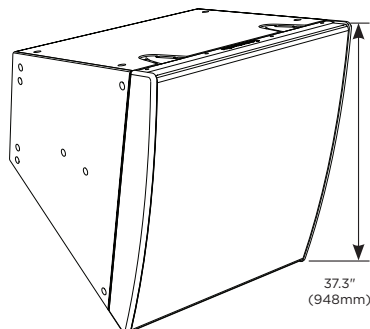


DATA SHEET

Community L SERIES Steerable Venue Horn

LVH-909

90° HORIZONTAL DISPERSION | AUDIENCE-FITTED COVERAGE DESIGN | SOFTWARE CONFIGURED PATTERNS FOR ANY VENUE GEOMETRY | SINGLE- OR MULTI-CABINET ARRAY



APPLICATIONS

Houses of worship, performing arts facilities, auditoriums, stadiums, arenas, amphitheaters, convention centers, multipurpose outdoor and indoor venues

DESCRIPTION

The Biamp Community LVH-909 Steerable Venue Horn, combined with VenuePolar, a custom plugin for EASE® Focus 3, precisely tailors the directivity of each loudspeaker, or array of loudspeakers, to meet audience geometry and sound requirements across a wide range of applications.

Designed for exceptional performance in venues where consistent coverage, intelligibility, and sonic quality are critical, each LVH-909 model consists of four 12-inch LF drivers, three Community M200 midrange compression drivers, and four 1.5-inch HF compression drivers. Using patent-pending techniques, all drivers integrate into a single triaxial waveguide that fills the entire 36 x 31-inch face of the enclosure, providing pattern control to below 400 Hz.

Typical applications include music and speech reinforcement for houses of worship, performing arts spaces, auditoriums, athletic facilities, multipurpose venues, and other environments where precise coverage and high-quality sound are essential. With advanced directivity control, focused dispersion patterns, weather-resistant construction, and outstanding sonic performance, LVH-900 loudspeakers help make installations faster, simpler, and more functionally effective.

WHAT IS AUDIENCE-FITTED COVERAGE DESIGN?

Unlike conventional loudspeakers with fixed coverage patterns or steerable symmetric beams, the LVH-909 vertical coverage pattern can be custom-shaped to match the exact geometry of the audience area. Instead of selecting from a limited set of predefined vertical dispersion angles, designers can use VenuePolar, a custom plugin for EASE Focus 3, to create a coverage pattern that follows the unique shape of the space — including asymmetric seating areas, avoidance areas, floor + multi-balcony coverage, and multi-zone venues.

VenuePolar automatically generates the FIR filter files required to achieve the desired coverage, eliminating the need to manually aim and sum individual beams. The result is sound distribution that is precisely sculpted to fit the room, helping deliver consistent coverage and intelligibility without physical loudspeaker adjustments.

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

FEATURES

- Audience-fitted coverage design — vertical pattern can be shaped to match seating geometry (not a fixed preset or manual beam-steering system)
- Horn-loaded triaxial array: pattern control to 400 Hz (single cabinet) or 200 Hz (dual cabinet)
- Colinear manifold for phase coherent HF and MF beamforming
- Software designed patterns via VenuePolar in EASE® Focus 3+ — any asymmetric shape, automatically exported to Armonia+
- 6 ms fixed latency, not configuration dependant
- Quick-slide Amp Channel Selector: 6- or 9-channel wiring (standard or high resolution steering)
- Color-coded input panel terminals; cabinet orientation indicator

TECHNICAL SPECIFICATIONS¹

Specification	SINGLE CABINET	DUAL CABINET
Operating Mode	Multi-amplifier with FIR DSP Beamforming*	
Operating Environment	Indoor or Outdoor Direct Exposure	
Operating Range (-10dB) ²	50 Hz - 20 kHz	48 Hz - 20 kHz
Nominal Beamwidth	Horizontal: 90° • Vertical: Coverage pattern custom shaped to fit audience geometry via VenuePolar.	
Transducers	• LF: 4 x 12" (300 mm) with 3" (75 mm) CCAW voice coil, inherently weather-resistant cone in cast aluminum chassis • MF: 3 x M200, 2" (51 mm) exit, ketone polymer diaphragm, compression driver • HF: 4 x 1.5" (38 mm) CCAW voice coil, 1" (25 mm) exit, ketone polymer diaphragm, compact neodymium compression driver	
Nominal Continuous Power Handling ³	6-Channel LF (per pair): 87 V (950 W, 8 Ω) MF 1 MF 2: 26 V (130 W, 5 Ω 65 W, 10 Ω) HF (per pair): 23 V, (65 W, 8 Ω)	9-Channel LF (per pair): 87 V (950 W, 8 Ω) MF (each): 26 V (65 W, 10 Ω) HF (each): 23 V, (33 W, 16 Ω)
Nominal Maximum SPL (Processed) ⁴	Nominal Max Up to 134 dB continuous; 140 dB peak (pattern dependent)	Nominal Max Up to 139 dB continuous; 145 dB peak (pattern dependent)
Rated Maximum SPL (Processed) ⁶	Rated Max Up to 130 dB continuous; 142 dB peak (pattern dependent)	Rated Max Up to 136 dB continuous; 148 dB peak (pattern-dependent)
Rated Continuous Voltage ⁵	LF: 50.1 V (34 dBV) • MF: 20.0 V (26 dBV) • HF: 15.8 V (24 dBV)	
Crossover Frequencies	530 Hz • 1.84 kHz	
Amp Channel Selector	Quick-slide selector jumper on LF1/LF2 input panel. 6-Channel mode: HF/MF drivers wired in pairs — standard configuration. 9-Channel mode: each driver individually amplified — maximum steering resolution.	
Recommended Amplifiers	6-Channel: LF: 1 x ALC-1604, MF/HF: 1 x ALC-404 9-Channel: LF: 1 x ALC-1604, MF/HF: 2 x ALC-404	12-Channel: LF: 2 x ALC-1604, MF/HF: 2 x ALC-404 18-Channel: LF: 2 x ALC-1604, MF/HF: 4 x ALC-404

PHYSICAL

Input Connection	Lever-actuated clamping — 4, 6 & 8-position terminal blocks
Mounting Points	24 x M10 rigging inserts per cabinet
Dimensions H x W x D	948 x 797 x 775 mm (37.3" x 31.4" x 30.5")
Weight	Indoor: 113.4 kg (250 lbs) per cabinet • Outdoor: 95.3 kg (210 lbs) per cabinet
Shipping	Indoor: 139.3 kg (307 lbs) • Outdoor: 121 kg (267 lbs)
Enclosure Construction	Indoor: Powder-coated perforated steel grille, acoustically transparent woven fabric, PolyCoat on 15 mm Finish Baltic plywood Outdoor: PolyGlas (fiberglass-reinforced composite) enclosure, marine-grade aluminum grille, hydrophobically-treated fabric
Outdoor Rating	IP56 per IEC 60529 with input panel covers
Weather Resistance	IEC 60068-2-1 Cold, -2-2 Dry Heat, -2-6 Vibration, -2-30 Damp Heat cyclic, -2-42 SO ₂ , -2-78 Damp Heat steady
Certifications	EN54-24, ISO 7240-24, CE (LVD, WEEE, RoHS)

OPTIONS

Accessories	Splay Bracket: LVH-900SP1 Type 1 (0-20 splay); LVH-900SP2 Type 2 (30 splay) — splay angle determined by VenuePolar output Indoor Frames: LVH-900AF Array frame; LVH-900PB Pull-back; LVH-900UB U-Bracket (single cabinet only) 3rd party rigging: Indoor & outdoor
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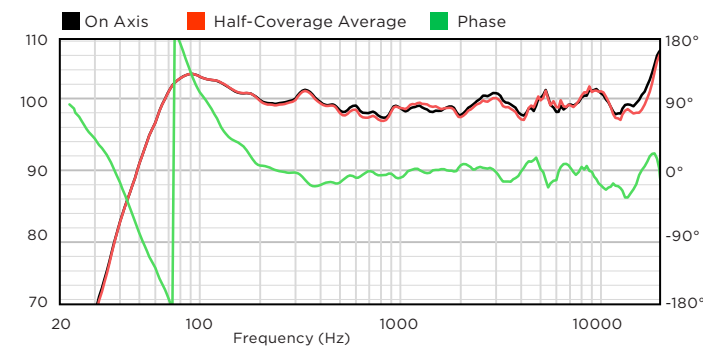
* EASE® and FIRmaker® are registered trademarks of AFMG Technologies GmbH.

Community L SERIES Steerable Venue Horn

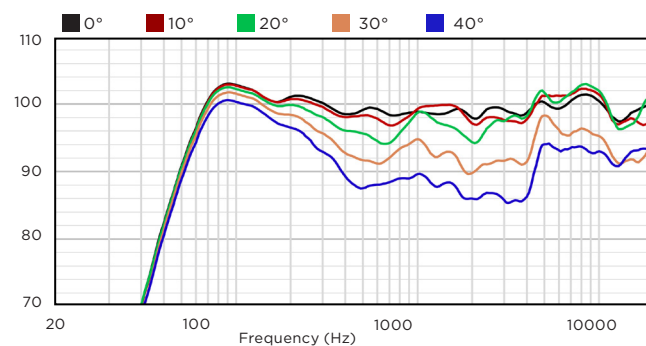
LVH-909

90° HORIZONTAL DISPERSION | AUDIENCE-FITTED COVERAGE
DESIGN | SOFTWARE CONFIGURED PATTERNS FOR ANY VENUE
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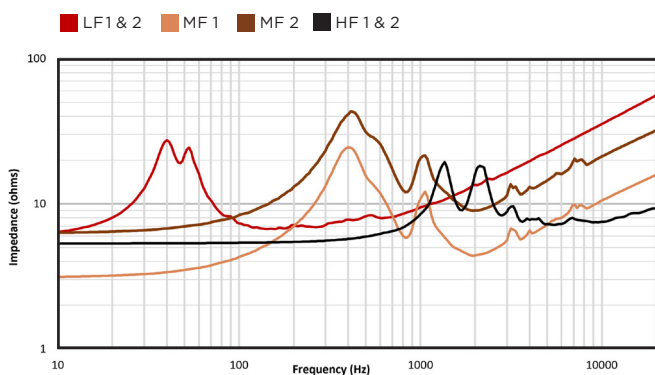
AXIAL PROCESSED SENSITIVITY (dB SPL)⁷



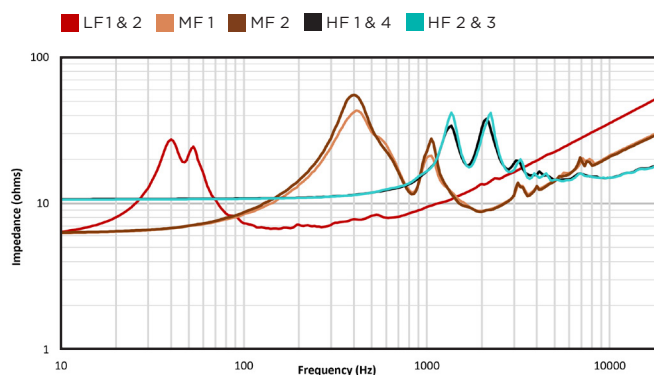
HORIZONTAL OFF-AXIS RESPONSE (dB SPL)⁸



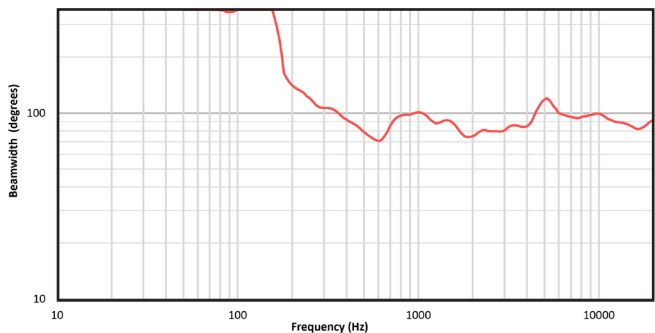
6-CHANNEL IMPEDANCE (Ω)



9-CHANNEL IMPEDANCE (Ω)



BEAMWIDTH (degrees)¹⁰ ■ Horizontal



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TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

37.3" x 31.4" x 30.5"
(948 x 797 x 775 mm)

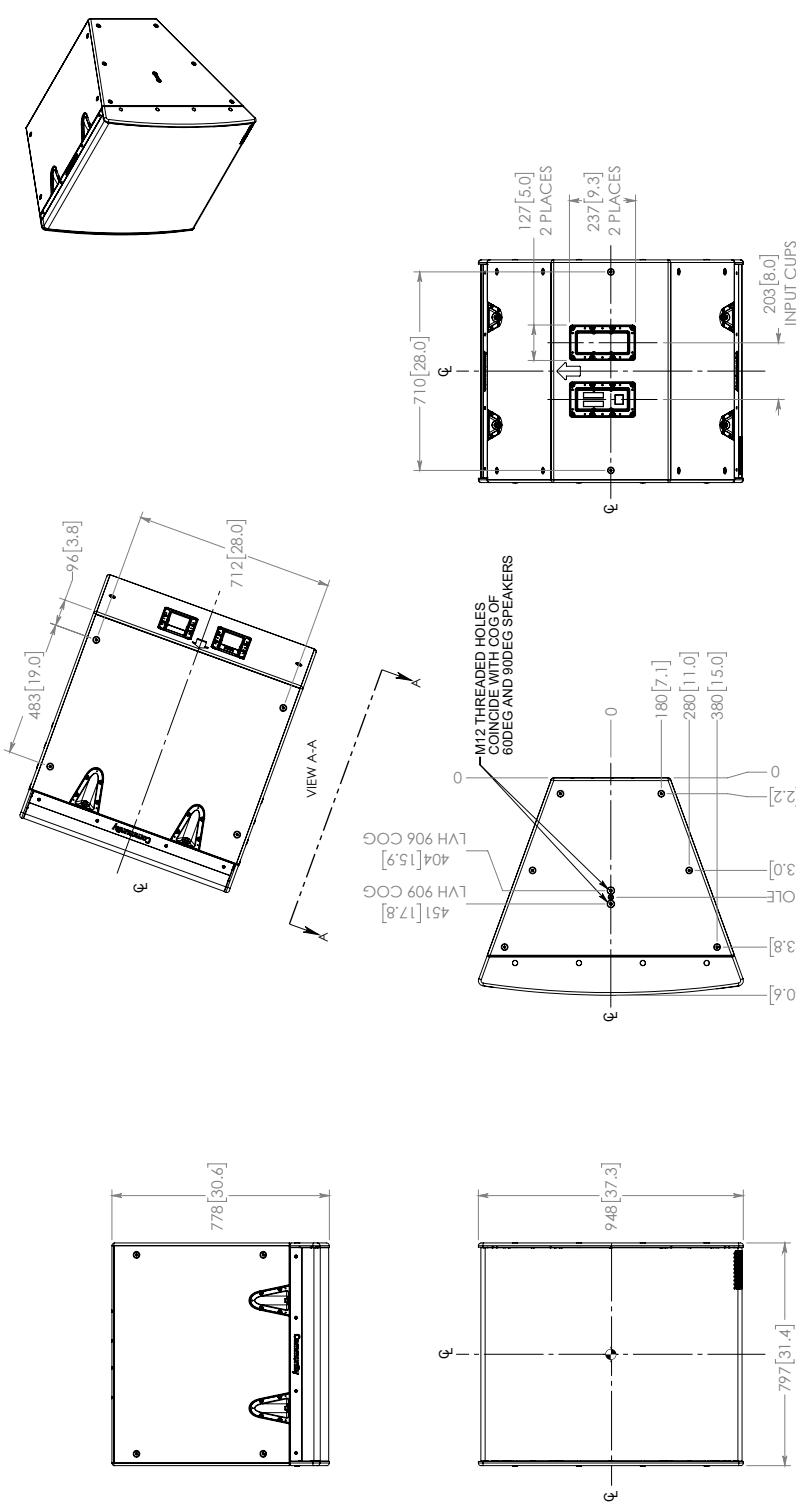
Unit Weight

250 lbs (113.4 kg) (Indoor)
210 lbs (95.3 kg) (Outdoor Weather-resistant)
Shipping Weight (on a pallet)
307 lbs (139.3 kg) (Indoor)
267 lbs (121 kg) (Outdoor Weather-resistant)

Enclosure Finish

Indoor: Powder-coated perforated steel (indoor) grille backed with acoustically transparent woven fabric and coated with Biamp's robust PolyCoat finish on 15mm Baltic Birch plywood enclosure

Outdoor (WR): Powder-coated marine grade aluminum grille featuring hydrophobically-treated acoustically transparent woven black fabric backed on a 15mm PolyGlas™ enclosure coated with Biamp's durable PolyCoat finish, rated for both indoor and outdoor use



- NOTES:
1. DIMENSIONS ARE MM (INCHES)
 2. DIMENSIONS SYMMETRICAL ABOUT CENTERLINE
 3. -C- DENOTES CENTER OF GRAVITY (COG)
 4. UNLESS OTHERWISE NOTED, MOUNTING HOLES ARE M10 THREAD
 5. WEIGHT (INDOOR) = 250LBS (113.4KG)
 6. WEIGHT (OUTDOOR WEATHER-RESISTANT) = 210LBS (95.3KG)

biamp.	
TITLE: LVH900 OVERALL DIMENSIONS AND MOUNTING DETAIL	
SIZE	DWG. NO. B
REV	LVH900
DO NOT SCALE DRAWING. SCALE: 1:14. VERSION: 5 SHEET 1 OF 1	

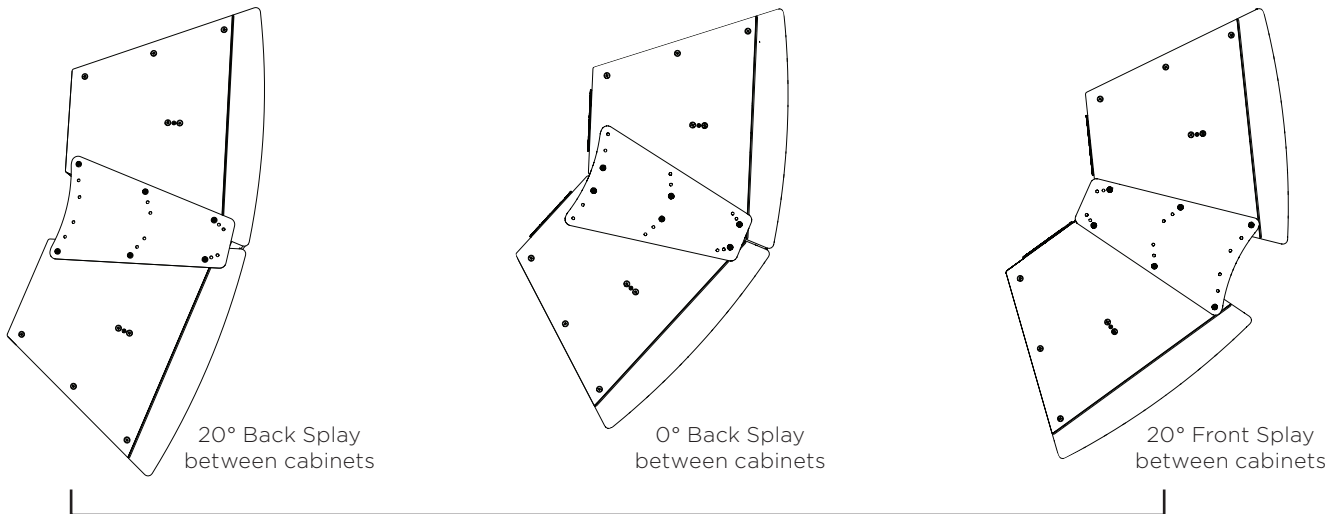
*Note: Outdoor (WR) versions - There are covers on the seal cups (4) and input panels (2)

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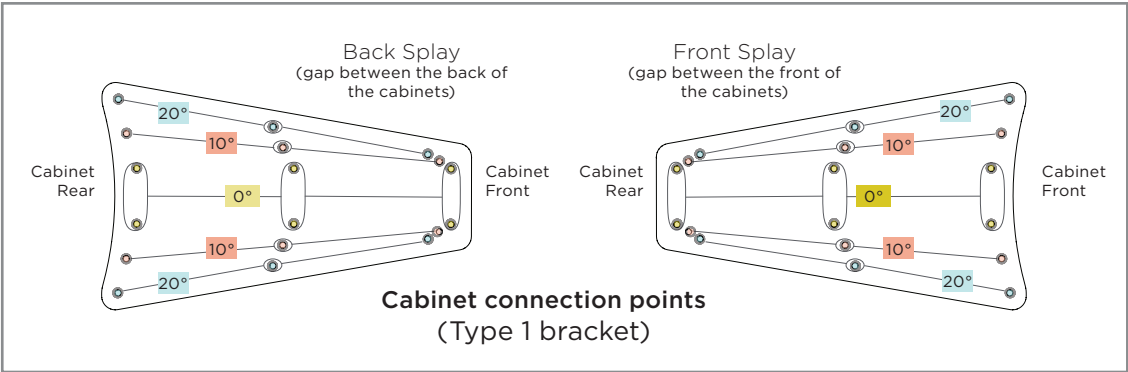
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SPLAY BRACKETS / CABINET CONNECTIONS



Type 1 Splay Bracket



Cabinet connection points
(Type 1 bracket)

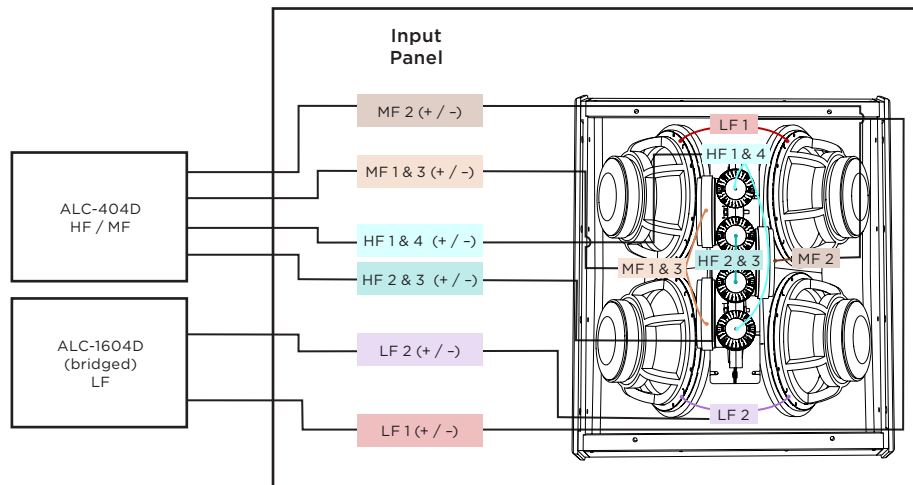
Models	Description
LVH-909B	90° Horizontal — Black
LVH-909W	90° Horizontal — White
LVH-909C	90° Horizontal — Configurable for indoor or outdoor operation and custom color
LVH-909WRB	90° Horizontal — Weather Resistant Black
LVH-909WRG	90° Horizontal — Weather Resistant Gray
LVH-909WRW	90° Horizontal — Weather Resistant White

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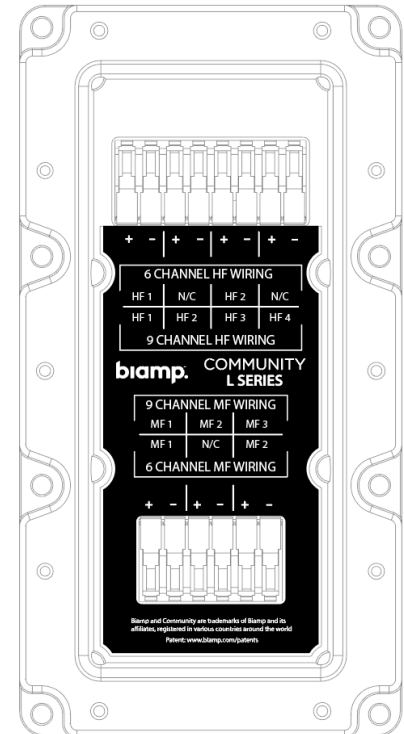
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CONNECTION DIAGRAMS



LVH-900/AS (with ALC-404D & ALC-1604D)



Input panel

Refer to the LVH Installation and Operation Guide for detailed wiring instructions.

NOTES

- 1. TECHNICAL SPECIFICATIONS** All measurements are performed using a time-windowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALCs).
- 2. OPERATING RANGE** The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- 3. NOMINAL CONTINUOUS POWER HANDLING** The maximum continuous input voltage at the stated nominal impedance that the system can withstand for a period of 2 hours using an IEC 60268-5 defined spectrum with recommended signal processing and protection filters.
- 4. NOMINAL MAXIMUM SPL** The SPL produced when an IEC 60268-5 signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its nominal continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-5 test signal.

- 5. RATED CONTINUOUS VOLTAGE** The maximum continuous input voltage for the system that results in no more than a 3 dB change in the system's response during operation.
- 6. RATED MAXIMUM SPL** The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 7. AXIAL PROCESSED SENSITIVITY** The variation in acoustic output level with frequency for a 2.83 V, swept-sine signal using the recommended signal processing. Referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.
- 8. HORIZONTAL/VERTICAL OFF-AXIS RESPONSES** The loudspeaker's magnitude response at various off-axis angles using the recommended signal processing in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.

- 9. DIRECTIVITY INDEX** The ratio of the on-axis SPL to the mean SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. The responses have 1/3 octave smoothing applied.
- 10. BEAMWIDTH** The included angle between the -6 dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 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. [\(LVH-900_GLL\)](#)

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.