

LBC3432/03 Sound projector 20W metal unidirectional

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Invented for life



- ▶ Excellent speech and music reproduction
- ▶ Provision for supervision board mounting
- ▶ (Suspended) ceiling and/or wall mounting
- ▶ Water and dust protected to IP 66
- ▶ EN 54-24 certified

The LBC 3432/03 is a powerful 20 W sound projector intended for speech and music reproduction in indoor and outdoor applications. The sturdy, aluminum enclosure is finished in the color white. It has provisions for cable loop through connection and inside mounting of a line- or loudspeaker- supervision board. The sound projector is suitable for use in voice alarm systems.

Functions

Voice alarm loudspeakers are specifically designed for use in buildings where performance of systems for verbal communication announcements is governed by regulations. The LBC 3432/03 is designed for use in voice alarm systems and is compliant with British Standard BS 5839-8 and EN 60849.

The sound projector has provision inside for mounting an optional line/loudspeaker supervision board. The loudspeaker has built-in protection to secure that, in the event of a fire; damage to the loudspeaker does not result in failure of the circuit to which it is connected. In this way, system integrity is maintained; ensuring loudspeakers in other areas can still be used

to inform people of the situation. The loudspeaker has a ceramic terminal block, thermal fuse and heat resistant, high-temperature wiring. The sound projector is constructed from extruded aluminum and finished in white. The front-grill, rear cover and bracket are made from aluminum to increase corrosion resistance.

Certifications and approvals

Quality assurance

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 60268-5 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 improved reliability under extreme conditions, leading to higher customer satisfaction, longer operating life, and lessens the chance of failure or performance deterioration.

Safety	acc. to EN 60065
Emergency	acc. to EN 54-24 / BS 5839-8 / EN 60849
Water and dust protection	acc. to IEC 60529, IP 66 IP33C verified for EN54-24 by CNBOP

Region	Regulatory compliance/quality marks	
Europe	CE	DECL EC LBC3432_03
	CE	DOP
	CPD	

Installation/configuration notes

Mounting

A sturdy aluminum mounting bracket is supplied to allow easy mounting and directing in virtually any position. The sound projector may also be suspended using the bracket.

Power Setting

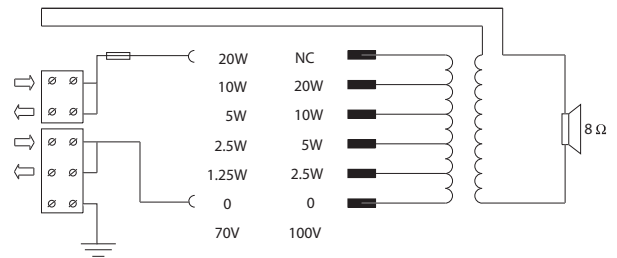
The loudspeaker includes a transformer for both 70 V and 100 V with taps on the primary winding for different power settings.

The required power radiation (in 3 dB steps) can easily be selected by connecting to the appropriate tap.

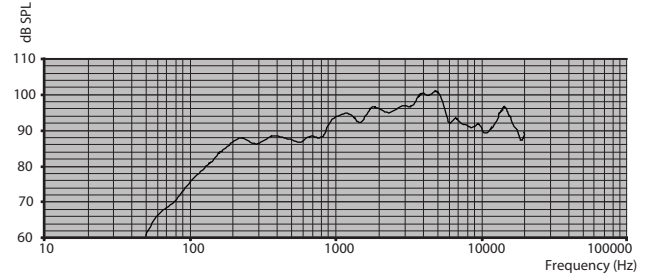
The connection cable is fed out through an ABS cable gland (PG13.5) in the rear cover.

The wires can be terminated on the ceramic screw terminal.

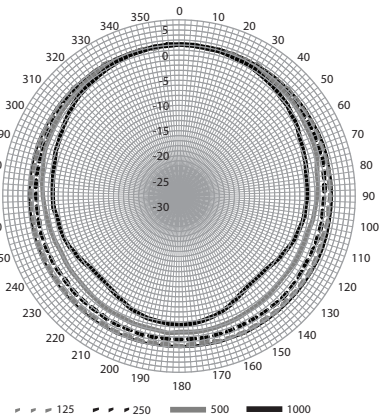
For loop-through connection, the rear cover is fitted with a second hole (covered as standard supplied). In the rear cover, an provision for inside mounting of the optional line-/loudspeaker- supervision board is available.



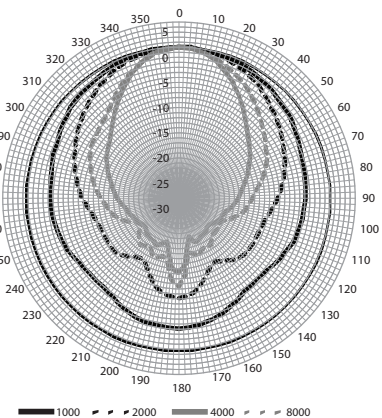
Circuit diagram



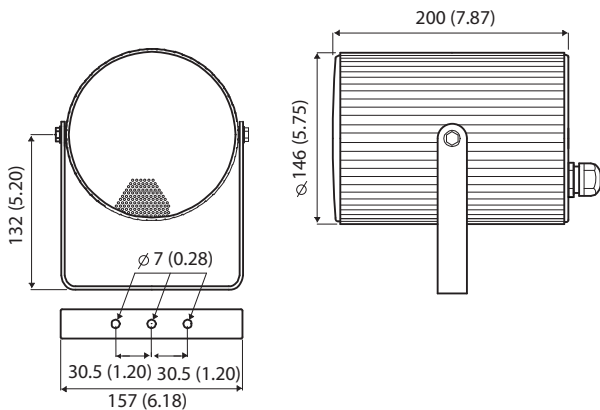
Frequency response



Polar diagram



Polar diagram



Dimensions in mm / (in)

Octave band sensitivity *

	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	81.1	-	-
250 Hz	88.6	-	-
500 Hz	88.3	-	-
1000 Hz	93.8	-	-
2000 Hz	96	-	-
4000 Hz	100.4	-	-
8000 Hz	94.5	-	-
A-weighted	-	93.8	105.3
Lin-weighted	-	93.8	105.7

Octave band opening angles

	Horizontal	Vertical	
125 Hz	360	360	
250 Hz	360	360	
500 Hz	360	360	
1000 Hz	224	224	
2000 Hz	110	110	
4000 Hz	56	56	
8000 Hz	70	70	

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	LBC3432/03 Unidirectional Sound Projector 20 W
1	Installation Instruction

Technical specifications

Electrical*

Rated power (PHC)	20 W
Power tapping	20 / 10 / 5 / 2.5 W (1.25 W, 70 V only)
Sound pressure level at 20 W / 1 W (1kHz, 1 m)	107 / 94 dB (SPL)
Sound pressure level at 20 W / 1 W (1kHz, 4 m)	95 / 82 dB (SPL)

Opening angle at 1 kHz / 4 kHz (-6 dB)	224° / 56°		
Effective frequency range (-10 dB)	170 Hz to 20 kHz		
Rated voltage	70 V	100 V	
Rated impedance	20 W	250 Ohm	500 Ohm
	10 W	500 Ohm	1000 Ohm
	5 W	1000 Ohm	2000 Ohm
	2.5 W	2000 Ohm	4000 Ohm
	1.25 W	4000 Ohm	N.A.

* Technical performance data acc. to IEC 60268-5

Mechanical


Dimensions (D x L)	146 x 200 mm (5.7 x 7.9 in)
Weight	2.6 kg (5.7 lb)
Color	White (RAL 9010)
Material	Aluminum
Connector	Screw terminal block
Cable diameter	6-12 mm (0.24-0.47 in)

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%
Water/dust protected	According to EN 60529 IP66

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 13 1438/CPD/0328
EN 54-24:2008 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Sound Projector 20 W LBC3432/03 Type B DoP: LP052914

Ordering information

LBC3432/03 Sound projector 20W metal unidirectional
Sound projector 20 W, unidirectional, aluminum extruded enclosure, U-bracket mounting, water and dust protected IP66, EN54-24 certified, white RAL 9010.

Order number **LBC3432/03**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com

North America:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
onlinehelp@us.bosch.com
www.boschsecurity.us

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