

ALTEC LANSING®

PROFESSIONAL

CD1012-8A CD1012-60T



FEATURES - THE ALTEC LANSING DIFFERENCE

- Point-source single magnet structure Duplex® design
- Large Format HF Driver (1.4" exit, 2.8" diaphragm)
- 90° conical high frequency horn
- 12"/300 mm low frequency speaker
- Attached low profile passive crossover network
- Factory-mounted 60W 70V/100V low insertion loss transformer (model CD1012-60T)

GENERAL PRODUCT DESCRIPTION

Convention centers, hotel ballrooms, conference centers, airports & transportation facilities and shopping malls have high ceilings that require high output 70V/100V ceiling speakers. Altec Lansing has offered 12"/300 mm Duplex® ceiling speakers with built-in HF compression drivers for over forty years. The Altec Lansing models CD1012-8A and CD1012-60T are designed to deliver high fidelity background & foreground music reproduction and intelligible speech from a high ceiling. The CD1012 uses a unique point-source design featuring a single magnet structure. The large format high frequency driver (2.8"/35.6mm voice-coil) is on the rear of the magnet structure, while the 12"/300 mm low frequency speaker & voice coil are mounted to the front of the magnet structure. This point-source design means that all of the acoustic energy is generated in a 1.5" space. The high frequency driver is mated to a 90° conical high frequency horn, insuring smooth coverage across the rated bandwidth.

A passive crossover network is mounted "donut style" around the rear cover to insure a low profile. The model CD1012-60T has a factory-mounted premium 60W 70V/100V transformer, with broadband insertion loss of < 1.0 dB. The CD1012-8A and CD1012-60T fit into any industry-standard 3.0 cubic foot metal enclosure.

FREQUENCY RESPONSE ^{1,2}

65 Hz - 16 kHz (± 3 dB)

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

45 Hz

SENSITIVITY ³

97 dB SPL

POWER HANDLING ⁴

300 W continuous; 1,200 W peak

MAXIMUM OUTPUT (1 m) ⁵

122 dB SPL continuous; 115 dB SPL @ 60W

COVERAGE ANGLES ⁶

90° (horizontal) x 90° (vertical)

DIRECTIVITY FACTOR, Q ⁶

11.03

DIRECTIVITY INDEX, Di ⁶

9.46 dB

TRANSDUCER COMPONENTS

LF: 1 x 12-in. (300 mm) low frequency woofer

HF: 1 x 1.4-in. exit compression driver

IMPEDANCE ⁷

Nominal: 8.0 Ω

Minimum: 6.1 Ω at 190 Hz

CROSSOVER FREQUENCY

Passive LF - HF: 1,500 Hz

HARMONIC DISTORTION ⁸

| 1% rated power | | 10% rated power | |
|----------------|-------|-----------------|-------|
| 2nd Harmonic | 0.33% | 2nd Harmonic | 0.98% |
| 3rd Harmonic | 0.70% | 3rd Harmonic | 1.10% |
| THD | 0.78% | THD | 1.47% |

INPUT CONNECTIONS:

1x 2 position barrier strip

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)

CD1012-8A Depth: 8.75 in. (222 mm)

CD1012-60T Depth: 11.00 in. (279 mm)

WEIGHT

CD1012-8A:

Net: 23 lbs. (10.4 kg)

Shipping: 26 lbs. (11.8 kg)

CD1012-60T:

Net: 31 lbs. (14 kg)

Shipping: 36 lbs. (16.3 kg)

THIELE-SMALL PARAMETERS

| | |
|------------------------------------|--------------------------------|
| Free Air Resonance, Fs: | 39.6 Hz |
| Equivalent Volume Compliance, Vas: | 4.75 ft ³ (134.5 l) |
| Total Q, Qts: | 0.376 |
| Electrical Q, Qes | 0.398 |
| Mechanical Q, Qms | 6.77 |
| D.C. Resistance, Re | 5.6 ohms |
| Peak Linear Displacement, Xmax | 0.09 in. (2.2 mm) |