

Professional Series Model 2110 8" Extended Range Transducer

20 Watts continuous program
2" edgewound copper ribbon voice coil
60 - 10,000 Hz response
48 dB sensitivity



JBL Model 2110 is a professional quality 8-inch transducer ideally suited for distributed-speaker ceiling installations, portable "effects" speakers, columnar arrays and general purpose monitoring. Its large-diameter edgewound voice coil and highly efficient magnetic assembly are largely responsible for the unit's high conversion efficiency and 20 Watt continuous program power rating. As a result, Model 2110 generates surprisingly high sound pressure levels without audible distortion.

At a distance of 30 feet, a single JBL 2110 can produce a sound pressure level greater than 90 dB.

Like all JBL transducers, Model 2110 is noted for its clean, crisp response and incisive reproduction of transients. Built to traditional JBL standards of precision, it will continue to deliver exceptional performance year after year, without special care or attention.

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Model 2110—8" Extended Range Transducer

Architectural Specifications

The transducer shall have a nominal diameter of 8 inches, overall depth not greater than 3-1/8 inches, and weigh at least 4 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 two inches in diameter and shall be made of edgewound aluminum ribbon operating in a magnetic field of not less than 9,000 gauss. High frequencies shall be reproduced by a 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 milliwatt input, swept 500–2500 Hz) shall be at least 48 dB on-axis and 45 dB 45° off-axis. As an indication of electromechanical conversion efficiency, the BI factor shall be at least 9.1×10^6 dynes per abampere. Usable frequency response shall extend from 60 to at least 10,000 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 1.5 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 10,000 Hz shall be not more than 10 dB down from the 500–2500 Hz reference level. Nominal impedance shall be 8 ohms and power capacity shall be at least 20 Watts normal speech or music program material.

The transducer shall be JBL Model 2110. 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	8 ohms	
Power Capacity ¹	20 Watts continuous program	
Sensitivity ²	1 mW, 30 ft. (9.1 m) 48 dB SPL 1 W, 1 m (3.3 ft.) 97 dB SPL	
Frequency Range	60 Hz to 10 kHz	
Nominal Free Air Resonance	55 Hz	
Voice Coil Diameter	2 inches	5.1 cm
Voice Coil Material	Edgewound aluminum ribbon	
Magnetic Assembly Weight	3 5/8 lbs	1.6 kg
Flux Density	9,000 gauss	
BI Factor	9.1×10^6 dynes/abampere	
Recommended Enclosure Volume	2 - 3 cu. ft.	56 - 84 liters
Baffle Cutout Diameter		
Front or Rear Mount	7 1/16"	17.9 cm
Depth	3 1/8"	7.9 cm
Net Weight	4 1/2 lbs	2.0 kg
Shipping Weight	5 1/4 lbs	2.4 kg

1. 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.
2. Sensitivity measured with an input swept from 500 to 2500 Hz.



Frequency response contour of the 2110 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.

JBL Professional Products are not intended for household use.

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Professional Division