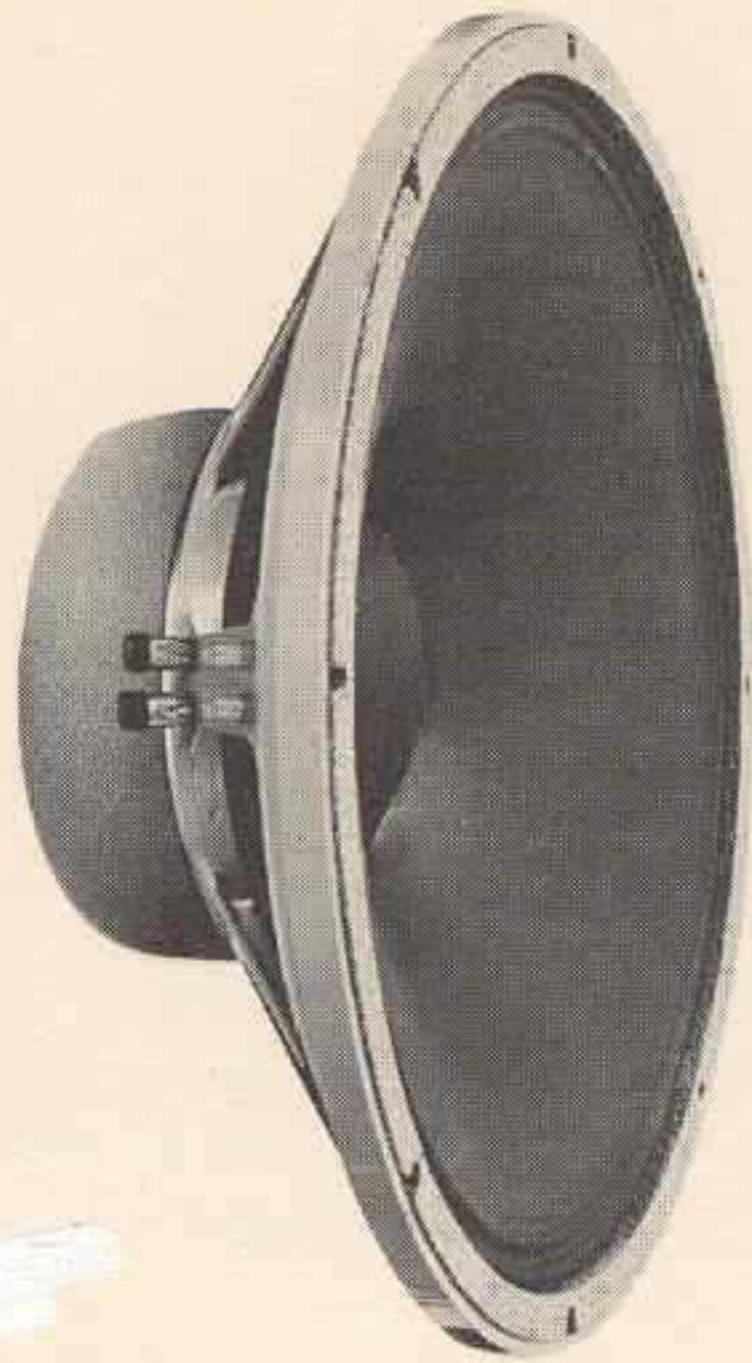


JBL

**130A & B
150-4 & 4C**

**HIGH EFFICIENCY
DRIVERS FOR
HORN OR
REFLEX LOADED
ENCLOSURES**



The JBL *Signature* Models 130A and 130B are designed to provide crisp, clean reproduction of all usable audio frequencies below 1500 cps. They are recommended for performance at the lower end of JBL *Signature* sound systems crossing over at 1200 cps. These include *Signature* System 001 which has a single Model 130A at the low end and *Signature* System 050, in which two Models 130B perform in concert. High Frequency Assembly Model 175DLH generates and projects the highs in both systems. Transducers of the 130-series are distinguished in listening tests by the remarkable fidelity with which they articulate the most difficult transients. This quality results from the extremely high electroacoustical efficiency which has been achieved through extensive research, imaginative design and the unstinting use of top-quality materials.

JBL *Signature* Models 150-4 and 150-4C are designed to provide powerful verbatim reproduction of all usable audio frequencies below 700 cps. They are recommended for use in front loaded horn type enclosures such as the renowned JBL "Hartsfield," and the rear-loading C43 and C55. They comprise the lower frequency transducer, crossing over at 500 cps, when used in such systems as the JBL 081, 083, and the 085. The rigid piston assembly and efficient electromagnetic characteristics of this transducer result in crisp reproduction of the lowest audio frequencies, without "hangover" or boom. The high efficiency, smooth response, and great power-handling reserve of these drivers has prompted their use in the world's finest theater systems.

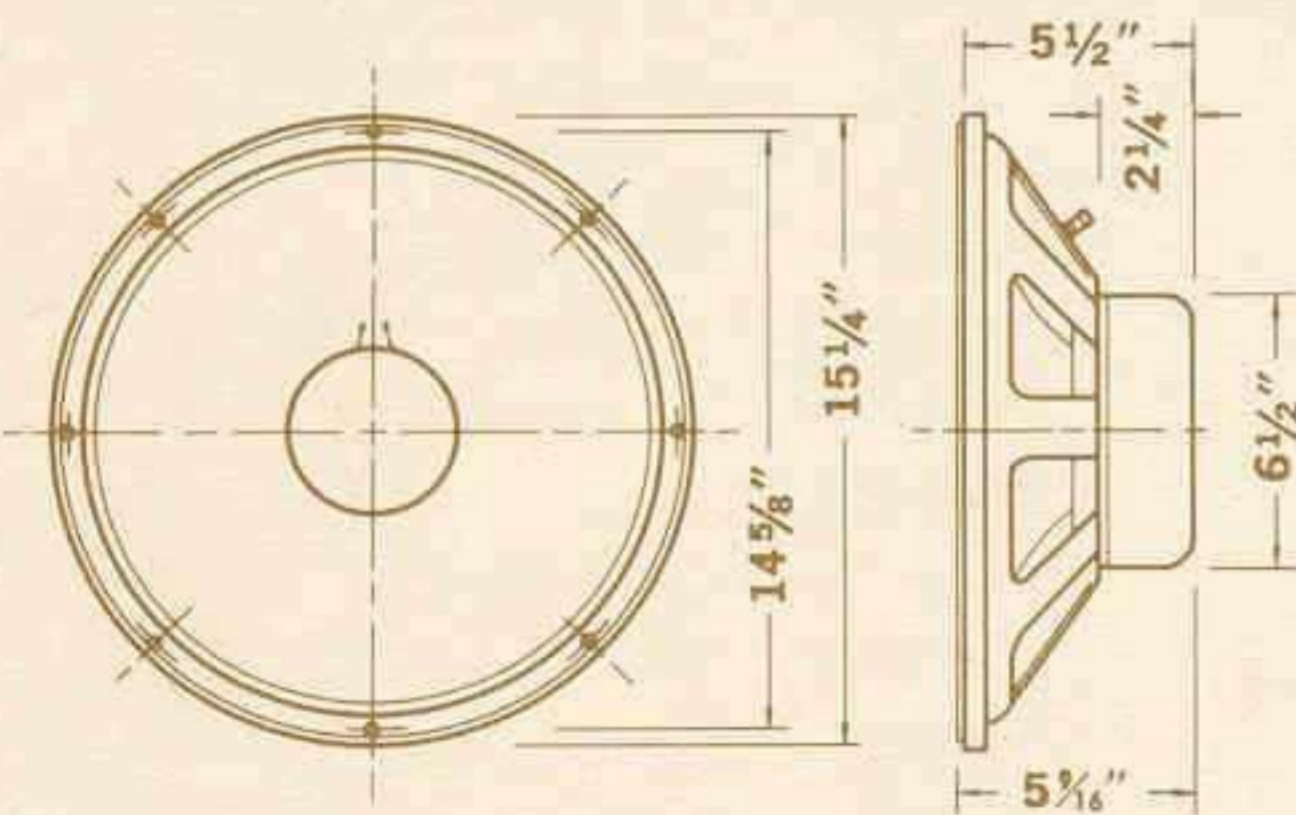
Edge wound copper voice coils.

Maximum efficiency.

Massive magnetic structures.

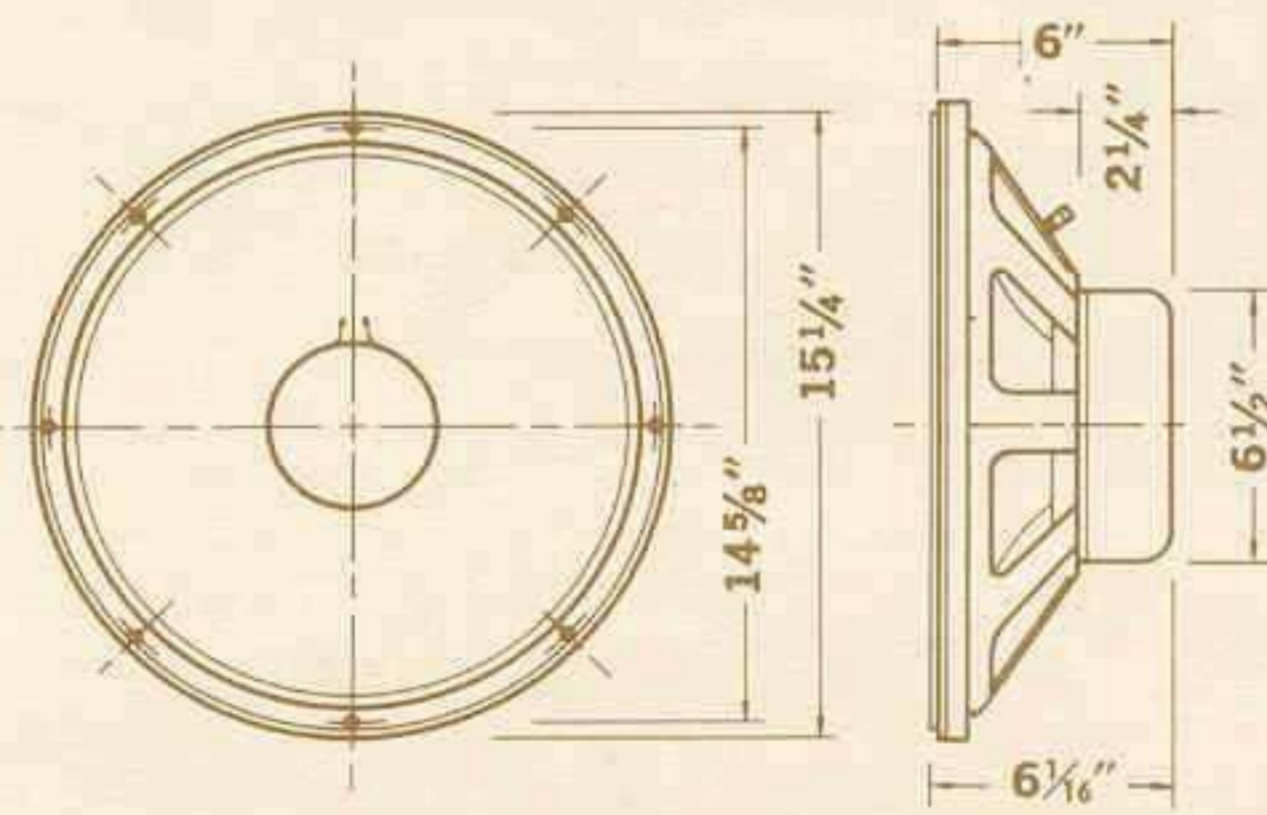
Precision cast aluminum frames.

Grain oriented Alnico V magnetic field supply.



SPECIFICATIONS

Impedance: 130A	16 ohms
130B	32 ohms
Voice coil diameter	4"
Power capacity	25 watts
Free air cone resonance	36 cps
Field	permanent Alnico V magnet
Baffle hole diameter	13 1/2"
Shipping weight	23 lbs



SPECIFICATIONS

Impedance: 150-4	32 ohms
150-4C	16 ohms
Voice coil diameter	4"
Power capacity	30 watts
Free air cone resonance	35 cps
Field	permanent Alnico V magnet
Baffle hole diameter	13 1/2"
Shipping weight	25 lbs





DYNAMIC ASSEMBLY Models 130A, B and 150-4, -4C have 4-inch diameter voice coils of edgewound copper ribbon. This unique feature requires specialized manufacturing techniques which prohibit ordinary mass-production assembly. The large, specially wound voice coil is coupled to a stiff, straight-sided cone. This combination is the only known method of achieving the goal of true piston action throughout the operating range of the transducer. High electro-acoustic efficiency is achieved by centering the economically-wound voice coil (more than one foot of conductor per turn!) in a precisely machined magnetic gap of the highest possible flux density. These powerful drivers have none of the "muddy," "bubbling" quality associated with less efficient designs.

FRAME The frame is a rigid aluminum casting, eliminating the disagreeable resonances which occur in all punch-press fabricated speaker baskets.

POT The magnetic circuit of the pot is constructed of a specially developed iron material which provides a low-reluctance return path for the magnetomotive force. Through advanced design, such extremely efficient use is made of the permanent magnet material that stray magnetic fields external to the pot structure are virtually non-existent. This can be demonstrated by holding a small iron object close to the pot. *All available magnetic flux* is conducted to the voice coil gap where it contributes to the field motivating the coil. It should be pointed out in this connection that the magnetic leakage from speakers designed with less care has an extremely detrimental effect on the performance of TV tubes and other electronic equipment operating within the stray field.

PERFORMANCE Models 130A and 130B perform at maximum efficiency up to 1500 cps. The widest flat frequency response is obtained when these transducers are mounted in correctly designed bass reflex or back-loading horn enclosures. In such installations, frequencies from 30 to 175 cps are generated at the back of the cone and transmitted through the enclosure, while the front of the cone acts as a direct radiator of the midrange frequencies (175-1200 cps).

MODEL N1200 DIVIDING NETWORK Crossover at 1200 cps; roll-off rate, 12 db per octave. Panel-mounted HF Gain Selector. Nominal impedance, 16 ohms.

MODEL 175DLH HF ASSEMBLY A precision transducer reproducing all useful audio frequencies above 1200 cps. Smooth, efficient dispersion by acoustic lens.

PERFORMANCE Models 150-4 and 150-4C perform at maximum efficiency up to 700 cps. These transducers may be used as drivers for compression-loaded folded horns, such as the *Paragon*, or in reflex or rear-loading horn enclosures as well. The high acoustic loading of properly matched reflex and horn-type enclosures results in the greatest possible acoustic efficiency—hence fidelity—down to the lowest musical frequencies. To realize the clean, crisp quality which characterizes these bass drivers, they should *not* be mounted in resonant, tuned pipe, or "air coupler" type cabinets. Properly installed, these transducers have no equal in natural reproduction of the vital bass frequencies.

N500 AND N400 DIVIDING NETWORKS Both units have a crossover frequency of 500 cps, impedance of 16 ohms, and provide for adjustable attenuation of the high frequency driver. The N500 is designed for general purpose heavy-duty use.

