



# CMS 801sub

TANNOY®



LISTED  
UL-1480,  
UL-2043



## Product Description

The Tannoy CMS 801sub is a compact unit specifically designed to complement the full range CMS ceiling monitor systems; delivering low frequency extension into applications that require a combination of premium sonic quality and output level for music and speech reinforcement.

The 200mm (8.00") driver, with long throw multi fibre paper pulp cone, and a 2nd order 160Hz passive crossover are mounted in a vented, injection moulded, paintable front baffle manufactured from UV/weather resistant UL94V-0 ABS material.

Two CMS 801sub model versions and a separate back can are available to satisfy the vast majority of installation application requirements:

**CMS 801sub BM (Blind Mount) - supplied with an integral back can.**

**CMS 801sub PI (Pre-Install) - supplied without a back can.**

**CMS 801PI Back Can (Pre-Install back can) - use with the CMS 801sub PI.**

The CMS 801sub BM model is equipped with a low insertion loss 60W line transformer mounted within the back can. This is 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**

The CMS 801sub PI is supplied without a transformer. If the product is to be used without a back can a 60W line transformer (7600 1658) is available as an optional accessory for easy connection to the baffle mounted control switch circuit. Installing the transformer in this manner (flying) requires installation in accordance with local building regulations.

**NOTE:** For optimum performance and full compliance with safety ratings Tannoy recommends using the CMS 801PI back can (8001 4570) accessory option in which the transformer is pre-fitted.

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

- High Power & high sensitivity with low distortion
- UV/weather resistant UL94V-0 ABS front baffle
- Blind Mount & Pre Install options
- Easily accessible tapping switch on front baffle
- Low insertion loss 60W line transformer
- Packaged with tile rails and C-ring for quick & easy installation and simple stocking logistics
- Five year warranty

## Applications

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

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## TECHNICAL SPECIFICATIONS

System	CMS 801sub
Frequency response (-3dB) <sup>(1)</sup>	58Hz - 160Hz
Frequency range (-10dB) <sup>(1)</sup>	42Hz - 300Hz
System sensitivity (1W @1m) <sup>(2)</sup>	92dB (1W = 2.45V for 8 Ohms)
Crossover	Integral 2nd order passive, 160 Hz
Rated maximum SPL <sup>(2)</sup>	
Average	112dB
Peak	118dB
Average with THP60	110dB
Power handling <sup>(3)</sup>	
Average	100W
Programme	200W
Peak	400W
Recommended amplifier power	200W @ 8 Ohms
Nominal Impedance	8 Ohms
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 (7.75V)	2nd Harmonic 3rd Harmonic
70Hz	1.22% 1.90%
100Hz	0.38% 0.49%
1% Full Power (2.45V)	2nd Harmonic 3rd Harmonic
70Hz	0.91% 1.28%
100Hz	0.04% 0.44%

### Notes

<sup>(1)</sup> Average over stated Bandwidth. Measured in an IEC baffle in an Anechoic Chamber

<sup>(2)</sup> Unweighted pink noise input, measured in an IEC baffle in an Anechoic Chamber.

If the loudspeaker is placed in the ceiling near a corner ( $\pi/2$ ) an increase of 6dB in sensitivity and maximum SPL can be realised.

<sup>(3)</sup> Long term power handling capacity as defined in EIA - 426B test

A full range of measurements, performance data, and Ease™ Data can be downloaded from [www.tannoy.com](http://www.tannoy.com)

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods will always 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.

Transducer	1x 200mm (8.00") long throw woofer with multi fibre paper pulp cone
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 / 1.1")
Connectors	Removable locking connector with screw terminals with "loop through" facility
Safety Agency Ratings	UL-1480, UL-2043, CE
BM Hole cutout diameter	295mm (11.61")
PI Hole cutout diameter	295mm (11.61")
Dimensions	
Bezel diameter	325mm (12.80")
Front of ceiling to rear of back can (BM)	310.5mm (12.22")
Front of ceiling to top of safety loop (BM)	327.8mm (12.90")
Front of ceiling to rear of speaker unit (PI)	117.50mm (4.63")
Front of accessory back can bezel to top of safety loop (PI)	168.5mm (6.63")
Net weight (ea)	
CMS 801sub BM	6.3kg (13.89lbs)
CMS 801sub PI	3.2kg (7.05lbs)
PI Back can	4kg (8.81lbs)
Included accessories	C Ring, tile bridge, paint mask, cutout template, grille
Optional accessories	Plaster (Mud) Ring

## Ordering information

Part number	Model name	Baffle / Grille Colour	Packed Quantity	Packed Weight kg (lbs)
8001 4730	CMS 801sub BM	White	2	19.0 (41.89)
8001 4740	CMS 801sub PI	White	2	11.5 (25.35)
8001 4650	Plaster Ring - CMS 801	N/A	10	8.0 (17.64)
8001 4570	Back can CMS 801PI 8 Ohm	N/A	1	4.5 (9.92)
7600 1658	CMS 60 Watt XFMR/Lead Dual 8 Ohm	N/A	10	12.0 (26.46)

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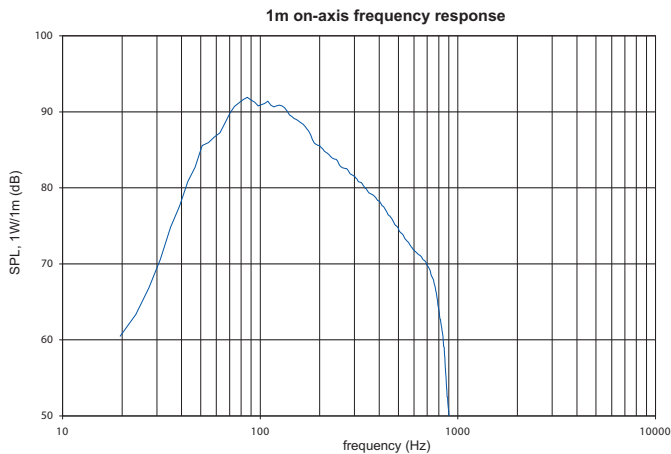
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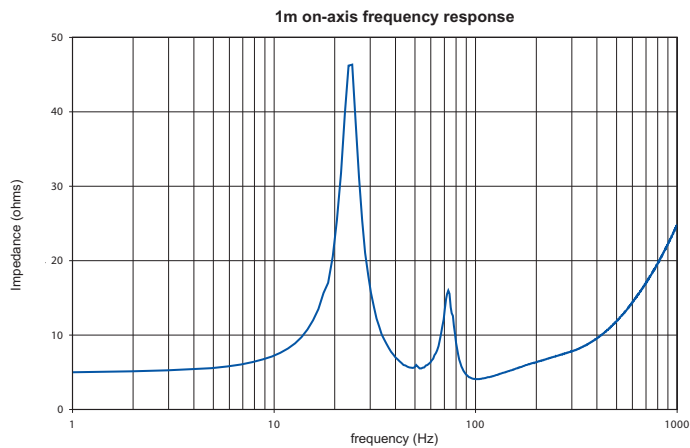


## PERFORMANCE MEASUREMENTS

ANECHOIC  
FREQUENCY  
RESPONSE



IMPEDANCE



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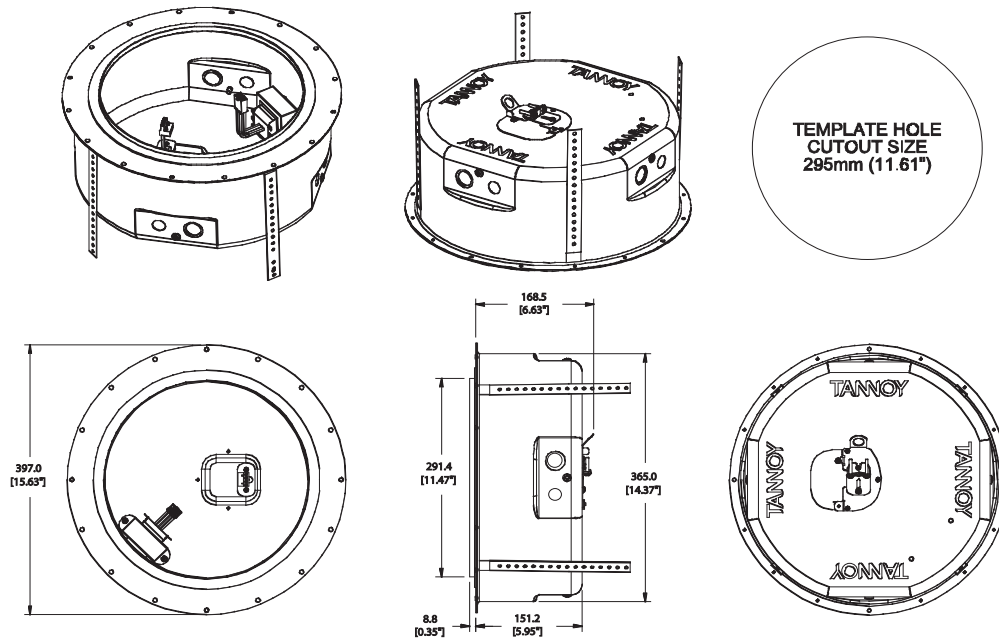
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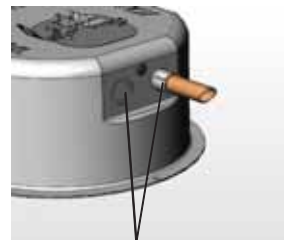
## DIMENSIONAL SKETCHES



The PI back can accept 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



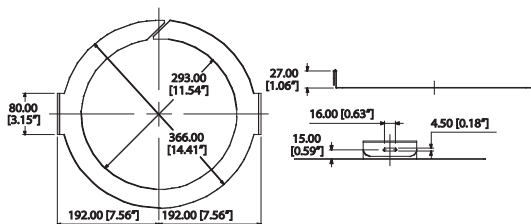
2 Any of the three knock-out points at the side 19mm / 22mm / 28mm (0.75" / 0.87" / 1.10")

CMS 801PI BACK CAN

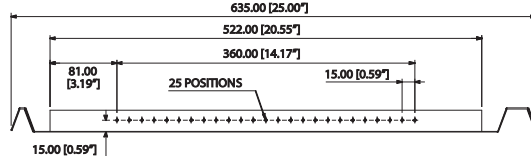
TEMPLATE HOLE CUTOUT SIZE - 295 (11.61")

### SUPPLIED ACCESSORIES

#### C-RING

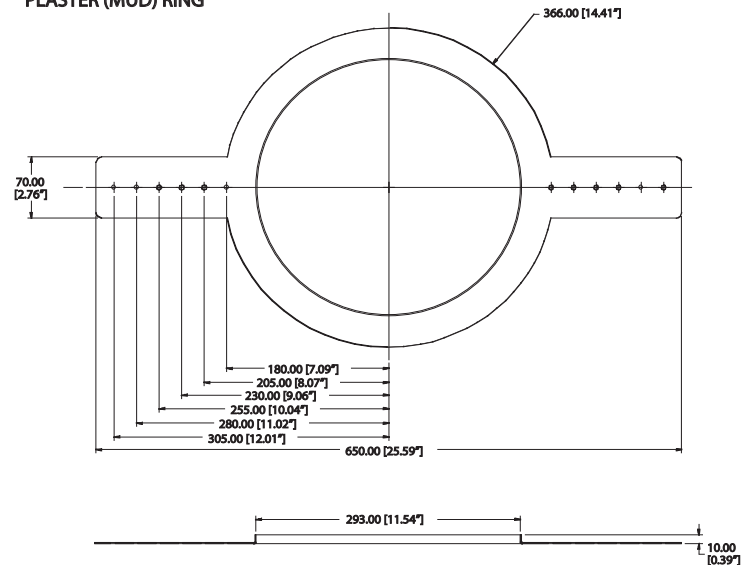


#### TILE BRIDGE



### OPTIONAL ACCESSORIES

#### PLASTER (MUD) RING



### Ordering information

Part number	Model name	Baffle / Grille Colour	Packed Quantity	Packed Weight kg (lbs)
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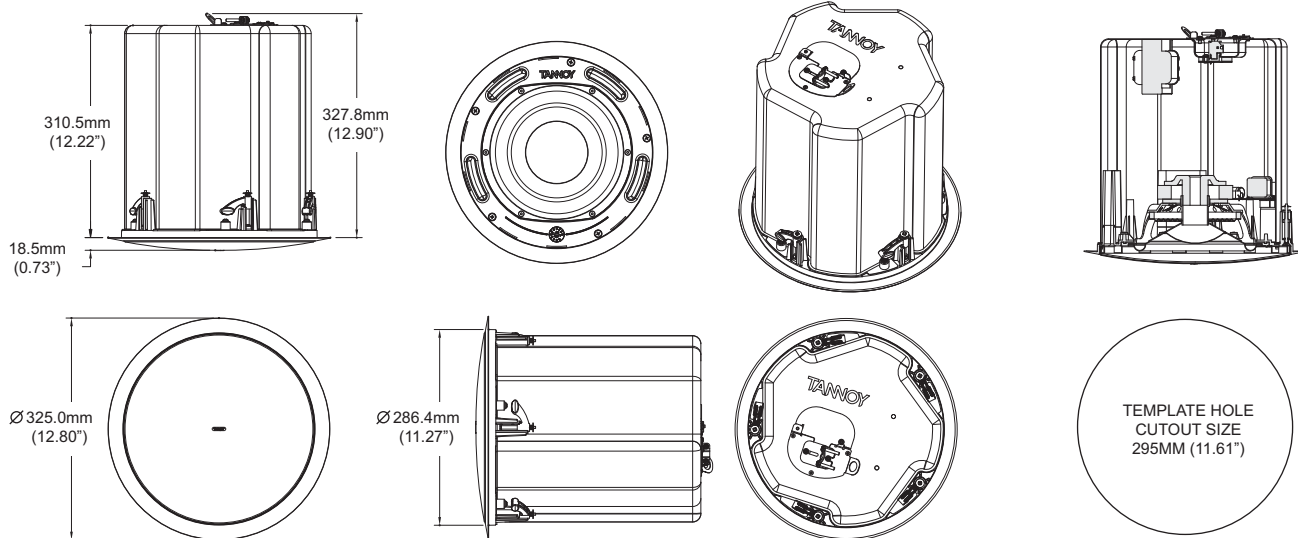


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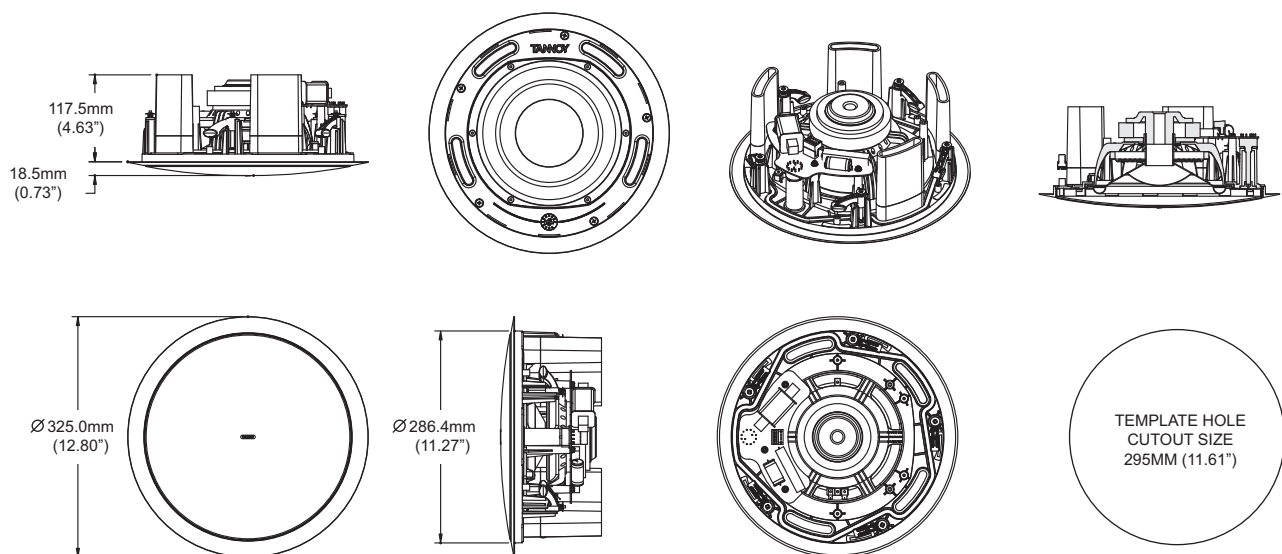
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## DIMENSIONAL SKETCHES

### CMS 801sub BM



### CMS 801sub PI



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## Architectural specifications

The Ceiling Subwoofer System shall consist of a 200mm (8.00") transducer, with long throw multi fibre paper pulp cone, and a 2nd order 160Hz passive crossover 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 pre-wiring 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 Subwoofer System shall meet or exceed the following criteria: Frequency range measured on axis shall be 42Hz - 300Hz (-10dB from rated sensitivity, measured in an IEC baffle in an anechoic chamber with no equalization). Sensitivity shall be 92dB (1W @ 1m where 1W = 2.45V for 6 Ohms). Long term power handling capacity as defined in EIA-426B test shall be 100W, recommended amplifier power 200W. The nominal system impedance shall be 6 Ohms (in low impedance setting).

The Ceiling Subwoofer System shall be equipped with a 60W 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 grille covers the transducer and switch.

Two support rails and one C-Ring shall be included with the ceiling monitor system.

Bezel diameter 325mm (12.80")

Front of ceiling to rear of back can 310.5mm (12.22"), Front of ceiling to top of safety loop 327.8mm (12.90")

Front of ceiling to rear of speaker unit 117.50mm (4.63"), Front of accessory back can bezel to top of safety loop 168.5mm (6.63")

**The Ceiling Subwoofer System shall be the.....CMS 801sub.**

\*70 Volt only



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