

JBL AC299

JBL Professional AC299 Two-Way Full-Range Loudspeaker User Manual

1. INTRODUCTION

1.1 Product Overview

The JBL Professional AC299-WH is a compact 2-way full-range loudspeaker system designed for fixed installation applications. It features a 310 mm (12 in) low frequency driver and a 25 mm (1 in) exit/35 mm (1.5 in) voice-coil compression driver. The horn provides 90° by 90° coverage in both vertical and horizontal orientations. This loudspeaker is part of JBL's AE Application Engineered Series, offering versatility for various fixed installations. This manual provides essential information for the proper setup, operation, and maintenance of your AC299 loudspeaker.



Figure 1: JBL Professional AC299 Two-Way Full-Range Loudspeaker (White model). This image shows the front and side view of the white loudspeaker unit, highlighting its grille and robust enclosure.

2. KEY FEATURES

- 90° x 90° Waveguide for controlled sound dispersion.
- Dual Neutrik NL4 connectors plus screw terminals for flexible connectivity.

- Multiple M10 attachment points for ultimate installation flexibility.
- 310 mm (12 in) Low Frequency (LF) transducer for powerful bass response.
- Robust 15mm enclosure available in a White or Black textured finish.
- Active amplification type, integrating the amplifier within the unit.

3. SETUP AND INSTALLATION

3.1 Unpacking

Carefully remove the loudspeaker from its packaging. Inspect the unit for any signs of damage that may have occurred during transit. Retain the packaging for future transport or storage.

3.2 Mounting Considerations

The AC299 is designed for fixed installations. It features M10 threaded suspension points for secure overhead mounting. Additionally, four threaded inserts on the back of the enclosure allow for attachment of a MultiMount® or similar mounting bracket. Ensure that all mounting hardware and structures are rated to safely support the loudspeaker's weight (approximately 49 pounds or 22.2 kg). Consult a qualified installer for complex installations.

3.3 Electrical Connections

As an active loudspeaker, the AC299 requires both an audio signal input and a power connection.

- **Audio Input:** Connect your audio source (e.g., mixer, processor) to the loudspeaker using a cable terminated with a Neutrik NL4 connector or by utilizing the screw terminals. Ensure correct polarity for optimal sound performance.
- **Power Connection:** Connect the loudspeaker to a suitable AC power outlet using the provided corded electric power cable. Verify that the power supply voltage matches the requirements specified on the loudspeaker's rear panel.

Always make connections with the loudspeaker and audio source powered off to prevent potential damage.

4. OPERATION

4.1 Powering On/Off

To power on the loudspeaker, ensure all audio connections are secure, then connect the power cable to a live outlet. Locate the power switch, typically on the rear panel, and switch it to the 'ON' position. To power off, switch the power switch to 'OFF' and then disconnect the power cable.

4.2 Audio Signal Management

Once powered on, ensure your audio source is active and sending a signal. Adjust the input gain or volume control on the loudspeaker, if available, to achieve the desired output level without distortion. It is recommended to start with lower volume settings and gradually increase them.

5. MAINTENANCE

5.1 Cleaning

Regularly clean the exterior of the loudspeaker with a soft, dry cloth. For stubborn dirt, a slightly damp cloth can be used, followed by a dry cloth. Avoid using abrasive cleaners, solvents, or harsh chemicals, as these can damage the finish and components. Ensure no liquids enter the grille or any openings.

5.2 Environmental Considerations

The AC299 is not waterproof. Protect the loudspeaker from moisture, extreme temperatures, and direct sunlight. Ensure adequate ventilation around the unit to prevent overheating, especially during extended operation.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No Sound Output	- Loudspeaker not powered on. - Audio cable disconnected or faulty. - Audio source not sending signal. - Volume/gain set too low.	- Ensure power switch is ON and power cable is connected. - Check audio cable connections and try a different cable. - Verify audio source is active and outputting sound. - Increase volume/gain gradually.
Distorted Sound	- Input signal too high (clipping). - Loudspeaker volume too high. - Faulty cable or connection.	- Reduce input level from the audio source. - Lower the loudspeaker's volume/gain. - Check and replace cables if necessary.
Intermittent Sound	- Loose cable connections. - Overheating.	- Secure all audio and power connections. - Ensure adequate ventilation; allow unit to cool down.

If problems persist after attempting these solutions, please contact JBL Professional customer support.

7. TECHNICAL SPECIFICATIONS

Specification	Detail
Model Name	AC299-WH
Brand	JBL Professional
Speaker Type	2-Way Full-Range Loudspeaker
LF Transducer	310 mm (12 in)

Specification	Detail
HF Driver	25 mm (1 in) exit / 35 mm (1.5 in) voice-coil compression driver
Coverage Pattern	90° x 90°
Amplification Type	Active
Maximum Output Power	300 Watts
Connectivity	Dual Neutrik NL4 connectors, Screw terminals
Power Source	Corded Electric
Mounting Type	M10 Threaded Suspension Points, Rear Threaded Inserts (MultiMount® compatible)
Color	White
Dimensions (H x W x D)	18 x 17 x 27 inches (45.7 x 43.2 x 68.6 cm approx.)
Item Weight	49 pounds (22.2 kg)
Waterproof	No
UPC	691991004278

8. WARRANTY AND SUPPORT

8.1 Product Warranty

JBL Professional products are covered by a limited warranty. Please refer to the warranty card included with your product or visit the official JBL Professional website for detailed warranty terms and conditions specific to your region.

8.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or service inquiries, please contact JBL Professional customer support. Contact information can typically be found on the JBL Professional website or in your product documentation.