

# LB1-UM06E-1 Metal Cabinet Loudspeaker

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**BOSCH**  
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

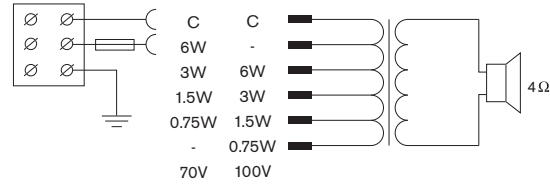
Region	Certification
Europe	CE
	CPD

**Installation/configuration notes**

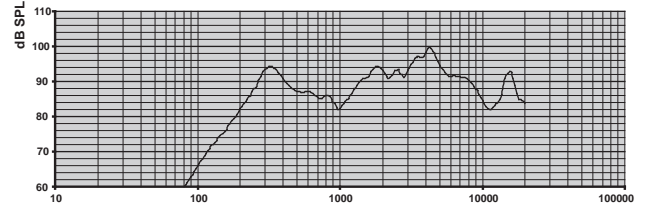
The cabinet is designed for both surface and recessed mounting on walls. The back box provides a selection of mounting holes, even for mounting on U40 and MK installation boxes. The back box has two knockout holes on the topside for two cable glands (not included) for loop-through connection. For extra 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).

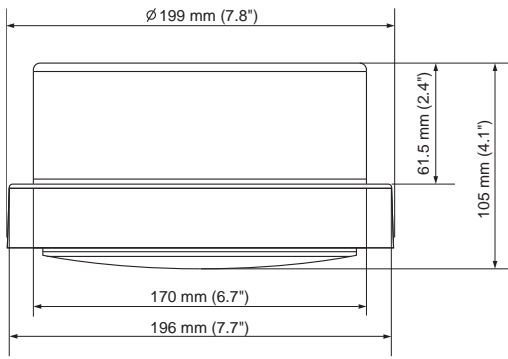
Four primary taps on the matching transformer allow selection of nominal full-power, half-power, quarter-power or eighth power radiation (in 3 dB steps).



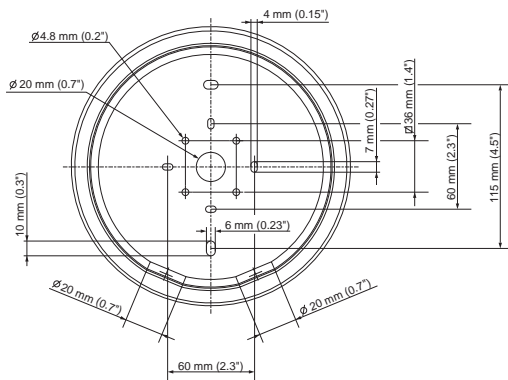
Circuit diagram



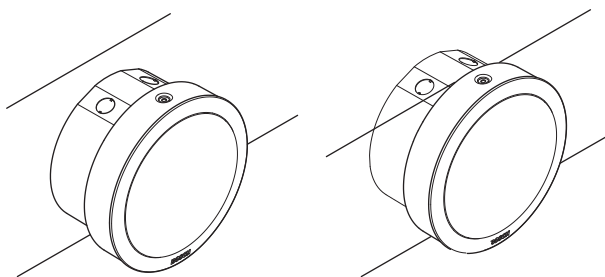
Frequency response



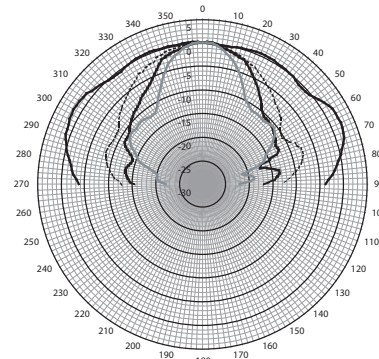
Dimensions in mm (in)



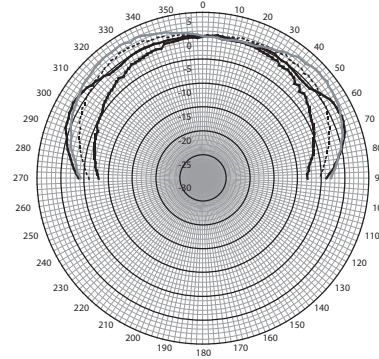
Rear / Installation dimensions in mm (in)



Surface mounted (left) and recessed mounted (right)



Legend: 1000, 2000, 4000, 8000



Legend: 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	-	-

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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 dBSPL)

#### Parts included

Quantity	Components
1	LB1-UM06E-1
1	Installation instruction

#### Technical specifications

##### Electrical\*

Maximum power	9 W
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, 1 m)	105 / 97 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	70/100 V
Rated impedance	835/1667 ohm
Connector	3-pole screw block

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

##### Mechanical


Dimensions (W x D)	199 x 105 mm
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	(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 temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%

Other parameters are available in CNBOP test report nr 4782/BA/10.

 1438
Bosch Security Systems BV Kapittelweg 10, 4827 HG Breda, 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 6 W LB1-UM06E-1 Type A

#### Ordering information

##### LB1-UM06E-1 Metal Cabinet Loudspeaker

6 W

Order number **LB1-UM06E-1**

**Represented by:**

**Americas:**

Bosch Security Systems, Inc.  
12000 Portland Avenue South  
Burnsville MN 55337, USA  
Phone: +1-800-392-3497  
Fax: +1-800-955-6831  
audiosupport@us.bosch.com  
www.boschsecurity.com

**Europe, Middle East, Africa:**

Bosch Security Systems B.V.  
P.O. Box 80002  
5617 BA Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
Fax: +31 40 2577 330  
emea.securitysystems@bosch.com  
www.boschsecurity.com

**Asia-Pacific:**

Robert Bosch (SEA) Pte Ltd, Security  
Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6571 2808  
Fax: +65 6571 2699  
apr.securitysystems@bosch.com  
www.boschsecurity.asia

**China:**

Bosch (Shanghai) Security Systems Ltd.  
201 Building, No. 333 Fuquan Road  
North IBP  
Changning District, Shanghai  
200335 China  
Phone +86 21 22181111  
Fax: +86 21 22182398  
www.boschsecurity.com.cn

**America Latina:**

Robert Bosch Ltda Security Systems Division  
Via Anhanguera, Km 98  
CEP 13065-900  
Campinas, Sao Paulo, Brazil  
Phone: +55 19 2103 2860  
Fax: +55 19 2103 2862  
al.securitysystems@bosch.com  
www.boschsecurity.com