

Professional Series

Model 2115H/J

200 mm (8 in) Full Range Loudspeaker

50 W continuous program

50 mm (2 in) edgewound aluminum voice coil

40 to 15,000 Hz response

92 dB sensitivity, 1 W, 1 m (3.3 ft)



Unique in both concept and execution, JBL Model 2115H offers uncolored, natural, wide-range performance superior to that of many two-way monitor systems. Because of its peak-free response and freedom from distortion, the 2115H is recommended for top quality distributed-speaker ceiling installations, in-line arrays, monitoring facilities, and music listening rooms. Unlike other 200 mm (8 in) loudspeakers, the JBL 2115H maintains substantially uniform efficiency through more than eight octaves. Installed in an enclosure of only 42 L (1.5 ft³) internal volume, a single 2115H can produce

a sound pressure level greater than 85 dB not only at 500 Hz but at 50 or 5,000 Hz as well.

Model 2115H is unquestionably the finest 200 mm loudspeaker offered for professional applications. It is painstakingly crafted to traditional JBL standards of precision and will deliver exceptional performance year after year without special care or attention. The 2115J offers identical performance; its impedance is 16 Ω rather than 8 Ω .

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Model 2115H/J—200 mm (8 in) Full Range Loudspeaker

Architectural Specifications

The loudspeaker shall have a nominal diameter of 200 mm (8 in), overall depth not greater than 100 mm (4 in), and weigh at least 3.6 kg (8 lb). The frame shall be of cast aluminum to resist deformation and the magnetic assembly shall utilize a ferrite magnet and a symmetrical magnetic field around the voice coil gap. An aluminum ring on the pole piece shall act to reduce flux modulation. The voice coil shall be approximately 50 mm (2 in) in diameter and shall be made of edgewound aluminum ribbon operating in a magnetic field of not less than 0.85 T (8,500 gauss). High frequencies shall be reproduced by a damped aluminum dome attached directly to the voice coil former.

Performance specifications of a typical production unit shall be as follows:

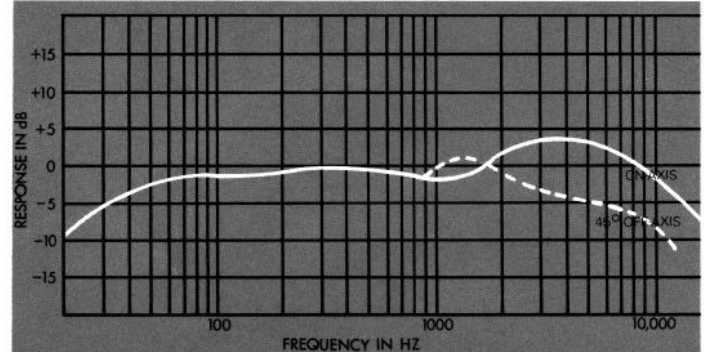
Measured sensitivity (SPL at 9.1 m [30 ft] with one mW input, warbled 500-2500 Hz) shall be no less than 42 nor greater than 45 dB on axis, and down no more than 2 dB 45° off axis. As an indication of electromechanical conversion efficiency, the BI factor shall be at least 6.8 T•m. Usable frequency response shall extend from 40 to at least 15,000 Hz. On-axis response, measured at a distance of 1.8 m (6 ft) or more under free-field conditions, shall be within ± 3 dB from 40 to 12,000 Hz, with the exception of the region between 1,500 and 6,000 Hz. In this region, response shall exhibit a gentle 4-5 dB rise to heighten the feeling of "presence." Above 6,000 Hz response shall gradually roll off, but at 15 kHz shall not be more than 6 dB down from the 500-2500 Hz reference level. Nominal impedance shall be 8 or 16 ohms and power capacity shall be at least 50 watts normal speech or music program material.

The loudspeaker shall be JBL Model 2115H/J. Other loudspeakers will be considered for equivalency provided that submitted data from a recognized independent test laboratory verify that the above performance specifications are met.

Specifications

Nominal Diameter	200 mm	8 in
Nominal Impedance		
2115H	8 Ω	
2115J	16 Ω	
Power Capacity ¹ (in recommended enclosure)	50 W continuous program	
Sensitivity	92 dB, SPL 1 m (3.3 ft), 1 W 43 dB, SPL 9.1 m (30 ft), 1 mW	
Frequency Range	40 Hz to 15 kHz	
Free Air Resonance	55 Hz	
Voice Coil Diameter	50 mm	2 in
Voice Coil Material	Edgewound aluminum ribbon	
Magnetic Assembly Weight	2.8 kg	6 lb
Flux Density	0.85 T (8500 gauss)	
BI Factor	6.8 T•m	
Recommended Enclosure Volume	28 - 57 L	1.2 ft ³
Baffle Cutout Diameter		
Front Mount	179 mm	7 $\frac{1}{8}$ in
Rear Mount	171 mm	6 $\frac{3}{4}$ in
Depth	98 mm	3 $\frac{7}{8}$ in
Net Weight	3.4 kg	7 $\frac{1}{2}$ lb
Shipping Weight	3.7 kg	8 $\frac{1}{4}$ lb

¹Continuous program power is defined as 3 dB greater than continuous sine wave power (RMS). It is a conservative expression of the transducer's ability to handle normal speech and music program material.



Frequency response contour of the 2115 in a closed box of 170 L (6 ft³) internal volume. Measured response of a typical production unit, including all peaks and dips, does not deviate more than 2 dB from the above curve. Additional acoustic loading (a port) will further extend bass response.

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Professional Division

James B. Lansing Sound, Inc., 8500 Balboa Boulevard, Northridge, California 91329 U.S.A.

SS2115H/2'80 Printed in U.S.A.