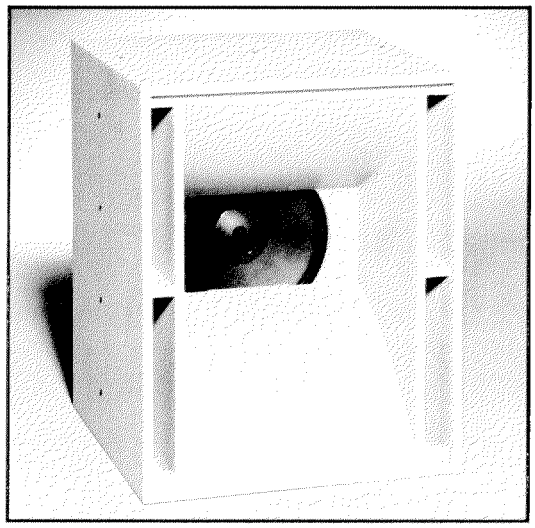
ALTEC LANSING

816VI
Horn Loaded
Low Frequency System



KEY FEATURES

- ★ **Vented Bass Horn**
- ★ **Superior Low-Frequency Directivity Control**
- ★ **High Output Capability**

PRIMARY SPECIFICATIONS

System Type:	Vented bass horn type low-frequency loudspeaker system.
Pressure sensitivity:	103.5 dB SPL (1W, 100Hz - 1kHz, re: 20uPa, see note 1).
Frequency Response:	65 Hz - 3 kHz (see Figure 1, Note 2)
Power Handling:	200 watts, 50Hz - 4 kHz, AES method (see note 3). 400 watts, 50Hz - 4 kHz continuous program. 800 watts, 50 Hz - 4 kHz peak power.
Maximum Long Term Output:	126.0 dB SPL (200 watts input, 1m, re: 20uPa, see note 4).
Impedance:	7.0 ohms minimum. 8.0 ohms nominal.

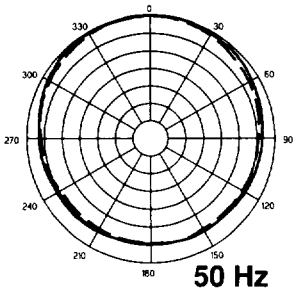
DESCRIPTION

The Altec Lansing **816VI** low-frequency loudspeaker system is a factory assembled vented bass horn system. This compact system features high sensitivity and high output with excellent directivity control down to 200 Hz. The nominal coverage at 500Hz is 80° horizontal by 60° vertical. The bass reflex porting extends the low frequency response to below 65 Hz, or lower if multiple units are used. The **816VI** consists of a 16-inch (40.6 cm) high power low frequency driver and an input terminal plate. Electrical connection to the driver is made by large screw terminals able to accept up to ten gauge wire. The system can be used with an electronic crossover or a standard Altec Lansing passive network installed in place of the input plate. The maximum intended crossover frequency is 2 kHz. The enclosure is constructed from 3/4 inch (1.9 cm) thick thoroughly braced 7-ply birch plywood lined with sound absorbent glass wool. Threaded insert mounting points are provided to conveniently attach the Altec Lansing **816VI-SK** suspension kit. The system may then be hung as a single unit or as part of a cluster. The finish of the enclosure is texture painted Acousta-beige but it can be painted to complement any interior. The grille is covered with beige cloth and fastened to the front of the enclosure with six wood screws.

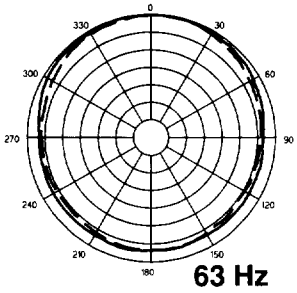
The **816VI** can be used with essentially all of the Altec Lansing MR-series and VIR,VIT horns to create a compact, high output and directivity controlled system for use in houses of worship, auditoriums, hotels and civic centers.

816VI Specifications (continued)

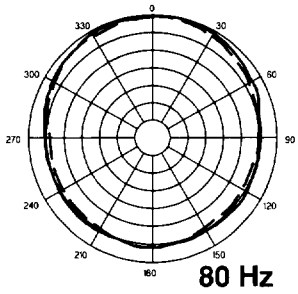
Components:	515 - GHP type 16-inch, high efficiency, low frequency driver.
Input Terminals:	Large screw terminals
Replacement L.F.:	R515-8GHP
Replacement Grille:	Model RG816VI
Enclosure:	Vented bass horn type, built of 3/4 - inch (1.9cm) birch plywood with appropriate bracing, lined with glass wool. Includes mounting points for accessory 816VI-SK suspension kit.
Dimensions:	31.5in (80.0cm) high 25.3in (64.3cm) wide 25.5in (64.8cm) deep
Net Weight:	110.0 lbs (50.0 kg)
Shipping Weight:	118.0 lbs (53.6 kg)
Finish:	Acousta-beige, texture finish, polyurethane paint, beige grille cloth.
Accessories:	Altec Lansing 816VI-SK suspension kit, N1285-8B passive network.



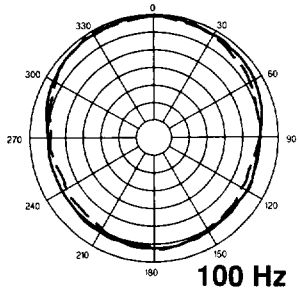
50 Hz



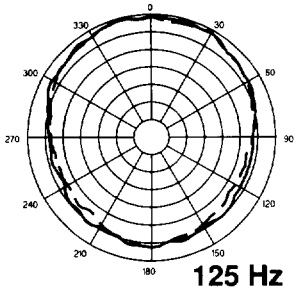
63 Hz



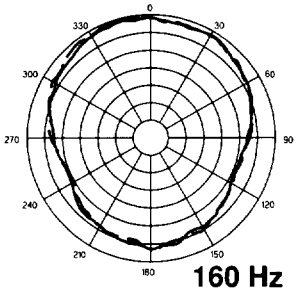
80 Hz



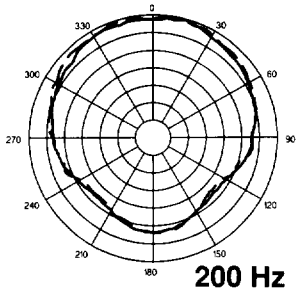
100 Hz



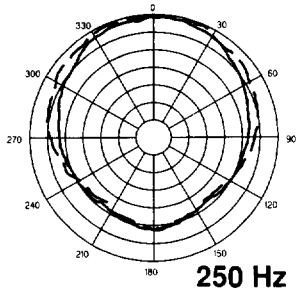
125 Hz



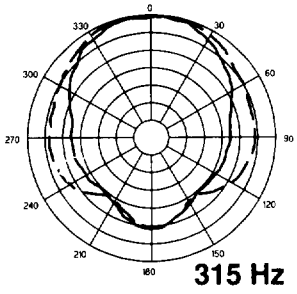
160 Hz



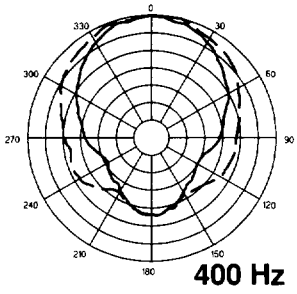
200 Hz



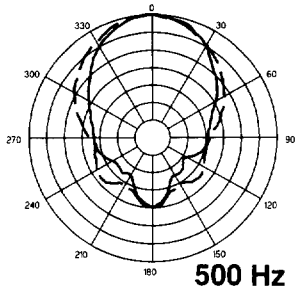
250 Hz



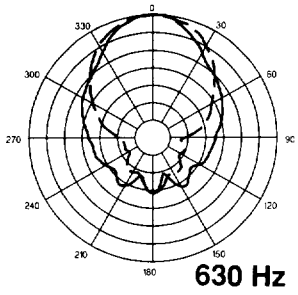
315 Hz



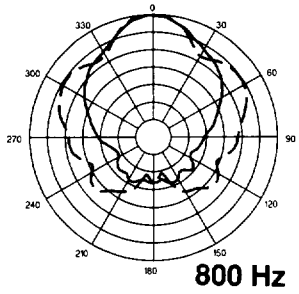
400 Hz



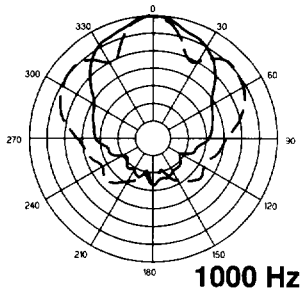
500 Hz



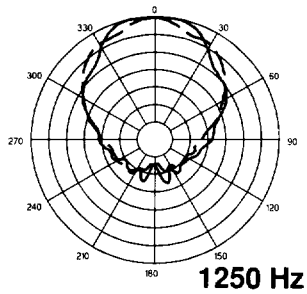
630 Hz



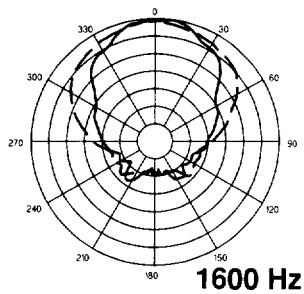
800 Hz



1000 Hz



1250 Hz



1600 Hz

HORIZONTAL ———
VERTICAL ----------

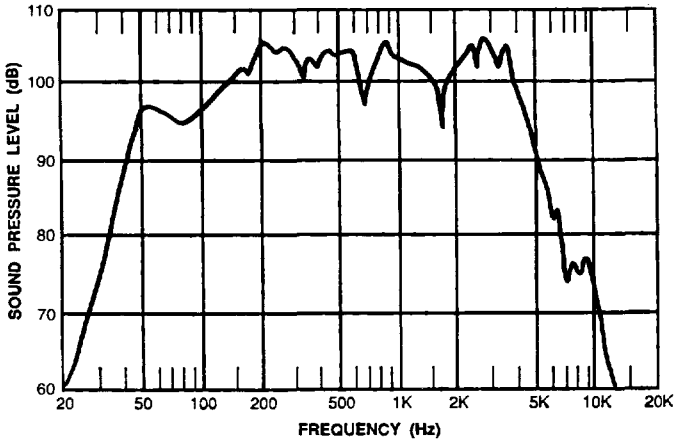


Figure 2. Frequency Response

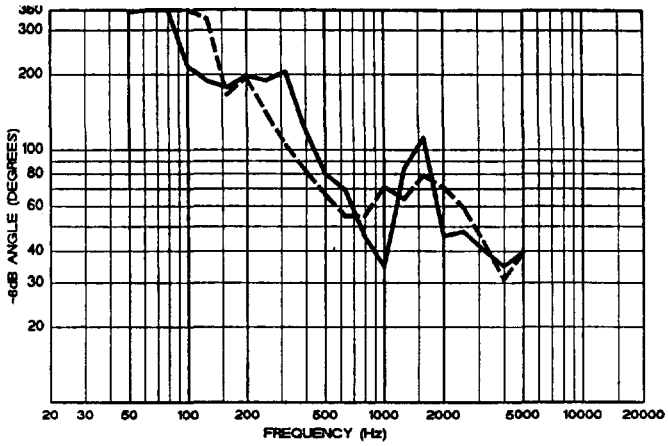


Figure 3. Dispersion Angle

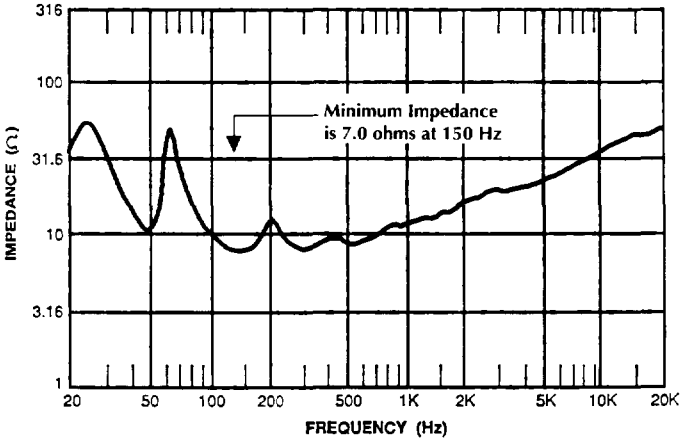


Figure 4. Magnitude of Impedance

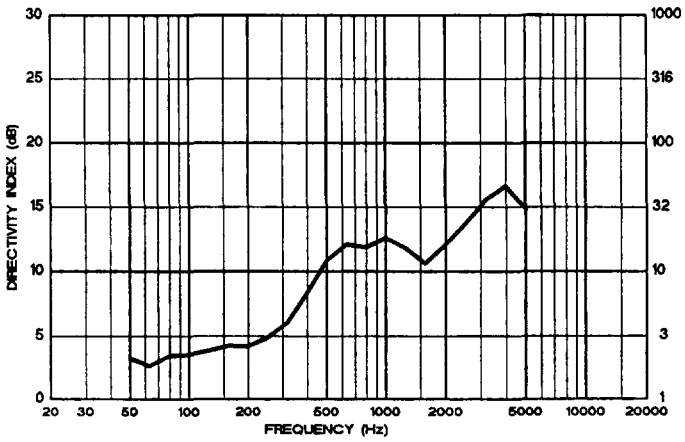


Figure 5. Q and Directivity Index

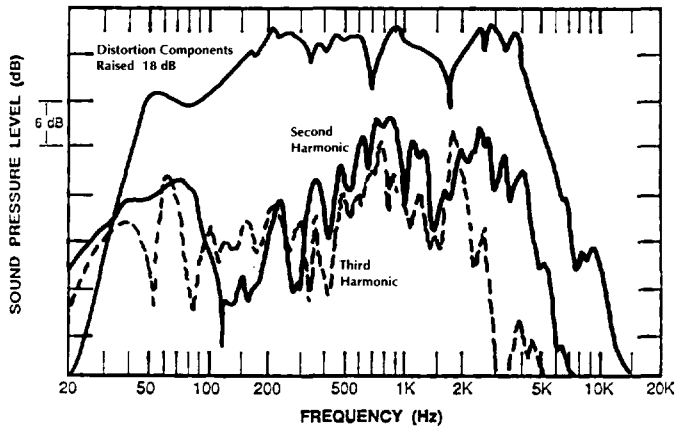


Figure 6. Harmonic Distortion at 0.01 Rated Power

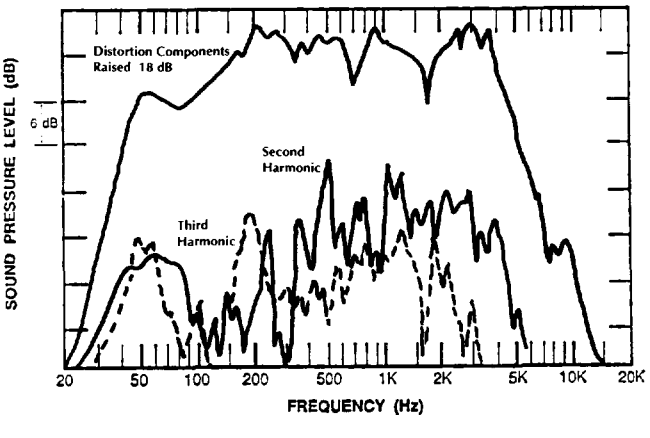


Figure 7. Harmonic Distortion at 0.1 Rated Power

1. Pi
E²
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2. Th
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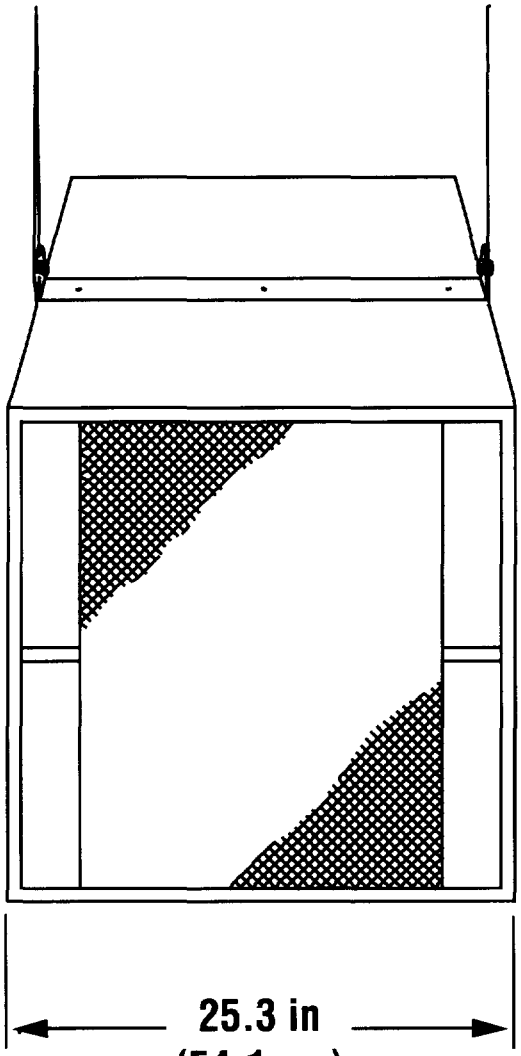
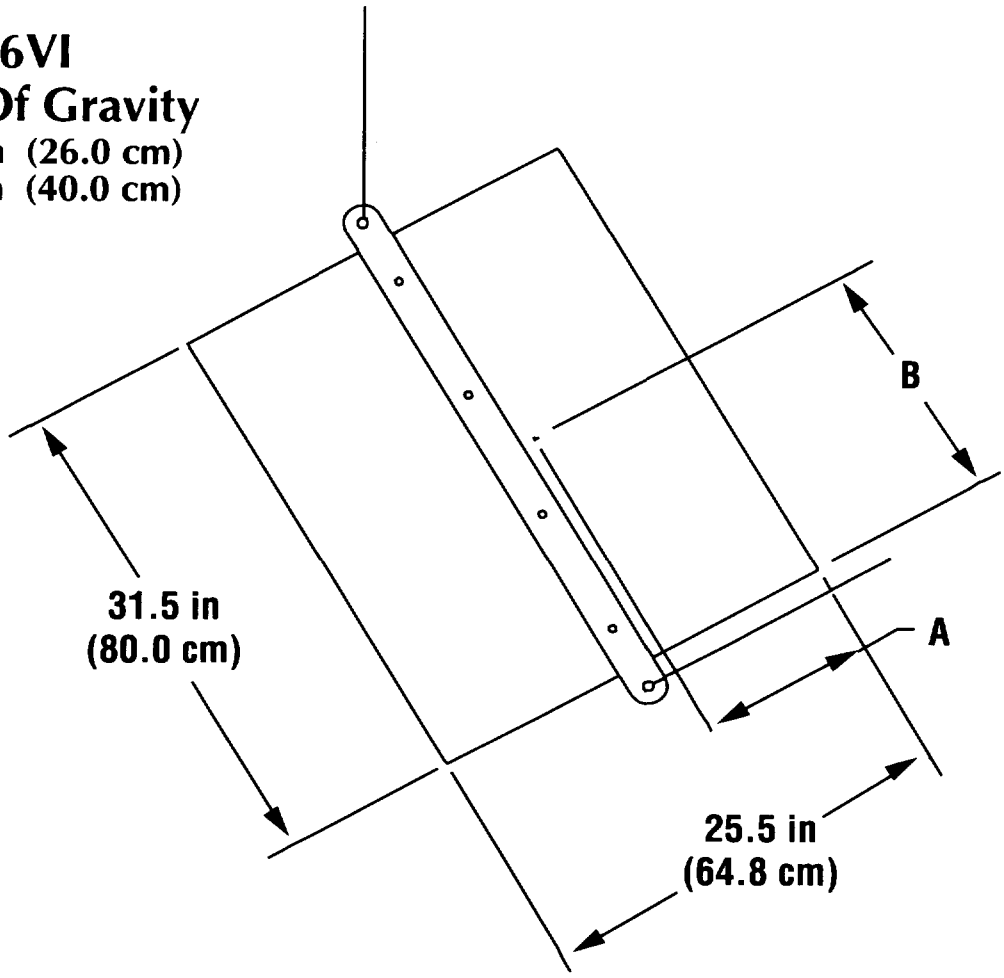


NOTES ON MEASUREMENT CONDITIONS

1. Pink noise signal, one Watt calculated using $E^2/Zmin$, 3.16 meter measurement distance referred to one meter.
2. This system rating patterned after the A.E.S. method for individual driver, where the rest signal is pink noise with a 6dB crest factor over the bandwidth of the system with power calculated using the $E^2/Zmin$, for two hours.
3. Continuous program is defined as 3dB greater than the AES power rating.
4. Peak power is defined as 6dB greater than the AES power rating and equivalent to the crest factor used in this test.

816VI
Center Of Gravity
A: 10.3 in (26.0 cm)
B: 15.8 in (40.0 cm)



ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The loudspeaker system shall be of the vented bass horn type consisting of one 16-inch (40.6 cm) high power low frequency driver mounted in a vented bass horn enclosure. The loudspeaker shall meet the following performance criteria. Power handling, 200 watts of pink noise with 6 dB crest factor, band limited from 65 Hz - 3 kHz. Frequency response, smooth and uniformly usable at high levels from 65 Hz - 3 kHz. Pressure sensitivity, 103.5 dB at one watt, 65 Hz - 3 kHz, at one meter on axis. Impedance, 7 ohms minimum. The horn directivity pattern shall be 80^0 horizontally by 60^0 vertically at 500 Hz. The enclosure shall be constructed of 3/4-inch 7-ply birch plywood and shall be heavily braced and lined with sound absorbent glass wool. The finish of the enclosure shall be a texture painted Acousta-beige and a removable grille shall be provided. The dimensions of the enclosure shall be 31.5-inches (80 cm) high by 25.3-inches (64.3cm) wide by 25.5-inches (64.8 cm) deep. The loudspeaker system shall weigh 110.0 lbs. (50.0 Kg). The loudspeaker system shall be the Altec Lansing **816VI**.

ALTEC LANSING

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