



CM1001d-T PRODUCT SPECIFICATIONS

| | |
|---|--|
| System Type | 10" subwoofer, in-ceiling, ported (150 W transformer for 25, 70.7, 100 V or transformer bypass) |
| Impedance (Nominal) ¹ | 4 Ω |
| Sensitivity dB @ 2.83 V / 1 M | 92 dB |
| Sensitivity dB @ 1 W / 1 M ² | 89 dB |
| Frequency Response (± 3 dB) ³ | 55 Hz - 118 Hz |
| Frequency Response (± 10 dB) ³ | 41 Hz - 224 Hz |
| Max. Program Power ⁴ | 300 W |
| Max. Continuous Power RMS ⁵ | 150 W |
| Max. Power SPL @ 1 M ⁶ | 111 dB |
| Transducer: Low-Frequency Driver | 254 mm (10") polypropylene cone, butyl rubber surround |
| Low-Frequency Voice Coil | 35 mm l 1.38" |
| Crossover Frequency | 100 kHz |
| Network Type: Low Pass | 6 dB per octave, 1st order |
| Enclosure Material | Drawn steel backcan with ABS baffle |
| Grille | Powder-coated steel with integrated ABS baffle |
| Inputs | 4-pin, 5.08 mm Euroblock for individual or daisy chain connection |
| Backcan Height | 316.5 mm 12.46" |
| Visible Diameter | 374.9 mm / 14.76" |
| Visible Height | 27.4 mm 1.08" |
| Mounting Hole Diameter | 323.9 mm 12.75" |
| Min. / Max. Ceiling Thickness | 6.4 mm 0.25" - 48.5 mm 1.91" |
| Weight | 12.3 kg 27 lbs |
| Included Accessories | Tile bridge, suspension cable, and hardware |
| Optional Accessories | Pre-construction bracket (AC-CM8-PCB), junction box (AC-CMi-JBOX), low-profile flangeless grille (GRL-CM6/8-FLG-BK/WH) |
| Certifications | CE, RoHS, UL1480A, UL2043 |

Description

The CM1001d-T is a 10", blind-mount, in-ceiling subwoofer tuned for maximum output and performance across the operating bandwidth. By incorporating a 10" polypropylene woofer and a butyl rubber surround in a tuned and ported enclosure, this speaker delivers maximum low-frequency response (41 Hz - 224 Hz, ±10 dB) and high SPL (111 dB). For added low-end punch, SoundTube has incorporated an oversized enclosure and tuned, flared port.

Mounting hardware is included and features a constant-tension, fixed-wing mounting system with a 21-gauge "full-metal" steel tile bridge, ensuring rapid and secure installation in any sheetrock or drop-tile application. Restraint cable included for easier installation. For easy ordering, stocking and installation, the CM1001d-T includes a color-coded (purple) tile bridge and ships with a five-position tap switch for 25, 70.7 and 100 V applications with transformer bypass position.

Features

- One 10" (254 mm) polypropylene cone with a butyl rubber surround on a reinforced ABS baffle
- High output (111 dB SPL) and maximum efficiency with an accentuated 70 Hz peak to maximize listener's low-frequency experience
- Extra large SoundTube-specific 12.9 liter steel deep can (12.46" depth) for quality bass response
- Rapid installation blind-mount, fixed-wing mounting mechanism with constant-tension design affixing to ceiling thicknesses ranging from 0.25" (6.4 mm) to 1.91" (48.5 mm)
- Easy access five-position tap switch for 25, 70.7, and 100 V and transformer bypass position
- Steel grille with protective powder-coated finish for lasting durability plus a tool-free strap for easy installation
- Baffle-mounted, flared and tuned port for maximum efficiency and frequency response
- UL1480A and UL2043, CE (EMC Directive 89/366/EEC, EN55020, EN55013) approved
- High-quality black or white paint finish. Custom paint colors optional
- Included accessories: color-coded (purple) tile bridge, suspension cable, and hardware
- Optional accessories: color-coded (purple) pre-construction bracket (AC-CM8-PCB), and junction box (AC-CMi-JBOX), low-profile flangeless grille (GRL-CM6/8-FLG-BK/WH)

¹ Impedance listed per IEC 60268-5 with a minimum less than 80% the nominal impedance

² 1 W/1 M sensitivity determined using nominal impedance

³ Frequency response measured in half or full space as dictated by speaker mounting configuration

⁴ Max program power is 3 dB above max continuous power

⁵ Continuous power rating, EIA-426-B test

⁶ Max output based on max continuous power

Transformer Taps

| 70.7 V | Output | 100 V | Output | 25 V | Output |
|--------|--------|-------|--------|-------|--------|
| 150 W | 111 dB | 150 W | 111 dB | 19 W | 102 dB |
| 75 W | 108 dB | 35 W | 108 dB | 9.5 W | 99 dB |
| 38 W | 105 dB | 19 W | 105 dB | 4.8 W | 96 dB |
| 19 W | 102 dB | | | 2.4 W | 93 dB |

Applications

The CM1001d-T is a background to foreground subwoofer for installations where high quality, true bass response and rapid installation are critical variables. Aerobic rooms, retail, restaurants, nightclubs, hotels, bars, theme parks, arenas, ballrooms and churches are all ideal fits for the CM1001d-T. Because overall system design is a critical component of subwoofer integration, SoundTube recommends incorporating a DSP system with an active crossover to maximize the subwoofer integration and overall system performance. Tuning the system based on room acoustics and loudspeaker selection will result in smooth response and reduced subwoofer localization.

Patented Technologies

SoundTube Entertainment and the MSE Audio Group constantly develop new technologies which enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dome, enclosure and dispersion technologies. The MSE Audio Group actively defends its patents in order to protect SoundTube resellers and end-users.

Technical Data and Specification Tools

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data is available from SoundTube Entertainment or at www.soundtube.com.

Technical data and downloads include:

- EASE™ data - 3-D polar plots.
- EASE™ Address - 2-D modeling for distributed systems
- AutoDesk® Revit® software
- Tech Sheets - technical information and architectural specs for system engineers
- SoundTubeSPEC™ - Proprietary speaker placement software

Independent Data Acquisition and Verification

All data for SoundTube speakers is independently collected from and verified by NWAALabs (www.nwaalabs.com) using their proprietary MACH testing system. All data is collected and analyzed according to ASTM, ISO and AES standards using EASERA, TEF and MLSSA. Full balloon data including both phase and magnitude is compiled into a variety of formats including EASE 4.x, GLL and CLF.

Architectural Specifications

The subwoofer shall consist of one 254 mm (10") low-frequency transducer installed in a 12.9-liter ported enclosure. The transducer shall have a polypropylene cone with a butyl rubber surround. The speaker shall include a 150 W transformer.

Performance specifications of a typical production unit shall be as follows: Usable frequency response shall extend from 41 Hz - 224 kHz (± 10 dB). Maximum continuous output at 1 meter shall be 111 dB. The CM1001d-T subwoofer shall include a selectable 25, 70.7, 100 V tap switch and transformer bypass position. Rated power capacity of the components and network shall be at least 150 W continuous RMS and conform to EIA-426-B testing.

The backcan shall be constructed of galvanized steel with a UL94 V(0) flame-rated ABS baffle. The grille shall be constructed of powder-coated steel. Packaged complete with UL-rated conduit cover plate, color-coded tile bridge (to match color-coded backcan label), grille, and paint shield, the integrated in-ceiling subwoofer is engineered for high performance and rapid installation in plenum spaces. The speaker incorporates a secondary attachment point for added security, or code satisfaction where required.

Installation for the speaker shall be by two-screw, blind-mount, constant-tension, fixed-winged assembly and shall attach to ceiling thicknesses ranging from 6.4 mm (0.25") to 48.5 mm (1.91"). The external wiring input connector shall be a four-pin, 5.08 mm Euroblock for 4 Ω or distributed systems and shall accept from 10 - 22-gauge wire.

The unit is factory preset to the 150 W setting in the 70.7 V operating mode with a tap switch located on the front baffle.

The system shall be the SoundTube CM1001d-T for both low- and high-impedance applications.

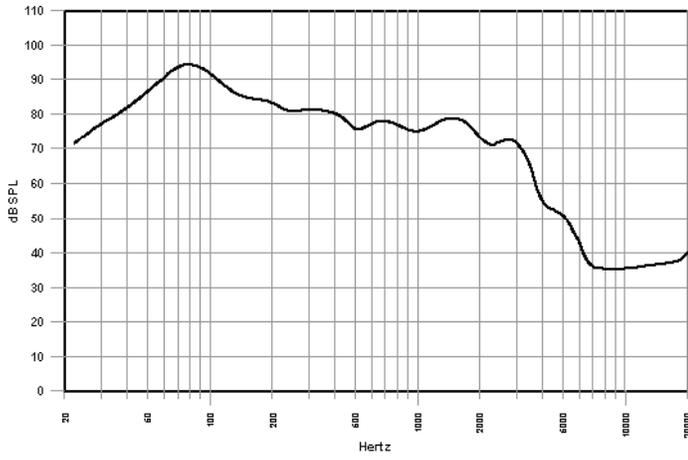
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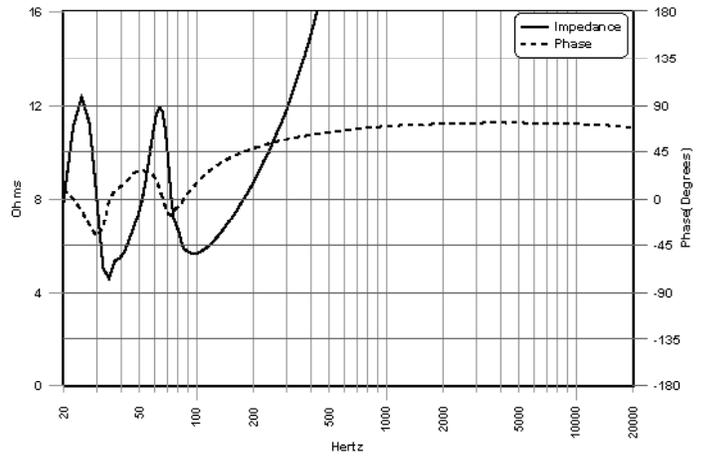
All SoundTube speakers come with a 5-year limited warranty and 3-year warranty on all electronics.

Graphs

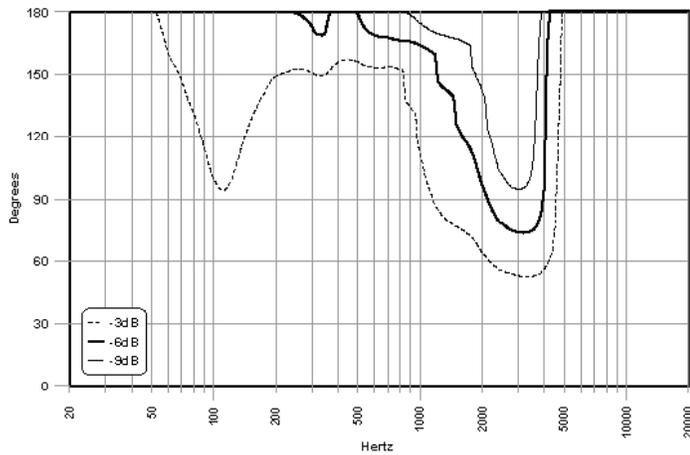
Frequency Response



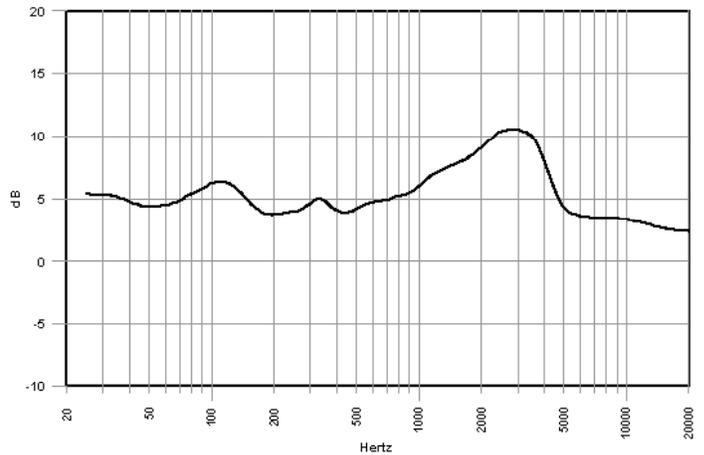
Phase/Impedance Response



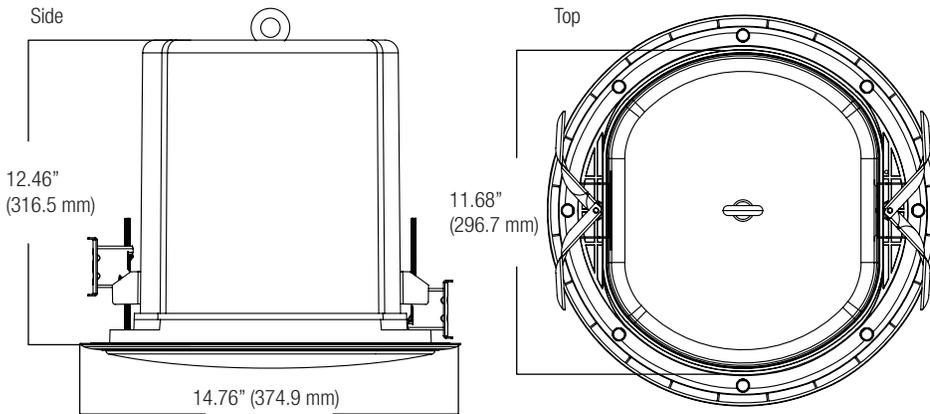
Vertical Beamwidth



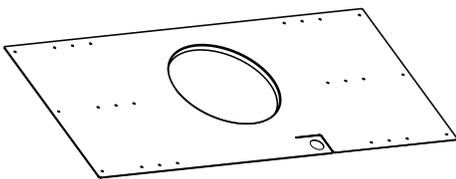
Directivity Index (DI)



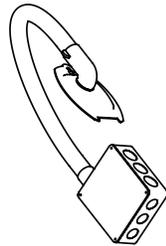
Mechanical Drawings



Optional Accessories

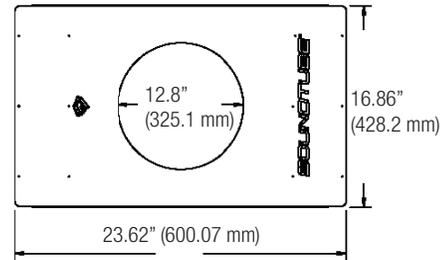


Pre-Construction Bracket
(AC-CM8-PCB)



Junction Box
(AC-CMi-JBOX)

Included Accessories



Tile Bridge



Suspension
Cable & Hardware

Plots

