ALTEC musical instrument loudspeakers are designed to provide outstanding reproduction of the music sound spectrum when used in sound systems for the largest theaters and auditoriums. Utilizing heavy permanent magnets, rugged die-cast frames, voice coils of the largest practical diameter that are edge-wound with aluminum or copper ribbon, and exceptionally compliant cone-suspension, these musical instrument transducers combine the advantages of long-term operation with unparalleled response throughout the entire musical instrument frequency range.

The smooth response and exceptional linearity of each loudspeaker is achieved by means of 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.

The ALTEC 417-8C is a 12-inch musical instrument loudspeaker with a continuous power rating of 75 watts and a frequency response from 60 Hz to 8000 Hz. It is ideal for use in musical entertainment systems of moderate size and coverage area where true high-fidelity reproduction must be combined with high power output.

The ALTEC 418B is a 15-inch musical instrument loudspeaker with a continuous power rating of 100 watts and a frequency response from 45 Hz to 8000 Hz. Its high efficiency and its ability to cover a large listening space with emphatic sound reproduction of exceptional quality has earned it eminent billing for use in the instrumental music field.

The ALTEC 421A, with its outstanding low-frequency response, high efficiency and ability to faithfully reproduce instrumental music at unusually high power levels remains the unchallenged leader in the largest and finest single-source musical sound systems throughout the entertainment world. The 15-inch cone has a frequency response from 35 Hz to 4000 Hz and can handle up to 100 watts of continuous music power; perfect for the throbbing beat of the bass guitar in any 'rock' group.

The ALTEC 425-8A is a 10-inch musical instrument loudspeaker with a continuous power rating of 75 watts and a frequency response from 60 Hz to 8000 Hz. It is ideal for limited-space enclosures where true high-fidelity reproduction must not be compromised in music entertainment systems.
ALTEC 417-8C, 418B, 421A, 425-8A Loudspeakers

**DESCRIPTION**

**MODEL 417-8C**
- **Power Rating:** For sound system use with amplifiers having continuous power rating of up to 75 watts with program material
- **Frequency Range:** 60-9000 Hz
- **Pressure Sensitivity:** 100 dB SPL at 1 watt input from 600-2400 Hz sweep signal measured on axis 4° from cone
- **Impedance:** 8 ohms (other impedances available in production quantities)
- **Impedance:** 69 Hz
- **Voice Coil Diameter:** 3" (3"
- **Magnet Assembly -**
  - **Magnet Weight:** 2.4 lbs
  - **Assembly Weight:** 10.5 lbs
  - **Magnet Type:** Alnico V
  - **Flux Density:** 13,000 Gauss
- **Frame -**
  - **Structure:** Structurally reinforced die-cast aluminum
  - **Frame:** 2.4 lbs
- **Cone -**
  - **Material:** Molded fiber
  - **Cone Suspension:** High-compliance cloth surround with mechanical resistance
- **Voice Coil -**
  - **Type:** Edge-wound aluminum ribbon
  - **Base:** 1/2"
  - **Diameter:** 12-1/8"
  - **Weight:** 13 lbs, 6 ozs
  - **Mounting Data -**
    - **Molding Hole:** 11-1/8" (may be either front or rear mounted)
    - **Mounting Bolt:** 8 holes equally spaced on 11-1/8" diameter circle
    - **Loudspeaker:** 6"

**SPECIFICATIONS**

**MODEL 418B**
- **Power Rating:** For sound system use with amplifiers having continuous power rating of up to 100 watts with program material
- **Frequency Range:** 45-9000 Hz
- **Pressure Sensitivity:** 100 dB SPL at 1 watt input from 600-2400 Hz sweep signal measured on axis 4° from cone
- **Impedance:** 8 ohms (other impedances available in production quantities)
- **Impedance:** 60 Hz
- **Voice Coil Diameter:** 3" (3"
- **Magnet Assembly -**
  - **Magnet Weight:** 2.4 lbs
  - **Assembly Weight:** 10.5 lbs
  - **Magnet Type:** Alnico V
  - **Flux Density:** 13,000 Gauss
- **Frame -**
  - **Structure:** Structurally reinforced die-cast aluminum
  - **Frame:** 2.4 lbs
- **Cone -**
  - **Material:** Molded fiber
  - **Cone Suspension:** High-compliance cloth surround with mechanical resistance
- **Voice Coil -**
  - **Type:** Edge-wound aluminum ribbon
  - **Base:** 1/2"
  - **Diameter:** 12-1/8"
  - **Weight:** 13 lbs, 6 ozs
  - **Mounting Data -**
    - **Molding Hole:** 11-1/8" (may be either front or rear mounted)
    - **Mounting Bolt:** 8 holes equally spaced on 11-1/8" diameter circle
    - **Loudspeaker:** 6"

**MODEL 421A**
- **Power Rating:** For sound system use with amplifiers having continuous power rating of up to 100 watts with program material
- **Frequency Range:** 35-9000 Hz
- **Pressure Sensitivity:** 100 dB SPL at 1 watt input from 600-2400 Hz sweep signal measured on axis 4° from cone
- **Impedance:** 8 ohms (other impedances available in production quantities)
- **Impedance:** 60 Hz
- **Voice Coil Diameter:** 3" (3"
- **Magnet Assembly -**
  - **Magnet Weight:** 2.4 lbs
  - **Assembly Weight:** 10.5 lbs
  - **Magnet Type:** Ceramic Ferrimag V
  - **Flux Density:** 14,400 Gauss
- **Frame -**
  - **Structure:** Structurally reinforced die-cast aluminum
  - **Frame:** 2.4 lbs
- **Cone -**
  - **Material:** Molded fiber
  - **Cone Suspension:** High-compliance cloth surround with mechanical resistance
- **Voice Coil -**
  - **Type:** Edge-wound copper ribbon
  - **Base:** 1/2"
  - **Diameter:** 12-1/8"
  - **Weight:** 13 lbs, 6 ozs
  - **Mounting Data -**
    - **Molding Hole:** 11-1/8" (may be either front or rear mounted)
    - **Mounting Bolt:** 8 holes equally spaced on 11-1/8" diameter circle
    - **Loudspeaker:** 6"

**MODEL 425-8A**
- **Power Rating:** For sound system use with amplifiers having continuous power rating of up to 75 watts with program material
- **Frequency Range:** 60-9000 Hz
- **Pressure Sensitivity:** 100 dB SPL at 1 watt input from 600-2400 Hz sweep signal measured on axis 4° from cone
- **Impedance:** 8 ohms (other impedances available in production quantities)
- **Impedance:** 72 Hz
- **Voice Coil Diameter:** 3" (3"
- **Magnet Assembly -**
  - **Magnet Weight:** 2.4 lbs
  - **Assembly Weight:** 10.5 lbs
  - **Magnet Type:** Ceramic Ferrimag V
  - **Flux Density:** 13,000 Gauss
- **Frame -**
  - **Structure:** Structurally reinforced die-cast aluminum
  - **Frame:** 2.4 lbs
- **Cone -**
  - **Material:** Molded fiber
  - **Cone Suspension:** High-compliance cloth surround with mechanical resistance
- **Voice Coil -**
  - **Type:** Edge-wound aluminum ribbon
  - **Base:** 1/2"
  - **Diameter:** 12-1/8"
  - **Weight:** 13 lbs, 6 ozs
  - **Mounting Data -**
    - **Molding Hole:** 11-1/8" (may be either front or rear mounted)
    - **Mounting Bolt:** 4 holes equally spaced on 9-5/8" diameter circle

**ARCHITECTS AND ENGINEERS SPECIFICATIONS**

417-8C
- The musical instrument loudspeaker shall have a maximum diameter of 12-1/8 inches and weigh 13 pounds, 6 ounces. From 1 watt, it shall have a minimum pressure sensitivity of 100 dB SPL (for 600-2400 Hz sweep signal) and 89.5 dB SPL (for 50-500 Hz sweep signal) at 4 feet, measured on axis with reference at 0.0002 dynes/cm². The loudspeaker shall be capable of withstanding the output of a 75-watt amplifier when the amplifier is driven to its maximum output power with program material. The voice coil shall be 3 inches in diameter, shall be edge-wound with aluminum ribbon and shall operate in a magnetic gap having a flux density of at least 13,000 Gauss, derived from an Alnico V permanent magnet. The voice coil shall be in a die-cast aluminum frame that shall be rigid enough to permit front or rear mounting. The cone-surround area shall be of high-compliance cloth that shall permit a nominal free-air resonance of 60 Hz. The input impedance of the loudspeaker shall be 8 ohms. The loudspeaker shall include a metal dust cover over the magnetic structure that shall provide a protective seal against dust, dirt, and mechanical and magnetic dust.

418B
- The musical instrument loudspeaker shall be ALTEC Lansing model 417-8C.

421A
- The musical instrument loudspeaker shall have a maximum diameter of 15-1/8 inches and weigh 14 pounds, 8 ounces. From 1 watt, it shall have a minimum pressure sensitivity of 100 dB SPL (for 600-2400 Hz sweep signal) and 98.5 dB SPL (for 50-500 Hz sweep signal) at 4 feet, measured on axis with reference at 0.0002 dynes/cm². The loudspeaker shall be capable of withstanding the output of a 100-watt amplifier when the amplifier is driven to its maximum output power with program material. The voice coil shall be 3 inches in diameter, shall be edge-wound with aluminum ribbon and shall operate in a magnetic gap having a flux density of at least 13,000 Gauss, derived from an Alnico V permanent magnet. The voice coil shall be in a die-cast aluminum frame that shall be rigid enough to permit front or rear mounting. The cone-surround area shall be of high-compliance cloth that shall permit a nominal free-air resonance of 55 Hz. The input impedance of the loudspeaker shall be 8 ohms. The loudspeaker shall include a metal dust cover over the magnetic structure that shall provide a protective seal against dust, dirt, and mechanical and magnetic dust.

425-8A
- The musical instrument loudspeaker shall be ALTEC Lansing model 421A.

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Specifications and components subject to change without notice. Overall performance will be maintained or improved.