Model 2470 is a professional quality high frequency compression driver capable of generating high sound pressure levels, while at the same time providing clear, crisp, natural reproduction of speech or music. It is built to typical JBL standards of precision. The mathematically determined phasing plug is a machined concentric exponential horn to eliminate phase cancellations. The magnetic assembly is cast and machined to tolerances considered impractical by industry standards. Diaphragms of phenolic impregnated linen diaphragm is virtually indestructible. A ring machined of pure silver is added to the pole piece to control impedance at high frequencies, so that this unit, with its phenolic diaphragm, exhibits a frequency response superior to competitive drivers with aluminum diaphragms. After manufacture, the frequency response of each driver is tested for conformity to rigid performance standards.

Model 2470 is an outstanding all purpose driver. It is smooth and wide-range enough for monitor systems; high powered and efficient enough for the most demanding reinforcement task.
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. No stamped or ceramic parts shall be used. The phasing plug shall be assembled of machined concentric exponential horns to eliminate phase cancellations, and it shall be further coupled to a tapered throat, the mouth of which shall be one 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 phenolic impregnated linen for greater resistance to fatigue. The voice coil shall be edgewound aluminum ribbon for greater frequency response, not less than 1.75 inches in diameter, operating in a magnetic field of not less than 19,000 gauss. An impedance controlling ring, machined of pure silver, shall be affixed to the pole piece in order to increase efficiency at high frequencies and extend flat response.

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

Measured sensitivity at 1 mW on a terminated tube (tube 1 inch in 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 10.3 x 10⁶ dynes/abampere.

Frequency response, measured on a terminated tube, shall be flat within ± 3 dB from 500 Hz to 4.5 kHz. From 4 kHz to 10 kHz, response shall roll off at the rate of 3 dB/octave, and shall be flat within ± 1 dB through this region. On a 2350 horn, response shall be ± 5 dB from 500 Hz to 10 kHz. Nominal impedance shall be 16 ohms, and power capacity shall be at least 50 Watts normal speech or music program material.

The compression driver shall be JBL Model 2470. 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.