



# LBC 3950/01 Ceiling Loudspeaker



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

The LBC 3950/01 is a compact, 6 W loudspeaker with a circular plastic grille. It has excellent audio performance and is easy to install with its integral mounting clips. The loudspeaker is IPx4 water protected from the front so it can be installed in humid environments.

## 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 modern 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 4 water protected from the front and can be applied in humidity environments for example bathrooms, saunas, atriums and swimming pool areas.

## Certifications and Approvals

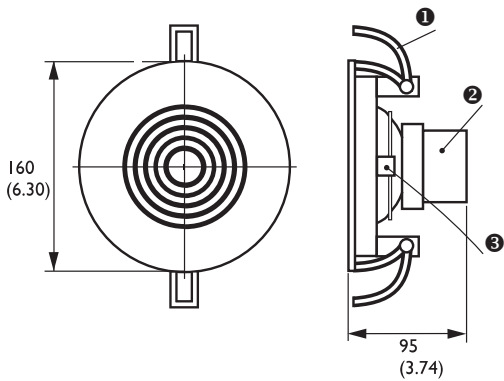
All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times their rated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

Region	Certification
Europe	CE Declaration of Conformity
Safety	acc. to EN 60065
Water protected	acc. to EN 60529, IPx4

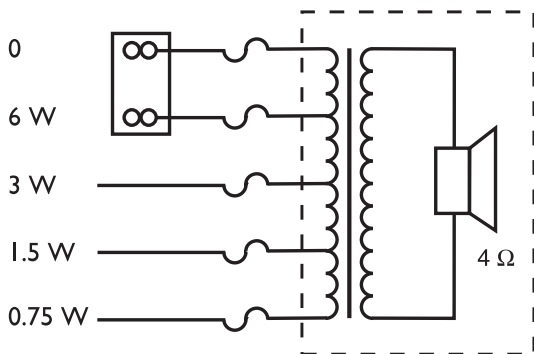
**Installation/Configuration Notes**

Installation is 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.

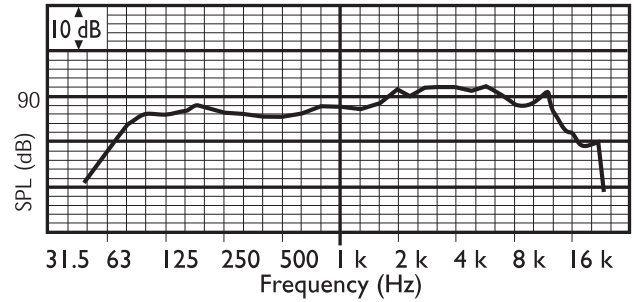


- 01 Clamp
- 02 Matching transformer
- 03 Terminal block

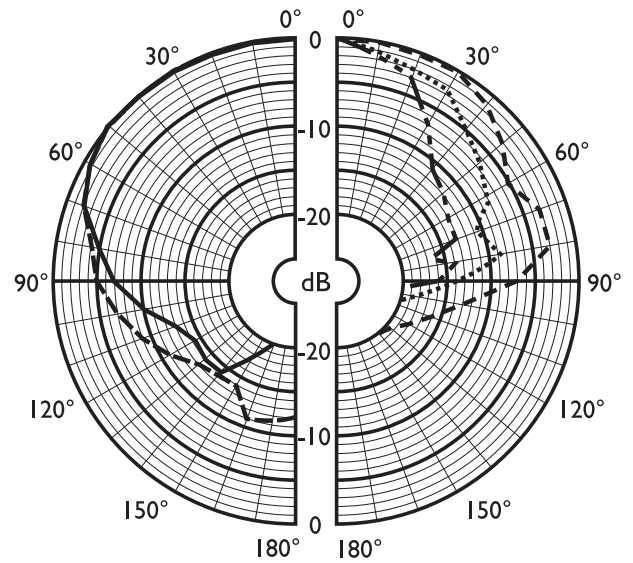
Dimensions in mm (in)



Circuit diagram



Frequency response



Polar diagram

	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
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
H. angle	180	180	180	170	165	90	55
V. angle	180	180	180	170	165	90	55

Acoustical performance specified per octave

## Technical Specifications

### Electrical\*

Maximum power	9 W
Rated power	6 / 3 / 1.5 / 0.75 W
Sound pressure level at 6 W / 1 W (1 kHz, 1 m)	96 dB / 88 dB (SPL)
Effective frequency range (-10 dB)	60 Hz to 18 kHz
Opening angle at 1 kHz/4 kHz (-6 dB)	170° / 90°
Rated voltage	100 V
Rated impedance	1667 ohm
Connector	2-pole push-in terminal block

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

### Mechanical

Diameter	160 mm (6.30 in)
Maximum depth	95 mm (3.74 in)
Ceiling thickness	9 to 25 mm (0.35 to 0.98 in)
Mounting cut-out	145 mm (5.71 in)
Speaker diameter	101.6 mm (4 in)
Weight	690 g (1.52 lb)
Color	Off-white (RAL 9010)
Magnet weight	101 g (3.57 oz)

### Environmental

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

## Ordering Information

<b>LBC 3950/01 Ceiling Loudspeaker</b> 6 W, with a circular plastic grille.	<b>LBC3950/01</b>
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### Accessories

<b>LBC 1256/00 EVAC Connection Adapter</b> 3-pole screw connector, 100 pieces	<b>LBC1256/00</b>
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