

## DD Audio 812F-D2

# DD Audio 812F-D2 12-inch Dual 2-Ohm 7500W Subwoofer Instruction Manual

Model: 812F-D2

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## 1. INTRODUCTION

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This manual provides essential information for the proper installation, operation, and maintenance of your DD Audio 812F-D2 12-inch Dual 2-Ohm 7500W Subwoofer. Please read this manual thoroughly before attempting installation or operation to ensure optimal performance and product longevity. Retain this manual for future reference.



Image 1.1: Front view of the DD Audio 812F-D2 Subwoofer. This image displays the speaker cone, surround, and the DD Audio logo.

## 2. KEY FEATURES

The DD Audio 812F-D2 subwoofer incorporates advanced design elements for enhanced performance and durability:

- **Thermal Cooling Enhancements:** Features a vented aluminum voice coil insert and a vented, finned aluminum heatsink designed to efficiently dissipate heat from critical components, supporting extended periods of high-output operation.
- **Optimized Excursion:** Equipped with a taller surround, double-stitched to a fiberglass-loaded, non-pressed cone. This, combined with a voice coil featuring increased winding length and a double-layer spider, provides increased Xmax for greater linear excursion.
- **Efficient Power Conversion:** Engineered to maximize total efficiency, converting raw power into clean sound while effectively managing heat generated during operation.
- **Robust Construction:** The motor assembly is encased in a rubber boot with an embossed design, contributing to both protection and aesthetic appeal.



Image 2.1: Angled view of the DD Audio 812F-D2 Subwoofer, highlighting the robust surround and cone structure.

### 3. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your subwoofer. If you are unsure about any step, consult a professional installer.

#### 3.1 Safety Precautions

- Disconnect the vehicle's battery before starting any electrical work.
- Wear appropriate safety gear, including eye protection.
- Ensure all wiring is properly insulated and secured to prevent short circuits and damage.
- Do not mount the subwoofer in a location that obstructs vehicle operation or safety features.

#### 3.2 Enclosure Requirements

The 812F-D2 subwoofer is designed for optimal performance in a ported enclosure. Refer to the specifications section for recommended enclosure volumes.

- **Ported Enclosure Volume:** 1.75 - 3.0 cubic feet.
- Ensure the enclosure is constructed from sturdy material and properly sealed to prevent air leaks.

#### 3.3 Wiring Connections

The 812F-D2 features a Dual 2-Ohm voice coil configuration. Proper wiring is essential for matching the subwoofer

to your amplifier's impedance requirements.

- **Parallel Wiring (1 Ohm Load):** Connect the positive terminals of both voice coils together, and the negative terminals of both voice coils together. Connect the amplifier's positive output to the combined positive terminal and the amplifier's negative output to the combined negative terminal.
- **Series Wiring (4 Ohm Load):** Connect the positive terminal of one voice coil to the negative terminal of the other voice coil. Connect the amplifier's positive output to the remaining positive terminal and the amplifier's negative output to the remaining negative terminal.
- Always use appropriate gauge wiring for power, ground, and speaker connections to prevent power loss and overheating.



Image 3.1: Rear view of the DD Audio 812F-D2 Subwoofer, illustrating the voice coil wiring and terminal connections.

## 4. OPERATION

Once installed, follow these guidelines for optimal performance and to prevent damage.

### 4.1 Initial Power-Up and Break-In

- After installation, double-check all wiring connections before applying power.
- Begin with the amplifier gain set to its minimum. Gradually increase the volume and adjust amplifier settings (gain, crossover, bass boost) to achieve desired sound without distortion.
- Allow a break-in period of approximately 20-30 hours of normal listening at moderate volumes. This allows the suspension components to loosen and reach their optimal compliance.

### 4.2 Amplifier Matching and Settings

- Ensure your amplifier's RMS power output matches the subwoofer's RMS power handling (2500 Watts). Using an underpowered or overpowered amplifier can lead to damage.
- Set the low-pass filter (LPF) on your amplifier or head unit to prevent high frequencies from reaching the subwoofer. A common range is 60-80 Hz.
- Avoid excessive bass boost, as this can cause clipping and damage the subwoofer.

## 5. MAINTENANCE

The DD Audio 812F-D2 subwoofer requires minimal maintenance to ensure long-term performance.

- **Cleaning:** Periodically wipe the subwoofer cone and surround with a soft, dry cloth to remove dust and debris. Avoid using harsh chemicals or excessive moisture.
- **Inspection:** Regularly inspect the speaker terminals and wiring for secure connections and signs of corrosion or damage.
- **Environmental Factors:** Protect the subwoofer from extreme temperatures, direct sunlight, and moisture.

## 6. TROUBLESHOOTING

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

| Problem                 | Possible Cause   | Solution  |
|-------------------------|--|---|
| No Sound from Subwoofer | <ul style="list-style-type: none"> <li>• Loose or incorrect wiring</li> <li>• Amplifier not powered on</li> <li>• Amplifier in protect mode</li> <li>• Head unit settings incorrect</li> </ul> | <ul style="list-style-type: none"> <li>• Check all speaker and power connections.</li> <li>• Verify amplifier power and ground connections.</li> <li>• Check amplifier fuses and ensure proper ventilation.</li> <li>• Confirm subwoofer output is enabled and volume is up.</li> </ul> |
| Distorted Sound         | <ul style="list-style-type: none"> <li>• Amplifier gain set too high</li> <li>• Crossover settings incorrect</li> <li>• Damaged subwoofer</li> </ul>   | <ul style="list-style-type: none"> <li>• Reduce amplifier gain until distortion is eliminated.</li> <li>• Adjust LPF to an appropriate frequency (e.g., 60-80 Hz).</li> <li>• Inspect subwoofer cone and surround for physical damage.</li> </ul>                                       |
| Weak or No Bass Output  | <ul style="list-style-type: none"> <li>• Incorrect phase setting</li> <li>• Low-pass filter set too low</li> <li>• Inadequate amplifier power</li> </ul>                                       | <ul style="list-style-type: none"> <li>• Adjust phase switch on amplifier or head unit (0° or 180°).</li> <li>• Increase LPF frequency slightly.</li> <li>• Ensure amplifier RMS output matches subwoofer RMS handling.</li> </ul>  |



Image 6.1: Bottom view of the DD Audio 812F-D2 Subwoofer's motor assembly, showing the heatsink and rubber boot.

## 7. SPECIFICATIONS

Detailed technical specifications for the DD Audio 812F-D2 Subwoofer:

|                                     |              |
|-------------------------------------|--------------|
| <b>Speaker Size</b>                 | 12 Inches    |
| <b>Watts RMS</b>                    | 2500 Watts   |
| <b>Watts Peak</b>                   | 7500 Watts   |
| <b>Impedance</b>                    | Dual 2-Ohm   |
| <b>VCD (Voice Coil Diameter)</b>    | 4 Inches     |
| <b>Piston Diameter</b>              | 10.25 Inches |
| <b>Fs (Resonance Frequency)</b>     | 34 Hz        |
| <b>Qms (Mechanical Q)</b>           | 6.282        |
| <b>Qes (Electrical Q)</b>           | 0.601        |
| <b>Qts (Total Q)</b>                | 0.548        |
| <b>Vas (Equivalent Volume)</b>      | 18.84 Liters |
| <b>Xmech (Mechanical Excursion)</b> | 100 MM       |
| <b>Xmax (Linear Excursion)</b>      | 31 MM        |

|                              |                 |
|------------------------------|-----------------|
| Frame OD (Outer Diameter)    | 12.625 Inches   |
| Frame OD w/Gasket            | 12.875 Inches   |
| Mounting Diameter            | 11.34 Inches    |
| Mounting Depth               | 11 Inches       |
| Motor Diameter               | 9.45 Inches     |
| Motor Depth                  | 5.8 Inches      |
| Recommended Ported Enclosure | 1.75 - 3.0 CuFt |
| Item Weight                  | 80 Pounds       |

## 8. WARRANTY AND SUPPORT

The DD Audio 812F-D2 Subwoofer comes with a Limited Warranty. For specific terms and conditions, please refer to the warranty card included with your product or visit the official DD Audio website.

For technical support, service, or warranty claims, please contact DD Audio customer service directly. Ensure you have your product model number (812F-D2) and proof of purchase available when contacting support.

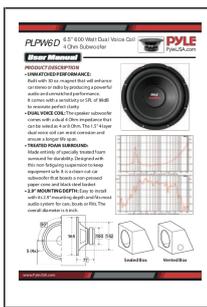
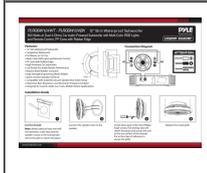
**Manufacturer:** DD Audio

**Model Number:** 812F-D2

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## Related Documents - 812F-D2

|  |   |
|--|---|
|  | <p><a href="#">Pyle PLPW6D 6.5-Inch 600 Watt Dual Voice Coil 4 Ohm Subwoofer User Manual</a></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><a href="#">Pyle PLRGSW124WT/PLRGSW124BK 12-Inch Slim Waterproof Subwoofer User Guide</a></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>  |



[Pyle PLTB101-PLTB121 Subwoofer Box System](#)

Detailed information on the Pyle PLTB101 and PLTB121 carpeted subwoofer tube enclosure systems, including features, wiring, technical specifications, and what's included.



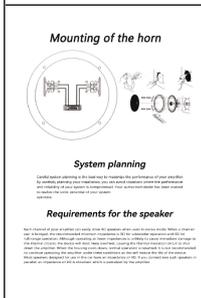
[Manual de Usuario Subwoofer BOSS CH12DVC 12" Dual 4 Ohm](#)

Guía completa del Subwoofer BOSS CH12DVC de 12 pulgadas con bobina de voz dual de 4 ohmios. Incluye especificaciones técnicas, opciones de cableado y dimensiones de caja para optimizar el rendimiento.



[DS18 GEN-X154D 15-Inch Subwoofer Owner's Manual and Specifications](#)

Detailed owner's manual and technical specifications for the DS18 GEN-X154D 15-inch subwoofer, including dimensions, power handling, Thiele & Small parameters, and recommended enclosure designs.



[Car Speaker Mounting and System Planning Guide](#)

Comprehensive guide on mounting car horns and planning your audio system for optimal performance, detailing speaker impedance requirements and installation best practices.