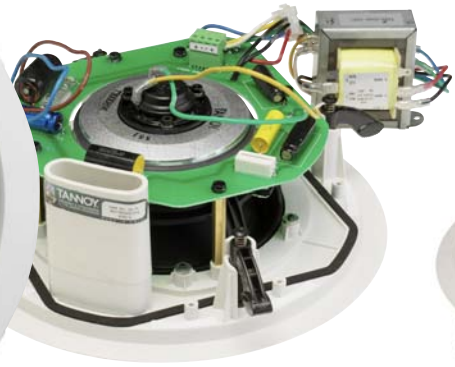
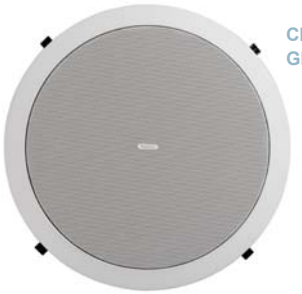
CMS601 DC

TANNOY



CMS601 DC PI



CMS601 DC
GRILLE FITTED

CMS601 DC BM

Product Description

The Tannoy CMS601 DC is a full bandwidth; high power and high sensitivity ceiling monitor system. The 165mm (6.50") Tannoy Dual Concentric™ is a point source, constant directivity drive unit design comprising a multi fibre paper pulp mid bass cone and a 25mm (1") ferrofluid cooled, titanium dome HF unit with neodymium magnet system. The driver and passive frequency dividing network is mounted in a vented, injection moulded, paintable front baffle manufactured from UV/weather resistant UL94V-0 ABS material.

The mid-bass and tweeter sections of the Tannoy Dual Concentric™ constant directivity driver are coincidentally aligned to a true point source; ensuring a wide and controlled dispersion for optimum coverage; this while avoiding the massive loss of energy, in the vertical plane at the crossover frequency, inherent in two-way discreet designs. This high power and high sensitivity design, with extended frequency response and very low distortion, is equipped with dynamic high frequency protection.

This compact unit is specifically designed for applications requiring the combination of premium sonic quality for music and speech reinforcement and exceptional reliability and intelligibility.

The CMS601 DC is equipped with a low insertion loss 60W line transformer easily configurable to the following settings via front baffle mounted rotary tapping switch:

70V systems: 60W / 30W / 15W / 7.5W / OFF & low Impedance operation
100V systems: 60W / 30W / 15W / OFF & low Impedance operation

Two CMS601 DC model versions and a separate back can are available to satisfy the vast majority of installation application requirements:

CMS601 DC BM (Blind Mount) - supplied with an integral back can.
CMS601 DC PI (Pre-Install) - supplied without a back can.
CMS601 PI Back Can (Pre-wire back can) - use with the CMS601 DC PI.

The zinc plated steel back cans have an integrated, recessed termination box. The removable locking connector has screw terminals for secure wire termination and "loop through" facility. Strain relief is provided by a clamping mechanism for use with plenum rated cable or conduit.

Spring loaded self-aligning clamps make for quick and easy installation, while all models are also supplied with two tile support rails and one C-ring included in the package. A plaster (mud) ring is available as an optional accessory.

Features

- 165mm (6.50") point source Dual Concentric™ driver
- High power & high sensitivity with extended frequency response and very low distortion
- Wide, controlled constant directivity dispertion for optimum coverage.
- Does not suffer from massive loss of energy in the vertical plane at crossover caused by two way discreet designs
- UV/weather resistant UL94V-0 ABS front baffle
- Blind Mount & Pre Install options
- Dynamic high frequency protection
- Easily accessible tapping switch on front baffle.
- Low insertion loss 60w line transformer
- Ferrofluid cooled neodymium HF
- Packaged with tile rails and C-ring for quick & easy installation and simple stocking logistics
- Five year warranty

Applications

- Multi-zone foreground music & paging systems
- Boardrooms & offices
- Business music systems
- Airports, convention centres, hotels
- Reception/ waiting rooms
- Houses of worship
- Retail outlets/ shopping malls
- Lounges/ bars
- Cruise ships
- Courtrooms

Tannoy United Kingdom | T: +44 (0) 1236 420199 | F: +44 (0) 1236 428230 | E: enquiries@tannoy.com
Tannoy North America | T: (519) 745 1158 | F: (519) 745 2364 | E: inquiries@tannoyna.com
Tannoy Deutschland | T: (04102) 888 393 | F: (04102) 888 959 | E: info@tannoy.com

tannoy.com

CMS601 DC

TECHNICAL SPECIFICATIONS

System	CMS601DC
Frequency Response (-3dB) (1) BM Back can	75Hz - 30kHz
Frequency Range (-10dB) (1) BM Back can	50Hz - 30kHz
Frequency Range (-10dB) (1) PI Back can	46Hz - 30kHz
System Sensitivity (1W @1m) (2)	91dB (1W = 2.83V for 8W)
Nominal Coverage Angle	90 degrees conical
Coverage Angle (1kHz to 6kHz)	111 degrees conical
Directivity Factor (Q)	4.7 averaged 1kHz to 6kHz
Directivity Index (DI)	6.5 averaged 1kHz to 6kHz
Rated Maximum SPL	110dB (average) 116dB (peak)
Power Handling (3)	
Average	80W
Programme	160W
Peak	320W
Recommended Amplifier Power	160W @ 8W
Nominal Impedance	8Ω
Transformer Taps (via front rotary switch)	
70V	60W / 30W / 15W / 7.5W / OFF & low impedance operation
100V	60W / 30W / 15W / OFF & low impedance operation

Distortion		
10% Full Power	2nd Harmonic	3rd Harmonic
250Hz	1%	0.32%
1kHz	0.18%	0.32%
10kHz	1%	0.18%
1% Full Power	2nd Harmonic	3rd Harmonic
250Hz	0.25%	0.25%
1kHz	0.06%	0.18%
10kHz	0.45%	0.14%

Crossover	2kHz - 2nd order LF, 3rd Order HF (with dynamic HF protection)

Notes
(1) Average over stated Bandwidth. Measured in an IEC baffle in an Anechoic Chamber
(2) Unweighted Pink noise input, measured at 1m on axis
(3) Long term power handling capacity as defined in EIA - 426B test

Transducers

Low Frequency	165mm (6.00") Dual Concentric™ constant directivity driver with multi fibre paper pulp cone
High Frequency	25mm (1.00") titanium dome with neodymium magnet system

Physical

Enclosure	
Back can	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
Safety Features	Safety ring located at rear of enclosure for load bearing safety bond
Clamping Design	Security toggle clamp
Back Can Options	
Blind Mount (BM)	Complete with fixed back can
Pre Install (PI)	Separate back can for pre Installation
Cable Entry Options	Cable clamp & squeeze connector for conduit up to 22mm
Conduit Knockouts	3 Sets of horizontal positions 19 / 22 / 28mm (0.75" / 0.87" / 1.10")
Connectors	Removable locking connector with sctrew terminals with "loop through" facility
Safety Agency Ratings (pending)	UL-1480, UL-2043, CE
BM Hole Cutout Diameter	253mm (10.00")
PI Hole Cutout Diameter	253mm (10.00")
Dimensions	
Bezel diameter	280mm (11.30")
Front of ceiling to rear of back can (BM)	258mm (10.20")
Front of ceiling to top of safety loop (BM)	275.5mm (10.90")
Back of ceiling surface to rear of back can (PI)	151mm (5.90")
Back of ceiling surface to top of safety loop (PI)	168.5mm (6.60")
Net Weight (ea)	
CMS601 DC BM	TBA
CMS601 DC PI	TBA
CMS601 PI back can	TBA
Included Accessories	C Ring, tile bridge, paint mask, cutout template, grille
Optional Accessories	Plaster (mud) ring

Ordering Information

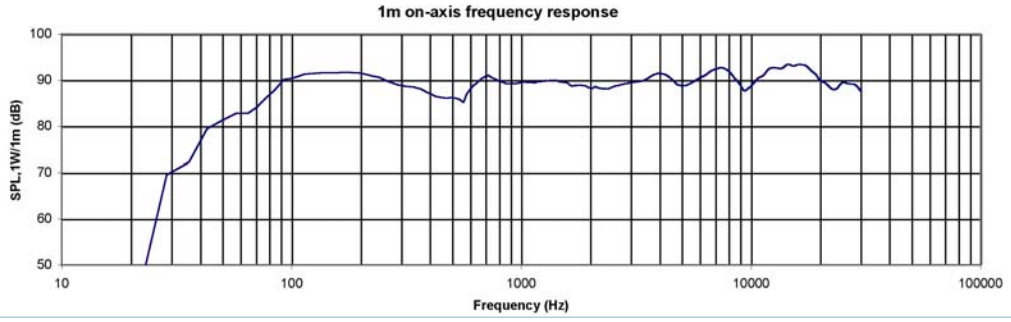
Item number	Item name	Packaging Quantity	Gross Weight	Gross Depth	Gross Width	Gross Height
8001 3890	CMS601 DC BM	2	8.45	35.25	20.25	18.5
8001 3900	CMS601 DC PI	2	5.9	34.75	20	10.5
8001 3880	CMS601 DC PI Back can	1	2.9	20	20	11.25

Tannoy United Kingdom | T: +44 (0) 1236 420199 | F: +44 (0) 1236 428230 | E: enquiries@tannoy.com
Tannoy North America | T: (519) 745 1158 | F: (519) 745 2364 | E: inquiries@tannoyna.com
Tannoy Deutschland | T: (04102) 888 393 | F: (04102) 888 959 | E: info@tannoy.com
tannoy.com

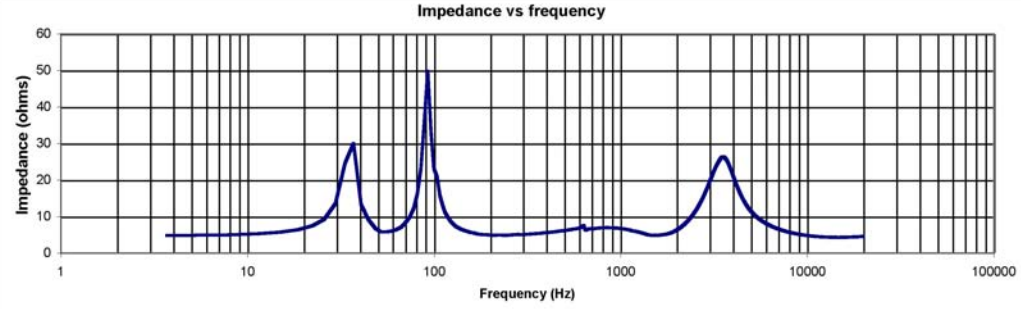
CMS601 DC

PERFORMANCE MEASUREMENTS

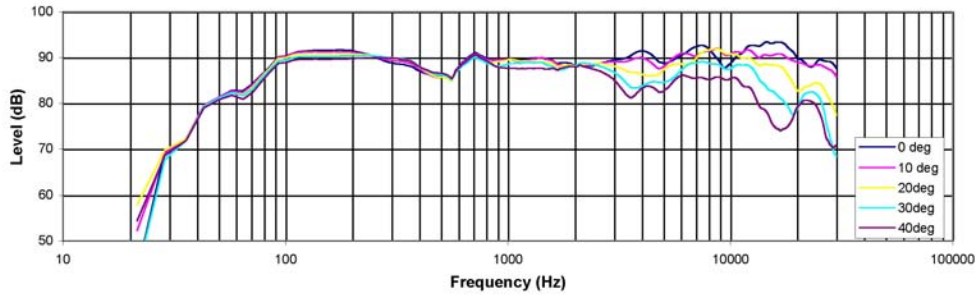
ANECHOIC FREQUENCY RESPONSE



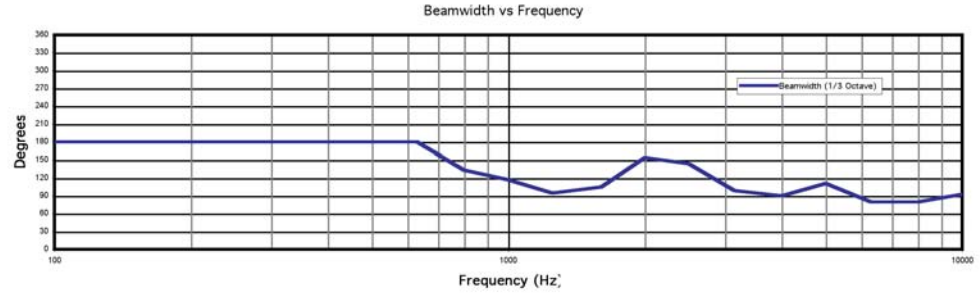
IMPEDANCE



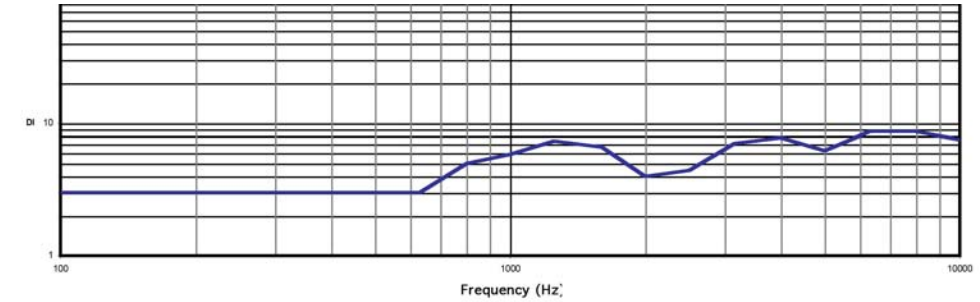
OFF AXIS RESPONSE



BEAMWIDTH



DIRECTIVITY INDEX

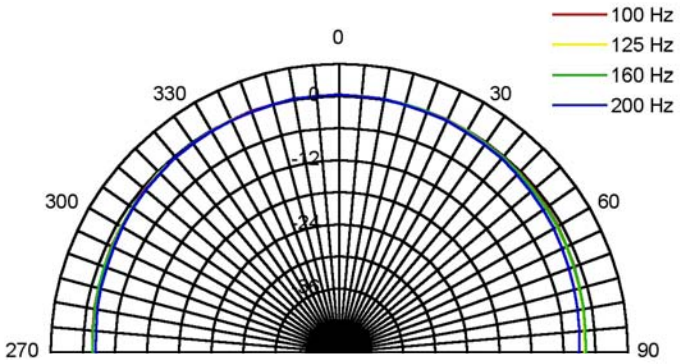


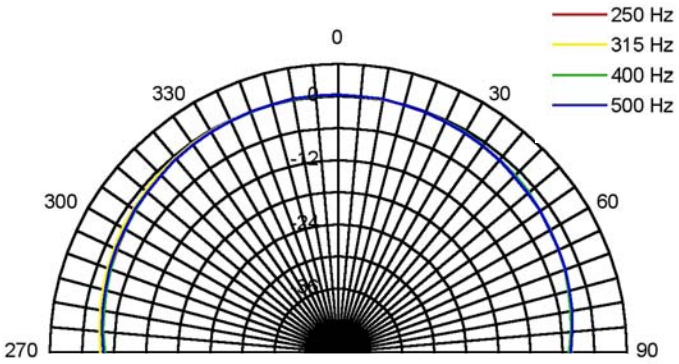
Tannoy United Kingdom | T: +44 (0) 1236 420199 | F: +44 (0) 1236 428230 | E: enquiries@tannoy.com
Tannoy North America | T: (519) 745 1158 | F: (519) 745 2364 | E: inquiries@tannoyna.com
Tannoy Deutschland | T: (04102) 888 393 | F: (04102) 888 959 | E: info@tannoy.com

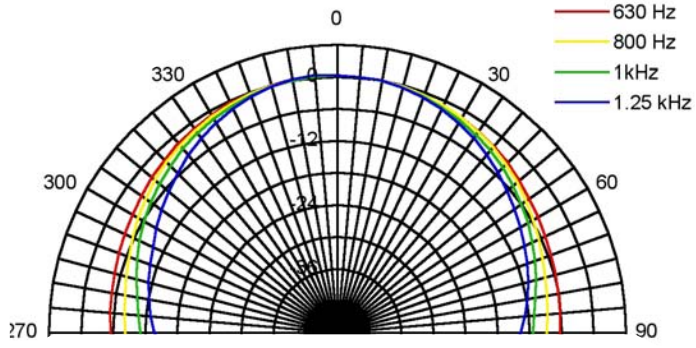
tannoy©com

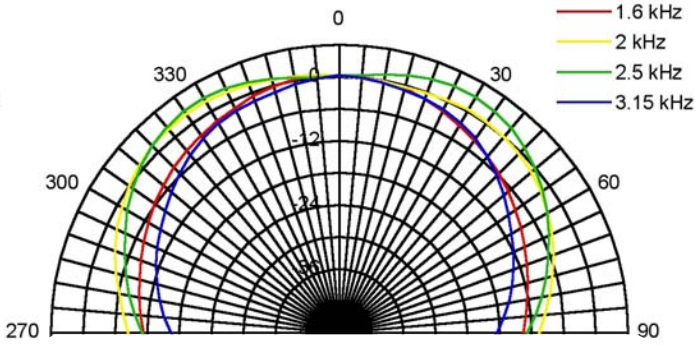
CMS601 DC

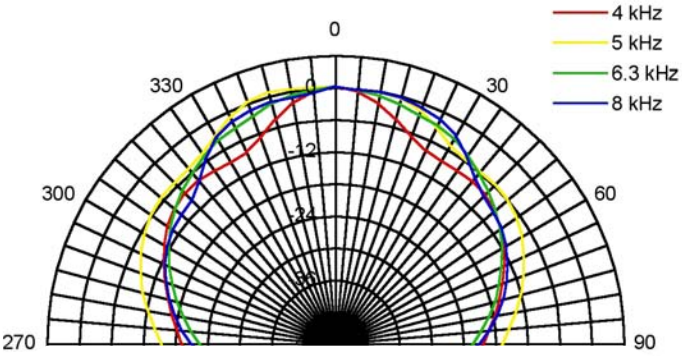
PERFORMANCE MEASUREMENTS POLAR PLOTS (1/3 OCTAVE)

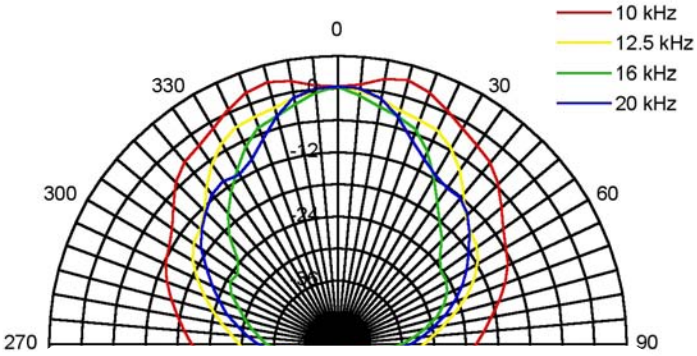










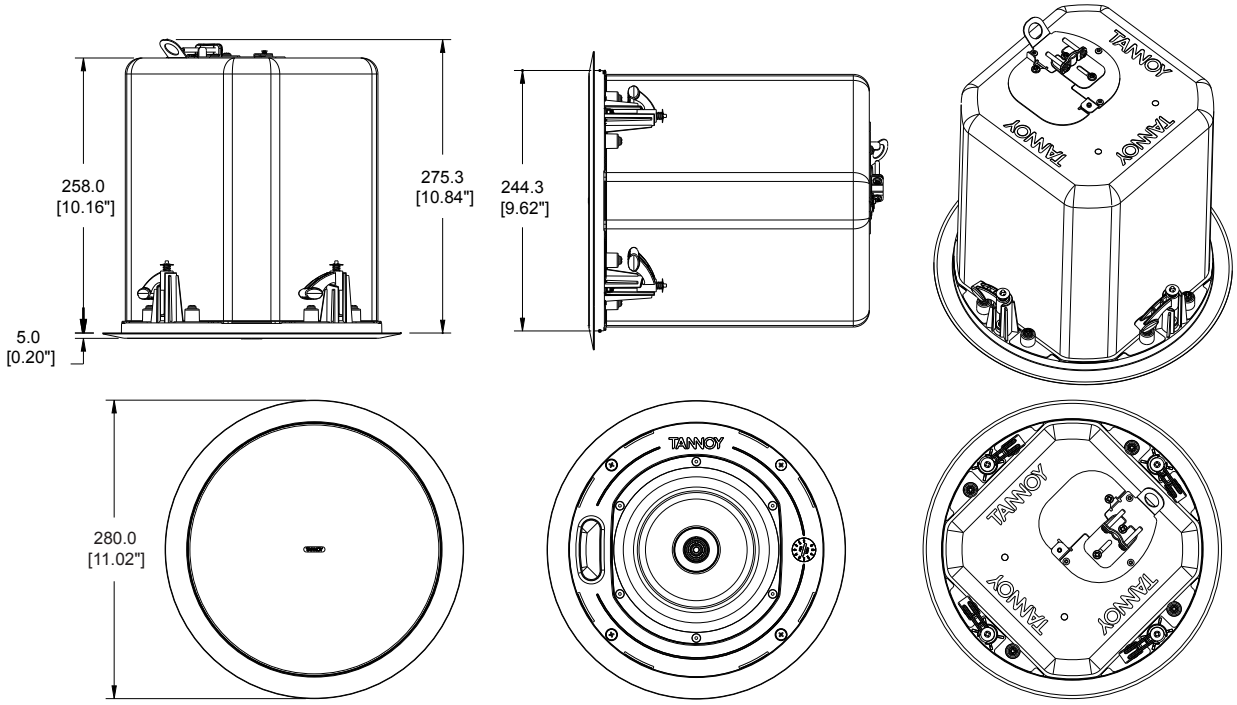


Tannoy United Kingdom | T: +44 (0) 1236 420199 | F: +44 (0) 1236 428230 | E: enquiries@tannoy.com
Tannoy North America | T: (519) 745 1158 | F: (519) 745 2364 | E: inquiries@tannoyna.com
Tannoy Deutschland | T: (04102) 888 393 | F: (04102) 888 959 | E: info@tannoy.com

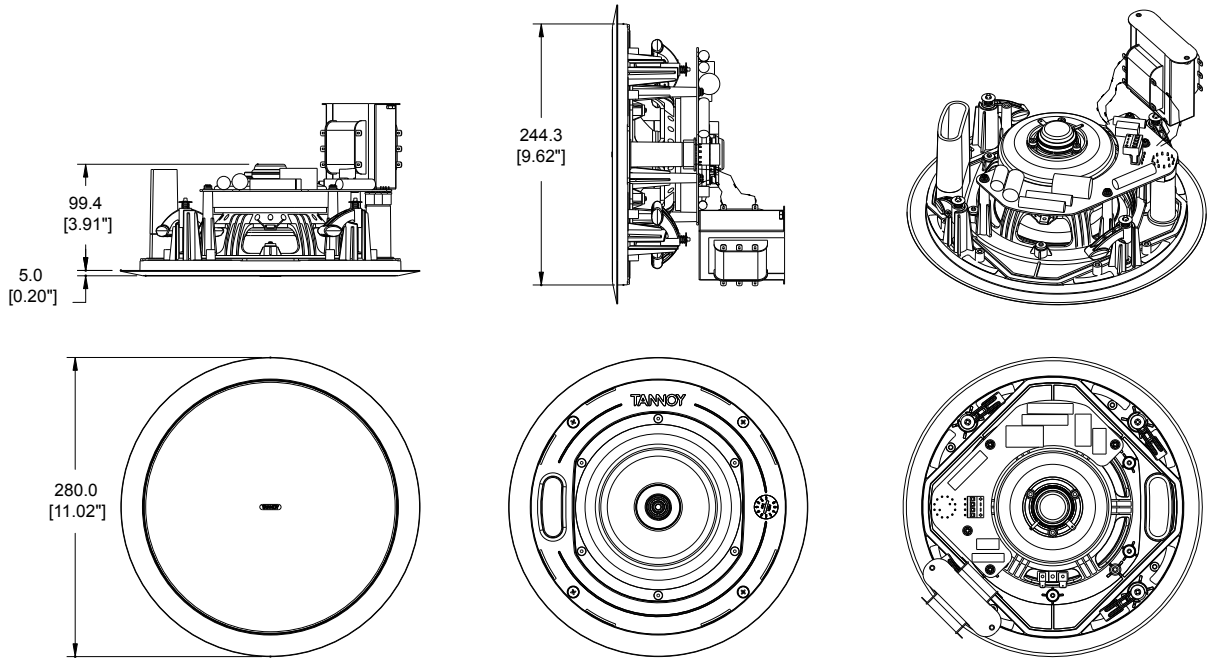
tannoy©com

CMS601 DC

DIMENSIONAL SKETCHES



CMS601DC BM TEMPLATE HOLE CUTOUT SIZE - 253mm (9.96")



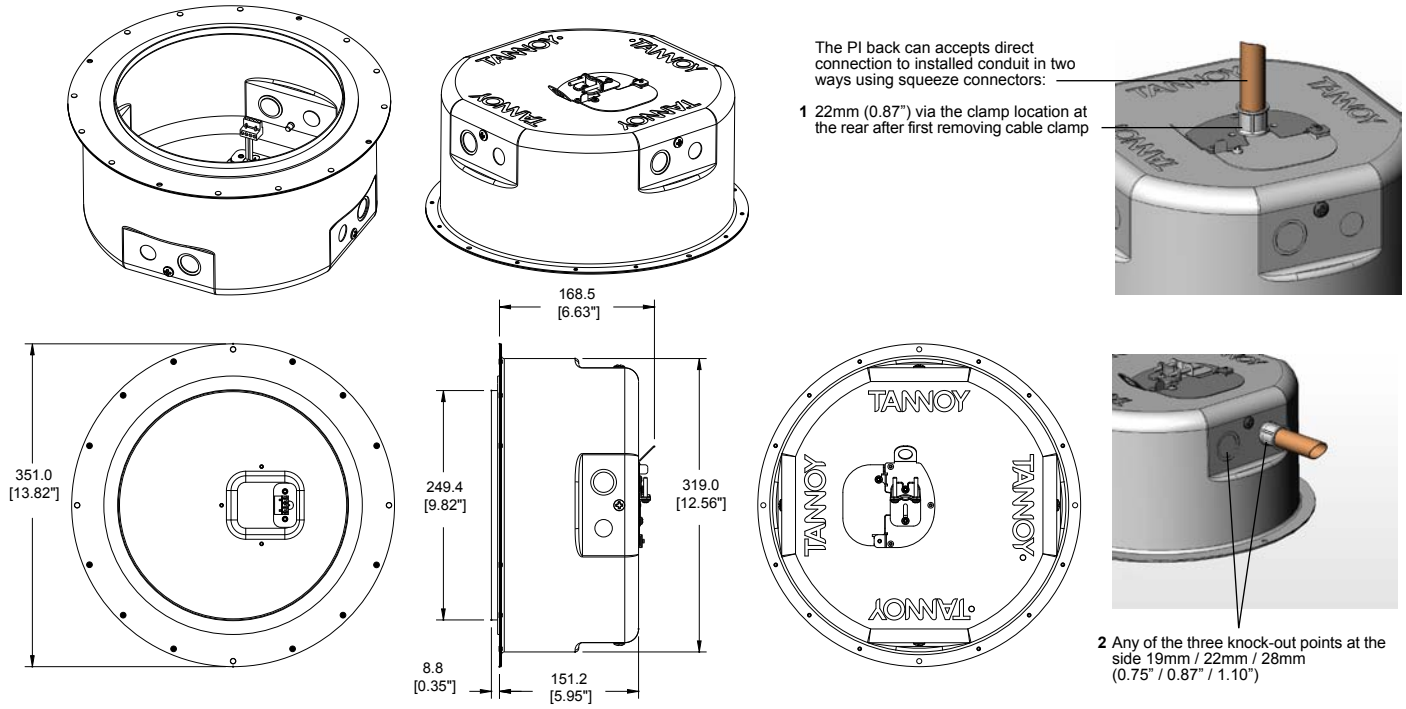
CMS601DC PI TEMPLATE HOLE CUTOUT SIZE - 253mm (9.96")

Tannoy United Kingdom | T: +44 (0) 1236 420199 | F: +44 (0) 1236 428230 | E: enquiries@tannoy.com
Tannoy North America | T: (519) 745 1158 | F: (519) 745 2364 | E: inquiries@tannoyna.com
Tannoy Deutschland | T: (04102) 888 393 | F: (04102) 888 959 | E: info@tannoy.com

tannoy.com

CMS601 DC

DIMENSIONAL SKETCHES



The PI back can accepts direct connection to installed conduit in two ways using squeeze connectors:

1 22mm (0.87") via the clamp location at the rear after first removing cable clamp

2 Any of the three knock-out points at the side 19mm / 22mm / 28mm (0.75" / 0.87" / 1.10")

CMS601 PI BACK CAN

Architectural Specifications

The Ceiling Monitor System shall consist of a 165mm (6.00") full range, point source, constant directivity Dual Concentric™ transducer and passive frequency dividing network mounted in a vented, injection moulded, paintable front baffle in UL94V-0 ABS material.

The back can in both PI (pre-install) & BM (Blind-mount variants) shall be constructed of zinc plated steel. A recessed termination box shall be integrated with the back can, a removable locking connector with screw terminals for secure wire termination with "loop through" facility shall be provided. Strain relief will be provided by a clamping mechanism for use with plenum rated cable or conduit.

For prewiring the PI (pre-install) back can is provided with conduit knockouts (19mm / 22mm / 28mm, 0.75" / 0.87" / 1.14"). A safety ring is located on the rear of the back can for a load bearing safety bond.

Performance of the Ceiling monitor shall meet or exceed the following criteria: The system shall have a conical coverage pattern of 111degrees (1kHz to 6kHz). Frequency response measured on axis shall be 50Hz - 30kHz (-10dB from rated sensitivity, measured in an IEC baffle in an anechoic chamber) with no equalization. Sensitivity shall be 91dB (1W @ 1m). Long term power handling capacity as defined in EIA-426B test shall be 80W, recommended amplifier power 160W. Dynamic high frequency protection is provided for occasional overpowering. The nominal system impedance shall be 8W (in low impedance setting).

The Ceiling monitor system shall be equipped with a 60Watt high performance line transformer for use in 70.7 or 100 Volt distributed audio systems with 60, 30, 15, 7.5* Watt taps available. An easily accessible rotary switch located on the front baffle shall be available for selecting transformer and low impedance settings. A weather resistant perforated steel grill covers the transducer and switch.

Two support rails and one C-Ring shall be included with the ceiling monitor system. The front face diameter shall not exceed 280mm (11.30"), overall depth from the front of the ceiling to the top of the safety loop shall not exceed 275mm (10.90") for the blind mount variant, and 168.5mm (6.60") for the pre install variant.

The Ceiling Monitor System shall be the.....CMS601DC.

Tannoy United Kingdom | T: +44 (0) 1236 420199 | F: +44 (0) 1236 428230 | E: enquiries@tannoy.com
Tannoy North America | T: (519) 745 1158 | F: (519) 745 2364 | E: inquiries@tannoyna.com
Tannoy Deutschland | T: (04102) 888 393 | F: (04102) 888 959 | E: info@tannoy.com

tannoy.com

NOTES

TANNOY®

Tannoy United Kingdom | T: +44 (0) 1236 420199 | F: +44 (0) 1236 428230 | E: enquiries@tannoy.com
Tannoy North America | T: (519) 745 1158 | F: (519) 745 2364 | E: inquiries@tannoyna.com
Tannoy Deutschland | T: (04102) 888 393 | F: (04102) 888 959 | E: info@tannoy.com

tannoy©com