KEY FEATURES

* 90° by 90° CD Horn, Produces a Square Floor Plan Isobar.
* High Output Capability
* Auto-Reset Circuit Breakers

DESCRIPTION

The Altec Lansing 950-8A Duplex® loudspeaker system is a two-way loudspeaker with a 15-inch low frequency cone and high-temperature voice-coil assembly, coaxially mounted with a rectangular-coverage 90° x 90° horn driven by a 1-inch compression driver. The 950-8A utilizes a dual section crossover network with 12dB per-octave attenuation and self-resetting protection circuits on each section. Pilot holes are provided for mounting an Altec 15716 or 15732 matching transformer in order to operate the loudspeaker from 70.7V distribution lines. These transformers offer selections of 2, 4, 8, 16 or 32W, delivered to the loudspeaker system.

The Altec 5297-W steel grille and baffle provide an attractive means to conceal the loudspeaker in ceiling or wall installations. The perforated grille is finished in semi-gloss white enamel.

A metal ceiling-type enclosure is available as an accessory with the 950-8A. The 5197-X enclosure provides an internal volume of 4 ft³. It is constructed from heavy-gauge, rugged cold-rolled steel, under-coated to prevent panel resonance, and finished with rust-inhibiting paint. In addition, the interior is lined with glass wool blankets, and corner mounting brackets are provided to mount the enclosure within a ceiling.

These components are designed to work together as a complete system of in-ceiling loudspeakers and accessories. They provide a square coverage pattern, high efficiency, high maximum output, ease of installation, and wide-range reproduction of music and voice.
Components: 15-inch, high-efficiency, low-frequency driver with a coaxially mounted 1-inch compression driver and rectangular coverage 90° x 90° horn.

Crossover Network: Two-way at 1800 Hz with a 12dB per octave slope for both low and high frequencies. Self-resetting protection circuits for both woofer and tweeter.

Input Terminals: .205-series spade terminals 15716, 15732

Accessories: Transformers; 5197-X Enclosure, 5297-W Grille and Baffle assembly.

Replacement Diaphragm Assembly: R-950-8AHF

LF Cone Kit: R-950-8ALF

Dimensions Diameter: 15.1 in. (38.35cm)

Bolt Circle Diameter: 14.46 in. (37.0cm)

Bolt Holes: Eight .281 in.holes spaced 45° apart.

Baffle Opening: 13.9 in. (35.3cm)

Depth Rear Mounted: 9.2 in. (23.37cm)

Depth Front Mounted: 8.3 in. (21.0cm)

Net Weight: 22.1 lbs (10.0kg), includes network

Shipping Weight: 29.0 lbs (13.2kg), includes network

Finish: Dark Grey enamel

Weight: 2 lbs. (0.91kg) 3 lbs. (1.36kg)

Connection Type: .205-series spade terminals

Additional Taps: Additional 0.5dB and 1.0dB taps to compensate for line losses.

SPECIFICATIONS: 5197-X ENCLOSURE

Construction Material: 18 gauge cold rolled steel

Coating: Undercoated for panel resonance damping.

Glass Wool Lining: 1.5 in. (3.7cm) glass wool blankets

Volume: 4 ft³ (113.2 liters)

Dimensions: 23.0 in. (50.8cm) square, with centered perforated 15.8 in. (40.1cm) square section.

SPECIFICATIONS: TRANSFORMERS

Frequency Response: 50Hz to 15Khz, ±1dB

Insertion Loss: 0.5dB

Secondary Impedance: 8 ohms

Primary Impedances and Power Drawn:

<table>
<thead>
<tr>
<th>Primary Impedance</th>
<th>Power Drawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>2499Ω</td>
<td>2 Watts</td>
</tr>
<tr>
<td>1250Ω</td>
<td>4 Watts</td>
</tr>
<tr>
<td>625Ω</td>
<td>8 Watts</td>
</tr>
<tr>
<td>312Ω</td>
<td>16 Watts</td>
</tr>
<tr>
<td>156Ω</td>
<td>32 Watts</td>
</tr>
</tbody>
</table>

15716  15732
1. **Figure 2.** Frequency Response

2. **Figure 3.** Dispersion Angle

3. **Figure 4.** Magnitude of Impedance

4. **Figure 5.** Q and Directivity Index

5. **Figure 6.** Harmonic Distortion at 0.1 Rated Power

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**CEIL**

Ceiling treatment consists of a single layer of 1/4" thick fiberglass with a density of 12 pounds per cubic foot. This material is designed to absorb sound and reduce reverberation in the room. The fibers are impregnated with a special adhesive to prevent the fibers from falling out. The ceiling tiles are square and measure 2' x 2', and are installed on a grid system. This system allows for easy installation and removal of the ceiling tiles.

**5297**

5297 is a type of speaker cone that is made of a special composite material. This material is designed to provide excellent sound quality and durability. The cone is coated with a special paint that helps to reduce the risk of the cone peeling or tearing. The 5297 cone is designed to work well with a wide range of amplifiers and other audio equipment.

**ALT**

ALT is a series of high-quality speakers that are designed to provide excellent sound quality in a variety of applications. These speakers are made with high-quality components and are designed to work well with a wide range of amplifiers and other audio equipment. The ALT series of speakers is available in a variety of sizes and shapes, and is designed to provide excellent sound quality in a variety of applications. The ALT speakers are made with high-quality components and are designed to work well with a wide range of amplifiers and other audio equipment. The ALT speakers are available in a variety of sizes and shapes, and are designed to provide excellent sound quality in a variety of applications.
NOTES ON MEASUREMENT CONDITIONS

1. Pink noise signal, one Watt calculated using $E^2 + Z_{\text{min}}$, 3.16m measurement distance referred to one meter.
2. On-axis, one Watt calculated using $E^2 + Z_{\text{min}}$, 3.16m measurement distance referred to one meter, low frequencies corrected for anechoic chamber error.
3. This system rating patterned after the A.E.S method for individual driver, where the test signal is pink noise with a 6dB crest factor over the bandwidth of the system, with power calculated using the $E^2 + Z_{\text{min}}$, for two hours.
4. This measurement made under the same conditions as Pressure Sensitivity, but at rated power, and takes into account any power compression effects due to non-linearities in the system.
5. Distortion components invalid above 10kHz. The distortion at any given frequency may be found by graphically taking the difference between the fundamental and harmonic, and adding the number of Decibels which the harmonic has been raised on the graph and apply the formula:
percent distortion = $100 \times \frac{\text{difference in dB}}{20}$

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

CEILING-TYPE ENCLOSURES
The ceiling-type enclosure shall be of square shape for new and existing installations to accommodate a 15-inch duplex® loudspeaker. Construction shall be of heavy gauge, rugged cold rolled steel, heavily undercoated to eliminate panel resonance, and finished with rust-preventing paint. The interior of the enclosure shall be lined with 1-1/2-inch thick glass wool blankets. The enclosure shall have corner mounting brackets to facilitate mounting within the ceiling. The enclosure shall have a volume of 4 cubic feet. The ceiling-type enclosure shall be the ALTEC LANSING Model 5197-X.

5297-W GRILLE AND BAFFLE ASSEMBLY
The grille and baffle assembly shall be of square shape and constructed of 18 gauge steel having a visible finish of semi-gloss white baked enamel paint. A loudspeaker mounting subplate and mounting hardware shall be included. Dimensions shall be 20” on each side, with a centered perforated square measuring 15.8” in each side. The grille and baffle assembly shall be the ALTEC LANSING Model 5297-W.

TRANSFORMERS
The transformers shall deliver within ±1.0db of full rated power over a frequency range of 50Hz to 15kHz with a maximum insertion loss of not greater than 0.5 dB for the most unfavorable impedance combination. Primary and secondary windings shall be electrically isolated, and shall provide a balanced line to the load. Secondary impedance shall be 8 ohms. Additional taps of 0.5dB and 1dB shall be provided to compensate for line losses. The transformers shall utilize 1/4-inch blade quick-connectors for convenience of installation and wiring. The Model 15716 Transformer shall offer selections of 2, 4, 8 and 16 watts, and shall weigh 2 pounds. The Model 15732 Transformer shall offer selections of 4, 8, 16 and 32 watts, and shall weigh 3 pounds. The transformer shall be the ALTEC-LANSING Model ______________.