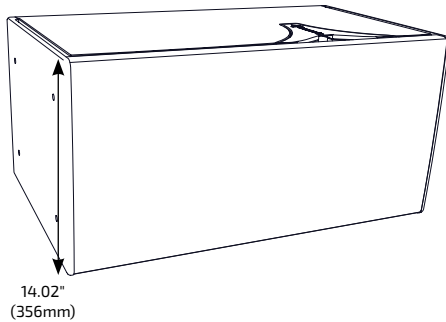


IV6-1122/05

12-INCH 2-WAY
120° x 5° LOUDSPEAKER



DESCRIPTION

I SERIES Modular Vertical Array 600 is a scalable, adaptive sound reinforcement system featuring multiple vertically arrayable elements designed to be used in combination or separately, and with or without splay between cabinets, providing an extensive range of vertical coverage angle and throw distance configurations. Two carefully chosen array elements, 120° x 5° and 120° x 15°, overcome the physical limitations and acoustical tuning difficulties of conventional line arrays and constant-curvature (point source) arrays while maintaining the best qualities of each.

Two complementary, discreet coverage angles permit the creation of true line array configurations for longer throws, gently curving progressive curvature arrays for medium size applications and compact constant-curvature arrays where near-field point source coverage is required. Constraining the splay angle between any adjacent element to 0°, 2.5° or 5° eliminates excessive coverage overlap as well as gaps in coverage between adjacent elements that occur when typical line array elements are deployed in their straightest or most curved configurations. The splay brackets also provide adequate adjustment between IV6 elements to adapt the vertical coverage angle of an array to fit the needs of any application.

After resolving physical array configuration needs, typical vertical arrays still suffer from level and frequency response imbalances between the nearest and furthest listeners. Multi-channel DSP-based solutions are available to help correct these issues, but are typically complicated and expensive. Instead, the IV6 has a built-in passive system to resolve the issue that requires no additional amplifier or DSP channels, called Passive Acoustic Optimization (PAO).

PAO provides up to 19dB of frequency-selective attenuation in 1.5dB steps within each element, allowing passive correction of the level and response throughout an array's vertical coverage plane. In addition to the standard array aiming features found in EASE® Focus 3 Software, a Community exclusive Passive Acoustic Optimization module quickly calculates the ideal attenuation settings for each element in the array to achieve uniform SPL and frequency response throughout each listening area.

FEATURES

- Modular, can be combined to make arrays of up to twenty elements @ 10:1 safety ratio
- Versatile configurations for both constant curve and line array applications
- Built-in Passive Acoustic Optimization settings allow array response shaping using one amplifier channel
- Elegant acoustics designed for permanent installations
- Exclusive Acoustic Optimization and Rigging Safety Check modules integrated into EASE® Focus 3
- Indoor and Outdoor (weather-resistant) models available

TECHNICAL SPECIFICATIONS¹

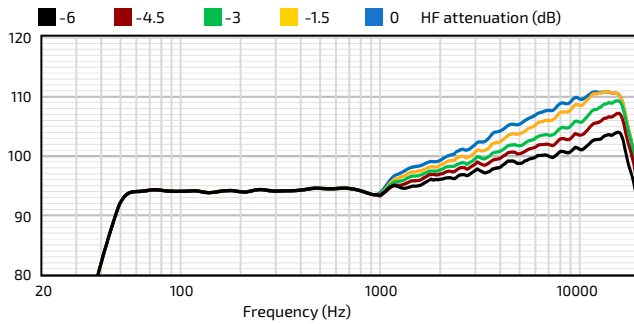
Operating Mode	Passive with Integrated Passive Acoustic Optimization					
Passive Array Optimization Settings	Element Attenuation: 15 dB range (in 1.5 dB steps) HF Attenuation: 6 dB range (in 1.5 dB steps)					
Operating Environment	Indoor or Weather-Resistant Outdoor					
Operating Range²	40 Hz to 18.5 kHz					
Nominal Beamwidth	Horizontal: 120° Vertical: Array dependent, 5° maximum splay					
Transducers	LF: 1 x 12" (305mm) ferrite driver, 3" (76mm) voice coil, inherently weather-resistant cone HF: 2 x 1.7" (43mm) voice coil, 1" (25mm) exit, ketone polymer diaphragm, neodymium compression drivers					
Continuous Power Handling³ @ Nominal Impedance	80V, 400W @ 16 ohms (1600W peak)					
Recommended Amplifiers	400W - 800W @ 16 ohms, (80V - 113V) equivalent to 1600W - 3200W @ 4 ohms					
	Number of 5° elements (in continuous array)					
	1	4	6	8	12	16
Nominal Sensitivity (1W/1m)	102 dB	107 dB	108 dB	110 dB	113 dB	115 dB
Nominal Maximum SPL⁵ Peak (Continuous)	134 dB (128 dB)	145 dB (139 dB)	148 dB (142 dB)	151 dB (145 dB)	156 dB (150 dB)	159 dB (153 dB)
Equalized Sensitivity⁶ (1W/1m)	102 dB	107 dB	108 dB	110 dB	113 dB	115 dB
Equalized Maximum SPL⁷ Peak (Continuous)	134 dB (128 dB)	145 dB (139 dB)	148 dB (142 dB)	151 dB (145 dB)	156 dB (150 dB)	159 dB (153 dB)
PHYSICAL						
Input Connection	(1) Screw terminal block (2x 2-position), (2) NL4 Connectors					
Mounting Points	(8) M10 threaded rigging points (4 per side)					
Environmental	Outdoor: IP55W per IEC 60529, designed in accordance with MIL-STD-810G					
Weight	77.3 lbs (35.1 kg) loudspeaker and 1 pair of splay brackets					
Dimensions (H x W x D)	14.02" x 28.12" x 16.55" (356 x 714 x 421 mm)					
Finish	Refer to the Technical Drawing					
Required Accessories	EASE® Focus 3 Software: Acoustic optimization - array configuration Free - go to "DOWNLOADS" tab here: http://www.communitypro.com/products/i-series/IV6-1122 IV6-S1/S2/S3: IV6 Splay Bracket Pairs (Type 1, 2, or 3) One pair must be ordered for each element-to-element connection					
OPTIONS						
Accessories	Rigging - refer to page 8 for item drawings Additional rigging/mounting options are available from PolarFocus					
Configure-to-Order (CTO)	Custom color					

IV6-1122/05

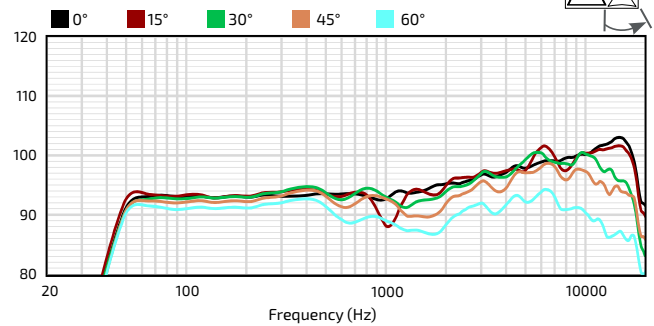
12-INCH 2-WAY
120° x 5° LOUDSPEAKER



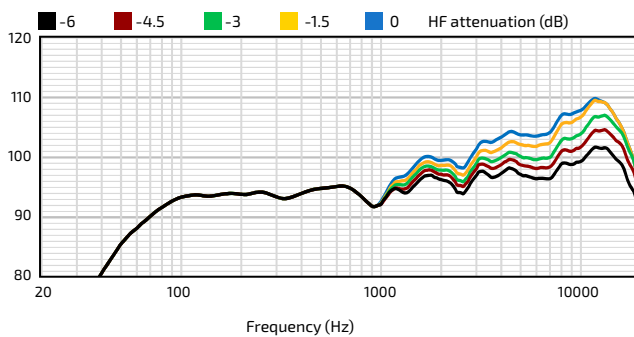
AXIAL PROCESSED RESPONSE (dB)⁸



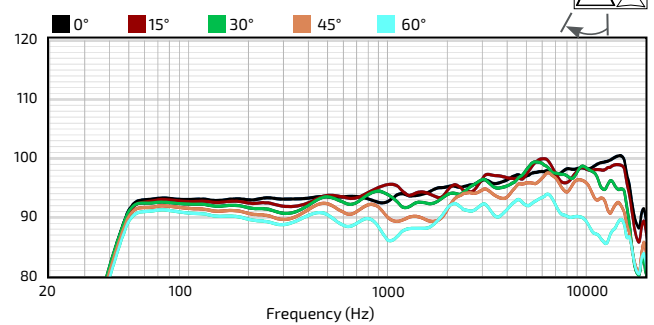
HORIZONTAL OFF-AXIS LEFT RESPONSE (dB)¹⁰



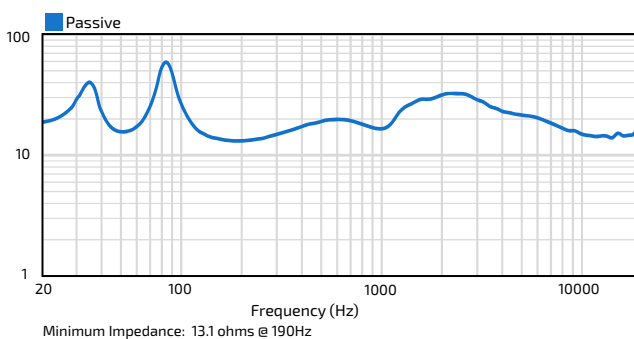
AXIAL SENSITIVITY (dB SPL)⁹



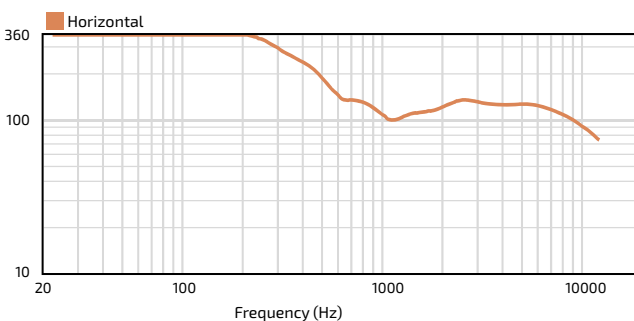
HORIZONTAL OFF-AXIS RIGHT RESPONSE (dB)¹⁰



IMPEDANCE (Ohms)



BEAMWIDTH (Degrees)¹²



ORDERING DATA

Loudspeaker Elements

Part Number	Description
IV6-1122/05B	120° x 5° indoor black
IV6-1122/05W	120° x 5° indoor white
IV6-1122WR05	120° x 5° weather-resistant grey
IV6-1122WR05B	120° x 5° weather-resistant black
IV6-1122WR05W	120° x 5° weather-resistant white

Splay Brackets (required)

Important Note: One pair must be ordered for each element-to-element connection. A pair of S1's to connect to the top element is included with the marked (*) frames listed below. Order type based upon PAO modeling report from EASE® Focus 3.

Part Number	Description
IV6-S1	Splay bracket 1 [= maximum splay] black
IV6-S2	Splay bracket 2 [= max. splay minus 2.5°] black
IV6-S2W	Splay bracket 2 [= max. splay minus 2.5°] white
IV6-S3	Splay bracket 3 [= max. splay minus 5°] black
IV6-S3W	Splay bracket 3 [= max. splay minus 5°] white

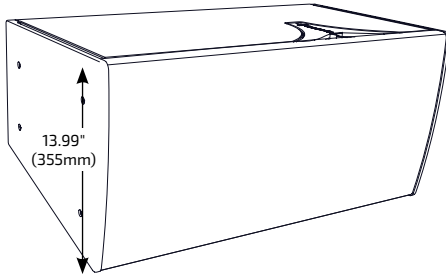
Rigging / Mounting Accessories

Part Number	Description
IV6-GP-AF	IV6 GlidePoint™ Array Frame*
IV6-SB-AF	IV6 Sub Behind Array Frame*
PY1-EN750-1550	Lift Point for Array Frame
IV6-LAF-PBB	IV6 Light Array Frame/Pullback Bar*
IV6-LAU	IV6 Light Frame Adapter U-Bracket

Rigging accessories shown above are black. If white finish is desired add "W" to the part number. Dimensions and additional accessories from Polar Focus appear on pg 10.

IV6-1122/15

12-INCH 2-WAY
120° x 15° LOUDSPEAKER



DESCRIPTION

I SERIES Modular Vertical Array 600 is a scalable, adaptive sound reinforcement system featuring multiple vertically arrayable elements designed to be used in combination or separately, and with or without splay between cabinets, providing an extensive range of vertical coverage angle and throw distance configurations. Two carefully chosen array elements, 120° x 5° and 120° x 15°, overcome the physical limitations and acoustical tuning difficulties of conventional line arrays and constant-curvature (point source) arrays while maintaining the best qualities of each.

Two complementary, discreet coverage angles permit the creation of true line array configurations for longer throws, gently curving progressive curvature arrays for medium size applications and compact constant-curvature arrays where near-field point source coverage is required. Constraining the splay angle between any adjacent element to 0°, 2.5° or 5° eliminates excessive coverage overlap as well as gaps in coverage between adjacent elements that occur when typical line array elements are deployed in their straightest or most curved configurations. The splay brackets also provide adequate adjustment between IV6 elements to adapt the vertical coverage angle of an array to fit the needs of any application.

After resolving physical array configuration needs, typical vertical arrays still suffer from level and frequency response imbalances between the nearest and furthest listeners. Multi-channel DSP-based solutions are available to help correct these issues, but are typically complicated and expensive. Instead, the IV6 has a built-in passive system to resolve the issue that requires no additional amplifier or DSP channels, called Passive Acoustic Optimization (PAO).

PAO provides up to 19dB of frequency-selective attenuation in 1.5dB steps within each element, allowing passive correction of the level and response throughout an array's vertical coverage plane. In addition to the standard array aiming features found in EASE® Focus 3 Software, a Community exclusive Passive Acoustic Optimization module quickly calculates the ideal attenuation settings for each element in the array to achieve uniform SPL and frequency response throughout each listening area.

FEATURES

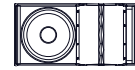
- Modular, can be combined to make arrays of up to twenty elements @ 10:1 safety ratio
- Versatile configurations for both constant curve and line array applications
- Built-in Passive Acoustic Optimization settings allow array response shaping using one amplifier channel
- Elegant acoustics designed for permanent installations
- Exclusive Acoustic Optimization and Rigging Safety Check modules integrated into EASE® Focus 3
- Indoor and Outdoor (weather-resistant) models available

TECHNICAL SPECIFICATIONS¹

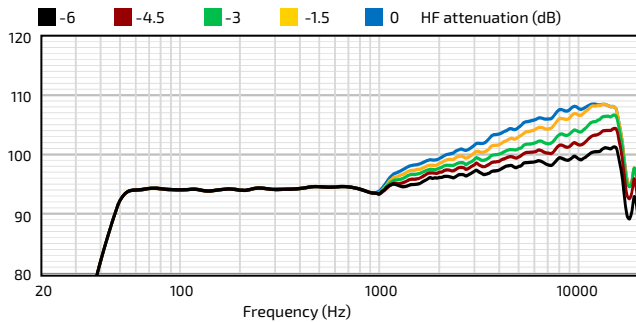
Operating Mode	Passive with Integrated Passive Acoustic Optimization				
Passive Array Optimization Settings	Element Attenuation: 15 dB range (in 1.5 dB steps) HF Attenuation: 6 dB range (in 1.5 dB steps)				
Operating Environment	Indoor or Weather-Resistant Outdoor				
Operating Range²	40 Hz to 18.5 kHz				
Nominal Beamwidth	Horizontal: 120° Vertical: Array dependent, 15° maximum splay				
Transducers	LF: 1 x 12" (305mm) ferrite driver, 3" (76mm) voice coil, inherently weather-resistant cone HF: 2 x 1.7" (43mm) voice coil, 1" (25mm) exit, ketone polymer diaphragm, neodymium compression drivers				
Continuous Power Handling³ @ Nominal Impedance	80V, 400W @ 16 ohms (1600W peak)				
Recommended Amplifiers	400W - 800W @ 16 ohms, (80V - 113V) equivalent to 1600W - 3200W @ 4 ohms				
	Number of 15° elements (in continuous array)				
	1	2	4	6	8
Nominal Sensitivity (1W/1m)	100 dB	101 dB	101 dB	102 dB	103 dB
Nominal Maximum SPL⁵ Peak (Continuous)	132 dB (126 dB)	136 dB (130 dB)	139 dB (133 dB)	142 dB (136 dB)	144 dB (138 dB)
Equalized Sensitivity⁶ (1W/1m)	100 dB	101 dB	101 dB	102 dB	103 dB
Equalized Maximum SPL⁷ Peak (Continuous)	132 dB (126 dB)	136 dB (130 dB)	139 dB (133 dB)	142 dB (136 dB)	144 dB (138 dB)
PHYSICAL					
Input Connection	(1) Screw terminal block (2x 2-position), (2) NL4 Connectors				
Mounting Points	(8) M10 threaded rigging points (4 per side)				
Environmental	Outdoor: IP55W per IEC 60529, designed in accordance with MIL-STD-810G				
Weight	73.2 lbs (33.2 kg) loudspeaker and 1 pair of splay brackets				
Dimensions (H x W x D)	13.99" x 28.12" x 16.72" (355 x 714 x 425 mm)				
Finish	Refer to the Technical Drawing				
Required Accessories	EASE® Focus 3 Software: Acoustic optimization - array configuration Free - go to "DOWNLOADS" tab here: http://www.communitypro.com/products/i-series/IV6-1122 IV6-S1/S2/S3: IV6 Splay Bracket Pairs (Type 1, 2, or 3) One pair must be ordered for each element-to-element connection				
OPTIONS					
Accessories	Rigging - refer to page 9 for item drawings Additional rigging/mounting options are available from PolarFocus				
Configure-to-Order (CTO)	Custom color				

IV6-1122/15

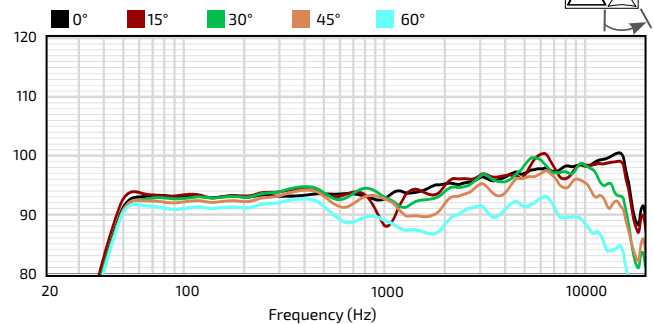
12-INCH 2-WAY
120° x 15° LOUDSPEAKER



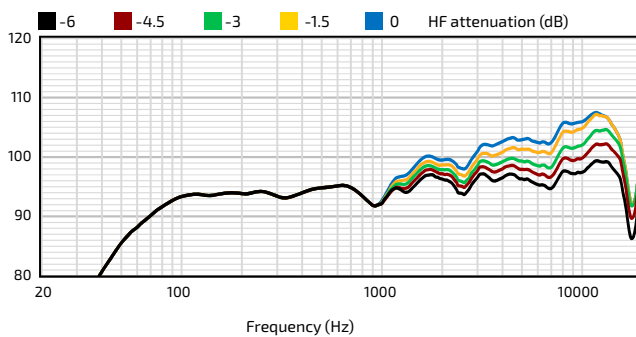
AXIAL PROCESSED RESPONSE (dB)⁸



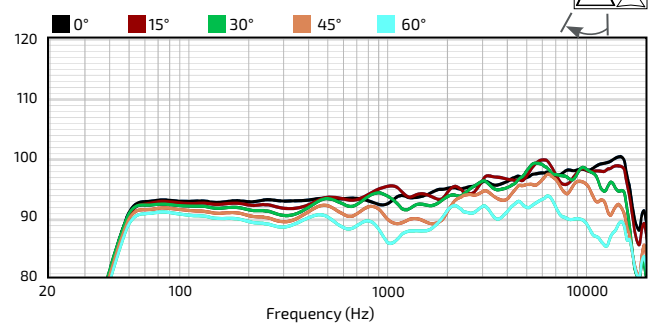
HORIZONTAL OFF-AXIS LEFT RESPONSE (dB)¹⁰



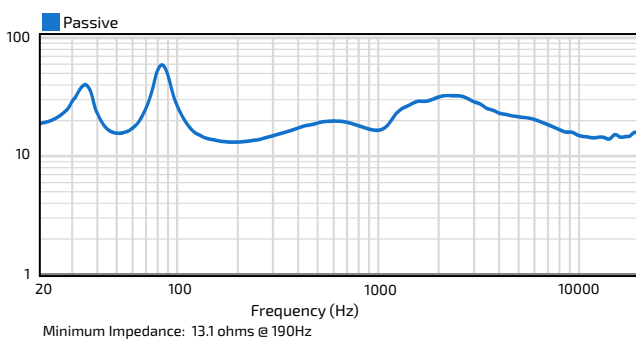
AXIAL SENSITIVITY (dB SPL)⁹



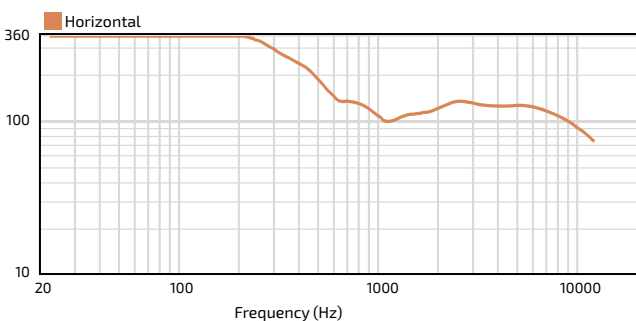
HORIZONTAL OFF-AXIS RIGHT RESPONSE (dB)¹⁰



IMPEDANCE (Ohms)



BEAMWIDTH (Degrees)¹²



ORDERING DATA

Loudspeaker Elements

Part Number	Description
IV6-1122/15B	120° x 15° indoor black
IV6-1122/15W	120° x 15° indoor white
IV6-1122WR15	120° x 15° weather-resistant grey
IV6-1122WR15B	120° x 15° weather-resistant black
IV6-1122WR15W	120° x 15° weather-resistant white

Splay Brackets (required)

Important Note: One pair must be ordered for each element-to-element connection. A pair of S1's to connect to the top element is included with the marked (*) frames listed below. Order type based upon PAO modeling report from EASE® Focus 3.

Part Number	Description
IV6-S1	Splay bracket 1 [= maximum splay] black
IV6-S2	Splay bracket 2 [= max. splay minus 2.5°] black
IV6-S2W	Splay bracket 2 [= max. splay minus 2.5°] white
IV6-S3	Splay bracket 3 [= max. splay minus 5°] black
IV6-S3W	Splay bracket 3 [= max. splay minus 5°] white

Rigging / Mounting Accessories

Part Number	Description
IV6-GP-AF	IV6 GlidePoint™ Array Frame*
IV6-SB-AF	IV6 Sub Behind Array Frame*
PY1-EN750-1550	Lift Point for Array Frame
IV6-LAF-PBB	IV6 Light Array Frame/Pullback Bar*
IV6-LAU	IV6 Light Frame Adapter U-Bracket

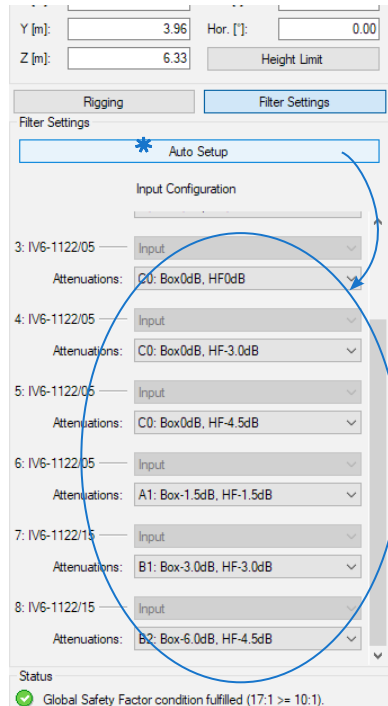
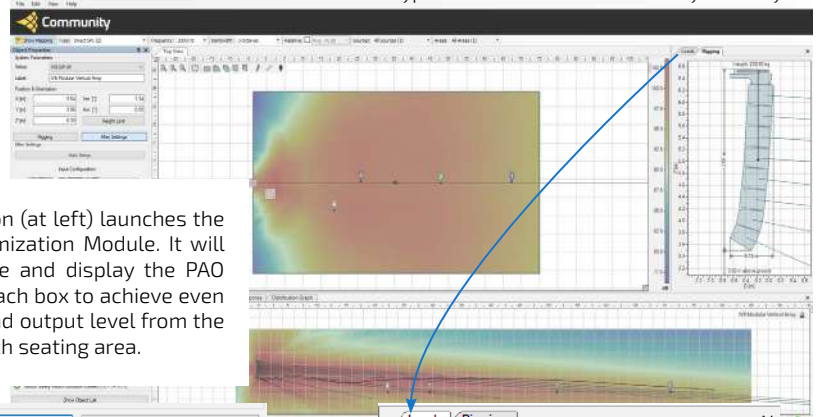
Rigging accessories shown above are black. If white finish is desired add "W" to the part number. Dimensions and additional accessories from Polar Focus appear on pg 10.

IV6-1122/05 and IV6-1122/15

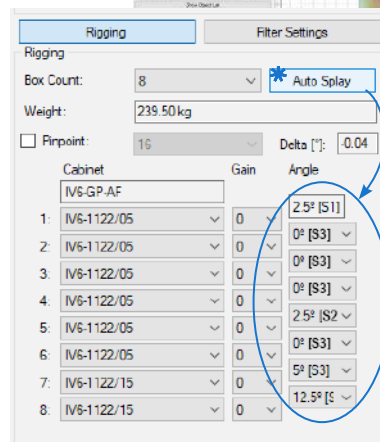
EASE® FOCUS 3 SOFTWARE with PASSIVE ACOUSTIC OPTIMIZATION and RIGGING SAFETY CHECK modules

In addition to the standard array and aiming features found in EASE Focus 3 Software (EF3), Community's exclusive Passive Acoustic Optimization (PAO) Module quickly calculates the ideal array parameters for unmatched SPL consistency without additional amp or DSP channels.

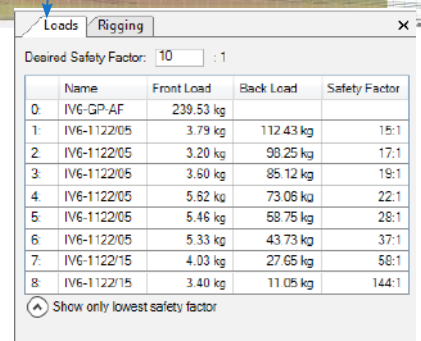
Typical EF3 screen with Community IV6 array



The "Auto Setup" button (at left) launches the Passive Acoustic Optimization Module. It will automatically calculate and display the PAO settings required for each box to achieve even frequency response and output level from the front to the back of each seating area.



Splay bracket types (S1, S2, S3) are clearly shown on the standard EF3 "Rigging" screen.



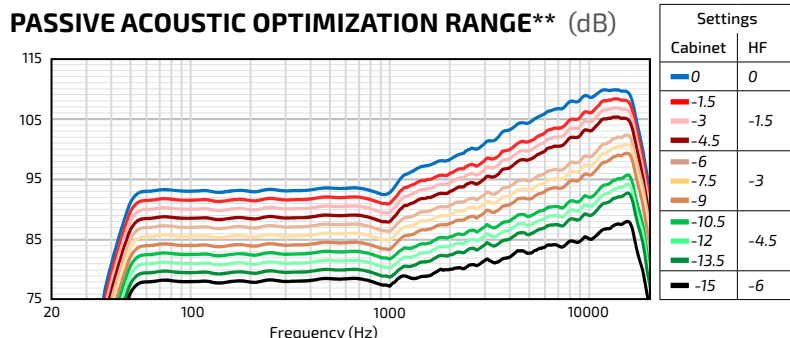
Community's exclusive Rigging Safety Check (RiSC) module is found on the "Loads" tab. It allows setting of the minimum allowable safety factor, and dynamically updates the load and safety factor between each element in the array as it is built and aimed.

INDIVIDUAL ELEMENT CONTROL

Passive Acoustic Optimization (PAO) settings on the rear of each element allow for up to 55 different frequency response profiles to be independently selected for each cabinet in an array. For every 3 dB of box attenuation the impedance doubles, this feature makes it possible to operate a very large number of elements from a single amplifier channel when necessary.

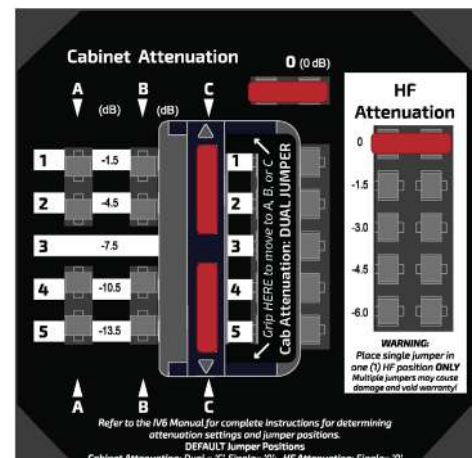
Community's IV6 Impedance Calculator tool will help you quickly determine the number of elements that can safely be run on a single amplifier channel with the selected attenuation settings.

The chart below shows a sample of the change in frequency response when different Cabinet and HF attenuation settings are used.



**This selection of Element (Box) and HF settings is not a complete representation of all of the possible combinations of attenuation settings. There are 55 possible combinations.

The PAO module in EF3 calculates the difference between ideal cabinet and HF attenuation settings for each element in the array and identifies the positions each jumper should be placed. Jumper position "C" and "0" (shown below) provide 0dB of cabinet attenuation and are the default settings.

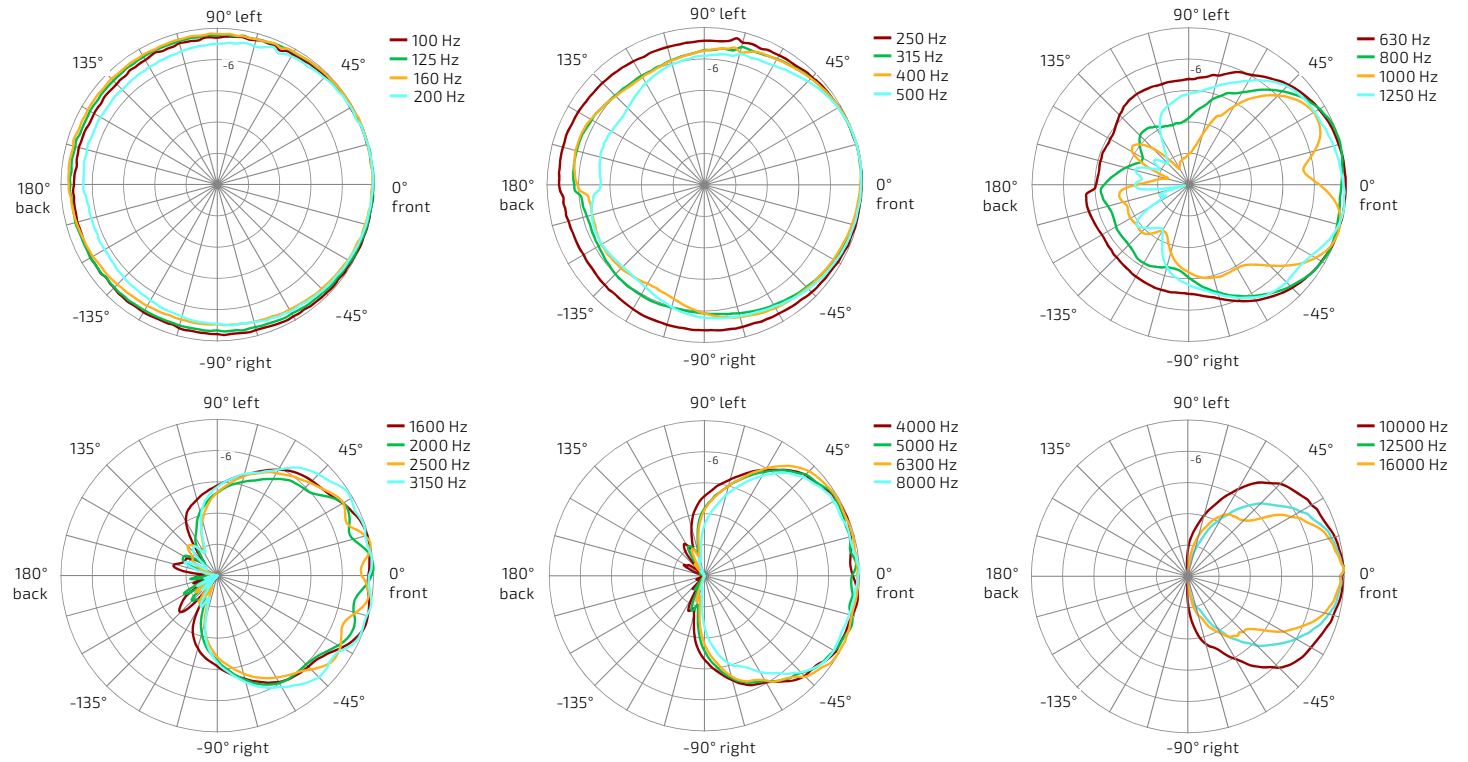


Attenuation panel (on rear of each loudspeaker element)

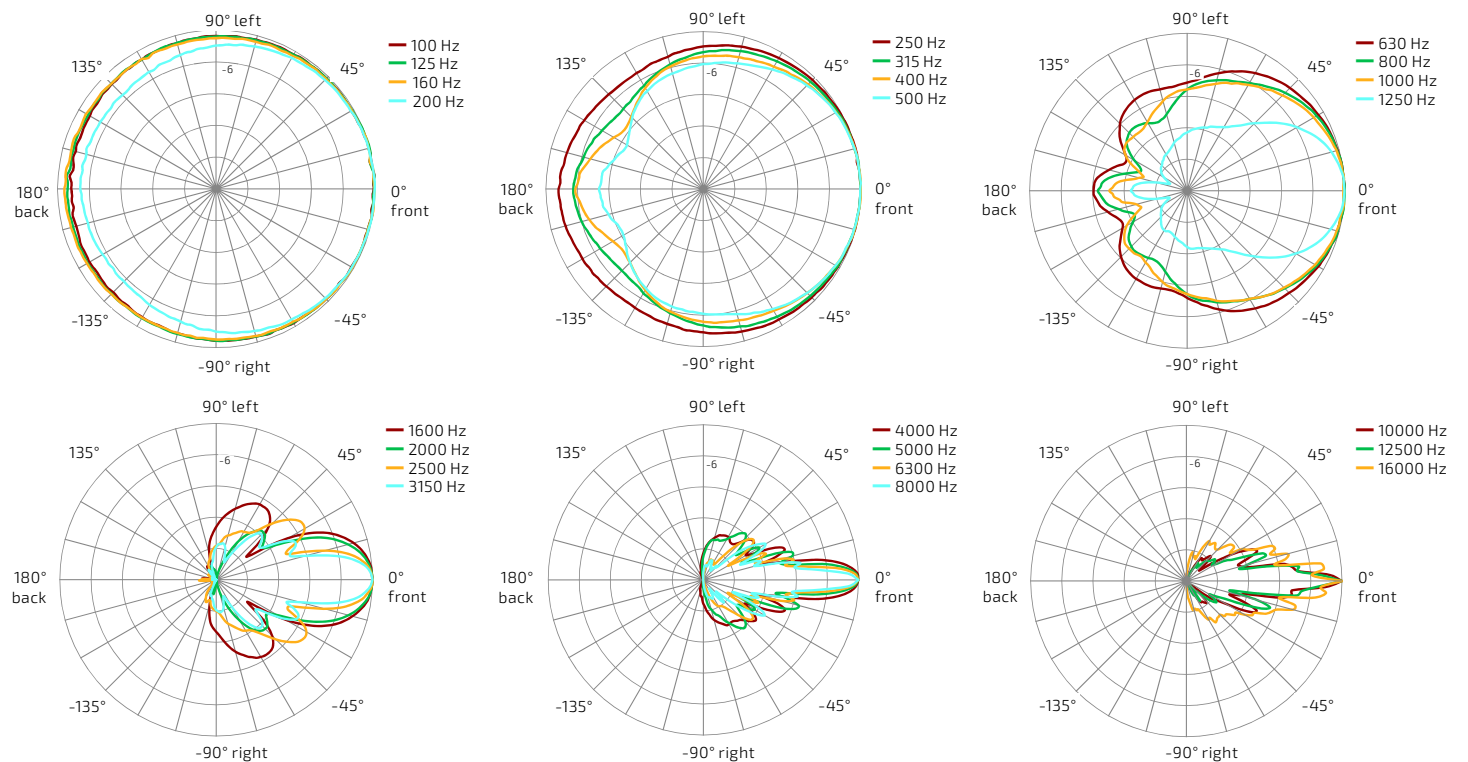
IV6-1122/05

12-INCH 2-WAY
120° x 5° LOUDSPEAKER

HORIZONTAL POLAR DATA (30dB Scale, 6dB per major division)



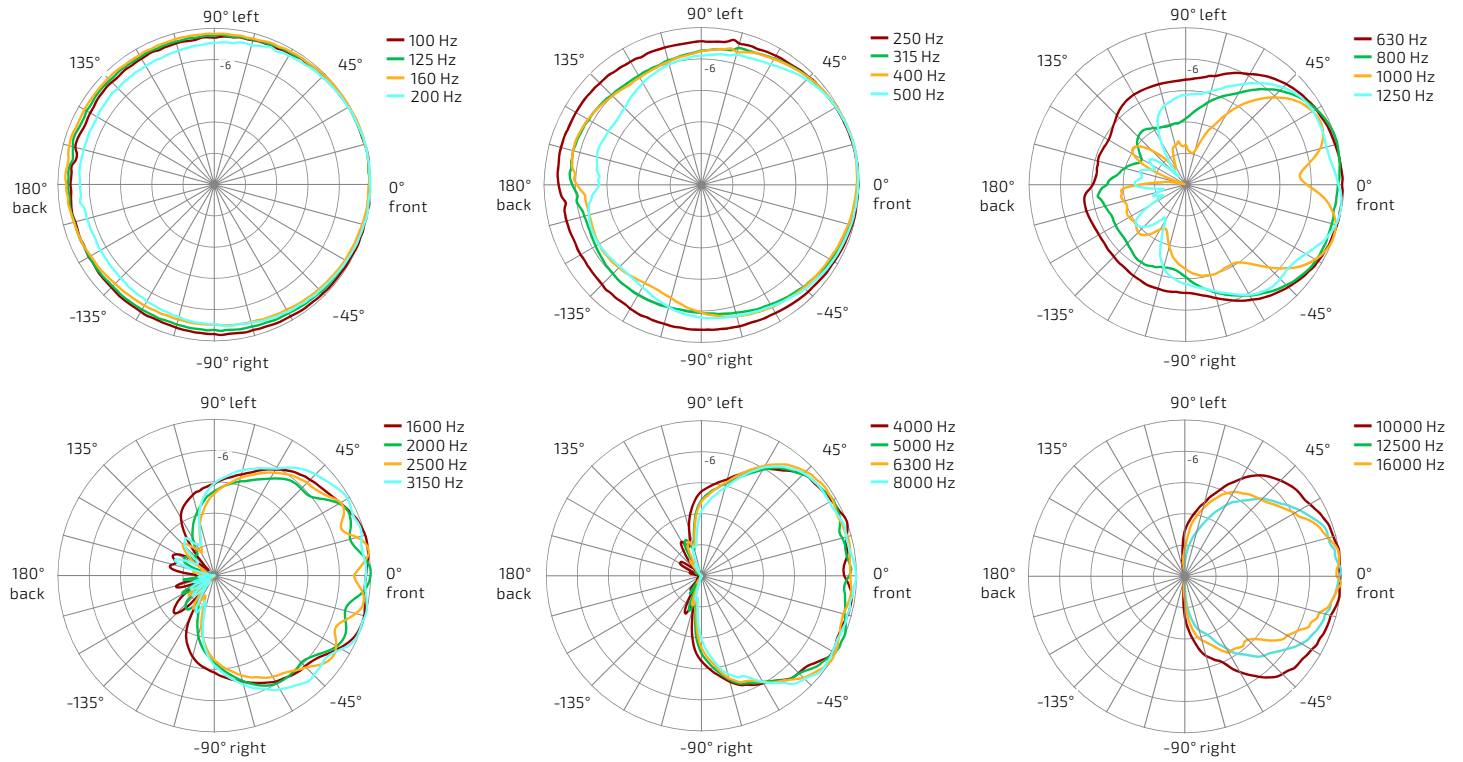
VERTICAL POLAR DATA (30dB Scale, 6dB per major division)



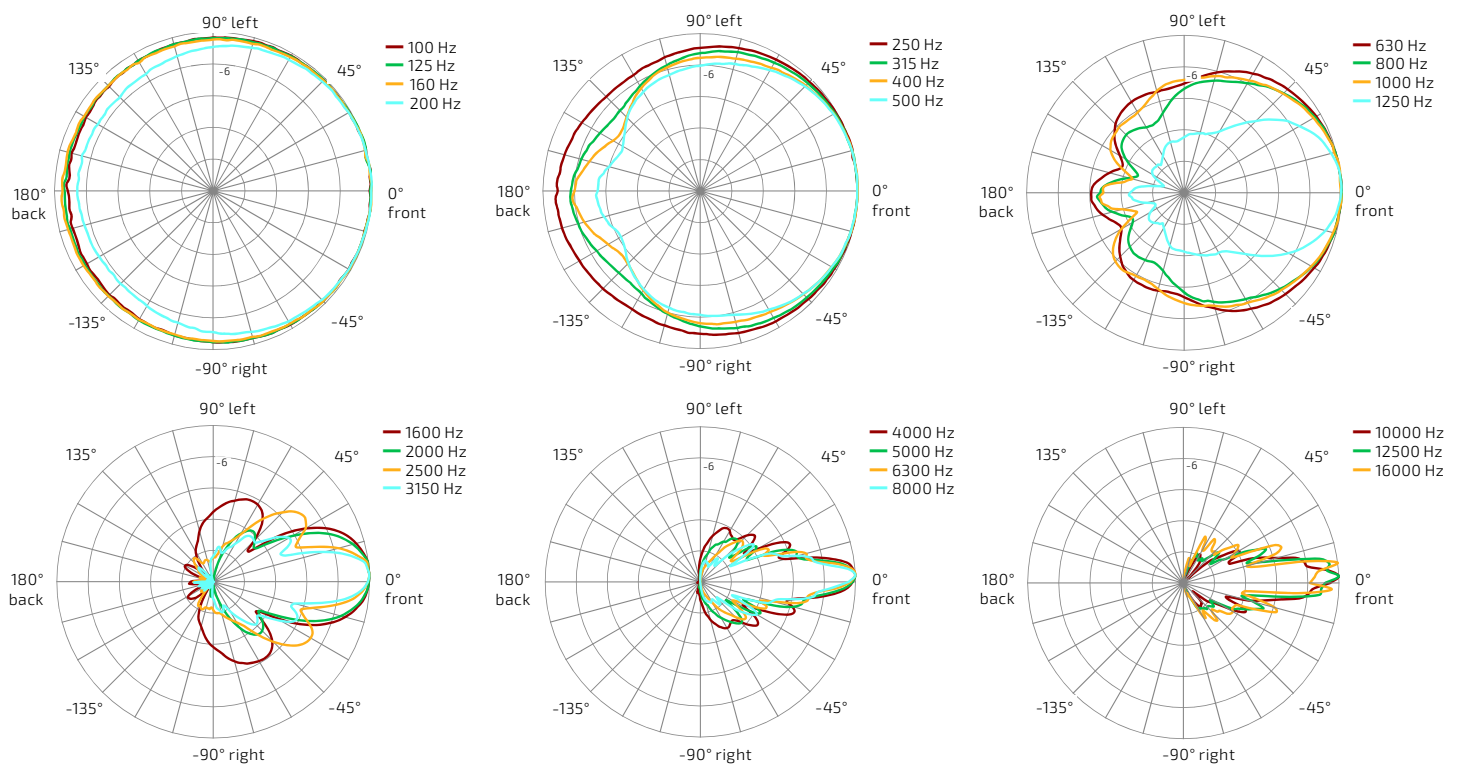
IV6-1122/15

12-INCH 2-WAY
120° x 15° LOUDSPEAKER

HORIZONTAL POLAR DATA (30dB Scale, 6dB per major division)



VERTICAL POLAR DATA (30dB Scale, 6dB per major division)



IV6-1122/05

12-INCH 2-WAY
120° x 5° LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

14.02" x 28.12" x 16.55"
(356 x 714 x 421 mm)

Unit Weight

77.3 lbs (35.1 kg) loudspeaker and
1 pair of splay brackets (sold separately)

Shipping Weight

83.0 lbs (37.6 kg)

Indoor Models:

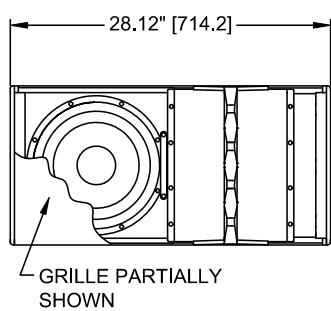
Grille: Powder-coated perforated steel backed with color-matched acoustically transparent woven fabric. Black (RAL#9005) or White (RAL#9003)

Enclosure / Finish: Black (RAL#9005) or White (RAL#9003) low gloss, uniformly textured painted 15mm Baltic Birch plywood.

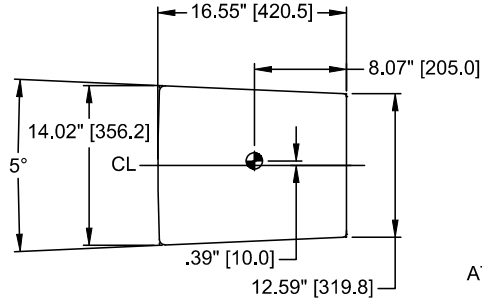
***Outdoor Models:**

Grille: Marine grade perforated aluminum with dual-layer powder-coat, featuring hydrophobically treated acoustically transparent woven black fabric backing. Black, White or Grey

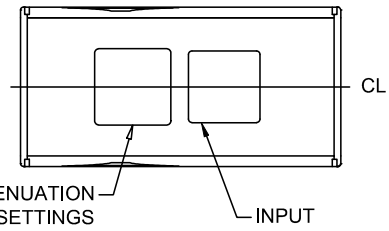
Enclosure / Finish: 15mm PolyGlas™, Black, White or Grey, heavily textured industrial-grade exterior-rated coating. Custom colors upon request.



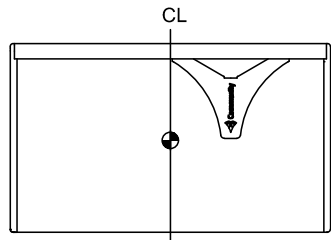
FRONT



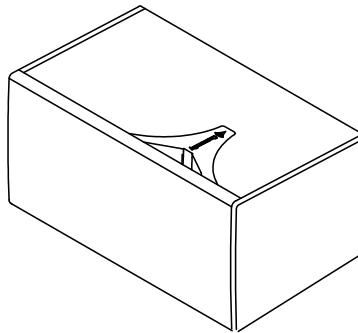
SIDES



BACK



TOP/BOTTOM



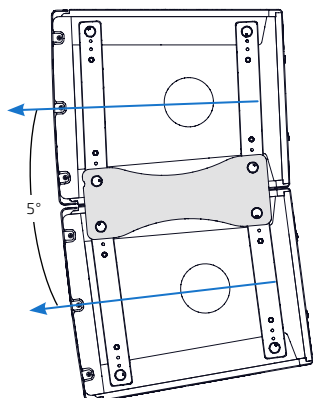
	IV6-S1 PAIR 2.5 lbs (1.1 kg)
	IV6-S2 PAIR 2.7 lbs (1.2 kg)
	IV6-S3 PAIR 2.9 lbs (1.3 kg)

SPLAY BRACKETS
1 pair must be ordered for each element-to-element connection

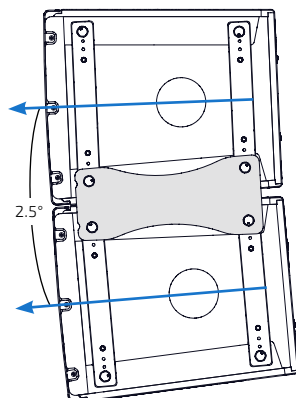
***Note:** The outdoor (WR) model drawing is available at communitypro.com - Input panel and mounting point locations, the unit weight and the dimensions vary slightly from indoor model (shown).

SPLAY BRACKETS

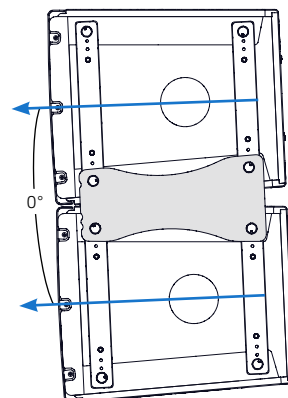
Splay brackets are required to connect the elements in the array. One pair must be ordered for each element-to-element connection. The degree value (5°, 2.5°, 0°) is the aiming angle between the elements.



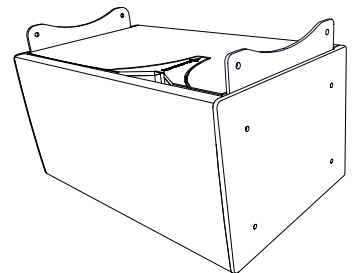
IV6-S1 Type 1 (maximum splay)
Aiming angle = 5°



IV6-S2 Type 2: [max. splay - 2.5°]
Aiming angle = 2.5°



IV6-S3 Type 3: [max. splay - 5°]
Aiming angle = 0°



IV6-1122/15

12-INCH 2-WAY
120° x 15° LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

13.99" x 28.12" x 16.72"
(355 x 714 x 425 mm)

Unit Weight

73.2 lbs (33.2 kg) loudspeaker and
1 pair of splay brackets (sold separately)

Shipping Weight

79.2 lbs (35.9 kg)

Indoor Models:

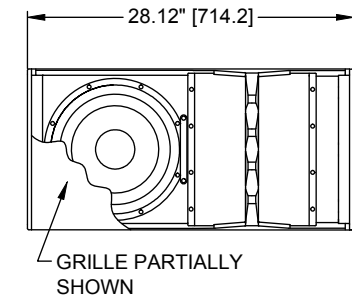
Grille: Powder-coated perforated steel backed with color-matched acoustically transparent woven fabric. Black (RAL#9005) or White (RAL#9003)

Enclosure / Finish: Black (RAL#9005) or White (RAL#9003) low gloss, uniformly textured painted 15mm Baltic Birch plywood.

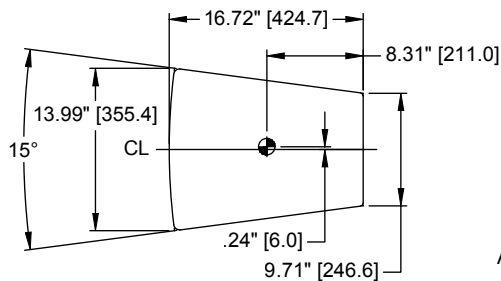
***Outdoor Models:**

Grille: Marine grade perforated aluminum with dual-layer powder-coat, featuring hydrophobically treated acoustically transparent woven black fabric backing. Black, White or Grey

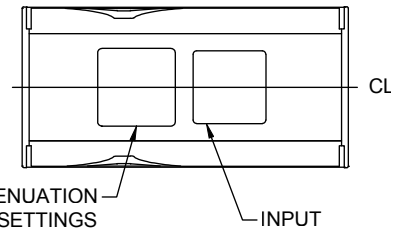
Enclosure / Finish: 15mm PolyGlas™, Black, White or Grey, heavily textured industrial-grade exterior-rated coating. Custom colors upon request.



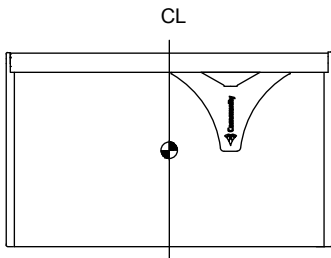
FRONT



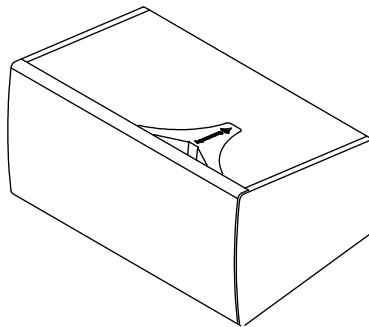
SIDES



BACK



TOP/BOTTOM



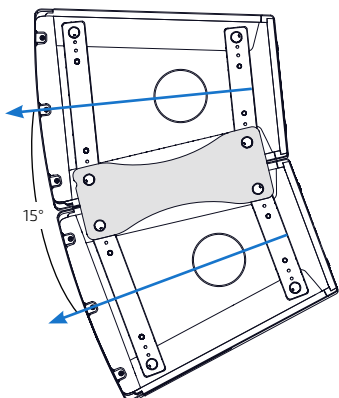
	IV6-S1 PAIR 2.5 lbs (1.1 kg)
	IV6-S2 PAIR 2.7 lbs (1.2 kg)
	IV6-S3 PAIR 2.9 lbs (1.3 kg)

SPLAY BRACKETS
1 pair must be ordered for each element-to-element connection

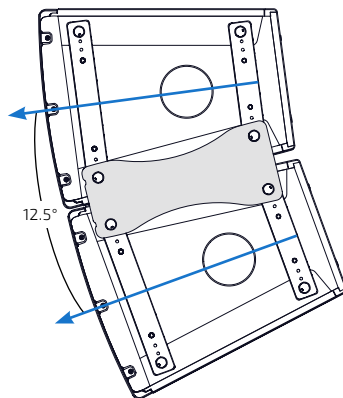
***Note:** The outdoor (WR) model drawing is available at communitypro.com - Input panel and mounting point locations, the unit weight and the dimensions vary slightly from indoor model (shown).

SPLAY BRACKETS AND RIGGING EXAMPLES

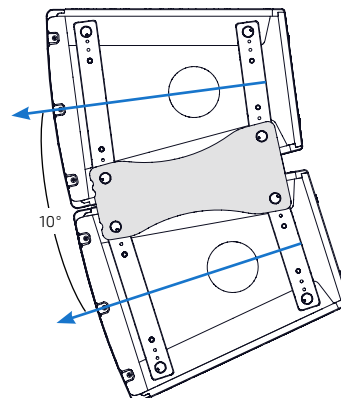
Splay brackets are required to connect the elements in the array. One pair must be ordered for each element-to-element connection. The degree value (15°, 12.5°, 10°) is the aiming angle between the elements.



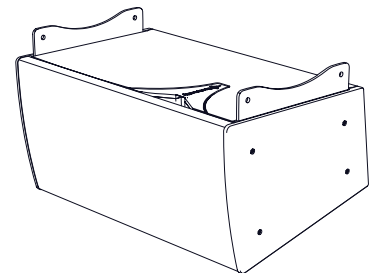
IV6-S1 Type 1: maximum splay
Aiming angle = 15°



IV6-S2 Type 2: [max. splay - 2.5°]
Aiming angle = 12.5°

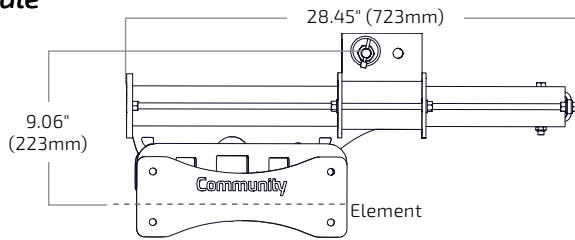


IV6-S3 Type 3: [max. splay - 5°]
Aiming angle = 10°

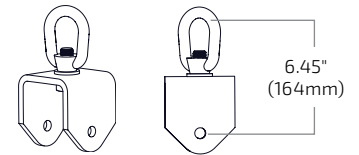


IV6-1122/05 and IV6-1122/15

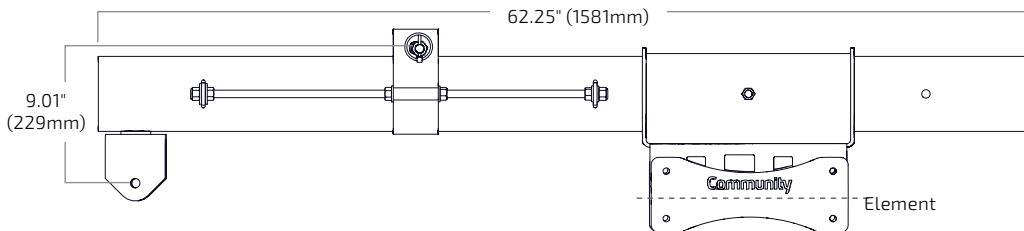
ACCESSORIES - not to scale



IV6-GP-AF: IV6 GlidePoint™ Array Frame

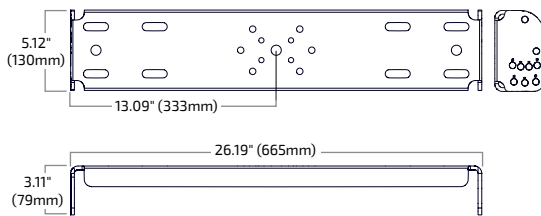


PY1-EN750-1550
Lift Point for
Array Frame

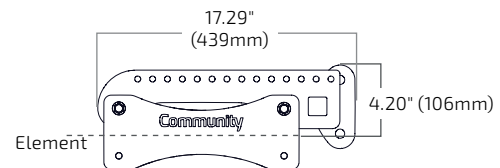


IV6-SB-AF: IV6 Sub Behind Array Frame

ORDERING DATA: Accessories can be ordered using the "bold" number. The parts have a black finish, if white finish is needed add "W" to the part number.



**IV6-LAU: IV6 Light Frame
Adapter U-Bracket**

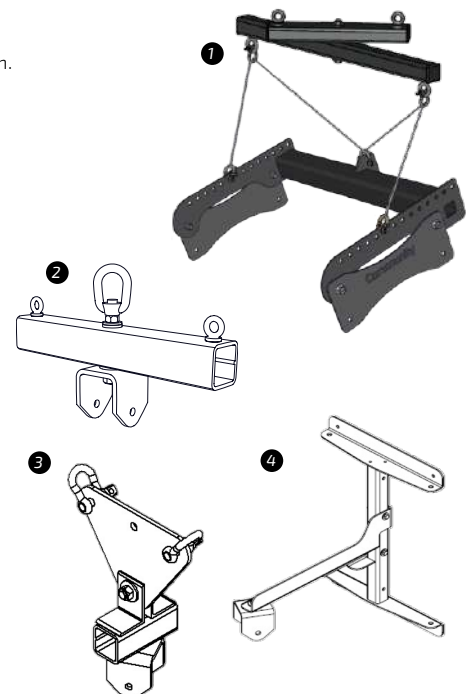


**IV6-LAF-PBB: IV6 Light Array
Frame/Pullback Bar**

ACCESSORY BRACKETS - available from Polar Focus

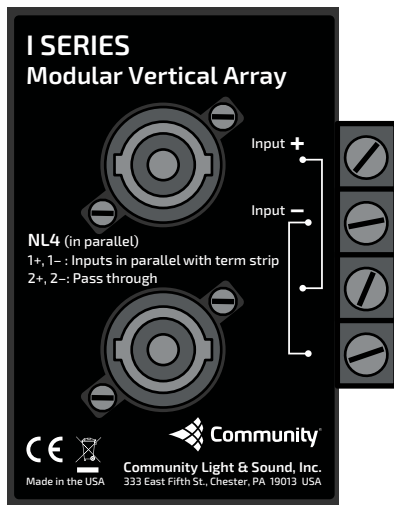
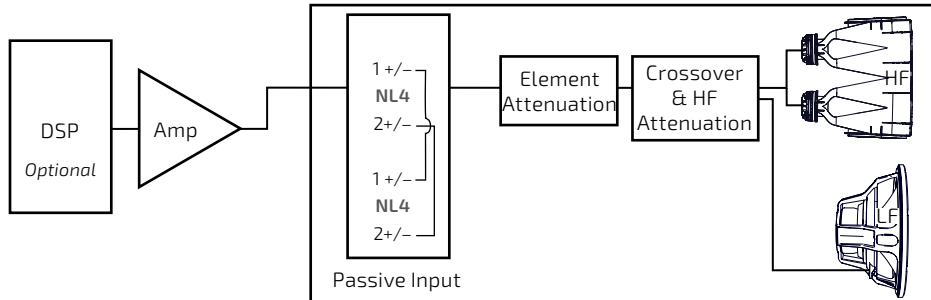
Some of the accessories are shown at right. Contact Polar Focus (linearrayframes.com) for additional information.

OFF THE SHELF		
1	IV6-ZB-TCK	Z-Beam and Tilt Cable Kit (for use with IV6-LAF-PBB - shown)
	IV6-ZB-DHB	Z-Beam "Dead Hang" Bracket (for use with IV6-LAF-PBB)
2	PY1-ZBH-1550	Two Point Permanent Install Mount with Center Service Pick Point
	PY1-ZBR-1550	Self-Leveling Dual Hoist Mount
3	PY1-SLH	Self-Leveling Two Point Bridle Mount (1200lbs. WLL)
	PY1-RBC-1-1100	Level, Steel I-Beam Mount
	PY1-BTO1212-1550	12" x 12" Box Truss Plate Mount
	RLP-X2-1800	Redundant Load Point
4	PY0-WMV-2226-250	Wall Mount (250lbs. WLL)
	PY0-STEM	Hidden Two Point Permanent Install Through-Ceiling Mount (300lbs. WLL)
	PY0-ZBH-300	Two Point Permanent Install Mount with Center Service Pick Point (300lbs. WLL)
SEMI-CUSTOM		
	PY1-UJEXT-POST	Custom Length Ceiling Extension Post (available from 2ft. to 16ft.)
	PY1-CBA-3	Custom Sized Mount for Level or Sloped Wood-Based Beams (500lbs. WLL)
	PY1-CBA-4	Custom Sized Mount for Rolled Wood-Based Beams (450lbs. WLL)



IV6-1122/05 and IV6-1122/15

CONNECTION DIAGRAMS



Input panel

NOTES

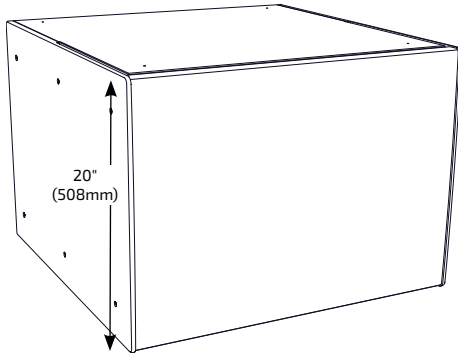
- PERFORMANCE SPECIFICATIONS** All measurements are taken indoors using a time-windowed and processed signal to eliminate room effects, approximating an anechoic environment, a distance of 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP with settings provided by Community Professional Loudspeakers is required to achieve the specified performance; further performance gains can be realized using Community's dSPEC226 loudspeaker processor with FIR power response optimization.
- OPERATING RANGE** The frequency range in which the on-axis processed response remains within 10dB of the average SPL.
- CONTINUOUS POWER HANDLING** Maximum continuous input voltage (and the equivalent power rating, in watts, at the stated nominal impedance) that the system can withstand, without damage, for a period of 2 hours using an EIA-426-B defined spectrum; with recommended signal processing and protection filters.
- NOMINAL SENSITIVITY** Averaged SPL over the operating range with an input voltage that would produce 1 Watt at the nominal impedance (4V @ 16 Ohms); swept sine wave axial measurements with no external processing applied in whole space.
- NOMINAL MAXIMUM SPL** Calculated based on nominal / peak power handling, respectively, and nominal sensitivity; exclusive of power compression.
- EQUALIZED SENSITIVITY** The respective SPL levels produced when an EIA-426-B signal is applied to the equalized loudspeaker system at a level which produces a total power of 1 Watt, in sum, to the loudspeaker subsections, referenced to a distance of 1 meter.
- EQUALIZED MAXIMUM SPL** The SPL produced when an EIA-426-B signal is applied to the equalized loudspeaker system, at a level which drives at least one subsection to its rated continuous input voltage limit, referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6dB) crest factor of the EIA-426-B test signal.
- AXIAL PROCESSED RESPONSE** The on-axis variation in acoustic output level with frequency of the complete loudspeaker system with recommended signal processing applied. 1/6 octave Gaussian smoothing applied.
- AXIAL SENSITIVITY** The on-axis variation in acoustic output level with frequency for a 1 Watt swept sine wave, referenced to 1 meter with no signal processing. 1/6 octave Gaussian smoothing applied.
- HORIZONTAL / VERTICAL OFF-AXIS RESPONSES** The loudspeaker's magnitude response at various angles off-axis, with recommended signal processing applied in the operating mode which utilizes the largest number of individually amplified pass bands. 1/6 octave Gaussian smoothing applied.
- BEAMWIDTH** The angle between the -6dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. 1/6 octave Gaussian smoothing applied.

Data presented on this spec sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: communitypro.com.

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IV6-118S

SINGLE 18-INCH
SUBWOOFER



APPLICATIONS

MAIN PA

Houses of Worship · Auditoriums · Arenas
Theaters · Stadiums · Themed Entertainment

DESCRIPTION

I SERIES Modular Vertical Array 600 is a scalable, adaptive sound reinforcement system featuring multiple vertically arrayable elements designed to be used in combination or separately, and with or without splay between elements, providing an extensive range of vertical coverage angle and throw distance configurations.

The IV6-118S is a high power 1 x 18" compact, direct-radiating subwoofer designed to complement the full range IV6-1122 elements in any array configuration with deep, impactful low frequency support. Large, balanced ports provide optimal enclosure tuning and even air pressure distribution to the driver cone, reducing distortion and extending system longevity. A FEA-optimized ferrite motor with long linear excursion capabilities provides deep bass response for the enclosure's size. With 800W @ 8 Ohms of continuous power handling (80V), the IV6-118S subwoofer can be conveniently driven by the same size power amplifier as the IV6-1122 full-range array elements.

The subwoofer can be ground-stacked or suspended at the top of, or behind, a flown array. Cardioid subwoofer tunings are easily deployed using the IV6-SB-AF (Sub Behind Array Frame) and can be integrated into a single full-range array or flown separately. The IV6-118S is fully compatible with all of the available accessory array frames in the series, presenting virtually limitless options for integration in any application.

FEATURES

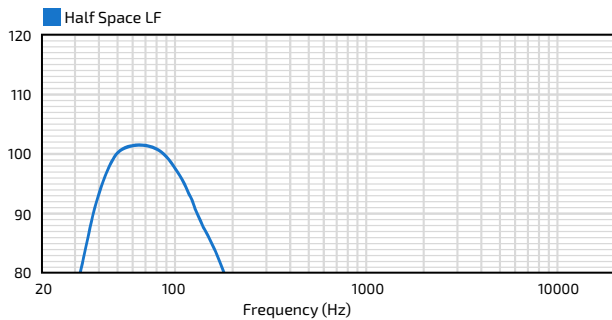
- Long excursion ferrite LF driver with FEA-optimized motor and symmetric movement suspension
- Matched-size enclosure and aligned suspension point for seamless flown array integration
- 800W continuous power handling (3200W peak)
- High sensitivity design minimizes power compression losses and required amplifier size
- Indoor and Outdoor (weather-resistant) models available

TECHNICAL SPECIFICATIONS¹

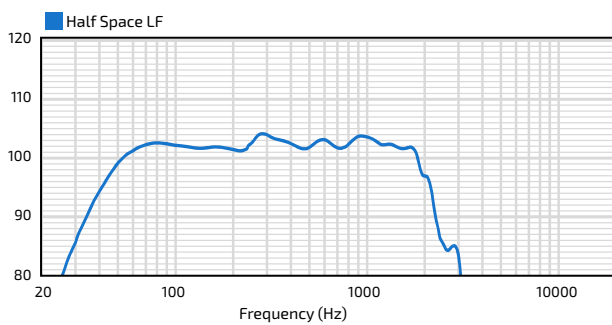
Operating Mode	Passive		
Operating Environment	Indoor or Weather-Resistant Outdoor		
Operating Range²	37 Hz to 132 Hz		
Transducers	1 x 18" (457mm) double-treated cone with 4" (102mm) inner/outer wound voice coil, ferrite construction		
Continuous Power Handling³ @ Nominal Impedance	80V, 800W @ 8 ohms (3200W peak)		
Recommended Amplifiers	800W - 1600W @ 8 ohms, (80V - 113V)		
	Half Space	Whole Space	
Nominal Sensitivity⁴ (1W/1m)	102 dB	96 dB	
Nominal Maximum SPL⁵ Peak (Continuous)	137 dB (131 dB)	131 dB (125 dB)	
Equalized Sensitivity⁶ (1W/1m)	99 dB	93 dB	
Equalized Maximum SPL⁷ Peak (Continuous)	134 dB (128 dB)	128 dB (122 dB)	
PHYSICAL			
Input Connection	(1) Screw terminal block (2x 2-position), (2) NL4 Connectors		
Mounting Points	(8) M10 threaded rigging points (4 per side) (4) User-installed rubber feet (for ground stack applications)		
Environmental	Outdoor: IP55W per IEC 60529, designed in accordance with MIL-STD-810G		
Weight	132.6 lbs (60.1 kg) loudspeaker and 1 pair of splay brackets		
Dimensions (H x W x D)	20.00" x 28.12" x 28.08" (508 x 714 x 713 mm)		
Finish	Refer to the Technical Drawing		
Required Accessories	EASE® Focus 3 Software: Acoustic optimization - array configuration Free - go to "DOWNLOADS" tab here: http://www.communitypro.com/products/i-series/IV6-118S IV6-S1: IV6 Splay Bracket Pairs (Type 1) One pair must be ordered for each subwoofer-to-subwoofer or element connection if flown		
OPTIONS			
Accessories	Rigging - refer to page 16 for item drawings		
Configure-to-Order (CTO)	Custom color		

IV6-118S SINGLE 18-INCH SUBWOOFER

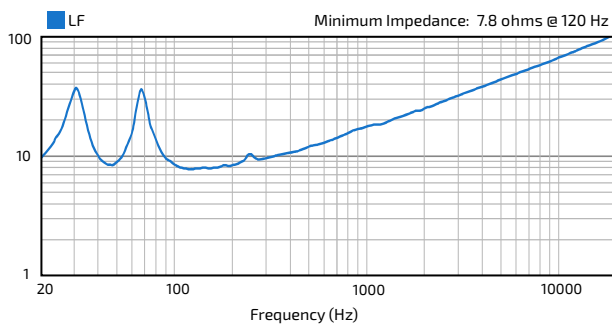
AXIAL PROCESSED RESPONSE (dB)⁸



AXIAL SENSITIVITY (dB SPL)⁹



IMPEDANCE (Ohms)



ORDERING DATA

Subwoofers

Part Number	Description
IV6-118SB	Subwoofer indoor black
IV6-118SW	Subwoofer indoor white
IV6-118SWR	Subwoofer weather-resistant grey
IV6-118SWRB	Subwoofer weather-resistant black
IV6-118SWRW	Subwoofer weather-resistant white

Splay Brackets (required if flown)

Important Note: 1 pair must be ordered for each element from the 2nd in the array to the last one. A pair of S1s for the top subwoofer is included with the marked (*) frames listed below.

Part Number	Description
IV6-S1	Splay bracket 1 – maximum splay black

Rigging / Mounting Accessories

Part Number	Description
IV6-GP-AF	IV6 GlidePoint™ Array Frame*
IV6-SB-AF	IV6 Sub Behind Array Frame*
PY1-EN750-1550	Lift Point for Array Frame
IV6-LAF-PBB	IV6 Light Array Frame/Pullback Bar*
IV6-LAU	IV6 Light Frame Adapter U-Bracket

Rigging accessories shown above are black. If white finish is desired add "W" to the part number. Dimensions and additional accessories from Polar Focus appear on the model specification sheets available via the website.

IV6-118S

SINGLE 18-INCH
SUBWOOFER

TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

20.00" x 28.12" x 28.08"
(508 x 714 x 713 mm)

Unit Weight

130.1 lbs (59.0 kg) subwoofer only
132.6 lbs (60.1 kg) with one pair of splay brackets

Shipping Weight

144.1 lbs (65.4 kg)

Indoor Models:

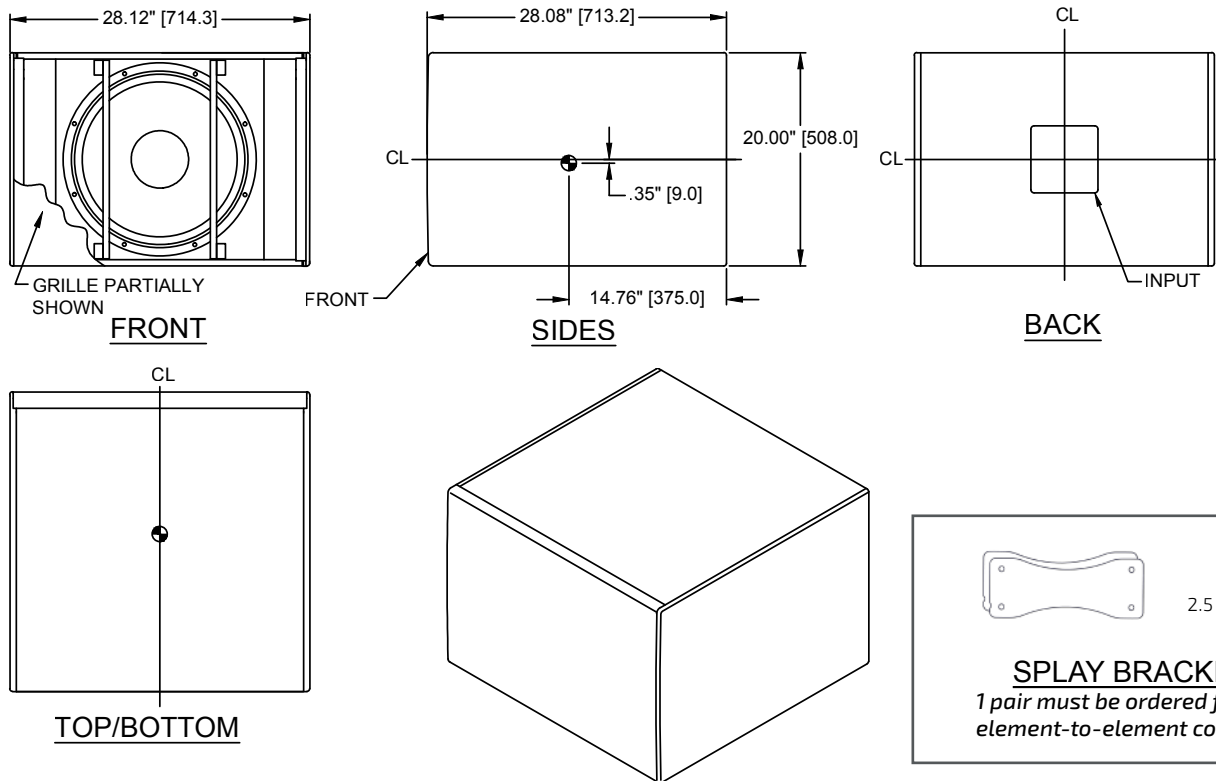
Grille: Powder-coated perforated steel backed with color-matched acoustically transparent woven fabric. Black (RAL#9005) or White (RAL#9003)

Enclosure / Finish: Black (RAL#9005) or White (RAL#9003) low gloss, uniformly textured painted 15mm Baltic Birch plywood.

***Outdoor Models:**

Grille: Marine grade perforated aluminum with dual-layer powder-coat, featuring hydrophobically treated acoustically transparent woven black fabric backing. Black, White or Grey

Enclosure / Finish: 15mm PolyGlas™, Black, White or Grey, heavily textured industrial-grade exterior-rated coating. Custom colors upon request.



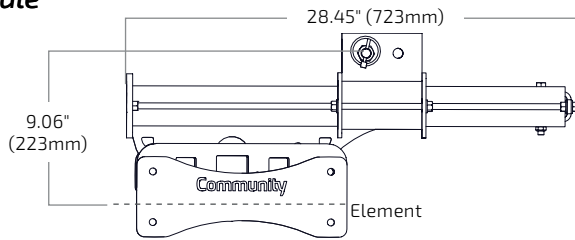
**IV6-S1
PAIR
2.5 lbs (1.1 kg)**

SPLAY BRACKETS
1 pair must be ordered for each element-to-element connection

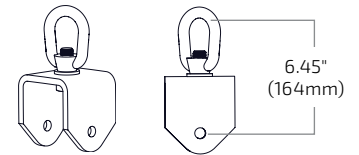
*Note: The outdoor (WR) model drawing is available at communitypro.com - Input panel and mounting point locations, the unit weight and the dimensions vary slightly from indoor model (shown).

IV6-118S SINGLE 18-INCH SUBWOOFER

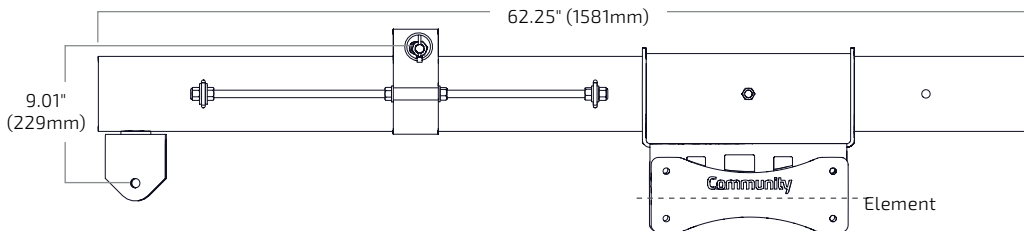
ACCESSORIES - not to scale



IV6-GP-AF: IV6 GlidePoint™ Array Frame

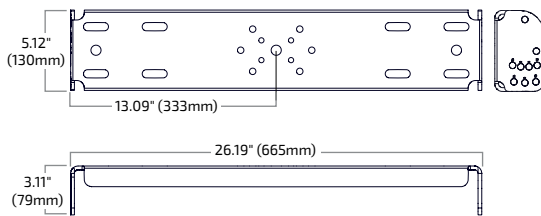


PY1-EN750-1550
Lift Point for
Array Frame

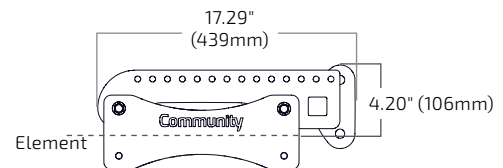


IV6-SB-AF: IV6 Sub Behind Array Frame

ORDERING DATA: Accessories can be ordered using the "bold" number. The parts have a black finish, if white finish is needed add "W" to the part number.



IV6-LAU: IV6 Light Frame Adapter U-Bracket

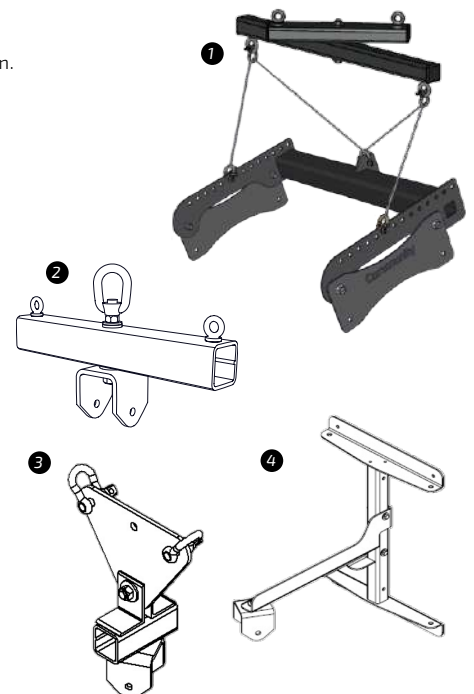


IV6-LAF-PBB: IV6 Light Array Frame/Pullback Bar

ACCESSORY BRACKETS - available from Polar Focus

Some of the accessories are shown at right. Contact Polar Focus (linearrayframes.com) for additional information.

OFF THE SHELF		
1	IV6-ZB-TCK	Z-Beam and Tilt Cable Kit (for use with IV6-LAF-PBB - shown)
	IV6-ZB-DHB	Z-Beam "Dead Hang" Bracket (for use with IV6-LAF-PBB)
2	PY1-ZBH-1550	Two Point Permanent Install Mount with Center Service Pick Point
	PY1-ZBR-1550	Self-Leveling Dual Hoist Mount
3	PY1-SLH	Self-Leveling Two Point Bridle Mount (1200lbs. WLL)
	PY1-RBC-1-1100	Level, Steel I-Beam Mount
	PY1-BTO1212-1550	12" x 12" Box Truss Plate Mount
	RLP-X2-1800	Redundant Load Point
4	PY0-WMV-2226-250	Wall Mount (250lbs. WLL)
	PY0-STEM	Hidden Two Point Permanent Install Through-Ceiling Mount (300lbs. WLL)
	PY0-ZBH-300	Two Point Permanent Install Mount with Center Service Pick Point (300lbs. WLL)
SEMI-CUSTOM		
	PY1-UJEXT-POST	Custom Length Ceiling Extension Post (available from 2ft. to 16ft.)
	PY1-CBA-3	Custom Sized Mount for Level or Sloped Wood-Based Beams (500lbs. WLL)
	PY1-CBA-4	Custom Sized Mount for Rolled Wood-Based Beams (450lbs. WLL)



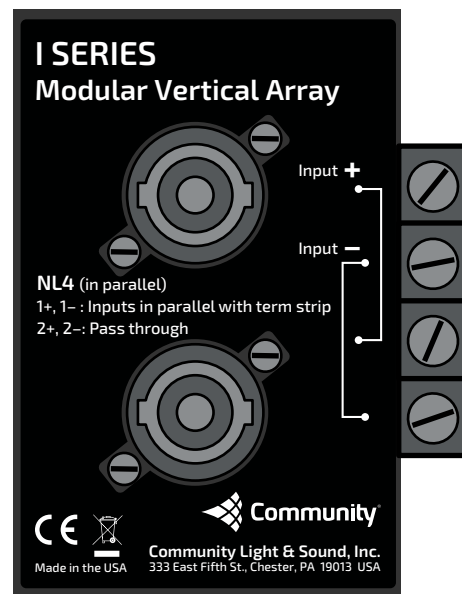
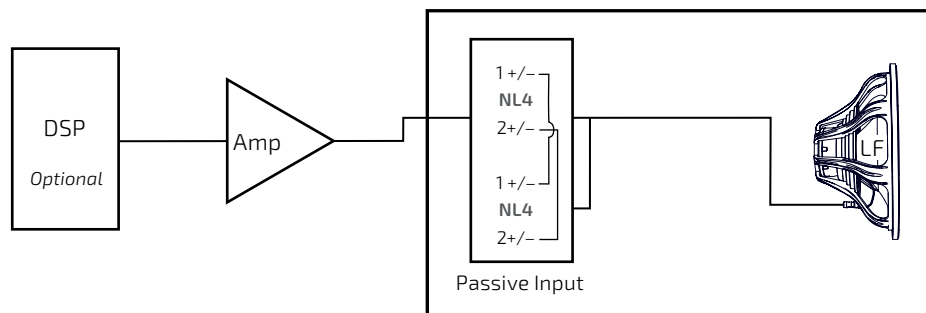
I SERIES

Modular Vertical Array 600

IV6-118S

SINGLE 18-INCH
SUBWOOFER

CONNECTION DIAGRAMS



Input panel

NOTES

- PERFORMANCE SPECIFICATIONS** All measurements are taken indoors using a time-windowed and processed to eliminate room effects, approximating an anechoic environment, a distance of 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP with settings provided by Community Professional Loudspeakers is required to achieve the specified performance; further performance gains can be realized using Community's dSPEC226 loudspeaker processor with FIR power response optimization.
- OPERATING RANGE** The frequency range in which the axial processed response remains within 10dB of the average SPL.
- CONTINUOUS POWER HANDLING** Maximum continuous input voltage (and the equivalent power rating, in watts, at the stated nominal impedance) that the system can withstand, without damage, for a period of 2 hours using an EIA-426-B defined spectrum; with recommended signal processing and protection filters.
- NOMINAL SENSITIVITY** Averaged SPL over the operating range with an input voltage that would produce 1 Watt at the nominal impedance; swept sine wave axial measurements with no external processing applied in whole space, except where indicated.
- NOMINAL MAXIMUM SPL** Calculated based on nominal / peak power handling, respectively, and nominal sensitivity; exclusive of power compression.
- EQUALIZED SENSITIVITY** The respective SPL levels produced when an EIA-426-B signal is applied to an equalized loudspeaker system at a level which produces a total power of 1 Watt, in sum, to the loudspeaker subsections, referenced to a distance of 1 meter.
- EQUALIZED MAXIMUM SPL** The SPL produced when an EIA-426-B signal is applied to an equalized loudspeaker system, at a level which drives at least one subsection to its rated continuous input voltage limit, referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6dB) crest factor of the EIA-426-B test signal.
- AXIAL PROCESSED RESPONSE** The axial magnitude response of the complete loudspeaker system and each pass band capable of being driven by an independent amplification channel with recommended signal processing applied. 1/6 octave smoothing applied.
- AXIAL SENSITIVITY** The SPL plotted against frequency, in all operating modes and for each pass band capable of being driven by an independent amplification channel, for a 1 Watt swept sine wave, referenced to 1 meter with no signal processing. 1/6 octave smoothing applied.

Data presented on this spec sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: communitypro.com.