

- COMPACT YET POWERFUL •
- VERY WIDE OPENING ANGLE •
- MODERN UNOBTRUSIVE STYLING •
- INSTALLATION FRIENDLY •
- COMPLY WITH INTERNATIONAL INSTALLATION AND SAFETY REGULATIONS •

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

Unobtrusive styling

Two modern grille styles are available. The LBC 3950/01 has a circular pattern plastic grille with a plastic surround, and the LBC 3951/01 has a perforated metal grille with a plastic surround. Both models are finished in an attractive off-white RAL colour. The unobtrusive styling of these loudspeakers complements today's interior lighting.

Excellent audio performance

The loudspeakers 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 units are supplied with a 100 V matching transformer with taps on the primary winding



LBC 3950/01



LBC 3951/01

LBC 3950/01, LBC 3951/01

CEILING LOUDSPEAKERS

for full-power, half-power, quarter-power and eighth-power radiation.

Installation friendly

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 cut-out in ceiling panels. Wiring is via a convenient 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 colour-coded wires and terminal block.

Safety aspects

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

common with all Philips products, care is taken to meet high safety standards. These enclosures comply with the relevant safety and installation regulations of EN 60065.

Quality assurance

All Philips loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Philips 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.



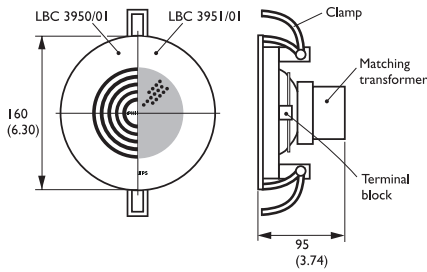
SPECIFICATIONS

LBC 3950/01, LBC 3951/01

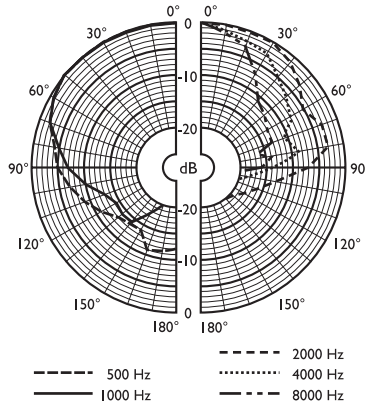
CEILING LOUDSPEAKER

TECHNICAL PERFORMANCE DATA ACC. TO IEC 268-5

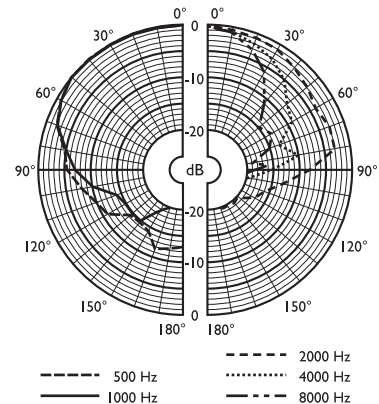
	LBC 3950/01	LBC 3951/01
Max. power	9 W	9 W
Rated power (PHC)	6 W (6 - 3 - 1.5 - 0.75 W)	6 W (6 - 3 - 1.5 - 0.75 W)
Sound pressure level at 6 W/1 W (at 1 kHz, 1 m)	96/88 dB (SPL)	96/88 dB (SPL)
Effective frequency range (-10 dB)	60 Hz to 18 kHz	60 Hz to 18 kHz
Opening angle (at 1 kHz/4 kHz, -6 dB)	170°/90°	170°/80°
Rated voltage	100 V	100 V
Rated impedance	1667 Ω	1667 Ω
Speaker size	4"	4"
Magnet weight	3.57 oz	3.57 oz
Ambient temperature range	-25 to +55 °C (-13 to 131 °F)	-25 to +55 °C (-13 to 131 °F)
Safety	acc. to EN 60065	acc. to EN 60065
Self-extinguishing	acc. to UL 94V0	acc. to UL 94V0
Connection	2-pole push connector	2-pole push connector
Dimensions diameter	160 mm (6.30 in)	160 mm (6.30 in)
max. depth	95 mm (3.74 in)	95 mm (3.74 in)
ceiling thickness	9 to 25 mm (0.35 to 0.98 in)	9 to 25 mm (0.35 to 0.98 in)
Mounting cut-out	145 mm (5.71 in)	145 mm (5.71 in)
Colour	off-white (RAL9010)	off-white (RAL9010)
Weight	690 g (1.52 lb)	670 g (1.47 lb)



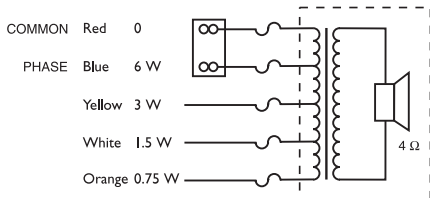
Dimensions in mm (inches)



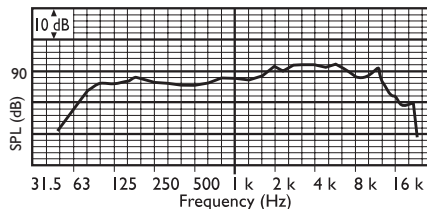
Polar diagram LBC 3950/01



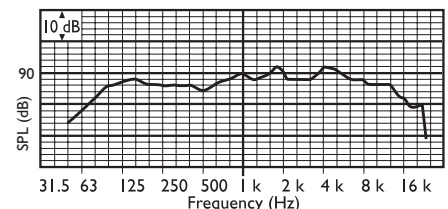
Polar diagram LBC 3951/01



Circuit diagram



Frequency response LBC 3950/01



Frequency response LBC 3951/01

LBC 3950/01							
Octave band (Hz)	125	250	500	1 k	2 k	4 k	8 k
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

LBC 3951/01							
Octave band (Hz)	125	250	500	1 k	2 k	4 k	8 k
SPL 1.1	87	87	85	88	89	89	86
SPL max.	95	95	93	96	97	97	94
Q-factor	4	5.6	2.2	3.2	4.6	10.7	19
Efficiency	0.16	0.11	0.18	0.25	0.22	0.09	0.03
Hor. angle	180	180	180	170	160	80	60
Vert. angle	180	180	180	170	160	80	60



PHILIPS

Let's make things better.