418B Musical Instrument Loudspeaker



The ALTEC 418B Musical Instrument Loudspeaker is a rugged, 15" loudspeaker designed for use in musical entertainment systems of moderate size and coverage area where true high-fidelity reproduction must be combined with high power output.

Features:

for Long Life

Rugged Construction — The 418B has a heavy permanent magnet, a structurally-reinforced die-cast aluminum frame, a 3"-diameter edge-wound aluminum voice coil and exceptionally compliant cone suspension. sealed against dust and dirt.

Excellent Sound Distribution with Smooth Response to **Enhance Musical** Instruments

The smooth response and excellent linearity of the 418B loudspeaker is achieved by strict adherence to precision design and manufacturing tolerances. The axial retention of the voice coil in a magnetic field, uniform over the full excursion, assures the clarity of music reproduction at high power levels. The low cone resonance, when coupled to a properly designed ALTEC enclosure, eliminates virtually all 'doubling' or self-generation of unwanted harmonic components.

High Power-Handling — Capacity and High **Quality Sound** Reproduction

The 418B has a continuous power rating of 100 watts and a frequency response from 45 to 8000 Hz. Its design provides high efficiency, high linearity, low distortion, wide range and optimum cone resonance.



ALTEC 418B Loudspeakers

SPECIFICATIONS

Type:

Musical instrument loudspeaker

Power Rating:

For sound system use with amplifiers having continuous power rating of

up to 100 watts with program material

Frequency Response:

45 Hz to 8000 Hz

Pressure Sensitivity:

100 dB SPL with 1 watt input from 600 to 2400 Hz sweep signal measured

on axis 4' from cone

99 dB SPL with 1 watt input from 50 to 550 Hz sweep signal measured on

axis 4' from cone

(Ref.: 0.0002 dyne/cm²)

Impedance:

8 ohms (other impedances available in production quantities)

Nominal Free-Air

Cone Resonance:

55 Hz

Voice Coil Diameter:

3"

Magnetic Assembly -

Magnet Weight:

2.4 pounds

Assembly Weight:

10.5 pounds

Magnet Type:

Alnico V

Flux Density:

13,000 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 aluminum ribbon

Maximum Core Excursion:

1/2"

Diameter:

15-5/16"

Weight:

14 pounds, 6 ounces

Mounting Data -

Mounting Hole Diameter:

13-5/8" (may be either front or rear mounted)

Mounting Bolt Centers:

8 holes equally spaced on 14-9/16" diameter circle

Loudspeaker Depth:

7"

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The musical instrument loudspeaker shall have a maximum diameter of 15-5/16" and weigh 14 pounds, 6 ounces. It shall have a structurally-reinforced die-cast aluminum frame which shall be rigid enough to permit front or rear mounting. The voice coil shall be 3" in diameter, edge-wound aluminum ribbon and shall operate in a magnetic gap having a flux density of 13,000 gauss. The loudspeaker shall have an Alnico V permanent magnet weighing not less than 2.4 pounds. The magnetic structure shall have a metal dust cover to protect it from dirt, iron particles and magnetic dust. The cone-surround area shall be of high-compliance cloth. The musical instrument loudspeaker shall meet the following performance criteria. Power rating, up to 100 watts of continuous program material. Frequency response, uniform from 45 to 8000 Hz when loudspeaker is mounted in suitable enclosure. Pressure sensitivity; 100 dB SPL with 1 watt input from 600 to 2400 Hz sweep signal measured on axis 4' from cone, 99 dB SPL with 1 watt input from 50 to 550 Hz sweep signal measured on axis 4' from cone (ref.: 0.0002 dyne/cm²). Impedance, 8 ohms. Nominal free-air cone resonance, 55 Hz.

The musical instrument loudspeaker shall be the ALTEC Model 418B.

- NOTICE

ecommend that you obtain your Altec products from factory trained prize Sound Contractors and Distributors. This will assure you opper installation, a continuing source of knowledgeable advice, service, quick warranty protection.