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> [B2 Audio Rave 12" DVC 4 Ohm 2.5" VC 500W RMS Shallow Mount Subwoofer Instruction Manual](#)

B2 Audio B2-RAVE12-D4

B2 Audio Rave 12" DVC 4 Ohm 2.5" VC 500W RMS Shallow Mount Subwoofer Instruction Manual

Model: B2-RAVE12-D4

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your B2 Audio Rave 12" DVC 4 Ohm 2.5" VC 500W RMS Shallow Mount Subwoofer. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your product.

PRODUCT FEATURES

- **Power Handling:** 500W RMS / 1000W Max Power, designed for robust audio performance.
- **Voice Coils:** Dual 4 Ohm Voice Coils, allowing for flexible wiring configurations (2 or 8 ohm loads) to match various amplifiers.
- **Voice Coil Construction:** 2.5" Round Copper Voice Coil, engineered for high-temperature operation and clean output across all power levels.
- **Frequency Response:** Wide frequency range of 10Hz–500Hz, suitable for both deep subwoofer bass and midbass applications.
- **Enclosure Compatibility:** Optimized for compact ported enclosures, specifically 1.5–1.77 cubic feet.
- **Shallow Mounting Depth:** Designed with a shallow mounting depth for versatile installation in various vehicle types, including truck-style boxes.
- **Push Terminals:** Equipped with robust push terminals for secure and easy wire connections.
- **Durable Construction:** Features a stamped metal basket, ferrite magnet, and foam surround for durability and performance.

SPECIFICATIONS

Feature	Detail
Model Name	RAVE

Feature	Detail
Item Model Number	B2-RAVE12-D4
Speaker Type	Subwoofer
Subwoofer Diameter	12 Inches
Audio Driver Size	12 Inches
RMS Power	500 Watts
Maximum Output Power	1000 Watts
Impedance	Dual 4 Ohms
Voice Coil Diameter	2.5 Inches
Frequency Response	10 Hz - 500 Hz
Sensitivity (SPL)	89.3 dB
Fs (Resonance Frequency)	31.8 Hz
Mounting Depth	Approximately 5.5 inches
Overall Dimensions (D x W x H)	12.52"D x 12.52"W x 5.98"H
Item Weight	12.1 pounds
Material	Copper Voice Coil, Ferrite Magnet, Foam Surround
Color	Black
Connectivity Technology	Wired
Recommended Uses	For Surround Sound Systems, Pro Audio
Water Resistance Level	Not Water Resistant
Included Components	(1) B2 Audio RAVE12-D4 12" Dual 4 Ohm Subwoofer

SETUP AND INSTALLATION

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

Unpacking

Carefully remove the subwoofer from its packaging. Inspect the unit for any signs of damage during transit. Retain all packaging materials for future use or in case of return.



Image: The B2 Audio Rave 12 subwoofer in its brown cardboard retail box.

Mounting Considerations

The Rave 12 subwoofer features a shallow mounting depth of approximately 5.5 inches, making it suitable for installations where space is limited, such as behind truck seats or in compact enclosures. Ensure adequate clearance for the subwoofer's excursion within the chosen enclosure.



Image: Side profile of the B2 Audio Rave 12 subwoofer, highlighting its shallow mounting design.

Wiring Configurations

The subwoofer features Dual 4 Ohm Voice Coils, offering flexibility in wiring. You can wire a single subwoofer for a 2

Ohm or 8 Ohm load. For multiple subwoofers, further configurations are possible to achieve 1 Ohm or other desired impedances. Consult an impedance wiring diagram for specific setups.



Image: Detailed view of the robust 8 gauge push terminals on the subwoofer for secure wire connections.

Enclosure Recommendations

For optimal performance, the B2 Audio Rave 12 is recommended for compact ported enclosures with an internal volume between 1.5 and 1.77 cubic feet. While it can operate in sealed enclosures, a ported design will maximize its bass output. The subwoofer's design includes a thick plastic ring to prevent the surround from hitting the enclosure in shallow-mount applications.



Image: Front view of the B2 Audio Rave 12 subwoofer, showcasing the cone, surround with double red stitching, and the B2 logo on the dust cap.

OPERATING INSTRUCTIONS

Once installed, ensure your amplifier is properly configured to match the subwoofer's impedance and power handling. Start with low volume levels and gradually increase to allow the subwoofer to break in. Avoid overdriving the subwoofer, which can lead to distortion and damage.

Amplifier Matching

Match your amplifier's RMS output to the subwoofer's 500W RMS rating. Ensure the amplifier's impedance output matches the wired impedance of your subwoofer(s) (e.g., 2 Ohm or 8 Ohm for a single subwoofer). Incorrect impedance matching can lead to amplifier overheating or reduced power output.

Crossover Settings

Set your low-pass filter (LPF) on your amplifier or head unit to prevent high frequencies from reaching the subwoofer. A typical range for subwoofers is between 80Hz and 120Hz. Adjust to your preference and system acoustics.

Gain Adjustment

Set the amplifier gain correctly to prevent clipping and distortion. This is not a volume control; it matches the output voltage of your head unit to the input sensitivity of your amplifier. Consult your amplifier's manual for proper gain setting procedures.

MAINTENANCE

The B2 Audio Rave 12 subwoofer is designed for durability. Regular maintenance is minimal but important for long-term performance.

- **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.
- **Inspection:** Periodically check the wiring connections at the push terminals to ensure they are secure. Inspect the surround for any signs of cracking or damage.
- **Environment:** Avoid exposing the subwoofer to extreme temperatures, direct sunlight for prolonged periods, or excessive moisture, as it is not water resistant.

TROUBLESHOOTING

If you experience issues with your subwoofer, refer to the following common troubleshooting steps:

- **No Sound:**
 - Check all wiring connections from the amplifier to the subwoofer.
 - Verify the amplifier is powered on and receiving a signal.
 - Ensure the head unit is sending an audio signal to the amplifier.
 - Confirm correct impedance matching between the subwoofer and amplifier.
- **Distorted Sound:**
 - Reduce the amplifier gain setting.
 - Check for proper crossover settings.
 - Ensure the subwoofer is not overdriven (volume too high).
 - Inspect the subwoofer cone and surround for physical damage.
- **Weak Bass:**
 - Verify amplifier gain and crossover settings.
 - Check for correct wiring polarity.
 - Ensure the enclosure volume matches recommended specifications.

If problems persist after following these steps, contact B2 Audio USA customer support or a qualified car audio technician.

PRODUCT SHOWCASE VIDEO

Watch the official product showcase video for a detailed overview of the B2 Audio Rave 12 subwoofer's features and design.

Your browser does not support the video tag.

Video: B2 Audio RAVE12 Product Showcase. This video provides a visual demonstration and discussion of the subwoofer's physical characteristics, including its shallow mounting depth, voice coil, terminals, and recommended enclosure types.

WARRANTY AND SUPPORT

This B2 Audio Rave 12 Subwoofer is covered by a **Manufacturer Warranty**. For specific warranty terms, conditions, and duration, please refer to the documentation included with your product or contact B2 Audio USA directly.

For technical assistance, troubleshooting, or warranty claims, please contact:

B2 Audio USA

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