

Column Loudspeakers

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BOSCH
Invented for life



- ▶ Good speech intelligibility and background music reproduction
- ▶ For applications where directivity is important
- ▶ High sensitivity
- ▶ Swivel wall-mounting bracket supplied as standard
- ▶ Available in black or white

The Column Loudspeakers are, general-purpose, cost-effective column loudspeakers for indoor use where beaming is desirable, such as places of worship, conference venues, meeting rooms, and canteens. The column loudspeaker is available in 24 W and 36 W rated power, and in dark or light color. A swivel wall-mounting bracket is supplied as standard.

Functions

The robust, solid MDF (Medium Density Fiber board) enclosures are covered with a durable, easy-to-clean vinyl in a choice of black or white. The ABS fronts are covered with fine woven cloth in matching color. These powerful column loudspeakers are fitted with four dual-cone, high-sensitivity, loudspeaker drivers.

Certifications and approvals

Quality assurance

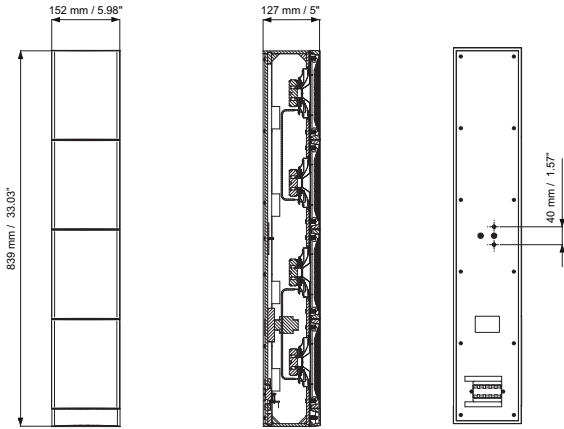
All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times their rated 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.

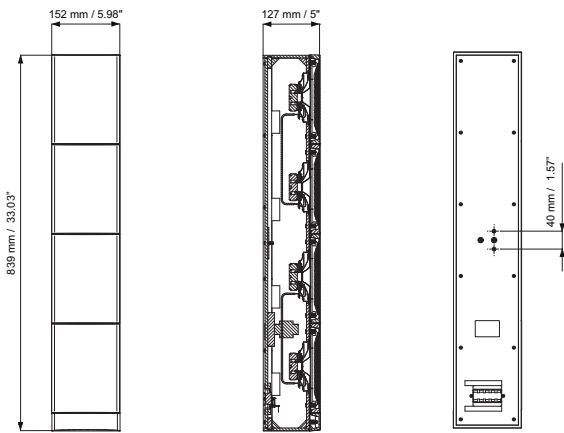
Safety	acc. to EN 60065
Region	Certification
Europe	CE
	CE

Installation/configuration notes

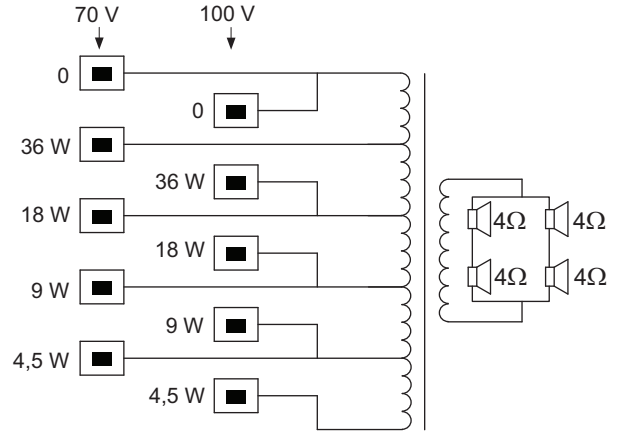
The column loudspeakers can be wall mounted using the supplied swivel bracket, allowing accurate positioning. A convenient, easy-to-use, double five-pole push-in terminal block is present on the rear panel for on-site wiring. This terminal block has provision for power tapping on the 70 V / 100 V, matching transformer in the cabinet. It allows selection of nominal full-power, half-power, quarter-power or eight-power radiation (in 3 dB steps).



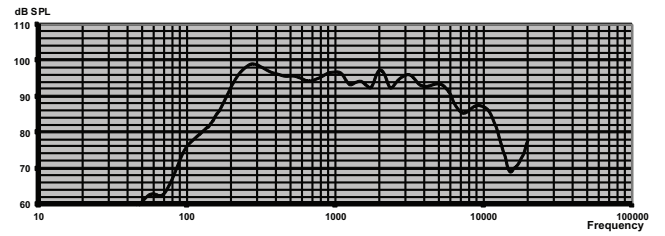
LA1-UW24-x1 dimensions



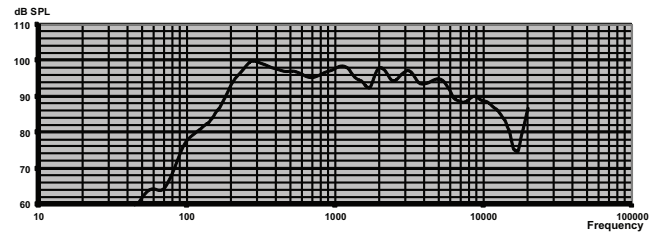
LA1-UW36-x1 dimensions



LA1-UW36-x1 circuit diagram

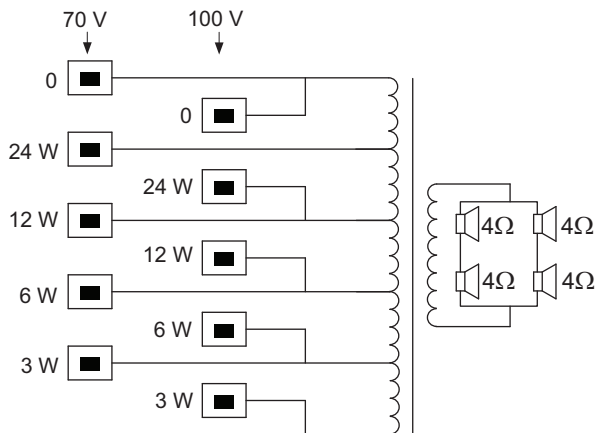


LA1-UW24-x1 frequency response

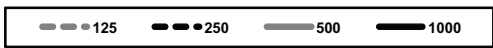
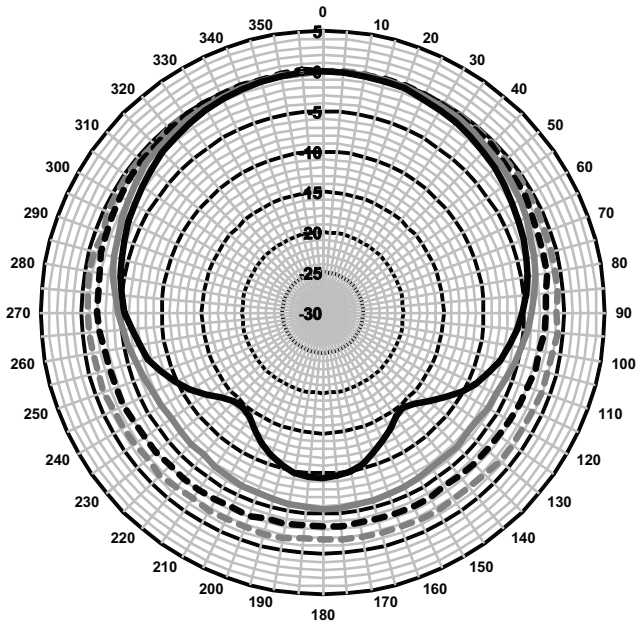


LA1-UW36-x1 frequency response

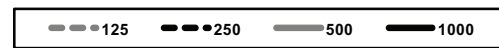
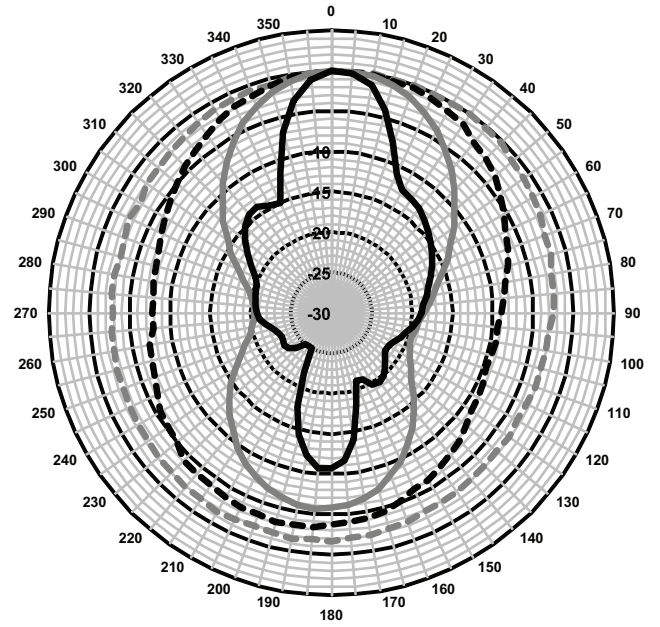
Note: The frequency response is based on measurements at a distance of 1 meter and 4 meter on the main axis.



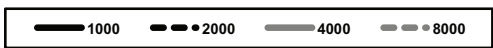
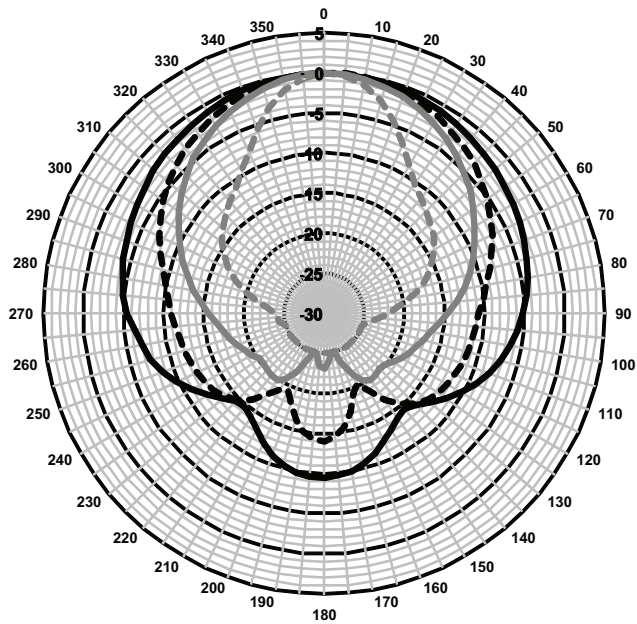
LA1-UW24-x1 circuit diagram



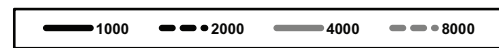
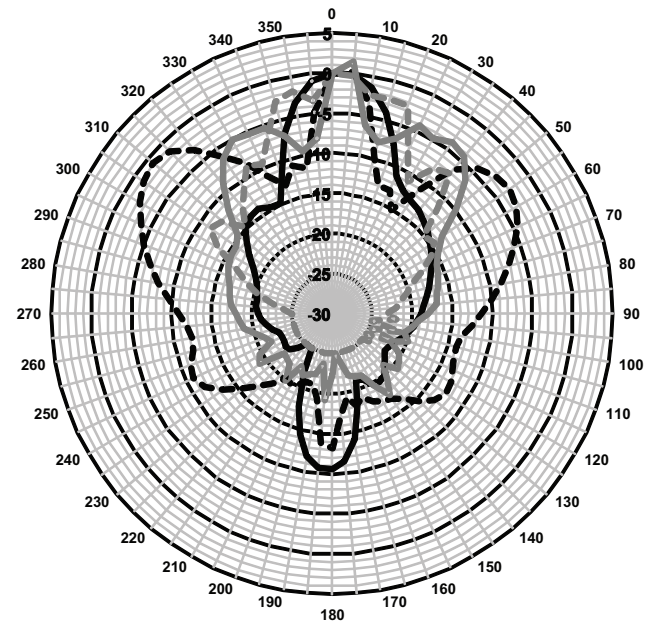
LA1-UW24-x1 polar diagram horizontal (low frequency)



LA1-UW24-x1 polar diagram vertical (low frequency)

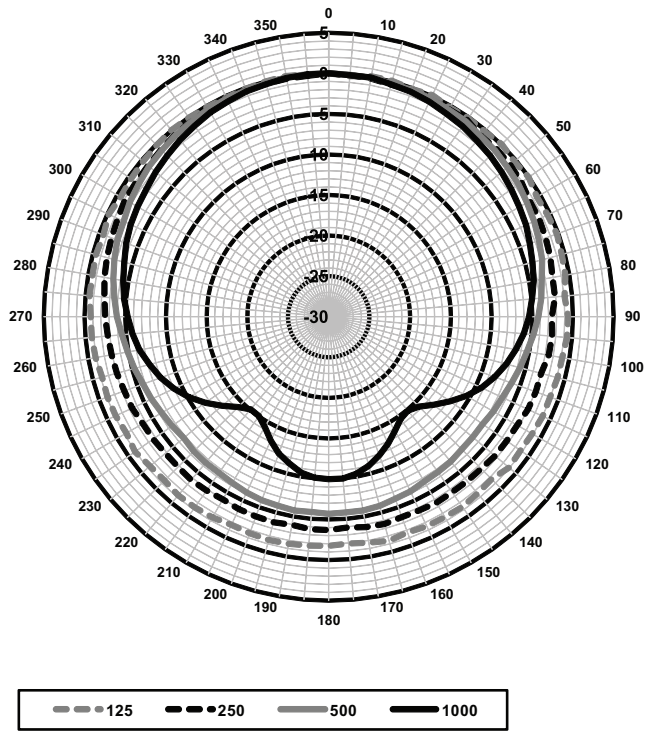


LA1-UW24-x1 polar diagram horizontal (high frequency)

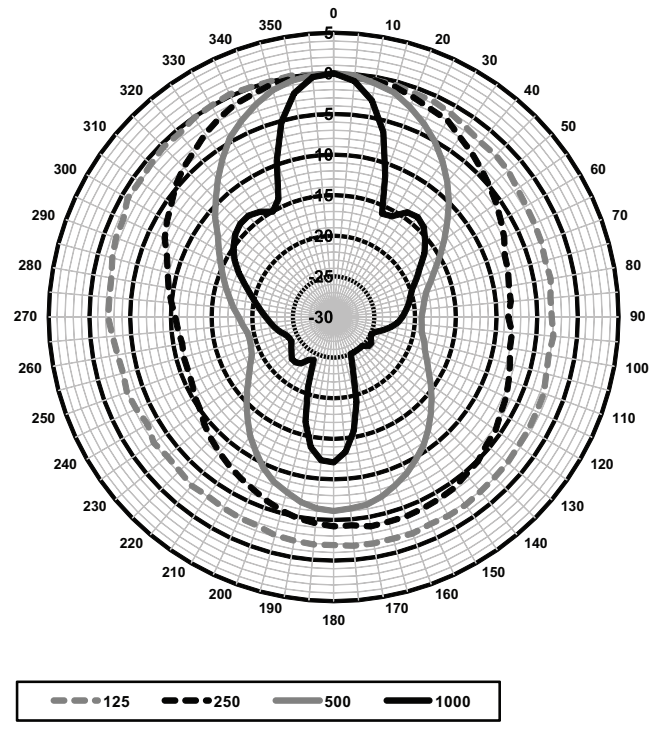


LA1-UW24-x1 polar diagram vertical (high frequency)

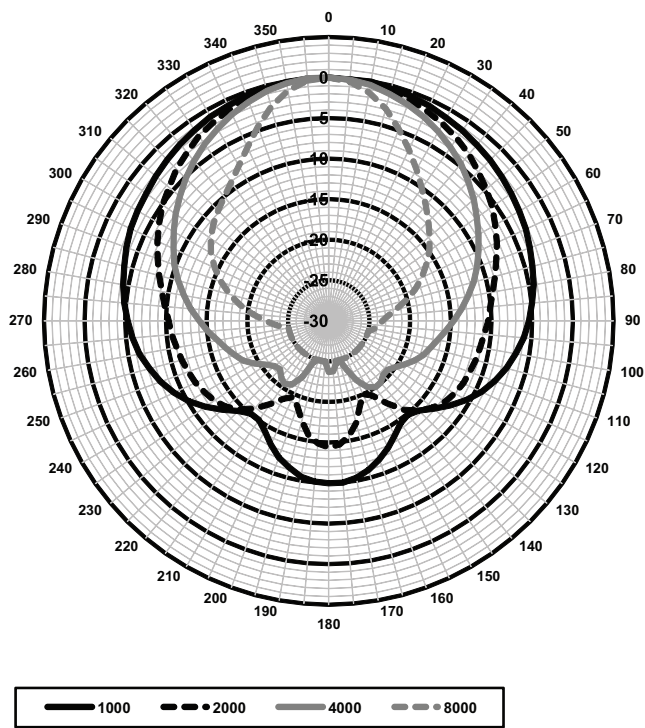
Polar diagrams are measured with pink noise. Normalized at the 0-degree axis.



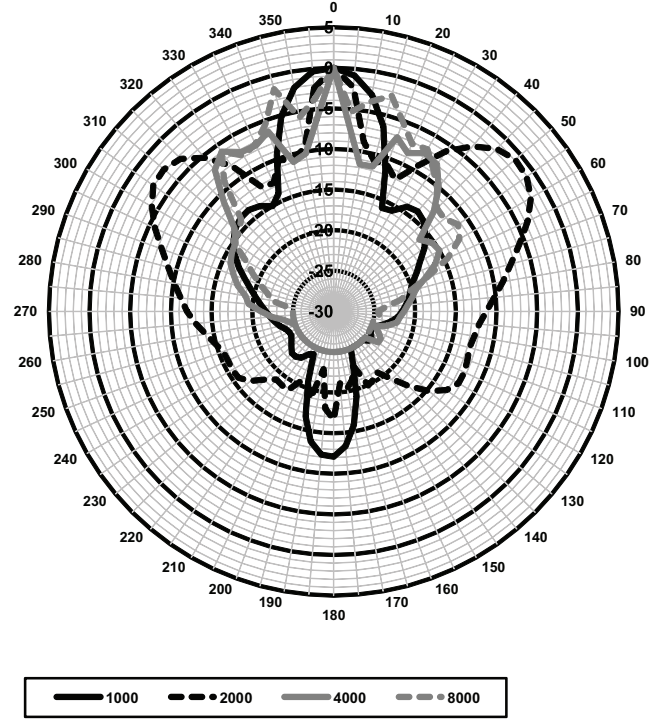
LA1-UW36-x1 polar diagram horizontal (low frequency)



LA1-UW36-x1 polar diagram vertical (low frequency)



LA1-UW36-x1 polar diagram horizontal (high frequency)



LA1-UW36-x1 polar diagram vertical (high frequency)

Polar diagrams are measured with pink noise. Normalized at the 0-degree axis.

Octave band sensitivity* LA1-UW24-x1

	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	81.8	-	-
250 Hz	96.5	-	-
500 Hz	95.0	-	-
1000 Hz	95.1	-	-
2000 Hz	92.9	-	-
4000 Hz	85.7	-	-
8000 Hz	87.9	-	-
A-weighted	-	89.5	102.1
Lin-weighted	-	91.5	104.4

Octave band opening angles LA1-UW24-x1

	Horizontal	Vertical
125 Hz	360	360
250 Hz	360	79
500 Hz	230	68
1000 Hz	190	32
2000 Hz	117	18
4000 Hz	94	13
8000 Hz	44	42

Octave band sensitivity* LA1-UW36-x1

	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	82.9	-	-
250 Hz	97.4	-	-
500 Hz	96.7	-	-
1000 Hz	97.1	-	-
2000 Hz	94.2	-	-
4000 Hz	86.6	-	-
8000 Hz	91.6	-	-
A-weighted	-	91.3	105.3
Lin-weighted	-	93.2	107.5

Octave band opening angles LA1-UW36-x1

	Horizontal	Vertical
125 Hz	360	360
250 Hz	360	114

500 Hz	248	68
1000 Hz	192	31
2000 Hz	118	16
4000 Hz	95	9
8000 Hz	47	42

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	LA1-UW24-x1 Column Loudspeaker or LA1-UW36-x1 Column Loudspeaker
1	Swivel wall-mounting bracket

Technical specifications

Electrical*

Column Loudspeaker type	LA1-UW24-D1/ L1	LA1-UW36-D1/ L1
Maximum power	36 W	54 W
Rated power	24 / 12 / 6 / 3 W	36 / 18 / 9 / 4.5 W
Sound pressure level at 24 W/36 W / 1 W (1 kHz, 1 m)	110 dB / 96 dB +/- 3 dB (SPL)	114 dB / 98 dB +/- 3 dB (SPL)
Effective frequency range (-10 dB)	150 Hz to 12.5 kHz	160 Hz to 13.5 kHz
Opening angle	1 kHz / 4 kHz (-6 dB)	1 kHz / 4 kHz (-6 dB)
horizontal	190° / 88°	190° / 88°
vertical	30° / 8°	30° / 8°
Rated input voltage	100 V and 70 V	100 V and 70 V
Rated impedance	417 ohm	278 ohm
Connector	5-pole push-in terminal block	5-pole push-in terminal block

* Technical performance data according to IEC 60268-5

Mechanical

Dimensions (H x W x D)	841x 151 x 129 mm (33.1 x 5.9 x 5.1 in)
Weight LA1-UW24-x1 Weight LA1-UW36-x1	5.5 kg (12.1 lb) 6 kg (13.2 lb)
Color	Black (D1) or white (L1)
cabinet / cloth (D1)	Matches RAL 9004 / RAL 9004
cabinet / cloth (L1)	Matches RAL 9010 / RAL 7044

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%

Ordering information**Column Loudspeaker**

Column loudspeaker 24 W, MDF enclosure with fine-woven cloth fronts, finished in black, supplied with a swivel wall-mounting bracket.

Order number **LA1-UW24-D1**

Column Loudspeaker

Column loudspeaker 24 W, MDF enclosure with fine-woven cloth fronts, finished in white, supplied with a swivel wall mounting bracket.

Order number **LA1-UW24-L1**

Column Loudspeaker

Column loudspeaker 36 W, MDF enclosure with fine-woven cloth fronts, finished in black, supplied with a swivel wall mounting bracket.

Order number **LA1-UW36-D1**

Column Loudspeaker

Column loudspeaker 36 W, MDF enclosure with fine-woven cloth fronts, finished in white, supplied with a swivel wall mounting bracket.

Order number **LA1-UW36-L1**

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