

LB1-UM06E-1 Cabinet loudspeaker, metal, circular

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Invented for life



- ▶ Suitable for speech and music reproduction
- ▶ Robust metal enclosure
- ▶ Surface and/or recessed mounting
- ▶ Provision for internal mounting of the optional line/loudspeaker supervision boards
- ▶ Recommended for voice evacuation systems

The LB1-UM06E-1 circular metal cabinet emergency loudspeaker delivers professional performance from a robust, yet aesthetically designed metal enclosure. It is an ideal loudspeaker for indoor use in offices, schools, car parks, shopping centers, and in areas where vandalism is a potential hazard.

Functions

Voice alarm

Voice alarm loudspeakers are specifically designed for use in buildings, where the performance of PA systems is subject to official regulations. The LB1-UM06E-1 is designed for voice alarm systems, and is compliant with British Standard BS 5839-8 and EN 60849.

Protection

The loudspeaker has built-in protection to ensure that in the event of a fire damage does not cause failure of the connected circuit. In this way, system integrity is maintained; ensuring loudspeakers in other areas can still be used to inform people of the situation.

Connections and safety

The loudspeaker has a ceramic terminal block, thermal fuse, and heat-resistant, high-temperature wiring. The cabinet has a provision for internally mounting the optional line/loudspeaker supervision board.

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 the speakers can withstand two times their rated power for short durations. This ensures extra reliability under extreme conditions, leading to greater customer satisfaction, longer operating life, and much less chance of failure or performance deterioration.

Safety	according to EN 60065
Emergency	according to BS 5839-8
	according to EN 60849

	according to EN 54-24	
Water and dust protection	according to EN60529 IP32 IP21C verified for EN54-24 by CNBOP	

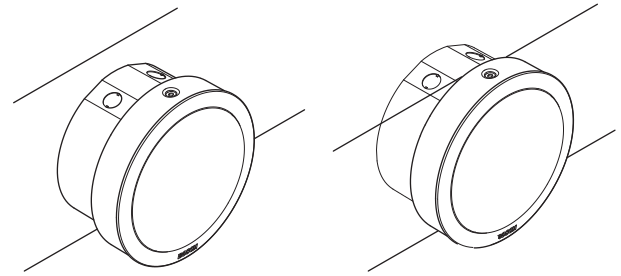
Region	Regulatory compliance/quality marks	
Europe	CE	DOP
	CE	DECL EC LB1-UM06E-1
	CPD	

Installation/configuration notes

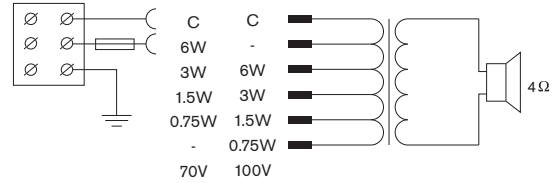
The cabinet is designed for both surface and recessed mounting on walls. The back box provides a selection of mounting holes, even for mounting on U40 and MK installation boxes. The back box has two knockout holes on the topside for two cable glands (not included) for loop-through connection. For extra installation convenience, a safety cord from the back box lets the installer temporarily hang the front grille unit during installation.

The cabinet has a three-way terminal block with screw connections suitable for loop-through wiring (including earth).

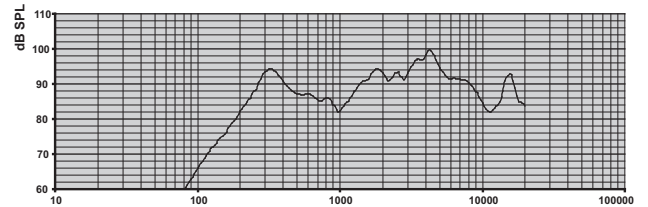
Four primary taps on the matching transformer allow selection of nominal full-power, half-power, quarter-power or eighth power radiation (in 3 dB steps).



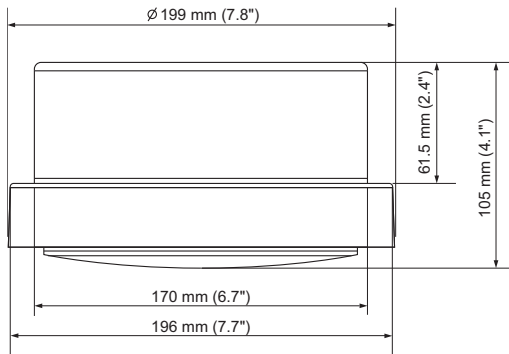
Surface mounted (left) and recessed mounted (right)



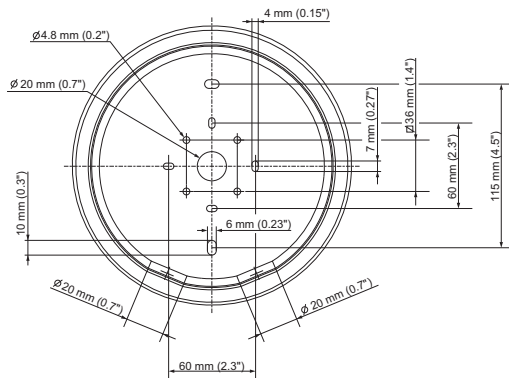
Circuit diagram



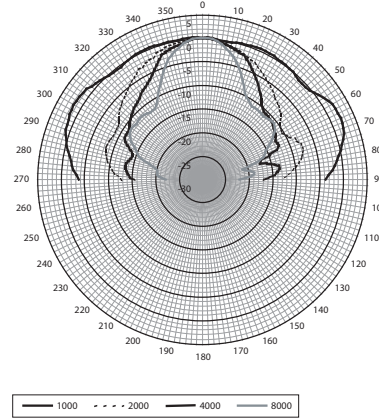
Frequency response



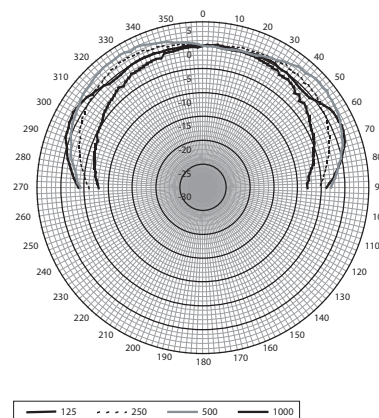
Dimensions in mm (in)



Rear / Installation dimensions in mm (in)



— 1000 - - - 2000 — 4000 — 8000



— 125 - - - 250 — 500 — 1000

Polar diagrams (measured with pink noise)

Octave band sensitivity *

	Octave SPL 1W/m	Total octave SPL 1W/m	Total octave SPL Pmax/m
125 Hz	73.3	-	-
250 Hz	90.4	-	-
500 Hz	89.0	-	-
1000 Hz	86.0	-	-
2000 Hz	92.4		
4000 Hz	96.6	-	-
8000 Hz	89.9	-	-
A-weighted	-	89.9	96.8
Lin-weighted	-	90.1	96.0

Octave band opening angles

	Horizontal	Vertical	
125 Hz	180	180	
250 Hz	180	180	
500 Hz	180	180	
1000 Hz	180	180	
2000 Hz	80	80	
4000 Hz	56	56	
8000 Hz	40	40	

Acoustical performance specified per octave

* (all measurements are done with a pink noise signal; the values are in dB SPL)

Parts included

Quantity	Component
1	LB1-UM06E-1 Cabinet loudspeaker, metal, circular
1	Installation instruction

Technical specifications

Electrical*

Rated power (PHC)	6 W
Power tapping	6 / 3 / 1.5 / 0.75 W
Sound pressure level at 6 W / 1 W (1 kHz, 1 m)	94 / 86 dB (SPL)
Sound pressure level at 6 W / 1 W (4 kHz, 4 m)	82 / 74 dB (SPL)

Effective frequency range (-10 dB)	160 Hz to 20 kHz		
Opening angle at 1 kHz / 4 kHz (-6 dB)	180° / 56°		
Rated input voltage	70 V	100 V	
Rated impedance	6 W	835 Ohm	1667 Ohm
	3 W	1667 Ohm	3333 Ohm
	1.5 W	3333 Ohm	6667 Ohm
	0.75 W	6667 Ohm	13333 Ohm
Connector	3-pole screw terminal block		

* Technical performance data acc. to IEC 60268-5

Mechanical


Dimensions (W x D)	199 x 105 mm (7.8 x 4.1 in)
Weight	1.23 kg (2.71 lb)
Color	White (RAL 9010)
Material (back box and grille)	Steel
Speaker size	152.4 mm (6 in)
Magnet weight	53 g (1.9 oz)

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

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Bosch Security Systems BV Torenallee 49, 5617 BA Eindhoven, the Netherlands 10 1438/CPD/0195
EN 54-24:2008 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Metal Cabinet Loudspeaker 6 W LB1-UM06E-1 Type A DoP: LP032922

Ordering information

LB1-UM06E-1 Cabinet loudspeaker, metal, circular
Cabinet loudspeaker 6 W, circular, metal enclosure,
water and dust protected IP 32, EN54-24 certified,
white RAL 9010.
Order number **LB1-UM06E-1**

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