

Professional Series Model 2115 8" Full Range Transducer

2" edgewound ribbon voice coil
40 watts continuous program
35-18,000 Hz response
Long linear cone travel
Silver plated pole piece

Professional audio consultants and engineers are invited to compare the JBL 2115 with other loudspeakers, both on the basis of acoustical measurements and extended listening tests.



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 ft.³ 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 transducer 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 Transducer

Architectural Specifications

The transducer shall have a nominal diameter of 8 inches, overall depth not greater than 4 inches, and weigh at least 7½ 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 edgewound aluminum ribbon operating in a magnetic field of not less than 8,500 Gauss with at least 200,000 Maxwells total flux. High frequencies shall be reproduced by a damped dural dome attached directly to the voice coil former.

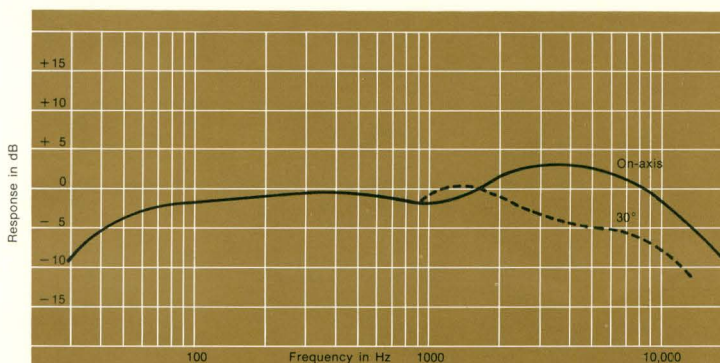
Performance specifications of a typical production unit shall be as follows:

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 6.8×10^6 dynes per abampere. Usable frequency response shall extend from 35 to at least 18,000 Hz. On-axis response, measured at a distance of six feet or more under free-field conditions, shall be within ± 3 dB from 40 to 12,000 Hz, with the exception of the region between 1500 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 reference level. Nominal impedance shall be 16 ohms and power capacity shall be at least 40 watts normal speech or music program material.

The transducer 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
Nominal impedance	16 ohms
Power capacity (properly loaded)	40 watts cont. program
Sensitivity	82.5 dB, SPL 10 feet, 1 Watt 43 dB, SPL 30 feet, 1mW
Frequency range	35 – 18,000 Hz
Voice coil diameter	2 inches
Voice coil material	Edgewound aluminum ribbon
Flux density	8,500 Gauss
Total flux	200,000 Maxwells
BI factor	6.8×10^6 dynes per abampere
Magnetic assembly	6.5 pounds
Baffle hole dia.	7-1/16 inches (front mtg.) 6-3/4 inches (rear mtg.)
Depth	3-7/8 inches
Net weight	7.5 lbs.



Frequency response contour of Model 2115. Measured response of a typical production unit, including all peaks and dips, does not deviate more than 3 dB from the above curve.

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