

LBC 3200/00 Line Array Indoor Loudspeaker



This loudspeaker, with its good directivity, can handle small and medium indoor environments like congress venues, meeting rooms, showrooms and canteens. The full frequency range of the LBC 3200/00 makes it ideal for speech as well as music reproduction. Its exceptionally narrow housing (only 8 cm wide) means it is extremely unobtrusive.

Functions

Range of Application

The LBC 3200/00 is part of the XLA 3200 (eXtended Listening Area) range of line array loudspeakers. The positioning of the loudspeaker drivers* has resulted in greatly improved audio directivity. The specially developed high quality drivers enables reproduction of remarkably clear, natural sound which gives excellent intelligibility of both speech and music. Greater coverage is achieved, so more people can be reached with perceptual perfect sound. All the above, makes this small line array loudspeaker very suitable for use in small to medium sized applications.

*patent pending

- ► Extended listening area
- ► Excellent intelligibility of speech and music
- Uniform distribution of natural sound throughout the room
- Suitable for any small to medium venues, from canteens to meeting rooms
- ► Ultra-slim housing
- ► Voice evacuation compliant as standard
- ► Ideal combination of advanced acoustics and easy application
- Unrivalled sound quality for its size

Easy Installation

Positioning of the loudspeaker drivers in the array generates larger vertical opening angles for high frequencies, so there is less narrow 'beaming' of higher tones. As an example, at 4 kHz the vertical opening angle is still 18°. Having larger vertical opening angles makes installation easier, as the positioning of the loudspeakers is less critical because they cover a wider area. An extremely wide horizontal opening angle of 130° at 4 kHz means that a single loudspeaker can provide natural sound reproduction over an extensive listening area.

Suppressed Side Lobes

All conventional column loudspeakers produce a main lobe of sound, which is directed at listeners, and a number of unwanted side lobes. The LBC 3200/00 has highly suppressed side lobes in the vertical plane, typically at least 8 dB suppression from the 500 Hz octave band at 90°, resulting in a much clearer, less 'colored' sound and strongly reduced risks for acoustic feedback.

Sound Reproduction

The positioning and very high quality of the 2 -inch drivers contribute significantly in making the LBC 3200/00 a very efficient line array. With a sound

pressure level of 106 dB at 1 m, at 30 W, loud and clear sound reproduction is possible even at a significant distance from the loudspeaker.

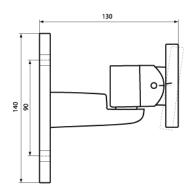
The high-quality loudspeaker drivers used in the LBC 3200/00 give excellent, natural sound reproduction of frequencies ranging from 190 Hz to 18 kHz. This ensures that all important frequencies for superb speech intelligibility are heard in the listening area.

EVAC Compliant

The loudspeakers ceramic terminal block, thermal fuse and heat-resistant, high-temperature wiring ensures that, in the event of a fire, damage to the loudspeaker does not result in failure of the circuit to which it is connected. In this way, system integrity is maintained, ensuring loudspeakers within the same loudspeaker zone in other areas can still be used to inform people of the situation.

System Overview

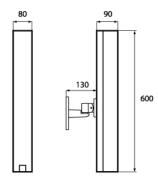
A wall bracket for mounting the line array onto walls and pillars is standard supplied. This is fully adjustable in two perpendicular planes for accurate positioning. For temporary installations, the LBC 3200/00 may be mounted on a LBC 1259/00 floor stand with an M10 threaded bolt without additional accessories.



Mounting bracket (included) with marked angle. Dimensions (in mm)



Detail mounting bracket



Dimensions (in mm)



Mounted on optional loudspeaker stand (LBC 1259/00)

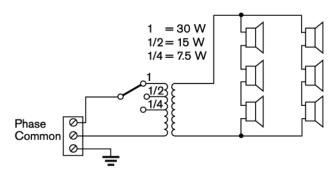
A three-way ceramic terminal block with screw connections suitable for loop-through wiring is located in a compartment at the base of the loudspeaker. There is also a switch which allows the selection of nominal full power (30 W), half power (15 W) or quarter power (7.5 W). The compartment has knock-out slots for accommodating cables.

Certifications and Approvals

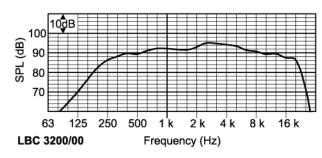
All Bosch loudspeakers are designed to withstand operation at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. These loudspeakers also comply with the Simulated Acoustical Feedback Exposure (SAFE) test, which demonstrates that they can withstand acoustical feedback at full power for short durations. This ensures extra reliability under extreme conditions, leading to higher customer satisfaction, longer operating life and much less chance of failure or performance deterioration.

Safety	acc. to EN 60065 and CE
EVAC Compliant	BS 5839 part 8 and IEC 60849

Installation/Configuration Notes



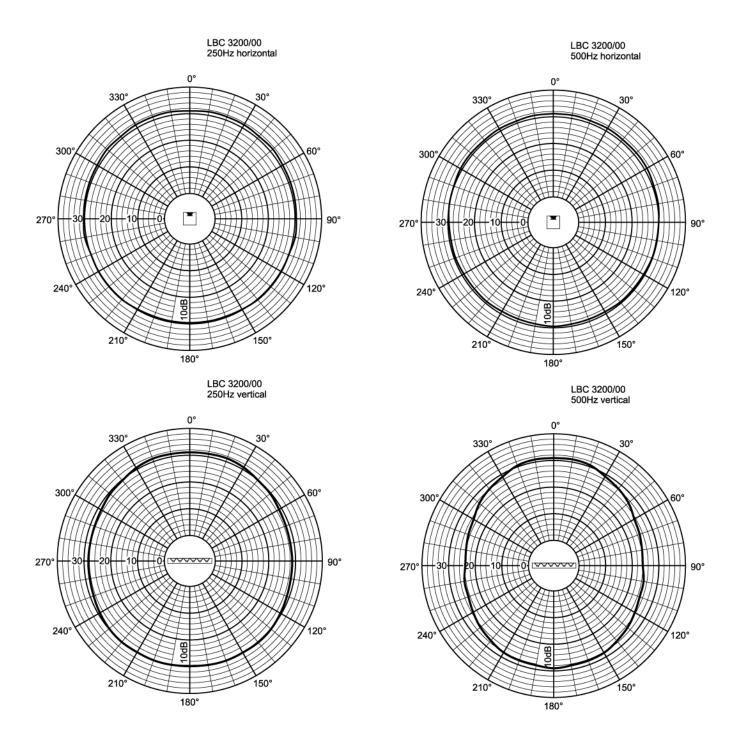
Circuit diagram

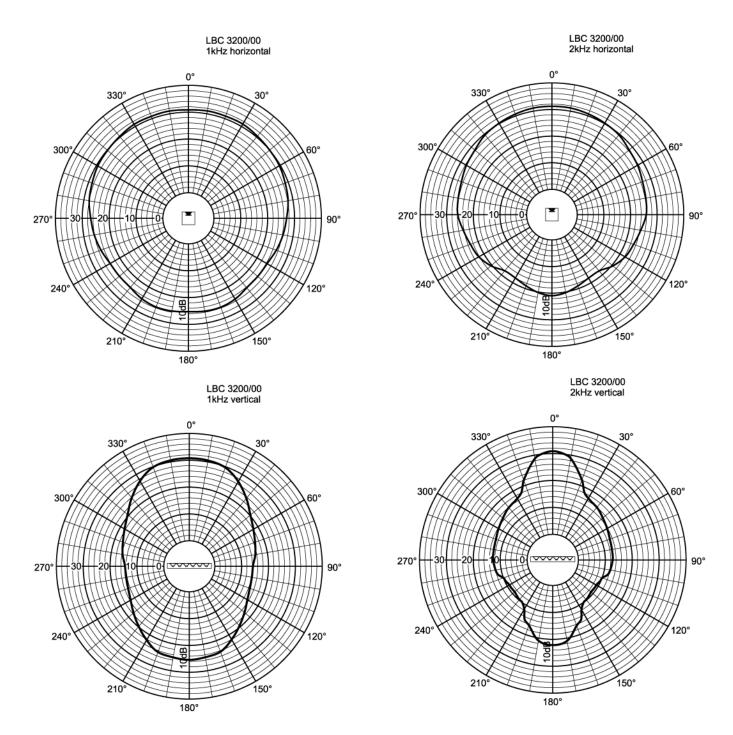


Frequency response

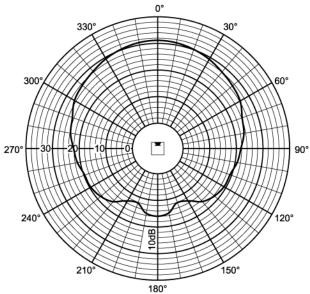
Octave band (Hz)	250	500	1k	2k	4k	8k
SPL 1.1	87	89	91	93	93	89
SPL max.	102	104	106	108	108	104
Q-factor	1.3	2.2	4.5	11.6	25.7	58.9
Hor. angle (deg)	360	360	220	190	130	100
Vert. angle (deg)	360	120	70	32	18	10

Quick reference table

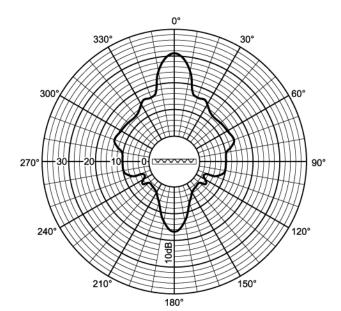




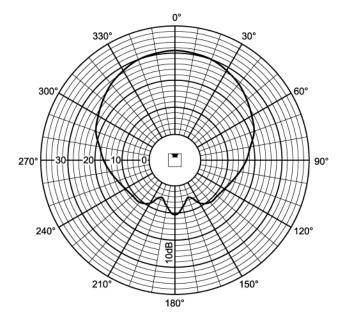




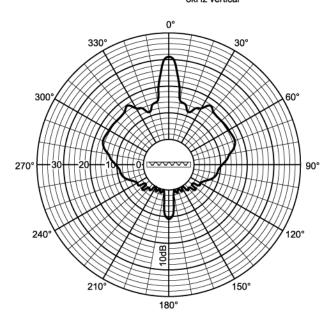
LBC 3200/00 4kHz vertical



LBC 3200/00 8kHz horizontal



LBC 3200/00 8kHz vertical



Parts Included

Quantity	Component
1	LBC 3200/00 Line Array Loudspeaker
1	Wall Mounting Bracket

Technical Specifications

Electrical*

Maximum Power	45 W			
Rated Power	30 W (30-15-7.5 W)			
Sound Pressure Level at 30 W/1 W (at 1 kHz, 1 m)	106 dB / 91 dB (SPL)			
Effective Frequency Range (-10 dB)	190 Hz to 18 kHz			
Opening Angle (at 1 kHz/4 kHz, -6 dB)				
Horizontal	220°/130°			
Vertical	70°/18°			
Rated Input Voltage	100 V			
Rated Impedance	333 ohm			
Mechanical				
Connection	Screw Terminal Block			
Dimensions (H x W x D)	600 x 80 x 90 mm (23.62 x 3.15 x 3.54 in)			
Color	Silver			
Weight	3 kg			
Environmental				

Environmental

-25°C to +55°C Ambient Temperature

Ordering Information

Model | Description

LBC 3200/00 Line Array Indoor Loudspeaker for small and medium indoor environments, 30 W

Hardware Accessories

LBC 1259/00 Loudspeaker Floor-stand

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Fax: +1 800 289 0096
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^{*)} Technical performance data acc. to IEC 60268-5