

ALTEC LANSING®

PROFESSIONAL

CD912-8C



FEATURES - THE ALTEC LANSING DIFFERENCE

- High Fidelity Duplex® 12 inch / 300 mm Speaker
- High Performance 125 W AES / 500 W peak power handling
- Point-Source design for superior speech intelligibility
- Corrosion resistant, die-cast speaker frame
- Special moisture resistant cone material
- Four low insertion loss transformers available

GENERAL PRODUCT DESCRIPTION

Twelve-inch Duplex® speakers from Altec Lansing are the most popular hotel ballroom ceiling speakers in the world. The Altec Lansing Professional CD912 is an excellent choice for hotel meeting spaces, convention centers, airports & transportation facilities, and any high ceiling applications that require reproduction of high fidelity music and intelligible speech. The loudspeaker consists of a 12 inch / 300 mm moisture resistant cone woofer, a broad dispersion dome tweeter with heat resistant voice coils and die-cast corrosion-resistant speaker frame. A 2,200 Hz second order crossover provides smooth high fidelity transitions. The top cover of the CD912-8C is now pre-trapped to allow mounting of Altec Lansing Professional's accessory 16W, 32W, 60W and 100W premium transformers.

FREQUENCY RESPONSE ^{1, 2}

75 Hz - 15 kHz

USABLE LOW FREQUENCY LIMIT (-10 dB) ^{1, 2}

45 Hz

SENSITIVITY ³

100 dB SPL

POWER HANDLING ⁴

125 W continuous; 500 W peak

MAXIMUM OUTPUT (1 m) ⁵

121 dB SPL continuous; 127 dB SPL peak

COVERAGE ANGLES ⁶

100° (horizontal) x 100° (vertical)

DIRECTIVITY FACTOR, Q ⁶

8.61

DIRECTIVITY INDEX, Di ⁶

9.35 dB

TRANSDUCER COMPONENTS

LF: 1x 12 in. Woofer

HF: 1x 1.5 in. Dome Tweeter

IMPEDANCE ⁷

Nominal: 8.0 Ohms

Minimum: 5.0 Ohms at 5,500 Hz

CROSSOVER FREQUENCY

2,200 Hz

HARMONIC DISTORTION ⁸

	1% rated power	10% rated power
2nd Harmonic	0.25%	0.79%
3rd Harmonic	0.47%	0.78%
THD	0.78%	1.58%

INPUT CONNECTIONS:

1x 2 position barrier strip with 0.250" blades

DIMENSIONS

Outside Diameter: 12.250 in. (311 mm)

Bolt Circle Diameter: 11.625 in. (295 mm)

Cut-out Diameter

Front Mount: 11.188 in. (284 mm)

Rear Mount: 11.000 in. (279 mm)

Depth: 5.000 in. (127 mm)

WEIGHT

Net: 13.5 lbs. (6.1 kg)

Shipping: 17.0 lbs. (7.7 kg)

ARCHITECTS & ENGINEERS SPECIFICATION

The loudspeaker system shall be a two-way multi-purpose type consisting of a 12 inch / 300mm Duplex® loudspeaker component with a wide-dispersion dome tweeter. The crossover network shall be a dual-section, 12 dB/octave slope low pass and 12 dB/octave slope high pass with an electro-acoustic crossover frequency of 2,200 Hz. The loudspeaker system shall have an operating bandwidth of 75 Hz - 15 kHz with a sensitivity of 100 dB when measured at a distance of one meter. The power handling capability shall be 125 W AES (500 W peak). Nominal impedance shall be 8.0 ohms with a minimum impedance of 5.0 ohms at 5,500 Hz. The loudspeaker shall have nominal coverage angles of 100 degrees in the horizontal plane and 100 degrees in the vertical plane. The dimensions shall be 12.250 inches diameter by 5.000 inches deep. The loudspeaker system shall weigh 13.5 pounds (6.1 kg). The loudspeaker system shall be the Altec Lansing Professional model CD912-8C. Optional transformers shall be the T516-71 (16 Watt, 70 V / 100 V), T532-71 (32 Watt, 70 V / 100 V), T560-71 (60 Watt, 70 V / 100 V) or T5100-71 (100 W, 70 V / 100 V).

ENCLOSURES & BAFFLES

The CD912-8C ceiling speaker will fit on standard 12 inch (300 mm) baffles, enclosures and back boxes.

All measurements, except impedance, were made in a standard AES baffle for a 12 inch driver. The driver was housed in a 1.8 ft³ (0.051 m³) enclosure. Please note that different volume enclosures will result in altered low frequency performance.

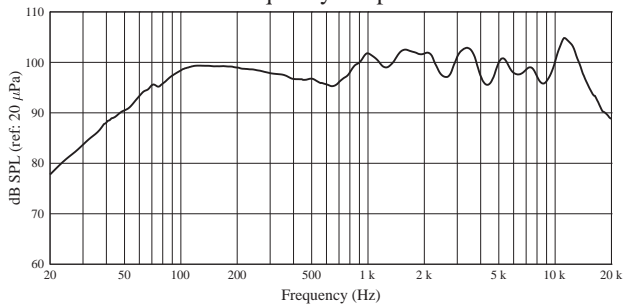
SAFETY CONSIDERATIONS

1. Appropriate connectors with suitable ratings must be used to make all installation connections.
2. All unused taps must be insulated with suitable insulation.
3. Transformers and speaker combinations must be supplied by a suitable amplifier incorporating ungrounded outputs only and reinforced insulation (as per IEC60065) from output to mains.

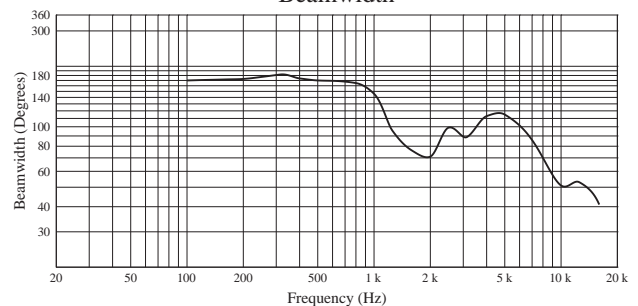
ACCESSORIES

The CD912-8C ceiling speaker will fit on standard 12 inch (300 mm) baffles, enclosures and back boxes. Altec Lansing recommends use of our 12 inch (300 mm) square metal enclosures and grilles. The CD912 Series will also fit on standard industry ceiling speaker hardware. Altec Lansing Professional offers premium low insertion loss 70 V / 100 V transformers in 16W, 32W, 60W, and 100W versions.

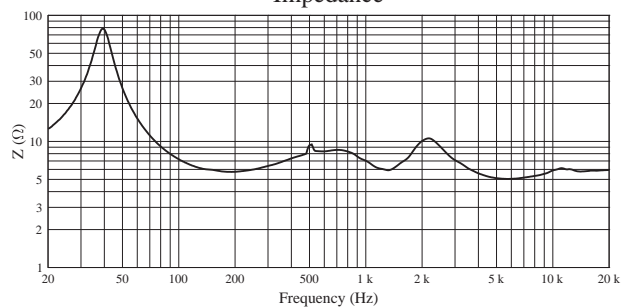
Frequency Response



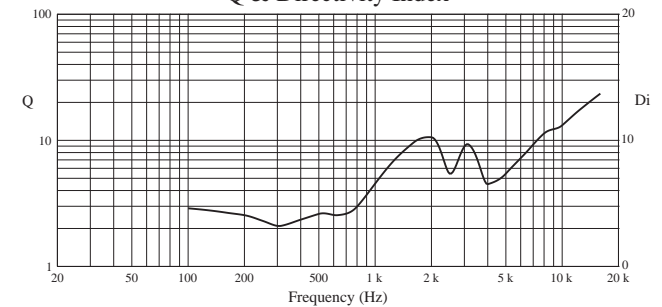
Beamwidth



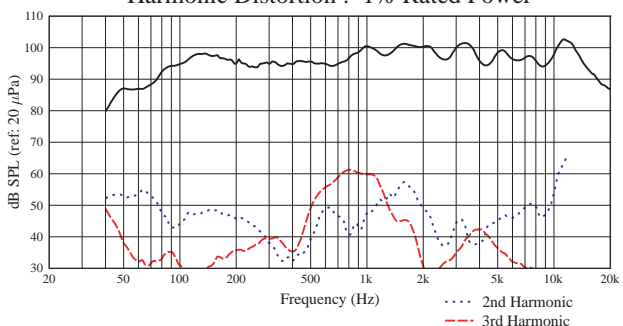
Impedance



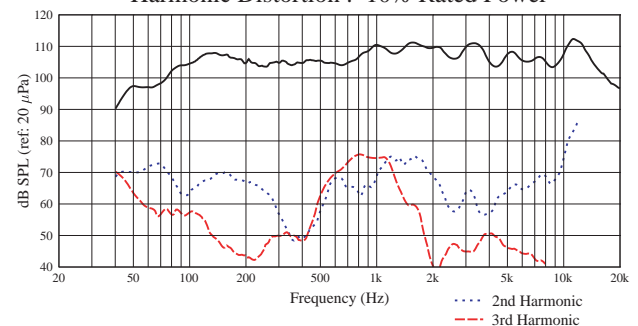
Q & Directivity Index



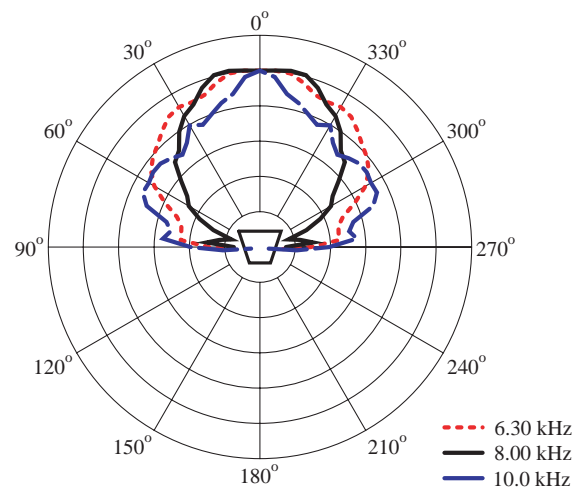
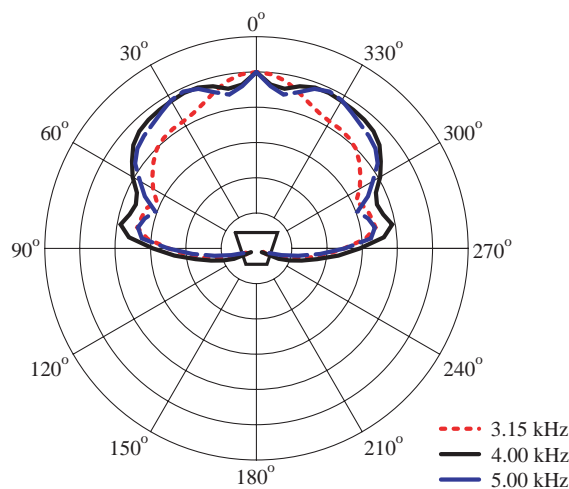
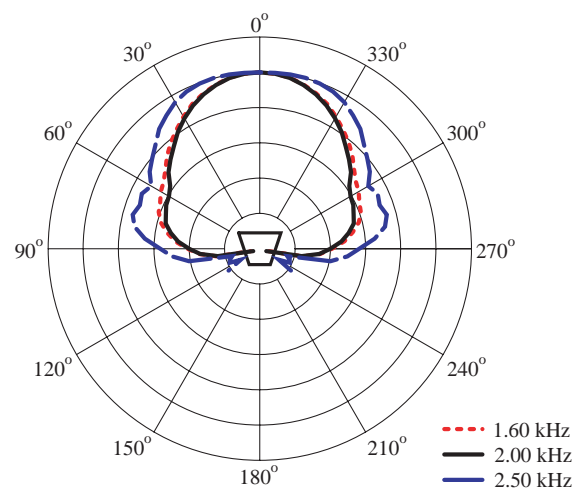
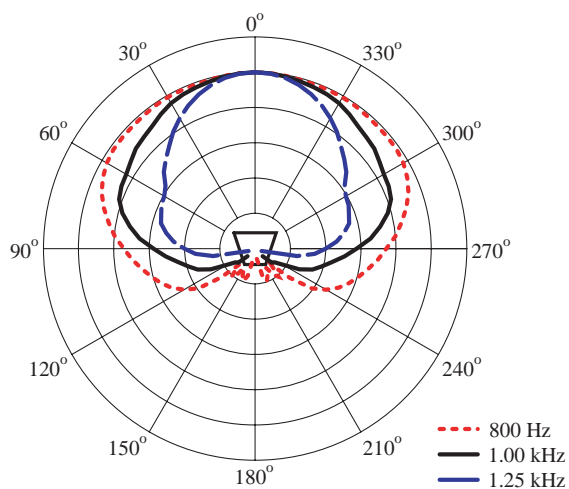
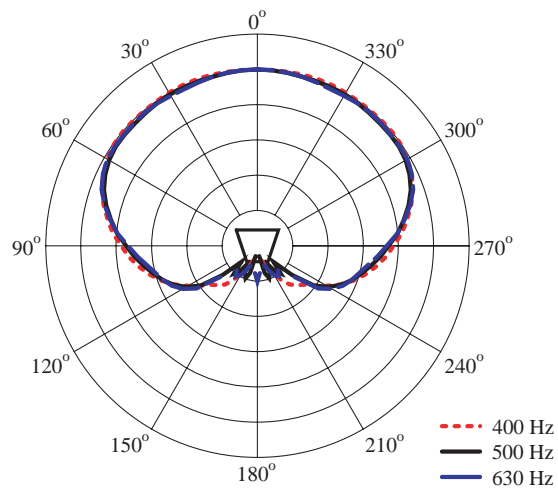
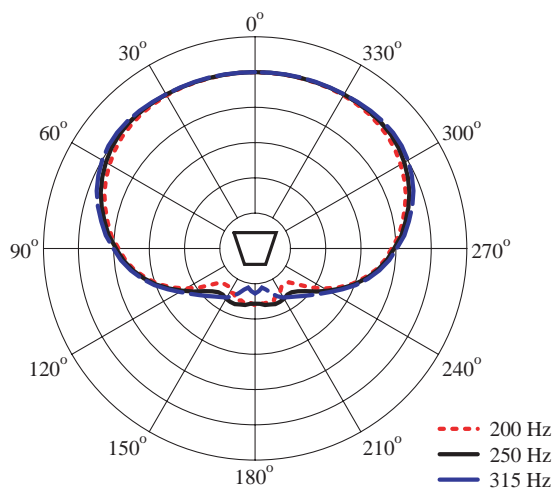
Harmonic Distortion : 1% Rated Power



Harmonic Distortion : 10% Rated Power

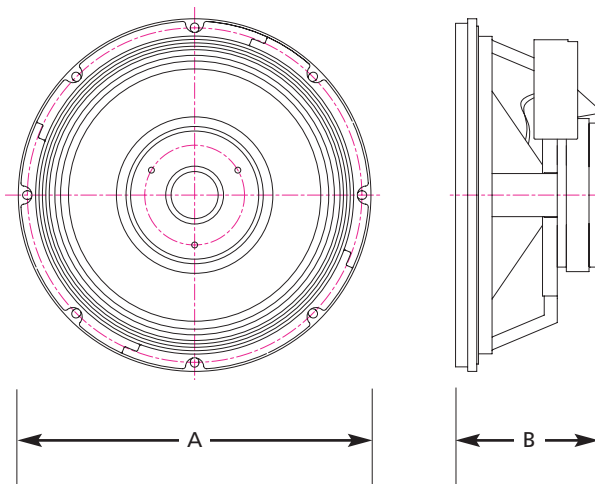


ONE-THIRD OCTAVE POLAR RESPONSE CHARTS
6 dB / DIVISION



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

MOUNTING DIMENSIONS



	A	B
CD912-8C	12.24 in (311 mm)	4.92 in (125 mm)

SPECIFICATION NOTES

- 1 The frequency response of the loudspeaker 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 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 -5 dB of the loudspeakers rated sensitivity.
- 3 The sensitivity of the loudspeaker is the log based average SPL taken over the intended bandwidth of operation for the loudspeaker with a 2.83 V swept sine stimulus. The data is measured and level corrected in a manner consistent with note 1.
- 4 The power handling capacity of the loudspeaker 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 loudspeaker. The amplifier used to drive the loudspeaker has a minimum operating headroom of 6 dB referenced to the RMS voltage.
- 5 The maximum output level of the loudspeaker is calculated based on the sensitivity and the power handling capabilities of the system.
- 6 The coverage angles for the loudspeaker are taken as the -6 dB points of the directivity response and averaged from 500 Hz – 16 kHz.
- 7 The minimum impedance of the loudspeaker is taken over its intended band of operation.
- 8 The distortion measurements of the loudspeaker are performed at a distance of 1 m with RMS input voltages corresponding to 1% and 10% of rated power handling calculated using minimum loudspeaker impedance. The distortion percentages are log based averages from 300 Hz – 3 kHz.

VISIT WWW.ALTECPRO.COM FOR

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

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