side or rear walls are available for mounting your speakers, try placing these bookshelf speakers on speaker stands, slightly behind and to the sides of your listening position. Avoid aiming them directly at your listening position.



**Figure 3.** Typical speaker & subwoofer placement in 5.1/5.2 theater system

# **Specifications**

# **RBS-52**

Configuration	2-Way Bass Reflex
System Type	Passive Bookshelf
HF Driver	1" Silk Dome NEO Tweeter
LF/MF Driver	5.25" Carbon Fiber with patented PistonMax™ Technology
Frequency Response (±3dB)	30Hz - 20kHz
Crossover Frequency	3kHz (High Pass)
Amplifier Requirement	50 - 300 Watts
Sensitivity	90 dB
Nominal Impedance	8 Ohm
Weight (per speaker)	7.65 lbs (3.47 kgs)
Dimensions (H x W x D) including feet and grille	10 <sup>1</sup> / <sub>2</sub> " x 7 <sup>1</sup> / <sub>8</sub> " x 8 <sup>3</sup> / <sub>4</sub> " (266mm x 180mm x 222mm)

Specifications are subject to change without notice

# One (1) Year Limited Warranty Guidelines

Earthquake warrants the original purchaser that the speaker (product) is free from defects in material and workmanship, under normal and proper use, for a period of **one (1) year from the date of purchase** (as shown on the original sales receipt).

The one (1) year warranty period is valid **only if the product is purchased from an authorized dealer/reseller** and the warranty registration card is properly filled out and sent to Earthquake Sound Corporation.

#### (A) One (1) year limited warranty guidelines:

Earthquake pays for labor, parts and ground freight (only in US mainland) back to customer.

#### (B) Warning:

- Products (sent in for repair) that are tested by Earthquake technicians and deemed to have no problem will not be covered by the limited warranty. Customer will be charged a minimum of one (1) hour of labor (at ongoing rate) plus shipping charges back to customer.
- Each product sent in for repair must be packaged in its original packaging. Otherwise, repackaging charges will apply in addition to the labor, parts and shipping charges.

# (C) Earthquake agrees to repair or replace - at our discretion - all such defective products/parts subject to the following provisions:

- Defective products/parts have not been altered or repaired by anyone other than an Earthquake factory approved technician.
- Products/parts are not subjected to negligence, misuse, accident or damage by improper line voltage.
- Products/parts were used with incompatible products.
- The serial number or any part of the product altered, defaced or removed.
- Products/parts have been used in any way that is contrary to Earthquake's written instructions.

# (D) Warranty limitations:

Earthquake warranty does not cover products that have been modified or abused, including but not limited to the following:

- Damages to speaker cabinet and/or cabinet finish due to misuse, abuse or use of improper cleaning materials/methods.
- Bent speaker frame, broken speaker connectors, holes in speaker cone, surround & dust cap, burnt speaker voice coil.
- Fading, deterioration of speaker components & finish due to improper exposure to elements.

- Burnt tracers on PCB.
- Product/part damaged due to poor packaging or abusive shipping conditions.
- Subsequent damage to other products.

A warranty claim will not be valid if the warranty registration card is not properly filled and returned to Earthquake with a copy of the sales receipt.

#### (E) Service Request:

To receive product(s) service, contact Earthquake Sound service department at (510) 732-1000 and request an RMA (Return Merchandise Authorization) number. Items shipped without a valid RMA number will be refused. Make sure you provide us with your complete/correct shipping address, a valid phone number and a brief description of the problem you are experiencing with the product. In most cases, our technician maybe able to resolve the problem over the phone; thus eliminating the need to ship the product.

#### (F) Shipping Instructions:

Product(s) must be packaged in its original protective box(es) to minimize transport damage and avoid repackaging charges. Shipper claims regarding items damaged in transit must be presented to carrier. Earthquake Sound Corporation reserves the right to refuse products that are improperly packaged. A copy of the original sales receipt must accompany product returned for service. We encourage you to include a written description of the problem inside the package. Ship product to:

Earthquake Sound Corporation
Attn: RMA Department - RMA# \_\_\_\_\_
2727 McCone Avenue
Hayward, CA 94545
Tel: (510) 732-1000

You are responsible for the cost of shipping the product to Earthquake Sound Corporation.

# (G) Disputes Resolution:

All disputes - between customer and Earthquake Sound Corporation - resulting from the one (1) year limited warranty policy must be resolved in accordance to the laws and regulations of the county of Alameda, California.

