LINE ARRAY SYSTEMS

OVERVIEW

The LA series line-array systems were developed and produced by NEXT to deliver unprecedented performance in applications ranging from live reinforcement, arenas, and stadiums to big discos, theatres and houses of worship.

Very high quality speakers from the best European manufacturers, and cabinets designed following intensive audio research, are the keys to the outstanding audio performance.

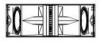
Quality construction is assured by our computer controlled production facility based in Portugal where skilled technicians control all the production stages.

Common to all the elements are: the ICWG (isophasic cylindrical wave generator), the Baltic birch plywood enclosures finished in durable black semi-matt textured paint, the heavyduty power coated steel grilles, the fast integral rigging system and the Neutrik NL4 or NL8 connectors.



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2-Way Compact Wide Line Array Element



O7 LA122A Active 2-Way Compact Line Array Element



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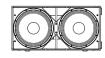


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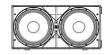
08 LAs118A Active Hybrid-Horn Arrayable Subwoofer



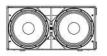
08 LAs418A Active Double Bass Reflex Subwoofer



08 LAs418
Double Bass
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LINE ARRAY SYSTEMS

LA212X_{v2}

3-Way Fully Horn Loaded Line Array Element

- Fully horn-loaded, axially symmetric, Line array
- Extreme SPL and throw capability
- Uniform dispersion and great coverage control
- | Horizontal Coverage maintained down to 280 Hz
- Easy and fast rigging system with variable splay

The LA212Xv2 is a 3-Way fully horn-loaded, axially symmetric, line array element, capable of producing crystal clear, detailed and extremely powerful audio performance over distance, with an exceptional 90° horizontal constant dispersion control. Being completely symmetric this line array is capable of generating virtually identical acoustic sound patterns on the right and left which allows for an easy, accurate and symmetric alignment.

It incorporates a number of technologies to produce a coherent vertical wave front, extreme sound pressure levels with exceptional accuracy and specially consistent horizontal coverage over a wide frequency range, kept down to 280 Hz. Maintaining directionality control over this wide bandwidth raises the ratio of direct-to-reflected energy, thereby increasing system intelligibility.

The bass section makes use of two 12 inch speakers with 3 inch voice coils strategically placed on either side of the speaker in a dipolar horn arrangement.

The also horn-loaded mid and high frequency sections are coaxially mounted in the center of the cabinet, dramatically extending lower vocal directivity control and providing extremely smooth mid/high transition.

The generously dimensioned mid frequency horn uses a 10 inch driver, while the high frequency section consists of two 1.4 inch exit HF compression drivers with 3 inch voice coils mounted to a dedicated wave-shaping device. To preserve the acoustical integrity and the natural warmth, all the horns, wave guides and phase correctors are made of low resonance plywood or acoustically neutral polymers.

The speaker transducers employed are exclusively made by the reference european manufacturer B&C. The LA212X cabinet is constructed from genuine Baltic birch plywood and has a black textured finish. The front of the loudspeaker cabinet is protected by a rigid metal grill and the side and rear panels incorporate four handles. Two Neutrik NL8 connectors wired in parallel are mounted at the rear.





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LINE ARRAY SYSTEMS

The Low Frequency Section consists on two 12" neodymium low frequency drivers that are loaded by two proprietary hybrid-horns. The horn mouths are horizontally separated by a "tuned" distance that uses the Tuned Dipolar Array (TDA) effect to achieve an exceptional low frequency horizontal dispersion control with the nominal angle being maintained down to 250Hz. With TDA effect is possible to keep the LF signals away from the stage revealling it to be more immune to low frequencies feedback.

The Mid Frequency Section is equipped with one high-performance 10" speaker, mounted coaxially behind the HF drivers, loaded by a, mathematically complex, directivity control device that cleverly eliminates the HF section acoustic shadow.

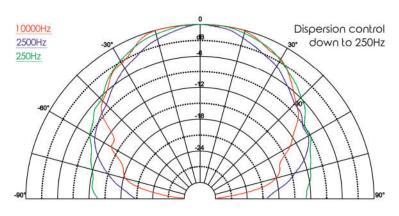
To couple the mid frequencies, reproduced by the 10", NEXT-proaudio developed a proprietary WAVE SPLITTER device. The device splits the generated wave into two smaller waves that coherently couples on the vertical plane. As the summation is much more perfect, the Line Source behavior is effective down to lower frequencies.

In addition, the LA212Xv2 mid frequency section employs a Correction Phase Device (CPD) which equalizes speaker's cone acoustical path lengths and thereby minimizes HF cancelations and distortion. The CPD and the associated horn are optimized to create a high compression ratio which rises conversion efficiency to reach na incredible output sensitivity.

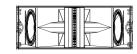
The High Frequency Section is composed by two 1.4" HF neodymium compression drivers mounted on a dedicated wave shaping device.

Knowing that our ear is particularly sensitive to detail on mid/high frequencies, NEXT-proaudio was highly focused in optimizing the HF section. This unit was carefully designed to precisely match all the path lenghts from the throat to the mouth of the device. The generated sound wave has a flat and isophasic wavefront that meets a diffraction slot which mantains a constant horizontal directivity. By vertically limiting and spreading on the horizontal plane, the LA212Xv2, creates a cylindrical wave with minimal lobing when coupling with other units.





LA212X_{V2}



SPEAKER TYPE	Horn-Loaded 3-Way Line Array Element	
FREQ. RESPONSE (-6dB)	60Hz - 19.000Hz	
SENSITIVITY (1W@1m)	LF: 106dB (Full-Space) MF: 112dB (Full-Space) HF: 114.5dB (Full-Space)	
Calculated Max. SPL (Continuous/Peak)	LF: 138dB/144dB (Full-Space) MF: 139dB/145dB (Full-Space) HF: 138dB/144dB (Full-Space)	
COVERAGE (HxV)	90° (Down to 280Hz) x 8°	
DRIVERS	LF: 2 x 12" (300mm)/3" (76mm) VC, Neodymium, B&C custom speake MF: 1 x 10" (250mm)/2.5" (65mm) VC, B&C custom speaker HF: 2 x 1.4" (36mm) exit/3" (75mm) VC, B&C custom compression drive	
POWER (Program/Peak)	LF: 1600W/3200W (10ms) MF: 500W/1000W (10ms) HF: 440W/880W (10ms)	
NOMINAL IMPEDANCE	LF: 2 x 8Ω MF: 16Ω HF: 16Ω	
CROSSOVER (Frequency/Type)	LF to MF: 350Hz Linkwitz-Riley 24dB/oct MF to HF: 1050Hz Linkwitz-Riley 48dB/oct	
RECOMMENDED HPF	75Hz, 24dB/oct Linkwitz-Riley	
CONNECTORS	2 x Neutrik NL8	
CONSTRUCTION	15mm multi-laminate birch plywood	
FINISH	Textured black semi-matte coating	
PROTECTIVE GRILL	NGS Adjustable (0° to 8°) rigging system	
FITTINGS		
HANDLES		
DIMENSIONS (WxHxD)	1020 x 380 x 501mm (40.16 x 14.96 x 19.72in)	
WEIGHT	66kg (145.5lb)	



LINE ARRAY SYSTEMS

LA122

2-Way Compact Line Array Element

- | Very smooth and clear sound
- 12" and 2 x 1.4" neodymium drivers
- Extremely smooth horizontal and vertical coverage
- | Extremely versatile
- Integrated hardware for flying or ground stack





2-Way Compact Wide Line Array Element

- | Wide dispersion (120° x 15°)
- | Very smooth and clear sound
- 1 x 12" and 2 x 1.4" neodymium drivers
- Extremely smooth horizontal and vertical coverage
- Integrated hardware for flying or ground stack



LA122



SPEAKER TYPE	Passive 2-Way Line Array Element
FREQ. RESPONSE (-6dB)	58Hz - 19.000Hz
SENSITIVITY (1W@1m)	LF: 100dB (Full-Space) HF: 108dB (Full-Space)
Calculated Max. SPL (Continuous/Peak)	LF: 129dB/135dB (Full-Space) HF: 133dB/139dB (Full-Space)
COVERAGE (HxV)	90° x 8°
DRIVERS	LF: 1 x 12" (300mm)/3" (76mm) VC, Neodymium, B&C custom speaker HF: 2 x 1.4" (36mm) exit/2.5" (65mm) VC, B&C custom compression driver
POWER (Program/Peak)	LF: 800W/1600W (10ms) HF: 320W/640W (10ms)
NOMINAL IMPEDANCE	LF: 8Ω HF: 16Ω
CROSSOVER (Frequency/Type)	1150Hz Linkwitz/Riley 48dB/oct
RECOMMENDED HPF	45Hz, 18dB/oct Bulterworth
CONNECTORS	2 x Neutrik NL4
CONSTRUCTION	15mm multi-laminate birch plywood
FINISH	Semi-Matte Black Textured Coating
PROTECTIVE GRILL	Black Perforated Steel
FITTINGS	Adjustable (0° to 8°) rigging system
HANDLES	1 on each side
DIMENSIONS (WxHxD)	677 x 350 x 450mm (26.65 x 13.78 x 17.72in)
WEIGHT	32.8kg (72.31lb)

LA122W



Passive 2-Way Wide Line Array Element	
58Hz - 19.000Hz	
LF: 100dB (Full-Space)	
HF: 108dB (Full-Space)	
LF: 129dB/135dB (Full-Space)	
HF: 133dB/139dB (Full-Space)	
120° x 15°	
LF: 1 x 12" (300mm)/3" (76mm) VC, Neodymium, B&C custom speaker	
HF: 2 x 1.4" (36mm) exit/2.5" (65mm) VC, B&C custom compression driver	
LF: 800W/1600W (10ms)	
HF: 320W/640W (10ms)	
LF: 8Ω	
HF: 16Ω	
1150Hz Linkwitz/Riley 48dB/oct	
45Hz, 18dB/oct Butterworth	
2 x Neutrik NL4	
15mm multi-laminate birch plywood	
Semi-Matte Black Textured Coating	
Black Perforated Steel	
15° rigging system	
1 on each side	
677 x 353 x 450mm (26.65 x 13.9 x 17.72in)	
31.4kg (69.23lb)	





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LINE ARRAY SYSTEMS

LA122A

Active 2-Way Compact Line Array Element

- 2200Wprg, 2-Way amplification
- Small, Versatile, Loud
- 90° x 8° (120° x 8° optionally) Coverage
- 12" and 2 x 1.4" neodymium drivers
- Integrated hardware for flying or ground stack



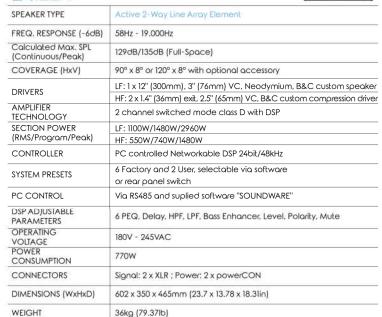
LA122WA

Active 2-Way Compact Wide Line Array Element

- 2200Wprg, 2-Way amplification
- Small, Versatile, Loud
- Precise wide coverage (120° x 15°)
- Very smooth and clear sound
- 12" and 2 x 1.4" neodymium drivers



LA122A



LA122WA



Active 2-Way Line Array Element	
58Hz - 19.000Hz	
128.5dB/134.5dB (Full-Space)	
120° x 15°	
LF: 1 x 12" (300mm), 3" (76mm) VC, Neodymium, B&C custom speaker	
HF: 2 x 1.4" (36mm) exit, 2.5" (65mm) VC, B&C custom compression driver	
2 channel switched mode class D with DSP	
LF: 1100W/1480W/2960W	
HF: 550W/740W/1480W	
PC controlled Networkable DSP 24bit/48kHz	
6 Factory and 2 User, selectable via software or rear panel switch	
Via RS485 and suplied software "SOUNDWARE"	
6 PEQ, Delay, HPF, LPF, Bass Enhancer, Level, Polarity, Mute	
180V - 245VAC	
770W	
Signal: 2 x XLR ; Power: 2 x powerCON	
602 x 350 x 465mm (23.7 x 13.78 x 18.31in)	
35.6kg (78.48lb)	





LAs118A

Active Hybrid-Horn Arrayable Subwoofer

- 2960Wprg amplification
- Small, Versatile, Loud
- Superior bass impact thanks to horn design
- Fast, simple Integrated Rigging hardware
- High SPL and low distortion





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SPEAKER TYPE	Active Hybrid-Horn Subwoofer	
FREQ. RESPONSE (-6dB)	38Hz - 160Hz	
SENSITIVITY (1W@1m)	-	
Calculated Max. SPL (Continuous/Peak)	132.5dB/138.5dB (Half-space)	
DRIVERS	LF: 1 x 18" (460mm), 4" (100mm) VC, B&C custom speaker	
AMPLIFIER TECHNOLOGY	Switched mode class D with DSP	
SECTION POWER (RMS/Program/Peak)	LF: 2200W/2960W/5920W	
CONTROLLER	PC controlled Networkable DSP 24bit/48kHz	
SYSTEM PRESETS	6 Factory and 2 User, selectable via software or rear panel switch	
PC CONTROL	Via RS485 and suplied software "SOUNDWARE"	
DSP ADJUSTABLE PARAMETERS	6 PEQ, Delay, HPF, LPF, Bass Enhancer, Level, Polarity, Mute	
OPERATING VOLTAGE	180V - 245VAC	
POWER CONSUMPTION	770W	
CONNECTORS	Signal: 2 x XLR ; Power: 2 x powerCON	
DIMENSIONS (WxHxD)	602 x 664 x 750mm (23.7 x 26.14 x 29.53in)	
WEIGHT	67.3kg (148.37lb)	

LAs418A

LAs418A

Active High Power Reflex Subwoofer

Active Double Bass Reflex Subwoofer

- | Dual long excursion 18" speaker
- High dynamic and extended response
- PFC Switched Mode Power Supply
- Large port areas for reduced distortion
- 24bit/96kHz Digital Signal Processor





28Hz - 250Hz
-
141dB/143dB (Half-space)
LF: 2 x 18" (460mm)/4"(100mm) VC, high excursion, B&C custom speaker
PFC switched mode class D with DSP
LF: 4000W/5650W/8000W
PC controlled Networkable DSP 24bit/96kHz
6 Factory and 2 User, selectable via software or rear panel switch
Via RS485 and suplied software "SOUNDWARE"
10 PEQ, Delay, HPF, LPF, Level, Polarity, Mute
90V - 260VAC

Signal: 2 x XLR; Power: 2 x powerCON; Control: USB 1030 x 516 x 920mm (40.55 x 20.31 x 36.22in)

LAs418[G]

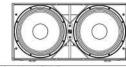
Double Bass [Ground Stack] Reflex Subwoofer

- Dual very long excursion 18" speakers
- Optionally arrayable
- High maximum pressure
- High dynamic and extended response
- Large port areas for reduced distortion





LAs418[G]



SPEAKER TYPE	Passive Very High Power [Ground Stack] Reflex Subwoofer
FREQ. RESPONSE (-6dB)	28Hz - 250Hz
SENSITIVITY (1W@1m)	109dB (Half-space)
Calculated Max. SPL (Continuous/Peak)	143.8dB/149.8dB (Half-space)
DRIVERS	2 x 18" (460mm)/4.5" (116mm) VC, very high excursion, B&C custom speaker
POWER (Program/Peak)	6000W/12000W (10ms)
NOMINAL IMPEDANCE	$2 \times 8\Omega$ (also available $2 \times 4\Omega$)
CROSSOVER (Frequency, Type)	80Hz to 180Hz / 24dB/oct Linkwitz/Riley (recommended)
REC. AMPLIFIER	MA3800, MA6000, MD14000
RECOMMENDED HPF	28Hz, 18dB/oct Butterworth
CONNECTORS	2 x Neutrik NL4 on back + 1 x Neutrik NL4 on front, parallel wired
FITTINGS	16 x M8 threaded inserts for optional wheel kit, 8 replaceable feet, 20 x M8 threaded inserts for optional rigging system (only available on LAs418)
DIMENSIONS (WxHxD)	1030 x 516 x 920mm (40.55 x 20.31 x 36.22in)
WEIGHT	94kg (207.23lb) [90kg (198.42lb)]



89kg (196.21lb)



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