AX1012P

12" (305mm), 2-way, full-range, Constant Curvature Array Element

KEY FEATURES

- Constant Curvature Array Element
- 12" woofer,1.4" HF neodymium compression driver
- Constant curvature Seamless Transition Waveguide (SWT) with 100° H x 20° V dispersion
- Integral suspension hardware for horizontal or vertical array installation
- Pole mounting available for free-standing applications

APPLICATIONS

- Sound reinforcement in small-to-medium-size live venues.
- Sidefill, Outfill or Infill applications
- Delay systems in stadia and arenas
- Theatres
- Corporate & A/V
- Theme parks
- Houses of Worship
- Leisure and Fitness

TECHNICAL SPECIFICATIONS

SYSTEM	
System's Acoustic Principle	Constant Curvature Array Element
Frequency Response (-6dB)	65 Hz – 17 kHz (processed)
Nominal Impedance	8 Ω (LF) + 8 Ω (HF)
Horizontal/ Vertical Coverage Angle	100°/20° 1kHz to 20kHz (-6dB)
Sensitivity 2.83V	101 dB SPL @ 1m (LF) - 106 dB SPL @ 1m (HF)
Maximum (peak) Output	134 dB SPL @ 1m

TRANSDUCERS	
LF	One 12" (305mm) LF driver, 3" (76mm) aluminium voice coil
HF	One 1.4" (35.5mm) HF compression driver, 2.4" (61mm) aluminium voice coil

INPUT CONNECTIONS	
Connector Type	Neutrik® speakON™ NL4MP x 2
Input Wiring	LF = Pin 1+/1- HF = Pin 2+/2-

POWER HANDLING	
Input Power Rating (AES)	600W + 75W
Input Power Handling (Program)	1200W + 150W

ENCLOSURE & CONSTRUCTION	
Dimensions (W x H x D)	246 mm (9.7") x 611 mm (24.0") x 500 mm (19.7")
Enclosure Material	15mm, reinforced phenolic birch
Paint	High resistance, black water based paint
Flying System	Captive suspension system
Net Weight	29 kg (63.9 lbs)

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DESCRIPTION

AX1012P is a versatile constant curvature full-range element that can be used to create both vertical and horizontal line source arrays and also as a high-directivity point-source loudspeaker.

The 1.4" high frequency compression driver is coupled to a constant curvature precision waveguide, which ensures a precise control of mid-high frequencies both on horizontal and vertical axis, for a perfect acoustic coupling between the enclosures that form the array. The unique waveguide design produces vertical line source directivity with a horizontal pattern that is maintained down to approximately 950Hz. This allows to project clean music and vocals evenly around the audience without hot-spots and dead-spots. The sharp SPL off-axis rejection is used to avoid reflecting surfaces in the enclosure coupling plane and perfectly adjusts the acoustic coverage to the audience geometry.

The system designer or sound engineer can build true line source horizontal or vertical arrays in 20° building blocks with seamless integration between cabinets.

The tour-grade 15mm phenolic birch plywood cabinet is provided with four integrated steels rails, to be used for coupling the cabinets with the provided aluminium coupling bars. A comprehensive set of accessories is available for creating horizontal or vertical arrays, for ground-stacking the systems and also for pole mounting one or two units.

Constant curvature precision waveguide

To extend the system's low frequency response the AX1012P can be complemented by sub-woofers from the Axiom SW series such as SW18P.

AX1012P is recommended for Indoor FOH (Left – Centre - Right systems), Medium-sized outdoor events or as a fill complement to large Systems, Out-fills, In-fills or distributed fill applications in a wide range of venue.

Horizontal array

Vertical array

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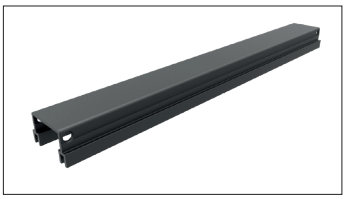
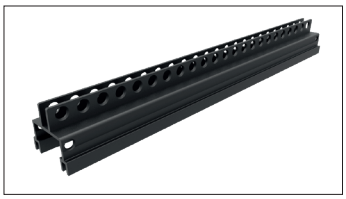
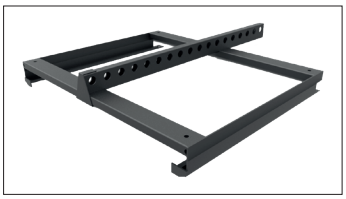
RIGGING HARDWARE



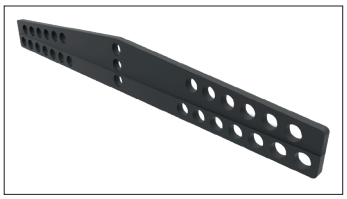
KPTAX1012 - Coupling bar



KPTAX1012H - Horizontal array flying bar



KPTAX1012V - Vertical Array flying bar



KPTAX1012T - Suspension bar

SYSTEM CONFIGURATION EXAMPLES

3-unit vertical array (100°x60°)

4-unit horizontal array (80°x100°)

3-unit ground stack (100°x60°)

1-unit pole mounted (100°x20°)

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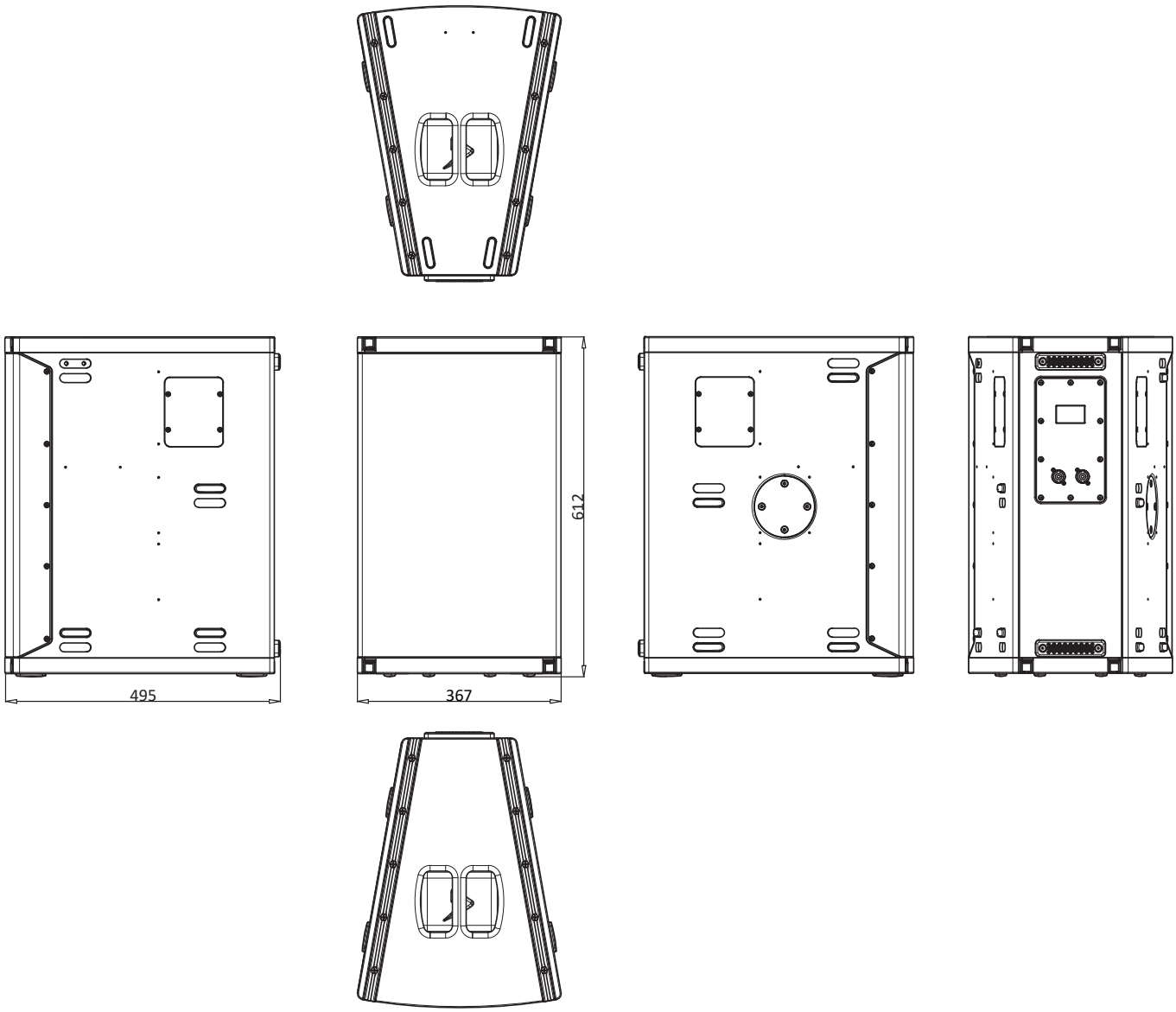
ENGINEERING DRAWING



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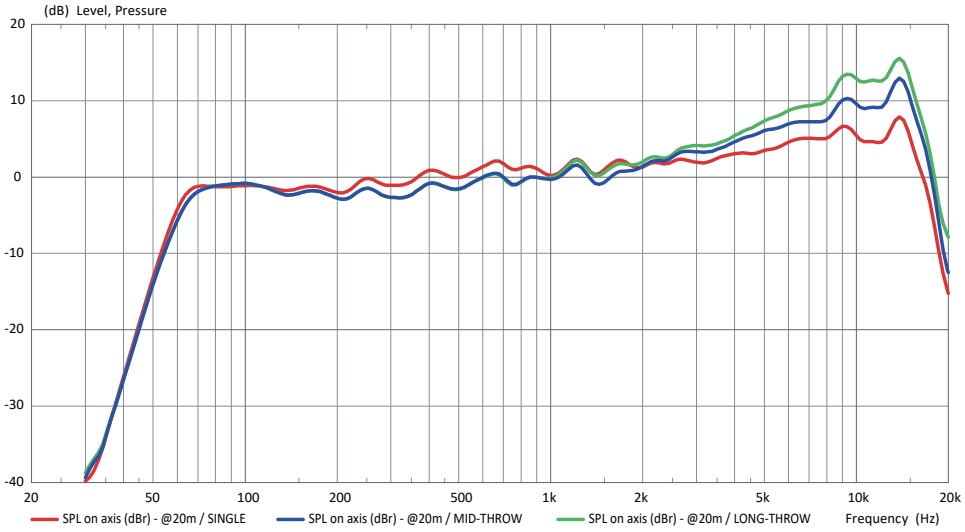
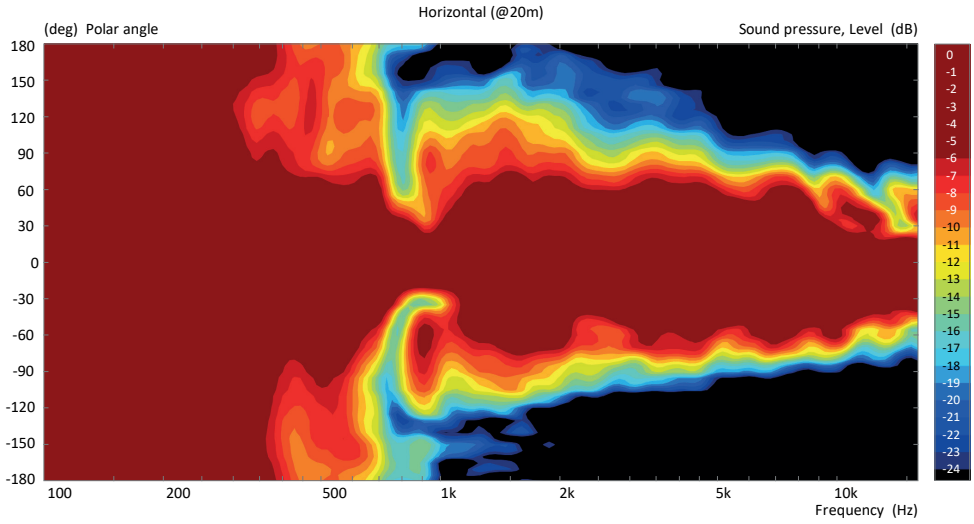
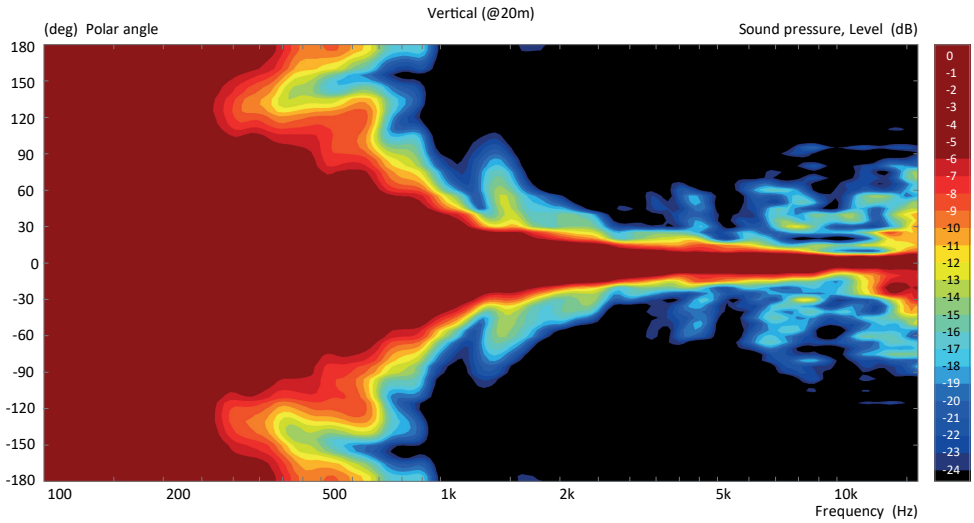
AX1012P frequency response



AX1012P HORIZONTAL directivity map



AX1012P VERTICAL directivity map



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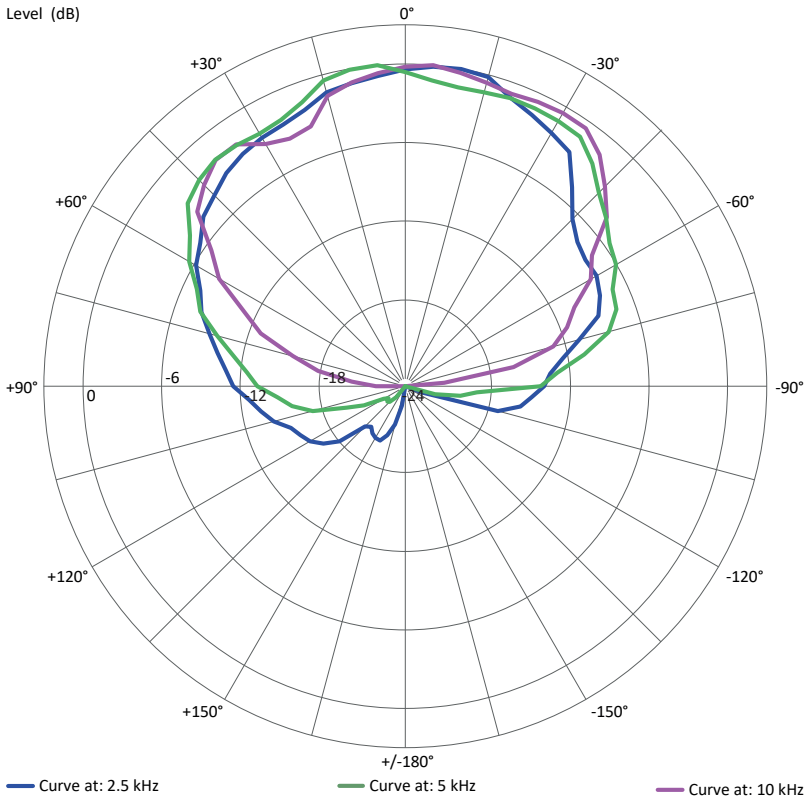
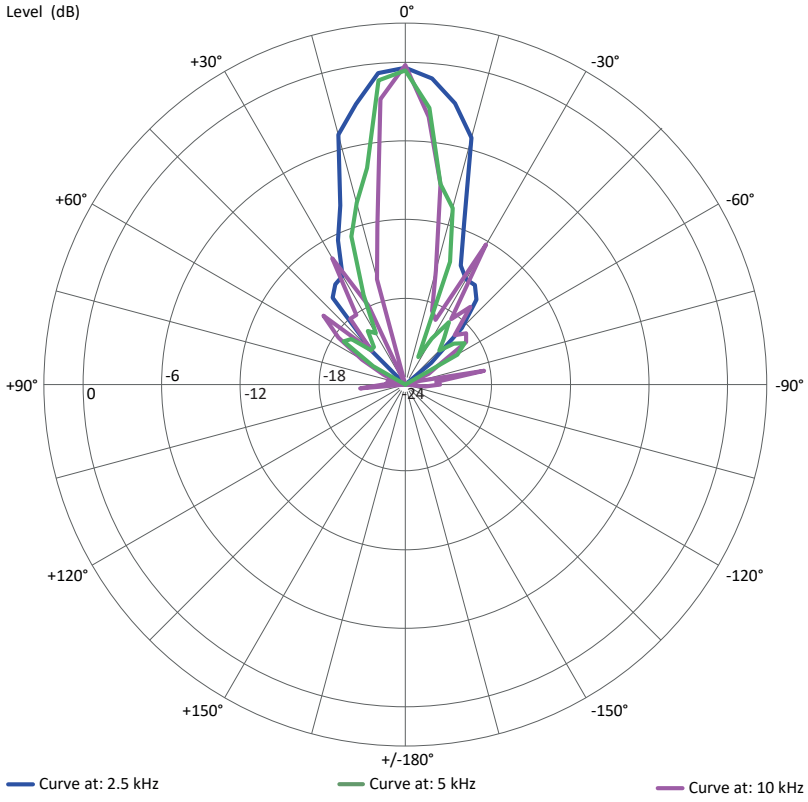
AX1012P HF HORIZONTAL polar diagram



AX1012P HF VERTICAL polar diagram



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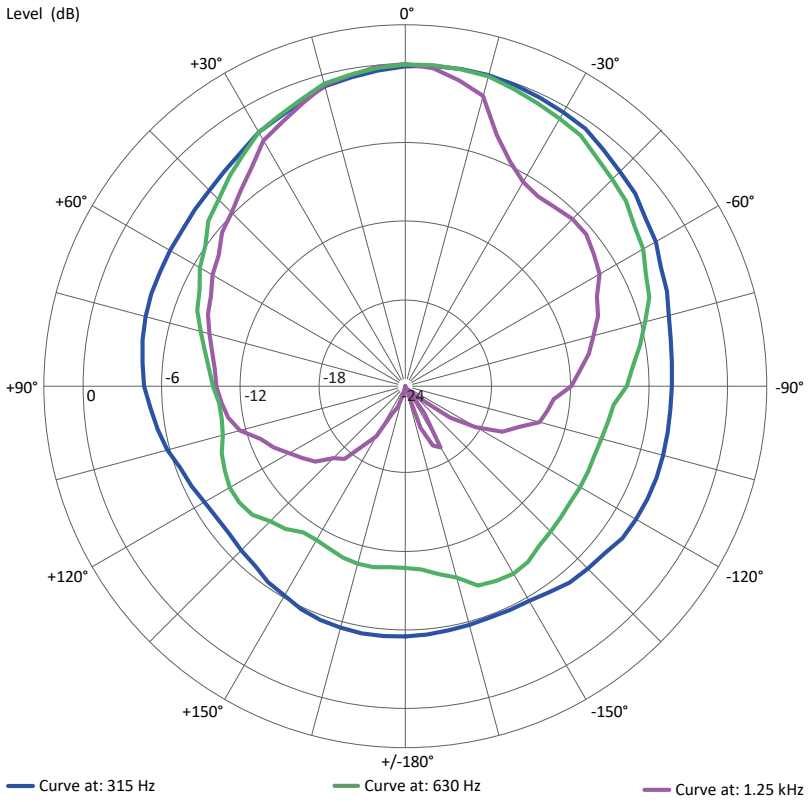
AX1012P LF HORIZONTAL polar diagram



AX1012P LF VERTICAL polar diagram