CMS801 DC

Product Description

The Tannoy CMS801 DC is a full bandwidth, high power and high sensitivity ceiling monitor system. The 200mm (8.00”) Tannoy Dual Concentric™ is a point source drive unit design comprising a multi fibre paper pulp mid bass cone and a 25mm (1.00”) ferrofluid cooled, titanium dome HF unit with neodymium magnet system. The driver and passive frequency dividing network are 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 crossover caused by 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.

Two CMS801 DC model versions and a separate back can are available to satisfy the vast majority of installation application requirements:

CMS801 DC BM (Blind Mount) - supplied with an integral back can.
CMS801 DC PI (Pre-Install) - supplied without a back can.
CMS801 PI Back Can (Pre-wire back can) - use with the CMS801 DC PI.

The CMS801 DC 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 CMS801 DC 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 CMS801 PI 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.

Tannoy United Kingdom
Tannoy North America
Tannoy Germany

Tannoy adopts a policy of continuous improvement and product specification is subject to change.
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>System</th>
<th>CMS801 DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Response (-3dB) (1) BM Back can</td>
<td>47Hz – 33kHz</td>
</tr>
<tr>
<td>Frequency Range (-10dB) (1) BM Back can</td>
<td>40Hz – 35kHz</td>
</tr>
<tr>
<td>Frequency Range (-10dB) (1) PI Back can</td>
<td>41Hz – 35kHz</td>
</tr>
<tr>
<td>System Sensitivity (1W @ 1m) (2)</td>
<td>92dB (1W = 2.83V for 8 Ohms)</td>
</tr>
<tr>
<td>Nominal Coverage Angle</td>
<td>90 degrees conical</td>
</tr>
<tr>
<td>Coverage Angle (1kHz to 6kHz)</td>
<td>100 degrees conical</td>
</tr>
<tr>
<td>Directivity Factor (Q)</td>
<td>5.5 averaged 1kHz to 6kHz</td>
</tr>
<tr>
<td>Directivity Index (DI)</td>
<td>7.2 averaged 1kHz to 6kHz</td>
</tr>
<tr>
<td>Rated Maximum SPL Average</td>
<td>112dB</td>
</tr>
<tr>
<td>Peak</td>
<td>116dB</td>
</tr>
<tr>
<td>Average with THP60</td>
<td>100dB</td>
</tr>
<tr>
<td>Back Can Options</td>
<td>Complete with fixed back can</td>
</tr>
<tr>
<td>Bird Mount (BM)</td>
<td>Separate backcan for Pre Installation</td>
</tr>
<tr>
<td>Cable Entry Options</td>
<td>Cable clamp &amp; squeeze connector for conduit up to 22mm</td>
</tr>
<tr>
<td>Conduit Knockouts</td>
<td>3 SAE of horizontal positions 1/2/25mm</td>
</tr>
<tr>
<td>Connectors</td>
<td>Removable locking connector with screw terminals with “loop through” facility</td>
</tr>
<tr>
<td>Transformer Tap</td>
<td>60W / 30W / 15W / 7.5W / OFF &amp; Low Impedance operation</td>
</tr>
<tr>
<td>Transformer Tap (via front rotary switch)</td>
<td>8 Ohms</td>
</tr>
<tr>
<td>Transformer Taps</td>
<td>60W / 30W / 15W / 7.5W / OFF &amp; Low Impedance operation</td>
</tr>
<tr>
<td>Distortion</td>
<td>0.85% 0.3%</td>
</tr>
<tr>
<td>1kHz</td>
<td>1.3% 0.29%</td>
</tr>
<tr>
<td>10kHz</td>
<td>1% 0.03%</td>
</tr>
<tr>
<td>Crossover</td>
<td>0.25% 0.43%</td>
</tr>
<tr>
<td>1kHz</td>
<td>0.49% 0.29%</td>
</tr>
<tr>
<td>10kHz</td>
<td>0.42% 0.03%</td>
</tr>
<tr>
<td>2nd Harmonic 3rd Harmonic</td>
<td>2kHz - 2nd order LF, 2nd order HF</td>
</tr>
<tr>
<td>2kHz - 2nd order LF, 2nd order HF</td>
<td>(with dynamic HF protection)</td>
</tr>
</tbody>
</table>

### 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

### Included Accessories
- C Ring, tile bridge, paint mask
- Cutout template, grille

### Optional Accessories
- Plaster (Mud) Ring

### Ordering Information

<table>
<thead>
<tr>
<th>Part number</th>
<th>Model name</th>
</tr>
</thead>
<tbody>
<tr>
<td>8001 4550</td>
<td>CMS801 DC BM</td>
</tr>
<tr>
<td>8001 4560</td>
<td>CMS801 DC PI</td>
</tr>
<tr>
<td>8001 4570</td>
<td>CMS801 Plaster (Mud) Ring</td>
</tr>
<tr>
<td>8001 4590</td>
<td>CMS801 Plaster back can</td>
</tr>
<tr>
<td>7600 1658</td>
<td>CMS801 DC 60W transformer kit 8 ohm</td>
</tr>
</tbody>
</table>

### Baffle / Grille Colour
- White | paintable
- Zinc plated steel

### Packed Quantity
- 2
- 10
- 1

### Net Weight (ex) |
- CMS801 DC BM | 6.5kg (14.33lbs) |
- CMS801 DC PI | 2.9kg (6.41lbs) |
- CMS801 Plaster (Mud) Ring | 4kg (8.81lbs) |
- CMS801 Plaster back can | 0.3685kg (0.81lbs) |
- CMS801 DC 60W transformer kit 8 ohm | 1.095kg (2.41lbs) |

### System
- **CMS801 DC**

### Physical
- **Enclosure**
  - Back can: Zinc plated steel
  - Grille: Steel, with weather resistant coating
- **Safety Features**
  - Safety ring located at rear of enclosure for load bearing safety band

### Clamping Design
- **Min / Max Clamping Range**
  - Front of ceiling (BM): 350mm (13.78"")
  - Top of safety loop (BM): 310mm (12.20"")
  - Front of ceiling (PI): 350mm (13.78"")
  - Top of safety loop (PI): 310mm (12.20"")

### Cable Entry Options
- 3 Sets of horizontal positions 1/2/25mm

### Connectors
- Removable locking connector with screw terminals with “loop through” facility

### Crossover
- 2kHz - 2nd order LF, 2nd order HF

### Notes
- A full range of measurements, performance data, CLF and Ease’AA Data can be downloaded from www.tannoy.com
- Full independent verification of published specifications carried out by NWAA Labs, California can also be obtained from the downloads section of www.tannoy.com
- Tannoy adopts a policy of continuous improvement and product specification is subject to change.

### CMS801 DC data file // issue 1.07 // 15.07.08

### Contact Information
- Tannoy North America: 1 800 318 7455 11.54
- European: 1 800 44 (8) 1234 4281 99
- Enquiries: anfragen@tannoy.com
- Technical Support: anfragen@tannoy.com
- Sales: sales@tannoy.com
CMS801 DC

PERFORMANCE MEASUREMENTS

ANECOIC FREQUENCY RESPONSE

IMPEDANCE

OFF AXIS RESPONSE

BEAMWIDTH

DIRECTIVITY INDEX

Tannoy adopts a policy of continuous improvement and product specification is subject to change.

Tannoy United Kingdom  T: 00-44-0-1234 428179  E: enquiry@tannoy.com
Tannoy North America  T: 00-1-312-745 1158  E: info@tannoy.com
Tannoy South Africa  T: 00-27-11-111 8817  E: infoSA@tannoy.com
Tannoy France  T: 00-33-1-7066 7479  E: ventes@tannoy.com

CMS801 DC data file - issue 1.07 15.07.08
CMS801 DC

PERFORMANCE MEASUREMENTS POLAR PLOTS (1/3 OCTAVE)

Tannoy adopts a policy of continuous improvement and product specification is subject to change.

anfragen@tannoy.com
CMS801 DC

DIMENSIONAL SKETCHES

Tannoy adopts a policy of continuous improvement and product specification is subject to change.

tannoy.com
The PI back can accept direct connection to installed conduit in two ways using squeeze connectors:

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

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")

TANNOY adopts a policy of continuous improvement and product specification is subject to change.

anfragen@tannoy.com
Architectural Specifications

The Ceiling Monitor System shall consist of a 200mm (8.00") 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 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 backcan for a load bearing safety bond.

Performance of the Ceiling Monitor System shall meet or exceed the following criteria: The system shall have a conical coverage pattern of 100 degrees (1kHz to 6kHz). Frequency response measured on axis shall be 40 Hz - 35kHz (-10dB from rated sensitivity, measured in an IEC baffle in an anechoic chamber) with no equalization. Sensitivity shall be 92dB (1W @ 1m). Long term power handling capacity as defined in EIA-426B test shall be 90W, recommended amplifier power 180W. Dynamic high frequency protection is provided for occasional overpowering. The nominal system impedance shall be 8 Ohms (in low impedance setting).

The Ceiling Monitor 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”)
BM Front of ceiling to rear of back can 310.50mm (12.22”), Front of ceiling to top of safety loop 327.80mm (12.90”)
PI Front of ceiling surface to rear of speaker unit 118.70mm (4.67”), Front of accessory back can bezel to top of safety loop 168.50mm (6.63”)

The Ceiling Monitor System shall be the...CMS801 DC.

*70 Volt only
CMS801 DC

NOTES

Tannoy adopts a policy of continuous improvement and product specification is subject to change.

anfragen@tannoy.com