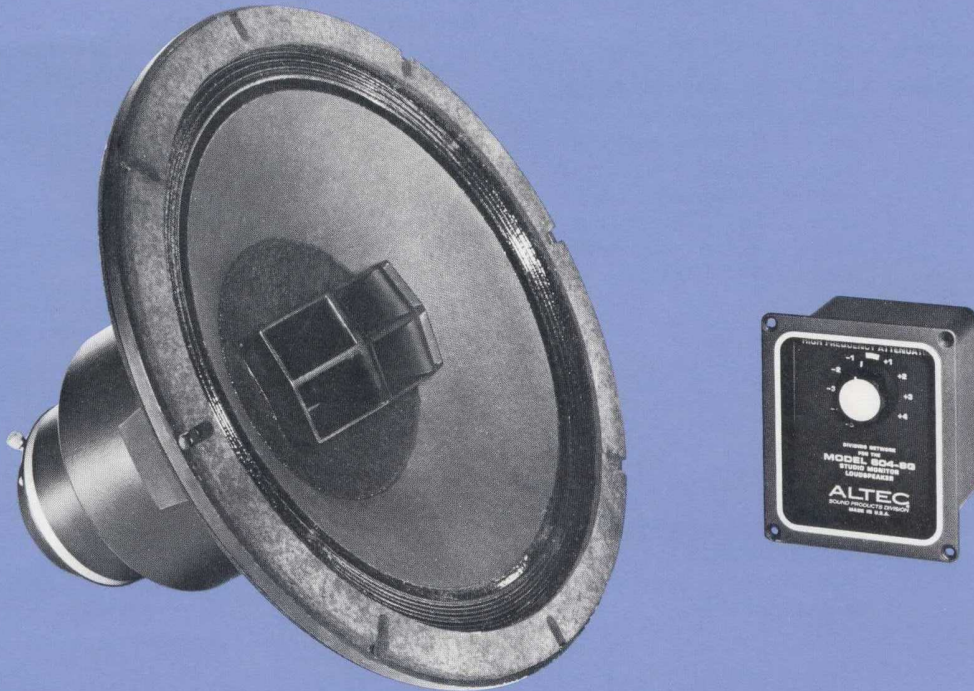


ALTEC

SOUND PRODUCTS DIVISION

604-8G DUPLEX[®] LOUDSPEAKER SYSTEM



DESCRIPTION

The ALTEC 604-8G Duplex Loudspeaker System is a two-way loudspeaker with high- and low-frequency speakers coaxially mounted in a single frame. The dual magnet structures allow each speaker to be magnetically, electrically and mechanically independent. The system is primarily designed for use in studio monitor applications where no compromise can be tolerated between the original and reproduced performance, and offers very high sensitivity (loudness) from moderate input power. Coaxial arrangement provides the effect of a homogenous source of full-range sound. All frequencies are propagated through a common 'window' to ensure good stereo imagery when multiple 604-8G's are used.

The 604-8G features several improvements over the earlier models:

- Voice-coil impedance has been changed from 16 to 8 ohms to better complement the solid-state amplifiers used today.
- The dividing network, mounted on a cast aluminum frame, ensures a minimum of 8 ohms impedance throughout the operating range, provides

crossover slope functions of 12 dB/octave (low pass) and 18 dB/octave (high pass), and includes continuously variable high-frequency attenuation of up to 20 dB to correctly match the acoustical characteristics to any listening area.

- The new structurally reinforced die-cast aluminum frame is rigid enough to permit front or rear mounting.
- A new high-frequency diaphragm provides extended treble response and greater linearity than previous designs.

The high-frequency section has a voice coil of edge-wound aluminum ribbon, attached to an aluminum diaphragm having tangential compliance and loaded with a sturdy exponentially expanded multicellular horn. A machined phasing plug with two exponential acoustic slots ensures proper phase relationship between the sound emanating from the center and outer edges of the high-frequency diaphragm. The low-frequency cone is driven by a voice coil of edge-wound copper ribbon and is supported by a high-compliance cloth surround.