

JBL**175 and 275
HIGH
FREQUENCY
COMPRESSION
DRIVERS****175DLH
HIGH
FREQUENCY
ASSEMBLY**

These JBL high frequency drivers are precision units, built to watchmaker's standards of accuracy. Edgewound aluminum ribbon voice coils pack maximum conductor length in the smallest possible space. The magnetic gap in which the voice coil vibrates is barely wider than the coil itself — surfaces are individually machined to closest possible tolerances. As in all JBL transducers, the total energy supplied by the magnet is concentrated in the one place where it contributes to performance: the voice coil gap. Suspended in this intense magnetic field, the light coil responds to highest audio frequencies with utmost fidelity.

Diaphragms are hydro-pneumatically formed of 2 mil dural alloy. This process assures a smooth non-resonant structure, uniform in thickness and free from localized stresses or work-hardening. Sound is conducted from the diaphragm to the horn throat through the exponentially flared channels of a mathematically designed phasing plug so that all frequencies are kept in unvarying phase relationship.

JBL high frequency drivers enjoy a reputation unmatched by any other units. Renowned for their ability to reproduce the most complex transient waveforms and for their impressive dynamic range, they will recreate with equal ease the most subtle nuances of delicate strings.

The JBL 175 and 275 drivers are precision high-efficiency units which are capable of delineating treble waveforms with remarkable accuracy. When used with recommended JBL exponential horns, these drivers will provide smooth transparent response through the full high frequency range.

SPECIFICATIONS	175	275
Nominal impedance	16 ohms	16 ohms
Flux density	16,000 gauss	18,500 gauss
Voice coil diameter	1 $\frac{3}{4}$ "	1 $\frac{3}{4}$ "
Power capacity—with recommended horn and crossover network	25 watts	25 watts
Horn throat diameter	1"	1"
Overall diameter	4 $\frac{1}{2}$ "	5 $\frac{3}{4}$ "
Overall depth	3 $\frac{13}{16}$ "	3 $\frac{13}{16}$ "
Shipping weight	10 lbs.	15 lbs.



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175 and 275 HIGH FREQUENCY COMPRESSION DRIVERS

175DLH HIGH FREQUENCY ASSEMBLY

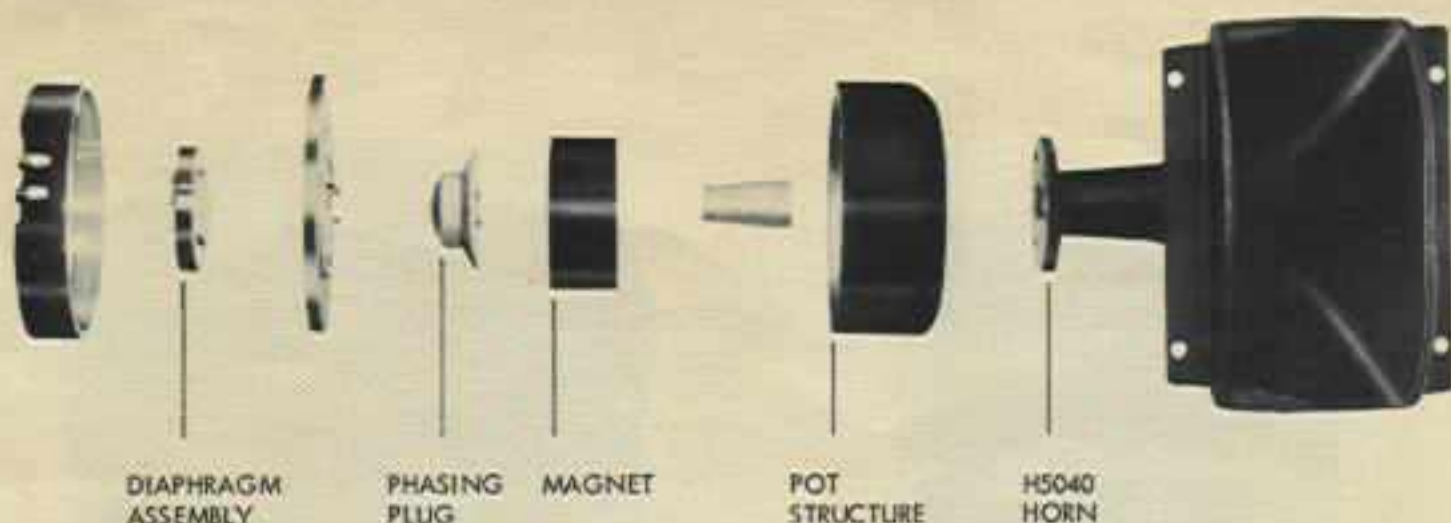
MOUNTING

A complete high frequency assembly (driver, horn and acoustic lens) is self-contained and does not require the properties of an enclosure. It may be installed in the same enclosure as the low frequency driver with no special precautions.

Or it may be mounted in a separate cabinet, or freestanding. In all cases, the high frequency assembly should be located as close as possible to the bass driver.

Model 175DLH (175 driver with 1217-1290 horn/lens) normally mounts in a single 5 1/4" hole cut in the baffle board. An adjustable clamp ring allows the front of the lens to be made flush with the front of the baffle board.

When the JBL H5040 horn is used with the 175 or 275 driver, a rectangular cutout 4 1/4" x 8 1/4" is required. The front of the horn projects 3/4" in front of a 1/4" baffle; clearance must be provided between the front of the baffle board and the grille.



ASSOCIATED HORNS AND ACOUSTIC LENSES
Models 175 and 275 have the same throat diameter and can be mounted to the same horns. The 175 is most often found as part of the complete 175DLH assembly (see below) while the 275 is used primarily with the H5040 horn, installed in the JBL-Ranger METREGON.

In addition to their use in recommended JBL high frequency assemblies, the 175 and 275 can be used with other horns and lenses for specialized applications. For example, either driver can be mounted to the HL91 horn/lens assembly. Or, by utilizing Model 27A horn extension, they can be used with larger JBL theater horns and lenses.

The optimum crossover frequency for a particular driver/horn/lens assembly depends both upon the acoustic loading imposed by the horn and lens, and upon the maximum power input which the driver must handle. If you need information about such special combinations, please write to the JBL Technical Service Department.

TWO-WAY LOUDSPEAKER SYSTEMS JBL Models 130A and 130B bass drivers match perfectly to high frequency assemblies using the 175 and 275 drivers in the following standard JBL maximum-efficiency systems:

001 The 175DLH high frequency assembly is combined with the 130A and the N1200 network to make an extremely popular loudspeaker system of the highest quality. Crossover frequency is 1200 cps. Maximum power input is 25 watts of continuous program material.

050 A maximum-efficiency system which utilizes two 130B low frequency drivers with the 175DLH and N1200 network.

205 Designed for installation in the JBL-Ranger METREGON, this system consists of two sets of loudspeaker components for outstanding stereo reproduction. Each set consists of the 275 driver and H5040 horn, N600 crossover network, and 130A low frequency driver. Crossover frequency—600 cps. Maximum power input—25 watts program material.

175DLH HIGH FREQUENCY ASSEMBLY



This high frequency assembly is used in the JBL 001 two-way loudspeaker system, long established as a "standard" for professional monitoring and high quality home installations. The assembly consists of the Model 175 driver mounted to the 1217-1290 horn/lens.

The 14 separate elements of the acoustic lens are combined in a double-concave configuration which spreads high frequencies smoothly over a 90° solid angle. It is acoustically transparent, absorbing less of the energy passing through it than the finest optical lenses. The configuration of this perforated plate lens allows it to mount flush with the face of the baffle board; no extra clearance is required.