

JBL VT4888

JBL VERTEC Series VT4888 Midsize Three-Way Line Array Element User Manual

Model: VT4888

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your JBL VERTEC Series VT4888 Midsize Three-Way Line Array Element. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of the product.

The JBL VT4888 is a professional-grade midsize tri-amplified 3-way high directivity line array element, designed for use in stand-alone arrays or in combination with other VERTEC system products. It features two 12" woofers, four 5.5" midrange transducers, and two high-frequency compression drivers.

2. KEY FEATURES

- **Dual voice coil, Differential Drive neodymium magnet, Direct Cooled cone transducers** for low weight and high output.
- **HF Waveguide units** couple to create a precision vertical slot aperture.
- **Patent-pending technology** integrates output of individual bandpass elements.
- **Advanced construction techniques and hybrid materials** provide exceptionally rigid, lightweight enclosure construction.
- **Rugged DuraFlex exterior finish** and weatherized components for durability.
- **PlyMax enclosure technology** for rigid characteristics and weight savings.
- **Radiation Boundary Integrators** for smooth high-frequency coverage.
- **Integral side-mounted suspension frames** for flexible array design.

3. SAFETY INFORMATION

Always adhere to local safety regulations and guidelines when installing and operating the VT4888. Professional

installation is highly recommended due to the weight and complexity of line array systems.

- Ensure all rigging hardware is properly rated and inspected before use.
- Do not exceed the maximum load capacity of suspension points.
- Avoid exposure to extreme temperatures or moisture.
- Disconnect power before performing any maintenance or connections.
- Refer to the [official JBL VERTEC VT4888 product page](#) for detailed safety specifications and rigging instructions.

4. SETUP AND INSTALLATION

The VT4888 is designed for professional sound reinforcement applications and requires careful setup. This section outlines general setup considerations. For detailed rigging and system configuration, consult the comprehensive VERTEC Series rigging manual.

4.1 Unpacking

Carefully remove the VT4888 unit from its packaging. Inspect for any signs of damage during transit. Retain original packaging for future transport or storage.

4.2 Rigging and Array Assembly

The VT4888 units are designed to be flown in vertical arrays using the integrated side-mounted suspension frames. Quick-release pins and hinge bars are used to couple units together.



Figure 4.2.1: Side view of the JBL VT4888, highlighting the integrated rigging points. These points are crucial for securely connecting multiple units to form a line array.

- Use appropriate VERTEC suspension frames (e.g., VT4888-SF) for suspending arrays.
- Ensure all pins are fully engaged and secured.
- Verify the array's center of gravity and adjust rigging points as necessary.
- Utilize predictive software (e.g., JBL LAC) to model array performance and determine optimal splay angles.

4.3 Electrical Connections

The VT4888 is a tri-amplified system, requiring separate amplifier channels for low, mid, and high frequencies. Use professional-grade speaker cables with appropriate connectors (e.g., NL8 or similar).



Figure 4.3.1: Rear panel of the JBL VT4888, illustrating the input connectors and wiring scheme. Proper connection to a tri-amplified system is essential for correct operation.

- Connect the low-frequency input to the dedicated LF amplifier channel.
- Connect the mid-frequency input to the dedicated MF amplifier channel.
- Connect the high-frequency input to the dedicated HF amplifier channel.
- Ensure correct polarity for all connections.

5. OPERATING INSTRUCTIONS

Once installed and connected, the VT4888 requires proper system processing and amplification for optimal performance.

5.1 System Processing

The VT4888 is designed to be used with a digital signal processor (DSP) that provides crossover points, equalization, and limiting specific to the VERTEC Series. Refer to JBL's recommended DSP settings for the VT4888.

- Load the correct VT4888 preset into your DSP.
- Verify crossover frequencies and slopes.
- Set appropriate gain staging throughout the signal chain.

5.2 Powering On/Off

- **Power On Sequence:** Turn on source devices (mixers, processors) first, then amplifiers.
- **Power Off Sequence:** Turn off amplifiers first, then source devices. This prevents transient pops that could damage speakers.

5.3 Monitoring Performance

Regularly monitor the sound output and amplifier indicators during operation to ensure stable performance and prevent clipping or overload.



Figure 5.3.1: Front view of the JBL VT4888, showcasing its dual 12-inch woofers and central high-frequency section. This is the primary sound radiating surface.

6. MAINTENANCE

The JBL VT4888 is built for durability, but regular maintenance ensures its longevity and optimal performance.

- **Cleaning:** Use a soft, dry cloth to clean the exterior. Avoid abrasive cleaners or solvents.
- **Inspection:** Periodically inspect rigging hardware, cables, and connectors for wear, corrosion, or damage. Replace any compromised components immediately.
- **Storage:** When not in use, store the unit in a dry, temperature-controlled environment, ideally in its original packaging or a protective road case.
- **Service:** Refer all servicing to qualified JBL service personnel. There are no user-serviceable parts inside.

7. TROUBLESHOOTING

This section provides solutions to common issues. For more complex problems, contact JBL Professional support.

Problem	Possible Cause	Solution
No sound output	Power not connected to amplifier. Incorrect cable connections. DSP not configured correctly. Amplifier in protect mode.	Check amplifier power and circuit breakers. Verify all speaker cables are securely connected and correct polarity. Ensure the correct VT4888 preset is loaded in the DSP. Check amplifier status indicators; reset if necessary.
Distorted sound	Input signal too high (clipping). Incorrect DSP settings. Damaged speaker component.	Reduce input gain at mixer or DSP. Verify DSP settings match JBL recommendations. Contact qualified service personnel for inspection.
Intermittent sound	Loose cable connection. Faulty cable.	Check and secure all connections. Test with a different cable.

8. TECHNICAL SPECIFICATIONS

Detailed specifications for the JBL VERTEC Series VT4888 Midsize Three-Way Line Array Element.

Feature	Specification
Model Name	VT4888
Speaker Type	Woofer (Line Array Element)
Configuration	Midsized Tri-Amplified 3-Way Line Array Element
Low Frequency Drivers	Two 12-inch woofers
Mid Frequency Transducers	Four 5.5-inch midrange transducers
High Frequency Drivers	Two high-frequency compression drivers
Enclosure Material	PlyMax (Plywood or composite)
Finish	DuraFlex exterior finish
Dimensions (LxWxH)	50.8 x 99.1 x 35.6 cm (20 x 39 x 14 inches)
Item Weight	51.3 kg (113 lbs)
Mounting Type	Suspended/Rigged (Integral side-mounted suspension frames)
Connectivity Technology	Wired (Tri-amplified input)
Color	Black

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official JBL Professional website or contact your authorized JBL dealer.

- **JBL Professional Website:** www.jblpro.com
- **Customer Support:** Refer to the contact section on the JBL Professional website for regional support numbers and email.
- **Product Registration:** Register your product online to receive updates and support.