

LBC3430/03 Sound projector 12W metal bidirectional

www.boschsecurity.com



BOSCH
Invented for life



- ▶ Excellent speech and music reproduction
- ▶ Ceiling and/or wall mounting
- ▶ Robust aluminum extrusion enclosure
- ▶ Water and dust protected to IP 55
- ▶ EN 54-24 certified

The LBC 3430/03 is a 12 W bidirectional sound projector intended for speech and music reproduction in indoor and outdoor applications. The two loudspeakers facing in opposite directions are ideally suited to applications such as subway tunnels, long corridors and shopping arcades. 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 3430/03 is designed for use in voice alarm systems and is compliant with British Standard BS 5839-8 and EN 60849.

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-grills 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 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 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 55

Region	Certification	
Europe	CE	
	CE	DOP
	CPD	

Installation/configuration notes

Mounting

The sound projector can be mounted to the ceiling or wall by means of two screws. The connection cable is fed out through an ABS cable gland (PG13.5) in the base of the mounting bracket. The wires can be terminated on the inside ceramic screw terminal block.

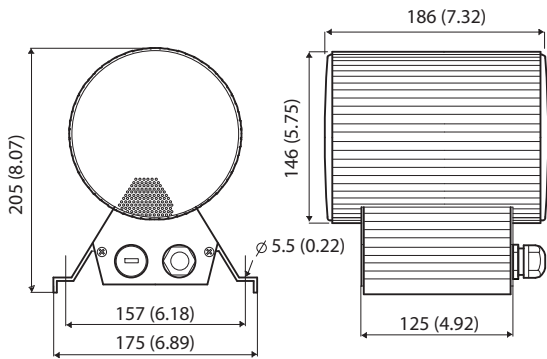
For loop-through connection, the cover plate is fitted with a second hole (covered as standard supplied).

Power Setting

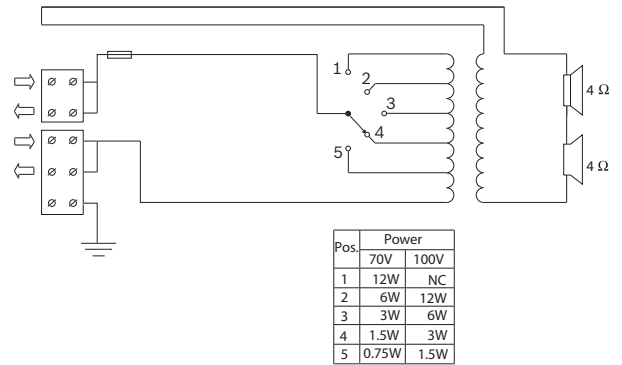
The loudspeaker includes a transformer for both 70 V and 100 V with taps on the primary winding for different power settings.

The required power radiation (in 3 dB steps) can easily be selected via a rotary vari-tap switch, located close to the screw terminal block.

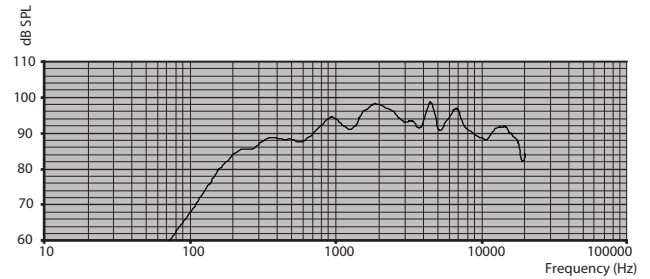
The sound projector has an provision for inside mounting of the optional line-/loudspeaker-supervision board.



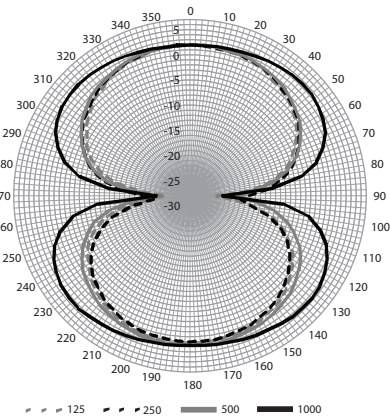
Dimensions in mm/(in)



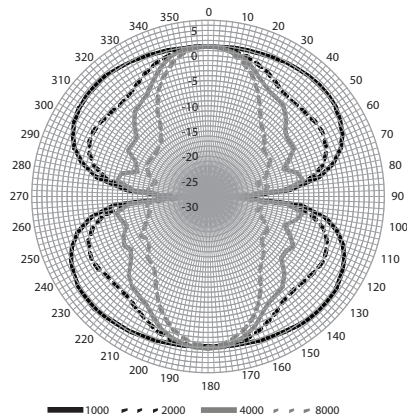
Circuit diagram



Frequency response



Polar diagram



Polar diagram

Octave band sensitivity *

	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	76.2	-	-
250 Hz	86.6	-	-
500 Hz	88.2	-	-
1000 Hz	93.3	-	-
2000 Hz	97.5	-	-
4000 Hz	96.0	-	-
8000 Hz	95.0	-	-
A-weighted	-	92.5	102.7
Lin-weighted	-	92.4	102.7

Octave band opening angles

	Horizontal	Vertical
125 Hz	118	118
250 Hz	119	119
500 Hz	130	130
1000 Hz	158	158
2000 Hz	146	146
4000 Hz	58	58
8000 Hz	48	48

Acoustical performance specified per octave

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

Parts included

Quantity	Component
1	LBC3430/03 Bidirectional Metal Sound Projector 12 W
1	Installation Instruction

Technical specifications

Electrical*

Maximum power	18 W		
Rated power (PHC)	12 W		
Power tapping	12 / 6 / 3 / 1.5 W (0.75 W, 70 V only)		
Sound pressure level at 12 W / 1 W (1kHz, 1 m)	104 dB / 93 dB (SPL)		
Sound pressure level at 12 W / 1 W (1kHz, 4 m)	87 dB / 78 dB (SPL)		
Opening angle at 1 kHz / 4 kHz (-6 dB)	158 ° / 58 °		
Effective frequency range (-10 dB)	190 Hz to 20 kHz		
Rated voltage	70 V	100 V	
Rated impedance	12 W	416 Ohm	833 Ohm
	6 W	835 Ohm	1667 Ohm
	3 W	1670 Ohm	3333 Ohm
	1.5 W	3340 Ohm	6667 Ohm
	0.75 W	6682 Ohm	N.A.

* Technical performance data acc. to IEC 60268-5

Mechanical

Dimensions (D x L)	146 x 186 mm (5.7 x 7.3 in)
Weight	3.5 kg (7.72 lb)
Color	White (RAL 9010)
Material	Aluminum
Connection	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 IP55

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

 1438
Bosch Security Systems BV Torenallee 49, 5617 BA Eindhoven, the Netherlands 13 1438/CPD/0326
EN 54-24:2008 Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings Sound Projector 12 W LBC3430/03 Type B DoP: LP052917

CE label

Ordering information

Sound projector 12W metal bidirectional
 Sound projector 12 W, bidirectional, aluminum extruded enclosure, water and dust protected IP55, EN54-24 certified, white RAL 9010.
 Order number **LBC3430/03**

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