

XLC COMPACT FULL BANDWIDTH LINE ARRAY SYSTEM







CONTROL WITH PREDICTABILITY

FAST INTEGRATED RIGGING

TRUE 3-WAY DESIGN

SOFTWARE AIMING PROGRAM





ELECTRO-VOICE® X-LINE™ COMPACT (XLC™) FULL-BANDWIDTH LINEAR-ARRAY LOUDSPEAKER SYSTEM



A successful design philosophy that solves problems, improves performance, and makes a difference in how needs are satisfied defines the Electro-Voice X^{LC} system. EV designed its compact linear array from the ground up to sound the best, to rig faster and easier, and to provide the best uniformity of coverage. Simply said, to be the best.

L





AXIS ASYMMETRICAL DESIGN

grated system fidelity. Advantage: XLC!

The Problem:



The X^{LC} Solution:

Most linear-array systems — whether large-format stadium systems or compact designs — are axis-symmetrical designs. This approach places the mid- and low-frequency drivers symmetrically across the vertical axis of each cabinet. Such designs succeed in generating identical polar radiation on both sides of the cabinet. Unfortunately, the narrowing of coverage patterns that unify the vertical elements of a linear array into a seamless wavefront works against such designs in the horizontal plane. The horizontal arrangement of drivers within each cabinet creates, in effect, miniature horizontal linear arrays. Their horizontal coverage patterns narrow, and lobing results, creating dead spots along the horizontal plane. When such lobing is fixed through the use of very low crossover points, HF compression drivers and mid-range drivers overload easily and real sonic problems occur, like high distortion, poor reliability and generally poor fidelity. Axis-symmetrical designs are, therefore, incomplete solutions.

 $X^{\text{LC}},$ however, is an axis-asymmetrical design. Within each X^{LC} cabinet, mid- and high-range

sonic results are clearly superior: better stereo imaging, no horizontal lobing, and better inte-

drivers are arrayed vertically, eliminating the problems inherent in horizontal arrays. The

Axis SYMMETRIC



HIGH FREQUENCY SUMMING - THE HYDRA

The Problem:



Accurate high-frequency summing of linear arrays is achieved only through careful control of the phase relationships between each HF device. However, there is no physical (or, more importantly, electronic) way to produce a single cohesive wave front from multiple sources. The simple HF waveguide designs used in most competitive linear arrays produce several individual wave fronts that are slightly out of phase with each other. Such phase distortion creates peaks and dips that introduce dead spots in the listening field.



The X^{LC} Solution:

EV's innovative HF waveguide, the Hydra[™], is a plane-wave generator that can be tuned to produce optimal wave-front geometry for any design. The Hydra sections in the X^{LC} are precisely tuned to the overall array geometries required for typical compact linear-array applications. Such optimization reflects the innovative design philosophy found everywhere in the X^{LC} system. The result is superior high-frequency summing throughout the entire listening field, near or far.







X^{LC} APPLICATIONS

Flexibility:

XLC's features make it the ideal, top-of-class choice for permanent installations and mobile applications alike.

BANDWIDTH LINE ARRAY SYSTEM

B

Performing arts venues Houses of worship Arenas

Fixed/Permanent Installation Applications

Sports facilities Theme parks Corporate events Medium- and small-format touring systems Wraps, sides, and delay in large spaces

Fixed/Permanent Installation Applications

ONE-PERSON RAPID RIGGING

Quick and Easy:

 X^{LC} 's rigging is classic EV: precise and very safe. The unique design allows one person to hang an X^{LC} array, even on irregular outdoor surfaces. The X^{LC} design also allows for in-the-air aiming (most competitive systems require the system to be lowered and reconfigured). The X^{LC} system is designed for fine-tuning in a real world environment. The captive front interlocking system has no separate parts to keep track of, and it disappears into the frame to maintain an uncluttered, attractive appearance.



AIMING SOFTWARE

Performance:



XLC's acclaimed aiming program Line Array Prediction Software (LAPS) is critical for achieving consistent array hangs. Simple data input of venue dimensions, hang geometries, and trim parameters generates not only front-to-back SPL performance data, but also critical safety-factor information. The aiming software produces repeatable results and allows the user to optimize the array for any given venue.





THE XLC SYSTEM and t

A three-box solution includes the XLC 127 main enclosure, the XLC 124 downfill, and the XLC 118 subwoofer.

X^{LC} 127 Main Enclosure

The three-way tri-amped axis-asymmetric design includes a passive crossover for bi-amp operation, if desired. An optimized single 12-inch EV speaker is used for the low-frequency/mid-bass section of the spectrum. Two 6.5" custom-designed drivers in a vertical array comprise the mid-frequency bandpass. The XLC 127 comes with two medium-format EV DH2T compression drivers loaded on two Hydra plane-wave generators. With horizontal coverage of 120 degrees, the XLC system accurately covers wide areas while maintaining excellent imaging and lobe-free coverage.



XLC 118 Subwoofer

XLC's subwoofer uses the legendary EVX180B, the same 18-inch used in the subwoofer for XLC's namesake, EV's X-Line[™]. The XLC 118's cabinet has 1.5 times the height of the XLC 127's and XLC 124's cabinets. Since two XLC 118 cabinets equal the height of three XLC 127/XLC 124 cabinets, the subs can be integrated into the main hang or flown beside the main system at a 3:2 ratio, maintaining aesthetic requirements for equal hang heights (if desired).









Specification	X ^{LC} 127	X ^{LC} 118
Horizontal Coverage	120°	300°
LF Power Handling	300 W cont./1200 W peak	600 W cont./2400 W peak
MB Power Handling	200 W cont./800 W peak	-
HF Power Handling	120 W cont./480 W peak	-
Sensitivity (LF/MB/HF)	95 dB/101 dB/110 dB	102 dB*
LF Transducer	1 x 12" DL12 (X-variant)	1 × 18" EVX180B
MB Transducer	2 × 6.5"	-
HF Transducer	2 × DH2T	-
Connectors	2 Neutrik® NL8	2 Neutrik® NL8
Enclosure Material	Futura®-coated plywood	Futura®-coated plywood
Grille	Powder-coated steel	Powder-coated steel
Environmental Specs	IEC 529 IP24 MIL STD 810	IEC 529 IP24 MIL STD 810
Dimensions (H \times VV \times D)	14.25" x 39 " x 22.5" (362 x 991 x 572 mm)	21.5" x 39" x 22.5" (546 x 991 x 572 mm)
Net Weight	111 lbs (50.4 kg)	120 lbs (54.5 kg)
Shipping Weight	116 lbs (52.6 kg)	140 lbs (63.6 kg)

*Half space environment

Technical Specifications for Fou	r-Cabinet X ^{LC} 127 Array
Specification	4 x X ^{LC} 127 Array
Frequency Range (-3 dB)	70 Hz-16 kHz
Sensitivity (1 VV/1 m)	112.5 dB
Max Calculated SPL (1 VV/1 m)	135 dB cont./141 dB peak
Horizontal Coverage	120°
Vertical Coverage	Splay dependent
LF Power (recommended)	EV® P2000
MB Power (recommended)	EV® P2000
HF Power (recommended)	EV® P2000

For very large spaces, or other applications that require greater high frequency energy capability, an XIC 127+ with large format Ndó compression drivers is available.

Optional Accessories			
Wheel Boards	127/127+ dolly	118 dolly	
Covers	127/127+ cover	118 cover	
Hanging Grid	Comprises 2-side arms an Supports 16 cabinets @ 8	Comprises 2-side arms and 2 spreader bars. Supports 16 cabinets @ 8:1 safety margin	



12000 Portland Avenue South Burnsville, MN 55337 Phone: 800-392-3497 Fax: 800-955-6831 Web: www.electrovoice.com