

# VLA301 Three-Way Full Range Loudspeaker with 2 x 15" LF

## Key Features:

- ▶ Line array module optimized for permanent install applications.
- ▶ Standard version featuring 3 HF drivers, 2 MF drivers, & 2 LF drivers.
- ▶ Advanced technology component transducers for low weight and high output.
- ▶ Comprehensive rigging points for creating a line array configuration.
- ▶ Rugged DuraFlex™ exterior finish and weatherized components. JBL's WRC or WRX weather protections also available.

## Applications:

- ▶ Outdoor sporting facilities
- ▶ Arenas
- ▶ Large Houses of Worship

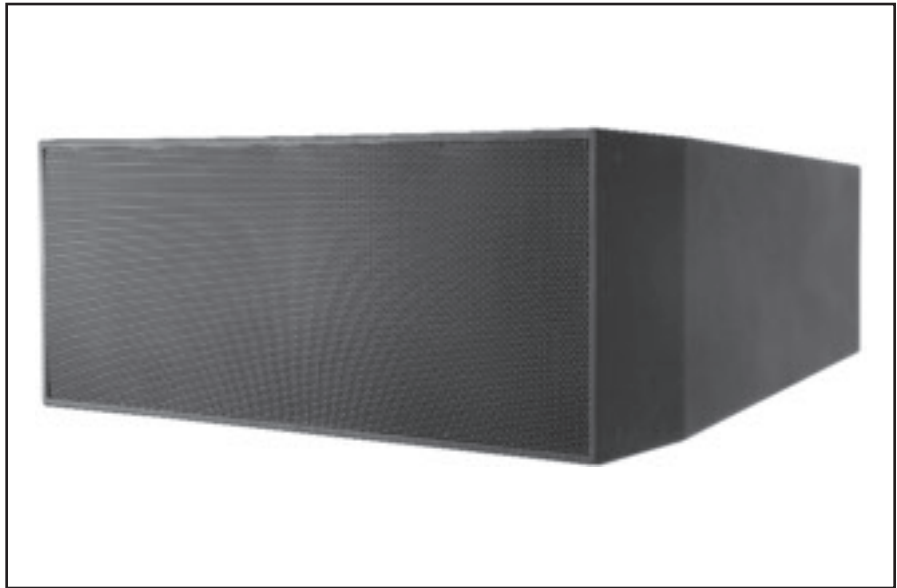
Variable Line Array Series (VLA Series) is a revolutionary product providing high-impact sound reinforcement at throw distances beyond the reach of traditional loudspeaker designs. The modular design concept provides the system designer the ability to build large line array systems for larger venue applications 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 is designed specifically for permanent installation applications where even coverage, intelligibility, and levels capable of overcoming crowd noise are required.

VLA modules are based on the same advanced engineering used in the highly successful VERTEC® Series line array systems. VLA goes one step further than VERTEC by providing six large format horn-loaded modules with three horizontal horn coverage patterns (30°, 60°, & 90°). This modular concept provides the designer the additional flexibility to vary the horizontal pattern within a vertical array by incorporating different modules with wider or narrower coverage patterns while still maintaining the vertical directivity.

The VLA Series uses JBL proven technology components. The mid and high frequency sections are horn-loaded for maximum sensitivity and optimum pattern control. The midrange section features the patented technology of the CMCD82H 200 mm (8 in) cone midrange compression driver with dual 75 mm (3 in) voice coils coupled to a driver/phasing plug assembly providing high output with low distortion. The high-frequency section features the 2431H 38 mm (1.5 in) throat diameter 75 mm (3 in) aluminum diaphragm, neodymium high-frequency drivers. The low-frequency section utilizes the 2226H 380 mm (15 in) driver with a 100 mm (4 in) voice coil.

Enclosures feature 16 mm (5/8-inch) exterior grade 12-ply birch plywood. Grilles are powder coated 14 gauge acoustically transparent perforated steel. For outdoor applications JBL offers two standard levels of weather resistance. WRC is for outdoor placement where the loudspeaker will be sheltered from direct exposure. WRX is for direct exposure or more extreme environments.



## Specifications:

Frequency Range (-10 dB):	42 Hz - 15 kHz
Frequency Response (+/-3 dB):	58 Hz - 12 kHz
Horizontal Coverage:	30°
Vertical Coverage:	Varies with array size and configuration.
Directivity Factor (Q):	100
Directivity Index (DI):	20 dB
System Power Ratings (AES):	LF: 1600 W (6400 W peak), 2 hrs. 1200 W (4800 W peak), 100 hrs. MF: 700 W (2800 W peak), 100 hrs. HF: 225 W (900 W peak), 2 hrs.
Maximum SPL:	LF: 132 dB SPL continuous average MF: 139 dB SPL continuous average HF: 144 dB SPL continuous average
<b>Transducers:</b>	
Low-Frequency Driver:	2 x 2226H 380 mm (15 in) driver with 100 mm (4 in) voice coil
Nominal Impedance:	4 ohms
Sensitivity (1 w @ 1 m):	100 dB SPL
Mid-Frequency Driver:	2 x CMCD82H 200 mm (8 in) cone midrange compression driver with dual 75 mm (3 in) voice coils.
Nominal Impedance:	4 ohms
Sensitivity (1 w @ 1 m):	111 dB SPL
High-Frequency Driver:	3 x 2431H 38 mm (1.5 in) exit compression driver with 75 mm (3 in) voice coil
Nominal Impedance:	16 ohms
Sensitivity (1 w @ 1 m):	120 dB SPL
<b>Physical:</b>	
Enclosure:	16 mm (5/8) exterior grade 12-ply birch plywood
Suspension Attachments:	16 points (4 each top bottom & rear, 2 each side), M10 threaded hardware (eyebolts NOT included).
Finish:	Black DuraFlex finish. White (-WH) available upon request. WRC & WRX available upon request.
Optional Weather Resistant Versions:	WRC for outdoor placement where the loudspeaker will be sheltered from direct exposure to the elements. WRX for direct exposure or extreme environments, such as tropical or beach, or in areas with salt air, extreme high humidity or rapid changes in temperatures. See WRC/WRX configuration sheet for details.
Grille:	Powder coated 14 gauge perforated steel, zinc-phosphate dipped, acoustically transparent foam backing (grill cloth backing on white units) (16 gauge stainless steel on WR versions)
Input Connectors:	Neutrik Speakon® NL8, plus CE-compliant covered barrier strip terminals. Barrier terminals accept up to 5.2 sq mm (10 AWG) wire or max width 9 mm (.375 in) spade lugs. Speakon in parallel with barrier strip for loop-through.
Environmental Specifications:	Mil-Std 810; IPx3 per IEC529. For higher environmental ratings, use WRC or WRX.
Dimensions (H x W x D):	533 x 1351 x 1384 mm (21.0 x 53.2 x 54.5 in)
Weight:	140 kg (309 lb)

\*With recommended active tuning. (Digital signal processing is required in order to achieve specified performance.)

<sup>1</sup>AES standard, one decade pink noise with 6 dB crest factor within device's operational band, free air. Standard AES 2 hour rating plus long-term 100 hour rating are specified for low-frequency transducers.

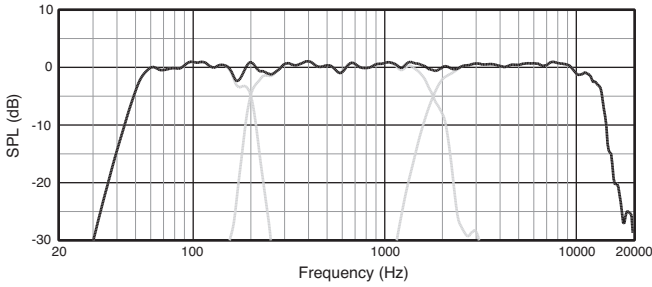
<sup>2</sup>Calculated based on power rating and sensitivity, exclusive of power compression.

<sup>3</sup>Anechoic sensitivity in free field, no additional sensitivity gains from boundary loading.

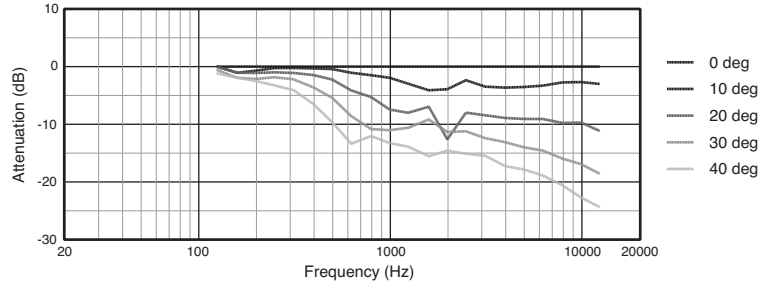
JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published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

# ▶ VLA301 Three-Way Full Range Loudspeaker with 2 x 15" LF

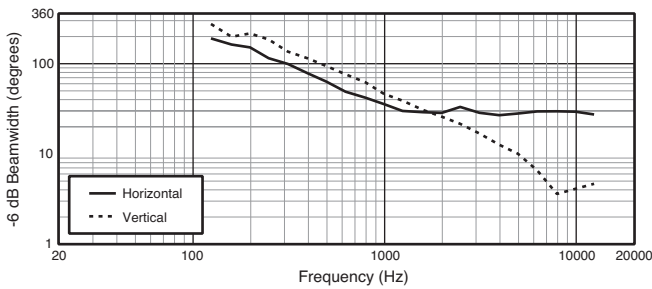
## Frequency Response:



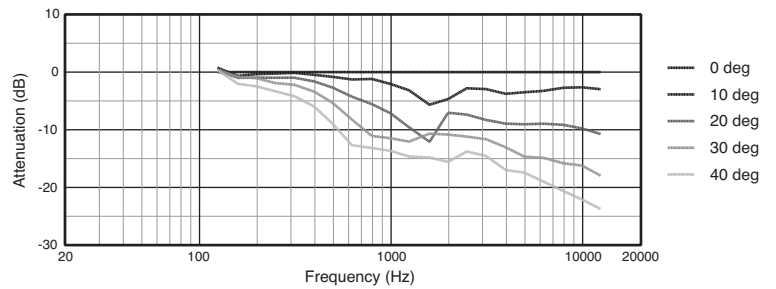
## Horizontal Left Off-Axis:



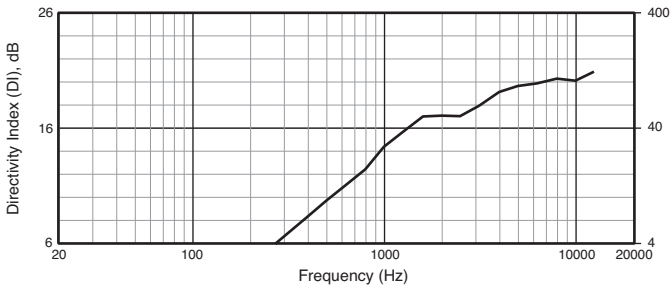
## Beamwidth:



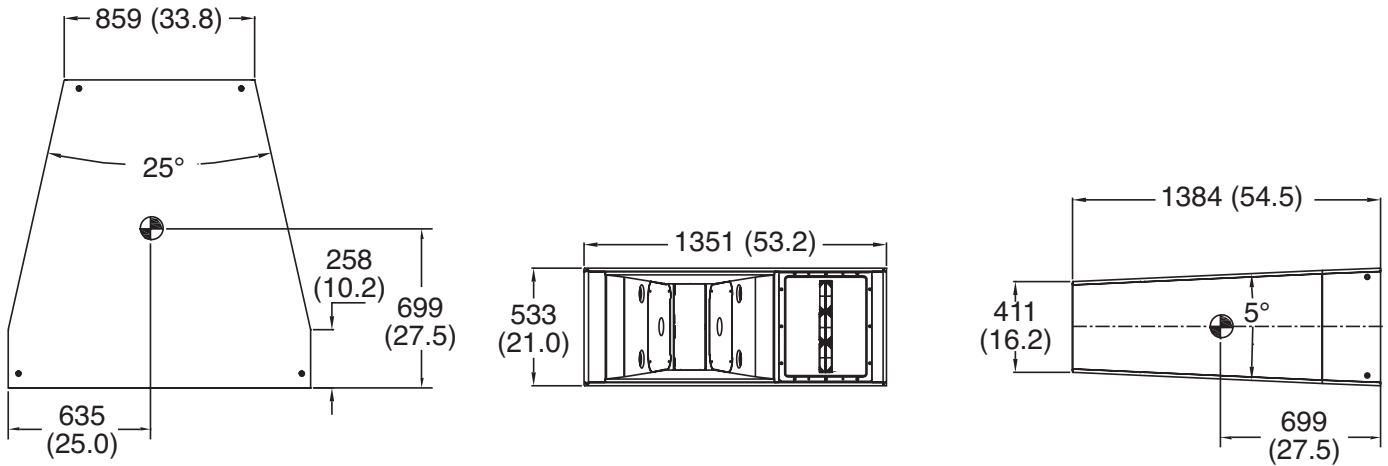
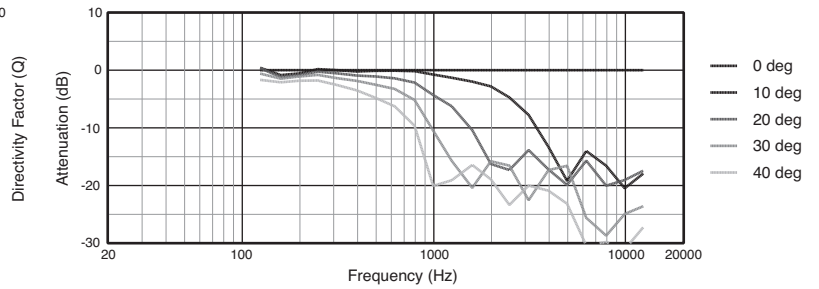
## Horizontal Right Off-Axis:



## Directivity Index:



## Vertical Off-Axis:



Dimensions in mm (in)



JBL Professional  
8500 Balboa Boulevard, P.O. Box 2200  
Northridge, California 91329 U.S.A.

■ A Harman International Company  
© Copyright 2006 JBL Professional

SS VLA301  
CRP 5M  
08/06