# High Output Three-Way Full-Range Loudspeaker with 2 x 12" LF



### **Key Features:**

- Two high power 300 mm (12 in) transducers in a compact slot-loaded configuration for low frequency extension to 40 Hz.
- ► High power CMCD™ Cone Midrange Compression Driver provides high sensitivity and high continuous SPL capability along with low distortion, extended bandwidth and improved phase coherence.
- Large format neodymium HF driver provides clear, intelligible high frequency projection.
- ► Large PT<sup>TM</sup> Progressive Transition<sup>TM</sup> waveguides provide consistent 60° x 40° pattern control, low distortion at high SPL levels and smooth frequency response.
- ▶ Rotatable mid and high frequency waveguides allow either horizontal or vertical cabinet orientation.
- ► Sophisticated, steep-slope passive midhigh crossover network with switchable tri-amp/bi-amp crossover modes.

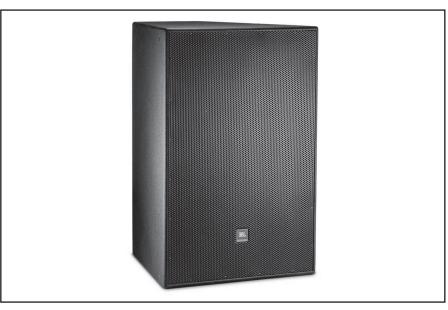
### Applications:

- ▶ Performing arts facilities / Live theaters
- ► Auditoriums / Houses of worship
- ▶ Dance clubs / Sports facilities

PD6322/64 is a Precision Directivity™ 60° by 40° full range, three way loudspeaker designed for use in arrays or singly in demanding music or speech system applications requiring high output capability with excellent pattern control and low frequency extension to 40 Hz.

The low frequency section, two 2206H 300 mm (12 in) VGC™ Vented Gap Cooled low frequency transducers, offers high power handling and low power compression for high continuous SPL capability. A newly designed LF loading plate provides the highest possible sensitivity, low frequency output and system reliability.

The mid and high frequency sections are horn-loaded for maximum sensitivity and pattern control. The CMCD-82H cone midrange compression driver consists of a driver/phasing plug assembly providing high output with low distortion. The design's extended response coupled with a small 100 mm (4 in) exit diameter allow for smoother transition to the high frequency driver in the magnitude and polar pattern domains. The integral 200 mm (8 inch) cone driver features a high power Differential Drive® dual, voice coil design. The 2432H large format high frequency compression driver utilizes a neodymium magnet and aluminum diaphragm to deliver clear and intelligible high frequency projection, extended frequency response, and low distortion at even the highest drive levels.



Specifications:

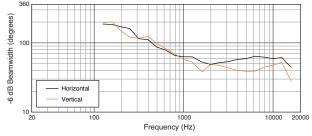
Specifications:	
Frequency Range <sup>1</sup> (-10 dB):	41 Hz to 18 kHz
Frequency Response <sup>1</sup> (±3 dB):	49 Hz to 16 kHz
Coverage Pattern:	60° x 40°
Directivity Factor (Q):	22.4
Directivity Index (DI):	13.5 dB
Crossover Modes:	Tri-amp/Bi-amp (passive mid-high) switchable
Passive Crossover <sup>2</sup> :	1.5 kHz
Transducer Power Ratings	LF: 1600 W (6400 W peak), 2 hrs. 1200 W (4800 W peak), 100 hrs
(AES) <sup>3</sup> :	MF: 350 W (1400 W peak), 100 hrs
	HF: 75 W (300 W peak), 2 hrs
Long-Term System Power	Bi-amplified Passive Mode: LF: 1200 W (4800 W peak)
Rating (IEC)4:	M/HF: 300 W (1200 W peak), 100 hrs
Maximum SPL <sup>5</sup> :	Tri-amp mode: LF: 128 dB-SPL cont avg (134 dB peak)
	MF: 135 dB-SPL cont avg (141 dB peak)
	HF: 135 dB-SPL cont avg (141 dB peak)
	Passive mode: 135 dB-SPL cont avg (141 dB peak)
System Sensitivity <sup>6</sup> (1W @ 1m):	Passive Mode: 110 dB-SPL (mid/high section only)
Transducers:	· · · · · · · · · · · · · · · · · · ·
Low Frequency Driver:	2 x 2206H 300 mm (12 in) driver with 100 mm (4 in) voice coil
Nominal Impedance:	4 ohms (2 x 8 ohms, internally wired in parallel)
Sensitivity <sup>6</sup> (1W, 1m within	*
Operational Band):	96 dB-SPL
Mid Frequency Driver:	CMCD-82H cone midrange compression driver with intergral 200 mm (8 in)
	Differential Drive® dual 75 mm (3 in) voice coil driver
Nominal Impedance:	8 ohms
Sensitivity <sup>6</sup> (1W @ 1m):	110 dB-SPL
High Frequency Driver:	2432H, 38 mm (1.5 in) exit compression driver with 75 mm (3 in) voice coil
Nominal Impedance:	8 ohms
Sensitivity <sup>6</sup> (1W @ 1m):	116 dB-SPL
Waveguides:	MF: PT-N64MF-1 600 x 600 mm (24 x 24 in)
	HF: PT-H64HF-1 300 x 300 mm (12 x 12 in)
Physical:	
Enclosure:	Trapezoidal with 15 degree side angles, 16 mm (5/8 in) exterior grade 11-ply Finnish birch plywood.
Suspension Attachment:	20 points (5 top, 5 bottom, 4 each side, 2 rear), M10 threaded hardware
Finish:	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request.
	(eyebolts NOT included, see optional accessories).  Black DuraFlex™ finish. White (-WH) available upon request.
Finish: Optional Weather Resistant Versions:	(eyebolts NOT included, see optional accessories).
Optional Weather Resistant	(eyebolts NOT included, see optional accessories).  Black DuraFlex™ finish. White (-WH) available upon request.  WRC for outdoor placement where the loudspeaker will be sheltered
Optional Weather Resistant	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request. 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,
Optional Weather Resistant	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request. 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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam
Optional Weather Resistant Versions: Grille:	(eyebolts NOT included, see optional accessories).  Black DuraFlex™ finish. White (-WH) available upon request.  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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units)
Optional Weather Resistant Versions:	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request. 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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units)  Neutrik Speakon® N18, plus CE-compliant covered barrier strip terminals.
Optional Weather Resistant Versions: Grille:	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request. 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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units) 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
Optional Weather Resistant Versions: Grille:	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request. 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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units) 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
Optional Weather Resistant Versions: Grille: Input Connectors:	(eyebolts NOT included, see optional accessories).  Black DuraFlex <sup>TM</sup> finish. White (-WH) available upon request.  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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units)  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.
Optional Weather Resistant Versions: Grille:	(eyebolts NOT included, see optional accessories).  Black DuraFlex <sup>TM</sup> finish. White (-WH) available upon request.  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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units)  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.
Optional Weather Resistant Versions:  Grille:  Input Connectors:  Environmental Specifications:	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request. 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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units)  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.  Mil-Std 810; IP-x3 per IEC529. For higher environmental ratings, use WRC or WRX.
Optional Weather Resistant Versions:  Grille:  Input Connectors:  Environmental Specifications:  Dimensions	(eyebolts NOT included, see optional accessories).  Black DuraFlex™ finish. White (-WH) available upon request.  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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units)  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.  Mil-Std 810; IP-x3 per IEC529. For higher environmental ratings, use WRC or WRX.  991 x 673 x 706 mm
Optional Weather Resistant Versions:  Grille:  Input Connectors:  Environmental Specifications:  Dimensions (H x W x D in vertical orientation):	(eyebolts NOT included, see optional accessories).  Black DuraFlex™ finish. White (-WH) available upon request.  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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units)  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.  Mil-Std 810; IP-x3 per IEC529. For higher environmental ratings, use WRC or WRX.  991 x 673 x 706 mm (39.0 x 26.5 x 27.8 in)
Optional Weather Resistant Versions:  Grille:  Input Connectors:  Environmental Specifications:  Dimensions	(eyebolts NOT included, see optional accessories). Black DuraFlex™ finish. White (-WH) available upon request. 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 temperature. See WRC/WRX configuration sheet for details.  Powder coated 14 gauge perforated steel, zinc-phosphate dipped, foam backing (grille cloth backing on white units) 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. Mil-Std 810; IP-x3 per IEC529. For higher environmental ratings, use WRC or WRX. 991 x 673 x 706 mm (39.0 x 26.5 x 27.8 in) 77 kg (170 lb)

In bi-amp mode, with recommended active tuning.
 Resultant engineered acoustical response of crossover network and components.

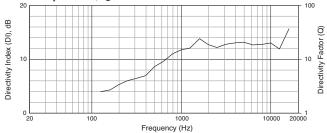
- <sup>3</sup> AES standard, one decade pink noise with 6 dB crest factor within device's operational band, free air. Standard AES 2 hr rating plug long-term 100 hr rating are specified for low-frequency transducers.
- <sup>4</sup> IEC standard, full bandwidth pink noise with 6 dB crest factor, 100 hours.
- Calculated based on power rating and sensitivity, exclusive of power compression. <sup>6</sup> Anechoic sensitivity in free field, no additional sensitivity gains from boundary loading.

## ▶ PD6322/64 High Output Three-Way Full-Range Loudspeaker

#### Beamwidth



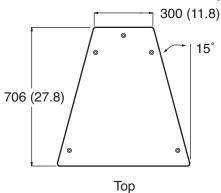
#### Directivity Index, Q



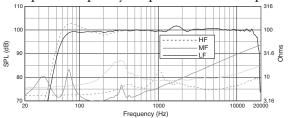
#### Dimensions

Dimensions in mm (in)

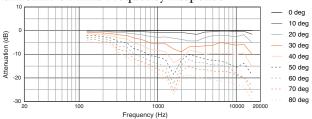
For more detailed dimensional information, refer to Application Data Sheet



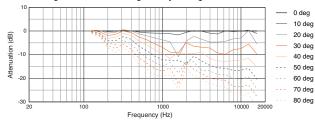
#### Tri-Amp FIR Frequency Response and Raw Impedance



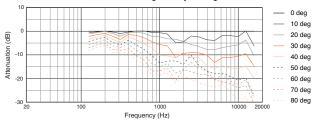
#### Horizontal Off-Axis Frequency Response



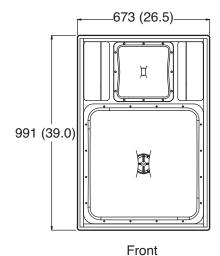
#### Vertical Up Off-Axis Frequency Response

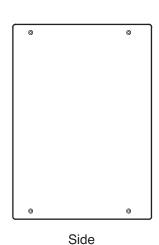


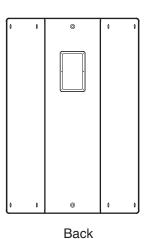
#### Vertical Down Off-Axis Frequency Response



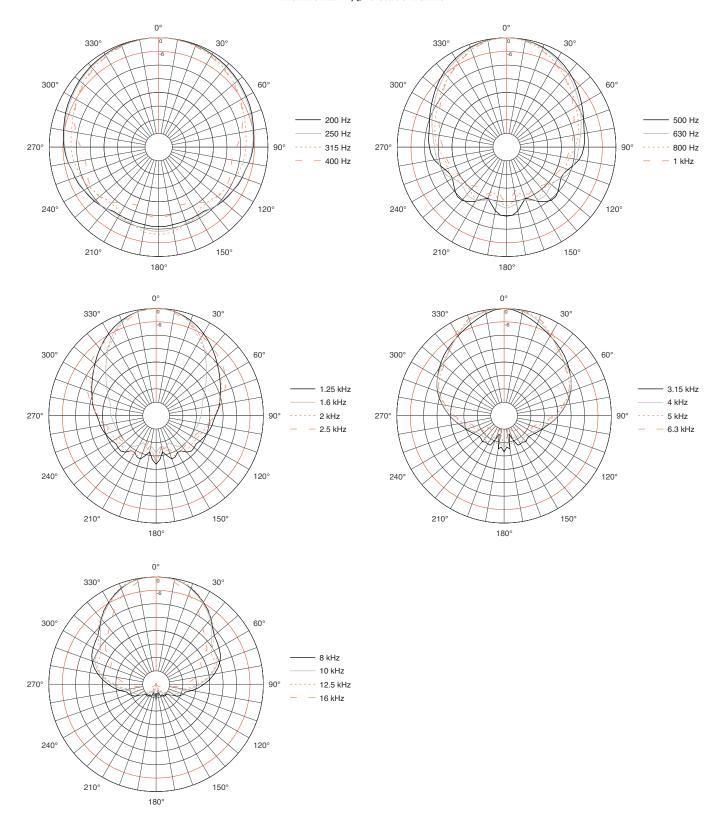
Measurements obtained in bi-amp mode using FIR filters. Graphs are from unaltered measured data.





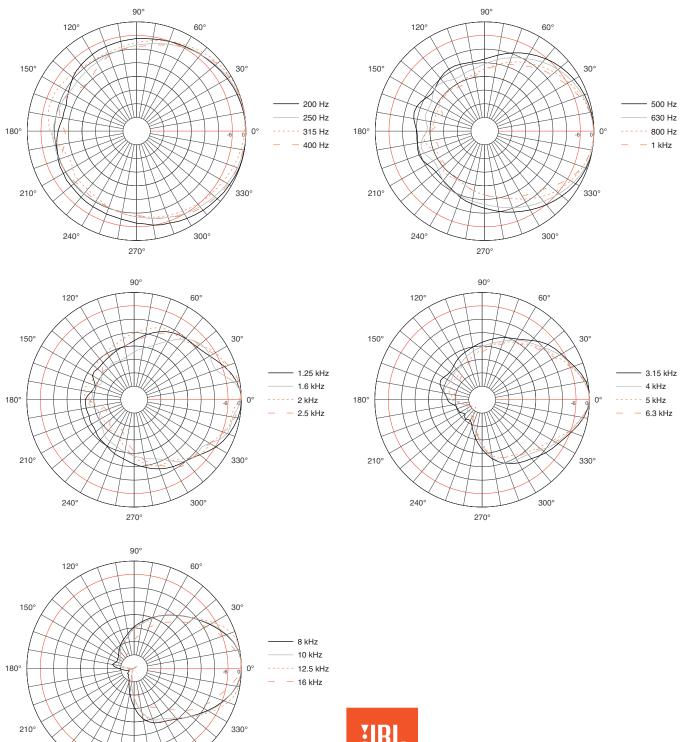


#### Horizontal 1/3 Octave Polars



## ▶ PD6322/64 High Output Three-Way Full-Range Loudspeaker

#### Vertical 1/3 Octave Polars



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.

300°

240°



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