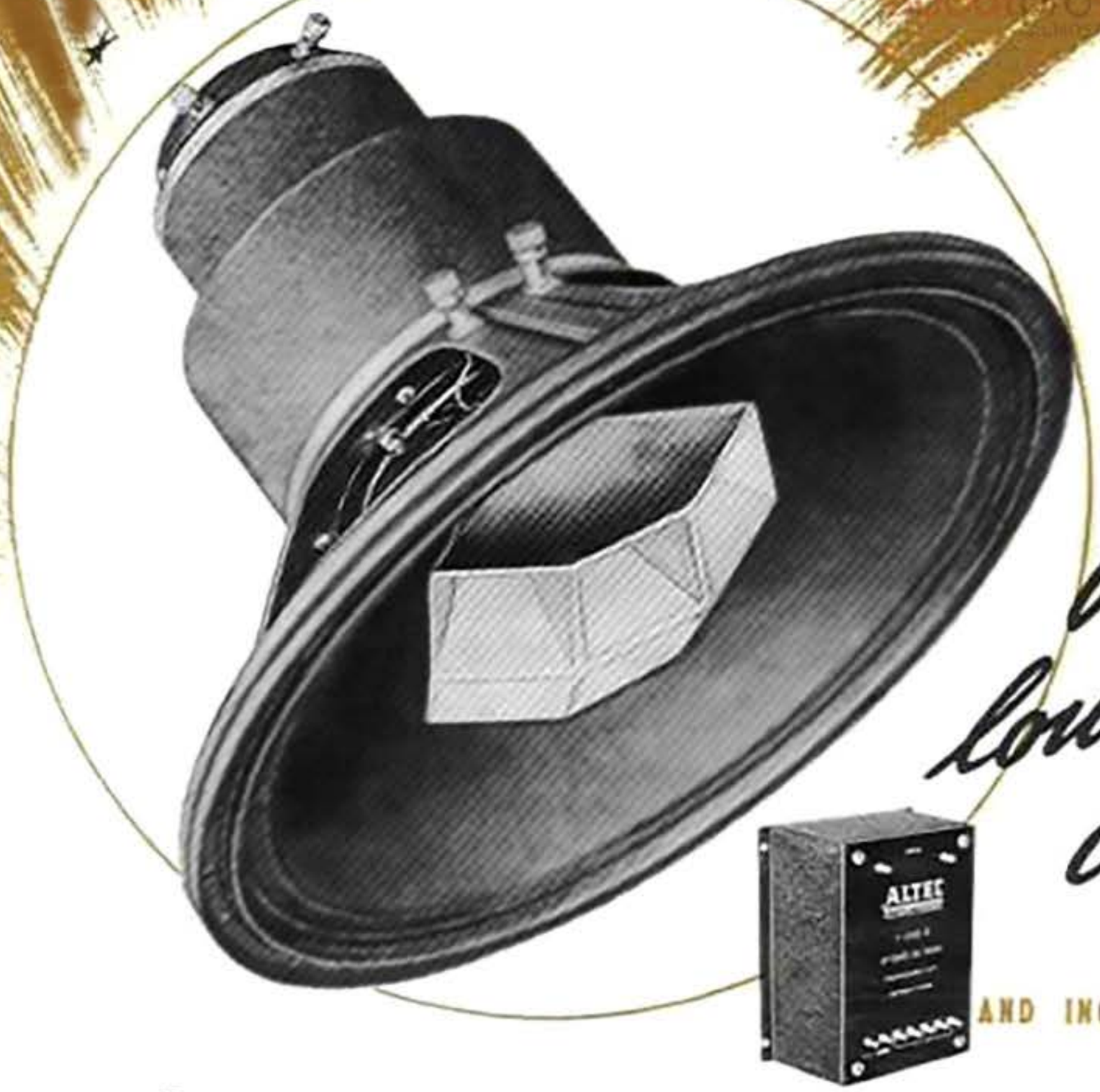
DUPLEX SPEAKER

ALTEC
LANSING CORPORATION

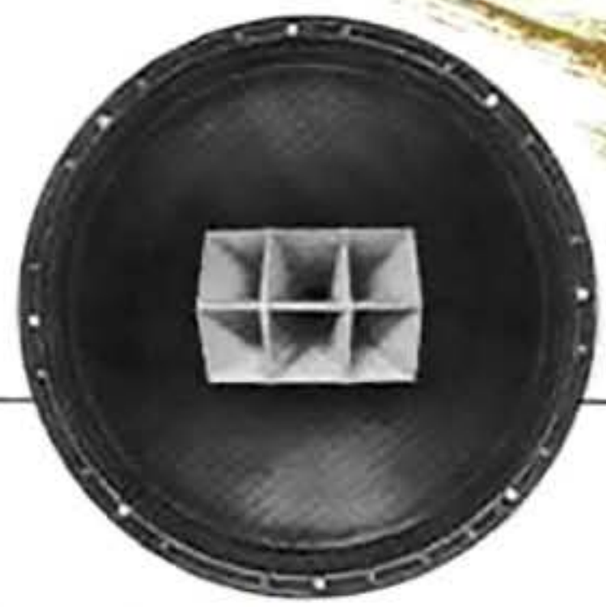


A two-way loudspeaker in compact form!

AND INCLUDING THE N-2000B DIVIDING NETWORK

This "professional" speaker used by professional sound men has become the standard of the radio, recording, and movie industries, and wherever high-quality sound reproduction is essential. The Altec Lansing Duplex is a complete two-way multicellular speaker designed for monitoring, radio, recording, phonograph, music systems, paging systems, television, FM radio, public address systems, and all industrial and commercial applications where the finest of sound reproduction is desired. By combining both high and low frequency units in a compact two-way multicellular speaker, a point source of sound has been provided with excellent quality, high efficiency, and small space requirements. The Duplex Speaker in actual performance is up to 500 per cent more efficient in these applications. Intermodulation effects, always produced by single dia-

SEE OTHER SIDE



SPECIFICATIONS

Angle of Horizontal Distribution	60°
Angle of Vertical Distribution	40°
Low Frequency Cut-Off Speaker (mounted in cabinet)	60 cycles
High Frequency Cut-Off Speaker (mounted in cabinet)	above audibility
Dividing Network Crossover	2000 cycles
Dividing Network Impedance	20 ohms
Signal Capacity	30 watts
Duplex Speaker Diameter	15 3/16"
Duplex Speaker Depth	11 1/8"
Shipping Weight	59 lbs.

phragm type loudspeakers, are not heard from the Duplex. The Duplex is a speaker that has revolutionized sound reproduction.

DISTRIBUTION

The multicellular horn in the Altec Lansing Duplex Speaker provides up to 1100 per cent increased area of quality sound distribution in the horizontal plane, or 12 times the area coverage at high frequencies as compared to other single unit speakers of comparable size. In the vertical plane, 700 per cent increase in area of quality sound distribution is provided, or 8 times more than any other speaker of similar size now available.

HIGH FREQUENCY UNIT

One of the most important of many factors contributing to the amazing performance of the Altec Lansing Duplex is the high frequency unit construction, which uses a metal diaphragm with a tangential compliance in conjunction with a multicellular horn for the efficient reproduction of high frequencies. The voice coil attached to the metal diaphragm is wound with rectangular aluminum wire and operates in a magnetic field of very high flux density supplied by a large Alnico V permanent magnet. The aluminum alloy metal diaphragm provides mass stiffness and high velocity of transmission speed which is more than 5 times greater than that obtainable with the paper cone material normally used for small cones radiating high frequencies This high frequency unit is designed to operate as a piston up to frequencies above the limit of audibility. The high frequency horn is a multicellular unit having 6 cells in a 2 x 3 configuration.

LOW FREQUENCY UNIT

The 3-inch voice coil of the low frequency unit is also wound with rectangular wire, and operates in a magnetic field of very high flux density supplied by a separate and very large Alnico V permanent magnet. The voice coil construction and the magnetic circuit design combine to provide exceptionally high efficiency. The low frequency voice coil assembly is mounted in a 15-inch stiff paper cone resonant at 38 cycles.

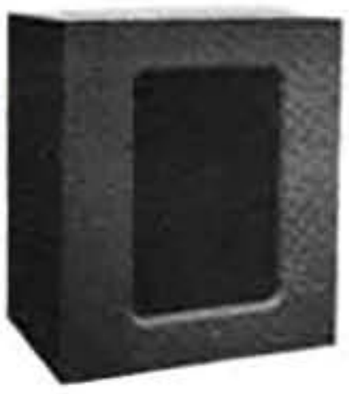
DIVIDING NETWORK FOR PROPER DIVISION OF POWER

A 20 ohm dividing network of the constant impedance type with a crossover frequency of 2000 cycles is used for separating the power for each unit.

CAUTION: Due to the extreme frequency range of the Duplex Speaker, it is necessary that signals of the highest quality be supplied it. Any low frequency hum or high frequency distortion will be faithfully reproduced.

DUPLEX CABINETS

612 UTILITY CABINET
Height 29½" Width 25½" Depth 17¾"



614 PORTABLE CABINET
Height 24¾" Width 18¾" Depth 14¼"

605A FLOOR CABINET
Height 38" Width 30" Depth 16"

606 WALL CABINET
Height 40" Width 30" Depth 17"

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ALTEC LANSING CORPORATION

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