

Professional Series Model 2482 Compression Driver

120 watts continuous program

100 mm (4 in) edgewound aluminum ribbon voice coil

100 mm (4 in) phenolic diaphragm

49 mm (2 in) horn throat diameter



Model 2482 is an extremely high-power professional-quality compression driver. It has a 100 mm (4 in) voice coil and a magnetic structure weighing 10.5 kg (23 lb). It can take the most explosive transients in stride and reproduce them at thunderous levels. Model 2482 is built to typical JBL standards of precision.

Diaphragms of phenolic impregnated linen are virtually indestructible. After manufacture, each driver is tested for conformity to rigid performance standards.

Model 2482 is also tested for power handling with a swept sine wave input signal for one hour at 60 watts. The test, of course, is a much more difficult task for the driver than its rating of 120 watts continuous program.

Model 2482 is unequalled by any other driver in both power capacity and efficiency. It can be used as the high frequency section of two-way systems for high-power reinforcing applications or by itself with a 300 Hz high-pass filter for voice paging or reinforcing systems of high quality and power.

JBL

Model 2482—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 billet stock. The phasing plug shall be assembled of concentric horns to minimize phase cancellations, and it shall be further coupled to a tapered throat, the mouth of which shall be 49 mm (2 in) in diameter. The back cover shall be cast aluminum with reinforcing ribs to prevent ringing resonances. The diaphragm shall be phenolic-impregnated linen for high durability. The voice coil shall be edgewound aluminum ribbon of not less than 100 mm (4 in) in diameter, operating in a magnetic field of not less than 1.7 tesla (17,000 gauss).

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

Measured sensitivity with a 1 mW input on a 25 mm (1 in) terminated tube, averaged from 500 Hz to 2.5 kHz, shall be at least 118 dB SPL. Measured sensitivity with a 1 W input at 1 m distance on-axis from the mouth of a horn with a Q of 6.3 averaged in the 2 kHz octave band shall be at least 111 dB SPL. As an indication of electromechanical conversion efficiency, the BI factor shall be at least 19 newtons per ampere. Frequency response, measured on a terminated tube shall be flat within ± 5 dB from 500 Hz to 6 kHz. On a JBL Model 2366 horn, response shall be ± 3 dB from 300 Hz to 5 kHz. Nominal impedance shall be 16 ohms and power capacity shall be at least 120 watts normal speech or music program material.

The compression driver shall be JBL Model 2482. 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.

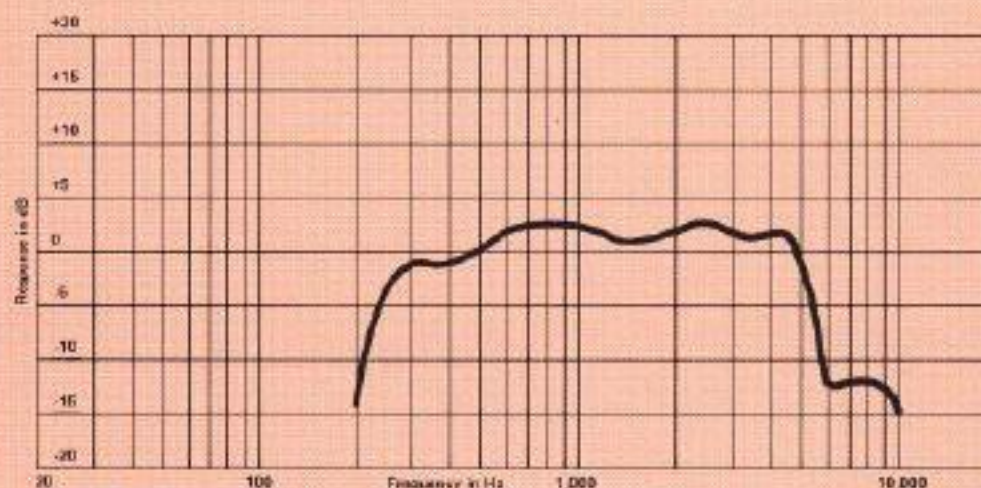
Specifications

Horn Throat Diameter	49 mm	2 in
Nominal Impedance	16 Ω	
Power Capacity ¹	120 W continuous program	
Sensitivity	111 dB SPL, 1 W @ 1 m on horn ²	
	118 dB SPL, 1 mW on plane wave tube ³	
Nominal Efficiency	25% (500 Hz to 2.5 kHz)	
Frequency Range	300 Hz to 6 kHz	
Recommended Crossover	300 Hz or higher	
Diaphragm	0.23 mm (0.009 in) phenolic	
Voice Coil Diameter	100 mm	4 in
Voice Coil Material	Edgewound aluminum ribbon	
Flux Density	1.7 T (17,000 gauss)	
BI Factor	19 N/A	
Positive voltage to black terminal gives diaphragm motion toward the phasing plug		
Dimensions	178 mm (7 in) diameter	
	138 mm (5 $\frac{3}{8}$ in) depth	
Net Weight	11.3 kg	24 $\frac{7}{8}$ lb
Shipping Weight	11.8 kg	26 lb

1. Continuous program power is defined as 3 dB greater than continuous pink noise power and is a conservative expression of the transducer's ability to handle normal speech and music program material. Continuous pink noise power ratings are tested with pink noise input having a 6 dB crest factor, with a high-pass filter set at the specified lower limiting frequency for two hours duration.

2. Sensitivity measured with 1 W input at 1 m distance on-axis from the mouth of a horn with a Q of 6.3 averaged in the 2 kHz octave band.

3. As specified by recognized standards organizations, sensitivity is measured with the driver coupled to a terminated tube. The JBL sensitivity rating represents the SPL in a 25 mm (1 in) terminated tube, using a 1 mW input signal (0.126 V into 16 Ω) swept from 500 Hz to 2.5 kHz. The sensitivity rating with a 1 W input would be 30 dB greater.



Frequency response contour of Model 2482 coupled to a 2366 horn. Measured response of a typical production unit, including all peaks and dips, does not deviate more than 2 dB from the above curve.

JBL continually engages in research related to product improvement. New materials, production methods, and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.



Professional Division

JBL Incorporated

8500 Balboa Boulevard, P.O. Box 2200, Northridge, California 91329 U.S.A.

JBL/harman international

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