

LAS-BEAM-L Beam steering array, large

Loudspeaker Specials



The LAS-BEAM-L features eight 3.5" drivers, each powered by a dedicated 100 W amplifier channel with enhanced processing via an on-board DSP module. It allows for the selection of 0, 1, or 2 steerable beams, with a typical throw of 25 meters, all housed in a compact design measuring just 911 mm (35.8").

The beam(s) can be digitally adjusted in real time using configuration software. Combining exceptional audio quality with advanced active beam steering technology, the LAS-BEAM-L is ideal for achieving high speech intelligibility in acoustically challenging environments such as airports, houses of worship, and other reverberant spaces.

The LAS-BEAM series integrates seamlessly with PA/VA systems like PRAESENSA and supports dual 100 V audio inputs and/or dual line-level input channels. Innovative monitoring options are available via the 100 V line. Various redundancy wiring configurations, including A+B wiring and Class A loop wiring are available. In the event of an error, an alarm can be triggered in the PA/VA system through the 100 V line, with full support for PRAESENSA End of Line technology.

The LAS-BEAM-L family offers a frequency range of 70 Hz to 18 kHz, delivering superior audio performance that exceeds life safety requirements, making it suitable for commercial applications such as spherical messaging and background music.

To extend coverage from a single position, the LAS-BEAM-L can be stacked with the LAS-BEAM-E extender kit, allowing for stacking up to five LAS-BEAM-L columns.

- ▶ Typical coverage of 25 meters
- ▶ Option to create one or two beams
- ▶ Compact design allows for quick and simple installation
- ▶ An innovative bracket simplifies mounting and enables flexible positioning
- ▶ Supports both 100 V line systems and line-level audio

This configuration increases sound pressure level (SPL) and beam shaping power, providing coverage of up to 70 meters and enabling the creation of up to four beams.

Regulatory information

Safety	EN/IEC 62368-1
Immunity	EN 55035 EN 61000-6-2
Emissions	EN 55032 EN 61000-3-2 EN 61000-3-3
Environment	EN/IEC 63000
Water and dust protection	EN 60529 IP54
Corrosion resistance	IEC 60068-2-11 (duration: 96 hours)

Installation/configuration notes

Column stacking	Number of LAS-BEAM-L
LAS-BEAM-L	1
LAS-BEAM-XL	2
LAS-BEAM-XXL	3
LAS-BEAM-3XL	4
LAS-BEAM-4XL	5

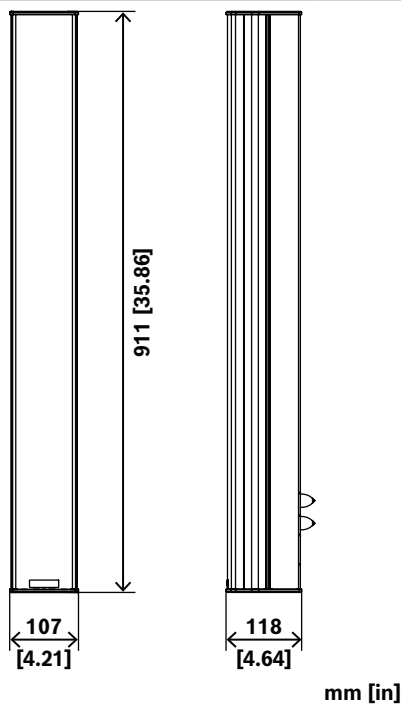


Fig. 1: Dimensions

Parts included

Quantity	Component
1	LAS-BEAM-L
1	IEC mains connector, 1.8 m (5.9 ft)
1	Closure cap (needed for IP54)
1	Connector set (Phoenix)
1	Quick installation guide
1	Safety and security information

Technical specifications**Acoustics LAS-BEAM-L**

Frequency range (-10 dB) (Hz)	70 Hz – 18,000 Hz
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Maximum SPL @25 m	94 dB
Transducers	8 x 3.5" HQ drivers
Dynamic range	>105 dB
Horizontal coverage (fixed)	130° (3 kHz), 70° (10 kHz)
Vertical coverage (adjustable)	3° to 40°, digitally steerable
Tilt	-70° to 70°, digitally steerable
Number of beams	1 or 2 beams
Typical distance	25 m
Focus distance	1 m to 50 m

Acoustics LAS-BEAM-XL (2 x LAS-BEAM-L)

Frequency range (-10 dB) (Hz)	70 Hz — 18000 Hz
Maximum SPL @25 m	97 dB
Transducers	16 x 3.5" HQ drivers
Dynamic range	>105 dB
Horizontal coverage (fixed)	130° (3 kHz), 70° (10 kHz)
Vertical coverage (adjustable)	3° to 40°, digitally steerable
Tilt	-70° to 70°, digitally steerable
Number of beams	1, 2 or 4 beams
Typical distance	35 m
Focus distance	1 m to 75 m

Acoustics LAS-BEAM-XXL (3 x LAS-BEAM-L)

Frequency range (-10 dB) (Hz)	70 Hz — 18000 Hz
Maximum SPL @25 m	100 dB
Transducers	24 x 3.5" HQ drivers
Dynamic range	>105 dB
Horizontal coverage (fixed)	130° (3 kHz), 70° (10 kHz)
Vertical coverage (adjustable)	3° to 40°, digitally steerable
Tilt	-70° to 70°, digitally steerable
Number of beams	1, 2 or 4 beams
Typical distance	70 m

Focus distance	1 m to 90 m
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Acoustics LAS-BEAM-3XL (4 x LAS-BEAM-L)

Frequency range (-10 dB) (Hz)	70 Hz — 18000 Hz
Maximum SPL @25 m	102 dB
Transducers	32 x 3.5" HQ drivers
Dynamic range	>105 dB
Horizontal coverage (fixed)	130° (3 kHz), 70° (10 kHz)
Vertical coverage (adjustable)	3° to 40°, digitally steerable
Tilt	-70° to 70°, digitally steerable
Number of beams	1, 2 or 4 beams
Typical distance	70 m
Focus distance	1 m to 90 m

Acoustics LAS-BEAM-4XL (5 x LAS-BEAM-L)

Frequency range (-10 dB) (Hz)	70 Hz — 18000 Hz
Maximum SPL @25 m	104 dB
Transducers	40 x 3.5" HQ drivers
Dynamic range	>105 dB
Horizontal coverage (fixed)	130° (3 kHz), 70° (10 kHz)
Vertical coverage (adjustable)	3° to 40°, digitally steerable
Tilt	-70° to 70°, digitally steerable
Number of beams	1, 2 or 4 beams
Typical distance	70 m
Focus distance	1 m to 90 m

Electrical LAS-BEAM-L

Audio input (2x)	0 dB (transformer balanced line level +4 dBuV rms)
Input 70 V / 100 V (2x)	Transformer balanced (floating input)
Nominal power @100 V	0.2 W
Nominal power @70 V	0.1 W
Nominal impedance	50 kΩ

Input level nominal	+40 dBV rms
Power amplifiers	8 x 100 W max. (4 Ω) / digital PWM
Power consumption (VA)	10 VA normal, 270 VA max.
Mains voltage	81 V - 277 V, 50 Hz - 60 Hz, 160 W IEC socket
DSP	24 bit / 96 kHz sample rate
Functions	Delay (max. 340 ms, 118 m) EQ Volume
Input audio mixing	Input A only Input B only Input A+B Fallback to Input B Fallback to Input A
Network interface	RJ45 interface RS485 data flow control
Max. number of units	256
Surveillance	General status via fault contact Status messages via RS485 Status message via the 100 V line
Failure relay	No failure = closed Failure = open
Rating	Max. 24 V, 100 mA

Mechanical LAS-BEAM-L

Dimensions (H x W x D) (mm)	911 mm x 107 mm x 118 mm
Dimensions (H x W x D) (in)	35.86 in x 4.21 in x 4.64 in
Weight (kg)	5.50 kg
Weight (lb)	12.12 lb
Color (RAL)	RAL 9006 White aluminum
Material	Aluminum
Grille material	Powder coated steel
Mounting	LAS-BEAM-WMS

Environmental LAS-BEAM-L

Operating temperature (°C)	0 °C – 40 °C
Operating temperature (°F)	32 °F – 104 °F
Operating relative humidity, non-condensing (%)	<95%

Ordering information

LAS-BEAM-L Beam steering array, large

LAS-BEAM-L with eight 3.5" drivers, each powered by a dedicated 100 W amplifier channel with on-board DSP processing. Supports 0, 1, or 2 steerable beams with a typical throw of 25 meters.

Order number **LAS-BEAM-L | F.01U.431.651**

Accessories

LAS-BEAM-CON Configuration Interface

Compact hardware tool for connecting a PC to the LAS-BEAM network. Enables real-time configuration and monitoring of up to 256 units.

Order number **LAS-BEAM-CON | F.01U.431.653**

LAS-BEAM-E Extender set

Extender set, sold separately, allows stacking LAS-BEAM-L loudspeakers into various array sizes with three mounting plates for easy assembly.

Order number **LAS-BEAM-E | F.01U.431.654**

LAS-BEAM-WMS Wall mount set

LAS-BEAM-WMS wall-mount set, sold separately, includes two mounting brackets for securely attaching LAS-BEAM-S and stacked LAS-BEAM-L speakers. It allows horizontal rotation and adjustable distance from the wall.

Order number **LAS-BEAM-WMS | F.01U.431.655**



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