



**DESCRIPTION**

The ALTEC 416-8C is a 16" low-frequency loudspeaker of professional quality that is ideal for use in wide-range sound reinforcement and high-fidelity systems. Performance is characterized by smooth response with extraordinary linearity.

A structurally reinforced frame, rigid enough to permit front or rear mounting, supports a heavy permanent magnet providing high flux density.

The low-mass voice coil is made from edge-wound copper ribbon to provide more turns of wire in the voice-coil gap. The cone suspension has exceptionally high compliance for accurate reproduction of low frequencies.

The 416-8C loudspeaker complements a wide selection of ALTEC-designed enclosures.

**SPECIFICATIONS**

**Power Rating:** 75 watts of continuous pink noise, band-limited 20-1600 Hz

**Frequency Response:** Uniform, 20-1600 Hz

**Pressure Sensitivity:** Measured at 4' on axis with 1 watt input of band-limited pink noise from 500-1000 Hz (Ref.: 0 dB = 0.0002 dyne/cm<sup>2</sup>):

Enclosure	1W, 4' Rating in dB SPL
612C	97.0
815A (2 units)	103.0
816A	99.5
825B/828G	100.00

**Impedance:** 8 ohms

**Nominal Free-Air Cone Resonance:** 25 Hz

**Voice Coil Diameter:** 3"

**Magnetic Assembly—**

**Magnet Weight:** 4.875 pounds

**Magnet Type:** Ferrite

**Flux Density:** 11,000 gauss

**Construction—**

**Frame (Basket):** Structurally reinforced die-cast aluminum

**Cone:** Molded fiber

**Cone Suspension:** High-compliance cloth surround with mechanical resistance

**Voice Coil:** Edge-wound copper ribbon

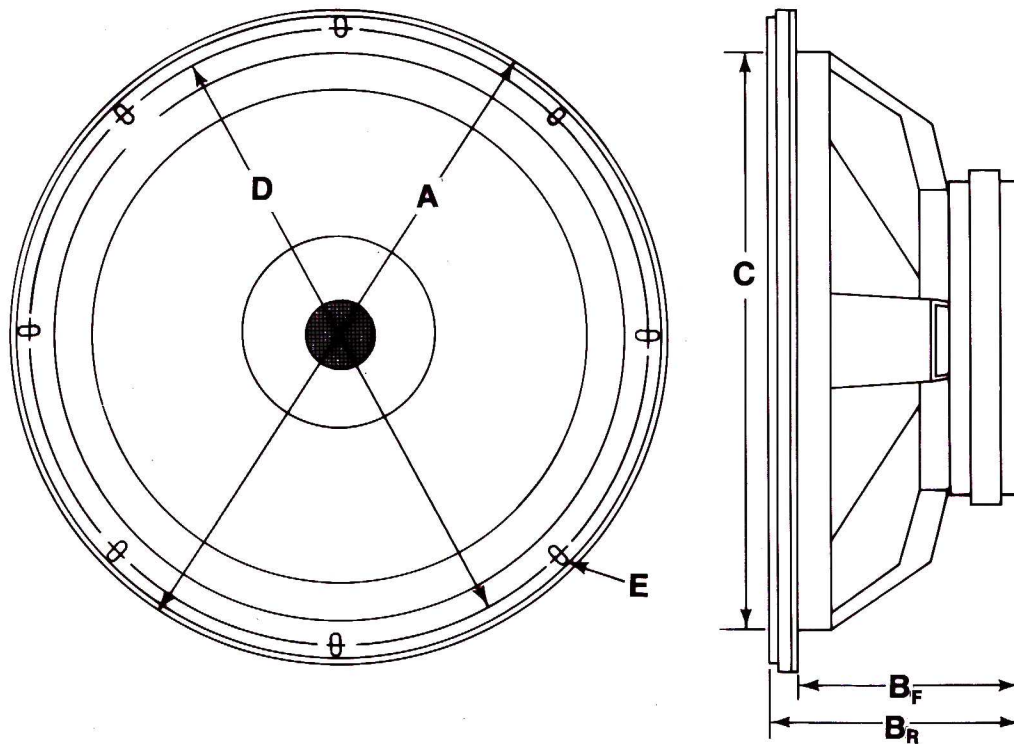
**Dimensions:** 16" (40.6 cm) diameter  
6¼" (15.88 cm) depth

**Weight:** 20 pounds, 11 ounces (90.4 kg)

**Mounting Data—**

**Mounting Hole Diameter:** 14⅞" (35.9 cm) (may be either front or rear mounted)

**Mounting Bolt Centers:** 4 holes equally spaced on 15" (38.1 cm) diameter circle



#### LOUDSPEAKER MOUNTING DIMENSIONS

(A) Loudspeaker Diameter:	16.00" (40.64 cm)
(B <sub>F</sub> ) Depth When Front Mounted:	5 <sup>5</sup> / <sub>16</sub> " (14.13 cm)
(B <sub>R</sub> ) Depth When Rear Mounted:	6 <sup>3</sup> / <sub>8</sub> " (16.20 cm)
(C) Baffle Opening Diameter:	14 <sup>1</sup> / <sub>8</sub> " (35.87 cm)
(D) Bolt Circle Diameter:	15.13" (38.4 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. Frame, structurally reinforced die-cast aluminum, for front or rear mounting. Voice coil, 3" diameter of edge-wound copper ribbon that shall operate in a magnetic gap having a flux density of 11,000 gauss. Magnet weight, 4.875 pounds. Cone surround, treated high-compliance cloth. Power rating, up to 75 watts of continuous pink noise, band-

limited 20-1600 Hz. Frequency response, uniform, 20-1600 Hz. Pressure sensitivity \_\_\_\_\_ dB SPL when measured at 4' on axis from front edge of ALTEC Model \_\_\_\_\_ enclosure (containing \_\_\_\_\_ 416-8C speakers) with 1 watt input of band-limited pink noise from 500-1000 Hz. Impedance, 8 ohms. Nominal free-air cone resonance, 25 Hz. Dimensions, 16" diameter x 6<sup>1</sup>/<sub>4</sub>" deep. Weight, 20 pounds, 11 ounces.

**ALTEC  
LANSING**

1515 SOUTH MANCHESTER AVENUE, ANAHEIM, CALIFORNIA 92803  
ALTEC CORPORATION