LB2 Premium-sound Cabinet Loudspeaker Range

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- ▶ High-fidelity music and speech reproduction
- ▶ Selectable 8 ohm, 70 V and 100 V inputs
- ► Compact yet robust ABS enclosure
- ▶ Supplied with adjustable mounting bracket
- ▶ Water and dust protected IP65

The LB2-UCxx-x1Premium-sound cabinet loudspeakers are intended for clear reproduction of speech, foreground and background music to be used in general indoor and outdoor applications. The Premium-sound cabinet loudspeaker range consists of a 15 W and 30 W model, available in a light or dark color. The loudspeakers have selectable 8 ohm, 70 V and 100 V inputs.

The ABS cabinets are fitted with aluminum front-grilles and standard supplied with aluminum bracket. Typical applications are: theme bars, music restaurants, theme parks, retail outlets, audio visual, boardrooms and offices, exhibition areas, showrooms, fitness centre's and presentation environments.

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 lessons the chance of failure or performance deterioration.

Safety	acc. to EN 60065
Water and dust protection	acc. to EN 60529 Water Protection
Self extinguishing	acc. to UL94 V 0
Chlorine resistant	acc. to IEC60068-2-42
Corrosion resistant	acc. to IEC60068-2-52
Salt mist	acc. to IEC60068-2-11

Installation/configuration notes

The cabinets include a built-in transformer that offers a selection of nominal full power, half power, quarter power or eight power radiation (i.e. in 3 dB steps) for 70 V, 100 V or 8 Ohm bypass.

Selection is done by a convenient switch on the rear enclosure.

A two meter long twin-core loudspeaker cable (in matching color with the cabinet) is connected to the loudspeaker. The core ends are stripped ready for use. The mounting brackets are fitted with anti-theft torx screws, covered with plastic covers in matching color of the cabinets.

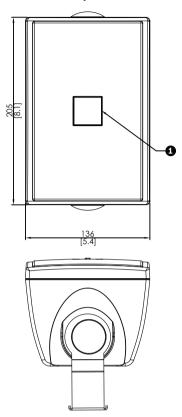
The cabinets can be mounted horizontally to allow the loudspeaker to be directed up or down, or vertically to allow left and right rotation by means of a steel U-shaped wall bracket (standard supplied).

The rotatable logo can be easily adjusted to match the mounting orientation.

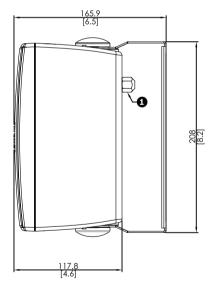


Rear view LB2-UC15-x1 / LB2-UC30-x1

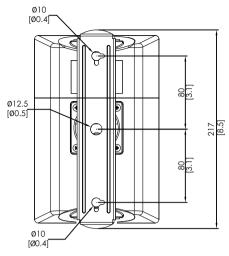
LB2-UC15-D1/L1



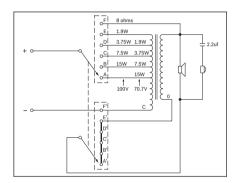
Front and top view mm (in). (1) Rotatable logo.



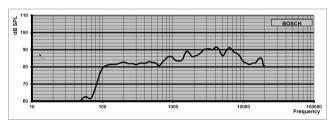
Side view mm (in). (1) Power tapping switch.



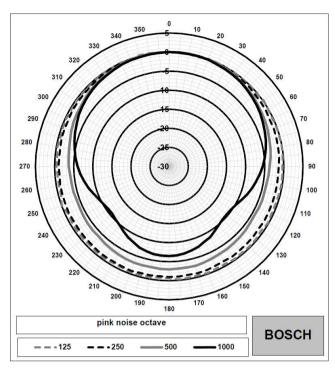
Rear view mm (in).



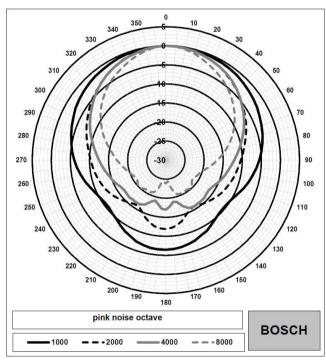
LB2-UC15-x1 Circuit diagram



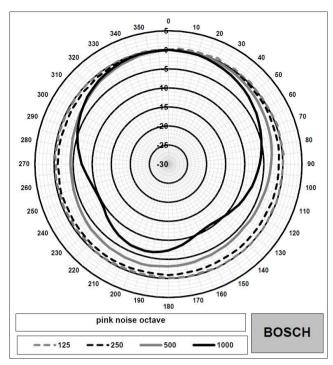
LB2-UC15-x1 Frequency response



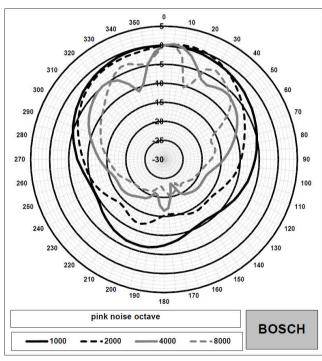
LB2-UC15-x1 Polar diagram horizontal (low frequency). Normalized at 0 degrees axis.



LB2-UC15-x1 Polar diagram horizontal (high frequency). Normalized at 0 degrees axis.



LB2-UC15-x1 Polar diagram vertical (low frequency). Normalized at 0 degrees axis.



LB2-UC15-x1 Polar diagram vertical (high frequency). Normalized at 0 degrees axis.

Octave band sensitivity *

	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	82.0	-	-
250 Hz	82.9	-	-
500 Hz	84.3	-	-
1000 Hz	86.9	-	-
2000 Hz	88.7	-	-
4000 Hz	90.7	-	-
8000 Hz	90.4	-	-
A-weighted	-	86.2	97.0
Lin-weighted	-	86.6	97.3

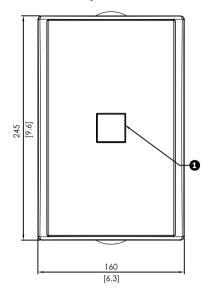
Octave band opening angles

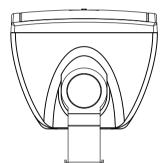
	Horizontal	Vertical
125 Hz	360	360
250 Hz	360	360
500 Hz	360	360
1000 Hz	184	170
2000 Hz	117	130
4000 Hz	112	35
8000 Hz	86	48

Acoustical performance specified per octave

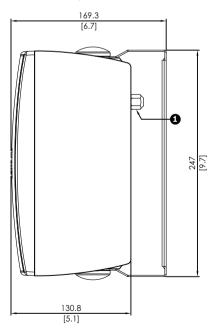
^{* (}all measurements are done with a pink noise signal; the values are in dB SPL)

LB2-UC30-D1/L1

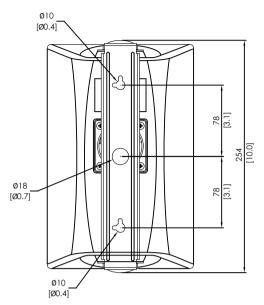




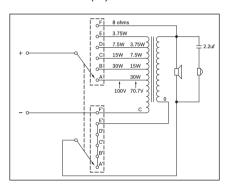
Front and top view mm (in). (1) Rotatable logo.



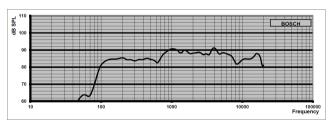
Side view mm (in). (1) Power tapping switch.



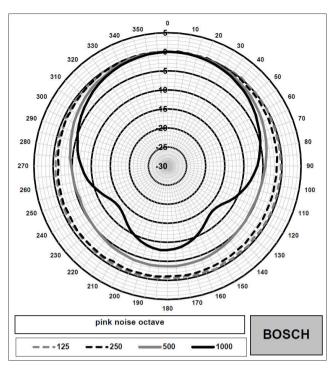
Rear view mm (in)



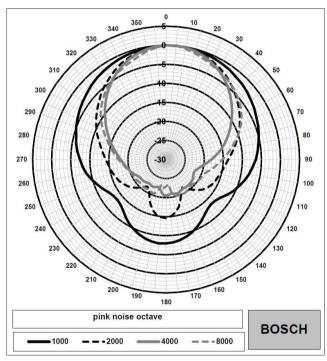
LB2-UC30-x1 Circuit diagram



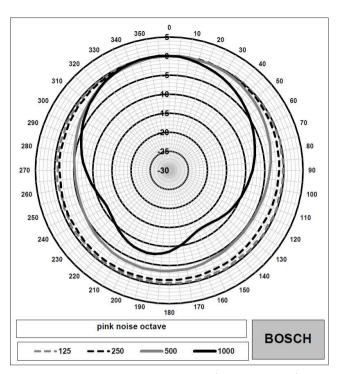
LB2-UC30-x1 Frequency response



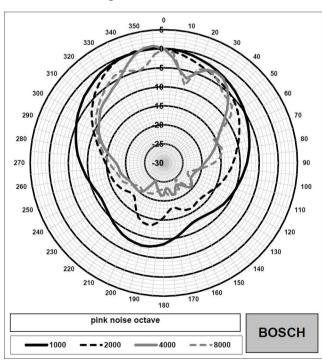
LB2-UC30-x1 Polar diagram horizontal (low frequency). Normalized at 0 degrees axis.



LB2-UC30-x1 Polar diagram horizontal (high frequency). Normalized at 0 degrees axis.



LB2-UC30-x1 Polar diagram vertical (low frequency). Normalized at 0 degrees axis.



LB2-UC30-x1 Polar diagram vertical (high frequency). Normalized at 0 degrees axis.

Octave band sensitivity *

Octave SPL 1W/1m Total octave SPL 1W/1m Total octave SPL SPL 1W/1m Total octave SPL SPL Pmax/1m 125 Hz 84.0 - - 250 Hz 84.4 - - 500 Hz 85.6 - - 1000 Hz 90.2 - - 2000 Hz 90.1 - - 4000 Hz 93.0 - - 8000 Hz 88.6 - - A-weighted - 87.7 101.6 Lin-weighted - 87.9 102.2				
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1000 Hz 90.2	250 Hz	84.4	-	-
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8000 Hz 88.6 A-weighted - 87.7 101.6	2000 Hz	90.1	-	-
A-weighted - 87.7 101.6	4000 Hz	93.0	-	-
	8000 Hz	88.6	-	-
Lin-weighted - 87.9 102.2	A-weighted	-	87.7	101.6
	Lin-weighted	-	87.9	102.2

Octave band opening angles

	Horizontal	Vertical
125 Hz	360	360
250 Hz	360	360
500 Hz	360	360
1000 Hz	166	140
2000 Hz	98	104
4000 Hz	83	76
8000 Hz	94	54

Acoustical performance specified per octave

Parts included

Quantity	Components
1	LB2-UCxx-x1
1	Mounting bracket
1	Installation instruction

Technical specifications

Electrical*

Product	LB2-UC15-D1 LB2-UC15-L1	LB2-UC30-D1 LB2-UC30-L1
Description	Premium-sound Cabinet Loudspeaker	Premium-sound Cabinet Loudspeaker

Maximum power	22.5 W	45 W
Rated power (PHC)	15 W	30 W
Power tapping	15/7.5/3.75/1.9 W	30/15/7.5/3.75 W
Sound pressure level at rated power / 1 W (1 kHz, 1 m)	99/87 dB (SPL)	105/90 dB (SPL)
Effective frequency range (-10 dB)	95 Hz to 20 kHz	100 Hz to 19 kHz
Opening angle at 1 kHz / 4 kHz (-6 dB)	184° / 112° (hor.) 170° / 35° (ver.)	166° / 83° (hor.) 140° / 76° (ver.)
Rated input voltage	11/70/100 V	15.5/70/100 V
Rated impedance	8/326/667 ohm	8/163/333 ohm
Transducers	101.6 mm (4") woofer, 13 mm (0.51 ") dome tweeter	127 mm (5") woofer, 13 mm (0.51") dome tweeter
Connection	2 m (78.8 in.) two-wire cable	2 m (78.8 in.) two-wire cable

^{*} Technical performance data acc. to IEC 60268-5

Mechanical

Dimensions (HxWxD)	205x136x117 mm 8.07x5.35x4.60 in	250x 60x140 mm 9.84x6.30x5.51 in
Weight	Approx. 1.9 kg (4.18 lb)	Approx. 2.4 kg (5.29 lb)
Color	White (RAL 9010) (L) or Charcoal (RAL 7021) (D)	White (RAL 9010) (L) or Charcoal (RAL 7021) (D)

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%

Ordering information

Premium-sound Cabinet Loudspeaker

Cabinet Loudspeaker 15 W, ABS enclosure, U-bracket mounting, fixed 2 m twin-core connection cable, water- and dust protected IP 65, charcoal RAL 7021. Order number **LB2-UC15-D1**

Premium-sound Cabinet Loudspeaker

Cabinet Loudspeaker 15 W, ABS enclosure, U-bracket mounting, fixed 2 m twin-core connection cable, water- and dust protected IP 65, white RAL 9010. Order number **LB2-UC15-L1**

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

Premium-sound Cabinet Loudspeaker

Cabinet Loudspeaker 30 W, ABS enclosure, U-bracket mounting, fixed 2 m twin-core connection cable, water- and dust protected IP 65, charcoal RAL 7021. Order number LB2-UC30-D1

Premium-sound Cabinet Loudspeaker

Cabinet Loudspeaker 30 W, ABS enclosure, U-bracket mounting, fixed 2 m twin-core connection cable, water- and dust protected IP 65, white RAL 9010. Order number LB2-UC30-L1

Represented by:

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

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

Bosch (Shanghai) Security Systems Ltd. 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