

Professional Series

Model 2135

15" Extended Range Loudspeaker

100 Watts continuous program

4" edgewound aluminum ribbon voice coil

40-8000 Hz response

High efficiency



Model 2135 is a high power, professional quality 15-inch loudspeaker capable of generating extremely high sound pressure levels while providing clear, natural reproduction of speech or music. It is ideally suited for custom designed clusters, distributed speaker ceiling installations, or as the low frequency transducer of two-way systems. In the last application, its full-range response provides valuable back-up capability in the event of failure of the high frequency transducer. Depending on desired tonal balance and directional characteristics, Model 2135 delivers excellent results in horn-loaded enclosures, or in ported enclosures having at least 4 cubic feet of internal volume.

A four-inch diameter edgewound voice coil and highly efficient magnetic assembly are largely responsible for the 2135's high conversion efficiency and 100-Watt continuous program power rating. At a distance of 30 feet, a single 2135 can produce a sound pressure level greater than 102 dB. Built to traditional JBL standards of precision, it will deliver exceptional performance year after year, without special care or attention.

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Model 2135—15" Extended Range Loudspeaker

Architectural Specifications

The loudspeaker shall have a nominal diameter of 15 inches, overall depth not greater than 5¾ inches, and weigh at least 16½ 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 approximately four inches in diameter and shall be made of edgewound aluminum ribbon operating in a magnetic field of not less than 12,000 gauss. High frequencies shall be reproduced by an aluminum foil dome attached directly to the voice coil former.

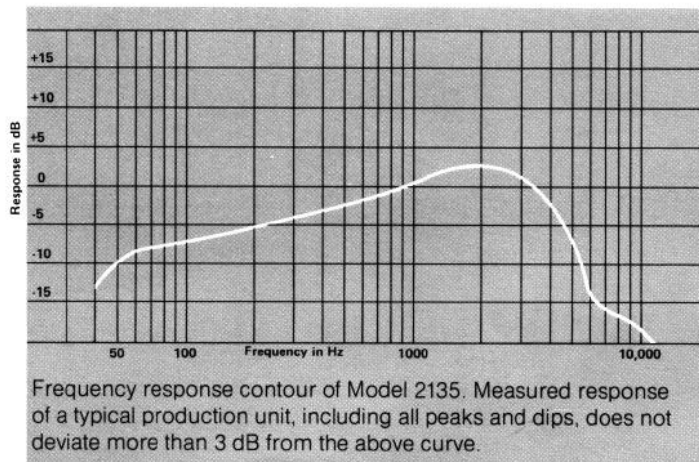
Performance specifications of a typical production unit shall be as follows:

Measured sensitivity (SPL at 30 feet with a 1-mW input, warbled 500-2500 Hz) shall be at least 54 dB on-axis and 50 dB 45° off axis. As an indication of electromechanical conversion efficiency, the BI factor shall be at least 1.8×10^7 dynes per abampere. Usable frequency response shall extend from 40 to at least 8000 Hz. On-axis response, measured at a distance of six feet or more under free-field conditions, shall approximate a straight line rising with frequency at a rate of 2 dB per octave. Response shall not deviate more than 3 dB from this characteristic from 45 to 3,000 Hz. Above 3,000 Hz response shall gradually roll off, but at 6,000 Hz shall not be more than 9 dB down from the 500-2500 Hz reference level. Nominal impedance shall be 8 ohms and power capacity shall be at least 100 Watts normal speech or music program material.

The loudspeaker shall be JBL Model 2135. 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	8 ohms	
Power Capacity	100 Watts continuous program	
Sensitivity		
1 Milliwatt Input	54 dB @ 30 feet	
1 Watt Input	93.5 dB @ 10 feet	
Frequency Range	40-8000 Hz	
Recommended Crossover	3000 Hz or lower	
Free Air Resonance	40 Hz	
Voice Coil Diameter	4 inches	10.2 cm
Voice Coil Material	Edgewound aluminum ribbon	
Magnetic Assembly Weight	13 lbs	5.9 kg
Flux Density	12,000 gauss	
BI Factor	1.8×10^7 dynes/abampere	
Baffle Cutout Diameter		
Front Mounting	13¾"	35.5 cm
Rear Mounting	13½"	34.3 cm
Depth	5¾"	14.6 cm
Net Weight	16½ lbs	7.5 kg
Shipping Weight	19 lbs	8.6 kg



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