



Product description

The CMS 1201DC is a powerful state-of-the-art large format in-ceiling loudspeaker device conceived, designed and built to complement Tannoy's existing class-leading CMS range. From the pioneers of point source and large format ceiling speakers the CMS 1201DC is engineered from the ground up with superior full-range performance in mind to handle demanding distributed sound applications such as ballrooms, shopping malls, sports halls, airports and other high ceiling installations. Built around a new evolution of the high power handling 12" (300 mm) Dual Concentric™ point source driver, the CMS 1201DC delivers best-in-class performance for the most even beamwidth and pattern control over the widest range of frequencies of any large format ceiling speaker. Coupled with exceptional clarity, ultra low distortion, and high SPLs, Tannoy has again raised the bar to give the absolute cutting edge performance in ceiling mounted loudspeaker technology.

The new Dual Concentric drive assembly features a treated mid-bass cone and double rolled cambric surround for high sensitivity, as well as a 1.34" (34 mm) aluminium dome with ferrofluid cooled Neodymium magnet assembly and a newly designed waveguide for the high frequency unit. These two drivers seamlessly merge into one with the high frequency mounted in the throat of the mid-bass; therefore coincidentally aligning both transducers to a point source. The result is a smooth, uniform response over a very controlled 90 degree coverage area – even in the highest octaves.

The custom engineered powder coated steel back-can has been designed to cater for all conceivable installation possibilities making the CMS 1201DC extremely versatile. The internally dampened 79 litre (2.8 cubic feet) back-can provides exceptional LF performance on a par with conventional wooden enclosure loudspeakers. Steel mounting lugs allow for fitting to a Unistrut roof rail system or be hung via 4 top-mounted eye bolts. Alternatively, the design caters for a single point hang via M10 or 3/8 UNC screwed rod. Mounting of the loudspeaker assembly to the pre-installed back-can is a one man job thanks to the common sense design approach. One edge of the baffle clips onto the steel box to hold it in place while the installer secures the assembly in place. Connection is simple via terminal barrier strips inside the can, easily accessible via 20 mm and 29 mm conduit knockouts on all 5 sides of the can. Saving time and man-power during installation has been a driving factor behind the design of the CMS 1201 system. Achieving new standards of controlled coverage means the CMS 1201DC can be specified with absolute confidence and located as efficiently as possible, minimising the number of devices typically required, reducing install time and cost.

Features

- 12" (305 mm) point source Dual Concentric™ driver with Ferrofluid cooled Neodymium HF
- High power & high sensitivity with extended LF response and very low distortion
- Highly controlled full-bandwidth 90 degree dispersion
- High power handling (400 W rec. power), high SPL (120 dB sustained average)
- Highly versatile back-can installation options
- 79 litre Back-can lined with OSB2 board and bracing for optimum acoustic performance
- One-man install thanks to quick-fix baffle fitment
- Available with optional low insertion loss 60 W line transformer

The CMS 1201DC is available in both standard low-Z variant (CMS 1201DC) and 60 W line transformer-equipped version (CMS 1201DCt) for use on 70 V or 100 V distributed lines (optional THP 150 Watt transformer also available for high powered applications). The following tappings are configurable on the transformer before screwing driver assembly into the back can:

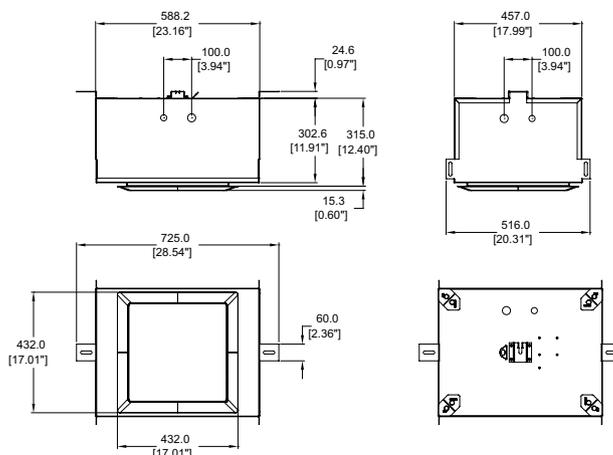
70 V systems: 60 W / 30 W / 15 W / 7.5 W / OFF
100 V systems: 60 W / 30 W / 15 W / OFF

If later adjustment to the level is required the baffle can be hung from the can via a hinged edge, leaving both hands free to make the required adjustment.

Warranty details can be found at music-group.com.

Physical data

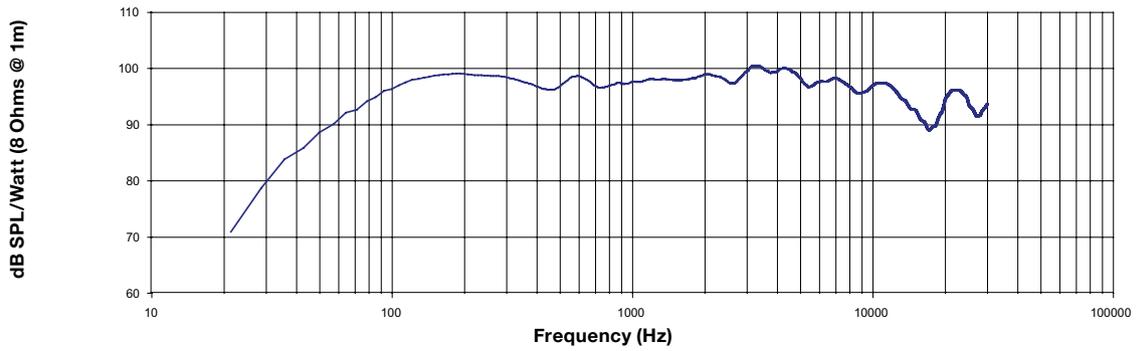
Dimensions H x W x D: 331 x 725 x 516 mm (13.03 x 28.54 x 20.31")
Net Weight (Baffle): 9 kg (19.8 lbs)



Applications

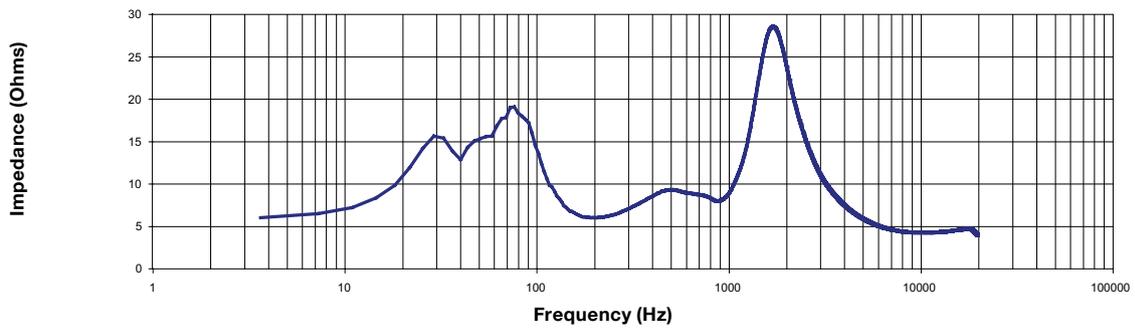
- High ceiling applications
- Shopping malls
- Transport hubs
- Ballrooms
- Boardrooms / Corporate AV
- Convention Centres
- Cruise Ships
- Large Bars & Restaurants

1m on-axis Sensitivity (IEC baffle)



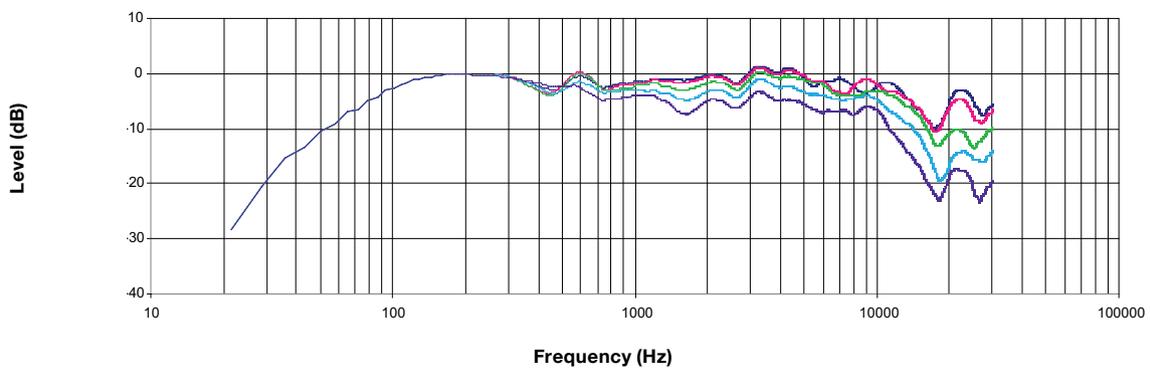
Anechoic Frequency Response

Impedance vs frequency



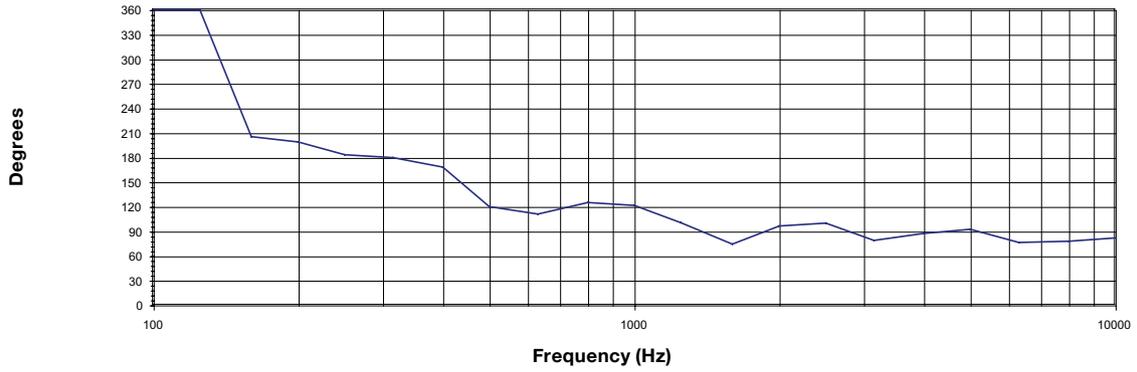
Impedance

Off-axis Frequency Response (IEC baffle)



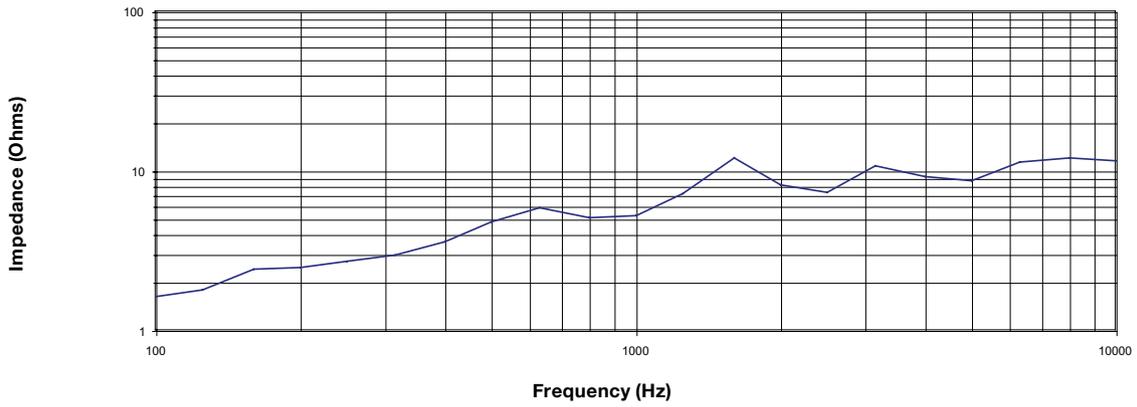
Off Axis Response

Beamwidth vs Frequency



Beamwidth

Q vs Frequency

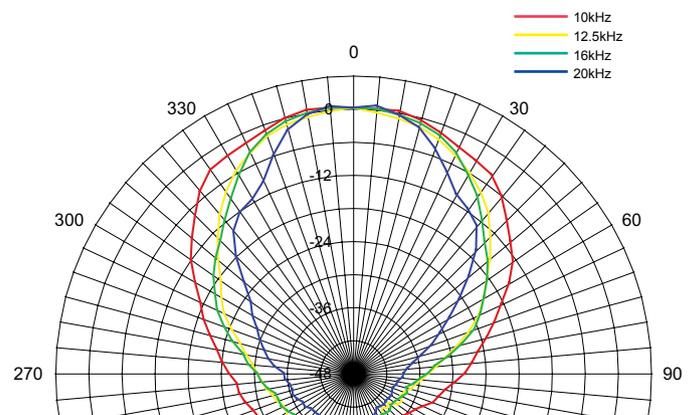
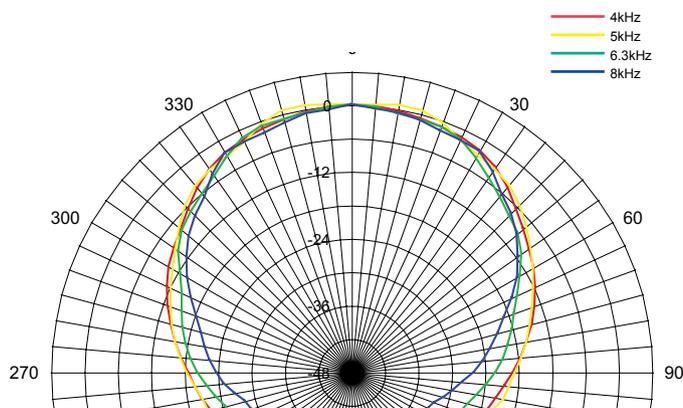
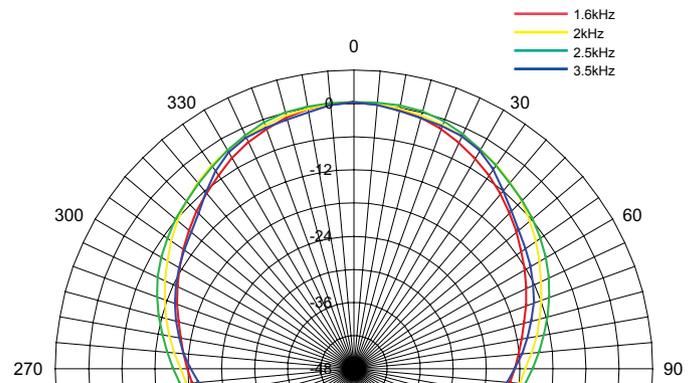
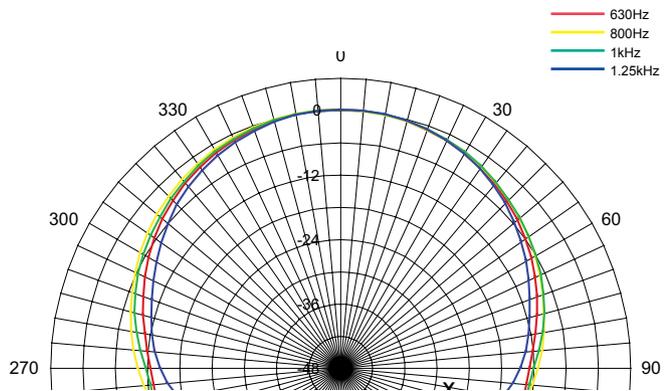
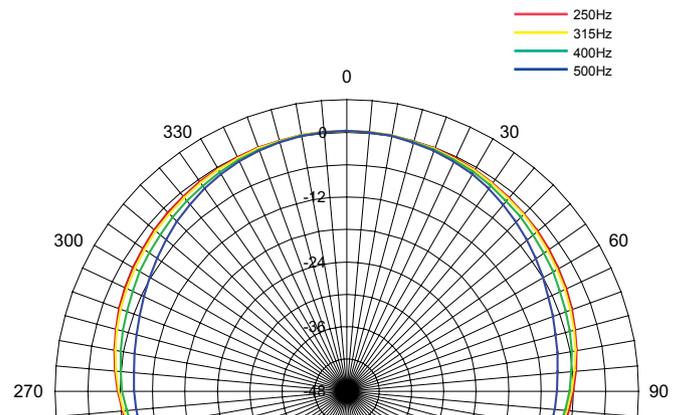
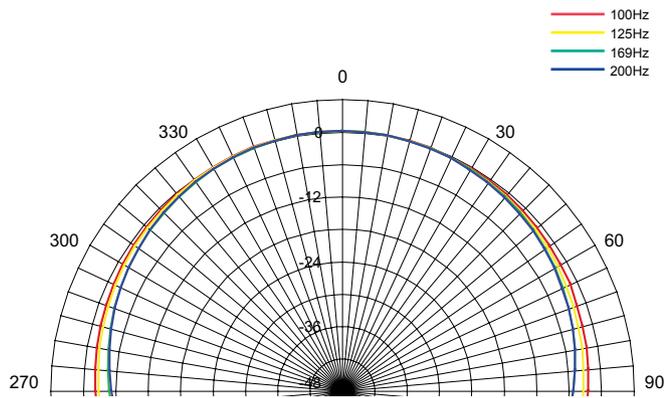


Directivity Index

Technical Data Sheet

Polar plots

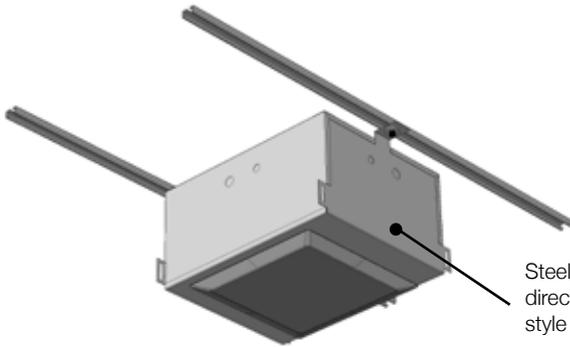
CMS 1201DC



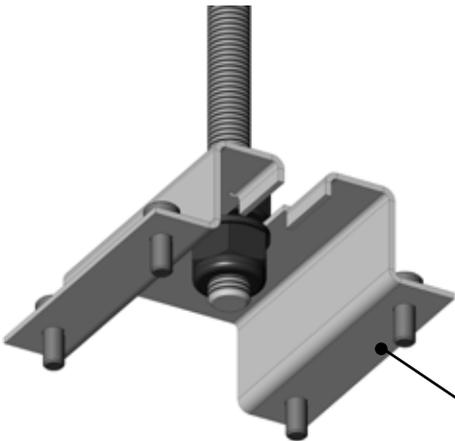
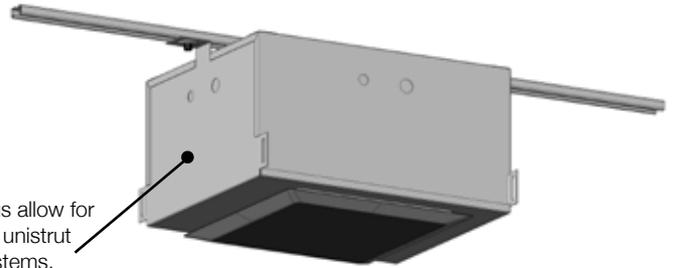
Technical Data Sheet

Mounting possibilities

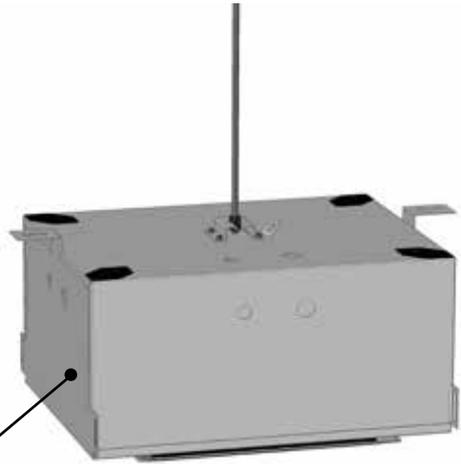
CMS 1201DC



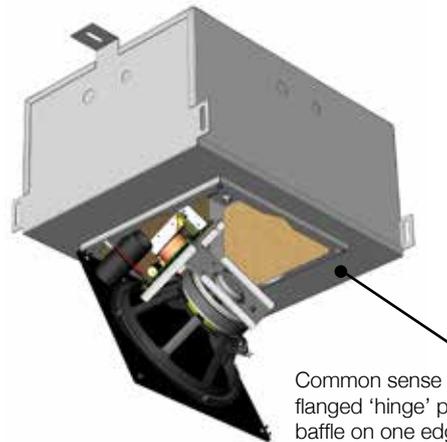
Steel mounting lugs allow for direct mounting to unistrut style ceiling rail systems.



Custom engineered slotted mounting saddle allows for easy and hassle free single-point hang via M10 (3/8) UNC threaded rod and pre-fixed Nylok nut.



4-point hang via corner located eyebolts.



Common sense design provides a flanged 'hinge' point for safely locating baffle on one edge while securing the baffle into the back-can, making it an easy one-man fit.

Technical Data Sheet

Specifications

CMS 1201DC

Performance

Frequency response (-3 dB) ⁽¹⁾	60 Hz - 20 kHz
Frequency range (-10 dB) ⁽¹⁾	45 Hz - 30 kHz
System Sensitivity (1W @ 1m) ⁽²⁾	97 dB (1 W = 2.83 V for 8 Ohms)
Nominal Coverage Angle	90 Degrees Conical
Coverage Angle (1 kHz to 16 kHz)	90 Degrees Conical
Crossover	1.6 kHz - 2nd order LF, 2nd order HF
Directivity Factor (Q)	8.9
Directivity Index (DI)	9.5
Rated maximum SPL ⁽²⁾	
Average	120 dB
Peak	126 dB
With THP 60 - Average	115 dB
Power Handling	
Average	200 W
Programme	400 W
Peak	800 W
Recommended Amplifier Power	400 W @ 8 Ohms
Nominal Impedance	8 Ohms
Transformer Taps (CMS 1201DCt only)	
70 V	60 W / 30 W / 15 W / 7.5 W / OFF
100 V	60 W / 30 W / 15 W / OFF

Transducers

Low Frequency	1 x 300 mm (12.00") Dual Concentric™ constant directivity driver with treated cone
High Frequency	34 mm (1.34") aluminium dome with neodymium magnet system

Distortion

10% full power (5.5 V)	Harmonics		
		2nd	3rd
250 Hz	1.60	0.28	
1 kHz	2.45	0.73	
10 kHz	4.50	0.32	
1% full power (1.73 V)			
250 Hz	0.48	0.08	
1 kHz	1.06	0.59	
10 kHz	1.57	0.04	

Physical

Enclosure	
Backcan	1.6 mm black powder coated steel, damped with 11 mm OSB board
Baffle	1.2 mm black powder coated steel
Grille	1.0 mm white powder coated perforated steel
Connectors	Terminal barrier strip inside the can, with loop thru capability
Safety Features	Safety ring located at the rear of enclosure for load bearing safety bond
Cable Entry Options	20 mm and 28 mm on knockouts
Conduit Knockouts	4 sides + top
Dimensions (H x W x D)	331 x 725 x 516 mm (13.03 x 28.54 x 20.31")
Net Weight	
Backcan	20 kg (44.1 lbs)
Baffle	9 kg (19.8 lbs)
Grille	1.1 kg (2.4 lbs)

Ordering Information

Part Number	Colour
8001 4750 CMS 1201DC	Black
8001 4751 CMS 1201DCt	Black
8001 4760 CMS 1201 Backcan	Black
8001 4780 CMS 1201 Grille Assembly	White
3212 0141 THP 150 Transformer	N/A

Notes:

- Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
- Unweighted pink noise input, measured at 1 metre on axis
- Long term power handling capacity as defined in EIA - 426B test

A full range of measurements, performance data, CLF and Ease™ Data for CMS 1201DC can be downloaded from www.tannoypro.com.

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods may introduce variations in actual performance; however, actual performance always will equal or exceed the published specifications, which Tannoy reserves the right to alter without prior notice. Please verify the latest specifications when dealing with critical applications.

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