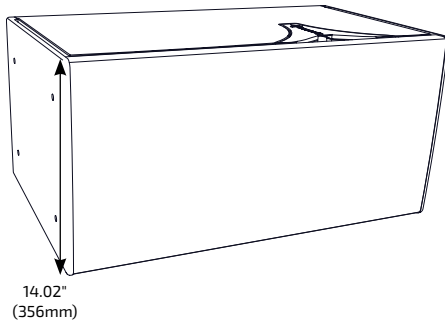


IV6-1122WR05

12-INCH 2-WAY WEATHER-RESISTANT
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

- 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
- Outdoor (weather-resistant) model

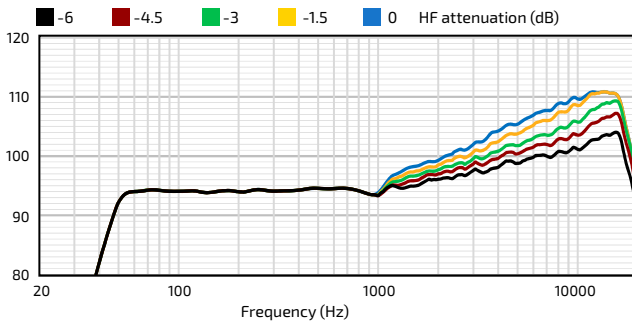
TECHNICAL SPECIFICATIONS¹

| | | | | | | |
|--|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| 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 | 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; Two (2) IP68-rated gland nuts included with Input panel cover accept cable diameters of 0.2-0.39" (5-10mm) | | | | | |
| Weight | 62.0 lbs (28.1 kg) loudspeaker and 1 pair of splay brackets | | | | | |
| Dimensions (H x W x D) | 14.02" x 28.84" x 16.59" (356 x 733 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 | Contact Community for Rigging information Additional rigging/mounting options are available from PolarFocus | | | | | |
| Configure-to-Order (CTO) | Custom color | | | | | |

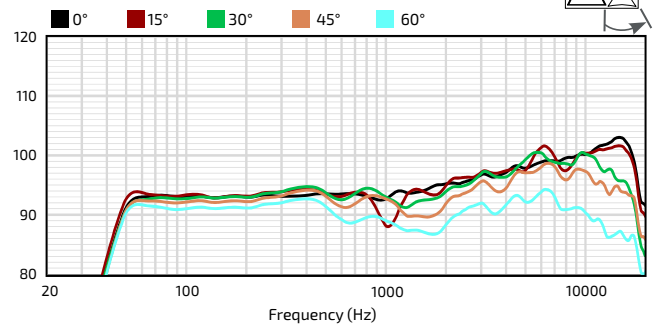
IV6-1122WR05 12-INCH 2-WAY WEATHER-RESISTANT
120° x 5° LOUDSPEAKER



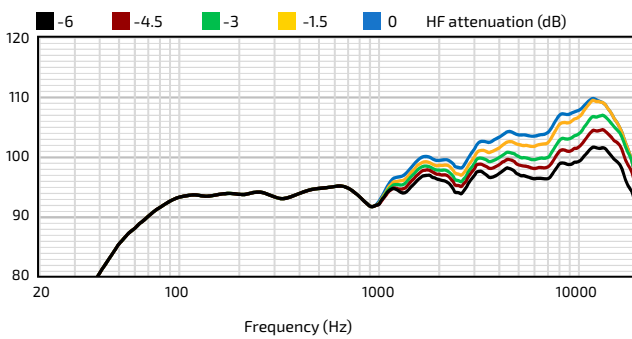
AXIAL PROCESSED RESPONSE (dB)⁸



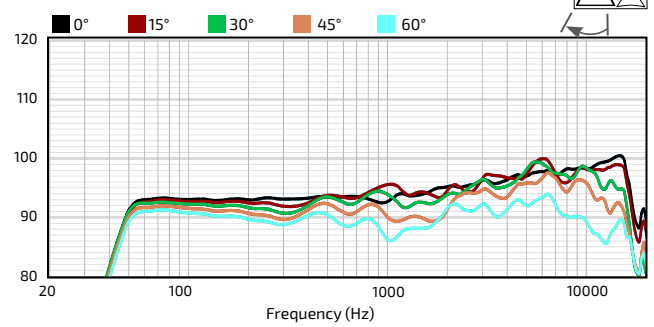
HORIZONTAL OFF-AXIS LEFT RESPONSE (dB)¹⁰



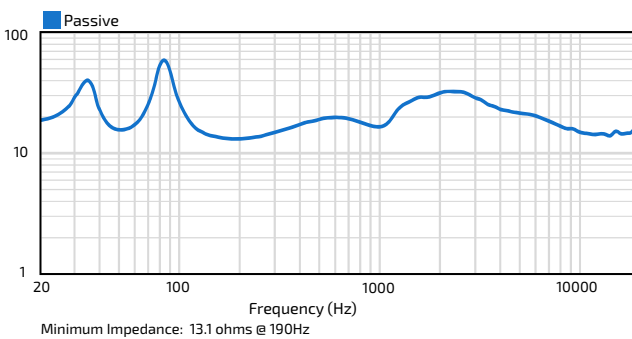
AXIAL SENSITIVITY (dB SPL)⁹



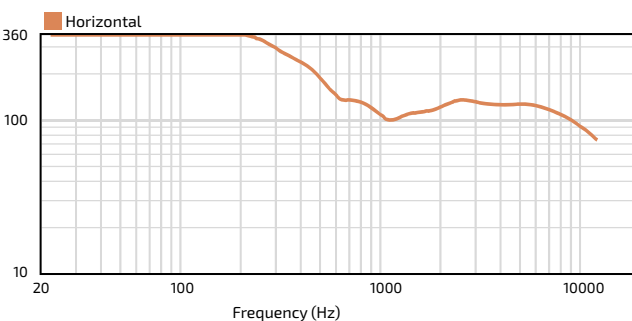
HORIZONTAL OFF-AXIS RIGHT RESPONSE (dB)¹⁰



IMPEDANCE (Ohms)



BEAMWIDTH (Degrees)¹²



ORDERING DATA

Loudspeaker Elements

| Part Number | Description |
|---------------|-----------------------------------|
| IV6-1122WR05 | 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. 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 Accessory

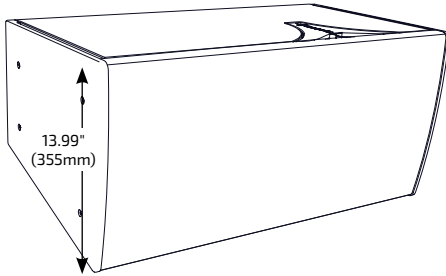
Contact Community for information regarding mounting options for WR (outdoor) IV6 loudspeakers.

Important Note: The IV6-WR loudspeakers differ in width and mounting points and will NOT fit the IV6 indoor array frames.

Custom rigging is available from Polar Focus.

IV6-1122WR15

12-INCH 2-WAY WEATHER-RESISTANT
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

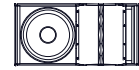
- Versatile configurations for both constant curve and line array applications
- Built-in Passive Acoustic Optimization settings allow array response shaping using one amplifier channel
- Elegant acoustics designed for permanent installations
- Exclusive Acoustic Optimization and Rigging Safety Check modules integrated into EASE® Focus 3
- Outdoor (weather-resistant) model

TECHNICAL SPECIFICATIONS¹

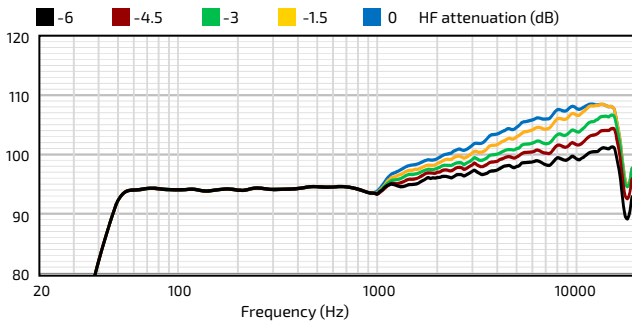
| | | | | | |
|--|--|--------------------|--------------------|--------------------|--------------------|
| Operating Mode | Passive with Integrated Passive Acoustic Optimization | | | | |
| Passive Array Optimization Settings | Element Attenuation: 15 dB range (in 1.5 dB steps) HF Attenuation: 6 dB range (in 1.5 dB steps) | | | | |
| Operating Environment | 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; Two (2) IP68-rated gland nuts included with Input panel cover accept cable diameters of 0.2-0.39" (5-10mm) | | | | |
| Weight | 59.0 lbs (26.8 kg) loudspeaker and 1 pair of splay brackets | | | | |
| Dimensions (H x W x D) | 13.99" x 28.87" x 16.72" (355 x 733 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 | Contact Community for Rigging information Additional rigging/mounting options are available from PolarFocus | | | | |
| Configure-to-Order (CTO) | Custom color | | | | |

IV6-1122WR15

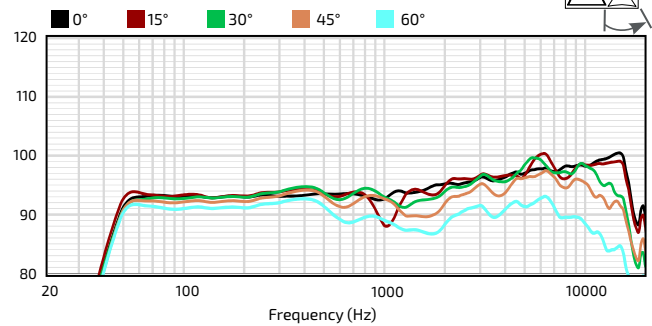
12-INCH 2-WAY WEATHER-RESISTANT
120° x 15° LOUDSPEAKER



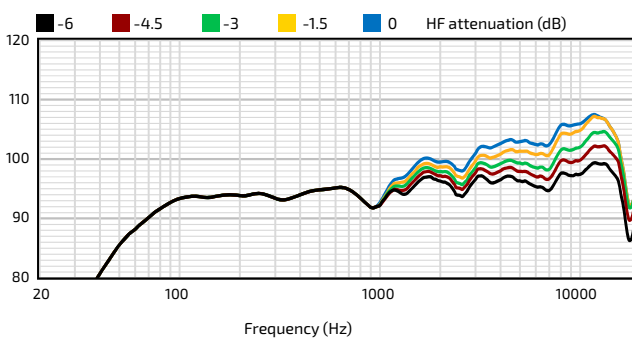
AXIAL PROCESSED RESPONSE (dB)⁸



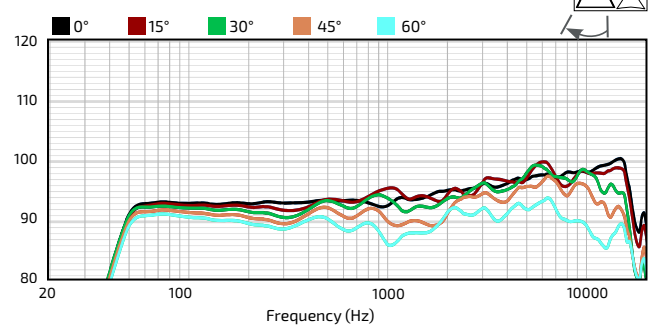
HORIZONTAL OFF-AXIS LEFT RESPONSE (dB)¹⁰



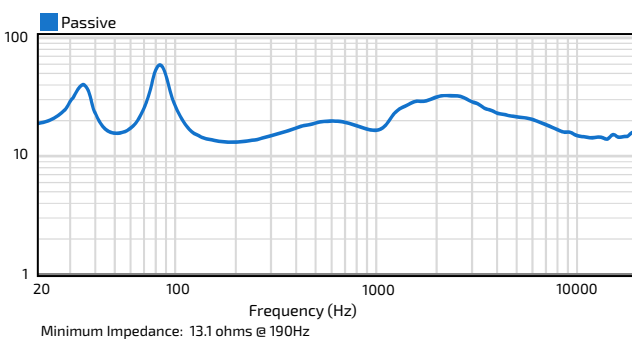
AXIAL SENSITIVITY (dB SPL)⁹



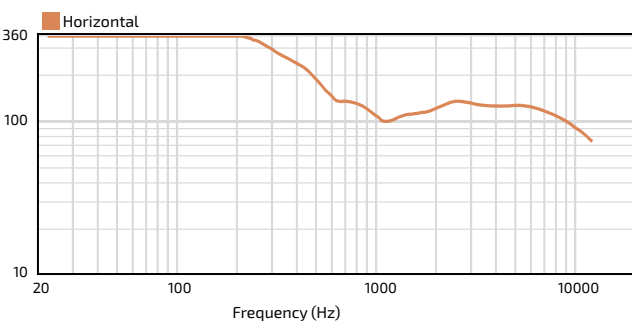
HORIZONTAL OFF-AXIS RIGHT RESPONSE (dB)¹⁰



IMPEDANCE (Ohms)



BEAMWIDTH (Degrees)¹²



ORDERING DATA

Loudspeaker Elements

| Part Number | Description |
|---------------|------------------------------------|
| IV6-1122WR15 | 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. 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 Accessory

Contact Community for information regarding mounting options for WR (outdoor) IV6 loudspeakers.

Important Note: The IV6-WR loudspeakers differ in width and mounting points and will NOT fit the IV6 indoor array frames.

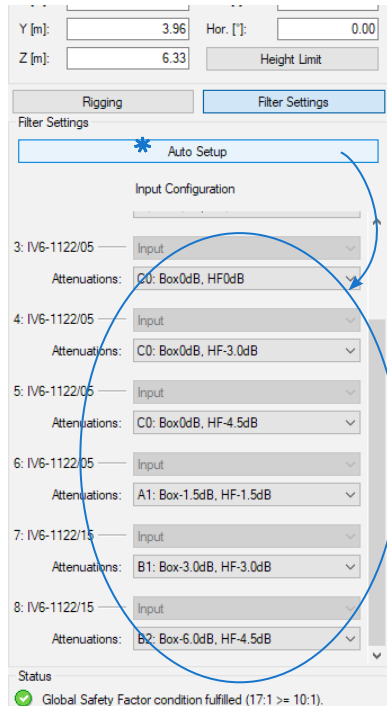
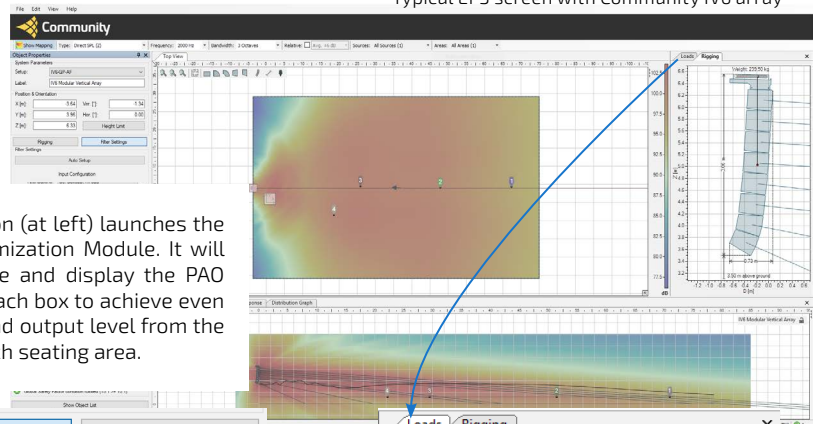
Custom rigging is available from Polar Focus.

IV6-1122WR05 and IV6-1122WR15

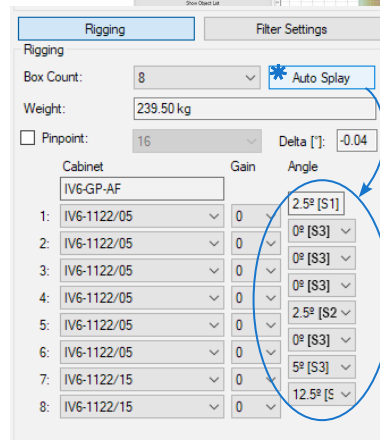
EASE® FOCUS 3 SOFTWARE with PASSIVE ACOUSTIC OPTIMIZATION and RIGGING SAFETY CHECK modules

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.

| Name | Front Load | Back Load | Safety Factor |
|----------------|------------|-----------|---------------|
| 0: IV6-GP-AF | 239.53 kg | | |
| 1: IV6-1122/05 | 3.79 kg | 112.43 kg | 15:1 |
| 2: IV6-1122/05 | 3.20 kg | 98.25 kg | 17:1 |
| 3: IV6-1122/05 | 3.60 kg | 85.12 kg | 19:1 |
| 4: IV6-1122/05 | 5.62 kg | 73.06 kg | 22:1 |
| 5: IV6-1122/05 | 5.46 kg | 58.75 kg | 28:1 |
| 6: IV6-1122/05 | 5.33 kg | 43.73 kg | 37:1 |
| 7: IV6-1122/15 | 4.03 kg | 27.65 kg | 58:1 |
| 8: IV6-1122/15 | 3.40 kg | 11.05 kg | 144:1 |

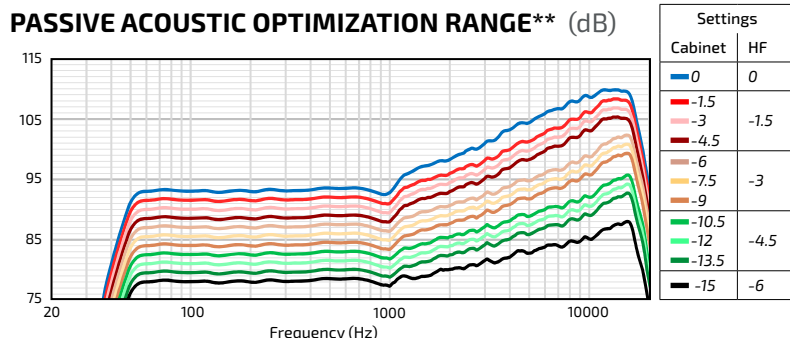
Community's exclusive Rigging Safety Check (RiSC) module is found on the "Loads" tab. The current version calculates the loads for indoor models only (not available yet for WR model loudspeakers).

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.

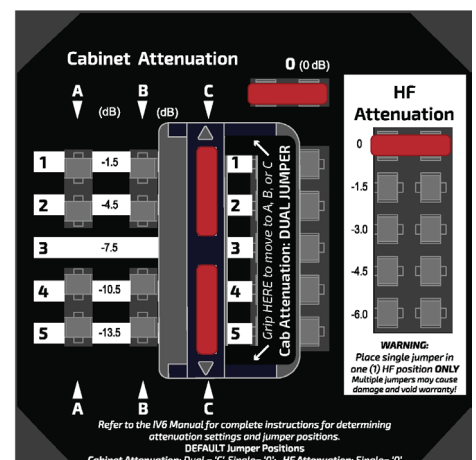
Community's IV6 Impedance Calculator tool will help you quickly determine the number of elements that can safely be run on a single amplifier channel with the selected attenuation settings.

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.

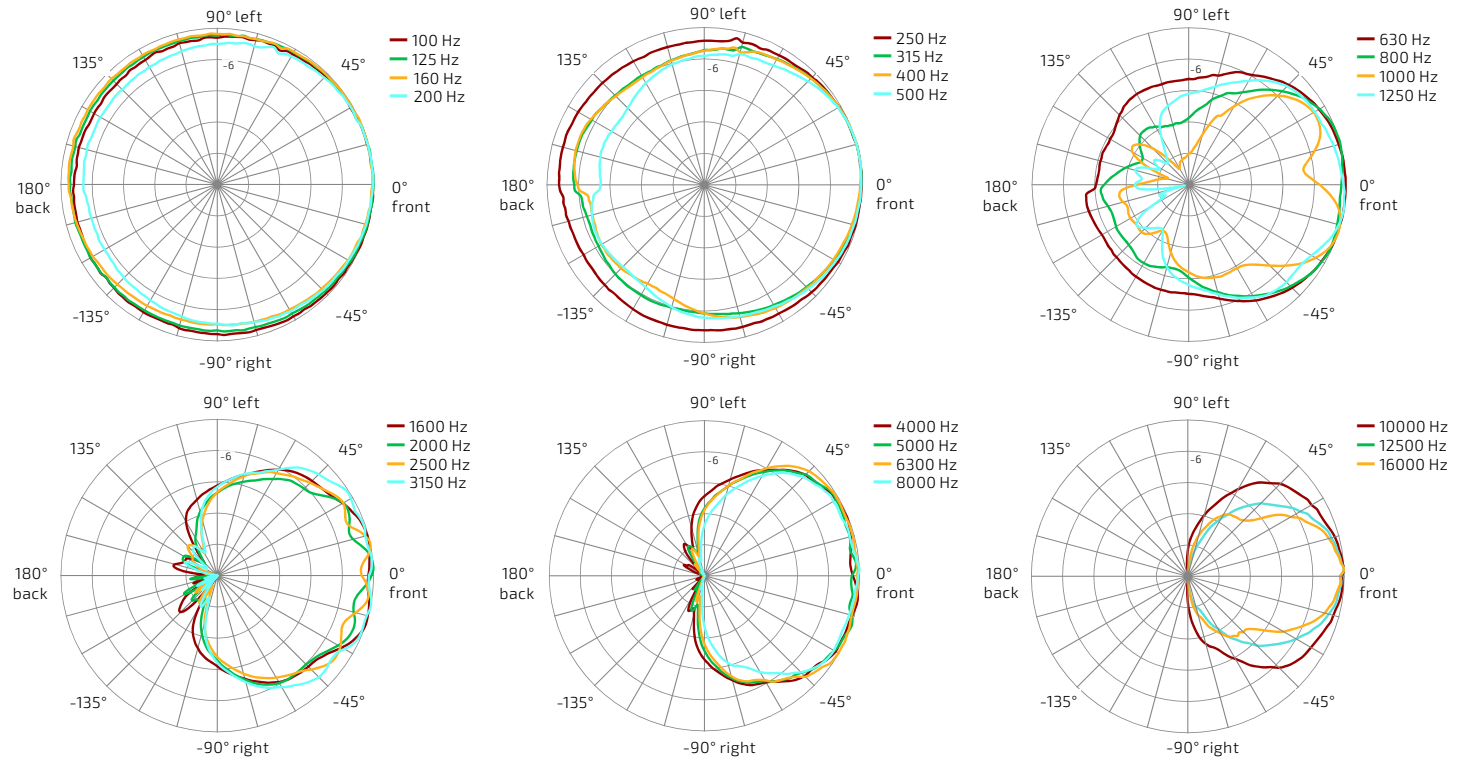
The PAO module in EF3 calculates ideal cabinet and HF attenuation settings for each element in the array and identifies the positions each jumper should be placed. Jumper position "C" and "0" (shown below) provide 0dB of cabinet attenuation and are the default settings.



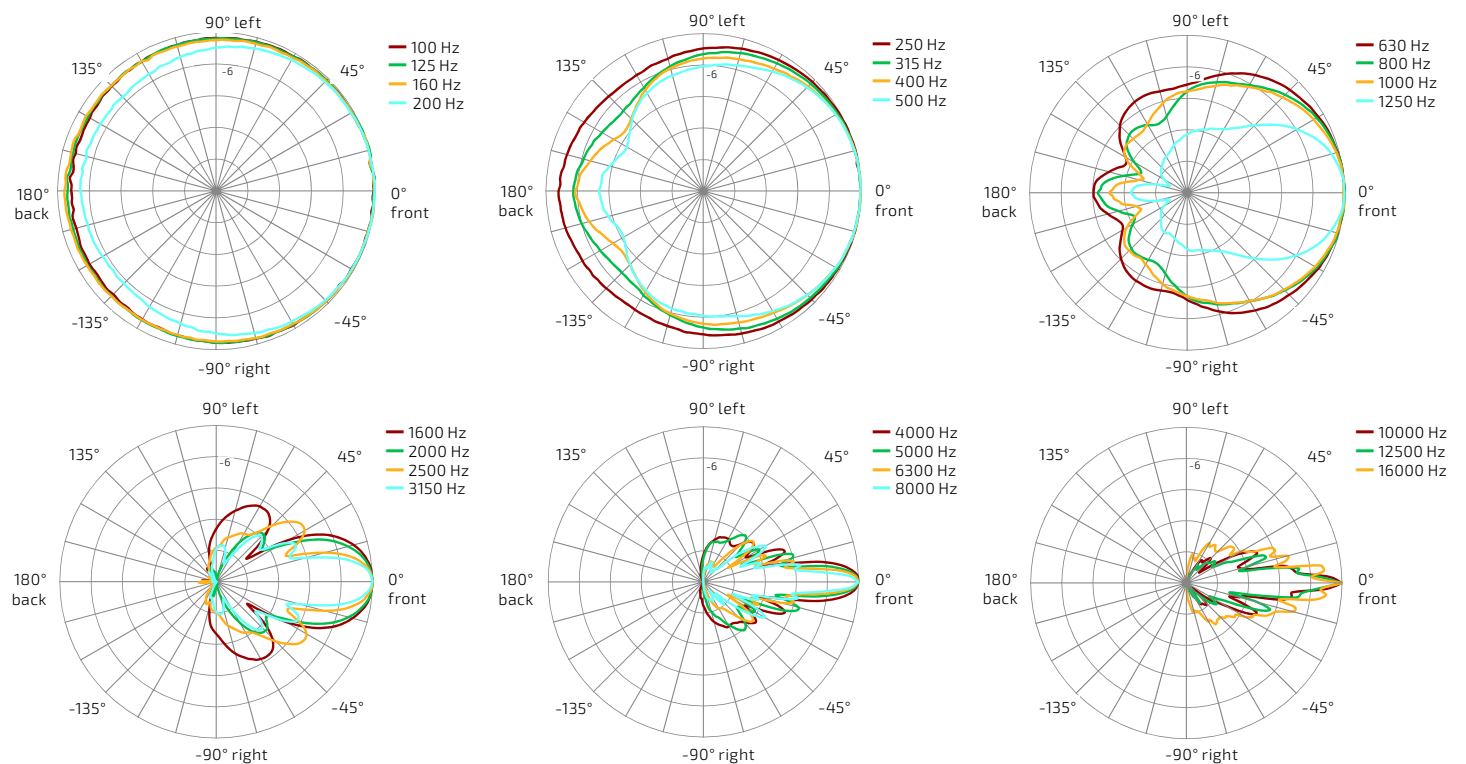
Attenuation panel (on rear of each loudspeaker element)

IV6-1122WR05 12-INCH 2-WAY WEATHER-RESISTANT 120° x 5° LOUDSPEAKER

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



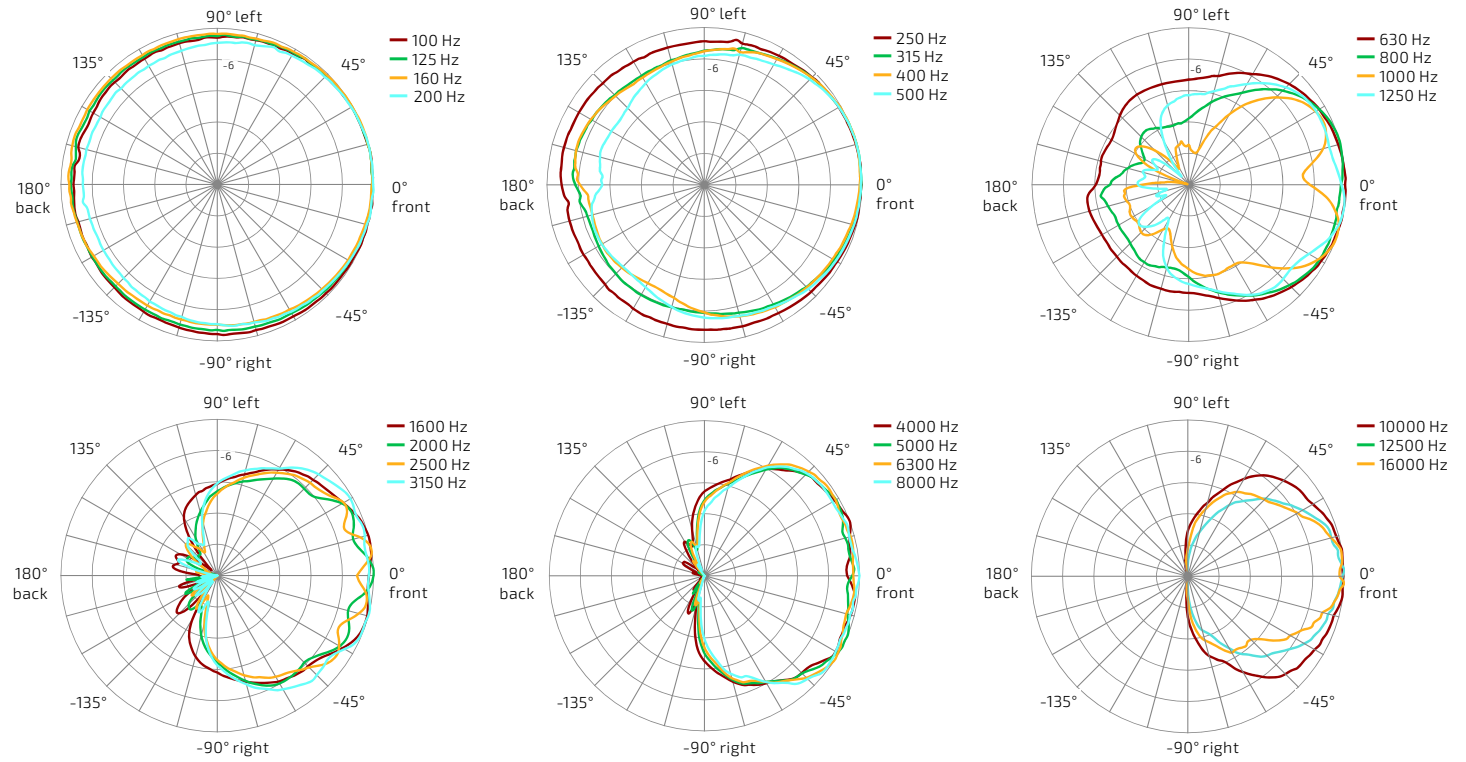
VERTICAL POLAR DATA (30dB Scale, 6dB per major division)



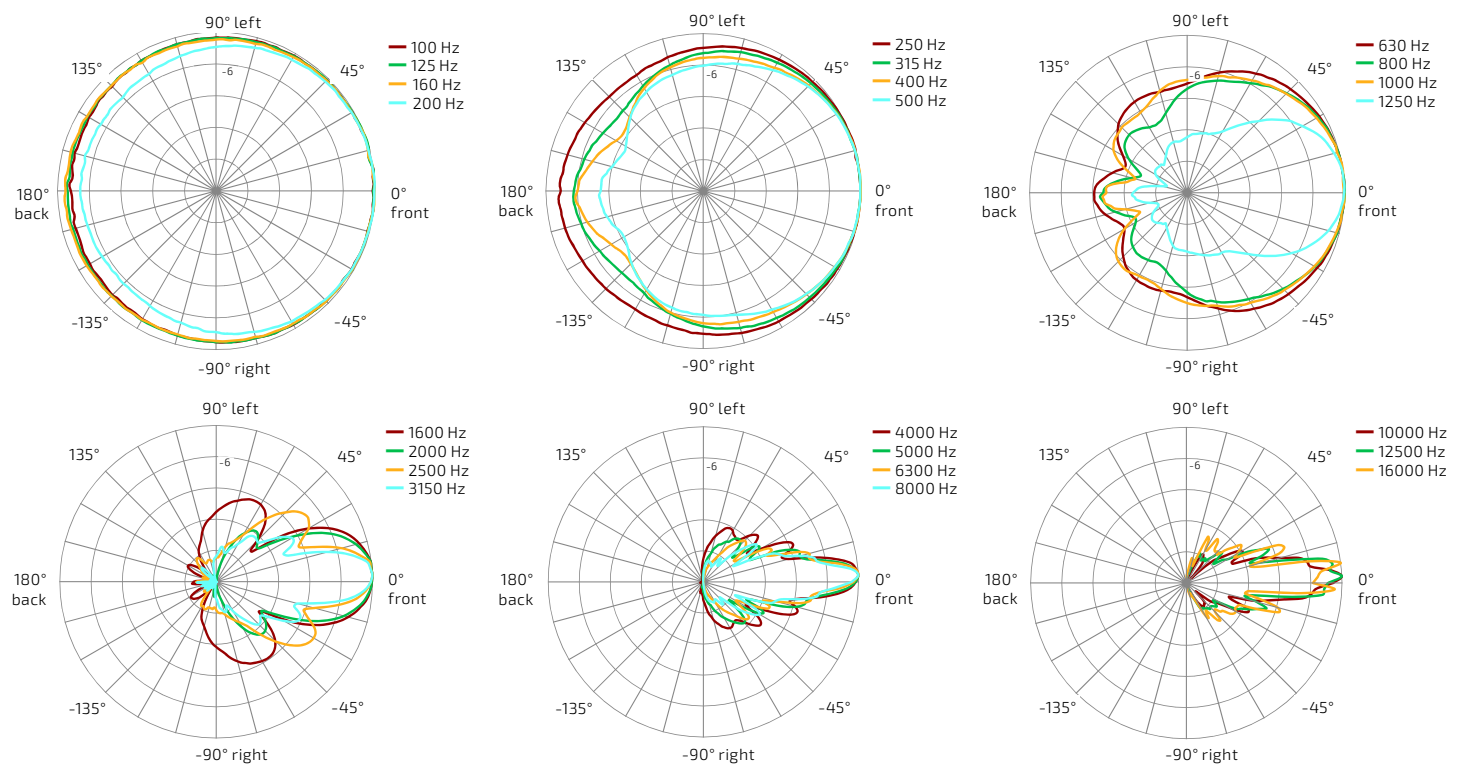
IV6-1122WR15

12-INCH 2-WAY WEATHER-RESISTANT
120° x 15° LOUDSPEAKER

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



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



IV6-1122WR05 12-INCH 2-WAY WEATHER-RESISTANT 120° x 5° LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

14.02" x 28.84" x 16.59"
(356 x 733 x 421 mm)

Unit Weight

62 lbs (28.1 kg) loudspeaker and
1 pair of splay brackets (sold separately)

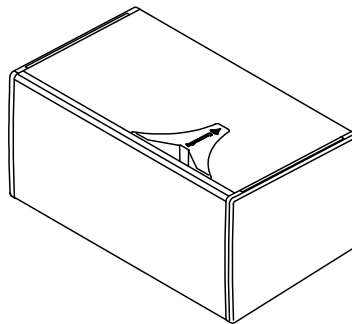
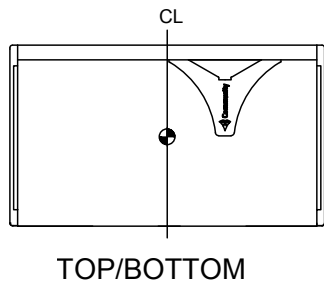
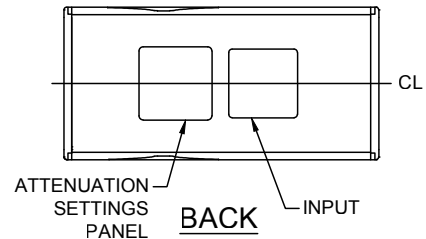
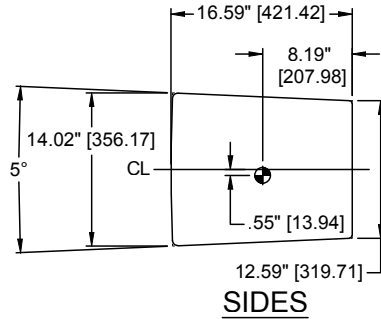
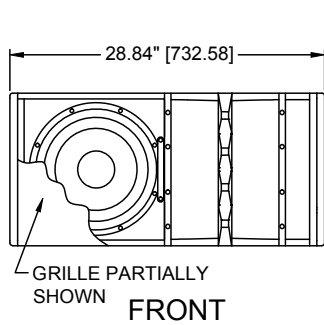
Shipping Weight




68.2 lbs (30.9 kg)

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.

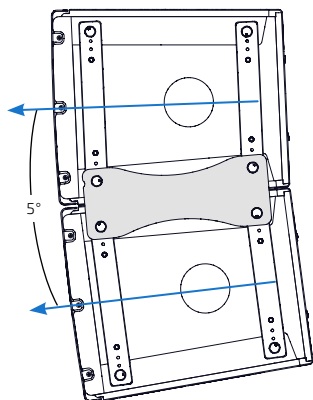


| | |
|---|------------------------------------|
|  | IV6-S1 PAIR 2.5 lbs (1.1 kg) |
|  | IV6-S2 PAIR 2.7 lbs (1.2 kg) |
|  | IV6-S3 PAIR 2.9 lbs (1.3 kg) |

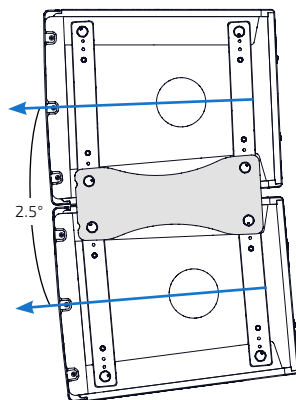
SPLAY BRACKETS
1 pair must be ordered for each element-to-element connection

SPLAY BRACKETS

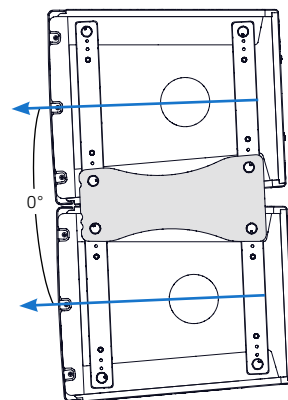
Splay brackets are required to connect the elements in the array. One pair must be ordered for each element-to-element connection. The degree value (5°, 2.5°, 0°) is the aiming angle between the elements.



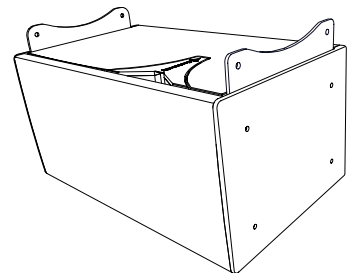
IV6-S1 Type 1 (maximum splay)
Aiming angle = 5°



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



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



IV6-1122WR15 12-INCH 2-WAY WEATHER-RESISTANT 120° x 15° LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

13.99" x 28.87" x 16.72"
(355 x 733 x 425 mm)

Unit Weight

59.0 lbs (26.8 kg) loudspeaker and
1 pair of splay brackets (sold separately)

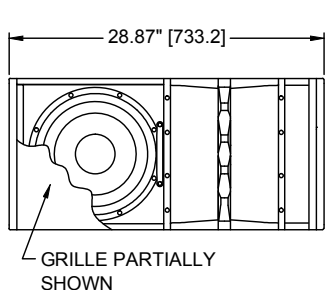
Shipping Weight

64.8 lbs (29.4 kg)

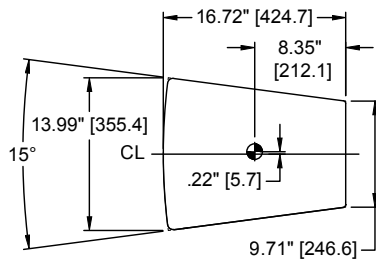
Outdoor Models:

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

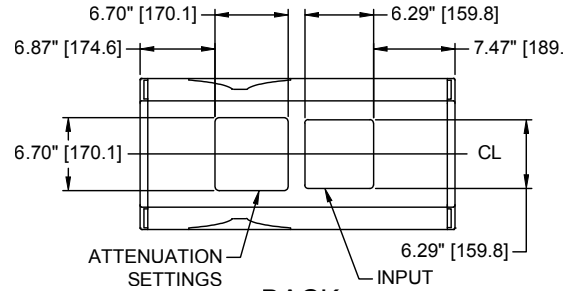
Enclosure / Finish: 15mm PolyGlas™, Black, White or Grey, heavily textured industrial-grade exterior-rated coating. Custom colors upon request.



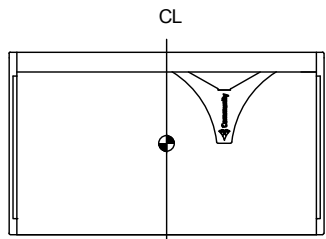
FRONT



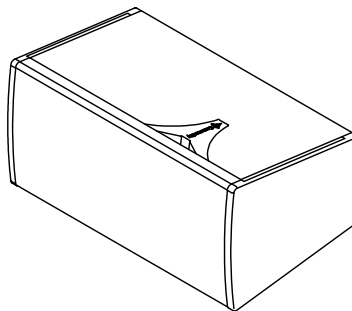
SIDES



BACK



TOP/BOTTOM

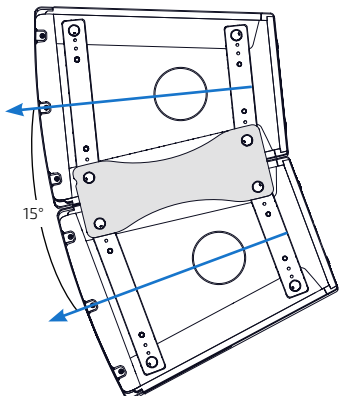


| | |
|--|--|
| | IV6-S1 PAIR 2.5 lbs (1.1 kg) |
| | IV6-S2 PAIR 2.7 lbs (1.2 kg) |
| | IV6-S3 PAIR 2.9 lbs (1.3 kg) |

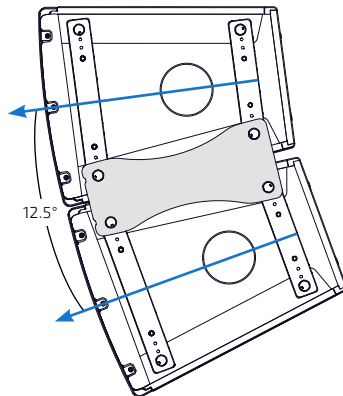
SPLAY BRACKETS
1 pair must be ordered for each element-to-element connection

SPLAY BRACKETS AND RIGGING EXAMPLES

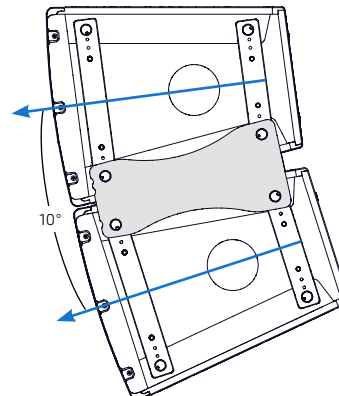
Splay brackets are required to connect the elements in the array. One pair must be ordered for each element-to-element connection. The degree value (15°, 12.5°, 10°) is the aiming angle between the elements.



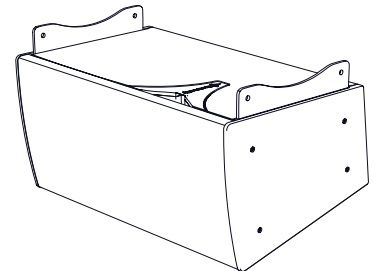
IV6-S1 Type 1: maximum splay
Aiming angle = 15°



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

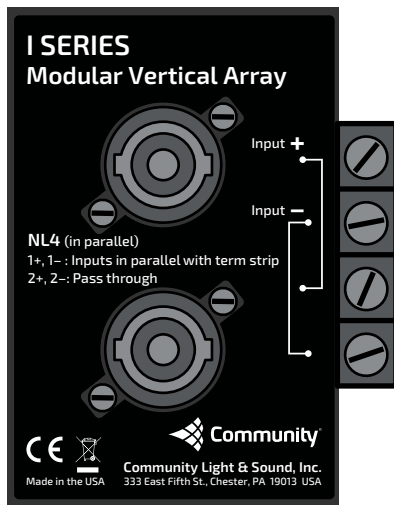
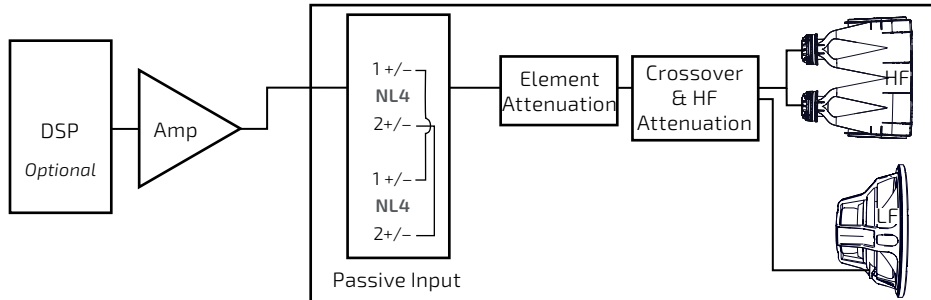


IV6-S3 Type 3: [max. splay - 5°]
Aiming angle = 10°



IV6-1122WR05 and IV6-1122WR15

CONNECTION DIAGRAMS



Input panel

! IMPORTANT: The NL4 connections cannot be used for outdoor operations. The covers must be in place on both attenuation and input panels to maintain weather resistance and validate the product warranty. Any unused gland nuts must be plugged to maintain weather-resistance.

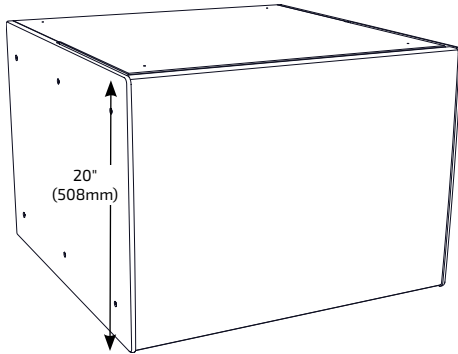
NOTES

- 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 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.

IV6-118SWR

SINGLE 18-INCH
WEATHER-RESISTANT 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 IV6-118SWR is a high power 1 x 18" compact, direct-radiating subwoofer designed to complement the full range IV6-1122WR elements 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 IV6-118SWR subwoofer can be conveniently driven by the same size power amplifier as the IV6-1122WR full-range array elements.

The subwoofer can be ground-stacked or suspended separately from the main flown array.

FEATURES

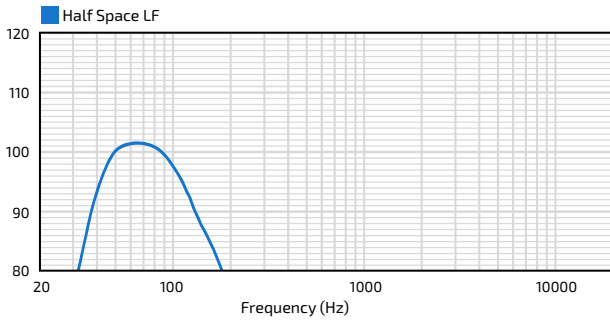
- Long excursion ferrite LF driver with FEA-optimized motor and symmetric movement suspension
- Matched-size enclosure and aligned suspension point for seamless flown array integration
- 800W continuous power handling (3200W peak)
- High sensitivity design minimizes power compression losses and required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

TECHNICAL SPECIFICATIONS¹

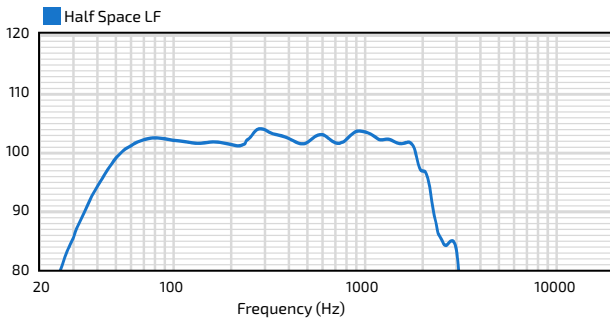
| | | |
|--|--|--------------------|
| Operating Mode | Passive | |
| Operating Environment | Indoor or Weather-Resistant Outdoor | |
| Operating Range ² | 37 Hz to 132 Hz | |
| Transducers | 1 x 18" (457mm) double-treated cone with 4" (102mm) inner/outer wound voice coil, ferrite construction | |
| Continuous Power Handling ³ @ Nominal Impedance | 80V, 800W @ 8 ohms (3200W peak) | |
| Recommended Amplifiers | 800W - 1600W @ 8 ohms, (80V - 113V) | |
| | Half Space | Whole Space |
| Nominal Sensitivity ⁴ (1W/1m) | 102 dB | 96 dB |
| Nominal Maximum SPL ⁵ Peak (Continuous) | 137 dB (131 dB) | 131 dB (125 dB) |
| Equalized Sensitivity ⁶ (1W/1m) | 99 dB | 93 dB |
| Equalized Maximum SPL ⁷ 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; Two (2) IP68-rated gland nuts included with Input panel cover accept cable diameters of 0.2-0.39" (5-10mm) | |
| Weight | 99.0 lbs (44.9 kg) loudspeaker and 1 pair of splay brackets | |
| Dimensions (H x W x D) | 20.00" x 28.86" x 28.08" (508 x 733 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 | Contact Community for Rigging information Additional rigging/mounting options are available from PolarFocus | |
| Configure-to-Order (CTO) | Custom color | |

IV6-118SWR SINGLE 18-INCH WEATHER-RESISTANT SUBWOOFER

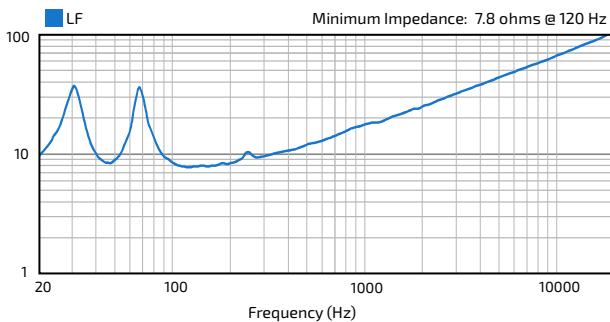
AXIAL PROCESSED RESPONSE (dB)⁸



AXIAL SENSITIVITY (dB SPL)⁹



IMPEDANCE (Ohms)



ORDERING DATA

Subwoofers

| Part Number | Description |
|-------------|-----------------------------------|
| 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 subwoofer-to-subwoofer connection.

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

Rigging / Mounting Accessory

Contact Community for information regarding mounting options for WR (outdoor) IV6 loudspeakers.

Important Note: The IV6-WR loudspeakers differ in width and mounting points and will NOT fit the IV6 indoor array frames.

Custom rigging is available from Polar Focus.

IV6-118SWR SINGLE 18-INCH WEATHER-RESISTANT SUBWOOFER

TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

20.00" x 28.86" x 28.08"
(508 x 733 x 713 mm)

Unit Weight

96.5 lbs (43.8 kg) subwoofer only
99.0 lbs (44.9 kg) with one pair of splay brackets

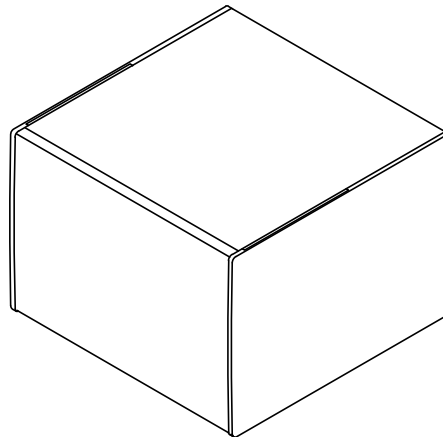
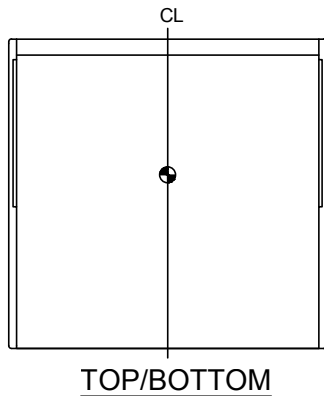
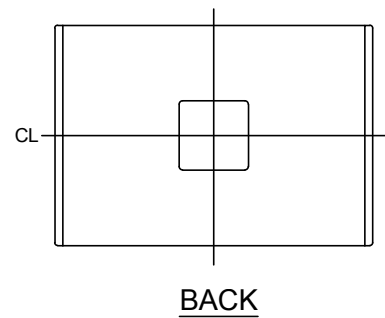
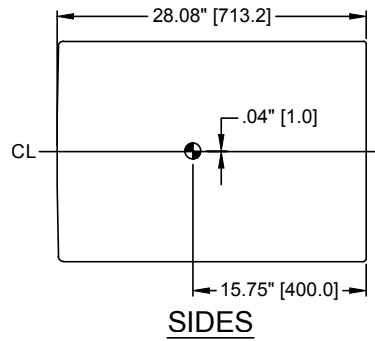
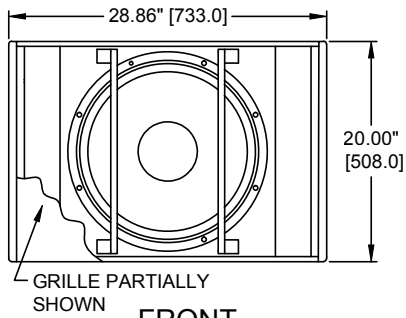
Shipping Weight


110.5 lbs (50.1 kg)

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

I SERIES

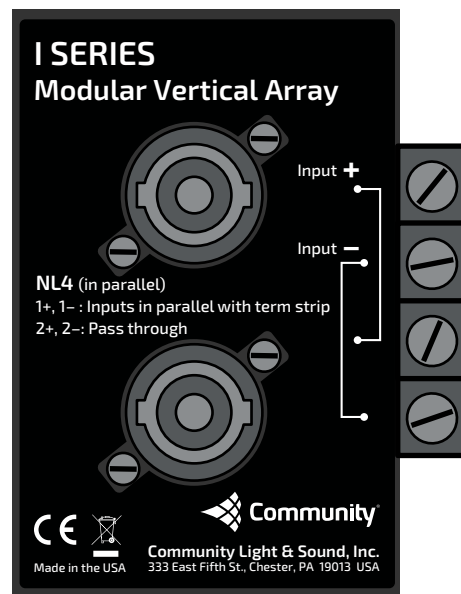
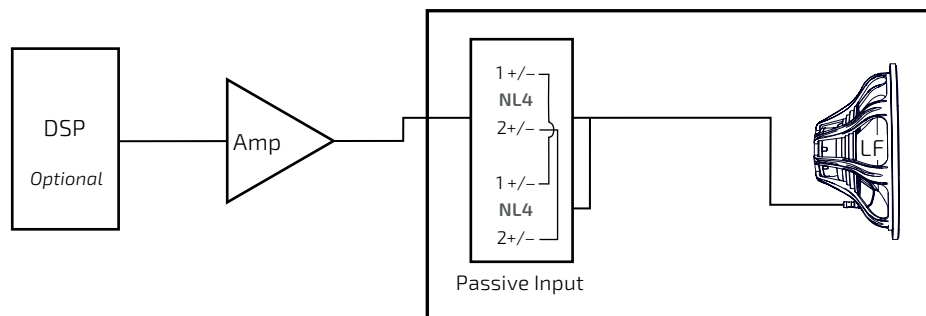
Modular Vertical Array 600

IV6-118SWR

SINGLE 18-INCH

WEATHER-RESISTANT SUBWOOFER

CONNECTION DIAGRAMS



Input panel



IMPORTANT: The NL4 connections cannot be used for outdoor operations. The covers must be in place on both attenuation and input panels to maintain weather resistance and validate the product warranty. Any unused gland nuts must be plugged to maintain weather-resistance.

NOTES

- PERFORMANCE SPECIFICATIONS** All measurements are taken indoor 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.