

ALTEC LANSING®

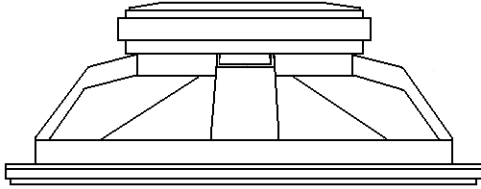
PROFESSIONAL

515-8HHP

515-16HHP

High Efficiency

15" Low Frequency Speaker



FEATURES - THE ALTEC LANSING DIFFERENCE

- Superior Efficiency
- Accurate Low Frequency Reproduction
- High Fidelity 15" / 381 mm Low Frequency Loudspeaker
- High Performance 200W AES / 800W Peak Power Handling

GENERAL PRODUCT DESCRIPTION

Since the introduction of the Voice of the Theatre® loudspeaker system in 1945, Altec Lansing's 515 series have been the leading low frequency loudspeakers in cinemas and auditoriums all over the world. The 515 is truly legendary, and Altec Lansing's 515-8HHP and 515-16HHP are the two newest models in this series. Continuing in the tradition of the 515 series, these two new models produce the outstanding fidelity that established Altec Lansing as the number one choice in theater, auditorium, and studio applications.

The 515-8HHP and 515-16HHP are constructed from one of the industry's largest magnet structures mated to a very lightweight cone assembly, resulting in two of the most efficient low frequency loudspeakers that Altec Lansing has ever produced. Both low frequency loudspeakers incorporate a high-power handling, edge-wound aluminum, flat-wire voice-coil, which is designed for dependability and high acoustic output level capability. These low frequency loudspeakers also feature a special cloth suspension, which provides extended low frequency response and extremely high linearity. The new 515-HHP series loudspeakers are designed to maximize the performance of bass horn enclosures (vented or sealed).

The 515-16HHP is rated at a nominal 16 ohm impedance, making it the first choice for dual-loudspeaker, vented bass horn cabinets, like the Altec Lansing 210/211 and 817A enclosures. Installation of these low frequency loudspeakers is made simple with 0.25-inch blade type wire terminals, allowing either solder connections or crimp type quick-connect wire terminals.

The Altec Lansing models 515-8HHP and 515-16HHP are perfect complements to our high frequency compression drivers when the requirements are superior efficiency, excellent low frequency response, premium sound quality, high acoustic output level, and absolute reliability.

FREQUENCY RESPONSE ^{1, 2}

40 Hz – 5 kHz

HIGHEST RECOMMENDED CROSSOVER FREQUENCY

2.5 kHz

SENSITIVITY ³

104 dB SPL

POWER HANDLING ⁴

200 W continuous; 800 W peak

MAXIMUM OUTPUT (1 m) ⁵

133 dB SPL

TRANSDUCER COMPONENTS

LF: 1 x 15 inch, high efficiency, low frequency driver

IMPEDANCE ⁷

Nominal: 8.0 Ohms or 16 Ohms

Minimum: 7.9 Ohms or 15.8 Ohms at 600 Hz

HARMONIC DISTORTION ⁸

THD: 0.85%

INPUT CONNECTIONS

1 x 2 position barrier strip with 0.250 in. blade type terminals

FINISH

Dark gray enamel

REPLACEMENT LF CONE KIT

R515-8HP or R515-16HP

DIMENSIONS

Outside Diameter: 16.0 in. (406 mm)

Depth: 6.69 in. (170 mm)

Mounting Information

Bolt Circle Diameter: 15.0 in. (381 mm)

Cut-Out Diameter

Front Mount: 14.125 in. (359 mm)

Rear Mount: 14.00 in (356 mm)

WEIGHT

Net: 30.0 lbs. (13.6 kg)

Shipping: 32.0 lbs. (14.5 kg)

THEILE-SMALL PARAMETERS

f_s 37 Hz

V_{as} 342.6 liters (12.1 ft.³)

Q_{ts} 0.187

Q_{es} 0.195

Q_{ms} 4.5

V_d 258.9 cm³ (15.8 in.³)

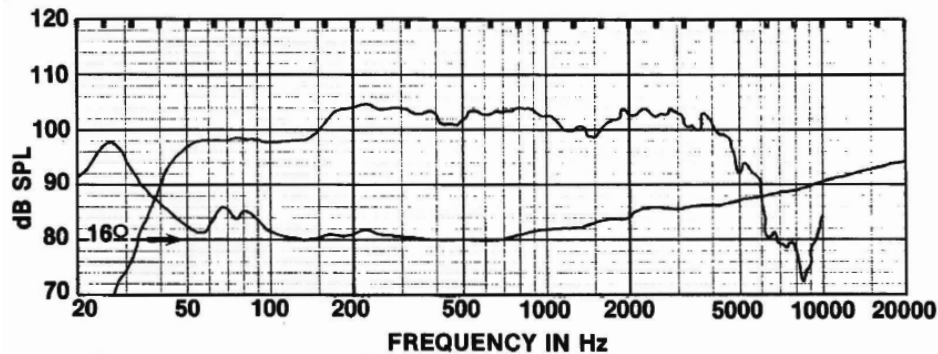
η_o 8.6%

ARCHITECTS & ENGINEERS SPECIFICATION

The loudspeakers shall be multi-purpose, 15 inch / 381 mm low frequency cone drivers. The loudspeakers shall have an operating bandwidth of 40 Hz to 5 kHz with a sensitivity of 104 dB when measured at a distance of one meter. Their power handling capability shall be 200 watts AES (800 W peak). Their nominal impedance shall be 8 Ohms and 16 Ohms, with a minimum impedance of 7.9 Ohms and 15.8 Ohms at 600 Hz. The magnetic gap of these drivers shall have a flux density of 1.5 T, resulting from an

8.25 lbs. (3.74 kg) ferrite magnet. Their nominal free-air cone resonance shall be 37 Hz and their voice-coil shall be 3 inches (76 mm) in diameter of edge-wound aluminum ribbon. The loudspeakers shall have dimensions of 16 inches (406 mm) in diameter and 6.69 inches (170 mm) in depth, and shall weigh 30 lbs. (13.6 kg). The low frequency loudspeakers shall be Altec Lansing models 515-8HHP and 515-16HHP.

FREQUENCY RESPONSE AND IMPEDANCE MAGNITUDE OF 515-16HHP IN 828G



As we are continually striving to improve Altec Lansing products, specifications are subject to change without notice. Please visit www.altecp.com for the latest information on Altec Lansing Professional products.

SPECIFICATION NOTES

- 1 The frequency response of the loudspeaker system is measured at a distance of no less than 3 meters to obtain full range data. The level is then corrected to be equivalent to a 2.83 V 1 m measurement. A near field measurement of the loudspeaker system is performed for frequencies below 500 Hz. This data is then combined with the full range measurement to give an accurate composite frequency response curve.
- 2 The limits of the frequency response are referenced to -10 dB of the systems rated sensitivity in a 828G vented enclosure.
- 3 The sensitivity of the loudspeaker system is the log based average SPL taken over the intended bandwidth of operation for the system with a 2.83 V swept sine stimulus. The data is measured and level corrected in a manner consistent with notes 1 and 2.
- 4 The power handling capacity of the loudspeaker system is tested using a full range form of AES Standard 2-1984. The test stimulus is band limited (40 Hz – 16 kHz) pink noise with a 6 dB crest factor. The applied RMS voltage is determined using the minimum impedance of the system. The amplifier used to drive the system has a minimum operating headroom of 6 dB referenced to the RMS voltage.
- 5 The peak output level of the loudspeaker system is calculated based on the sensitivity and the peak power handling capabilities of the system.
- 6 The minimum impedance of the loudspeaker system is taken over its intended band of operation.
- 7 The distortion measurements of the loudspeaker system are performed at a distance of 1 m with RMS input voltages corresponding to 1% of rated system power handling calculated using minimum system impedance. The distortion percentages are log based averages from 300 Hz – 3 kHz.

VISIT WWW.ALTECPRO.COM FOR

- Authorized EASE data on all Altec Lansing Professional loudspeakers
- Specification sheets in .pdf format. Download page 1 of the specification sheet for you submittals.
- One paragraph A&E Specifications in .doc format

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© 2003 Altec Lansing Professional
1000 W. Wilshire Blvd., Suite 362
Oklahoma City, Oklahoma 73116
Phone: 1-405-848-3108 • Fax: 1-405-848-3217
Web: www.altecp.com • Email: proinfo@alteclansing.com