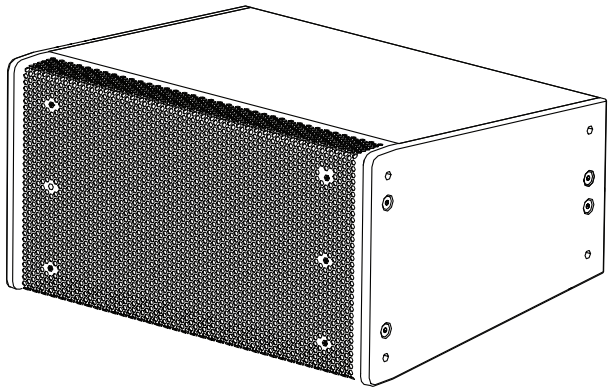
X1I-212



- 2-Way passive line-array element with 12" symmetric drive woofer and ring exit compression drivers
- Compact, install-friendly design with hard mounting points and optional rigging kit
- EV transducers and proprietary acoustic lenses deliver improved box-to-box coupling, extended high frequency performance, and clear sound even at high output levels
- Variants include 90° or 120° horizontal coverage, indoor and fully weatherized finishes in black or white
- Accessible fasteners so that grilles can be removed for inspection or service without dropping the array

The X1I-212 from Electro-Voice is a two-way vertical line-array loudspeaker system for applications in which wide bandwidth, vertical and horizontal directivity control, and high efficiency are required in a compact, cost-effective package.
The high frequency section of the X1I-212 utilizes two ND2R high-output 2-inch titanium compression drivers directly coupled to a pair of Wavefront-shaping Circular Hydra (WCH) Plane Wave Generators on a 90° or 120° waveguide optimized for uniform pattern control and smooth, linear response. The low frequency section utilizes an SMX2121 12-inch woofer, developed using Finite Element Analysis optimization for motor, suspension, and electrical design to provide low distortion, high efficiency, and maximum intelligibility at high SPL. The woofer couples to a Mid-Band Hydra (MBH), which effectively emulates the acoustic behavior of a double line of four 3-inch point sources to deliver superior mid-band coupling while maintaining the efficiency, power, and bandwidth of a 12-inch transducer. The built-in passive crossover employs a steep, eighth order topology resulting in acoustic crossover slopes approaching 96 dB per octave for linear summation and smooth off-axis response with passive equalization for improved definition over the critical vocal range, regardless of array size.

The X1I-212 is a cost effective yet advanced solution for fixed install applications. The vertical trapezoidal enclosure is constructed of weather-resistant birch plywood and is finished with a polyurea coating for enhanced durability. In addition to the indoor install models, the IP55 rated fiberglass models are fully weatherized for use in direct exposure outdoor environments. All models utilize stainless steel grilles and hardware for maximum corrosion resistance. The enclosures, available in RAL9003 white and RAL9005 black, have four M10 hard points on each side of the enclosure for mounting to structural framing. An optional rigging kit and grid are also available from Electro-Voice for deploying up to 12 elements in standard configurations. The grid is designed so that it can also be attached to the bottom of an array to function as a pull up when needed.
Electro-Voice PR**EV**IEW Loudspeaker Software provides accurate, fast design details, including coverage, optimal aiming angles, and safe hanging configurations. It also provides information for the creation of steered/shaped subwoofer arrays.
The input panel uses dual high-current Phoenix style terminal blocks for fast, easy connection. The input panel is fully weatherized, with multiple gland nuts included to accommodate a range of cable sizes.

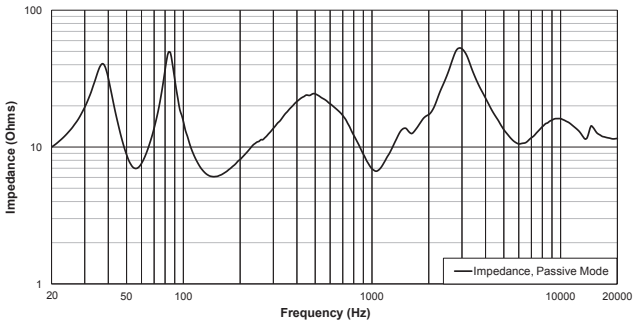
The advanced acoustic and mechanical designs of X1i series loudspeakers, combined with the predictive capability of PR**EV**IEW Loudspeaker Software, provide the tools and flexibility to easily design and deploy high-performance vertical line array systems.

Technical specifications

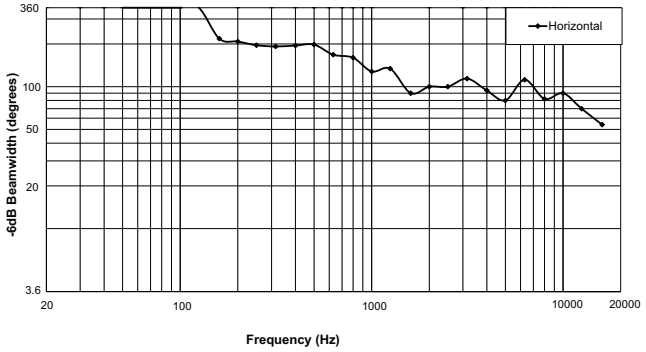
Frequency Response (-3 dB)[1]:	57 Hz - 16 kHz
Horizontal Coverage:	90° or 120°
Vertical Coverage:	Array dependent
Rec. High-Pass Frequency:	50 Hz
Max SPL[2]:	143 dB Peak
Configuration:	Passive
Crossover Freq.:	1600 Hz
Axial Sensitivity:	98 dB (1 W/1 m)
Power Handling[3]:	500 W Continuous, 2000 Peak
Impedance:	8 Ω (nominal), 6.4Ω (min)
LF Transducer:	SMX2121, 12-in (305 mm) driver
HF Transducer:	2 x ND2R, 2-in (51 mm) diaphragm compression driver
Connectors:	Dual high current Phoenix terminal blocks
Enclosure:	13-ply weather resistant birch with EVCoat (Fiberglass coating on FG models)
Grille:	16 GA 304 stainless steel with powder coat. Fiberglass models have hydrophobic screen.
IP Rating:	IP55 (fiberglass models only)
Suspension:	(8) M10 hard points, (4) on left side and (4) on right
Color:	RAL9003 white and RAL9005 black
Dimensions (H x W x D):	347 mm x 678.5 mm x 536 mm 13.66 in. x 26.71 in. x 21.10 in.
Net Weight:	34.9 kg (77 lb)
Shipping Weight:	42.0 kg (92.5 lb)

[1]Full-space anechoic array performance with FIR-Drive preset.
[2]Full-space measurement of 4 elements. SPL adjusted for 1m distance.
[3]EIA/ANSI RS-426A.

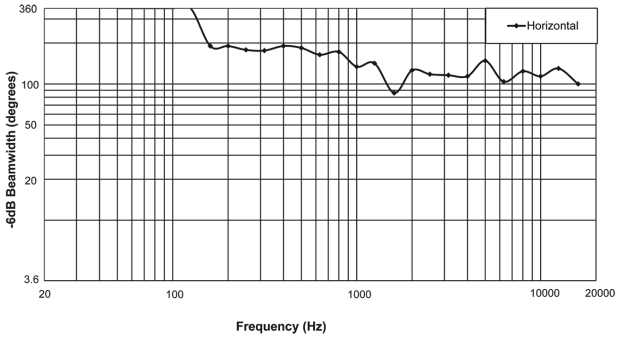
Impedance passive:



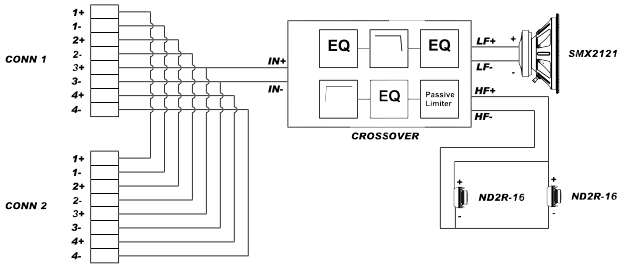
Horizontal Beamwidth (90°):



Horizontal Beamwidth (120°):



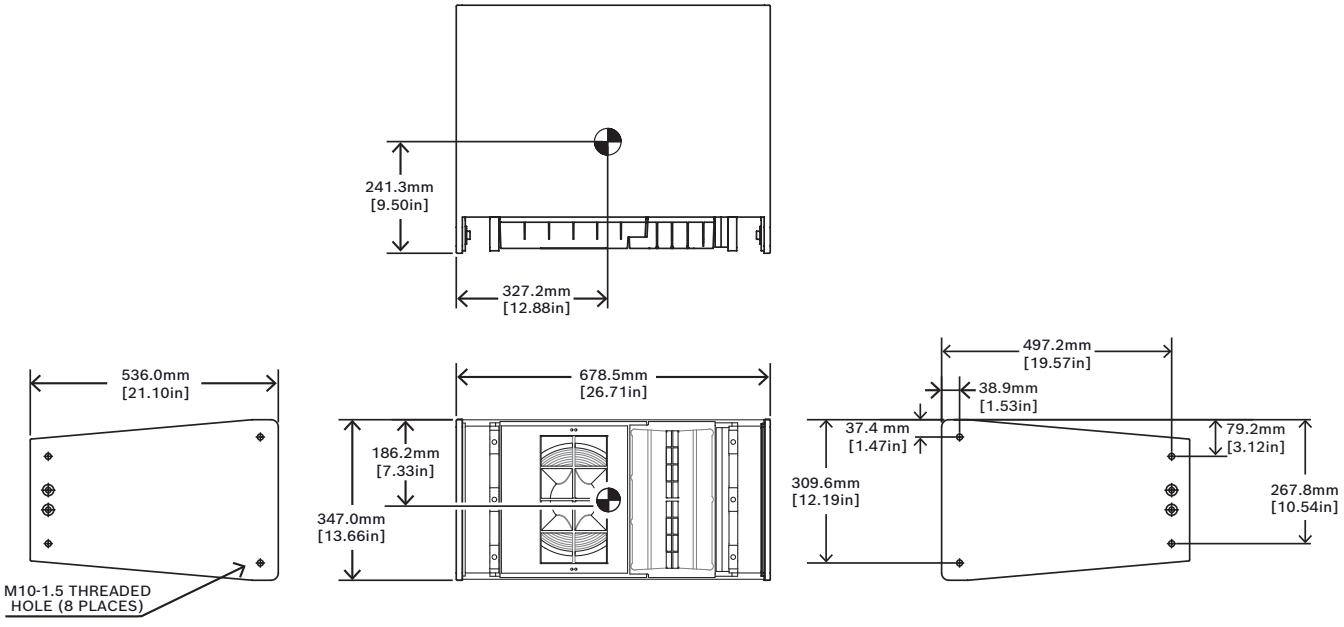
Block diagram:



Architectural and engineering specifications:
The loudspeaker system shall be a two-way passive design with dual Phoenix type input connectors, wherein on each connector pins 3 +/- are wired to a passive network and pins 4 +/-, 2 +/- and 1 +/- are

wired as pass thru between the two input connectors. The passive network shall employ 8th order topology with equalization and high frequency protection, resulting in acoustical crossover slopes approaching 96 dB per octave. The system shall have a 12-inch low-frequency transducer with a nominal impedance of 8 ohms, a 2.5-inch aluminum wire voice coil, and shall be coupled to a Mid-Band-Hydra vertical and horizontal wave shaping device. System power rating shall be 500 watts (per ANSI/EIA RS-426 A). The high-frequency section shall employ two 2-inch aluminum wire voice coil compression drivers, each with a titanium dome, mounted on a Wavefront-Shaping Circular Hydra plane wave generator coupled to a 90° or 120° horizontal by 10° vertical waveguide. The two high frequency drivers shall be connected in parallel for a high-frequency section nominal impedance of 8 ohms. The loudspeaker enclosure shall be constructed of 18 mm and 12 mm birch plywood and shall be trapezoidal in shape. The wedge angle shall be 10°. The grille shall be constructed from 16 GA powder-coated 304 stainless steel backed with acoustically transparent fabric. The loudspeaker shall be available with an indoor finish or in a fully weatherized IP55 version. Both versions shall include a gland nut cover that accepts cable diameters between 9 mm (0.35 inches) and 19 mm (0.74 inches). The system shall be capable of very high-level operation with a bandwidth of 57 Hz to 16 kHz (-3 dB down point). The system dimensions shall be 671 mm (26.4 inches) wide by 343 mm (13.6 inches) high by 533 mm (21.0 inches) deep. The system shall employ four M10 hard points per side for attachment to structural framing or an optional rigging kit available from the manufacturer. Net weight shall be 35.5 kg (78 lb). The loudspeaker shall be the X1i-212 from Electro-Voice.

Dimensions:



Caution!

Electro-Voice loudspeakers and rigging accessories should be suspended overhead only in accordance with the procedures and limitations specified in the user documentation and installation manual. Electro-Voice products should be suspended with certified rigging hardware by an authorized rigging professional and in complete compliance with local, state, and federal overhead suspension ordinances.

Notice!

Do not mix X1i and X2i full-range loudspeaker model types in the same vertical array. Although enclosure and rigging is identical for X1i and X2i line array elements they are designed to use only one model type in a vertical array.

Compatible System Solutions:

X12i-128 Dual 18" flying subwoofer

Compatible System Solutions, Electronics:

N8000-1500 NETMAX Controller including DSP-2 Extension for a total of 1800 MIPS processing power, 120 V. * This must be ordered as two separate items: (1) N8000 120 V and (1) DSP-2.[1]

OM-1 OMNEO card, replacement DM-1 Dante Module (Note that Dante transport is fully functional, but the OMNEO OCA control interface is not compatible with N8000.)

CPS4.10 Power Amplifier[1, 2]

Dynacord C3600FDi 2 x 1800W DSP Amplifier[2]

Dynacord IPX10:4 4 x 2500W DSP Amplifier[3]

Dynacord IPX20:4 4 x 5000W DSP Amplifier[3]

RCM-810 IRIS-Net remote control module for CPS Series amplifiers

[1]Contact your sales representative for available voltage versions.
[2]Maximum two elements in parallel per channel.
[3]Maximum three elements in parallel per channel.

Ordering information

X1I-212/120-B X1i 12" 120° Install array black
X1i compact 2-way 1 x 12-inch 120° line array, indoor, black
Order number **X1I-212/120-B**

X1I-212/120-FGB X1i 12" 120° Install array black FG
X1i compact 2-way 1 x 12-inch 120° line array, weatherized, black
Order number **X1I-212/120-FGB**

X1I-212/120-FGW X1i 12" 120° Install array white FG
X1i compact 2-way 1 x 12-inch 120° line array, weatherized, white
Order number **X1I-212/120-FGW**

X1I-212/120-W X1i 12" 120° Install array white
X1i compact 2-way 1 x 12-inch 120° line array, indoor, white
Order number **X1I-212/120-W**

X1I-212/90-B X1i 12" 90° Install array black
X1i compact 2-way 1 x 12-inch 90° line array, indoor, black
Order number **X1I-212/90-B**

X1I-212/90-FGB X1i 12" 90° Install array black FG
X1i compact 2-way 1 x 12-inch 90° line array, weatherized, black
Order number **X1I-212/90-FGB**

X1I-212/90-W X1i 12" 90° Install array white
X1i compact 2-way 1 x 12-inch 90° line array, indoor, white
Order number **X1I-212/90-W**

X1I-212/90-FGW X1i 12" 90° Install array white FG
X1i compact 2-way 1 x 12-inch 90° line array, weatherized, white
Order number **X1I-212/90-FGW**

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