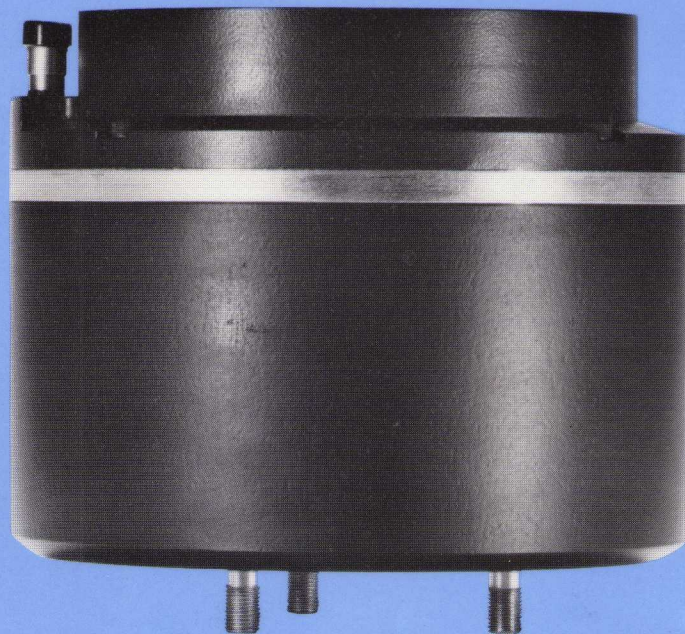


291-16B COMPRESSION DRIVER LOUDSPEAKER



DESCRIPTION

The Altec 291-16B Compression Driver Loudspeaker has been designed for use in high-level sound systems of the highest quality. It may be used with Altec multicellular or sectoral horns and will provide a smooth response from 500-13,000 Hz. This wide range, when used in conjunction with Altec low-frequency loudspeakers, will provide full high-fidelity reproduction for the largest theatre or auditorium. Improvements in diaphragm/voice coil assemblies and magnetic structures allow the 291-16B to exact a smoother and extended response characteristic over the 8-15 kHz band, and 2 dB greater pressure sensitivity than provided by

earlier 291 models. The 291-16B has a minimum impedance of 16 ohms.

The diaphragm/voice coil assembly of the 291-16B can be replaced in the field by untrained personnel without the use of special tools. Adjustable dowel pins allow each voice coil to be precisely centered in the voice coil gap, which has a flux density of 20,500 gauss derived from a 6.49-pound Alnico V magnet.

These improvements combine to produce a high-frequency compression driver loudspeaker of virtually matchless quality and limitless application.

SPECIFICATIONS

Power Rating:	40 watts of band-limited pink noise (500-20,000 Hz) when mounted on Altec 300 or 500 Hz horn	Construction — Magnet:	6.49-pound Alnico V, 20,500 gauss flux density
Frequency Response:	500-13,000 Hz	Magnetic Structure Weight:	28 pounds
Pressure Sensitivity:	109 dB SPL measured at 4' from mouth of Altec 311-90 horn with 1 watt input of band-limited pink noise from 500-3000 Hz (Ref.: 0 dB = 0.0002 dyne/cm ²). See appropriate Altec horn catalog sheets for specific pressure sensitivity when driver is combined with other horns.	Diaphragm:	Aluminum dome with polyamide-imide suspension
Minimum Impedance:	16 ohms	Voice Coil:	2.8" diameter of edge-wound aluminum ribbon
		Dimensions:	7.1" (17.9 cm) diameter 5.8" (14.8 cm) depth, less mounting studs
		Weight:	29.3 pounds (13.3 kg)
		Finish:	Gray "Hammertone" enamel
		Mounting Data:	Three 3/8"-24 x 1" studs, 120° apart on 3.25" centers

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The compression driver loudspeaker shall meet the following performance criteria. Power rating, 40 watts of band-limited pink noise (500-20,000 Hz). Frequency response, uniform from 500 to 13,000 Hz. Pressure sensitivity, 109 dB SPL when measured at 4' on axis from mouth of Altec 311-90 horn with 1 watt input of band-limited pink noise from 500-3000 Hz (Ref.: 0 dB = 0.0002 dyne/cm²). Minimum impedance, 16 ohms. The voice coil shall be 2.8" in diameter, of edge-wound aluminum ribbon, and shall operate in a magnetic gap having a flux density of 20,500 gauss derived from a 6.49-pound Alnico V magnet. The diaphragm shall be an aluminum dome and shall have polyamide-imide suspension. A machined phasing plug with 3 exponential acoustic slots shall serve as the pole piece and shall also be utilized to provide the proper phase relationship between the sound emanating from the center and edges of the diaphragm and voice coil assembly. The entire diaphragm and voice coil assembly shall be field replaceable without requiring special tools or skills; adjustable dowel pins shall allow each voice coil to be precisely centered in the voice coil gap. The driver shall be 7.1" in diameter by 5.8" deep (excluding 1" depth of mounting studs), and shall weigh 29.3 pounds.

The compression driver loudspeaker shall be the Altec Model 291-16B.