# High Output Three-Way



#### **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

PD5322/64 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 2431H 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> :	
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 SPL5:	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)
ransducers:	g,,
Low Frequency Driver:	2 x 2206H 300 mm (12 in) driver with 100 mm (4 in) voice coil
Nominal Impedance:	
Sensitivity <sup>6</sup> (1W, 1m):	
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
Sensitivity6 (1W @ 1m within	
Operaional Band):	110 dB-SPL
High Frequency Driver:	2431H, 38 mm (1.5 in) exit compression driver with 75 mm (3 in) voice coil
Nominal Impedance:	
Sensitivity <sup>6</sup> (1W @ 1m):	
Waveguides:	
	HF: PT-H64HF 300 x 300 mm (12 x 12 in)
Physical:	
Enclosure:	Trapezoidal with 15 degree side angles, 16 mm (5/8 in) exterior grade
C	11-ply Finnish birch plywood.
Suspension Attachment:	
	(eyebolts NOT included, see optional accessories).
Finish:	
Optional Weather Resistant	
Versions:	
	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.
Grille:	
	backing (grille cloth backing on white units)
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; IP-x3 per IEC529. For higher environmental ratings, use WRC
	or WRX.
Dimensions	
(H x W x D in vertical orientation):	(39.0 x 26.5 x 27.8 in)
Net Weight:	77 kg (170 lb)
Optional Accessories:	229-00009-01 kit of three M10 x 35 mm forged shoulder steel eyebolts.

- 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.
- 4 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.

### ► PD5322/64 High Output Three-Way Full-Range Loudspeaker

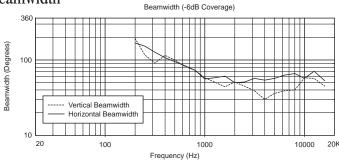
Large PT™ Progressive Transition waveguides achieve an optimum balance of extremely well controlled coverage with low distortion, smooth frequency response, and natural sound character. The mid and high frequency horns are rotatable for cabinet positioning in either horizontal or vertical orientation. High-slope crossovers minimize band overlap and a well-controlled off-axis response enhances arrayability.

The loudspeaker can be operated in either bi-amplified (passive mid/high) or in tri-amplified mode. In either case, digital signal processing is required in order to achieve specified performance. Input connectors include both Speakon® and CE-approved covered barrier strip input connectors for hookup versatility. The cabinet is fitted with twenty M10 threaded suspension points, supporting a wide variety of installation approaches.

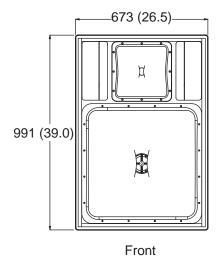
# **Dimensions** 300 (11.8) 15° 706 (27.8)

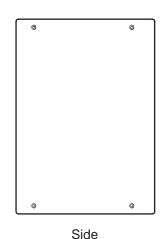
Top

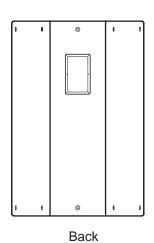
## Beamwidth



Measurements obtained in bi-amplified crossover mode







Dimensions in mm (in)



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