

Roxel RBS-300

Roxel RBS 300 Bookshelf Speaker User Manual

Model: RBS-300

1. INTRODUCTION

Thank you for choosing the Roxel RBS 300 Bookshelf Speaker. This manual provides essential information for setting up, operating, and maintaining your speakers to ensure optimal performance and longevity. Please read this manual thoroughly before use.

2. WHAT'S IN THE BOX

Carefully unpack all items and ensure the following are present:

- Roxel RBS 300 Bookshelf Speaker (Pair)
- Roxel Manual (This document)

If any items are missing or damaged, please contact Roxel customer support.

3. PRODUCT OVERVIEW

3.1 Components

The Roxel RBS 300 Bookshelf Speaker features high-quality components designed for superior audio performance.



Figure 3.1: Front view of Roxel RBS 300 Bookshelf Speakers with grilles removed, showing the woofer and tweeter.

- **4-inch Carbon Fibre Woofer:** Provides powerful, full-impact sound with extended bass response and low distortion.
- **1-inch Silk Dome Tweeter:** Delivers clear, refined high-frequency range with improved sound dispersion.
- **MDF Wood Enclosure:** High-quality cabinet construction for improved sound quality and classic aesthetic.
- **Speaker Terminals:** Located on the rear for connecting to an amplifier.

3.2 Dimensions

Understanding the dimensions of your speakers is important for proper placement.



Figure 3.2: Speaker dimensions: 26cm (height) x 15cm (width) x 17cm (depth).

Table 3.1: Product Dimensions

Measurement	Value
Height	26 cm
Width	15 cm
Depth	17 cm
Weight (each)	Approx. 2.2 kg

4. SETUP

The Roxel RBS 300 are passive speakers and require an external amplifier to function. Follow these steps for proper setup:

4.1 Placement

Optimal speaker placement is crucial for sound quality.

- Place speakers on a stable, flat surface such as a bookshelf, speaker stand, or desk.
- Ensure there is adequate space around the speakers for proper air circulation.
- For stereo imaging, position the speakers equidistant from your primary listening position, forming an equilateral triangle.
- Avoid placing speakers directly against a wall if possible, as this can overemphasize bass. The front-firing bass ports make them less sensitive to wall proximity compared to rear-ported designs.



Figure 4.1: Example of Roxel RBS 300 speakers placed on a shelf in a home audio setup.

4.2 Connecting to an Amplifier

Use high-quality speaker wire to connect the speakers to your amplifier. Ensure correct polarity (+ to + and - to -).

1. Turn off your amplifier and any connected audio sources.
2. Identify the positive (+) and negative (-) terminals on both your amplifier and the Roxel RBS 300 speakers. The speaker terminals are typically color-coded (red for positive, black for negative).
3. Strip approximately 1/2 inch (1.2 cm) of insulation from the ends of your speaker wires.
4. Connect the positive (+) terminal of the amplifier to the positive (+) terminal of the speaker.
5. Connect the negative (-) terminal of the amplifier to the negative (-) terminal of the speaker.
6. Repeat for the second speaker.
7. Ensure all connections are secure to prevent short circuits.



Figure 4.2: Rear panel of Roxel RBS 300 speakers, showing the binding posts for amplifier connection. Note the 75 Watts power handling and 4-8 Ohms impedance.

Note: The Roxel RBS 300 speakers have a power handling of 75 Watts RMS per speaker (150W total for the pair) and an impedance of 4-8 ohms. Ensure your amplifier is compatible with these specifications.

5. OPERATING INSTRUCTIONS

Once connected, operating your Roxel RBS 300 speakers is straightforward.

1. After connecting the speakers to your amplifier, turn on the amplifier.
2. Select your desired audio source on the amplifier.
3. Start playing audio at a low volume.
4. Gradually increase the volume to your preferred listening level.
5. Allow for a "break-in" period: Like all new speakers, the RBS 300 will benefit from a break-in period of several hours of normal use. During this time, the drivers will loosen up, and the sound quality may improve further.

For optimal sound, ensure your audio source provides a clean signal. These speakers are designed to deliver neutral and accurate sound with excellent vocal clarity and extended bass response.

6. MAINTENANCE

Proper care will help maintain the performance and appearance of your speakers.

- **Cleaning:** Use a soft, dry cloth to wipe down the speaker cabinets. Avoid abrasive cleaners or solvents.
- **Grilles:** The speaker grilles can be removed for cleaning or if you prefer the aesthetic of the exposed drivers. Handle them carefully to avoid damage.
- **Environment:** Keep speakers away from direct sunlight, excessive heat, moisture, and extreme temperature changes.
- **Dust:** Regularly dust the drivers and cabinet to prevent buildup.

7. TROUBLESHOOTING

If you encounter issues with your Roxel RBS 300 speakers, refer to the following common problems and solutions:

Table 7.1: Troubleshooting Guide

Problem	Possible Cause	Solution
No sound from speakers	<ul style="list-style-type: none">◦ Amplifier not powered on◦ Incorrect input selected on amplifier◦ Loose or incorrect speaker wire connections◦ Volume too low	<ul style="list-style-type: none">◦ Ensure amplifier is on◦ Select correct input◦ Check all speaker wire connections for proper polarity and tightness◦ Increase volume
Distorted sound	<ul style="list-style-type: none">◦ Volume too high (clipping)◦ Poor quality audio source◦ Loose speaker wire connections◦ Damaged speaker	<ul style="list-style-type: none">◦ Reduce volume◦ Try a different audio source◦ Check connections◦ Contact support if speaker is damaged
One speaker not working	<ul style="list-style-type: none">◦ Loose connection for that speaker◦ Faulty speaker wire◦ Amplifier channel issue	<ul style="list-style-type: none">◦ Check connections for that specific speaker◦ Swap speaker wires to test if wire is faulty◦ Test with another speaker if possible to isolate amplifier issue

If the problem persists after trying these solutions, please contact Roxel customer support for further assistance.

8. SPECIFICATIONS

Detailed technical specifications for the Roxel RBS 300 Bookshelf Speaker:

Table 8.1: Technical Specifications

Feature	Specification
Model Name	RBS-300
Speaker Type	Bookshelf, Passive
Speaker Maximum Output Power	150 Watts RMS (Pair), 75 Watts RMS (Each)
Frequency Response	60Hz - 20kHz
Impedance	4-8 Ohms
Sensitivity	86dB IW/IM
Woofer	4-inch Carbon Fibre Driver with Rubber Surround

Feature	Specification
Tweeter	1-inch Silk Dome
Cabinet Material	MDF Wood
Product Dimensions (each)	17 x 15 x 26 cm (Depth x Width x Height)
Weight (each)	2.2 kg
Connectivity Technology	Wired
Input Voltage	230 Volts (for amplifier, not speakers directly)

9. WARRANTY AND SUPPORT

Roxel products are designed and manufactured to the highest standards. For warranty information and technical support, please refer to the official Roxel website or contact their customer service directly.

Manufacturer: Roxel

Website: [Visit the Roxel Store on Amazon](#)

For any issues not covered in this manual, please reach out to Roxel customer support.