

Professional Series

Model 2215

15" Low Frequency Loudspeaker

150 Watts continuous program

4" edgewound copper ribbon voice coil

Low distortion

Extended bass for critical monitor applications



Model 2215 is a professional quality low frequency loudspeaker capable of handling high power with negligible distortion. Overall sensitivity is controlled to give linear response over the full bandwidth of the device. The 2215 was designed for critical monitoring applications where linear bass response with lowest possible distortion is required rather than high midrange efficiency. Optimum performance is realized in an enclosure having 6-9 cubic feet internal volume.

The JBL 2215 incorporates a long-travel critically damped cone assembly, 4-inch edgewound copper ribbon voice coil, and highly efficient magnetic circuit with individually machined pole pieces and pot casting. Unlike other long-throw woofers, the relatively light voice coil operates in an unusually deep magnetic gap, resulting in near-perfect linearity and superb transient response. The sophisticated design of Model 2215, plus JBL's precise tolerances and unique assembly techniques, result in a true state-of-the-art low frequency loudspeaker.



Model 2215 Low Frequency Loudspeaker

Architectural Specifications

The low frequency loudspeaker shall have a nominal diameter of 15 inches, overall depth not greater than 5 7/8 inches, and weigh at least 22 pounds. The frame shall be of cast aluminum to resist deformation and the magnetic assembly shall use Alnico V encased in a heavy cast iron return circuit for maximum efficiency and suppression of stray fields. The voice coil shall be four inches in diameter and shall be made of edgewound copper ribbon operating in a magnetic field of not less than 11,000 gauss.

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

Measured sensitivity (SPL at 30 feet with one mW input warbled 100-500 Hz) shall be within 43-45 dB on-axis and 42-44 dB off-axis.

As an indication of electromechanical conversion efficiency the Bl factor shall be at least 2.2×10^7 dynes/abampere.

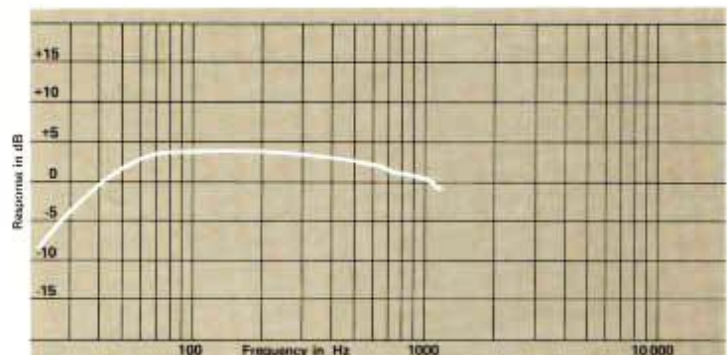
Useable frequency response shall extend from 30 to 1000 Hz. On-axis response, measured at a distance of six feet or more in a free field environment, shall be ± 3 dB from 40 to 800 Hz. Nominal impedance shall be 16 ohms. Power capacity shall be a minimum of 150 Watts normal program material.

The loudspeaker shall be JBL Model 2215. 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	15 inches	38 cm
Nominal Impedance		
2215A	8 ohms	
2215B	16 ohms	
Power Capacity	150 Watts continuous program	
Sensitivity*	45 dB	
Frequency Range	35 to 1200 Hz	
Recommended Crossover	800 Hz or lower	
Free Air Resonance	25 Hz	
Voice Coil Diameter	4 inches	10.2 cm
Voice Coil Material	Edgewound copper ribbon	
Magnetic Assembly Weight	20 1/4 lbs	9.2 kg
Flux Density	11,000 gauss	
Bl Factor	2.2×10^7 dynes/abampere	
Baffle Cutout Diameter		
Front Mounting	13 3/8"	35.5 cm
Rear Mounting	13 1/2"	34.3 cm
Depth	5 7/8"	14.9 cm
Net Weight	23 1/2 lbs	10.7 kg
Shipping Weight	26 lbs	11.8 kg

*NOTE: Because this loudspeaker is normally used below 800 Hz, JBL has measured its sensitivity using a signal warbled from 100-500 Hz rather than the more common 1,000-Hz single frequency. Useable sensitivity of the 2215 may, therefore, be substantially greater than that of loudspeakers with higher published ratings.



Frequency response contour of Model 2215 in a closed box of six cubic feet 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 (passive radiator or port) will further extend bass response.

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Professional Division

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