Deaf Bonce DB-SA302

Deaf Bonce Apocalypse DB-SA302 12-inch Dual Voice Coil Subwoofer

User Manual

Introduction

Thank you for choosing the Deaf Bonce Apocalypse DB-SA302 12-inch Dual Voice Coil Subwoofer. This high-performance subwoofer is engineered to deliver powerful and clear bass for your car audio system. This manual provides essential information for the proper installation, operation, and maintenance of your subwoofer to ensure optimal performance and longevity.

Image: Front view of the Deaf Bonce Apocalypse DB-SA302 12-inch Subwoofer, showcasing the cone and surround.

Safety Information

- Always disconnect the vehicle's battery before performing any electrical work.
- Ensure all wiring is properly insulated and secured to prevent short circuits and damage.
- Avoid exposing the subwoofer to moisture or extreme temperatures.
- Do not operate the subwoofer beyond its specified power handling limits to prevent damage.
- Professional installation is recommended for optimal performance and safety.
- High sound pressure levels can cause permanent hearing damage. Use caution when adjusting volume.

Package Contents

Verify that all items are present in the package:

- (1) Deaf Bonce Apocalypse DB-SA302 12-inch Dual Voice Coil Subwoofer

Image: The retail packaging box for the Deaf Bonce Apocalypse DB-SA302 Subwoofer.

Setup

Installation

The DB-SA302 subwoofer is designed for installation in a suitable enclosure. Proper enclosure design is critical for optimal sound quality and subwoofer longevity. Consult with a car audio professional or refer to recommended enclosure specifications for your specific application.

- **Cut Out Dimensions:** 11 inches (279.3 mm)
- **Cut Out Depth:** 7 inches (179.5 mm)
- **Overall Depth:** 8.4 inches (214.1 mm)
- **Overall Width:** 12.6 inches (321.1 mm)

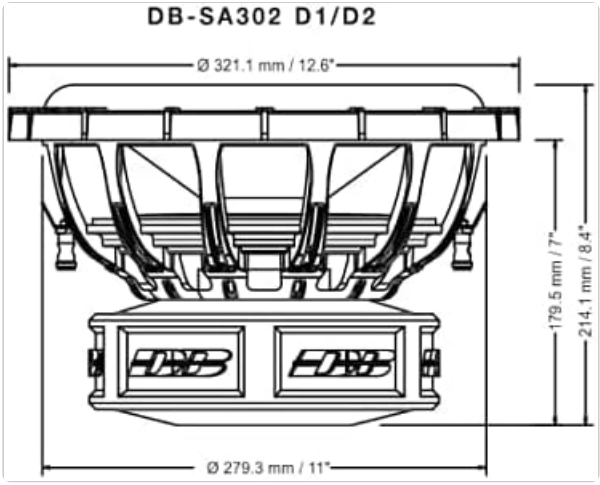

Image: Technical drawing showing the dimensions of the Deaf Bonce DB-SA302 Subwoofer, including overall width, depth, and cutout dimensions.

Wiring

The DB-SA302 features a dual 1-ohm voice coil (D1). This allows for flexible wiring configurations to match your amplifier's impedance requirements. Always ensure your amplifier is stable at the chosen impedance.

Image: Rear view of the Deaf Bonce DB-SA302 Subwoofer, showing the dual voice coil terminals.

Common Wiring Configurations for Dual 1-ohm Voice Coils:

- **Parallel Wiring (0.5 Ohm):** Connect the positive terminals of both voice coils together, and the negative terminals of

both voice coils together. Then connect the combined positive to the amplifier's positive output and the combined negative to the amplifier's negative output. This configuration results in a 0.5-ohm load. Ensure your amplifier is 0.5-ohm stable.

- **Series Wiring (2 Ohm):** Connect the positive terminal of one voice coil to the negative terminal of the other voice coil. Then connect the remaining positive terminal to the amplifier's positive output and the remaining negative terminal to the amplifier's negative output. This configuration results in a 2-ohm load.

Always double-check your wiring connections before applying power to prevent damage to the subwoofer or amplifier.

Operating Instructions

Break-in Period

Allow a break-in period of approximately 20-30 hours of normal listening at moderate volumes before operating the subwoofer at high power levels. This allows the suspension components to loosen and reach their optimal performance characteristics.

Amplifier Settings

- **Gain Setting:** Set the amplifier gain carefully. Do not use the gain control as a volume knob. It should be set to match the output voltage of your head unit. Incorrect gain settings can lead to clipping and damage to the subwoofer.
- **Crossover:** Use a low-pass filter (LPF) on your amplifier or head unit to send only low frequencies to the subwoofer. A typical LPF setting for subwoofers is between 60Hz and 100Hz.
- **Subsonic Filter:** If your amplifier has a subsonic filter (high-pass filter for the subwoofer channel), set it slightly below your enclosure's tuning frequency to protect the subwoofer from over-excursion at very low frequencies.

Listen for signs of distortion. If you hear distortion, reduce the volume or adjust your amplifier settings immediately.

Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the subwoofer cone and surround. Avoid using harsh chemicals or excessive moisture.
- **Inspection:** Periodically inspect the subwoofer for any signs of damage, such as tears in the cone or surround, loose connections, or unusual odors. Address any issues promptly.
- **Environment:** Ensure the subwoofer is installed in a well-ventilated area and protected from direct sunlight and extreme temperatures.

Troubleshooting

Problem	Possible Cause	Solution
No Sound from Subwoofer	◦ No power to amplifier ◦ Loose or incorrect wiring ◦ Amplifier in protect mode ◦ Head unit settings	◦ Check amplifier power, ground, and remote turn-on connections. ◦ Verify all speaker and RCA connections. ◦ Check amplifier for fault indicators; ensure proper impedance load. ◦ Confirm subwoofer output is enabled and volume is up on head unit.

Problem	Possible Cause	Solution
Distorted or Unclear Bass	◦ Amplifier gain set too high (clipping) ◦ Incorrect crossover settings ◦ Damaged subwoofer ◦ Poor enclosure design	◦ Reduce amplifier gain until distortion is eliminated. ◦ Adjust LPF and subsonic filter settings. ◦ Inspect subwoofer for physical damage. ◦ Ensure enclosure is sealed and properly sized.
Subwoofer Overheating	◦ Overpowering the subwoofer ◦ Incorrect impedance load ◦ Poor ventilation	◦ Reduce power or upgrade amplifier to match subwoofer RMS. ◦ Verify wiring impedance matches amplifier's stable load. ◦ Ensure adequate airflow around the subwoofer and amplifier.

SPECIFICATIONS

Model	DB-SA302
Type	Subwoofer
Size	12 inch
Voice Coil Size	3.00 inch
Cone Material	Paper
Magnet Material	Ferrite
Voice Coil Wire	CCAW
Surround Material	Foam
RMS Power	2000 W
MAX Power	4000 W
Frame Material	Alu
Impedance	1+1 Ohm (Dual 1 Ohm)
SPL	86.30 dB
Fs (Resonance Frequency)	35.2 Hz
Qts (Total Q Factor)	0.30
BL (Motor Strength)	20
Vas (Equivalent Volume)	21 Liters
Xmax (Linear Excursion)	18 mm
Cut Out Dimensions	11 inches (279.3 mm)
Cut Out Depth	7 inches (179.5 mm)
Overall Depth	8.4 inches (214.1 mm)

Overall Width	12.6 inches (321.1 mm)

Warranty Information

The Deaf Bonce Apocalypse DB-SA302 Subwoofer comes with a limited warranty. For specific details regarding warranty coverage, terms, and conditions, please refer to the official warranty statement provided by Deaf Bonce or contact their customer support directly. Keep your proof of purchase for warranty claims.

Support

If you encounter any issues or have questions not covered in this manual, please contact Deaf Bonce customer support or visit their official website for further assistance. You can often find FAQs, additional resources, and contact information on the manufacturer's support pages.
For more information, visit the Deaf Bonce Store on Amazon.