

# Bidirectional Cabinet Loudspeakers

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**BOSCH**

Invented for life



- ▶ Good speech intelligibility and background music reproduction
- ▶ Wedge shaped design
- ▶ Available in black or white
- ▶ MDF construction
- ▶ Complies with international installation and safety regulations

The LB1-BW12-x1 is a 12 W, cost-effective, bidirectional loudspeaker for indoor use. The baffle design creates a wide opening angle, making this loudspeaker very suitable for use in long corridors. Keyholes at the rear provide quick and easy wall mounting. The cabinet is available in black or white.

## Functions

The robust, solid MDF (Medium Density Fiber board) enclosures are covered with a durable, easy-to-clean vinyl in a choice of white or black. The ABS fronts are covered with fine woven cloth in matching color. The cabinets have two dual cone loudspeaker drivers, mounted on an angled baffle, providing a wide opening angle. This model is intended for use in long corridors, such as in shopping arcades.

## Certifications and approvals

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 extra reliability under extreme conditions, leading to

higher customer satisfaction, longer operating life, and much less chance of failure or performance deterioration.

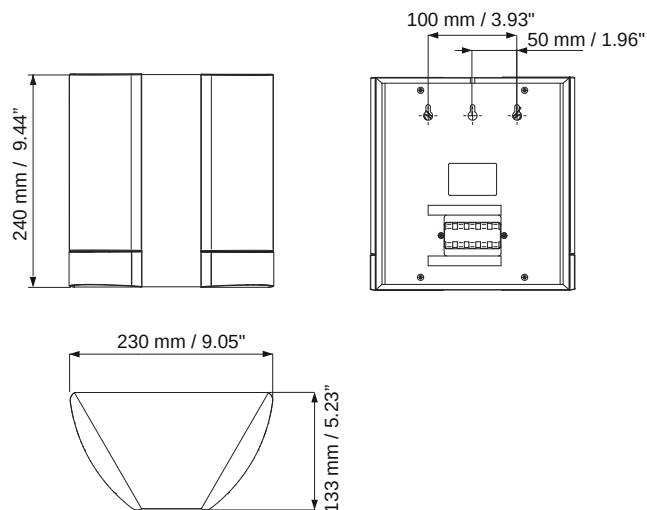
Safety

acc. to EN 60065

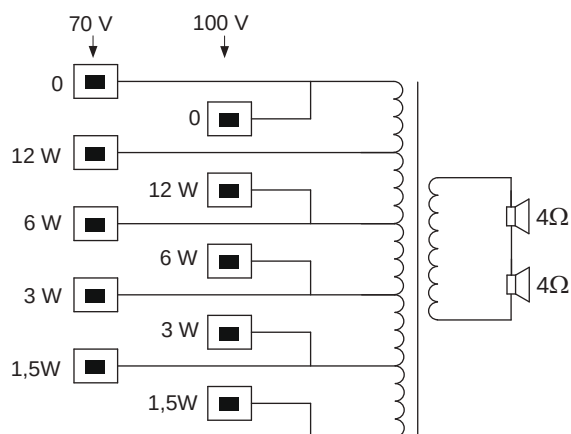
| Region | Certification |
|--------|---------------|
| Europe | CE            |

## Installation/configuration notes

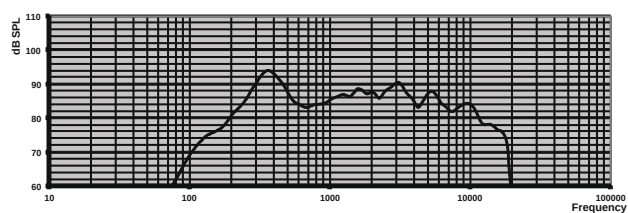
Three keyholes in the rear panel provide easy and quick wall mounting. A convenient, easy-to-use, double five-pole push-in terminal block is present on the rear panel for on-site wiring. This terminal block has provision for power tapping on the 70 V / 100 V, matching transformer in the cabinet. It allows selection of nominal full-power, half-power, quarter-power or eighth-power radiation (in 3 dB steps).



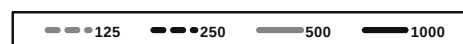
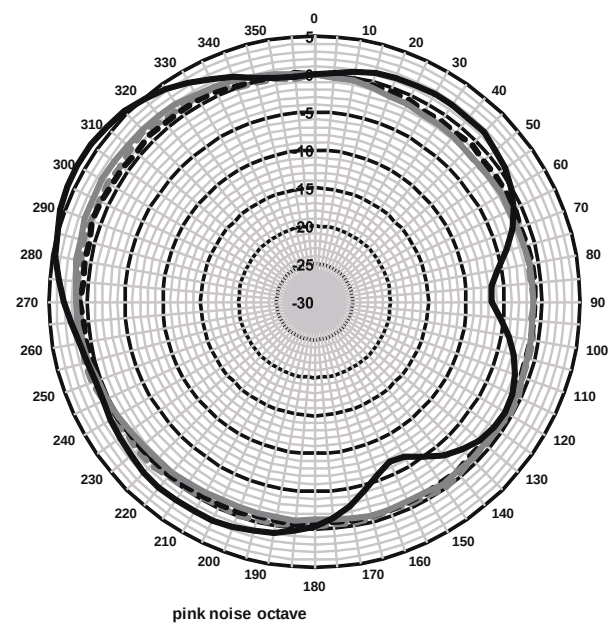
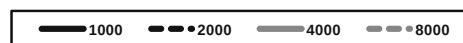
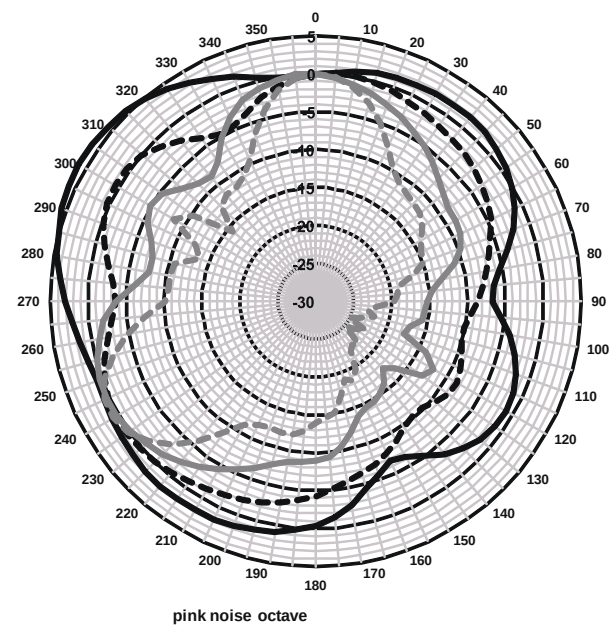
Dimensions



Circuit diagram



Frequency response



Polar diagrams (measured with pink noise)

## Octave band sensitivity\*

|              | Octave SPL<br>1W/1m | Total octave<br>SPL<br>1W/1m | Total octave<br>SPL<br>Pmax/1m |
|--------------|---------------------|------------------------------|--------------------------------|
| 125 Hz       | 74.4                | -                            | -                              |
| 250 Hz       | 89.4                | -                            | -                              |
| 500 Hz       | 89.9                | -                            | -                              |
| 1000 Hz      | 86.3                | -                            | -                              |
| 2000 Hz      | 88.1                | -                            | -                              |
| 4000 Hz      | 88.6                | -                            | -                              |
| 8000 Hz      | 85.2                | -                            | -                              |
| A-weighted   | -                   | 84.8                         | 94.6                           |
| Lin-weighted | -                   | 86.1                         | 96                             |

## Octave band opening angles

|         | Horizontal | Vertical |  |
|---------|------------|----------|--|
| 125 Hz  | 360        | -        |  |
| 250 Hz  | 360        | -        |  |
| 500 Hz  | 360        | -        |  |
| 1000 Hz | 360        | -        |  |
| 2000 Hz | 253        | -        |  |
| 4000 Hz | 71         | -        |  |
| 8000 Hz | 41         | -        |  |

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                                        | 12 / 6 / 3 / 1.5 W |
| Sound pressure level at 12 W / 1 W<br>(1 kHz, 1 m) | 97 / 86 dB (SPL)   |
| Effective frequency range<br>(-10 dB)              | 160 Hz to 17 kHz   |

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Opening angle<br>at 1 kHz / 4 kHz (-6 dB) | 360° / 71°                       |
| Rated input voltage                       | 70 V / 100 V                     |
| Rated impedance                           | 417 / 833 ohm                    |
| Connector                                 | 2x 5-pole push-in terminal block |

\* Technical performance data acc. to IEC 60268-5

## Mechanical

|                           |                                             |
|---------------------------|---------------------------------------------|
| Dimensions<br>(H x W x D) | 240 x 238 x 133 mm<br>(9.4 x 9.3 x 5.24 in) |
| Weight                    | 1.97 kg (4.34 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<br>(-13 °F to +131 °F) |
| Storage temperature   | -40 °C to +70 °C<br>(-40 °F to +158 °F) |
| Relative humidity     | <95%                                    |

## Ordering information

## Bidirectional Cabinet Loudspeaker

Bidirectional cabinet loudspeaker 12 W, MDF enclosure with fine-woven cloth fronts, finished in black, with 3 keyholes for wall mounting.

Order number **LB1-BW12-D1**

## Bidirectional Cabinet Loudspeaker

Bidirectional cabinet loudspeaker 12 W, MDF enclosure with fine-woven cloth fronts, finished in white, with 3 keyholes for wall mounting.

Order number **LB1-BW12-L1**

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