

DD Audio 1112-D4

DD Audio 1112-D4 12" Dual 4-Ohm Subwoofer Instruction Manual

Model: 1112-D4

INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your DD Audio 1112-D4 12-inch Dual 4-Ohm Subwoofer. Please read it thoroughly before use to ensure optimal performance and longevity of your product. Adhering to these guidelines will help you achieve the best possible audio experience.

PRODUCT OVERVIEW

The DD Audio 1112-D4 is a 12-inch subwoofer engineered for high-fidelity audio reproduction in car audio systems. It features a dual 4-ohm voice coil configuration, providing flexible wiring options to match various amplifier setups. As part of the 1100 Series, this subwoofer is designed for efficiency and sound quality, making it suitable for both sealed and small vented enclosures. Its Hi-Def Tuned suspension system contributes to its performance characteristics.



Image 1: Front view of the DD Audio 1112-D4 subwoofer, showcasing the black cone with the red DD Audio logo at its center.

TECHNICAL SPECIFICATIONS

Specification	Value
Model Name	1112-D4
Speaker Type	Subwoofer
Speaker Size	12 Inches
RMS Power Handling	200 - 400 Watts
Peak Power Handling	800 Watts
Nominal Impedance	Dual 4-Ohm

Specification	Value
Voice Coil Diameter (VCD)	2 Inches
Piston Diameter	10 Inches
Resonant Frequency (Fs)	35 Hz
Mechanical Q (Qms)	5.952
Electrical Q (Qes)	0.943
Total Q (Qts)	0.815
Equivalent Volume (Vas)	57.25 Liters
Sensitivity (dBSPL)	86 dB
Mechanical Excursion (Xmech)	64 mm
Linear Excursion (Xmax)	13.5 mm
Frame Outer Diameter (OD)	12.25 Inches
Frame OD with Gasket	12.5 Inches
Mounting Diameter	10.937 Inches
Mounting Depth	5.8 Inches
Motor Diameter	5.75 Inches
Motor Depth	2.35 Inches
Magnet Weight	90 Ounces
Woofer Displacement	0.08 Cubic Feet
Recommended Sealed Enclosure Volume	0.8 - 1.5 Cubic Feet
Recommended Ported Enclosure Volume	0.8 - 1.75 Cubic Feet
Item Weight	20 Pounds
Mounting Type	Flush Mount
Manufacturer	DD Audio

Note: All specifications are subject to change without notice. Performance may vary based on installation and environmental factors.

SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your subwoofer. If you are unsure about any steps, it is recommended to seek professional installation.

1. Safety Precautions

- Disconnect the vehicle's battery before starting any electrical work to prevent electrical shorts or damage.
- Wear appropriate safety gear, including eye protection, during installation.
- Ensure all wiring is correctly gauged for the power levels and properly fused to protect the system.

2. Enclosure Selection and Construction

The DD Audio 1112-D4 is designed to perform optimally in specific enclosure volumes:

- **Sealed Enclosure Volume:** 0.8 - 1.5 cubic feet
- **Ported Enclosure Volume:** 0.8 - 1.75 cubic feet

Ensure the enclosure is robust, airtight (for sealed designs), and properly braced to prevent rattles and vibrations that can degrade sound quality.



Image 2: Side view of the DD Audio 1112-D4 subwoofer, highlighting the cone and flexible surround components.

3. Wiring the Dual 4-Ohm Voice Coils

The 1112-D4 features dual 4-ohm voice coils, offering flexibility in wiring configurations to match your amplifier's impedance requirements. Always verify your amplifier's stable impedance range before wiring.

- **Parallel Wiring (2 Ohms):** Connect the positive terminals of both voice coils together, and the negative terminals of both voice coils together. Then connect these combined positive and negative terminals to your amplifier. This configuration presents a 2-ohm load to the amplifier.
- **Series Wiring (8 Ohms):** Connect the positive terminal of one voice coil to the negative terminal of the other voice coil. Then connect the remaining positive and negative terminals to your amplifier. This configuration presents an 8-ohm load to the amplifier.

Warning: Incorrect impedance matching can damage your amplifier or subwoofer. Consult your amplifier's manual for compatible load impedances.



Image 3: Angled view of the DD Audio 1112-D4 subwoofer, illustrating the dual voice coil terminals for wiring connections.

4. Mounting the Subwoofer

- Ensure the mounting surface within the enclosure is flat and secure.
- Use appropriate screws and ensure a tight, airtight seal between the subwoofer frame and the enclosure to prevent air leaks.
- The mounting diameter required is 10.937 inches, and the mounting depth is 5.8 inches. Verify these dimensions against your enclosure design.

OPERATING GUIDELINES

1. Power Handling

The DD Audio 1112-D4 has a recommended RMS power range of 200-400 watts and a peak power handling of 800 watts. It is crucial to match your amplifier's output to these specifications. Underpowering can be as damaging as overpowering, as it can lead to amplifier clipping and excessive distortion, which can damage the subwoofer.

2. Amplifier Settings

- **Gain Setting:** Set the amplifier gain correctly to match the output voltage of your head unit. The gain control is not a volume knob; it should be set to prevent clipping and distortion at maximum desired listening levels.
- **Low-Pass Filter (LPF):** Set the LPF on your amplifier or head unit to filter out frequencies above the subwoofer's intended range, typically between 60Hz and 100Hz. This ensures the subwoofer only reproduces bass frequencies.

- **Subsonic Filter (HPF):** If your amplifier has a subsonic filter, set it to protect the subwoofer from playing frequencies below its resonant frequency (F_s : 35Hz), usually around 25-30Hz. This prevents wasted power and potential damage from extreme low-frequency excursions.

3. Break-in Period

Allow a break-in period of approximately 10-20 hours of moderate listening before operating the subwoofer at high volumes. This allows the suspension components (surround and spider) to loosen up and reach their optimal performance characteristics, improving sound quality and longevity.

MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to gently clean the subwoofer cone and surround. Avoid using harsh chemicals, solvents, or excessive moisture, which can damage the materials.
- **Inspection:** Periodically inspect all wiring connections for tightness and signs of corrosion. Check the subwoofer surround and cone for any signs of physical damage, tears, or deterioration.
- **Environmental Factors:** Protect the subwoofer from extreme temperatures, direct sunlight, and moisture. These conditions can degrade materials and affect performance over time.



Image 4: Rear angled view of the DD Audio 1112-D4 subwoofer, displaying the robust motor structure and ventilation for heat dissipation.

TROUBLESHOOTING

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

- **No Sound:**

- Check all wiring connections (power, ground, remote, RCA, speaker wires) for proper connection and continuity.
- Verify the amplifier is powered on (check its power indicator light).
- Check fuses on the amplifier and the main power wire.

- Ensure the head unit is sending an audio signal to the amplifier.

- **Distorted Sound:**

- Reduce amplifier gain to prevent clipping.
- Check for proper LPF and subsonic filter settings.
- Ensure the subwoofer is not over-excursion (playing too loud for its capabilities).
- Inspect the subwoofer cone and surround for physical damage.

- **Weak Bass:**

- Verify amplifier gain and LPF settings are optimized.
- Check for correct wiring impedance matching between the subwoofer and amplifier.
- Ensure the enclosure is sealed properly (if applicable) and free of air leaks.
- Confirm the phase setting on the amplifier or head unit is correct.

- **Subwoofer Overheating:**

- Ensure proper ventilation around the amplifier.
- Check for correct impedance matching; an impedance too low can cause overheating.
- Avoid prolonged operation at maximum volume, especially during the break-in period.

If these steps do not resolve the issue, contact DD Audio customer support or a qualified car audio technician for further assistance.

WARRANTY AND SUPPORT

Warranty Information

This DD Audio 1112-D4 subwoofer comes with a **Limited Warranty**. The specific terms, conditions, and duration of the warranty are provided by DD Audio. Please refer to the official DD Audio website or your purchase documentation for complete warranty details. It is essential to retain your proof of purchase for any warranty claims.

Customer Support

For technical assistance, warranty inquiries, or further product information, please visit the official DD Audio website. Contact details for their customer support department are typically available on the manufacturer's website.

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Related Documents - 1112-D4



[DD Audio Class D Amplifiers Owner's Manual](#)

Comprehensive owner's manual for DD Audio Class D amplifiers, including models D4.75, D4.100, D6.500, and D5.1500. Covers features, specifications, installation, and troubleshooting.

	<p>DS18 GEN-X104D 10-Inch Subwoofer Owner's Manual and Specifications</p> <p>Detailed owner's manual, specifications, and recommended enclosure dimensions for the DS18 GEN-X104D 10-inch subwoofer. Includes technical data, Thiele & Small parameters, and box design guidelines.</p>
	<p>Pyle PLPW6D 6.5-Inch 600 Watt Dual Voice Coil 4 Ohm Subwoofer User Manual</p> <p>User manual for the Pyle PLPW6D, a 6.5-inch 600-watt dual voice coil 4-ohm subwoofer. Details product description, performance, dual voice coil features, treated foam surround, mounting depth, enclosure parameters, general specifications, and Thiele-Small parameters.</p>
	<p>Massive Audio KILOX Series Subwoofers: Specifications and Enclosure Guide</p> <p>Detailed specifications, features, and recommended enclosure volumes for the Massive Audio KILOX series subwoofers, including models KILOX 104, 122, 124, and 154. Find technical data for optimal car audio system design.</p>
	<p>Pyle PLRGSW124WT/PLRGSW124BK 12-Inch Slim Waterproof Subwoofer User Guide</p> <p>Comprehensive user guide for the Pyle PLRGSW124WT and PLRGSW124BK 12-inch slim waterproof subwoofers. Features, installation instructions, remote control operation, and technical specifications for car audio systems.</p>
	<p>Pyle PLPW6D 6.5-Inch 600W Dual Voice Coil 4 Ohm Car Subwoofer User Manual</p> <p>Detailed user manual for the Pyle PLPW6D 6.5-inch, 600-watt dual voice coil 4-ohm car subwoofer. Features include product description, unmatched performance, dual voice coil benefits, treated foam surround, mounting depth, enclosure parameters, general specifications, Thiele-Small parameters, and physical information.</p>