## Professional Series Model 2410 Compression Driver

Silver plated pole piece 134" edgewound ribbon voice coil High efficiency Smooth response 30 watts—continuous program

Professional audio consultants and engineers are invited to compare the JBL 2410 with other loudspeakers, both on the basis of acoustical measurements and extended listening tests.





Model 2410 is a professional quality high frequency compression driver which provides clear, crisp, natural reproduction of speech and music. It is ideally suited to high-quality sound reinforcement installations. Its high efficiency and power capacity permit great dynamic range, and its peak-free response means that greater gain can be attained without acoustic feedback. The 2410 incorporates a dural diaphragm, hydropneumatically drawn to avoid localized stresses or work hardening, concentric exponential phasing plug, I 3/4 inch

edgewound aluminum ribbon voice coil, highly efficient magnetic assembly, and non-resonant cast aluminum back plate. Traditional JBL standards of precision, involving tolerances so close as to be considered impractical by industry standards, result in unparalleled performance. Calibrated impedance and response curves are run to make sure that every unit released meets JBL's performance criteria, and that all 2410's are accurately matched in performance characteristics.



## Model 2410 - Compression Driver

## Architectural Specifications

The compression driver shall consist of an Alnico V magnet encased in a cast iron return circuit. All magnetic assembly parts shall be machined from cast or extruded billets stock. No stamped or non-metallic parts shall be used. The phasing plug shall be assembled of machined concentric exponential horns to eliminate phase cancellations, and it shall further be coupled to a tapered throat, the mouth of which shall be 1 inch in diameter. The back cover shall be cast aluminum with reinforcing ribs to prevent ringing resonances which cause peaks in response. The diaphragm shall be 0.002 duraluminum alloy pneumatically drawn to shape to prevent stresses. The voice coil shall be edgewound aluminum ribbon of not less than 1.75 inches in diameter, operating in a magnetic field of not less than 16,000 Gauss.

Performance specifications of typical production unit shall be as follows:

Measured sensitivity at 1mw on a terminated tube basis (tube of 1 inch diameter, 3.0 feet long) shall be at least 117 dB. As an indication of electromechanical conversion efficiency, the BI factor shall be at least 8.7 x 10<sup>6</sup> dynes/abampere. Usable frequency response shall be from 500 to 18 kHz. Frequency response, measured on a terminated tube shall be flat within ±3 dB from 500 to 4 kHz. From 4 kHz to 15 kHz response shall roll off at the rate of 3 dB octave, and shall be flat within ±1 dB.When used on a 2350 horn, response shall be ±3 dB from 500 - 15 kHz through this area. Nominal impedance shall be 16 ohms and power capacity shall be at least 30 watts normal speech or music program material.

The compression driver shall be JBL Model 2410. Other drivers 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 Impedance Power Capacity

Sensitivity\*

Frequency Range Voice Coil Diameter

Voice Coil Material Flux Density

Diaphragm BI factor

Recommended Crossover

Dimensions

Horn Throat Diameter 8 lbs. Net Weight

16 ohms

30 watts Continuous Program 117 dB, One MW 500-2500 Hz

500 to 15 kHz 1.75 inches

Edgewound Aluminum Ribbon

16.000 Gauss

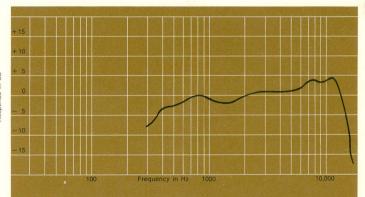
0.002" Duraluminum Alloy  $8.7 \times 10^6$  dynes/abampere

500 Hz or higher

4 1/2" diameter 3 7/8" deep

1 inch

As specified by recognized organizations, sensitivity is measured with the driver coupled to a terminated tube. The JBL rating represents the SPL in a one-inch diameter tube with a one milliwatt input signal (1.26 volts into 16 ohms) warbled from 500 to 2500 Hz.



Frequency response contour of Model 2410 coupled to a JBL model 2350 horn. Measured on-axis response of a typical production driver on this horn, including all peaks and dips, does not deviate more than 2 dB from the above curve.

PPB 2410 3/70 Printed in U.S.A.

