

411-8A LOW-FREQUENCY LOUDSPEAKER



DESCRIPTION

The ALTEC 411-8A Low-Frequency Loudspeaker has been developed to meet the need for a component that will provide optimum performance in enclosures of modest dimensions (4.5 to 8 cubic feet). The 411-8A features a robust 4-inch diameter voice coil of edge-wound copper ribbon operating in an unusually deep magnetic gap. This design has more turns of voice coil wire in the magnetic gap, which controls the

motion of the cone to an extent not normally found in commercially available low-frequency loudspeakers. When operating in an airtight enclosure of moderate volume, the 411-8A is capable of producing an extended low-frequency response having very low distortion characteristics even at power levels greatly exceeding normal listening demands.

SPECIFICATIONS

Type:	Low-frequency loudspeaker	Nominal Free-Air Cone Resonance:	18 Hz
Power Rating:	100 watts (pink noise above 40 Hz)	Construction — Frame:	Structurally reinforced die-cast aluminum
Frequency Response:	Uniform from 20 Hz to 1000 Hz (when mounted in a suitable airtight enclosure)	Cone:	Molded fiber
Pressure Sensitivity:	93 dB SPL with 1 watt input of band-limited pink noise from 250 Hz to 1000 Hz measured on axis 4' from cone (when mounted in a suitable airtight enclosure and referenced to 0.0002 dyne/cm ²). Equal to EIA rating of 46 dB SPL measured on axis 30' from cone with 1 milliwatt input. 113 dB SPL with 100 watts input of band-limited pink noise from 250 Hz to 1000 Hz measured on axis 4' from cone (when mounted in a suitable airtight enclosure and referenced to 0.0002 dyne/cm ²).	Cone Suspension:	High-compliance foam surround
		Voice Coil Assembly:	4" diameter edge-wound copper ribbon on aluminum support
		Flux Density:	9300 gauss
		Overall Dimensions:	15-5/16" diameter x 5-1/2" deep (38.89 cm x 13.97 cm)
		Weight:	20 pounds, 8 ounces (9.03 kg)
		Mounting Hole Diameter:	14-3/16" (front mounting) 13-3/4" (rear mounting)
		Mounting Hole Centers:	8 holes equally spaced on 14-9/16" diameter circle
Voice Coil Impedance:	8 ohms	Recommended Enclosure:	Airtight sealed enclosure 4.5 to 8.0 cubic feet volume

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The low-frequency loudspeaker shall be 15-5/16" in diameter. The voice coil shall be 4" in diameter, of edge-wound copper ribbon on an aluminum support. The cone surround shall be of high-compliance foam. The low-frequency loudspeaker shall meet the following performance criteria. Power rating, up to 100 watts of pink noise. Frequency response (when mounted in a suitable airtight enclosure), uniform from 20 Hz to 1000 Hz. Pressure sensitivity (when mounted in a suitable airtight enclosure), 93 dB SPL when measured at 4' on axis with 1 watt input of band-limited pink noise from 250 Hz to 1000 Hz (Ref.: 0.0002 dyne/cm²). Voice coil impedance, 8 ohms. Nominal free-air cone resonance, 18 Hz.

The low-frequency loudspeaker shall be the ALTEC Model 411-8A.