

## Professional Series

# Model 2115 8" Full Range Loudspeaker

40 Watts continuous program

2" edgewound aluminum voice coil

40 to 15,000 Hz response

43 dB sensitivity

Silver plated pole piece



Unique in both concept and execution, JBL Model 2115 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 2115 is recommended for top quality distributed-speaker ceiling installations, in-line arrays, monitoring facilities, and music listening rooms. Unlike other eight-inch loudspeakers, the JBL 2115 maintains substantially uniform efficiency through more than eight octaves. Installed in an enclosure of only 1.5 cubic feet

internal volume, a single 2115 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 2115 is unquestionably the finest 8-inch 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.

**JBL**



# Model 2115—8" Full Range Loudspeaker

## Architectural Specifications

The loudspeaker shall have a nominal diameter of 8 inches, overall depth not greater than 4 inches, and weigh at least 8 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 center pole piece shall be coated with a layer of pure silver to act as an impedance-controlling ring. The voice coil shall be approximately two inches in diameter and shall be made of edge-wound aluminum ribbon operating in a magnetic field of not less than 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:

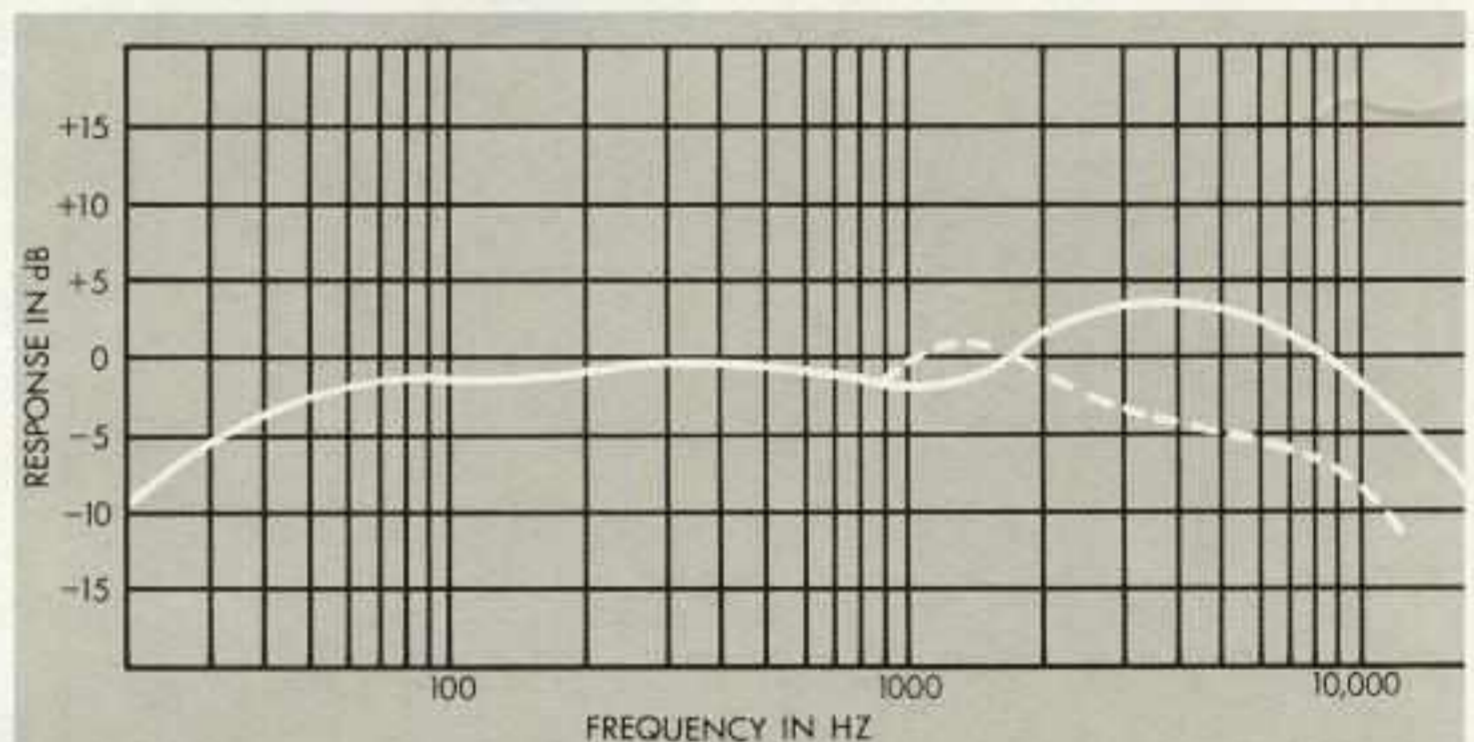
Measured sensitivity (SPL at 30 feet with one mW input, warbled 500-2500 Hz) shall be no less than 42 nor greater than 45 dB on axis, and down no more than 2 dB 45° off axis. As an indication of electromechanical conversion efficiency, the BI factor shall be at least  $6.8 \times 10^6$  dynes per abampere. Useable frequency response shall extend from 40 to at least 15,000 Hz. On-axis response, measured at a distance of six feet or more under free-field conditions, shall be within  $\pm 3$  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 16 ohms and power capacity shall be at least 40 Watts normal speech or music program material.

The loudspeaker shall be JBL Model 2115. 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	8 inches	20 cm
Nominal Impedance		
2115A	8 ohms	
2115B	16 ohms	
Power Capacity <sup>1</sup> (in recommended enclosure)	40 Watts continuous program	
Sensitivity	82.5 dB, SPL 10 ft, 1 Watt 43 dB, SPL 30 ft, 1 mW	
Frequency Range	40 Hz to 15 kHz	
Free Air Resonance	45 Hz	
Voice Coil Diameter	2 inches	5.1 cm
Voice Coil Material	Edgewound aluminum ribbon	
Magnetic Assembly Weight	6½ lbs	3.0 kg
Flux Density	8500 gauss	
BI Factor	$6.8 \times 10^6$ dynes/abampere	
Recommended Enclosure Volume	1-2 cu. ft.	28-57 liters
Baffle Cutout Diameter		
Front Mount	7½"	17.9 cm
Rear Mount	6¾"	17.1 cm
Depth	3¾"	9.8 cm
Net Weight	8 lbs	3.6 kg
Shipping Weight	8¾ lbs	3.9 kg

<sup>1</sup>Continuous 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 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 (a port) will further extend bass response.

PPB2115/75 Printed in U.S.A.



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Professional Division