

LBC 3950/01 Ceiling Loudspeaker



Security Systems



- Compact yet powerful
- Very wide opening angle
- Modern unobtrusive styling
- Installation friendly
- Splash-waterproof
- Comply with international installation and safety regulations

With this loudspeaker, Bosch provides impressive audio performance at an economical price. The 9 W (maximum power) ceiling loudspeaker is suitable for indoor public address installations, particularly in applications with smaller areas such as hotel rooms, shops, offices and elevators.

Functions

The LBC 3950/01 has a circular pattern plastic grille with a plastic surround, finished in an attractive off-white RAL color. The unobtrusive styling of this loudspeaker complements today's interior lighting.

The loudspeaker feature a very wide opening angle, which means fewer units are required to cover a given area. The wide frequency range means better speech and music reproduction. The unit is supplied with a 100 V matching transformer with taps on the primary winding for full-power, half-power, quarter-power and eighth-power radiation.

The loudspeaker (with special treated paper cone), is IP x 4 water protected from the front and can be applied in humidity environments for example bathrooms, sauna's, atriums and swimming pool areas.

Parts Included

Quantity	Component
1	LBC 3950/01 Ceiling Loudspeaker

Certifications and Approvals

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times their rated 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.

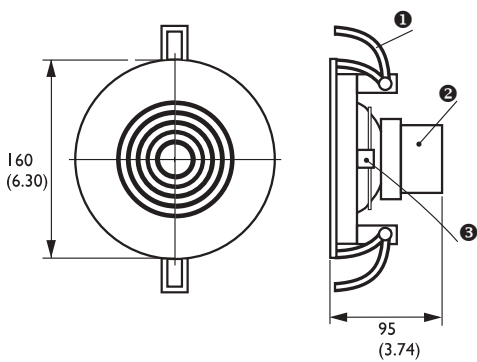
All plastic parts are manufactured from self-extinguishing high-impact ABS material (according to UL 94V0).

Safety	EN 60065
Water protected	acc. to EN 60529 IP x4

BOSCH

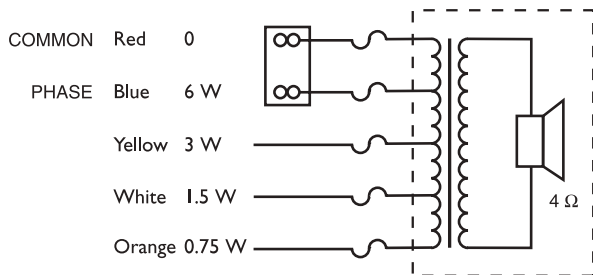
Installation/Configuration Notes

Installation is made easy with integral clips that securely hold the ceiling loudspeaker in its cut-out. Ceilings from 9 to 25 mm thick can be accommodated. A template is also provided for accurately marking the cutout in ceiling panels. Wiring is via a connection block with push-type terminals, making installation possible without using any special tools. The terminal blocks have provision for loop-through wiring. The transformer is delivered wired for 6 W rated output power, but can easily be changed for other connections using the color-coded wires and terminal block.

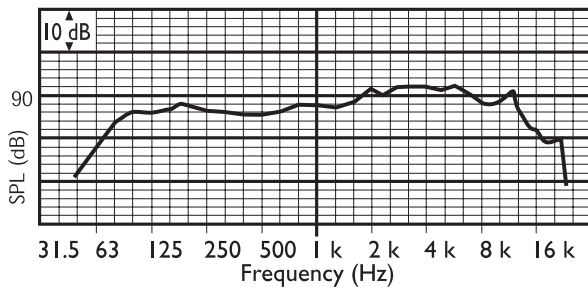


- 01 Clamp
- 02 Matching Transformer
- 03 Terminal Block

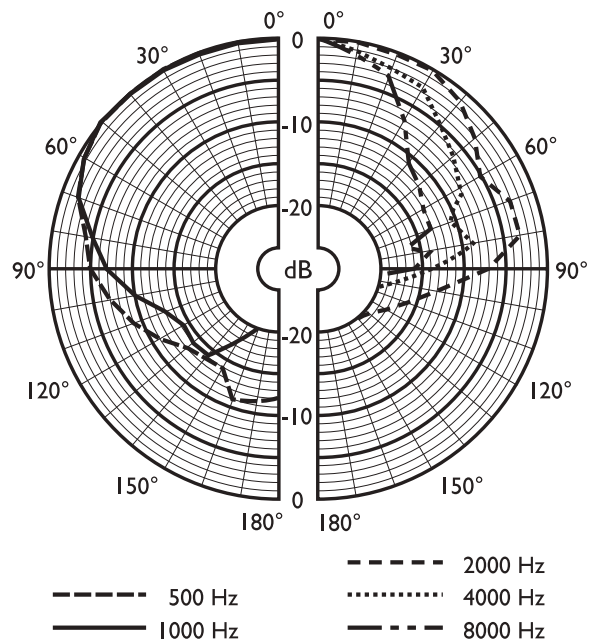
Dimensions in mm (inch)



Circuit diagram



Frequency response



Polar diagram

Octave band (Hz)	125	250	500	1k	2k	4k	8k
SPL 1.1	87	88	86	88	89	91	89
SPL max.	95	96	94	96	97	99	97
Q-factor	4	5.6	2.6	3	3.8	8.1	15
Efficiency	0.16	0.14	0.19	0.27	0.26	0.19	0.06
Hor. angle	180	180	180	170	165	90	55
Vert. angle	180	180	180	170	165	90	55

Quick reference table

Technical Specifications**Electrical***

Max. Power	9 W
Rated Power (PHC)	6 W (6 - 3 - 1.5 - 0.75 W)
Sound Pressure Level at 6 W/1 W (at 1 kHz, 1 m)	96/88 dB (SPL)
Effective Frequency Range	60 Hz to 18 kHz(-10 dB)
Opening Angle	170° / 90°(at 1 kHz/4 kHz, -6 dB)
Rated Voltage	100 V
Rated Impedance	1667 ohm

Mechanical

Speaker Size	101.6 mm (4 in)
Magnet Weight	3.57 oz
Connection	2-pole push connector

Dimensions

Diameter	160 mm (6.30 inch)
Max. Depth	95 mm (3.74 inch)
Ceiling Thickness	9 to 25 mm (0.35 to 0.98 inch)
Mounting Cut-Out	145 mm (5.71 inch)
Color	off-white (RAL 9010)
Weight	690 g (1.52 lb)

Environmental

Ambient Temperature	-25°C to +55 °C (-13 to 131 °F)
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Ordering Information**Model & Description**

LBC 3950/01 Ceiling Loudspeaker
LBC 1256/00 EVAC Connection Adapter
3-pole screw connector

*) Technical performance data acc. to IEC 60268-5

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