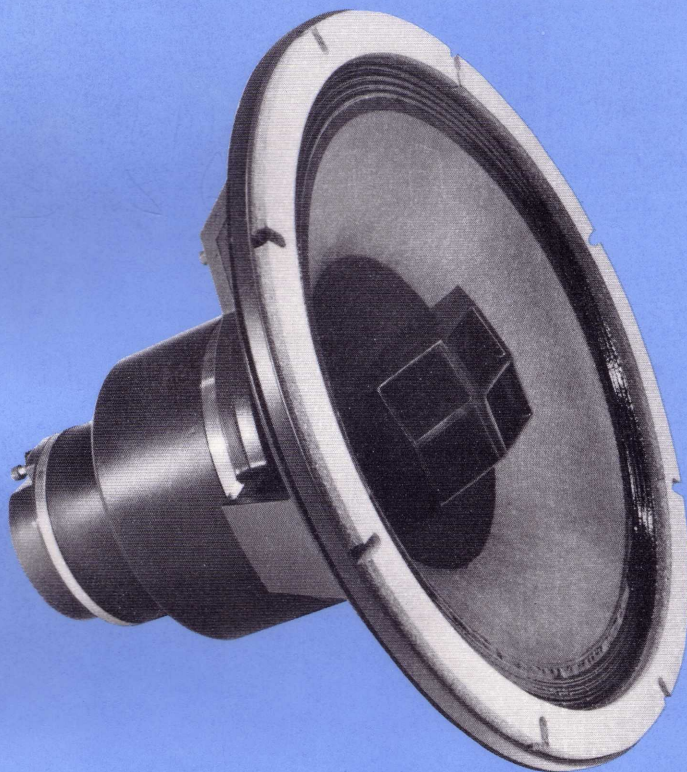


604-HPLN DUPLEX LOUDSPEAKER SYSTEM – PRELIMINARY



DESCRIPTION

The Altec Lansing 604-HPLN Duplex Loudspeaker System is a two-way coaxial loudspeaker. The 604-HPLN's dual magnet structure allows the HF section to be magnetically, electronically and mechanically independent of the LF section. Designed for high-power bi-amplified and tri-amplified sound systems, the 604-HPLN's reproduction accuracy makes it an ideal choice for both sound reinforcement and studio systems.

The 604-HPLN's high and low-frequency assemblies are mounted in a single 16" die-cast aluminum frame which is rigidly gusseted and braced and can be front or rear mounted. The high-frequency section has a voice coil of edge-

wound aluminum ribbon attached to an aluminum diaphragm with tangential compliance. Altec Lansing's patented "Tangerine" phasing plug ensures proper phase relationship between the sound emanating from the center and outer edges. The low-frequency section also has an edge-wound voice coil attached to a carefully molded (felted) cone and supported by a high-compliance cloth surround.

The impedance of the 604-HPLN's low-frequency section is 8-ohms nominal; the impedance of the high-frequency section is 16-ohms nominal. These differing impedances aid in optimum power transfer from modern solid state amplifiers.

SPECIFICATIONS

Type:	Duplex coaxial loudspeaker system	Voice Coils —	
LF Power Ratings:	80 watts continuous pink noise (50 Hz-1500 Hz)	LF:	3" diameter, edge-wound copper ribbon
HF Power Ratings:	15 watts continuous pink noise (1500 Hz-20 kHz)	HF:	1 3/4" diameter, edge-wound aluminum ribbon
LF Frequency Response:	Uniform 50 Hz-4 kHz	Magnets —	
HF Frequency Response:	Uniform 1500 Hz-20 kHz	LF:	Alnico, 4.4 pounds,
LF Pressure Sensitivity:	97 db SPL at 4 feet with a 10 cubic foot enclosure when measured on axis with 1 watt input of band-limited pink noise from 250 Hz-1 kHz	HF:	Alnico, 1.2 pounds
HF Pressure Sensitivity:	105 db SPL at 4 feet when measured on axis with 1 watt input of band limited pink noise from 2 kHz-10 kHz	Frame:	Structurally reinforced die-cast aluminum
LF Impedance:	8 ohms nominal	Dimensions:	16" (40.6 cm) diameter 11 1/8" (28.3 cm) deep
HF Impedance:	16 ohms nominal	Finish:	Dark gray enamel
Nominal free-air LF cone resonance:	34 Hz	Weight:	31 lbs.
Distribution Pattern:	40°V x 90°H	Mounting Data —	
		Baffle Opening:	14 1/8" (35.9 cm) (front or rear mount)
		Mounting Bolt Centers:	8 or 4 bolts equally spaced on 15" (38.1 cm) diameter circle
		Recommended Enclosures:	ALTEC 612C Speaker Cabinet ALTEC 620A Speaker Cabinet ALTEC 817A Speaker Cabinet 2 speakers per cabinet
		Voice Coil Replacement Numbers —	
		LF:	RCA 604-HPLN
		HF:	34117

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The loudspeaker system shall be a two-way coaxial, with a separate magnet structure for each section. The HF section shall have an aluminum diaphragm having tangential compliance and loaded with an exponentially expanded multicellular horn. The loudspeaker system shall meet the following criteria. LF rating, 80 watts continuous pink noise from 50 Hz to 1500 Hz, HF power rating, 15 watts continuous pink noise from 1500 Hz to 20 kHz. LF frequency response, uniform from 50 Hz to 4000 Hz. HF frequency response uniform from 1500 Hz to 20 kHz. LF pressure sensitivity, 97 db SPL at 4' measured on axis with 1 watt input of band

limited pink noise from 250 Hz to 1000 Hz. HF pressure sensitivity, 105 db SPL at 4' measured on axis with 1 watt input of band limited pink noise from 2000 Hz to 10 kHz. Nominal free-air cone resonance, 34 Hz. Distribution pattern, 40° V x 90° H. Voice coils; 3" diameter of edge-wound copper ribbon (LF), 1 3/4" diameter of edge-wound aluminum ribbon (HF). Magnets; Alnico, 4.4 pounds (LF), 1.2 pounds (HF). Dimensions, 16" diameter x 11 1/8" deep. Weight, 31 pounds.

The loudspeaker system shall be the ALTEC Model 604-HPLN.



1515 SOUTH MANCHESTER AVENUE, ANAHEIM, CALIFORNIA 92803