

# JBL VLA C125S Compact Line Array Module User Guide

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**JBL VLA C125S Compact Line Array Module** 



# **Key Features**

- · Compact line array module optimized for permanent install applications
- · Advanced technology component transducers for low weight and high output
- Outdoor IP55 rated enclosure for protection from dust and water
- Comprehensive rigging points for creating a line array configuration
- Fiberglass box construction and weatherized components
- Dual 15" transducers

The Variable Line Array (VLA) Compact Series is a family of three loudspeaker array modules designed to fill the needs of system designers for applications requiring a more compact line array solution with weather protection for stadia and arenas or any

other project in need of compact line arrays. The VLA Compact Series consists of three loudspeaker array modules:

- The C2100, a dual 10" full range speaker with a 100° horizontal coverage pattern
- The C265, a dual 10" full range speaker with a 65° horizontal coverage pattern
- The C125S, a dual 15" subwoofer

The modular design concept provides the system designer the ability to build large line array systems for larger venue applications or to design smaller line array systems for use as distributed clusters in arenas, domed stadiums and larger performance spaces, including large houses-of-worship.

VLA Compact is designed specifically for permanent installation applications where even coverage, intelligibility, and high sound pressure levels are required.

VLA Compact modules are based on the same advanced engineering used in the highly successful VLA Series line array systems. VLA Compact utilizes the same concept as VLA by providing large format horn-loaded modules with different horizontal horn coverage patterns (100° & 65°). This modular concept provides the designer the flexibility to optimize the horizontal pattern of the line array system by incorporating the appropriate module within the array while still maintaining the vertical directivity.

The VLA-C125S uses JBL proven technology components, featuring dual 15" Differential Drive® transducers.

Enclosures feature multi-layer reinforced fiberglass and steel end-panels. Grilles are zinc plated, powder coated 14-gauge perforated steel with an acoustically transparent black grill cloth backing, a hydrophobic mesh underlayer, and a waterproof rail system.

The rigging system is inherent to the design of the system. Inter-box angles are selected when the array is assembled. Other accessories include a rigging frame, pull-back bar, and a cardioid kit.

# **Specifications**

| System:                                     |  |  |  |  |
|---|--|--|--|--|
| Frequency Range (-10 dB)1:                  | 52 Hz – 210 Hz   |  |  |  |
| Frequency Response (±3 dB)1: 62 Hz – 123 Hz |  |  |  |  |
| System Power Rating2:                       | 1600 W Continuous Pink Noise (6400 W peak), 2 hrs 800 W Continuous P nk Noise (3200W peak), 100 hrs                                      |  |  |  |
| Maximum Input Voltage:                      | 80 V Rms (2 hrs), 160 V peak   |  |  |  |
| Maximum SPL (1m)3:                          | 127 dB Cont. Ave (2 hrs), 133 dB Peak  |  |  |  |
| Sensitivity4:                               | 98 dB (52 Hz – 210 Hz, 2.83V)  |  |  |  |
| Impedance:                                  | $4\Omega$ , $3.0\Omega$ min @ 195 Hz   |  |  |  |
| Amplifiers:                                 | Crown DCi Family with DSP on-board   |  |  |  |
| Recommended:                                | Crown DCi 2   2400N Crown DCi 4   2400N  |  |  |  |
| Transducers:                                |  |  |  |  |
| Low Frequency Driver:                       | 2 x 2275H, 304 mm (15 in) diameter , each with two 76 mm (3 in) diameter voice coils, Neodymium Differential Drive®, Direct Cooled™      |  |  |  |
| Physical:                                   |  |  |  |  |
| Enclosure Material:                         | Fiberglass shell, gelcoat finish, with 18 mm Birch plywood internal bracing.   |  |  |  |
| Grille:                                     | Powder coated 14 gauge hex-perforated steel with zinc under-coating, bac ked with acoustically transparent cloth and hydrophobic screen. |  |  |  |

| Inter-Enclosure Angles: | with VLA-C125S)  VLA-C265 below VLA-C125S Subwoofer (VLA-C265 cannot be con- necte d above C125S): 0°, 5° using VLA-C125S Bracket Plate (included with VL  |  |
|-------------------------|--|--|
|                         | A-C125S)  VLA-C2100 below VLA-C125S Subwoofer (VLA-C2100 cannot be connect ed above C125S): 0°, 7.5° using VLA-C125S Bracket Plate (included with VLA-C125S)   |  |
| Environmental:          | IP-55 rating per IEC529 (dust protected and protected against jets of water ).   |  |
| Terminals:              | CE-compliant covered barrier strip terminals. Barrier terminals accept up to 5.2 sq mm (10 AWG) wire or max width 9mm (0.375 in) spade lugs. Touch proof covers. Full set of terminals on back panel, plus option- al-use interable abinet connection terminals located on top and bottom panels of cabinet. |  |

# VLA-C125S Dual 15" Subwoofer Array Module

- 1. Using recommended DSP tuning, full-space  $(4\pi)$
- 2. Continuous Pink Noise rating is IEC-shaped pink noise with 6 dB crest factor. Peak defined as 6 dB above Continuous Pink Noise Rating.
- 3. Continuous Average calculated from sensitivity and power handling, exclusive of power compression. Peak measured, unweighted SPL, bi-amp mode, measured under full-space conditions at 1 meter using broadband pink noise with a 12 dB crest factor and specified preset.
- 4. 2.83 V RMS, full-space  $(4\pi)$

JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

| Colors: -GR: Gray (similar to Pantone 420C), -BK: Black |   |  |  |  |
|---|---|--|--|--|
| Dimensions (H x W x D):                                 | 508 x 848 x 634 mm (20.0 x 33.4 x 24.9 in)  |  |  |  |
| Net Weight (ea):  | 56.7 kg (125 lbs)   |  |  |  |
| Shipping Weight (ea):                                   | 62.6 kg (138 lbs)   |  |  |  |
| Included Accessories:                                   | 2 x VLA-C125S Bracket Plates  8 pcs. M10 x 35 mm stainless steel bolts (1.5mm pitch, 6 mm hex-drive) to attaching Bracket Plates  2 pcs. Plastic Trim Cover Panels for Bracket Plates, each attaches via 4 ps (8 total) 3-32 x ½" trusshead, phillips-drive, stainless steel bolts. |  |  |  |

Optional Accessories: VLA-C-SB Suspension Bar Kit – For top & bottom of the array, in-cludes 2 identical Suspension Bars (for top/bottom), 4 pcs ¾-inch Class 2 Screw Pin Shackles (must use 2 Shackles for each Suspension Bar, located at end channels, not in the center).

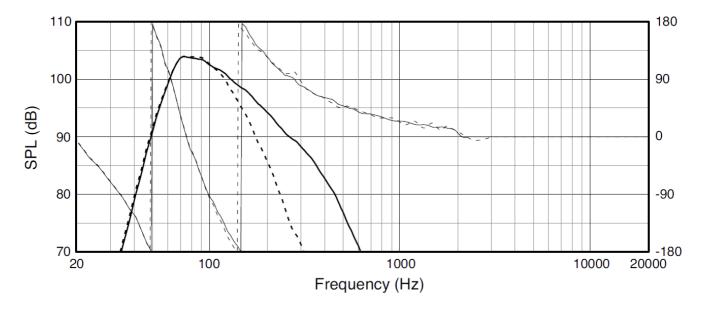
VLA-C125S-ACC Kit – For wiring of 3 VLA-C-125S subwoofers in cardioid configuration (2 front-facing and 1 re ar-facing).

Allows for neat, unexposed inter-cabinet wiring via the tops and bottoms of cabinets.

See User's Guide for more information about bracket plates, suspension bar kit, and wiring hookup to terminals.

#### Frequency Response & Phase:

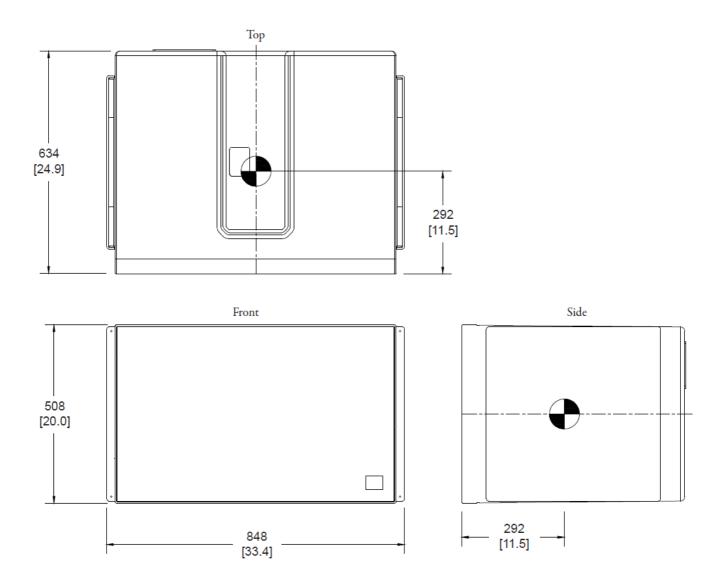
On-Axis in full-space ( $4\pi$ , using recommended DSP tuning), plus phase curve



- ---- VLA-C125S LF Array Preset
- - · VLA-C125S Sub Preset

#### **Dimensional**

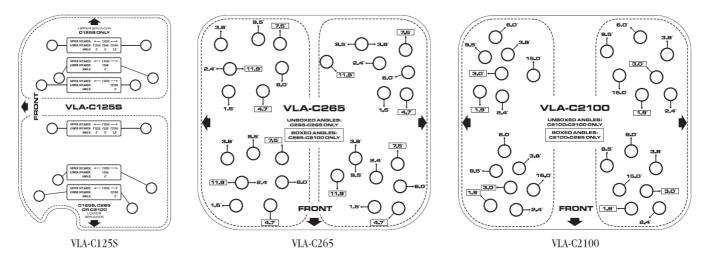
Dimensions in mm [in]



### **Bracket Plates**

VLA-C125S Bracket Plates comes with VLA-C125S speaker. Mirror image included on other side of bracket for use on left and right sides. Each bracket plate installs via included two bolts to top cabinet and two bolts to bottom cabinet, through bracket holes marked for desired inter-cabinet angle with that particular VLA-C model. Plastic Trim Cover Panel installs over bracket plate for clean look. See VLA-C Series User's Guide for additional Bracket Plate installation instructions.

|                                | Array Rigging Combinations  |                       |                             |  |
|--------------------------------|-----------------------------|-----------------------|-----------------------------|--|
|                                | VLA-C265 to VLA-C265        | VLA-C265 to VLA-C2100 | VLA-C2100 to VLA-C210<br>0  |  |
| VLA-C265 Bracket Plates (x2)   | 1.5°, 2.4° 3.8°, 6.0°, 9.5° | 4.7°, 7.5°, 11.9°     | NO                          |  |
| VLA C2100 Bracket Plate s (x2) | NO                          | 1.9°, 3.0°            | 2.4°, 3.8°, 6.0°, 9.5°, 15° |  |



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### **Documents / Resources**



JBL VLA C125S Compact Line Array Module [pdf] User Guide

VLA C125S Compact Line Array Module, VLA C125S, Compact Line Array Module, Line Array Module, Array Module

Manuals+,