

# LBC 3430/03 Bidirectional Sound Projector

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
<b>Region</b>	<b>Certification</b>
Europe	CE
	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.

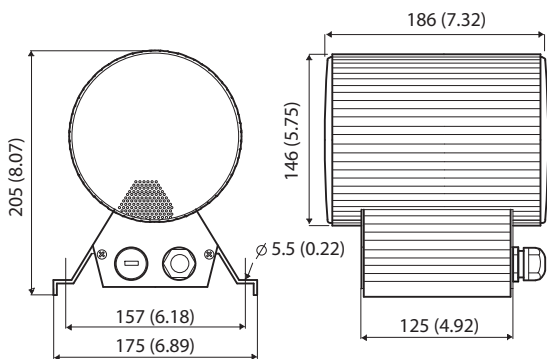
For loop-through connection, the cover plate is fitted with a second hole (covered as standard supplied).

**Power Setting**

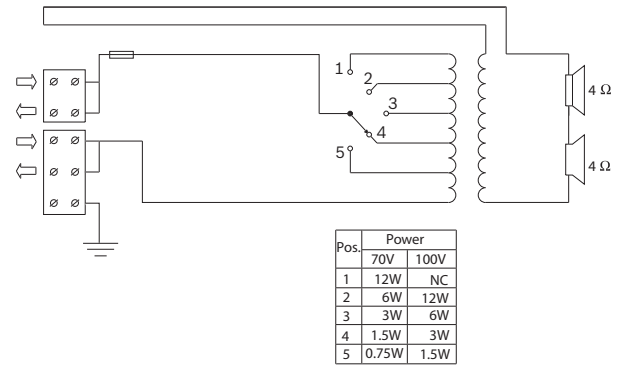
The loudspeaker includes a transformer for both 70 V and 100 V with taps on the primary winding for different power settings.

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.

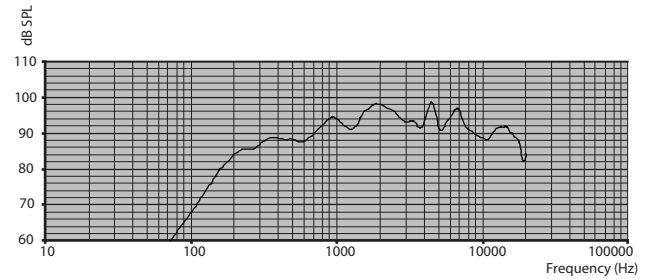
The sound projector has an provision for inside mounting of the optional line-/loudspeaker-supervision board.



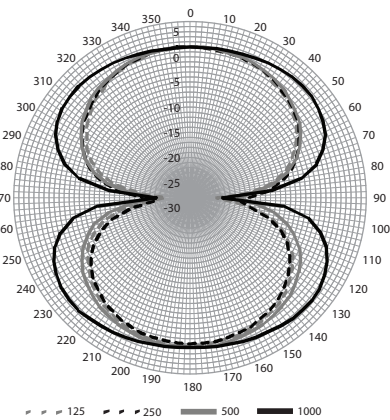
Dimensions in mm/(in)



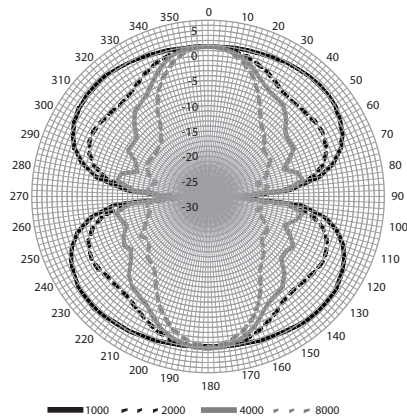
Circuit diagram



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 dB SPL)

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 (1 kHz, 1 m)	104 dB / 93 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	416 / 833 ohm

\* 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 temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%
Water/dust protected	According to EN 60529 IP55



1438

Bosch Security Systems BV  
Torenallee 49, 5617 BA Eindhoven, The Netherlands  
10  
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

## Ordering information

### LBC 3430/03 Bidirectional Sound Projector

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:

##### 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  
latam.boschsecurity@bosch.com  
www.boschsecurity.com