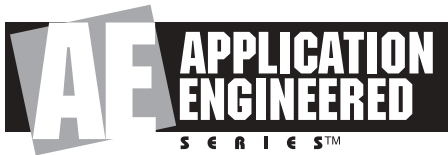




# AM6315/64 High Power 3-Way Loudspeaker with 1 x 15" LF Driver & Rotatable Horn



## Key Features:

- ▶ 60° x 40° Coverage, rotatable for use in either vertical or horizontal orientation.
- ▶ CMCD™ Cone Midrange Compression Driver provides low midrange distortion, increased sensitivity, extended bandwidth and improved phase coherency.
- ▶ PT™ Progressive Transition Waveguide for excellent pattern control with low distortion.
- ▶ Bi-Amp/Tri-Amp Switchable.
- ▶ Optional planar array frame kit (see AE Series Array Guide).

## Applications:

- ▶ Performing arts facilities
- ▶ Theatrical sound design
- ▶ Auditoriums
- ▶ Houses of worship
- ▶ Live clubs
- ▶ Dance-clubs/discotheques
- ▶ Sports facilities
- ▶ Themed entertainment venues

AM6315/64 is a high power 3-way full-range loudspeaker system comprised of one 380 mm (15 in) VGC™ Vented Gap Cooled low frequency driver, one 200 mm (8 in) CMCD Cone Midrange Compression Driver, and one 38 mm (1.5 in) exit/75 mm (3 in) voice-coil HF compression driver. The multi-band PT Progressive Transition mid-high frequency waveguide provides well-controlled 60° by 40° coverage and is rotatable for cabinet positioning in either horizontal or vertical orientation. High-slope crossovers minimize band overlap and well-controlled off-axis response enhances arrayability.

The cabinet is fitted with M10 threaded suspension points. Pre-engineered array bracketry is available.

AM6315/64 is part of JBL's AE Application Engineered Series, a versatile family of loudspeakers for a wide variety of fixed installation applications.



## Specifications:

<b>System:</b>	
Frequency Range <sup>1</sup> (-10 dB):	38 Hz – 19 kHz
Frequency Response <sup>1</sup> (±3 dB):	45 Hz – 17 kHz
Coverage Pattern:	60° x 40°, rotatable waveguide
Directivity Factor (Q):	25
Directivity Index (DI):	14 dB
Crossover Modes:	Tri-amp/Bi-amp switchable
Passive Crossover Slopes <sup>2</sup> :	MF/HF Section in Bi-amp mode: 4th order (24 dB/oct) Linkwitz-Riley HP & LP, 2.1 kHz
Transducer Power Rating (AES) <sup>3</sup> :	LF: 1000 W (4000 W peak), 2 hrs 600 W (2400 W peak), 100 hrs MF: 350 W (1400 W peak), 100 hrs HF: 75 W (300 W peak), 2 hrs
Long-Term System Power Rating (IEC) <sup>4</sup> :	LF: 600 W (2400 W peak), 100 hrs MF/HF: 350 W (1400 W peak), 100 hrs
Maximum SPL <sup>5</sup> :	LF: 125 dB-SPL cont avg (131 dB peak) Tri-amp mode: MF: 133 dB-SPL cont avg (139 dB peak) HF: 134 dB-SPL cont avg (140 dB peak) Bi-amp mode: MF/HF: 133 dB-SPL cont avg (139 dB peak)
System Sensitivity of Passive Sections <sup>6</sup> (1W @ 1m):	MF/HF Section in Bi-amp mode: 108 dB SPL
<b>Transducers:</b>	
<u>Low Frequency Driver:</u>	1 x JBL 2226H 380 mm (15 in) VGC™ driver with 100 mm (4 in) voice coil
Nominal Impedance:	8 ohms
Sensitivity <sup>7</sup> (1W @ 1m, within operational band):	95 dB SPL
<u>Midrange Driver:</u>	JBL CMCD-81H Cone Midrange Compression Driver with integral 200 mm (8 in) diameter Differential Drive™ dual voice coil internal driver
Nominal Impedance:	8 ohms
Sensitivity <sup>7</sup> (1W @ 1m):	108 dB SPL
<u>High Frequency Driver:</u>	JBL 2431H, 38 mm (1.5 in) exit compression driver, 75 mm (3 in) voice coil
Nominal Impedance:	8 ohms
Sensitivity <sup>7</sup> (1W @ 1m):	115 dB SPL
<u>Waveguide:</u>	PT-K64MH
<b>Physical:</b>	
Enclosure:	Trapezoidal with 15 degree side angles, 16 mm (5/8 in) exterior grade 11-ply Finnish birch plywood
Suspension Attachment:	13 points (3 top, 3 bottom, 2 each side, 3 rear), M10 threaded hardware
Finish:	Black DuraFlex™ finish. White available upon request.
Grille:	Powder coated 14 gauge perforated steel, with acoustically transparent black foam backing.
Input Connector:	NL8 Neutrik Speakon® and 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; IP-x3 per IEC529.
Dimensions (H x W x D in vertical cabinet orientation):	967 x 561 x 657 mm (38.1 x 22.1 x 25.9 in)
Net Weight:	48.3 kg (107 lb)
Optional Accessories:	M10 x 35 mm forged shoulder eyebolts with washers Optional planar array frame kit. See AE Series Bracket Guide

<sup>1</sup>Tri-amp mode, with recommended active tuning.

<sup>2</sup>Resultant engineered acoustical response of crossover network and components.

<sup>3</sup>AES standard, one decade pink noise with 6 dB crest factor within device's operational band, free air. Standard AES 2 hr rating plus long-term 100 hr rating are specified for low-frequency transducers.

<sup>4</sup>Passively crossed section rated with IEC standard, full bandwidth pink noise with 6 dB crest factor, 100 hours. Actively crossed section AES standard in cabinet, 100 hrs.

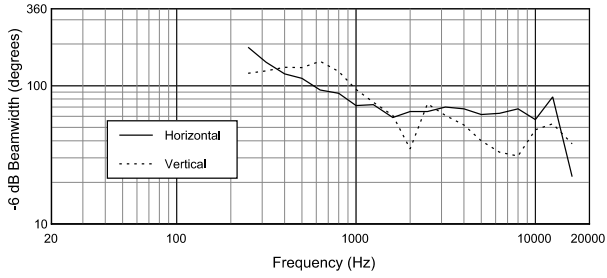
<sup>5</sup>Calculated based on power rating and sensitivity, exclusive of power compression.

<sup>6</sup>Anechoic sensitivity in free field, no additional sensitivity gain from boundary loading.

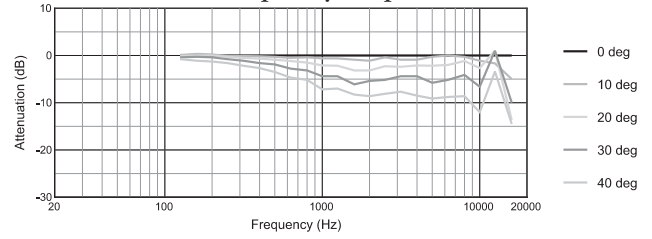
JBL continually engages in research related to product improvement. Changes introduced into existing products without notice are an expression of that philosophy.

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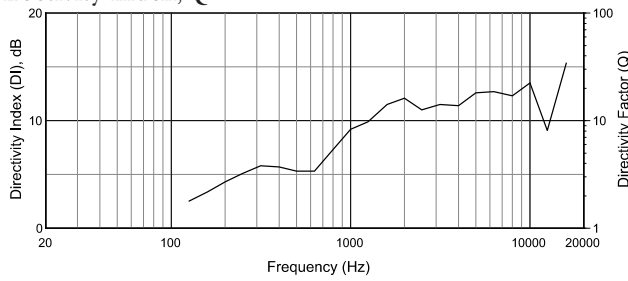
**Beamwidth**



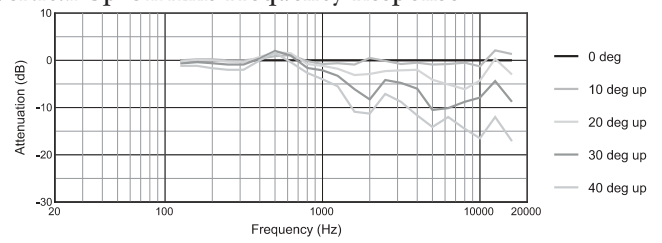
**Horizontal Off-Axis Frequency Response**



**Directivity Index, Q**



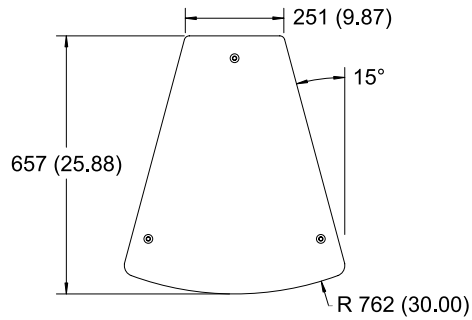
**Vertical Up Off-Axis Frequency Response**



## Dimensions

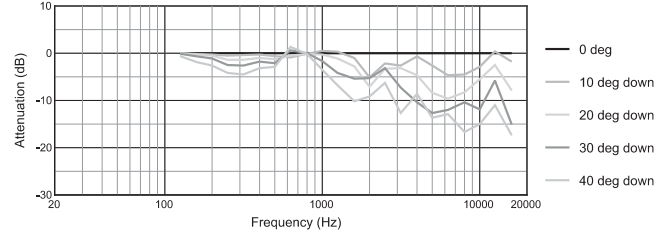
Dimensions in mm (in)

For more detailed dimensional information, refer to Application Data Sheet

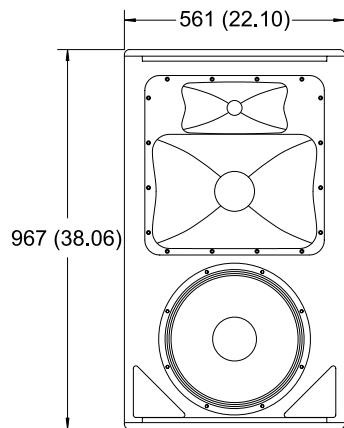


Top

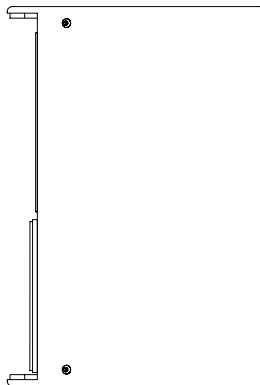
**Vertical Down Off-Axis Frequency Response**



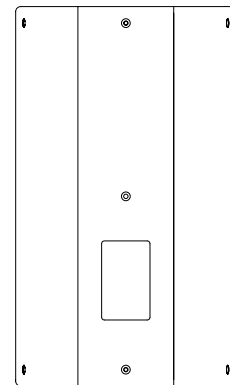
Measurements obtained in bi-amplified crossover mode. Graphs are from unaltered measured data.



Front

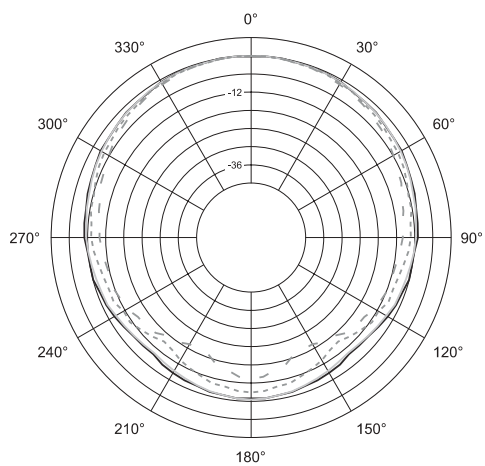


Side

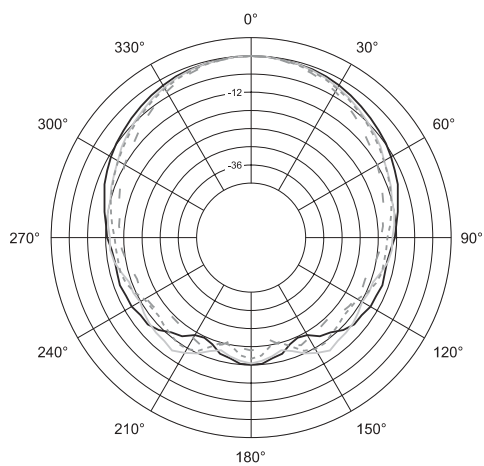


Back

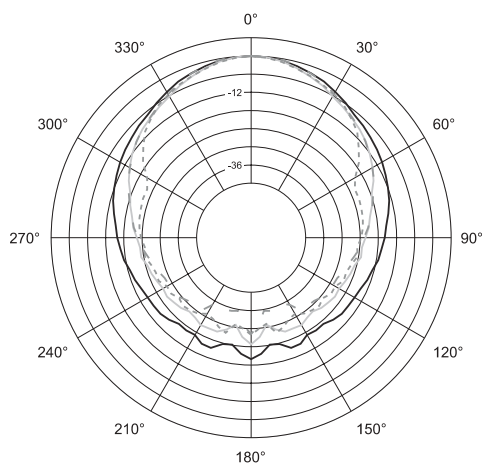
### Horizontal 1/3 Octave Polars



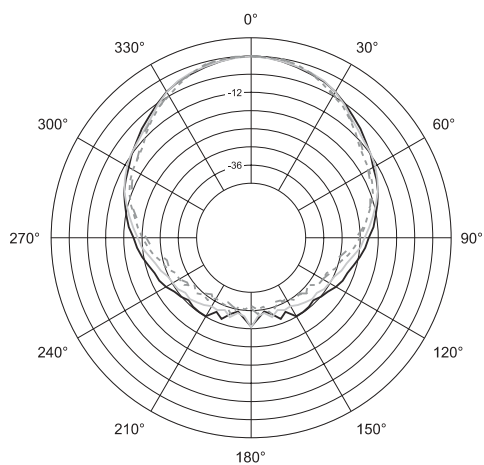
- 200Hz
- 250Hz
- - - 315Hz
- - - 400Hz



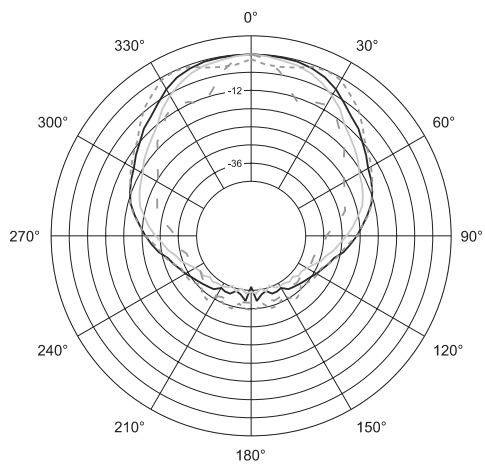
- 500Hz
- 630Hz
- - - 800Hz
- - - 1kHz



- 1.25kHz
- 1.6kHz
- - - 2kHz
- - - 2.5kHz



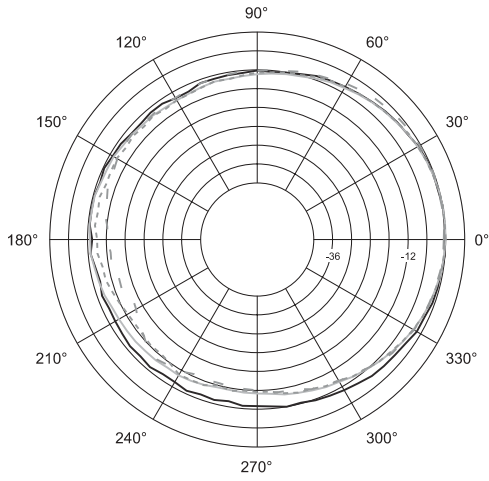
- 3.15kHz
- 4kHz
- - - 5kHz
- - - 6.3kHz



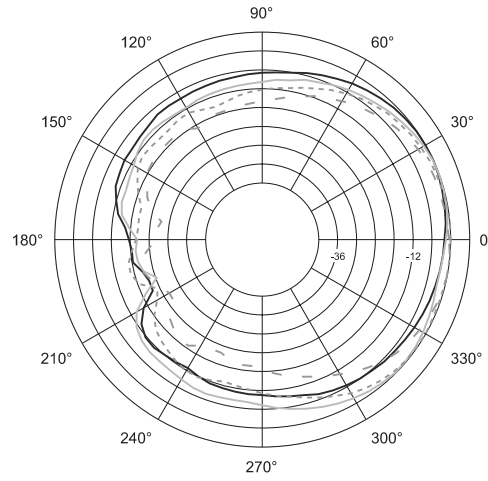
- 8kHz
- 10kHz
- - - 12.5kHz
- - - 16kHz

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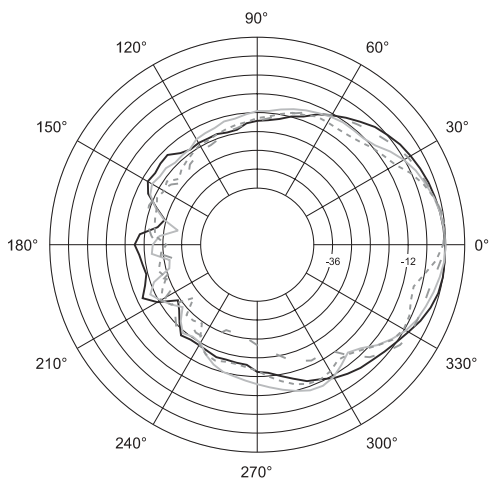
## Vertical 1/3 Octave Polars



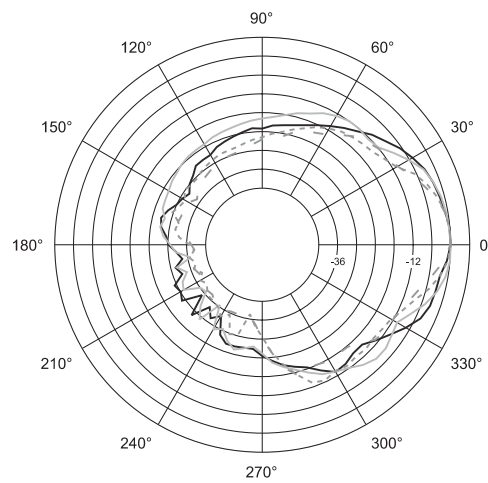
- 200Hz
- 250Hz
- - - 315Hz
- - - 400Hz



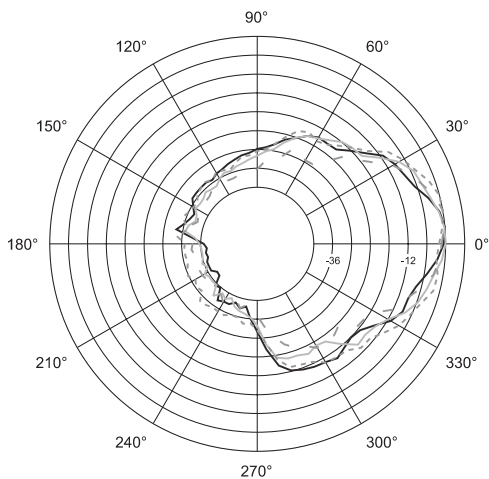
- 500Hz
- 630Hz
- - - 800Hz
- - - 1kHz



- 1.25kHz
- 1.6kHz
- - - 2kHz
- - - 2.5kHz



- 3.15kHz
- 4kHz
- - - 5kHz
- - - 6.3kHz



- 8kHz
- 10kHz
- - - 12.5kHz
- - - 16kHz



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