Professional Series
Model 2130
12″ Extended Range Transducer

4″ edgewound ribbon voice coil
100 watts continuous program
40-10,000 Hz response
High efficiency
Precision construction

Professional audio consultants and engineers are invited to compare the JBL 2130 with other loudspeakers, both on the basis of acoustical measurements and extended listening tests.

JBL Model 2130 is a high-power professional quality 12-inch transducer capable of generating extremely high sound pressure levels while at the same time providing clear, natural reproduction of speech or music. It is ideally suited for columnar arrays or clusters, distributed-speaker ceiling installations, or as the low frequency transducer of compact two-way systems. In the last application, its full-range response provides a backup capability in the event of failure of the high frequency reproducer. Except for cone diameter, Model 2130 is identical in construction to 15-inch JBL Model 2135. Therefore, it can be substituted for the 2135 wherever available mounting space will not accommodate a 15-inch unit.

A four-inch diameter edgewound voice coil and highly efficient magnetic assembly are largely responsible for the 2130's high conversion efficiency and 100 watt continuous program power rating. At a distance of 30 feet, a single 2130 can produce a sound pressure level greater than 100 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 2130—12″ Extended Range Transducer

Architectural Specifications

The transducer shall have a nominal diameter of 12 inches, overall depth not greater than 4-5/8 inches, and weigh at least 13.0 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 with at least 275,000 Maxwells total flux. High frequencies shall be reproduced by a dural dome attached directly to the voice coil former.

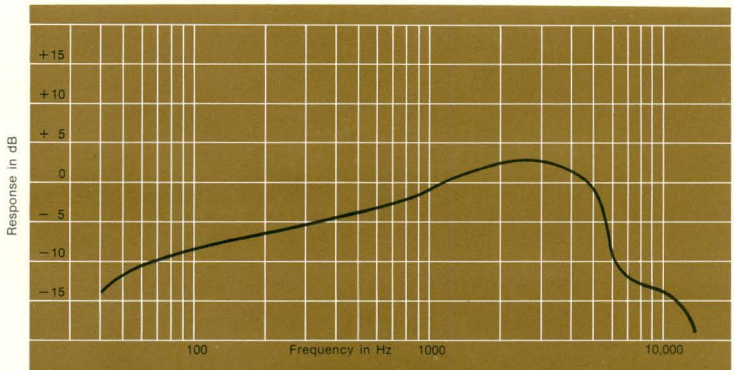
Performance specifications of a typical production unit shall be as follows:

Measured sensitivity (SPL at 30 feet with one mW input, warbled 500—2500 Hz) shall be at least 52 dB on-axis and 48 dB 45° off axis. As an indication of electromechnical conversion efficiency, the Bl factor shall be at least 1.8×10^7 dynes per abampere. Usable frequency response shall extend from 40 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 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 10,000 Hz shall be not more than 12 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 transducer shall be JBL Model 2130. 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	12 inches
Nominal impedance	8 ohms
Power capacity (properly loaded)	100 watts cont. program
Sensitivity	91.5 dB, SPL 10 feet, 1 Watt 52.0 dB, SPL 30 feet, 1mW
Frequency range	40 — 10,000 Hz
Voice coil diameter	4 inches
Voice coil material	Edgewound aluminum ribbon
Flux density	12,000 Gauss
Total flux	275,000 Maxwells
Bl factor	1.8×10^7 dynes per abampere
Magnetic assembly	11 lbs.
Baffle hole dia.	11-1/16 inches (rear mtg.) 11-1/16 inches (front mtg.)
Depth	4-5/8 inches
Net weight	13.0 lbs.



Frequency response contour of Model 2130. Measured response of a typical production unit, including all peaks and dips, does not deviate more than 3 dB from the above curve.

PPB-2130 1/70 Printed in U.S.A.

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