# LBC 3200/00 Line Array Indoor Loudspeaker

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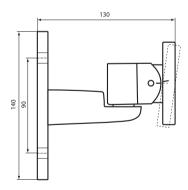


- ► Extended listening area
- ▶ Excellent intelligibility of speech and music
- ► Uniform distribution of natural sound throughout the room
- ► Ideal combination of advanced acoustics and easy application
- ► EN 54-24 certified

This loudspeaker, with its good directivity, can handle small and medium indoor environments such as 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) makes it extremely unobtrusive.

## **System overview**

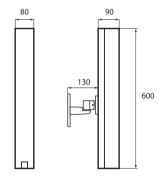
A wall bracket for mounting the line array onto walls and pillars is included with the loudspeaker. It is fully adjustable in two perpendicular planes for accurate positioning. For temporary installations, the LBC 3200/00 can be mounted on an LBC 1259/01 floor stand with an M10 threaded bolt without additional accessories.



Dimensions in mm of included mounting bracket (with marked angle)



Detail mounting bracket



Dimensions in mm



Mounted on optional loudspeaker stand (LBC 1259/01) 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 knockout slots for cables.

## **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 enable reproduction of remarkably clear, natural sound, giving excellent intelligibility of both speech and music. Greater coverage is achieved, so more people can be reached with perceptually perfect sound. All this makes this small line array loudspeaker very suitable for use in small to medium sized applications.

### **Easy Installation**

The positioning of the drivers in the array generates larger vertical opening angles for high frequencies, reducing the narrow 'beaming' of higher tones. As an example, the vertical opening angle is still 18° at 4 kHz. Having larger vertical opening angles makes

installation easier, as the positioning of the loudspeakers is easier 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 of suppression from the 500 Hz octave band at 90°. This provides a much clearer, less colored sound, and greatly reduces the possibilities 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.

### **Emergency 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. This maintains system integrity, ensuring that loudspeakers within the same loudspeaker zone in other areas can still be used to inform people of the situation.

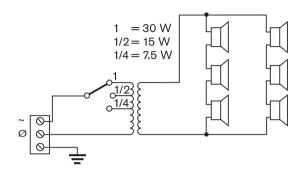
# **Certifications and approvals**

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.

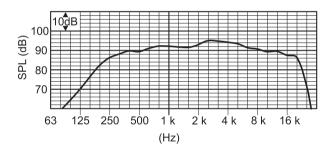
Safety	acc. to EN 60065 and CE
Emergency	acc. to EN 54-24 / BS 5839-8 / EN 60849
Impact	acc. to EN 50102, IK 07
Water and dust protection	acc. to IEC 60529, IP 32

Region	Certification
Europe	CPR
	CE
	CE DOP
Poland	CNBOP

### Installation/configuration notes



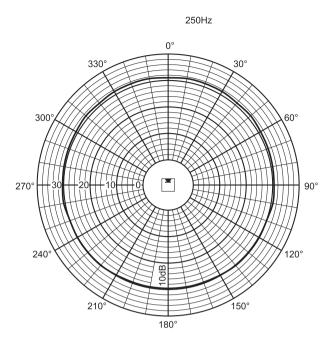
Circuit diagram



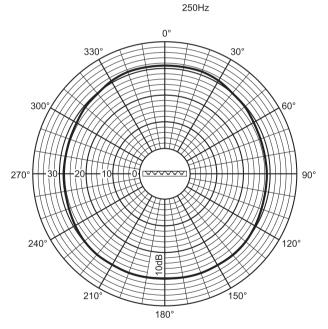
### Frequency response

	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
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
H. angle (deg)	360	360	220	190	130	100
V. angle (deg)	360	120	70	32	18	10

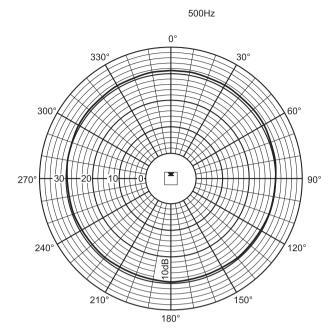
Acoustical performance specified per octave



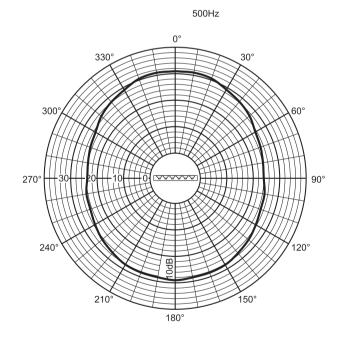
Polar diagram horizontal



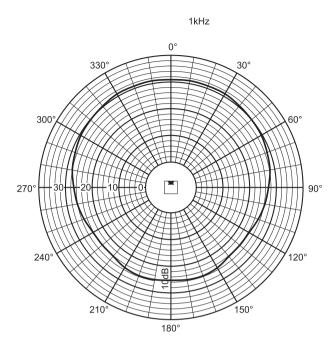
Polar diagram vertical



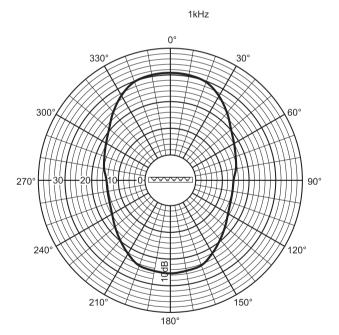
Polar diagram (horizontal)



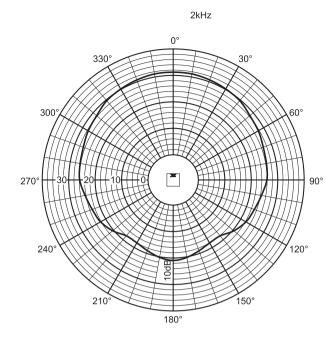
Polar diagram (vertical)



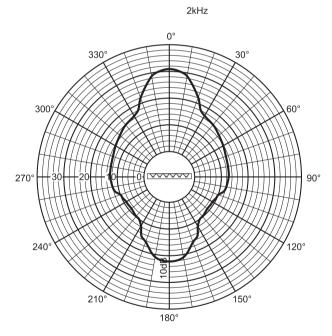
Polar diagram (horizontal)



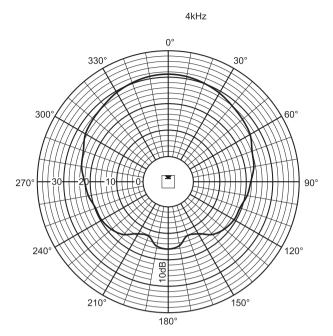
Polar diagram (vertical)



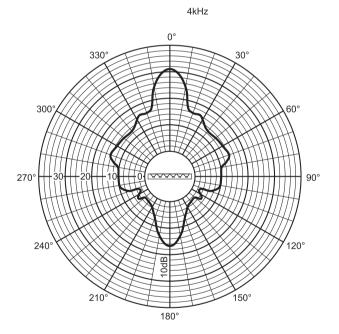
Polar diagram (horizontal)



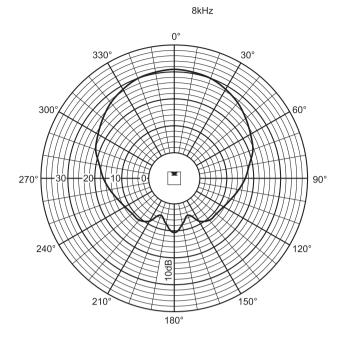
Polar diagram (vertical)



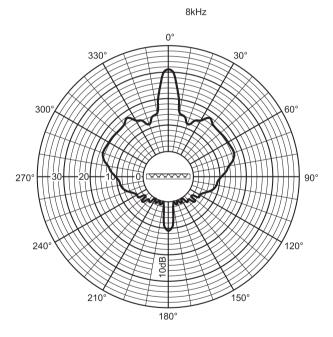
Polar diagram (horizontal)



Polar diagram (vertical)



Polar diagram (horizontal)



Polar diagram (vertical)

Parts included	
Quantity	Component
1	LBC 3200/00 Line array indoor loudspeaker
1	Wall mounting bracket

# **Technical specifications**

## Electrical\*

Maximum power	45 W	
Rated power	30 / 15 / 7.5 W	
Sound pressure level at 30 W / 1 W (1 kHz, 1 m)	106 / 91 dB (SPL)	
Sound pressure level at 30 W / 1 W (1 kHz, 4 m)	91 / 76 dB (SPL)	
Effective frequency range (-10 dB)	190 Hz to 18 kHz	
Opening angle	1 kHz / 4 kHz (-6 dE	3)
horizontal	220°/130°	
vertical	70° / 18°	
Rated input voltage Rated impedance		100 V
	30 W	333 Ohm
	15 W	667 Ohm
	7.5 W	1333 Ohm
Connector	Screw terminal block	

<sup>\*</sup> Technical performance data acc. to IEC 60268-5

## Mechanical

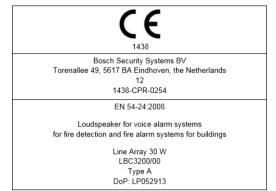
Dimensions (H x W x D)	600 x 80 x 90 mm (23.62 x 3.15 x 3.54 in)
Weight	3 kg (6.6 lb)
Color	Light gray (matches RAL 9022)

# **Environmental**

Operating temperature	-25 °C to +55°C (-13 °F to +131 °F)
Storage and transport temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%

#### Note:

- The specification data is measured in an anechoic chamber, free field
- The reference axis is perpendicular to the center point of the front grille
- The reference plane is perpendicular to the center of the reference axis
- The horizontal plane is perpendicular to the center of the reference plane



CE-label

# **Ordering information**

# LBC 3200/00 Line Array Indoor Loudspeaker

Line array loudspeaker for small and medium indoor environments, 30 W, extended listening area, aluminum extruded enclosure, EN54-24 certified, light gray, swivel wall-mounting bracket included.

Order number LBC3200/00

### Accessories

## LBC 1259/01 Universal Floorstand

Universal floor stand lightweight aluminum construction, foldable, M10 x 12 reducer flange. Order number **LBC1259/01** 

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