

# ALTEC LANSING®

## PROFESSIONAL

## 8" Ceiling Speakers

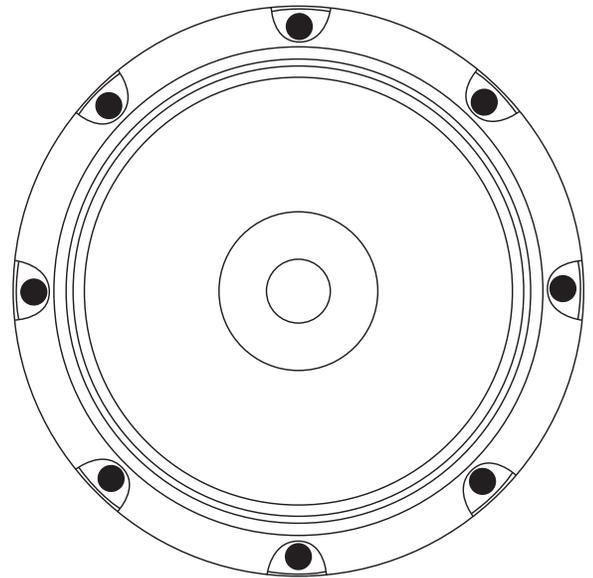
CD408-8A  
CD408-4T  
CD408-8T  
CD408-16T  
CD408-32T

### FEATURES – THE ALTEC LANSING DIFFERENCE

- High Fidelity Duplex® 8 inch / 200 mm Premium Loudspeaker
- Designed to maximize music program reproduction
- High output 32 W EIA / 128 W peak power handling
- Point-Source design for excellent speech intelligibility
- Available with four factory-mounted 70 V / 100 V transformers
- All transformers have a low < .6dB insertion loss
- Corrosion-resistant speaker frame
- Special moisture resistant cone material

### GENERAL PRODUCT DESCRIPTION

The Altec Lansing Professional CD408 series uses Duplex® technology to maximize the reproduction of high output music program material. The CD408 is an excellent choice for clubs, restaurants, performance and transportation venues and all applications requiring high output and high fidelity performance. The loudspeaker consists of an 8 inch / 200 mm special moisture resistant cone woofer, a broad dispersion cone tweeter with heat resistant voice coils and a corrosion-resistant speaker frame. A 2,500 Hz first order crossover provides smooth high fidelity transitions. The double magnet design allows physical, electrical, and magnetic isolation. The optional 70 V / 100 V transformers (4, 8, 16, 32 Watts) feature a low < 0.6 dB insertion loss.



#### SPECIFICATIONS

##### Frequency Response

82 – 16,000 Hz +/- 5dB

##### Low frequency limit (-10 dB)

66 Hz

##### Power Handling

32 W EIA, 128 W peak

##### Sensitivity (SPL - 1 W 1 m)

98 dB

##### Maximum Output (Peak SPL)

119 dB

##### Magnet Weight

0.62 lb (0.29 Kg)

##### Impedance

Nominal - 8 Ohms

Minimum - 7.8 Ohms

##### Crossover

2,500 Hz

#### DIMENSIONS

##### CD408-8A

Height: 3.11 in (79.6 mm)

Diameter: 8.07 in (205 mm)

##### CD408-4T

Height: 3.68 in (94.1 mm)

Diameter: 8.07 in (205 mm)

##### CD408-8T

Height: 3.68 in (94.1 mm)

Diameter: 8.07 in (205 mm)

##### CD408-16T

Height: 4.06 in (104.1 mm)

Diameter: 8.07 in (205 mm)

##### CD408-32T

Height: 4.41 in (113.1 mm)

Diameter: 8.07 in (205 mm)

#### NET WEIGHT

##### CD408-8A

2 lbs 8 oz (1.1 kg)

##### CD408-4T

3 lbs 13 oz (1.7 kg)

##### CD408-8T

4 lbs 1 oz (1.8 kg)

##### CD408-16T

4 lbs 10 oz (2.1 Kg)

##### CD408-32T

4 lbs 14 oz (2.2 kg)

#### SHIPPING WEIGHT

##### CD408-8A

3 lbs 4 oz (1.4 kg)

##### CD408-4T

4 lbs 9 oz (2.1 kg)

##### CD408-8T

4 lbs 14 oz (2.2 kg)

##### CD408-16T

5 lbs 7 oz (2.5 kg)

##### CD408-32T

5 lbs 13 oz (2.6 kg)

#### TRANSFORMER

##### CD408-4T

4 Watt 70 V/100 V transformer with 70 V taps @ 4 W, 2 W, 1 W and 0.5 W

##### CD408-8T

8 Watt 70 V/100 V transformer with 70 V taps @ 8 W, 4 W, 2 W and 1.0W

##### CD408-16T

16 Watt 70 V/100 V transformer with 70 V taps @ 16 W, 8 W, 4 W and 2.0 W

##### CD408-32T

32 Watt 70 V/100 V transformer with 70 V taps @ 32 W, 16 W, 8 W and 4.0 W

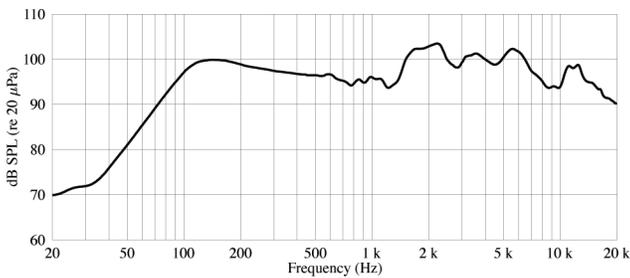
## ARCHITECTS & ENGINEERS SPECIFICATION

The loudspeaker shall be an Altec Lansing Professional CD408 series Duplex® with an 8 inch (200 mm) diameter moisture resistant woofer and a broad dispersion tweeter with heat resistant voice coils. The speaker shall have a power rating of 32 W EIA / 128 W peak, a double magnet assembly and corrosion-resistant frame. The frequency response shall be 82 to 16,000 Hz +/- 5 dB with a sensitivity of 98 dB @ 1 W 1 m. All transformers shall have a low < 0.6 dB insertion loss. The model numbers shall be Altec Lansing Professional CD408-8A for 8 Ohms impedance, CD408-4T with a 4 Watt 70 V/100 V transformer, CD408-8T with an 8 Watt 70 V/100 V transformer, CD408-16T with a 16 Watt 70 V/100 V transformer, and a CD408-32T with a 32 Watt 70 V/100 V transformer.

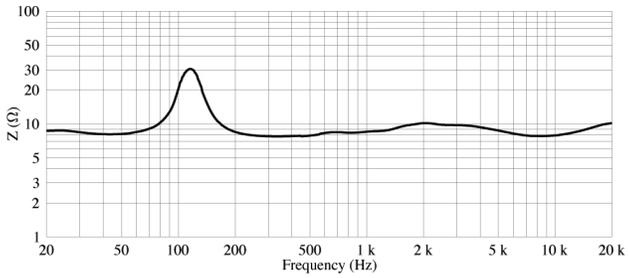
## ENCLOSURES AND BAFFLES

The CD408-series ceiling speakers will fit on standard 8 inch (200 mm) baffles, enclosures and back boxes. All measurements were made in a standard AES baffle for a 12 inch driver. The driver was housed in a 1.0 ft³ (0.028 m³) enclosure.

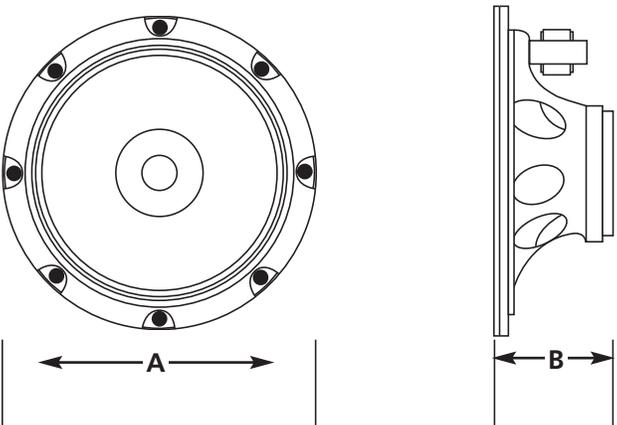
### Frequency Response (1 W 1 m on-axis)



### Impedance



## MOUNTING DIMENSIONS



	A	B
CD408-8A	8.07 in (205 mm)	3.11 in (79 mm)
CD408-4T	8.07 in (205 mm)	3.68 in (94 mm)
CD408-8T	8.07 in (205 mm)	3.68 in (94 mm)
CD408-16T	8.07 in (205 mm)	4.06 in (103 mm)
CD408-32T	8.07 in (205 mm)	4.41 in (112 mm)

Please note that larger volume enclosures will result in altered low frequency performance.

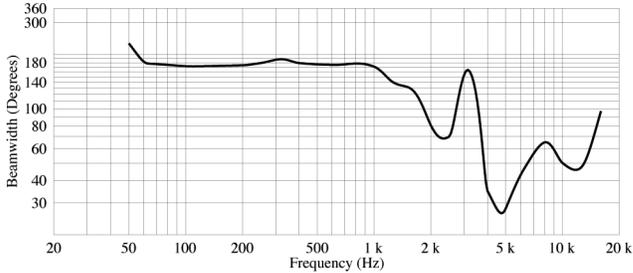
## SAFETY CONSIDERATION

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.

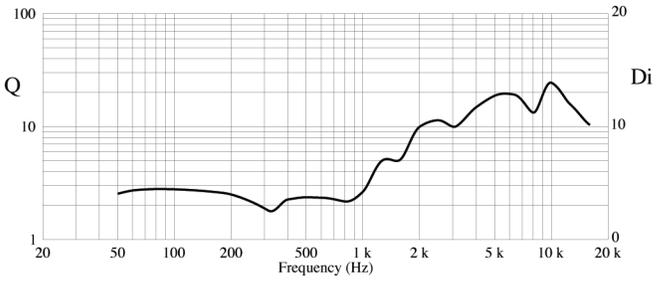
## ACCESSORIES

Altec Lansing recommends use of our 8 inch (200 mm) round and square metal enclosures, grilles and tile bridge. The CD408 Series will also fit on standard industry ceiling speaker hardware.

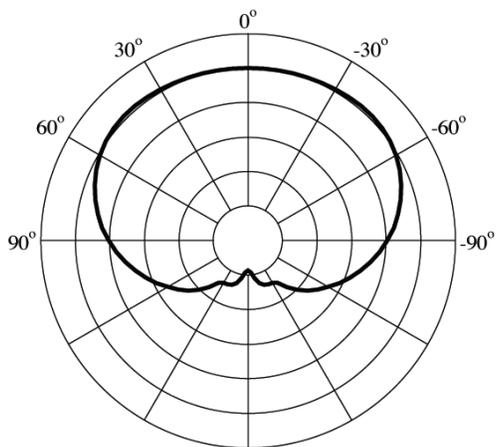
### Beamwidth



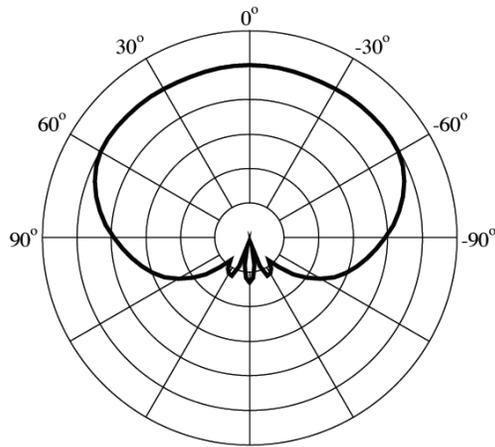
### Q & Directivity index



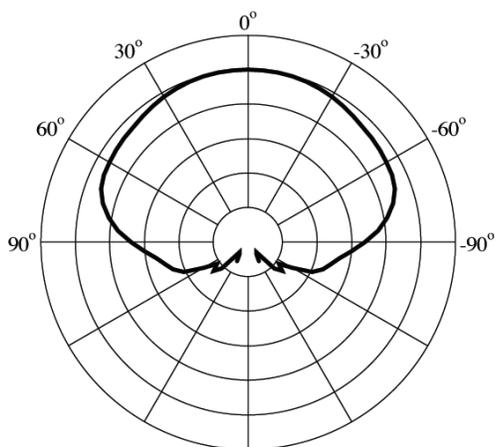
**One Octave Polar Response Charts**  
**6 dB/Division**



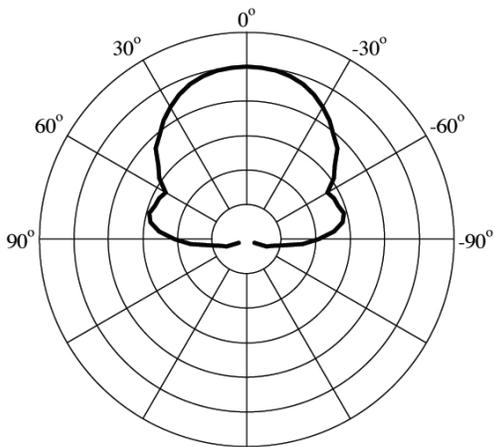
**250 Hz**



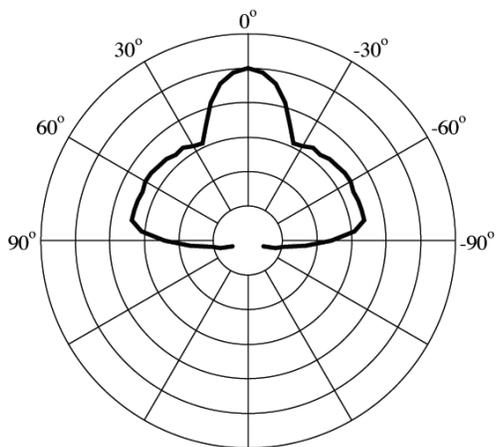
**500 Hz**



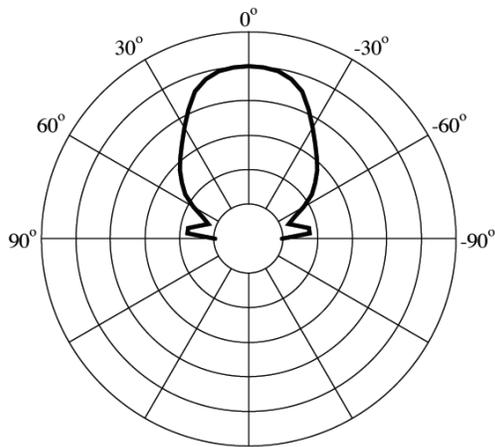
**1 kHz**



**2 kHz**



**4 kHz**



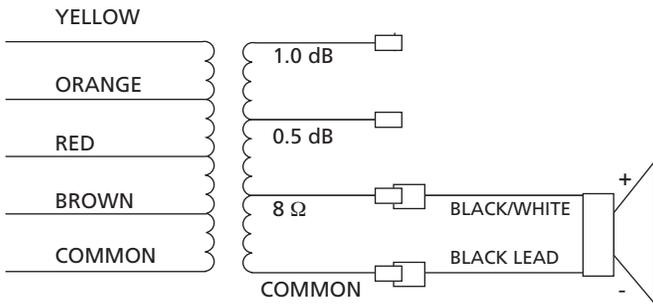
**8 kHz**

As we are continually striving to improve Altec Lansing products, specifications are subject to change without notice.

TRANSFORMER CHART  
CD408

Premium 4 W Transformer (T504-71) Primary	Premium 8 W Transformer (T508-71) Primary	Premium 16 W Transformer (T516-71) Primary	Premium 32 W Transformer (T532-71) Primary	70.7 V Primary Tap Color Code	100 V Primary Tap Color Code
4.0 W	8.0 W	16.0 W	32.0 W	Brown	Red
2.0 W	4.0 W	8.0 W	16.0 W	Red	Orange
1.0 W	2.0 W	4.0 W	8.0 W	Orange	Yellow
0.5 W	1.0 W	2.0 W	4.0 W	Yellow	N/A
Primary Common				Black	

WIRING DIAGRAM



**ALTEC  
LANSING**

PROFESSIONAL

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