

MARQUIS SERIES

# Marquis Series

## key features

- HIGH PERFORMANCE VS. COST
- PRE-FITTED WITH M10 THREADED INSERTS
- VERTICAL OR HORIZONTAL ORIENTATION
- EQUIPPED WITH "YOKE MOUNT" BRACKETS



The Marquis Series is designed for use in fixed installation applications. This series has been value engineered to provide systems with the highest performance vs. cost available. The full range enclosures are pre-fitted with M10 threaded inserts and are supplied with an eyebolt kit. The MS26 and MS28 are equipped with "yoke mount" brackets and hardware. The cabinets suspend easily—both horizontally and vertically—offering a greater degree of versatility.

### MS26

The **MS26** is a full-range, low profile system with 100° x 70° dispersion. This system features two 6" LF transducers and a 1" exit titanium composite tweeter integrated to a newly designed elliptical waveguide. The MS26 is ideal for close ceiling mounting or under-balcony applications.

### MS28

The **MS28** is a full-range, low profile system with 85° x 85° dispersion. This system features two 8" LF transducers and a 1" compression driver on an Optimized Aperture Symmetrical Radiator. The MS28 is ideal for similar applications where higher power is needed.



Shrine Church of St. Stanislaus, Cleveland, Ohio

## specifications

	MS26	MS28
SYSTEM TYPE	Two-way Full-range	Two-way Full-range
FREQ. RANGE (-10 dB)	45 Hz - 20 kHz	40 Hz - 20 kHz
FREQ. RESPONSE (-3 dB)	65 Hz - 19 kHz	60 Hz - 19 kHz
NOMINAL COVERAGE	100° x 70°	85° x 85°
POWER CAPACITY <sup>1</sup>	150 W	200 W
SENSITIVITY: 1 W, 1 m	91 dB	93 dB
NOMINAL IMPEDANCE	16 ohms	16 ohms
COMPONENTS: LF	2 x 152 mm (6 in)	2 x 203 mm (8 in)
HF	25 mm (1 in)	25 mm (1 in)
ENCLOSURE	Low profile	Low profile
FINISH	Black DuraFlex™	Black DuraFlex
INPUT CONNECTORS	2 x NL4 Neutrik® Speakon®	2 x NL4 Neutrik® Speakon
DIMENSIONS (H x W x D)	599 x 217 x 241 mm	676 x 291 x 321 mm
NET WEIGHT (each)	8.2 kg (18 lb)	12.7 kg (28 lb)

<sup>1</sup> IEC filtered random noise (50 Hz - 5 kHz) with a crest factor (peak to average ratio) of 6 dB

# AE Series

The AE Application Engineered™ Series was designed with one goal in mind—to deliver the performance and features contractors and consultants need and that listeners demand. Incorporating the latest loudspeaker technology, a wide selection of models, high performance features, reliability and a systems approach, AE Series has a loudspeaker for just about any challenge you might come across.

Whatever your need—whether performance-maximized or compact profile; tri-amp; bi-amp or passive crossover; higher power or lower cost; vertical or horizontal installation—

AE Series has the right loudspeaker for the job!

**AE** APPLICATION  
ENGINEERED  
SERIES™

# Application Engineered™ Series

## key features

- SCALED SYSTEM APPROACH WITH VERSATILE OPTIONS
- VGC™ DRIVERS AND DIFFERENTIAL DRIVE® CONE TRANSDUCERS
- PT™ PROGRESSIVE TRANSITION WAVEGUIDES FOR EXCELLENT PATTERN CONTROL

AE Series loudspeakers are ideal for a wide variety of fixed installation applications including performing arts facilities, theatrical sound design, auditoriums, houses of worship, live music clubs, dance-clubs/discotheques, sports facilities and themed entertainment venues. The special mid-high frequency models can be used without LF reinforcement in voice-only PA and delay-fill applications. The smaller models are ideal in lecture halls and corporate learning centers as well as in delay-fill locations of larger systems.

### Scaled System Design Approach

AE Series models provide a wide variety of building blocks for your system design, stair-stepped to give you just the right solution for your installation.

**6000 SERIES**

**4000 SERIES**

**2000 SERIES**

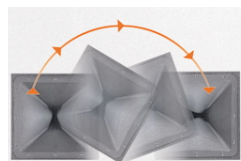
**6000-Series** models are the highest power speakers in the AE Series. **4000-Series** models are medium power and **2000-Series** are at lower power points for applications not requiring high power capability.

### Waveguide Scaling

Sometimes you need maximum pattern control. Other times the speaker needs to be as compact as possible. [AM] models are performance-maximized for the greatest pattern control. [AC] models are compact speakers that fit in areas where a smaller frontal profile is required.

### Sophisticated Crossover Networks

AE Series models incorporate sophisticated crossover designs for outstanding sound quality and consistent coverage. To minimize overlap between adjacent frequency bands, steep slopes are utilized in passive crossovers — most are 4th order (24 dB/octave). This reduces off-axis lobing, providing consistent coverage throughout the crossover region. Conjugate networks are added in some models to fine tune the frequency response for optimum sound quality.



### Rotatable Waveguides

The space often dictates how a speaker needs to be oriented. All [AM] two-way and three-way models include a rotatable waveguide, allowing the speaker to be installed in either vertical or horizontal orientation.

### Selectable Crossover Mode

Many AE Series speakers offer selectable crossover modes: tri-amp/bi-amp or bi-amp/passive switchable.

### Versatile Model Options

All AE Series speakers are available in several versions for matching décor or for outdoor use. Any model can be finished in white (-WH) or left unfinished and ready to paint (-UF). Additionally, two degrees of weather resistance are available. For many environments the basic weather resistance option (-WRC) is suitable. An extra thick DuraFlex™ coating, multilayer grille and component treatments provide excellent environmental protection. For extreme environments, with high humidity and/or rapid temperature cycling, a maximum weather treatment (-WRX) adds a full fiberglass covering of the cabinet.

### Legendary JBL Transducers

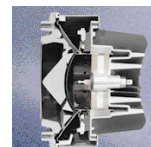
AE Series incorporates the legendary reliability of JBL's VGC™ Vented Gap Cooled drivers, augmented by today's new generation of JBL compression drivers and neodymium Differential Drive® cone transducers. Where reliability is important, JBL transducers are known as the best, most reliable drivers in the business.



### PT™ Progressive Transition Waveguides

JBL's new patent pending Progressive Transition Waveguides represent the latest in horn technology.

In addition to providing smooth, low distortion sound, PT Waveguides deliver uniform off-axis frequency response to every point within the intended coverage area — not just in the horizontal and vertical planes — resulting in superior array-ability of multiple loudspeaker systems. PT Waveguides combine outstanding pattern control with undistorted sound for natural music and intelligible speech.



### CMCD™ Cone Midrange Compression Drivers

Incorporated into all cone midrange models — patent pending CMCD technology is more than a simple displacement plug. In addition to providing increased output and lower distortion, this cone-based true compression driver design extends operational bandwidth (both up and down in frequency) to cover the entire vocal range seamlessly, allows for better waveguide pattern control, and improves phase coherency of the midrange signal for clearer, more intelligible audio quality.

### MODEL NUMBERING KEY

AM6340/95!

**M** = Performance Maximized  
**C** = Compact  
**L** = Low Frequency  
**SH** = Subwoofer  
**SL** = Subwoofer Pass-Loaded

**6000** = Highest Power  
**4000** = Medium Power  
**2000** = Lower Power

**3** = 3-Way  
**2** = 2-Way  
**1** = 1-Way

**The Number of LF Drivers**

**4** = 4 LF Drivers  
**2** = 2 LF Drivers  
**1** = 1 LF Driver  
**0** = 0 Mid-Hi or HF System

**Wave Size**

**1** = 10"  
**2** = 8"  
**3** = 6"  
**0** = 12"

(The number refers to the horn's LF diameter)

**Coverage Pattern**

**Horizontal**

0-120°  
 0-90°  
 0-60°

**Vertical**

0-120°  
 0-90°  
 0-45°

[AC] Rotatable  
 [AC] Not Rotatable  
Direct-Beam available only





**AM6340/xx**



**AM6315/xx**



**AM6200/xx**



**AM4315/xx**



**AM4200/xx**

### AM | Maximixed 3-Way

	<b>AM6340/95 &amp; /64</b>	<b>AM6315/95 &amp; /64</b>	<b>AM6200/95 &amp; /64</b>	<b>AM4315/95 &amp; /64</b>	<b>AM4200/95 &amp; /64</b>
<b>SYSTEM TYPE</b>	High-power Three-way	High-power Three-way	High-power Mid-high	Medium-Power Three-way	Medium-Power Mid-high
<b>FREQUENCY RANGE</b>	50 Hz - 19 kHz (-10 dB)	38 Hz - 19 kHz (-10 dB)	200 Hz - 19 kHz (-10 dB)	40 Hz - 23 kHz (-10 dB)	350 Hz - 23 kHz (-10 dB)
<b>FREQUENCY RESPONSE</b>	55 Hz - 17 kHz (± 3 dB)	45 Hz - 17 kHz (± 3 dB)	250 Hz - 17 kHz (± 3 dB)	50 Hz - 20 kHz (± 3 dB)	400 Hz - 20 kHz (± 3 dB)
<b>NOMINAL COVERAGE</b>	AM6340/95: 90° x 50° AM6340/64: 60° x 40°	AM6315/95: 90° x 50° AM6315/64: 60° x 40°	AM6200/95: 90° x 50° AM6200/64: 60° x 40°	AM4315/95: 90° x 50° AM4315/64: 60° x 40°	AM4200/95: 90° x 50° AM4200/64: 60° x 40°
<b>TRANSDUCER</b> LF	1200 W (4800 W peak)	1000 W (4000 W peak)		500 W (2000 W peak)	
<b>POWER RATING(AES)</b> MF	350 W (1400 W peak)	350 W (1400 W peak)	350 W (1400 W peak)	MF/HF: 125 W (500 W peak)	125 W (500 W peak)
	HF	75 W (300 W peak)	75 W (300 W peak)		35 W (120 W peak)
<b>LONG-TERM</b> LF	1000 W (4000 W peak)	600 W (2400 W peak)		350 W (1400 W peak)	
<b>POWER RATING(IEC):</b> MF/HF	350 W (1400 W peak)	350 W (1400 W peak)	350 W (1400 W peak)	350 W (1400 W peak) (Passive mode)	125 W (500 W peak)
<b>MAXIMUM SPL:</b> LF	130 dB	125 dB		124 dB	
	MF	133 dB	133 dB		127 dB
	HF	134 dB	134 dB		129 dB
<b>BI-AMP MODE:</b> MF/HF	133 dB	133 dB	133 dB	127 dB	127 dB
<b>SELECTABLE CROSSOVER MODES</b>	Bi-amp, Tri-amp	Bi-amp, Tri-amp	Bi-amp, Passive	Bi-amp, Passive	Bi-amp, Passive
<b>SUSPENSION</b>	13 points	13 points	13 points	13 points	13 points
<b>DIMENSIONS</b> (H x W x D)	1094 x 561 x 657 mm 43.1 x 22.1 x 25.9 in	967 x 561 x 657 mm 38.1 x 22.1 x 25.9 in	548 x 561 x 657 mm 21.6 x 22.1 x 25.9 in	967 x 561 x 657 mm 38.1 x 22.1 x 25.9 in	548 x 561 x 657 mm 21.6 x 22.1 x 25.9 in
<b>NET WEIGHT</b> (each)	56.7 kg (125 lb)	48.3 kg (107 lb)	29.0 kg (64 lb)	46.7 kg (103 lb)	28.1 kg (62 lb)



**AM6215/xx**



**AM6212/xx**



**AM4215/xx**



**AM4212/xx**

### AM | Maximixed 2-Way

	<b>AM6215/95 &amp; /64</b>	<b>AM6212/95, /64 &amp; /00</b>	<b>AM4215/95 &amp; /64</b>	<b>AM4212/95, /64 &amp; /00</b>
<b>SYSTEM TYPE</b>	High-power Two-way	High-power Two-way	Medium-power Two-way	Medium-power Two-way
<b>FREQUENCY RANGE</b>	35 Hz - 19 kHz (-10 dB)	40 Hz - 19 kHz (-10 dB)	40 Hz - 20 kHz (-10 dB)	55 Hz - 20 kHz (-10 dB)
<b>FREQUENCY RESPONSE</b>	45 Hz - 17 kHz (± 3 dB)	60 Hz - 17 kHz (± 3 dB)	45 Hz - 18 kHz (± 3 dB)	70 Hz - 18 kHz (± 3 dB)
<b>NOMINAL COVERAGE</b>	AM6215/95: 90° x 50° AM6215/64: 60° x 40°	AM6212/95: 90° x 50° AM6212/64: 60° x 40° AM6212/00: 100° x 100°	AM4215/95: 90° x 50° AM4215/64: 60° x 40°	AM4212/95: 90° x 50° AM4212/64: 60° x 40° AM4212/00: 100° x 100°
<b>TRANSDUCER</b> LF	1000 W (4000 W peak)	800 W (3200 W peak)	500 W (2000 W peak)	400 W (2000 W peak)
<b>POWER RATING(AES):</b> HF	75 W (300 W peak)	75 W (300 W peak)	35 W (140 W peak)	35 W (140 W peak)
<b>LONG-TERM</b> POWER	600 W (2400 W peak)	600 W (2400 W peak)	350 W (2400 W peak)	350 W (2400 W peak)
<b>RATING(IEC) PASSIVE MODE</b>	LF: 127 dB; HF: 133 dB	LF: 124 dB; HF: 139 dB	LF: 124 dB; HF: 128 dB	LF: 120 dB; HF: 125 dB
<b>MAXIMUM SPL:</b> LF/HF	127 dB	124 dB	124 dB	120 dB
<b>PASSIVE MODE</b>	Bi-amp, Passive	Bi-amp, Passive	Bi-amp, Passive	Bi-amp, Passive
<b>SELECTABLE CROSSOVER MODES</b>	15 points	15 points	15 points	15 points
<b>SUSPENSION</b>	783 x 422 x 504 mm 30.8 x 16.6 x 19.9 in	713 x 371 x 460 mm 28.1 x 14.6 x 18.1 in	783 x 422 x 504 mm 30.8 x 16.6 x 19.9 in	713 x 371 x 460 mm 28.1 x 14.6 x 18.1 in
<b>DIMENSIONS</b> (H x W x D)	29.9 kg (66 lb)	26.3 kg (58 lb)	29.0 kg (64 lb)	25.4 kg (56 lb)
<b>NET WEIGHT</b> (each)				

AE SERIES



AC | Compact 2-Way

	AC2215/95, /64 & /00	AC2212/95, /64 & /00
SYSTEM TYPE	Lower-power Two-way	Lower-power Two-way
FREQUENCY RANGE	42 Hz - 19 kHz (-10 dB)	50 Hz - 19 kHz (-10 dB)
FREQUENCY RESPONSE	50 Hz - 17 kHz (± 3 dB)	55 Hz - 17 kHz (± 3 dB)
NOMINAL COVERAGE	AC2215/95: 90° x 50° AC2215/64: 60° x 40° AC2215/00: 100° x 100°	AC2212/95: 90° x 50° AC2212/64: 60° x 40° AC2212/00: 100° x 100°
TRANSDUCER LF	275 W (1100 W peak)	300 W (1100 W peak)
POWER RATING(AES): HF	30 W (120 W peak)	30 W (120 W peak)
LONG-TERM POWER RATING (IEC)	250 W (1000 W peak)	250 W (1000 W peak)
MAXIMUM SPL: LF	121 dB	120 dB
MAXIMUM SPL: HF	127 dB	129 dB
PASSIVE MODE	121 dB	120 dB
SELECTABLE CROSSOVER MODES	Bi-amp, Passive	Bi-amp, Passive
SUSPENSION	15 points	15 points
DIMENSIONS (H x W x D)	637 x 422 x 504 mm	548 x 355 x 352 mm
NET WEIGHT (each)	25.1 x 16.6 x 19.9 in 23.6 kg (52 lb)	21.6 x 14.0 x 13.9 in 18.1 kg (40 lb)

AL | Low Frequency

	AL6115	AL6125
SYSTEM TYPE	High-power Low Freq.	High-power Low Freq.
FREQUENCY RANGE	40 Hz - 2.5 kHz (-10 dB)	40 Hz - 2.5 kHz (-10 dB)
FREQUENCY RESPONSE	47 Hz - 2.1 kHz (± 3 dB)	42 Hz - 2.1 kHz (± 3 dB)
TRANSDUCER	1000 W (4000 W peak)	2000 W (8000 W peak)
POWER RATING(AES)	(2 hrs)	(2 hrs)
LONG-TERM SYSTEM POWER RATING	600 W (2400 W peak)	1200 W (2400 W peak)
MAXIMUM SPL <sup>1</sup>	100 hrs	100 hrs
SELECTABLE CROSSOVER MODES	50 Hz - 125 Hz: 129 dB 125 Hz - 800 Hz: 127 dB	50 Hz - 125 Hz: 130 dB 125 Hz - 800 Hz: 129 dB
ENCLOSURE	Discrete	Parallel, Discrete
SUSPENSION	Trapezoidal, 15° side angles	Rectangular
DIMENSIONS (H x W x D)	13 points	12 points
NET WEIGHT (each)	548 x 561 x 657 mm 21.6 x 22.1 x 25.9 in 29.0 kg (64 lb)	967 x 422 x 504 mm 38.1 x 16.6 x 19.9 in 44.5 kg (98 lb)

<sup>1</sup> Maximum long-term average SPL. Peak SPL is 6 dB higher. Figure is for highest Q version.



ASB | Subwoofers

	ASB6118	ASB6128	ASB4128	ASB6128V	ASH6118
SYSTEM TYPE	High-power Subwoofer	High-power Subwoofer	Medium-power Subwoofer	Extended Response Sub	Horn-loaded Subwoofer*
FREQUENCY RANGE	28 Hz - 1 kHz (-10 dB)	30 Hz - 1 kHz (-10 dB)	30 Hz - 1 kHz (-10 dB)	21 Hz - 300 Hz (-10 dB)	25 Hz - 250 Hz (-10 dB)*
FREQUENCY RESPONSE	35 Hz - 1 kHz (± 3 dB)	38 Hz - 1 kHz (± 3 dB)	40 Hz - 1 kHz (± 3 dB)	25 Hz - 300 Hz (± 3 dB)	30 Hz - 200 Hz (± 3 dB)
TRANSDUCER	1200 W (4800 W peak)	2400 W (9600 W peak)	1000 W (4000 W peak)	2400 W (9600 W peak)	1200 W (4800 W peak)
POWER RATING(AES)	(2 hrs)	(2 hrs)	(2 hrs)	(2 hrs)	(2 hrs)
LONG-TERM SYSTEM POWER RATING	800 W (3200 W peak)	1600 W (6400 W peak)	600 W (2400 W peak)	1600 W (6400 W peak)	800 W (3200 W peak)
MAXIMUM SPL	100 hrs	100 hrs	100 hrs	100 hrs	100 hrs
SELECTABLE CROSSOVER MODES	30 Hz - 100 Hz: 129 dB 100 Hz - 500 Hz: 129 dB	30 Hz - 100 Hz: 136 dB 100 Hz - 500 Hz: 136 dB	30 Hz - 100 Hz: 133 dB 100 Hz - 500 Hz: 133 dB	30 Hz - 100 Hz: 134 dB 100 Hz - 500 Hz: 135 dB	30 Hz - 140 Hz: 133 dB
ENCLOSURE	Discrete	Parallel, Discrete	Parallel, Discrete	Parallel, Discrete	Discrete
SUSPENSION	Rectangular	Rectangular	Rectangular	Rectangular	Rectangular
DIMENSIONS (H x W x D)	14 points	12 points	14 points	13 points	None
NET WEIGHT (each)	548 x 561 x 816 mm 21.6 x 22.1 x 32.2 in 44.5 kg (98 lb)	1094 x 561 x 816 mm 43.1 x 22.1 x 32.2 in 73.0 kg (161 lb)	1094 x 561 x 816 mm 43.1 x 22.1 x 32.2 in 64.9 kg (143 lb)	967 x 561 x 1215 mm 38.1 x 22.1 x 47.85 in 89.8 kg (198 lb)	564 x 1530 x 1288 mm 22.3 x 56.4 x 50.7 in 159.3 kg (351 lb)

\* Designed to be used in multiples (2 minimum; 4 optimum) with proximity placement or with proper boundary/surface loading. Specifications shown are for one cabinet.

# Precision Directivity™ PD5000 Series

The new PD5000 Series joins JBL's broad lineup of installed sound loudspeakers, complementing the larger PD700 mid-high cabinets with a more compact size and supplementing the smaller AE Series cabinets with higher SPL capability and larger horns for pattern control to a lower frequency. The PD5000 Series loudspeakers deliver high power and constant coverage in a low profile form.

Featured across the PD5000 Series, newly developed 24 by 24 inch PT™ Progressive Transition mid-frequency rotatable waveguides that provide versatility, excellent pattern control with low distortion and extremely natural sound character. This is an evolution of the waveguide technology of the successful JBL Professional Application Engineered™ (AE) install series. Also incorporating sophisticated, steep-slope passive crossover networks minimize band overlap, further enhancing off-axis pattern control. User accessible internal switches allow for a fully active crossover.

## PD5200/43 (40° x 30°)

## PD5200/64 (60° x 40°)

## PD5200/95 (90° x 50°)

The PD5200 Series Precision Directivity mid-high frequency loudspeakers are designed for applications requiring high output capability with excellent pattern control.

The CMCD-82H cone midrange compression driver consists of a driver/phasing plug assembly providing high output with low distortion. CMCD-82H's extended response allows for smoother transition to the high frequency driver and the smaller entrance diameter into the waveguide provides for better pattern control. The internal 200 mm (8 inch) CMCD-82H features a high power neodymium Differential Drive® dual voicecoil 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.

## PD5212/43 (40° x 30°)

## PD5212/64 (60° x 40°)

## PD5212/95 (90° x 50°)

The PD5212 Series Precision Directivity full range two-way loudspeakers are designed for applications requiring high output capability with excellent pattern control. The speakers can be utilized alone in music or speech systems where frequency extension to 80 Hz is adequate or combined with subwoofers to create extended bandwidth fullrange systems.

The M222-8A 300 mm (12 in) low frequency transducer features high sensitivity and low power compression for high continuous SPL capability. It is horn-loaded for additional sensitivity and improved pattern control. A newly designed low frequency phasing plug extends frequency response, providing smoother transition to the high frequency driver. The 2451H-1 large format high frequency compression driver utilizes a neodymium magnet and pure titanium diaphragm to deliver clear and intelligible high frequency projection, extended frequency response, and low distortion at even the highest drive levels.

## PD5322/43 (40° x 30°)

## PD5322/64 (60° x 40°)

## PD5322/95 (90° x 50°)

The PD5322 Precision Directivity full range, three way loudspeakers are designed for applications requiring high output sensitivity with excellent pattern control. They can be utilized standalone in demanding music or speech systems where low frequency extension to 40 Hz is required.

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

The mid and high frequency sections are hornloaded for additional low-mid and midrange sensitivity and improved pattern control. The CMCD-82H cone midrange compression driver consists of a driver/phasing plug assembly providing high output with low distortion. The integral 200 mm (8 in) cone driver features a high power neodymium Differential Drive® dual, voicecoil 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.

## PD5122

The PD5122 is intended for use as a flown or ground supported, high power low frequency module used in conjunction with mid/high-only or fullrange systems of the PD5000 series to construct arrays with extended low frequency pattern control.

Low frequency transducers are the 2206H 300 mm (12 in) VGC™ Vented Gap Cooled drivers. They deliver excellent low frequency extension with minimal power compression and low distortion plus high sensitivity and power handling.

## PD5125

The PD5125 is a high power low frequency loudspeaker comprised of two 380 mm (15 in) VGC Vented Gap Cooled low frequency drivers in a front-loaded, vented configuration. Though it is intended for use as a flown or ground supported, high power low frequency module used in conjunction with mid/high or fullrange systems of the PD5000 and PD700 series, the PD5125 will perform well in any application where high output low bass is required.

Low frequency transducers are the 2226H 380 mm (15 in) VGC Vented Gap Cooled drivers. They deliver excellent low frequency extension with minimal power compression and low distortion plus high sensitivity and power handling. Large vent area assures minimal port compression and low distortion at high output levels.

**PD5000 Series loudspeaker inputs include both Speakon® and CE-compliant covered barrier strips. The cabinets are fitted with twenty M10 threaded suspension points, supporting a wide variety of installation approaches. All cabinets are constructed with 11 ply birch and finished with black DuraFlex™.**

PD5000 SERIES

# key features

- CLEAR, INTELLIGIBLE HIGH FREQUENCY PROJECTION
- LARGE PT™ PROGRESSIVE TRANSITION WAVEGUIDES FOR PATTERN CONTROL, LOW DISTORTION AND SMOOTH RESPONSE
- ROTATABLE WAVEGUIDES FOR HORIZONTAL OR VERTICAL CABINET ORIENTATION
- INTEGRAL, SOPHISTICATED STEEP-SLOPE PASSIVE CROSSOVER NETWORKS WITH BIAMP/ PASSIVE SWITCHABLE CROSSOVER MODES
- TWO FULLY-COMPATIBLE LOW FREQUENCY LOUDSPEAKERS FOR INSTALLATION VERSATILITY



PD5200/43, PD5200/64 (shown)  
PD5200/95



PD5212/43 (shown), PD5212/64  
PD5212/95



PD5322/43, PD5322/64  
PD5322/95 (shown)

# specifications

	PD5200/43	PD5200/64	PD5200/95	PD5212/43	PD5212/64	PD5212/95
SYSTEM TYPE	Mid-High Frequency	Mid-High Frequency	Mid-High Frequency	Two-Way Full-Range	Two-Way Full-Range	Two-Way Full-Range
FREQUENCY RANGE <sup>1</sup>	200 Hz - 18 kHz (-10 dB)	200 Hz - 18 kHz (-10 dB)	200 Hz - 18 kHz (-10 dB)	80 Hz - 18 kHz (-10 dB)	80 Hz - 18 kHz (-10 dB)	80 Hz - 18 kHz (-10 dB)
FREQUENCY RESPONSE	240 Hz - 16 kHz (± 3 dB)	240 Hz - 16 kHz (± 3 dB)	240 Hz - 16 kHz (± 3 dB)	90 Hz - 16 kHz (± 3 dB)	90 Hz - 16 kHz (± 3 dB)	90 Hz - 16 kHz (± 3 dB)
SYSTEM SENSITIVITY: 1 W, 1m	111 dB SPL (Passive Mode)	110 dB SPL (Passive Mode)	109 dB SPL (Passive Mode)	109 dB SPL (Passive Mode)	107 dB SPL (Passive Mode)	106 dB SPL (Passive Mode)
NOMINAL COVERAGE	40° x 30°	60° x 40°	90° x 50°	40° x 30°	60° x 40°	90° x 50°
TRANSDUCER	MF: 350 W (1400 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	MF: 350 W (1400 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	MF: 350 W (1400 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	LF: 400 W (1600 W pk), 2 hrs LF: 300 W (1200 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	LF: 400 W (1600 W pk), 2 hrs LF: 300 W (1200 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	LF: 400 W (1600 W pk), 2 hrs LF: 300 W (1200 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs
POWER RATING (AES) <sup>2</sup>				300 W (1200 W peak), 100 hrs	300 W (1200 W peak), 100 hrs	300 W (1200 W peak), 100 hrs
LONG-TERM <sup>3</sup> LF	300 W (1200 W peak), 100 hrs	300 W (1200 W peak), 100 hrs	300 W (1200 W peak), 100 hrs			
POWER RATING (IEC): MF/HF						
MAXIMUM SPL: <sup>4</sup> LF				137 dB SPL (143 dB peak)	135 dB SPL (143 dB peak)	134 dB SPL (140 dB peak)
Cont. Avg. MF	137 dB SPL (143 dB peak)	135 dB SPL (141 dB peak)	134 dB SPL (140 dB peak)	135 dB SPL (141 dB peak)	135 dB SPL (141 dB peak)	133 dB SPL (139 dB peak)
HF	135 dB SPL (141 dB peak)	135 dB SPL (141 dB peak)	133 dB SPL (139 dB peak)	134 dB SPL (140 dB peak)	132 dB SPL (138 dB peak)	131 dB SPL (137 dB peak)
PASSIVE MODE: MF/HF	136 dB SPL (142 dB peak)					
ENCLOSURE	Trapezoidal, 12.5° side angles	Trapezoidal, 12.5° side angles	Trapezoidal, 12.5° side angles	Trapezoidal, 12.5° side angles	Trapezoidal, 12.5° side angles	Trapezoidal, 12.5° side angles
DIMENSIONS	991 x 673 x 897 mm 39.0 x 26.5 x 35.3 in	991 x 673 x 706 mm 39.0 x 26.5 x 27.8 in	991 x 673 x 706 mm 39.0 x 26.5 x 27.8 in	991 x 673 x 897 mm 39.0 x 26.5 x 35.3 in	991 x 673 x 706 mm 39.0 x 26.5 x 27.8 in	991 x 673 x 706 mm 39.0 x 26.5 x 27.8 in
NET WEIGHT (each)	69.0 kg (152 lb)	58.8 kg (130 lb)	58.8 kg (130 lb)	75.5 kg (175 lb)	69.0 kg (152 lb)	69.0 kg (152 lb)

	PD5322/43	PD5322/64	PD5322/95	PD5122	PD5125	
SYSTEM TYPE	Three-Way Full-Range	Three-Way Full-Range	Three-Way Full-Range	Slot-Loaded Low Frequency	Dual 15" Low Frequency	<sup>1</sup> In bi-amp mode, with recommended active tuning.
FREQUENCY RANGE <sup>1</sup>	41 Hz - 17 kHz (-10 dB)	41 Hz - 17 kHz (-10 dB)	41 Hz - 17 kHz (-10 dB)	41 Hz - 1 kHz (-10 dB)	37 Hz - 2.5 kHz (-10 dB)	
FREQUENCY RESPONSE	49 Hz - 15 kHz (±3 dB)	49 Hz - 15 kHz (±3 dB)	49 Hz - 15 kHz (±3 dB)	49 Hz - 300 Hz (±3 dB)	42 Hz - 2.1 kHz (±3 dB)	<sup>2</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.
SYSTEM SENSITIVITY: 1 W, 1m	111 dB SPL (Passive Mode)	110 dB SPL (Passive Mode)	109 dB SPL (Passive Mode)	96 dB (60 Hz - 250 Hz) <sup>5</sup>	103 dB (50 Hz - 125 Hz) <sup>5</sup>	
NOMINAL COVERAGE	40° x 30°	60° x 40°	90° x 50°			
TRANSDUCER	LF: 1600 W (6400 W pk), 2 hrs LF: 1200 W (4800 W pk), 100 hrs MF: 350 W (1400 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	LF: 1600 W (6400 W pk), 2 hrs LF: 1200 W (4800 W pk), 100 hrs MF: 350 W (1400 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	LF: 1600 W (6400 W pk), 2 hrs LF: 1200 W (4800 W pk), 100 hrs MF: 350 W (1400 W pk), 100 hrs HF: 75 W (300 W pk), 2 hrs	1600 W (6400 W pk) 2 hrs <sup>2</sup>	1600 W (6400 W pk) 2 hrs <sup>2</sup>	
POWER RATING (AES) <sup>2</sup>						
LONG-TERM <sup>3</sup> LF	1200 W (4800 W pk) 300 W (1200 W pk), 100 hrs	1200 W (4800 W pk) 300 W (1200 W pk), 100 hrs	1200 W (4800 W pk) 300 W (1200 W pk), 100 hrs	1200 W (4800 W pk), 100 hrs <sup>6</sup>	1200 W (4800 W pk), 100 hrs <sup>6</sup>	
POWER RATING (IEC): MF/HF						
MAXIMUM SPL: <sup>4</sup> LF	128 dB SPL (134 dB peak)	128 dB SPL (134 dB peak)	128 dB SPL (134 dB peak)	128 dB SPL (134 dB pk) <sup>4</sup>	136 dB SPL (142 pk) (50 Hz - 125 Hz) <sup>4</sup>	
Cont. Avg. MF	137 dB SPL (143 dB peak)	135 dB SPL (141 dB peak)	134 dB SPL (140 dB peak)			
HF	135 dB SPL (141 dB peak)	135 dB SPL (141 dB peak)	133 dB SPL (139 dB peak)			
PASSIVE MODE: MF/HF	136 dB SPL (142 dB peak)	135 dB SPL (141 dB peak)	134 dB SPL (140 dB peak)			
ENCLOSURE	Trapezoidal, 15° side angles	Trapezoidal, 15° side angles	Trapezoidal, 15° side angles	Trapezoidal, 15° side angles	Trapezoidal, 10° side angles	
DIMENSIONS	991 x 673 x 897 mm 39.0 x 26.5 x 35.3 in	991 x 673 x 706 mm 39.0 x 26.5 x 27.8 in	991 x 673 x 706 mm 39.0 x 26.5 x 27.8 in	357 x 673 x 706 mm 14.1 x 26.5 x 27.8 in	991 x 476 x 691 mm 39 x 18.75 x 27.2 in	
NET WEIGHT (each)	87.3 kg (192 lb)	77 kg (170 lb)	77 kg (170 lb)	36.4 kg (80 lb)	53.4 kg (118 lb)	

# Precision Directivity™ PD700 and PD100

## key features



- FSA™ FORWARD STEERED ARRAY ENCLOSURE CONFIGURATIONS
- AVAILABLE SUSPENSION TRUSS COMPONENTS FOR EASY AND COST EFFECTIVE ARRAY BUILDING

One of the challenges in large arenas, stadiums, houses of worship and performance spaces is to provide quality sound to every seat with the volume and clarity demanded by today's concert, sporting and special events. JBL Professional's Precision Directivity™ (PD) line of speakers uses a full range, full bandwidth total system approach that allows contractors and consultants to design a fully integrated sound system solving the audio challenges inherent to these types of large installations.

### PD743 (40° x 30°) AND PD764 (60° x 40°)

The PD743 and PD764 mid-high loudspeaker systems provide high-impact sound reinforcement at throw distances that are beyond the reach of traditional single-driver designs. A single module produces greater than 104 dB SPL (continuous) at distances of 65 m (215 ft) with a 40° by 30° coverage pattern (PD743) or a 60° by 40° coverage pattern (PD764). These systems may be used in arrays with other PD Series modules or singly as part of a distributed system.

### PD100 Low Frequency Modules

PD100 loudspeakers are modules utilized in multiples to create FSA Forward Steered Arrays™, which provide excellent pattern control of low frequencies, ensuring even coverage of the audience area and high off-axis attenuation,

which substantially increases sound quality by maximizing the ratio of direct-to-reflected low frequency sound. The PD100 Calculator, available from JBL Professional, helps the system designer decide the model to use, the quantity of cabinets, how to configure them, and the DSP settings to utilize for the required coverage.

### PD125

The PD125 is a high power low frequency module designed for use in arrays and in conjunction with other PD Series systems to construct fullrange systems. Each PD125 module uses two 2226H 15" transducers, mounted "magnets out" for maximum heat transfer, assuring long term reliability at high power levels. Each transducer is mounted in a separate vented subchamber.

### PD128

The PD128 is a high power subwoofer module designed for use in arrays and in conjunction with other PD Series systems to construct fullrange systems.

### PD162

The PD162 mid bass module consists of three models: PD162, PD162L4 and PD162U4. The PD162U4 and PD162L4 are specialized beamsteering modules with four transducers each. PD162 is the standard, fully configured version featuring a full complement of six transducers. All three models share common enclosure dimensions and features. This allows for construction of compact, simple to rig, densely packed arrays using simple, cost effective truss components.

## specifications

	PD743	PD764	PD125	PD128	PD162
<b>SYSTEM TYPE</b>	Mid High Loudspeaker System	Mid High Loudspeaker System	LF Array Module	Subwoofer Array Module	Mid Bass Array Module
<b>FREQUENCY RANGE</b>	150 Hz - 17 kHz (-10 dB)	150 Hz - 17 kHz (-10 dB)	38 Hz - 1.7 kHz (-10 dB)	26 Hz - 2.3 kHz (-10 dB)	60 Hz - 1.7 kHz (-10 dB)
<b>FREQUENCY RESPONSE</b>	200 Hz - 15 kHz (± 3 dB)	200 Hz - 15 kHz (± 3 dB)	45 Hz - 900 Hz (± 3 dB)	34 Hz - 1.4 kHz (± 3 dB)	78 Hz - 900 Hz (± 3 dB)
<b>NOMINAL COVERAGE</b>	40° x 30° (H x V)	60° x 40° (H x V)			
<b>SENSITIVITY (1 W, 1 m)</b>	MF: 111 dB, HF: 118 dB	MF: 109 dB, HF: 116 dB	100 dB	99 dB	102 dB
<b>NOMINAL IMPEDANCE</b>	MF: 8 ohms, HF: 16 ohms	MF: 8 ohms, HF: 16 ohms	4 ohms	4 ohms	3 x 4 ohms
<b>INPUT POWER RATING</b>	MF: 700 W, AES; 2800 W peak HF: 150 W, AES; 600 W peak	MF: 700 W, AES; 2800 W peak HF: 150 W, AES; 600 W peak	1200 W, AES; 4800 W peak	1600 W, AES; 6400 W peak	3600 W, AES; 14,400 W peak
<b>TRANSDUCERS</b>	2 x 2250J (203 mm/8 in) 2 x 2430H (75 mm/3 in)	2 x 2250J (203 mm/8 in) 2 x 2430H (75 mm/3 in)	2 x 2226H (380 mm/15 in)	2 x 2242H (460 mm/18 in)	6 x 2206H (300 mm/12 in)
<b>ENCLOSURE</b>	Dual Trapezoidal 25° V, 35° H	Dual Trapezoidal 35° V, 55° H	Rectangular	Vertically Trapezoidal 30° angle	Rectangular
<b>FINISH</b>	Black DuraFlex™	Black DuraFlex	Black DuraFlex	Black DuraFlex	Black DuraFlex
<b>INPUT CONNECTORS</b>	1 x NL4 Neutrik® Speakon®	1 x NL4 Neutrik Speakon	2 x NL4 Neutrik Speakon	2 x NL4 Neutrik Speakon	2 x NL8 Neutrik Speakon
<b>DIMENSIONS (H x W x D)</b>	991 x 991 x 1146 mm 39 x 39 x 45.1 in	991 x 991 x 883 mm 39 x 39 x 34.75 in	889 x 432 x 724 mm 35 x 17 x 28.5 in	551 x 1676 x 864 mm 21.7 x 66 x 34 in	991 x 622 x 381 mm 39 x 24.5 x 15 in
<b>NET WEIGHT (each)</b>	111.4 kg (245 lb)	97.7 kg (215 lb)	57 kg (125.5 lb)	104.2 kg (229 lb)	86.1 kg (189.5 lb)



# JBL Custom Shop

## key features

- UNSURPASSED JBL ENGINEERING
- RENOWNED JBL TRANSDUCERS
- WORLD-CLASS MANUFACTURING



Custom Underfill Speakers  
Soldier Field Stadium, Chicago, IL

JBL Professional manufactures the world's most advanced off-the shelf loudspeaker systems, a very broad selection of standard product lines and models—from PD Precision Directivity™ and VERTEC® for large venues to Control Contractor's wide range of smaller loudspeakers. Within each product line, a wide assortment of models provides the right selection for virtually any application. For instance, the AE Application Engineered™ Series offers models in a variety of power levels, in white, in two levels of weather resistance, in a range of sizes and with a selection of coverage patterns.

Despite this broad lineup of models, there may be situations where a project calls for a unique approach. For applications requiring specialized loudspeakers, we offer the specialized services of the JBL Professional Custom Shop.

The Custom Shop designs and builds speakers to meet unique requirements such as specific-dimension cabinets to fit particular spaces, high transducer density systems to meet very high SPL requirements, compound cabinets to achieve non-standard coverage, loudspeakers that meet distinctive architectural requirements and other unique challenges.

Custom loudspeakers are designed by the most experienced engineering team in the industry, the same group responsible for JBL's standard products. They are manufactured in the same world-class factory as standard product, guaranteeing the most rigorous attention to manufacturing excellence.

Several of the Custom Shop's most popular products have been made available as the CSA (Contractor Special Application) Series. See [jblpro.com/pages/pre\\_engineered1\\_main.htm](http://jblpro.com/pages/pre_engineered1_main.htm) for details. The list is frequently expanded and updated.

JBL Professional offers a very broad line of off-the-shelf loudspeakers. However, when you need a specialized speaker that does not appear in this catalog, the JBL Professional Custom Shop provides solutions incorporating unparalleled technology, quality, experience, and manufacturing excellence.



Quality Assurance Testing, Custom Shop  
JBL Professional, Northridge, CA



Custom Ver Tec-PP / Precision Directivity cluster,  
Crystal Cathedral, Irvine, CA



Main Cluster Detail  
Soldier Field Stadium, Chicago, IL



# VP Series

## Self-Powered Integrated Audio Systems



Introducing the Venue Performance Series—a family of self-powered loudspeaker systems consisting of six models, suitable for portable or fixed installation sound reinforcement applications where high-output, low-distortion, and the highest quality sound are required. These systems are designed with compatibility in mind for applications where multiple individual loudspeakers might be required for a distributed system or where multiple loudspeakers will be configured into arrays for point source clusters.

### JBL DrivePack®

A key feature of the VP Series is its highly adaptable JBL DrivePack amplifier module. The two-channel module provides 1100 watts of total power to each full-range system. The subwoofer module provides 1800 watts of power to the loudspeaker. The JBL DrivePack® operates on auto-selecting line voltages at 50 or 60 Hz for worldwide operation.

### Feature Loaded

The VP Series features JBL Differential Drive® cone transducers and the new 2452H-SL compression driver. Each VP Series system features integral digital signal processing and is compliant with Harman Professional's HiQnet System Architect™ software for remote control and monitoring.

The VP Series also includes:

- Newly-created stylized and ergonomically designed powder-coated steel handles
- Industry-standard air-cargo track suspension and M10 threaded suspension points

### VP7212/64DPAN (60° x 40°)

### VP7212/95DPAN (90° x 50°)

The VP7212/64DPAN and VP7212/95DPAN are two-way speaker systems housing one 12" Differential Drive low frequency transducer and the new 2452H-SL compression driver. The VP7212 is available with either a 60° x 40° or 90° x 50° JBL Progressive Transition™ Waveguide.

### VP5B7118DPAN

The VPSB7118DPAN subwoofer system features one 18" Differential Drive low frequency transducer. This model includes an integrated pole mount, and is sized to readily combine into arrays of various configurations using other models in the line.

### VP7215/64DPAN (60° x 40°)

### VP7215/95DPAN (90° x 50°)

The VP7215/64DPAN and VP7215/95DPAN are two-way speaker systems housing one 15" Differential Drive low frequency transducer and the new 2452H-SL compression driver. The VP7215 is available with either a 60° x 40° or 90° x 50° JBL Progressive Transition™ Waveguide.

### VP7315/64DPAN

The VP7315/64DPAN is a three-way system housing one 15" Differential Drive low frequency transducer, the CMCD-8218" midrange transducer and the new 2452H-SL compression driver mounted on a JBL PT-164-MHF Progressive Transition Waveguide.



# VP SERIES key features

- NEW 2452H-SL 4" DAMPED DIAPHRAGM HIGH-FREQUENCY COMPRESSION DRIVER
- JBL DRIVEPACK® TECHNOLOGY, CO-ENGINEERED WITH CROWN
- COMPREHENSIVE ON-BOARD DSP
- HIQNET™ SYSTEM ARCHITECT™ COMPATIBILITY
- OPTIONAL DPCN COBRANET™ INPUT MODULE FOR DIGITAL AUDIO CONNECTIVITY
- DIFFERENTIAL DRIVE® LOW-FREQUENCY DRIVERS
- INTEGRATED RIGGING HARDWARE
- ERGONOMICALLY DESIGNED HANDLES



**DPAN Input Module with analog audio and 100 Mb Ethernet networking functionality and HiQnet compatibility**

### DPAN Input Module

The VP Series features the **DPAN input module** as standard. The DPAN input module includes analog audio inputs and sophisticated onboard digital signal processing technology. Precision band-pass limiting, pre-equalization filters and automatic self-test functions ensure optimized performance.

All models can be ordered with the **optional DPCN input module**. The DPCN input module is also HiQnet compatible, with CobraNet™ digital audio input capabilities. It offers the ability to direct up

to 64 audio channels on one network, with digital audio and remote control and monitoring via Ethernet combined on a single cable. DPCN includes the option to use an analog input as a backup audio source providing complete reliability and flexibility to cover any situation. As with the DPAN, user-addressable features include ten internal pre-e.q. filter presets, up to 2 seconds of signal delay per channel, and onboard noise and sine-wave generators.



**VPSB7118DPAN**

**VP7212/64DPAN (shown)  
VP7212/95DPAN**

**VP7215/64DPAN (shown)  
VP7215/95DPAN**

**VP7315/64DPAN**

## specifications

### VP7212/64DPAN & VP7212/95DPAN

### VP7215/64DPAN & VP7215/95DPAN

### VP7315/64DPAN

### VPSB7118DPAN

SYSTEM TYPE	Self-Powered Two-way Speaker System	Self-Powered Two-way Speaker System	Self-Powered Three-way Speaker System	Self-Powered Sub-woofer System
FREQUENCY RESPONSE	60 Hz - 18 kHz (±3 dB)	45 Hz - 18 kHz (±3 dB)	45 Hz - 18 kHz (±3 dB)	35 Hz - 125 Hz (±3 dB)
NOMINAL COVERAGE	VP7212/64: 60 x 40 VP7212/95: 90 x 50	VP7215/64: 60 x 40 VP7215/95: 90 x 50	VP7315/64: 60 x 40	
DRIVEPACK POWER RATINGS	2200W Peak (1100W Continuous)	2200W Peak (1100W Continuous)	2200W Peak (1100W Continuous)	3600W Peak (1800W Continuous)
TRANSDUCERS: LF	12 in Differential Drive	15 in Differential Drive	15 in Differential Drive	18 in Differential Drive
HF (MF)	2452H-SL 1.5" exit compression driver	2452H-SL 1.5" exit compression driver	2452H-SL 1.5" exit compression driver CMCD-82H (8" Midrange)	
HF (MF) HORN	JBL Progressive Transition™ Waveguide	JBL Progressive Transition™ Waveguide	JBL PT-K64-MHF Progressive Transition™ Waveguide	
FINISH	Black Duraflex™	Black Duraflex™	Black Duraflex™	Black Duraflex™
GRILLE	14-gauge perforated steel	14-gauge perforated steel	14-gauge perforated steel	14-gauge perforated steel
INPUT CONNECTOR	Female XLR/Male XLR	Female XLR/Male XLR	Female XLR/Male XLR	Female XLR/Male XLR
INPUT CONNECTOR OPTION	DPCN (CobraNet compliant) 2 x RJ45 connectors + M/FM XLR	DPCN (CobraNet compliant) 2 x RJ45 connectors + M/FM XLR	DPCN (CobraNet compliant) 2 x RJ45 connectors + M/FM XLR	DPCN (CobraNet compliant) 2 x RJ45 connectors + M/FM XLR
DIMENSIONS (H x W x D)	701.8 x 383.8 x 523.5 mm 27.63 x 15.11 x 20.61 in	765.3 x 447.6 x 523.5 mm 30.13 x 17.62 x 20.61 in	914.4 x 528.3 x 624.8 mm 36 x 20.8 x 24.6 in	414.4 x 701.8 x 812.8 mm 20.25 x 27.63 x 32 in
NET WEIGHT (each)	78 lb (35.4 kg)	85 lb (38.6 kg)	97 lb (44 kg)	129 lb (58.5 kg)