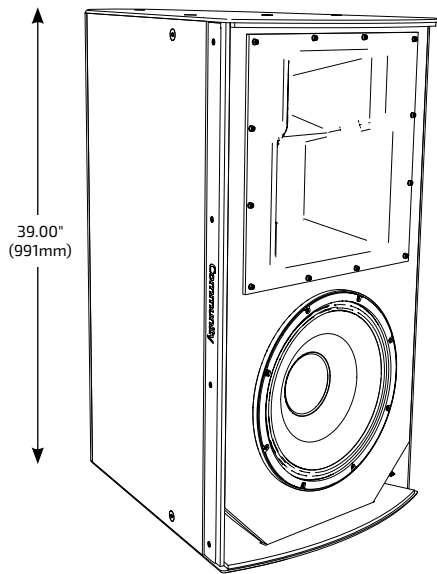


I SERIES

Point Source 800

IP8-1153/94

HIGH POWER 15-INCH THREE-WAY
90° x 40° INSTALLATION LOUDSPEAKER



APPLICATIONS

MAIN PA (Small to Medium Size Venues)

Houses of Worship · Auditoriums · Restaurants
Meeting Rooms · Theaters · Corporate A/V Systems

DISTRIBUTED OR FILL (Larger Size Venues)

Arenas · Stadiums · Night Clubs · Theaters
Themed Entertainment · Larger Houses of Worship

DESCRIPTION

I SERIES Point Source 800 loudspeakers provide exemplary acoustic performance, modular flexibility and elegant aesthetics for modern performance venues. Designed to support the goals of systems integrators and consultants both acoustically and mechanically, I SERIES includes a wide variety of arrayable, rotatable coverage patterns and a comprehensive selection of modular bracket systems that accelerate system design and system commissioning.

FEA-optimized linear suspensions, high-flux neodymium motors, and integral demodulation rings ensure precise transducer motion control and very low distortion at high SPL levels. The custom long-excursion LF driver delivers deep bass response and a balanced midrange in the most demanding applications. The matched diaphragms on the HF and MF compression drivers provide natural, transparent sound quality with unrivaled intelligibility and transient response accuracy that complements any source.

The rotatable 18-inch (457mm) MF/HF waveguide provides well-defined coverage and a smooth off-axis response that enhances arrayability. The acoustic 8th order MF/HF passive crossover produces a smooth, consistent vertical off-axis response free from the polar lobing and power response losses inherent in similar systems. User selectable biamp or triamp operating modes further expand performance capabilities.

FEATURES

- Matching ketone polymer MF/HF diaphragms provide uniform sound quality from 500Hz to 20 kHz
- M200HP midrange compression driver for signature Community intelligibility and low distortion
- FEA-optimized suspensions and neodymium motors with integral demodulation rings in LF and HF
- Large rotatable waveguide, user selectable biamp or triamp operation
- Innovative low profile modular bracket systems create elegant arrays with simplified installation

TECHNICAL SPECIFICATIONS¹

Operating Mode	Biamp or Triamp with DSP		
Operating Environment	Indoor or Weather-Resistant Outdoor		
Operating Range²	30 Hz to 16.5 kHz		
Nominal Beamwidth (H x V)	90° x 40°, rotatable waveguide		
Transducers	LF – 1 x 15" (381mm) neodymium motor woofer, 3" (76mm) voice coil, demodulation ring MF – M200HP, 2" exit, ketone polymer diaphragm, compression driver HF – 1 x 1.4" (36mm) exit neodymium compression driver, 2.6" (66mm) voice coil, demodulation ring, ketone polymer diaphragm		
Continuous Power Handling³ @ Nominal Impedance	LF MF HF MF/HF	69V 35V 32V 47V	600W @ 8 ohms (2400W peak) 150W @ 8 ohms (600W peak) 125W @ 8 ohms (500W peak) 275W @ 8 ohms (1100W peak)
Nominal Sensitivity⁴	LF MF HF MF/HF	@ 1W 96 dB 106 dB 106 dB 106 dB	@ 2.83V 96 dB 106 dB 106 dB 106 dB
Nominal Maximum SPL⁵ (Whole Space)	LF MF HF MF/HF	Peak 130 dB 134 dB 133 dB 136 dB	Continuous 124 dB 128 dB 127 dB 130 dB
Equalized Sensitivity⁶	System	@ 1W 94 dB	@ 2.83V 94 dB
Equalized Maximum SPL⁷	System	Peak 128 dB	Continuous 122 dB
Recommended Amplifiers	LF MF HF MF/HF	600W - 1200W @ 8 ohms, (69V - 98V) 150W - 300W @ 8 ohms, (35V - 49V) 125W - 250W @ 8 ohms (32V - 45V) 275W - 550W @ 8 ohms, (47V - 66V)	

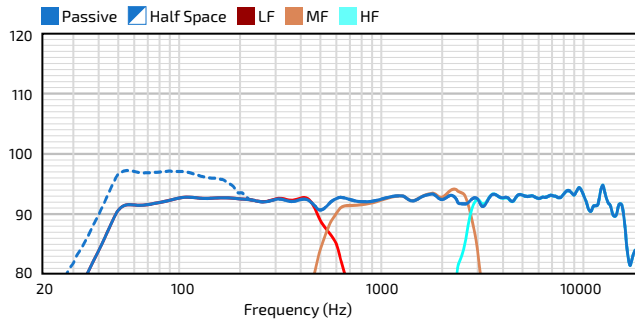
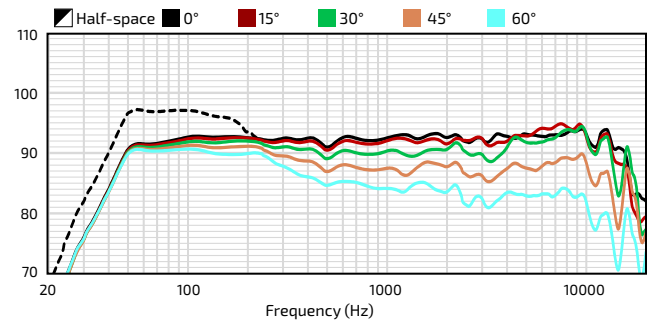
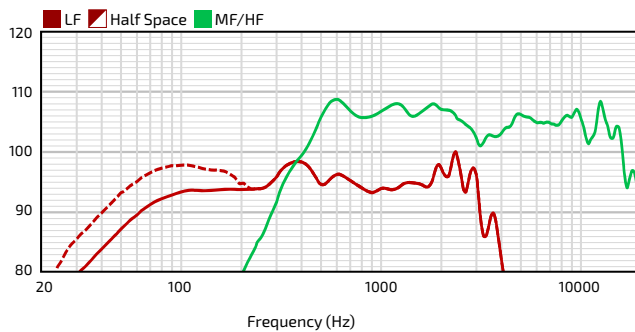
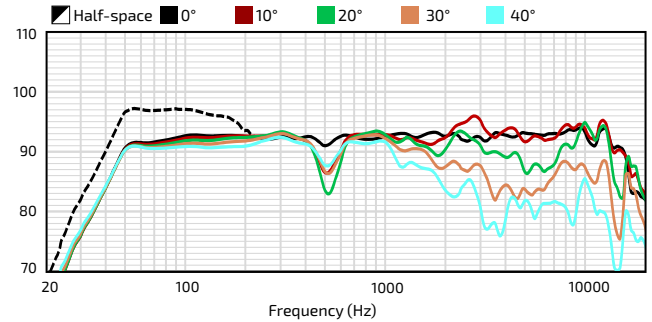
PHYSICAL

Input Connection	(2) Screw terminal blocks (6-position)
Mounting Points	(15) M10 threaded rigging points
Environmental	Outdoor: IP55W per IEC 60529, MIL-STD-810G
Weight	105 lbs (47.6 kg) loudspeaker only
Dimensions H x W x D	39.00" x 22.10" x 26.30" (991 x 561 x 668 mm)
Finish	Refer to the Technical Drawing

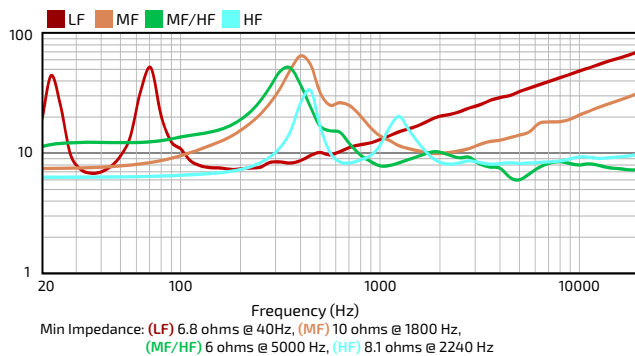
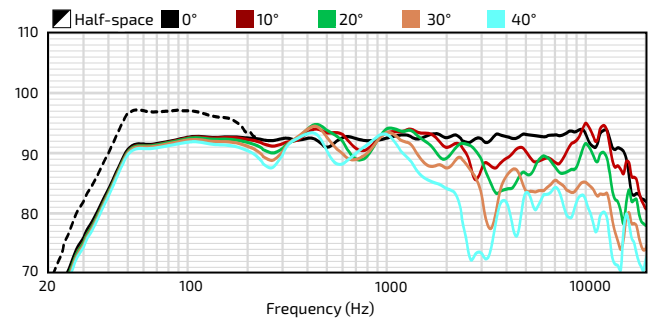
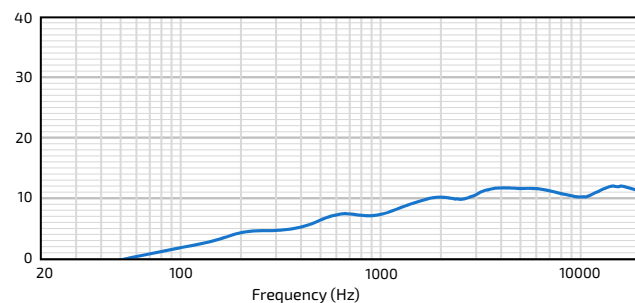
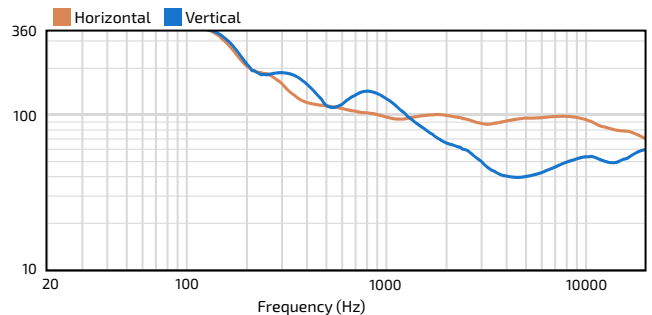
OPTIONS

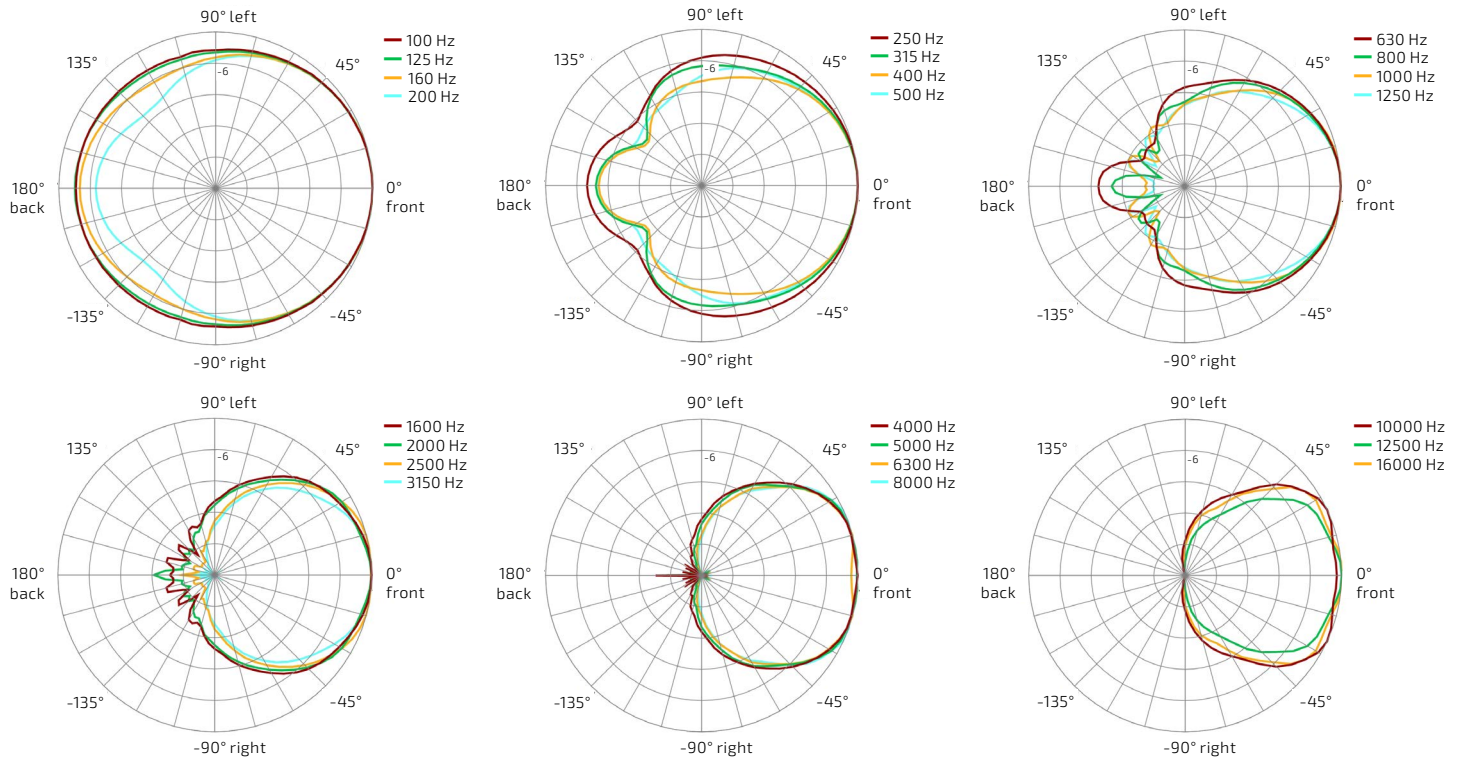
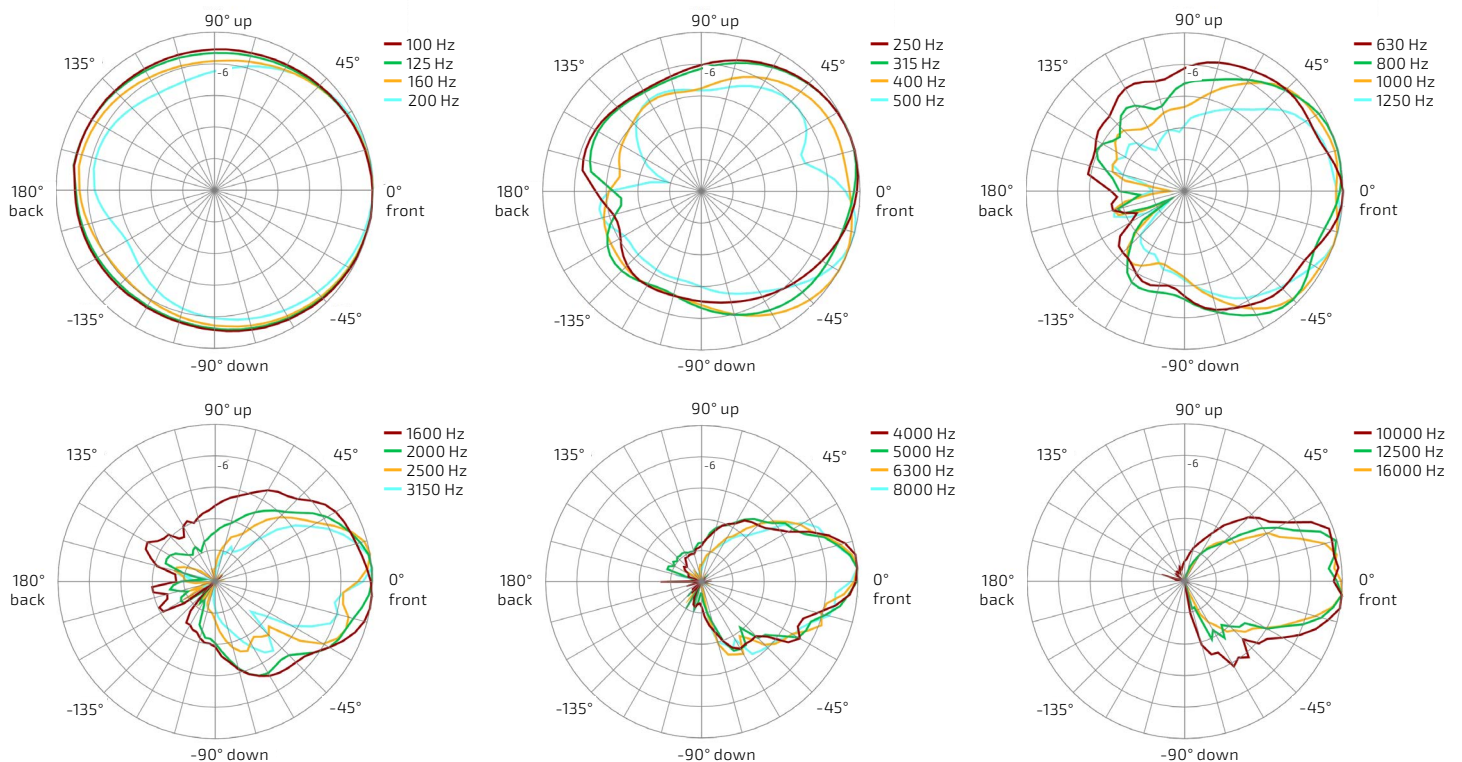
Accessories (Refer to BalancePoint™ Flyware Accessory Guide for complete listing)	Rigging kits include: BFR22: BalancePoint™ Fly Rails; IUB1153: U-Bracket; IVY1153: Vertical Yoke; IAF55: Isometric Array Frames; VAB-BFR38: Sub Above Vert Array; HAB3-BFR38: Sub/Dual 2-Way Horiz Array; HSB3/VSB3: Multiple Splay Brackets for Horiz/Vert Arrays with/without Sub Behind options; DFS: Downfill Splay Kit; DVS-BFR22: Dual Vert Splay Kit with BalancePoint™ Fly Rails; IUB1153WRG: Reinforced 304SS U-Bracket (Grey)
Configure-to-Order (CTO)	Custom color, Custom cable lengths on outdoor version

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.

AXIAL PROCESSED RESPONSE (dB)⁸HORIZONTAL OFF-AXIS RESPONSE (dB)¹⁰AXIAL SENSITIVITY (dB SPL)⁹VERTICAL OFF-AXIS UP RESPONSE (dB)¹⁰

IMPEDANCE (Ohms)

VERTICAL OFF-AXIS DOWN RESPONSE (dB)¹⁰DIRECTIVITY INDEX (dB)¹¹BEAMWIDTH (Degrees)¹²

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

IP8-1153/94

HIGH POWER 15-INCH THREE-WAY
90° x 40° INSTALLATION LOUDSPEAKER

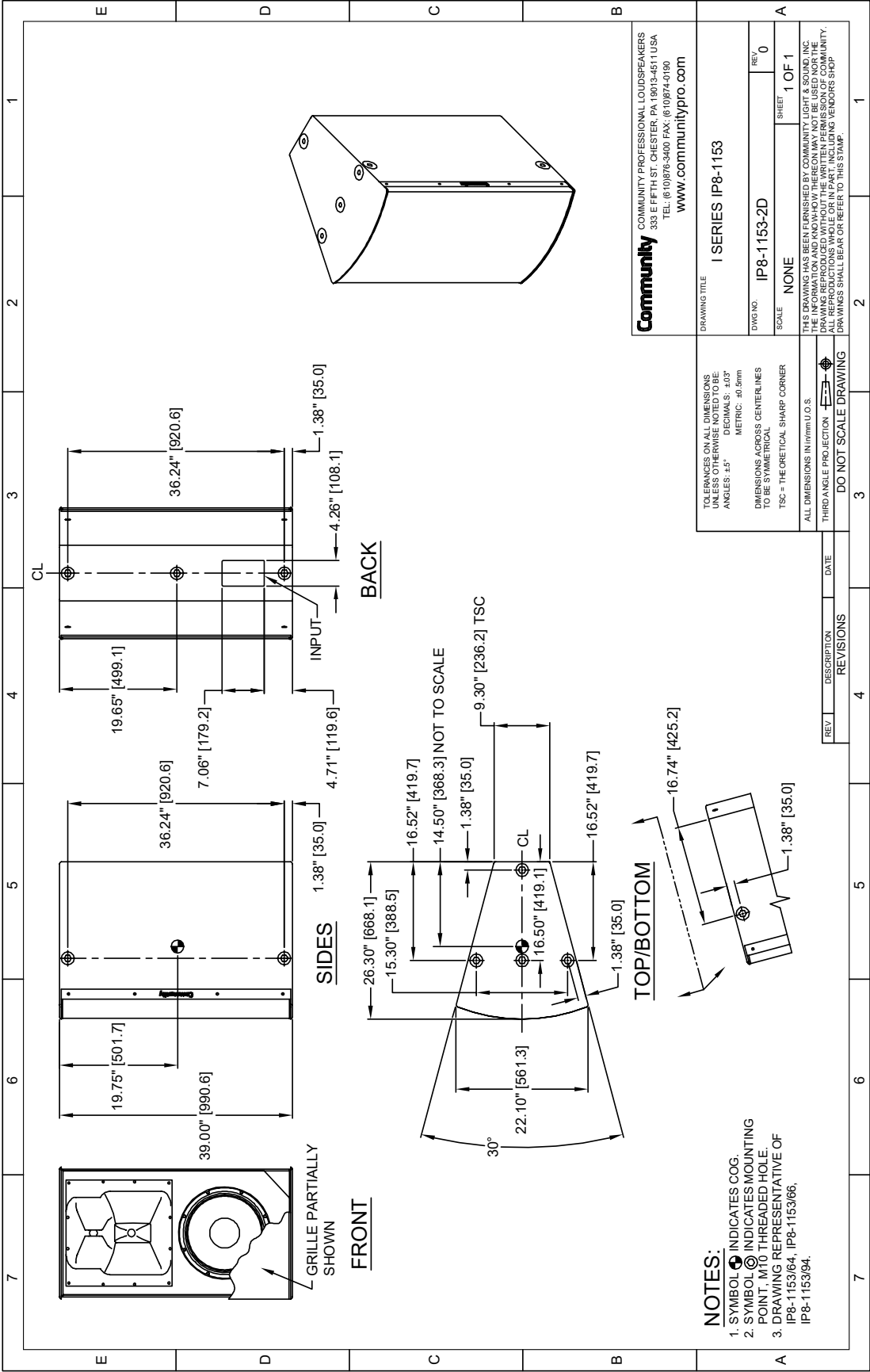
TECHNICAL DRAWING / DIMENSIONS / FINISH

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#9004) or White (RAL#9003) low gloss, uniformly textured painted 15mm Baltic Birch plywood.

Unit Weight
105 lbs (47.6 kg) loudspeaker only

Shipping Weight
124 lbs (56.2 kg)

***Outdoor Models:**
Grille: Marine grade aluminum with zinc-rich dual-layer powder-coat, featuring NeverWet™ treated acoustically transparent woven black fabric backing. Grey (RAL#7047)
Enclosure / Finish: 15mm PolyGlas, Grey, heavily textured industrial-grade exterior-rated coating. Black, White or Custom colors upon request.



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

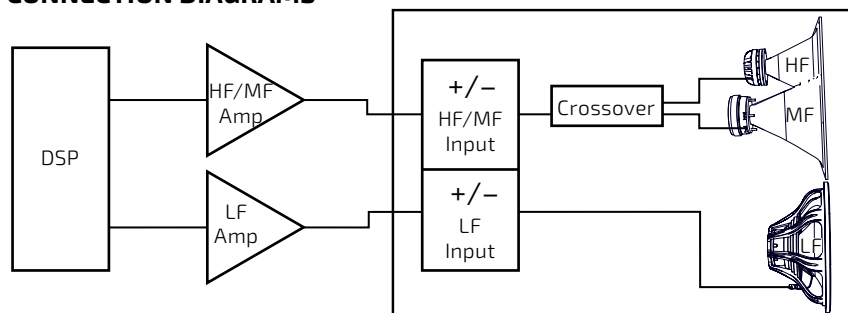
I SERIES

Point Source 800

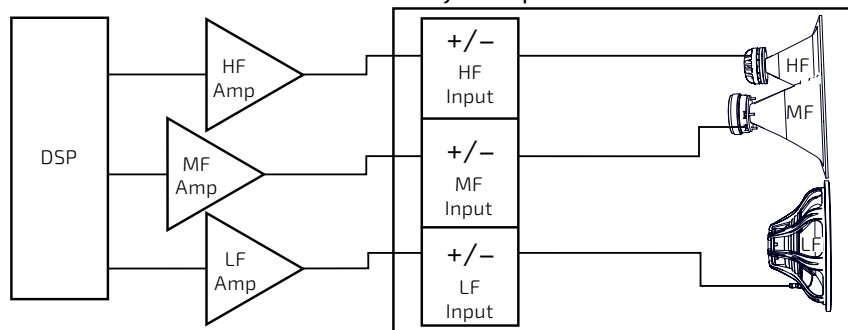
IP8-1153/94

HIGH POWER 15-INCH THREE-WAY
90° x 40° INSTALLATION LOUDSPEAKER

CONNECTION DIAGRAMS

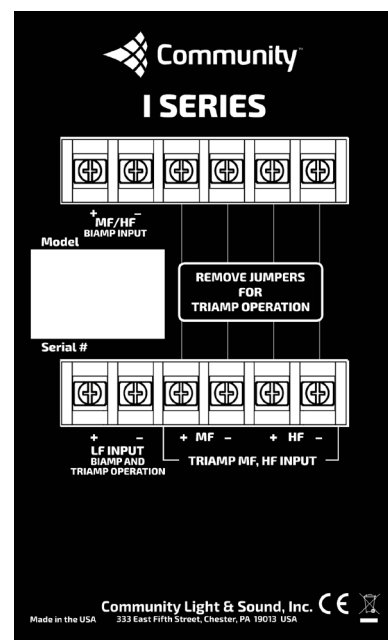


Three-way biamp



Three-way triamp

INPUT PANEL



Three-way input panel

NOTES

- PERFORMANCE SPECIFICATIONS** All measurements are taken indoor 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 Biamp is required to achieve the specified performance; further performance gains can be realized using one of the Community ALC amplified loudspeaker controllers 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 and the averaged SPL over the operating range with a fixed input voltage of 2.83V, respectively; 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 the equalized loudspeaker system at a level which produces a total power of 1 Watt, in sum, to the loudspeaker subsections and also at a level which produces a total voltage, in sum, of 2.83V to the loudspeaker subsections, respectively; each 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.
- DIRECTIVITY INDEX** The ratio of the on-axis SPL squared to the mean squared SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. 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: biamp.com

CAUTION: Installation of loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting design.