



DL-E 06-165/T-EN54 safe

- high sound pressure level
- low mounting depth
- with optional fire dome BS 5839 compliant

EN54

CE
13

EN 54-24:2008
Ref. Nr.: 012-13
ID-Code: SAA-LS12
1438-CPR-0997

ic audio GmbH, Boehringerstraße 14a,
68307 Mannheim, Germany

CE-Symbol gemäß Richtlinie 93/68EWG

The 6W powered speaker is equipped with a 165mm full-range loudspeaker and a 100V transformer with 3 power adjustments. The powder-coated metal version in RAL 9016 guarantees lasting stability. Thanks to an innovative airflow system, the DL-E provides sound characteristics normally attributed to a conventional bass speaker. An extremely flat construction method allows a low mounting depth of only 70mm, with less than 1 kg product weight.

For additional safety, a 4-pin ceramic block and a thermal fuse are provided and the speaker is impregnated against dampness. Protection class IP 21C secures the speaker against the impact of environmental influences.

Quick and easy mounting with spring clamps and short tension distance. Perfectly suitable for installations where the mounting depth is very limited. In combination with the optional fire dome FE-165-EN54, the speaker is compliant with the British Standard BS 5839, Part 8. Special paint of the speaker in 4-digit RAL- or NCS-colour available at extra cost.

The innovative PET-plastic contact protection is included in the delivery and protected by a European patent (publication no. **2768238**).

This speaker is suitable for a ceiling strength of about 3-45 mm. Our specification is primarily related to solid ceilings, for ceilings with soft materials, a higher ceiling thickness could be necessary. In addition, stronger cables and other fittings may also result in changes to the appropriate setup. With regard to the variety of materials and manufacturers, we recommend building a sample of the speaker to match the requirements accurately.

Product	DL-E 06-165/T-EN54 safe
Article No	20132653S

Acoustics

Power	6/3/1,5 W
Impedance (100V)	1667/3333/6667 ohm
Speaker ø	165 mm
Frequency Range	300 - 19.300 Hz
Frequency Response	70 - 23.500 Hz
SPL 1W/1m, peak	100,2 dB
SPL 1W/4m, peak	88,2 dB
SPL Pmax/4m, peak	95,9 dB
SPL IEC268-5, 1W/1m	91,0 dB (plastic) 90,0 dB (metal)
SPL IEC268-5, Pmax/1m	98,8 dB (plastic) 97,8 dB (metal)
Sensitivity EN54-24, 1W/1m	91,2 dB
Sensitivity EN54-24, 1W/4m	79,2 dB (plastic) 78,0 dB (metal)
Dispersion -6dB, 500Hz	180°
Dispersion -6dB, 1KHz	180°
Dispersion -6dB, 2KHz	135°
Dispersion -6dB, 4KHz	60°

Connections and Housing

Connector	4-pin ceramic block
Terminal Diameter	3,2 mm
Maximum Cable Passage	8mm²
Max. cable cross section loop	2x2 mm²
Temperature Range	-10 / +55 °C
Type A/B	A
Dimensions	200x72 mm (plastic) 200x94 mm (metal)
Ceiling Cut-out	166 mm
Weight (net)	0,70 kg (plastic) 0,96 kg (metal)
Housing	metal
Colour	RAL 9016
Mounting	spring clamp
IP Rating	IP21

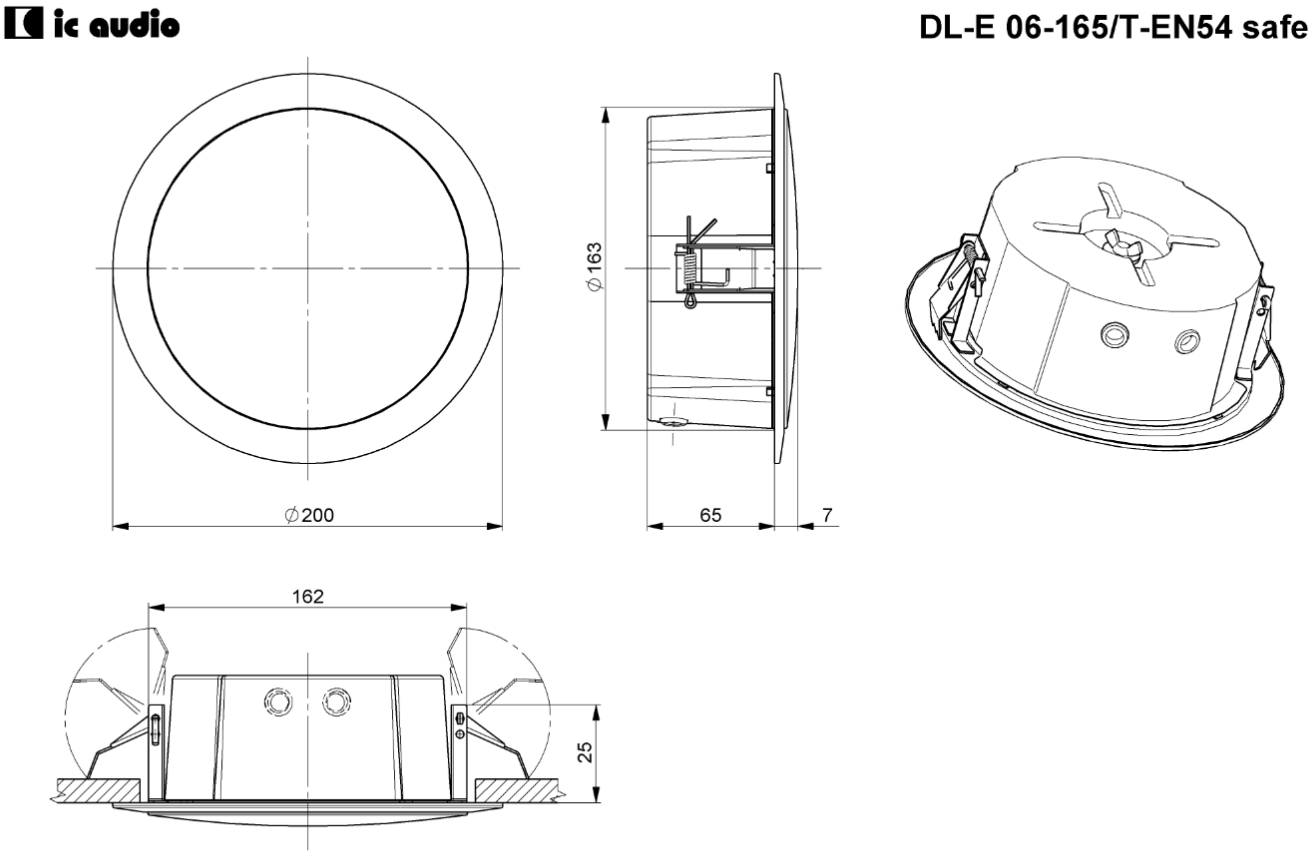
Certification

Ref. Nr.	012-13
ID-Code	SAA-LS12
Certificate Number	1438-CPR-0997

Product Attributes



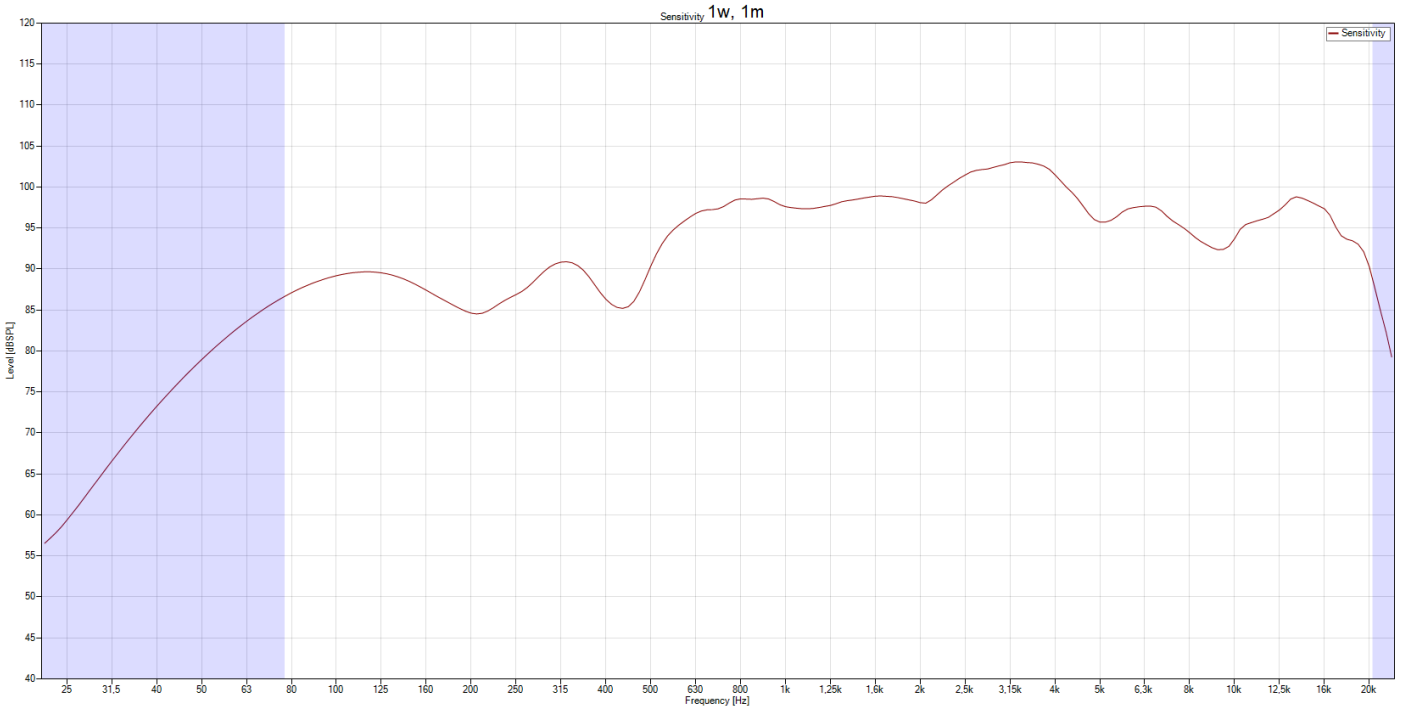
Technical Drawing



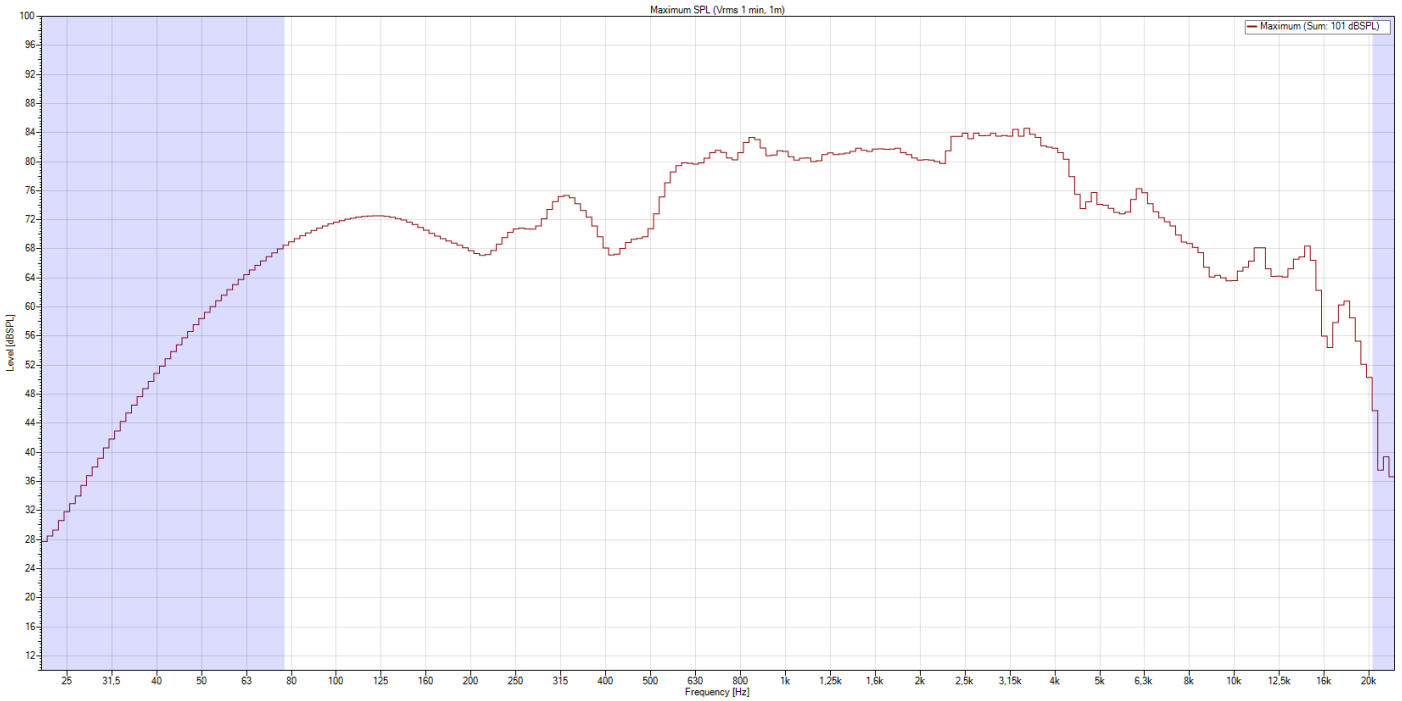
all dimensions are in mm

Frequency Response Diagram

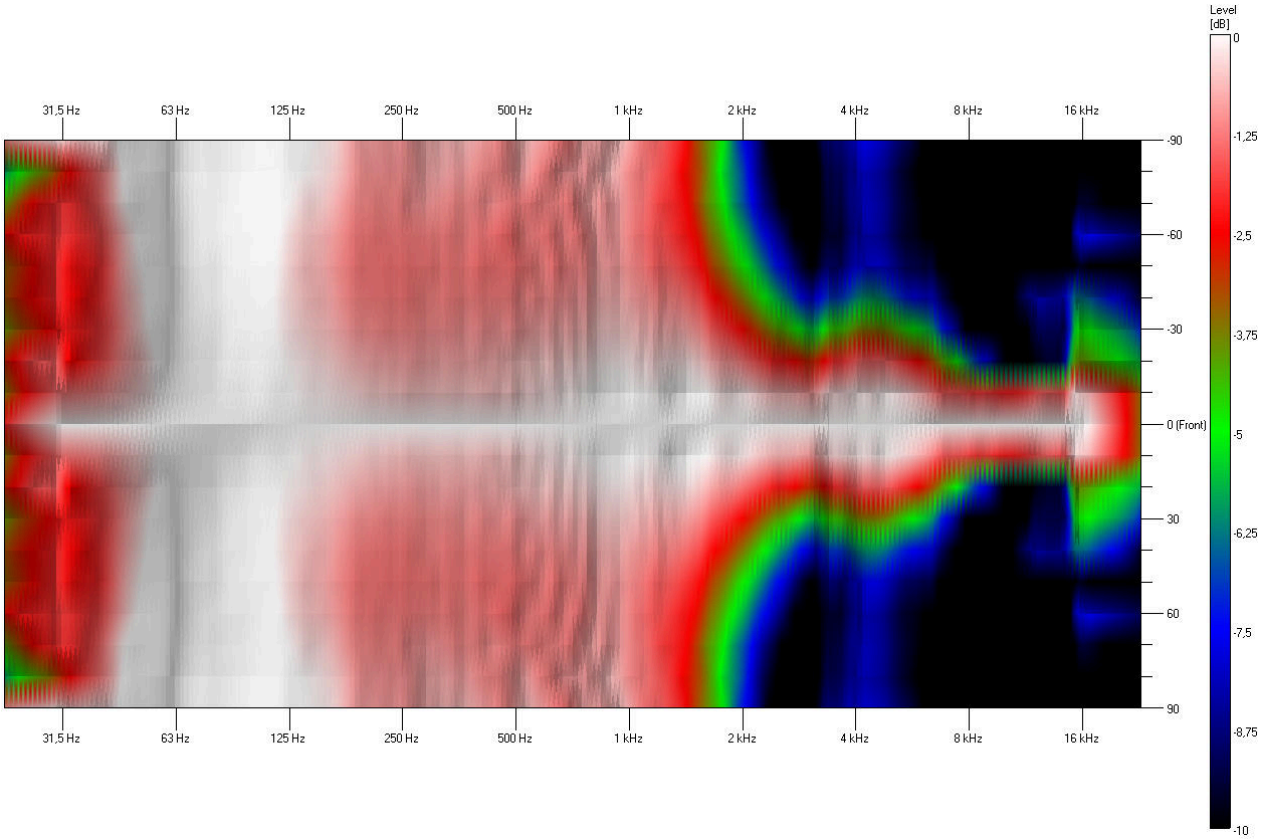
Sensitivity



SPL Max

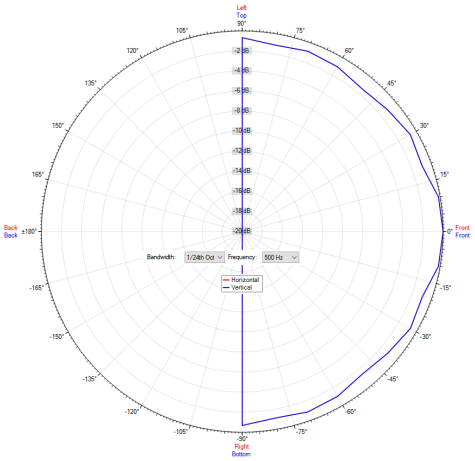


Isobar

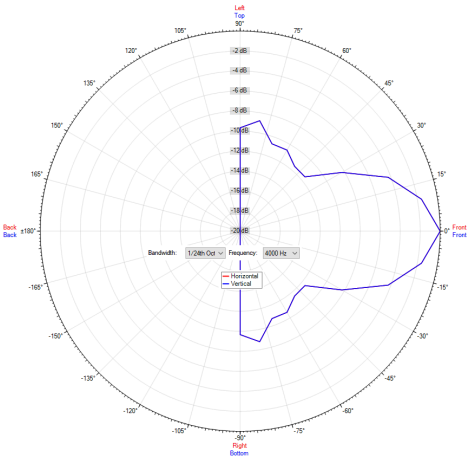

Level [dB]
0
-1,25
-2,5
-3,75
-5
-6,25
-7,5
-8,75
-10
31,5 Hz
63 Hz
125 Hz
250 Hz
500 Hz
1 kHz
2 kHz
4 kHz
8 kHz
16 kHz
-90
-60
-30
0 (Front)
30
60
90

Polar Diagram

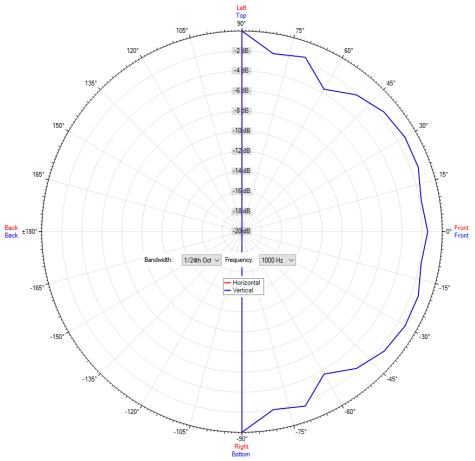
Polar Diagram 500Hz



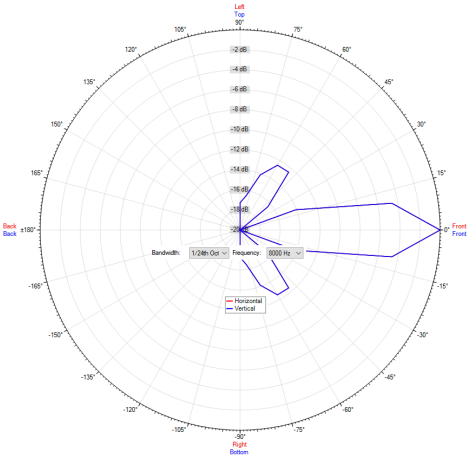
Polar Diagram 4000Hz



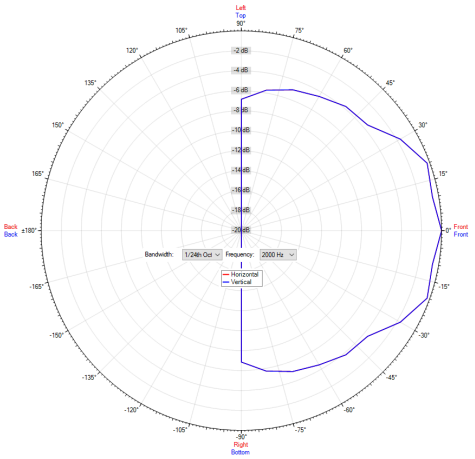
Polar Diagram 1000Hz



Polar Diagram 8000Hz



Polar Diagram 2000Hz



ic audio loudspeakers are tested and classified according to the IEC standard 60529 (degree of protection by enclosure) against the penetration of foreign objects and moisture. The classification is conforming to standards through characterization with a fixed code. This code consists of the letters IP (International Protection) followed by two digits. The first digit indicates the degree of protection against dust and the second digit the degree of protection against water. Please note that the testing of the products has been carried out in laboratory conditions which are not always 100% comparable with the conditions of different installation environments. This protection can be reduced due to normal wear and tear depending on the installation environment.

RoHS compliant (2011/65/EU)

The IP rating specified is based on ic audio test results, not on CNBOP-PIB test results. Certification only verifies the minimum requirements for EN54-24 compliance.

Article No: 20132653S
Packing Unit: 12