

# LH1-EC15-IN 15W Horn ABS Elliptical

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Invented for life



- ▶ Excellent speech reproduction
- ▶ Water-and dust protected to IP 65
- ▶ Easy to install
- ▶ Simple power tapping through color code

The LH1-EC15-IN is a high-efficiency horn loudspeaker providing excellent speech reproduction and sound distribution for a wide scope of outdoor applications. It is ideal for sports grounds, places of worship, parks, exhibitions, factories and open meeting areas.

## System overview

The LH1-EC15-IN is a circular horn loudspeaker and its horn and back-cover are made of ABS material. The speaker has a line matching transformer to connect to a 100V output from an amplifier. The loudspeaker has power tapings at full power, half power and quarter power to connect at different power levels.

## Functions

The LH1-EC15-IN model horn speaker is for direct connection to a 100 V line output and is finished in light grey (RAL 7035) color. The horn speaker is water and dust protected. The horn loudspeaker includes a 100 V transformer with taps on the primary winding to allow different power tapings. Nominal full-power, half-power or quarter-power radiation (in 3 dB steps) can easily be selected by connecting the amplifier output to the appropriate tapping. A two meter four-core cable is fitted to the horn for connectivity. Each

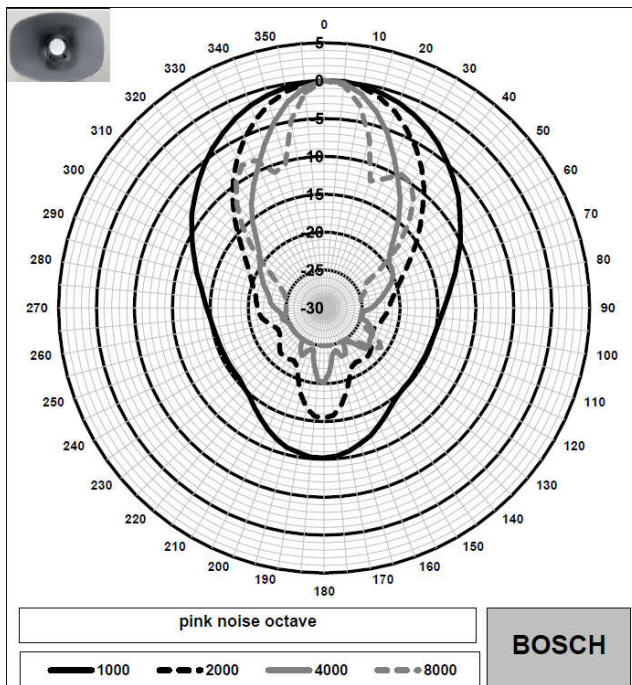
core is a different color, and is connected to one of the primary tapings on the transformer. Color code identification is provided on the product label. The horn loudspeaker is supplied complete with sturdy adjustable mounting brackets, allowing the sound beam to be accurately directed.

## Certifications and approvals

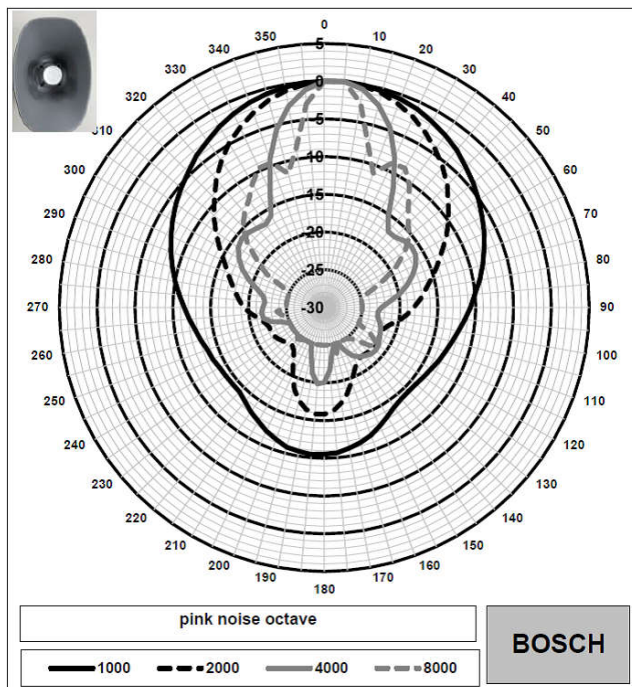
All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 60268-1 and IEC 60268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that the speakers can withstand two times their rated power for short durations. This ensures extra reliability under extreme conditions, leading to greater customer satisfaction, longer operating life, and much less chance of failure or performance deterioration.

- Lab test for water and dust protection acc. to IEC 60529 IP65
- Lab test for wind force test acc. to NEM6702:2007 + A1:2008 Bft 11 (static condition)
- Lab test for climatic tests acc. to IEC 60068-x-xx

## Installation/configuration notes



Horizontal Polar diagram LH1-EC15-IN (frequency in Hz)



Vertical Polar diagram LH1-EC15-IN (frequency in Hz)

## Acoustical performance specified per octave (LH1-EC15-IN)

	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
SPL 1w, 1m in dB	92.4	99.3	107.8	108.5	98.7	85.4
H. and V. Angle (deg)	180	180	88	58	39	25

## Parts included

1	Loudspeaker
1	Manual

## Technical specifications

## Electrical

Maximum power	22.5 W
Rated power (PHC)	15 W
Sound pressure level at 1 W (1 kHz, 1 m)	103 dB
Effective frequency range (-10 dB)	500 Hz to 3500 Hz
Opening angle at 1 kHz (-6 dB)	Elliptical : 110 (H) / 50 (V)
Rated voltage	100 V
Rated impedance	667 Ohm

## Mechanical

Dimensions (H x W x D)	Elliptical: 285 x 280 x 285 mm
Weight	Elliptical: 1.8 kg

## Environmental

Operating temperature	-5 °C to +55 °C
Storage temperature	-40 °C to +70 °C

## Ordering information

**15W Horn ABS Elliptical**  
Order number **LH1-EC15-IN**

## 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