

Skar Audio SDR-12 D2

Skar Audio SDR-12 D2 12-inch Dual 2 Ohm Car Subwoofer Instruction Manual

Model: SDR-12 D2

Brand: Skar Audio

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Skar Audio SDR-12 D2 12-inch Dual 2 Ohm Car Subwoofer. Designed for powerful, low-frequency sound reproduction, this subwoofer features a high-flux ferrite motor and a 2.5-inch high-temperature 4-layer copper voice coil. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your product.

2. SAFETY INFORMATION

WARNING: Improper installation or use can result in serious injury or damage to your equipment. Always consult a professional if you are unsure about any installation steps.

- **Electrical Hazards:** Disconnect the vehicle's battery before performing any electrical work. Ensure all wiring is properly insulated and secured to prevent short circuits.
- **Hearing Protection:** Prolonged exposure to high sound pressure levels can cause permanent hearing damage. Use appropriate hearing protection when operating the subwoofer at high volumes.
- **Secure Mounting:** Ensure the subwoofer and its enclosure are securely mounted within the vehicle to prevent movement during sudden stops or collisions.
- **Ventilation:** Ensure adequate ventilation around the subwoofer and amplifier to prevent overheating.
- **Impedance Matching:** Always match the subwoofer's impedance (Dual 2 Ohm) to your amplifier's output capabilities. Incorrect impedance can damage the amplifier or subwoofer.

3. WHAT'S IN THE BOX

Upon opening your Skar Audio SDR-12 D2 package, you should find the following:

- Skar Audio SDR-12 D2 12" Dual 2 Ohm Car Subwoofer (1 unit)

Note: Additional components such as an enclosure, amplifier, wiring kit, and installation hardware are sold separately and are required for a complete system.

4. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your subwoofer. It is highly recommended that installation be performed by a qualified car audio professional.

4.1. Enclosure Selection

The SDR-12 D2 subwoofer requires a suitable enclosure for optimal performance. Consult Skar Audio's recommended enclosure specifications for sealed or ported designs. The enclosure should be robust and free from air leaks.

4.2. Wiring and Impedance

The SDR-12 D2 features dual 2-ohm voice coils. This allows for various wiring configurations to achieve different final impedances, such as 1 ohm or 4 ohms, depending on your amplifier's capabilities. Refer to your amplifier's manual for compatible impedance loads.



Figure 1: Skar Audio SDR-12 D2 Subwoofer, showing the cone and surround. This view highlights the robust construction and design of the subwoofer.



Figure 2: Close-up of the wiring terminals on the Skar Audio SDR-12 D2 Subwoofer. These terminals are designed for secure and reliable electrical connections.

4.3. Amplifier Connection

1. Connect the subwoofer's voice coils to your amplifier according to the desired impedance and the amplifier's specifications.
2. Ensure all connections are tight and free from corrosion.
3. Route power and signal cables away from each other to minimize noise interference.

4.4. Initial Settings

Before powering on, set your amplifier's gain to its minimum setting. Set the low-pass filter (LPF) to a suitable frequency (e.g., 80-100 Hz) and disable any bass boost or equalization for initial testing.

5. OPERATING INSTRUCTIONS

5.1. Break-in Period

Allow a break-in period of approximately 20-30 hours of normal listening before operating the subwoofer at maximum output. This allows the suspension components to loosen and perform optimally.

5.2. Adjusting Settings

1. Gradually increase the amplifier's gain until the desired volume is achieved without distortion.
2. Adjust the LPF to blend the subwoofer's output seamlessly with your main speakers.
3. Use caution with bass boost features, as excessive boost can lead to distortion and damage.

Video 1: Skar Audio SDR Series Product Line-Up. This official video from Skar Audio showcases the SDR series subwoofers, including the SDR-12, highlighting their design and features.

6. MAINTENANCE

- **Regular Inspection:** Periodically check all wiring connections for tightness and signs of wear or corrosion.
- **Cleaning:** Keep the subwoofer cone and surround free from dust and debris. Use a soft, dry cloth for cleaning. Avoid using harsh chemicals or excessive moisture.
- **Environmental Factors:** Protect the subwoofer from extreme temperatures, direct sunlight, and moisture.

7. TROUBLESHOOTING

If you experience issues with your subwoofer, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No Sound	Loose wiring, amplifier off, incorrect settings, blown fuse.	Check all connections, ensure amplifier is powered on, verify settings, inspect fuses.
Distorted Sound	Gain too high, incorrect LPF setting, damaged voice coil, poor power supply.	Reduce amplifier gain, adjust LPF, check power and ground connections, inspect subwoofer for damage.
Subwoofer Overheating	Insufficient ventilation, improper impedance, excessive power.	Ensure adequate airflow, verify impedance match, reduce power input.
Weak Bass	Incorrect enclosure volume, phase issues, low gain setting.	Verify enclosure volume, check phase setting on amplifier, increase gain gradually.

8. SPECIFICATIONS

Feature	Specification
Model Name	SDR-12 D2
Speaker Type	Subwoofer
Subwoofer Diameter	12 Inches
Peak Power	1200 Watts
RMS Power	600 Watts
Impedance	Dual 2 Ohm
Voice Coil Size	2.5" 4-Layer High Temperature Copper
Frequency Response Range	22 Hz - 300 Hz
Sensitivity (SPL)	84.7 dB
Fs (Resonance Frequency)	32 Hz
Xmax (One-way)	13.5mm
Mounting Depth	7.62"
Cone Material	Competition Grade Pressed Paper
Surround Material	High Roll Foam
Motor Type	Powerful High Flux Ferrite
Cooling Design	Advanced Air Flow
Product Dimensions	12 x 12 x 8 inches
Item Weight	18.56 Pounds
Connectivity Technology	Wired

9. WARRANTY AND SUPPORT

9.1. Warranty Information

The Skar Audio SDR-12 D2 Subwoofer comes with a**Limited Warranty**. Please refer to the official Skar Audio website or contact their customer service for detailed terms and conditions regarding warranty coverage, duration, and claims procedures.

9.2. Customer Support




For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Skar Audio customer support:

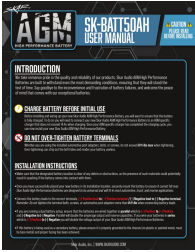


- **Website:** Visit the official Skar Audio website for support resources, FAQs, and contact information.

- **Contact:** Refer to the 'Contact Us' section on the Skar Audio website for phone numbers or email support.

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Related Documents - SDR-12 D2

	<p>Skar Audio RP Series Amplifiers Owner's Manual</p> <p>Owner's manual for Skar Audio RP Series car amplifiers, detailing features, specifications, and installation for monoblock and multi-channel models including RP-350.1D, RP-800.1D, RP-1200.1D, RP-1500.1D, RP-2000.1D, RP-3500.1D, RP-4500.1D, RP-75.4AB, RP-150.4AB, and RP-600.5.</p>
	<p>Skar Audio SA-1500.1D Monoblock Amplifier Owner's Manual and Installation Guide</p> <p>Comprehensive owner's manual and installation guide for the Skar Audio SA-1500.1D Monoblock Amplifier, covering specifications, connections, controls, installation tips, advanced features, and warranty information.</p>
	<p>Skar Audio SK-BATT80AH 12V AGM High Performance Battery User Manual & Specifications</p> <p>Comprehensive user manual for the Skar Audio SK-BATT80AH 12V AGM High Performance Battery. Includes installation, charging, storage instructions, safety precautions, and detailed specifications.</p>

	<p>Skar Audio SK-BATT50AH 12V 50Ah AGM High Performance Battery User Manual</p> <p>Comprehensive user manual for the Skar Audio SK-BATT50AH 12V 50Ah AGM High Performance Battery, covering installation, charging, storage, safety precautions, and technical specifications.</p>
	<p>Skar Audio SK-M Series Mini Amplifiers Owner's Manual</p> <p>Owner's manual for Skar Audio SK-M5001D, SK-M4004D, and SK-M9005D Sound Quality Mini Amplifiers. Includes specifications, connection diagrams, and troubleshooting.</p>
	<p>Skar Audio RP Series Amplifiers Owner's Manual</p> <p>Comprehensive owner's manual for Skar Audio RP series amplifiers, covering installation, specifications, features, and troubleshooting for monoblock and multi-channel models.</p>