

515E LOW-FREQUENCY LOUDSPEAKER ...PRELIMINARY



DESCRIPTION

The Altec Lansing 515E is a 16-inch low-frequency loudspeaker designed for quality sound reinforcement and reproduction systems where high power-handling capacity must be combined with high efficiency and linearity. This combination of performance attributes makes the 515E ideal for use in either high power sound systems or the most critical studio monitor systems.

The 515E is built on a rigid die-cast aluminum frame designed for either front or rear mounting. A heavy duty ferrite permanent magnet backs up a high power voice coil of edge-wound copper ribbon. This provides the highest possible density of wire in the voice coil gap. Uniform axial retention of the voice coil in the magnetic gap and the extremely high-compliance cone suspension ensures clear, accurate reproduction of even the lowest frequencies.

The 515E has a continuous power rating of 75 watts and a uniform frequency response from 20 Hz to 1000 Hz. Its high efficiency, high linearity, low distortion and high power-handling capacity make the 515E a perfect choice for the most demanding professional applications.

SPECIFICATIONS

Type: 16-inch low-frequency loudspeaker

Power Rating: 75 watts of band-limited pink noise (20-1000 Hz)

Frequency Response: 20-1000 Hz

Pressure Sensitivity: Measured in the far (free) field with 1 watt input of band-limited pink noise from 100-1000 Hz and calculated to 4' equivalent (Ref.: 0.0002 dyne/cm²)

Enclosure	dB SPL at 4'
210 (2)	107.0
211 (2)	106.0
410 (4)	108.0
612C	99.0
815A (2)	105.0
816A	101.5
828G	102.0
(2) = 2 Model 515E's	
(4) = 4 Model 515E's	

Minimum Impedance: 16 ohms

Nominal Free-Air

Cone Resonance: 25 Hz

Voice Coil: 3" diameter, edge-wound copper ribbon

Magnet: 5.6 lbs. ferrite, 13,000 gauss

Frame: Die-cast aluminum

Cone: Molded fiber

Cone Suspension: High-compliance cloth surround with mechanical resistance

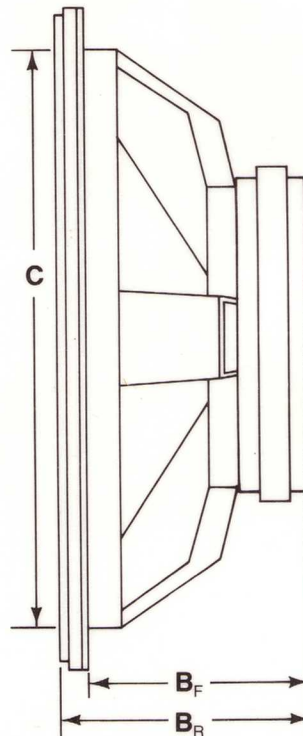
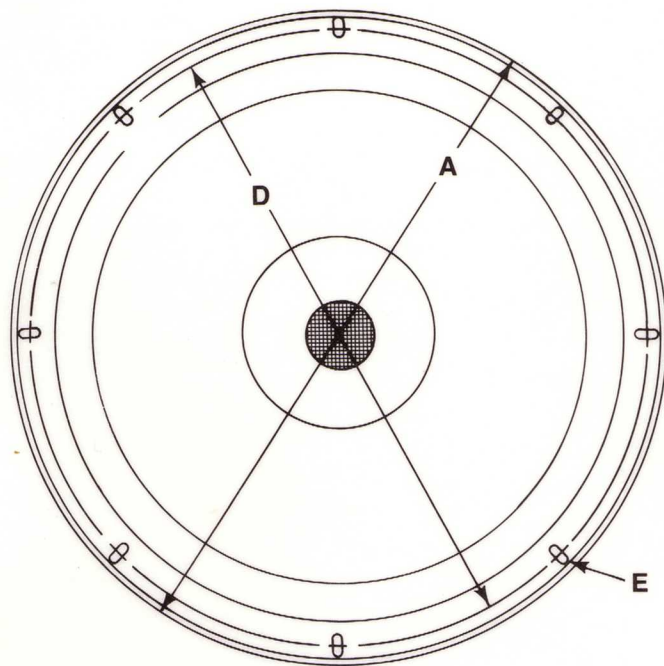
Dimensions: 16" (40.64 cm) diameter x 6³/₈" (16.20 cm) deep

Weight: 22 lbs. (10 kg)

Mounting Data—

Baffle Opening: 14¹/₈" (35.87 cm) diameter

Mounting Bolt Centers: 8 mounting bolts 45° apart on 15" (38.1 cm) diameter circle



LOUDSPEAKER MOUNTING DIMENSIONS

- (A) Loudspeaker Diameter: 16" (40.64 cm)
- (B_F) Depth When Front Mounted: 5³/₈" (14.13 cm)
- (B_R) Depth When Rear Mounted: 6³/₈" (16.20 cm)

- (C) Baffle Opening Diameter: 14¹/₈" (35.87 cm)
- (D) Bolt Circle Diameter: 15" (38.1 cm)
- (E) Bolt Hole Slots: 1/4" (0.64 cm) x 3/4" (2.02 cm); 8 slots spaced 45° apart.

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The low-frequency loudspeaker shall meet the following criteria. Power rating, up to 75 watts of band-limited pink noise (20-1000 Hz). Frequency response, uniform from 20-1000 Hz when mounted in a suitable enclosure. Pressure sensitivity, ___ dB SPL when measured at 4' on axis from front edge of Altec Model _____ enclosure (containing ___ 515E speakers) with 1 watt of band-limited pink noise from 100-1000 Hz (Ref.: 0.0002 dyne/cm²). Minimum

impedance, 16 ohms. Nominal free-air LF cone resonance, 25 Hz. The voice coil shall be 3" in diameter of edge-wound copper ribbon, driven by a 5.6-pound ferrite magnet having a flux density of 13,000 gauss. Dimensions, 16" diameter x 6³/₈" deep. Weight, 22 pounds.

The low-frequency loudspeaker shall be the ALTEC LANSING Model 515E.



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