

# CMS 3.0 Series

## In-Ceiling Loudspeakers



# TANNOY

Operation Manual



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# 1. Introduction

Thank you for purchasing this Tannoy Ceiling Monitor System product. Designed for both speech and music program material, the Tannoy CMS range provides exceptional sonic quality and long-term reliability in all ceiling-mount applications. The CMS 3.0 DC series features new 16 ohm Dual Concentric™ drivers for improved performance and prolonged service life.

## 2. Unpacking

Every Tannoy product is carefully inspected before shipment. After unpacking, please inspect your product to ensure no damage has occurred in transit. In the unlikely event of damage, please notify your dealer and retain all shipping materials as your dealer may require return shipment.

All CMS loudspeakers are shipped in pairs and provided with the following accessories as standard: C-ring, tile-bridge kit, cut-out template and paint mask. A plaster (mud) ring is available as an optional accessory.

## 3. Safety Notices

Some regional construction codes require the use of a secondary method of securing loudspeakers in the ceiling to provide security of a back-up support. A secondary support line should be attached from the safety loop on the rear of the product to a source point on the ceiling. For PI models, the secondary support line should be attached from the back of the driver chassis to a source point on the ceiling. Please consult the relevant construction codes in your region.

When using a power driver to install the product, it is essential to use the correct torque level settings to avoid over-tightening and damage to the ceiling material or clamps. Recommended torque setting: 1.5 Nm

Tannoy will not be held responsible for any damages caused by the improper installation of these loudspeakers.

The CMS 603 ICT LS is UL-1480, category UUMW, for use with non-DC supervised systems.

Electrical Safety Notice: To comply with the standard UL-1480, metal-clad flexible conduit (BX) is required for connection to the terminal block for proper earth grounding.

In order to comply with UL regulations, the PI backcan must always be used with the CMS PI models.

**SAFETY NOTE:**

*In order to comply with the relevant fire safety regulations (ie. BS 5839:1998), it is required that in the event of fire, that failure of the circuit to which the loudspeaker is connected does not occur before evacuation of the building is complete. Suitable measures include:*

- a) use of terminal blocks (for connection to primary) with a melting point of not less than 650°C, for example constructed from ceramic materials;*
- b) use of terminal blocks of a lower melting point but protected with thermal insulation;*
- c) use of terminal blocks such that, on melting, an open-circuit or a short-circuit does not occur.*

## 4. Product Feature Identification

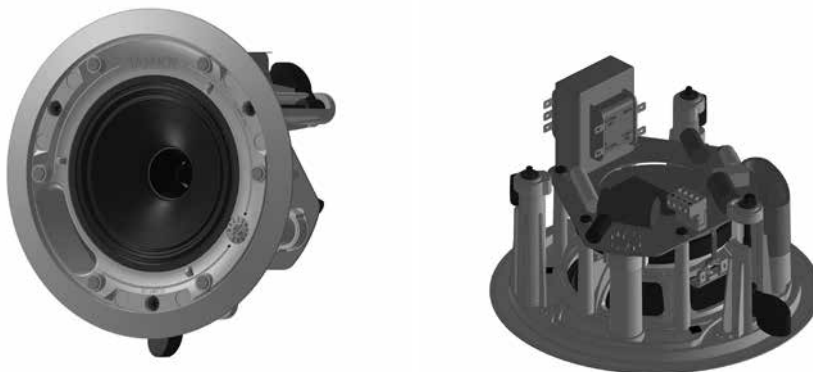
IMPORTANT NOTE: Drawings for each loudspeaker below are generic and apply to the loudspeaker types specified. Some variations will be apparent in some models, but differences are not critical for installation purposes except as noted.

### 4.1. Blind Mount



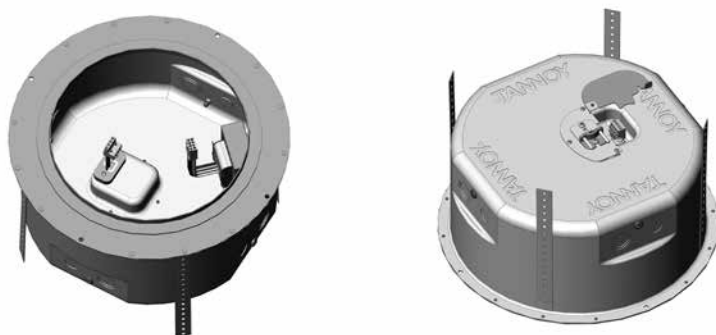
The blind-mount models are supplied with a pre-fitted backcan. Above applies to all models with a “BM” suffix as well any others that do NOT have a “PI” suffix.

### 4.2. Pre-install



A pre-install (PI) unit is shown without the optional pre-install backcan.

### 4.3. Pre-install backcan

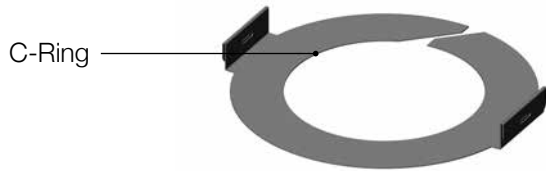


#### **Optional pre-install (PI) backcan for PI models.**

NOTE: The CMS 603DC/ICT and CMS 803DC models have the transformer pre-attached to the inside of the backcan. The CMS 503DC/ICT has the transformer pre-attached to the loudspeaker assembly.

# 5. Accessories

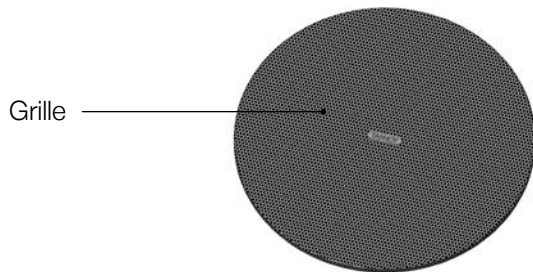
## Standard Accessories



C-Ring



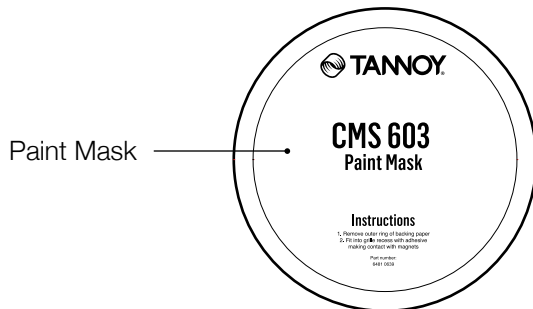
Tile-bridge kit  
Note: A tile-bridge kit must always be used when installing into suspended ceiling tiles



Grille

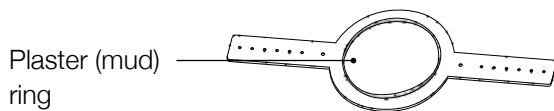


Cut-out template



Paint Mask

## Optional Accessories



Plaster (mud) ring



60 W Transformer  
Note: For use with CMS 803 PI in distributed lines without backcans.

# 6. Installation

## 6.1. Installation Guide for Suspended Ceilings

1. Remove the ceiling tile from its frame and place it on a flat surface. Position the cutout template (self adhesive backed) on the tile. (Fig.1)
2. Cut out the hole in the ceiling tile using a pad saw following the broken line indicated on the template (Fig.2)
3. Place the C-Ring and tile-bridge on top of the ceiling panel, aligning the C-Ring over the hole, and screw the C-Ring to the tile bridge using the fixings provided. (Fig.3)
4. Go to section 7 for instructions on wiring and set-up instructions.
5. Slide the speaker assembly through the hole. Turn the screws (denoted "Screw Fix") clockwise on the front of the speaker to extend the mounting wings. Tighten the screws until a firm grip is achieved. (NOTE: Screws have a PoziDriv head; use of a PoziDriv driver is recommended). If using a power driver, Tannoy recommends a torque setting of 1.5 Nm. (Fig.4)

### **DO NOT OVERTIGHTEN!**

6. Attach the nylon safety to the hooks on the front baffle before attaching the grille by presenting it to the speakers and allowing the magnets to pull it into position (Fig.5). (With the CMS 403DCe/ICTe, the grille is already fitted to the product.)

### **NOTE ON INSTALLATION OF CMS 403DCe/ICTe:**

Before tightening the screws in step 5, swivel the speaker in the desired direction. When the screws are tightened, the speaker will lock into position. Replace the front trim to conceal the mounting screws.



Fig.1

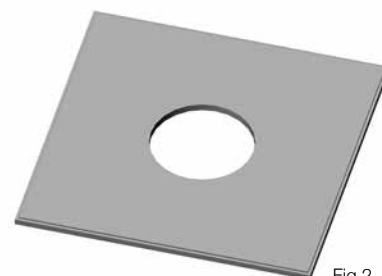


Fig.2

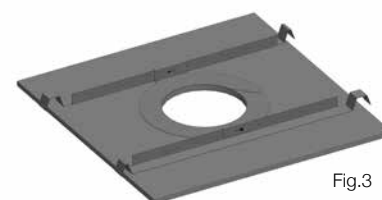


Fig.3



Fig.4



Fig.5



## 6.2. Installation Guide for Sheetrock Ceilings

1. Position the cutout template (self adhesive backed) on the ceiling. (Fig.1)
2. Cut out the hole in the ceiling using a pad saw following the broken line indicated on the template then slide the C-Ring into the ceiling, aligning it over the cut-out hole. (Fig.2)
3. Go to section 7 for wiring and set-up instructions then return to point 4 below.
4. Slide the speaker assembly through the hole. Turn the screws (denoted "Screw Fix") clockwise on the front of the speaker to extend the mounting wings. Tighten the screws until a firm grip is achieved. (NOTE: Screws have a PoziDriv head; use of a PoziDriv driver is recommended). If using a power driver, Tannoy recommends a torque setting of 1.5 Nm. (Fig.3)

### DO NOT OVERTIGHTEN!

5. Attach the nylon safety to the hooks on the front baffle before attaching the grille by presenting it to the speakers and allowing the magnets to pull it into position (Fig.4). (With the CMS 403DCe/ICTe, the grille is already fitted to the product.)

### NOTE ON INSTALLATION OF CMS 403DCe/ICTe:

Before tightening the screws in step 4, swivel the speaker in the desired direction. When the screws are tightened, the speaker will lock into position. Replace the front trim to conceal the mounting screws.



Fig.1

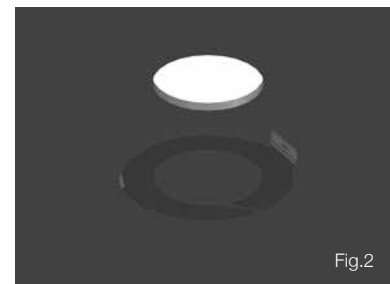


Fig.2



Fig.3



Fig.4

# 6. Installation

## 6.3. Installation Guide for Optional Plaster Ring

An optional plaster (mud) ring bracket is available from Tannoy. This bracket is designed to be pre-installed into newly constructed, non-suspended ceilings.

1. Nail or screw the plaster ring to the joists. (Fig.1)
2. Lay the speaker wiring to where the speaker will be fitted and complete the plastering work on the ceiling. (Fig.2)
3. Go to section 7 for instructions on wiring then return to point 4 below.
4. Slide the speaker assembly through the hole. Turn the screws (denoted "Screw Fix") clockwise on the front of the speaker to extend the mounting wings. Tighten the screws until a firm grip is achieved. (Note: Screws have a PoziDriv head; use of a PoziDriv driver is recommended). If using a power driver, Tannoy recommends a torque setting of 1.5 Nm. (Fig.3)

### **DO NOT OVERTIGHTEN!**

5. Attach the nylon safety to the hooks on the front baffle before attaching the grille by presenting it to the speakers and allowing the magnets to pull it into position (Fig.4). (With the CMS 403DCe/ICTe, the grille is already fitted to the product.)

### **NOTE ON INSTALLATION OF CMS 403DCe/ICTe:**

Before tightening the screws in step 4, swivel the speaker in the desired direction. When the screws are tightened, the speaker will lock into position. Replace the front trim to conceal the mounting screws.

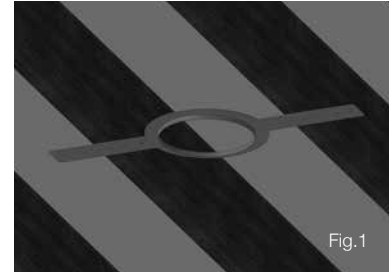


Fig.1

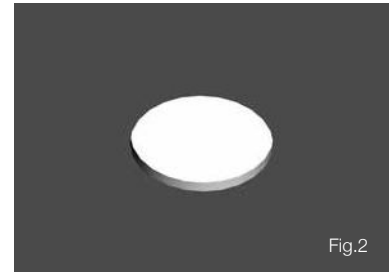


Fig.2



Fig.3



Fig.4

## 6.4. Installation Guide for Optional Pre-Installation Backcan (PI Models Only)

An optional pre-install backcan is available for all pre-install (PI) models. The backcan is designed for pre-installation in newly constructed, non-suspended ceilings.

NOTE: The CMS 603DC/ICT and CMS 803DC models have the transformer pre-attached to the inside of the backcan; the CMS 503DC/ICT models have the transformer pre-attached to the loudspeaker assembly.

1. Attach the backcan to a safe and secure fixing point.  
This can be done in a number of ways:

**METHOD 1:** Fix the backcan to a secure fixing point by using suitable fixings with the 4 fixing holes provided on the PI backcan. (Fig.1)



Fig.1

**METHOD 2:** Secure the backcan to a safe and secure fixing point using suitable fixings with the flexible straps that are attached to the PI backcan. (Fig.2)



Fig.2

**METHOD 3:**  
a. Attach the PI backcan to the optional pre-mount ring (plaster ring) using the fixings provided with the pre-mount ring. (Fig.3)



Fig.3

b. Next, secure the wings of the pre-mount ring to a safe and secure fixing point by using suitable fixings. (Fig.4)



Fig.4

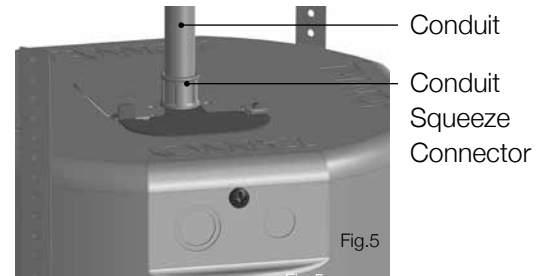
**Please turn over**

# 6. Installation

## 6.4. Installation Guide for Optional Pre-Installation Backcan (PI Models Only)

2. Attach the conduit to the installed backcan.  
This can be done in two ways:

**METHOD 1:** You can use the clamp at the back of the pre-install backcan. The product will accept a squeeze connector with a thread size of up to 22 mm: To remove the cable clamp, simply unscrew the threaded washer (under the wiring cover) which holds the cable clamp in place and replace it with a conduit squeeze connector. (Fig.5)

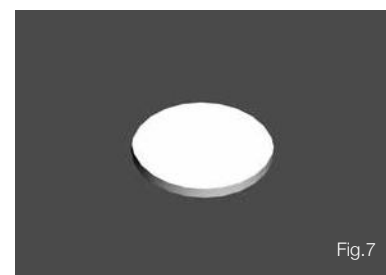


**METHOD 2:** You can use any of the three knock-out points at the sides of the PI backcan (19 mm, 22 mm or 28 mm diameter). (Fig.6)



3. If conduit is not chosen as the wiring method, run an approved speaker cable to the installed can. Terminate in the top mounted cable clamp or with an approved cable connector in one of the three knock-out points at the sides of the PI backcan.

4. Cut hole in the proper location in the ceiling using a pad saw. Place the pre-install backcan over the hole. (Fig.7)



## 6.4. Installation Guide for Optional Pre-Installation Backcan (PI Models Only)

5. Go to section 7 for instructions on wiring and setting up then return to point 6 below.

6. Slide the speaker assembly through the hole. Turn the screws (denoted "Screw Fix") clockwise on the front of the speaker to extend the mounting wings. Tighten the screws until a firm grip is achieved. (NOTE: Screws have a PoziDriv head; use of a PoziDriv driver is recommended). If using a power driver, Tannoy recommends a torque setting of 1.5 Nm. (Fig.8)

### **DO NOT OVERTIGHTEN!**

7. Attach the nylon safety to the hooks on the front baffle before attaching the grille by presenting it to the speakers and allowing the magnets to pull it into position. (Fig.9)



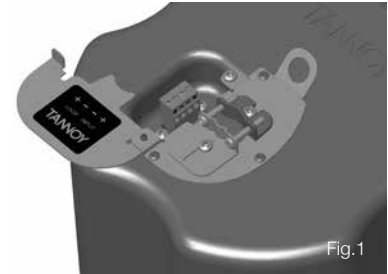
Fig.8



Fig.9

# 7. Wiring and Setting Up

1. Open the wiring cover (if applicable) and locate the Euro-type connector plug and socket at the back of the speaker. (Fig.1)



2. For connection to an amplifier, use Pins 1 and 2 (Fig.2):

- Pin 1 is positive
- Pin 2 is negative

For connection to additional speakers in a distributed line, Pins 3 and 4 are in parallel where:

- Pin 3 is negative
- Pin 4 is positive

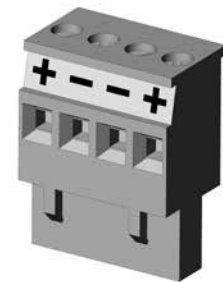


Fig.2

3. Close the wiring cover and tighten both screws on the cable clamp (if applicable).

4. Use the rotary switch on the front of the unit to select low impedance (LoZ) mode or high impedance (70 V or 100 V) for distributed applications.

THE SPEAKER IS SUPPLIED IN LOW IMPEDANCE MODE. NEVER CONNECT THE SPEAKER TO A 70/100 VOLT AMPLIFIER WHILE IT IS SET FOR LOW IMPEDANCE.

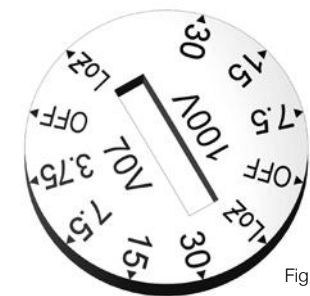


Fig.3

CMS 403DCe/ICTe and CMS 503DC/ICT models (all variants) use a 30 W transformer. In distributed line applications, the transformer can be tapped at 30 W, 15 W and 7.5 W, with an additional 3.75 W tap for 70 V line systems. (Fig.3)

CMS 603DC/ICT and CMS 803DC models (all variants) use a 60 W transformer. In distributed line applications, the transformer can be tapped at 60 W, 30 W and 15 W, with an additional 7.5 W tap for 70 V line systems. (Fig.4)

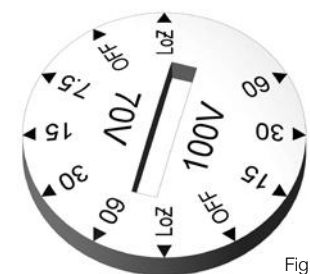
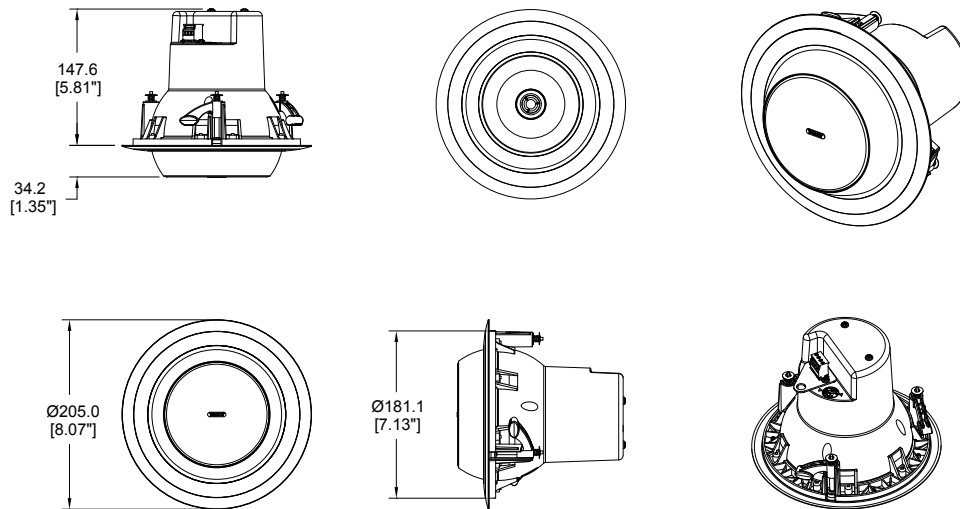


Fig.4

## 8. CMS Series Model Dimensions

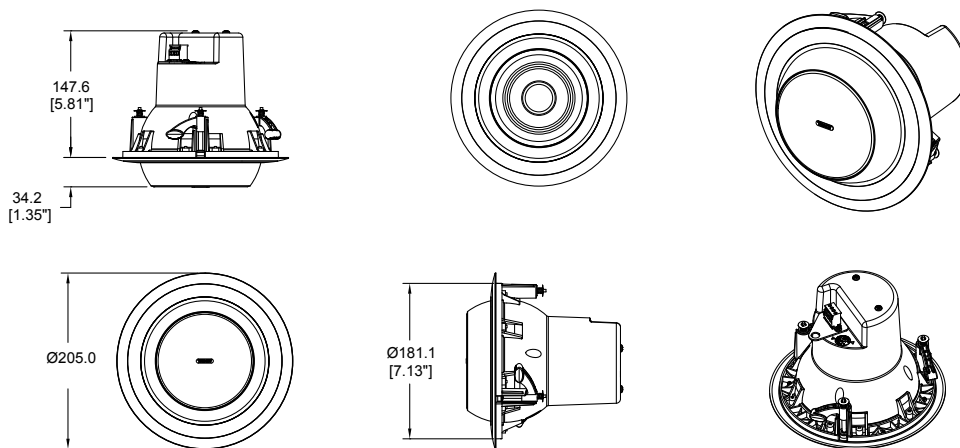
### CMS 403DCe

Hole Cut-out Size: 187 mm



### CMS 403ICTe

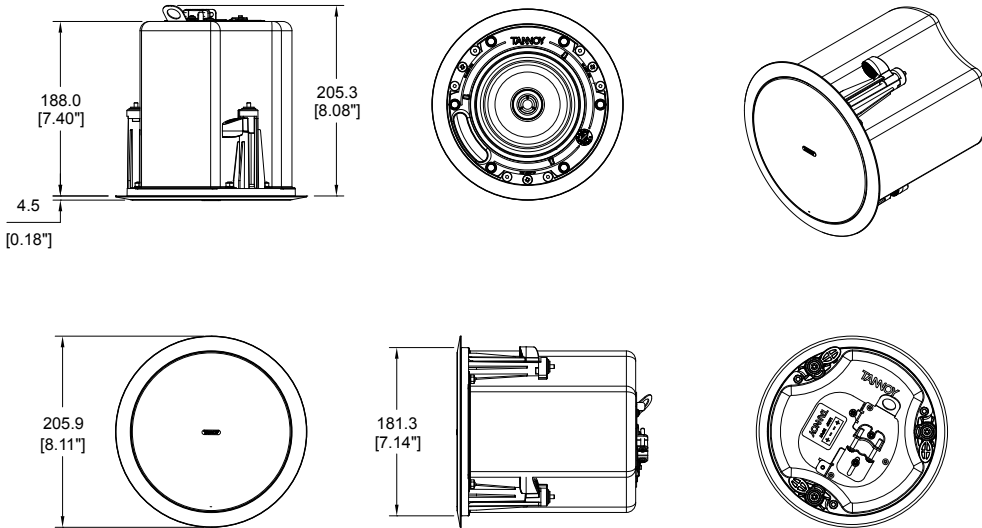
Hole Cut-out Size: 187 mm



# 8. CMS Series Model Dimensions

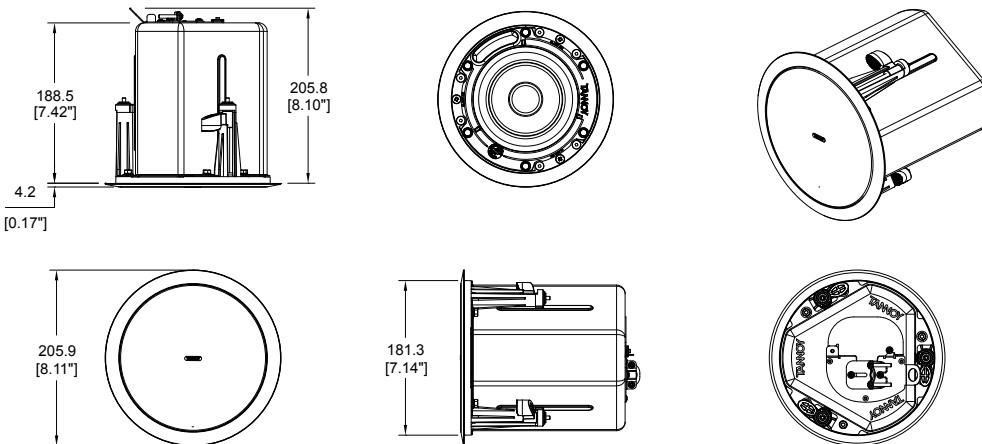
## CMS 503DC BM

Hole Cut-out Size: 190 mm



## CMS 503ICT BM

Hole Cut-out Size: 190 mm

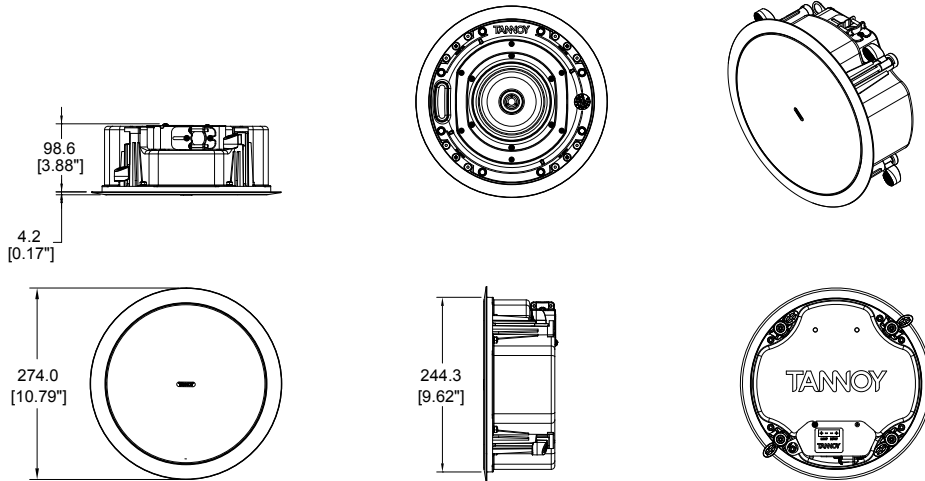




## 8. CMS Series Model Dimensions

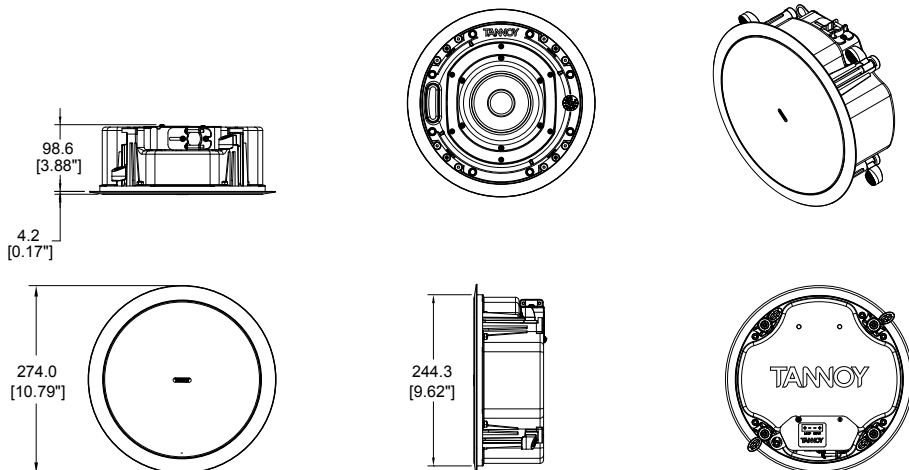
### CMS 503DC LP

Hole Cut-out Size: 253 mm



### CMS 503ICT LP

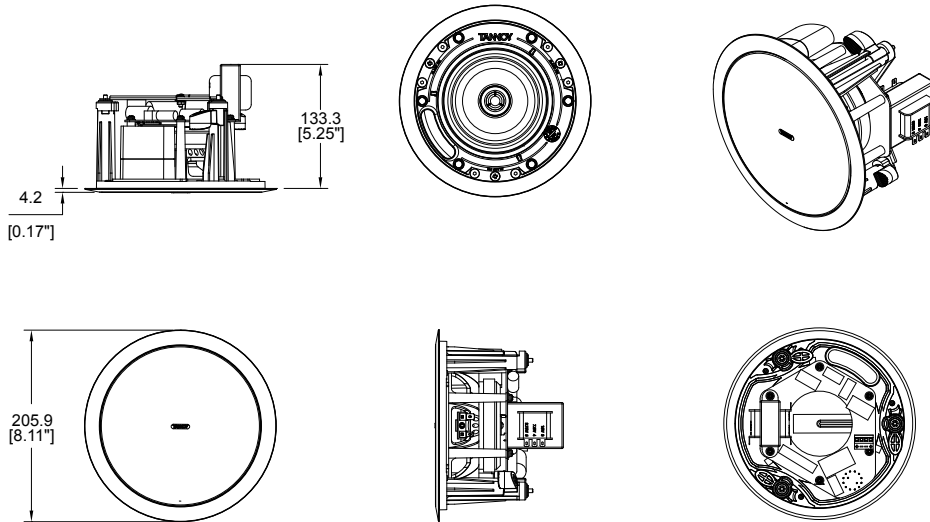
Hole Cut-out Size: 253 mm



## 8. CMS Series Model Dimensions

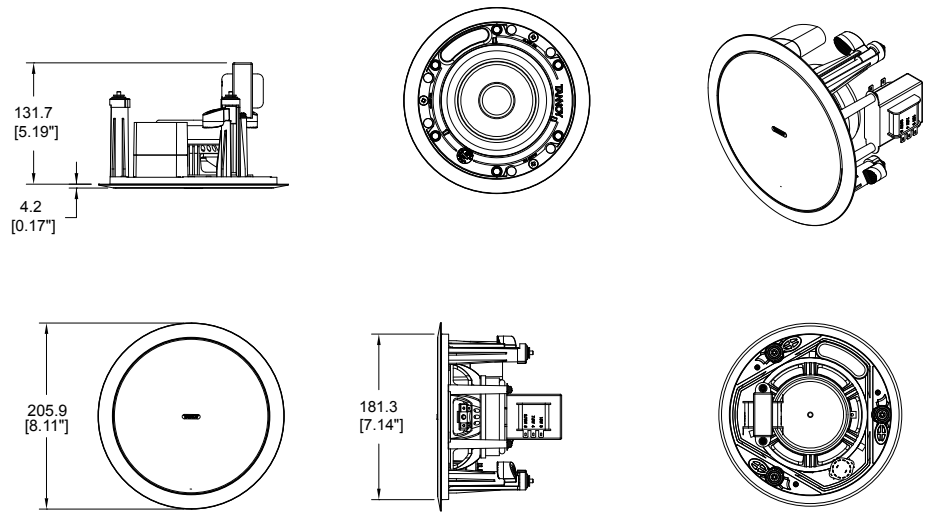
### CMS 503DC PI

Hole Cut-out Size: 190 mm



### CMS 503ICT PI

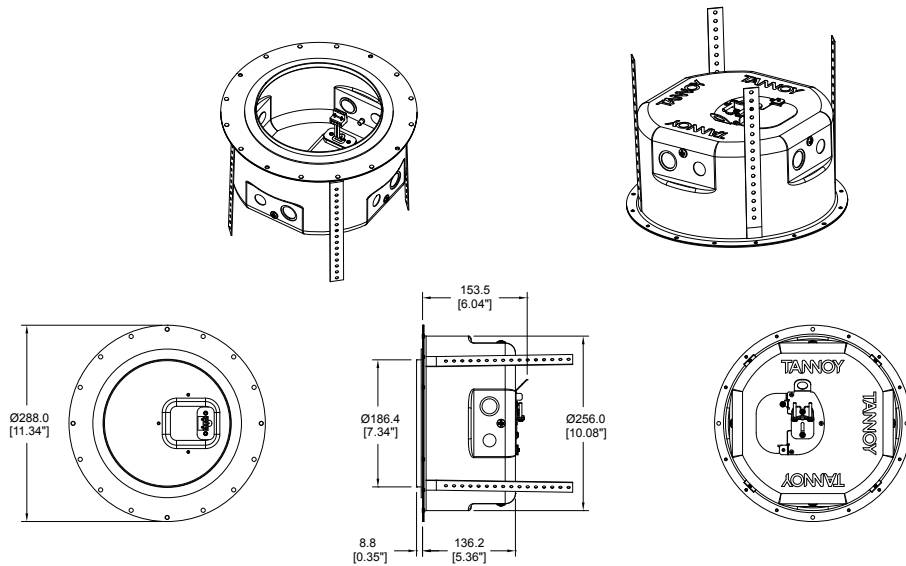
Hole Cut-out Size: 190 mm



## 8. CMS Series Model Dimensions

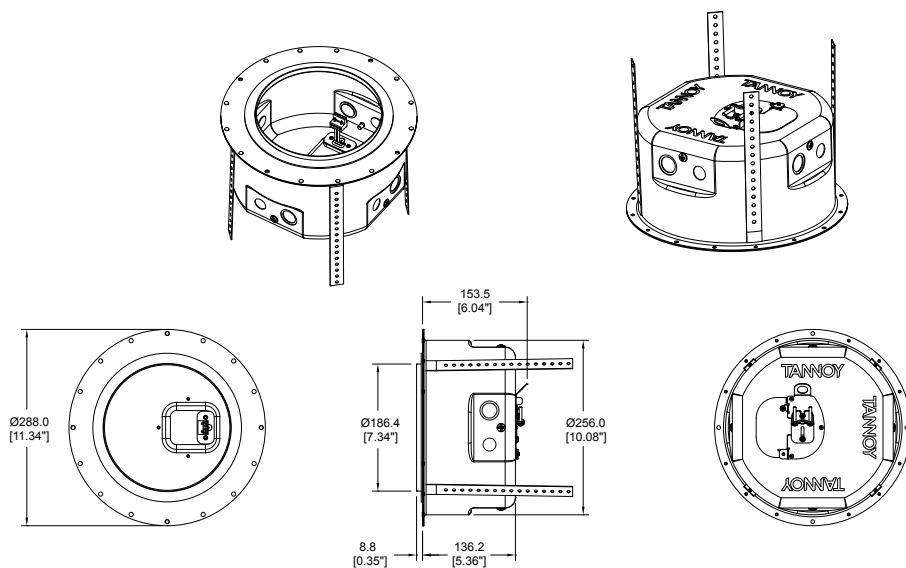
### CMS 503DC PI BACKCAN

Hole Cut-out Size: 190 mm



### CMS 503ICT PI BACKCAN

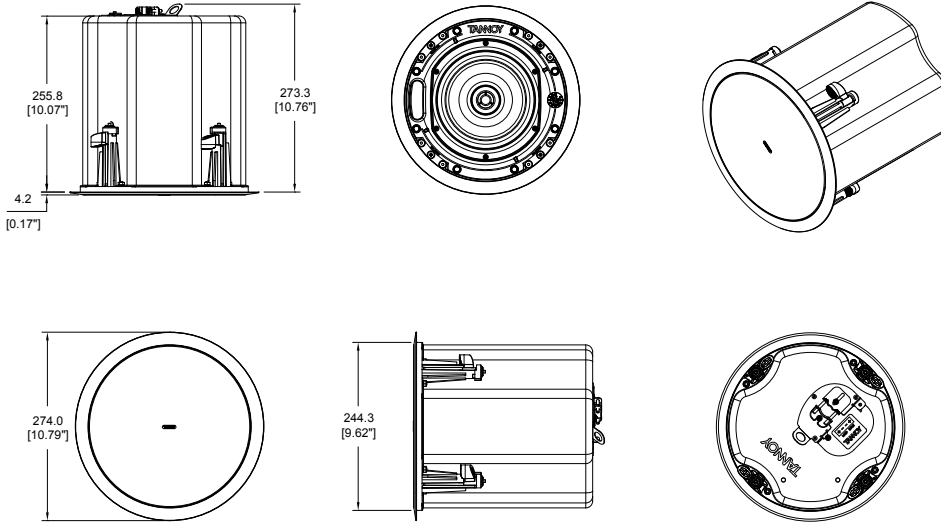
Hole Cut-out Size: 190 mm



# 8. CMS Series Model Dimensions

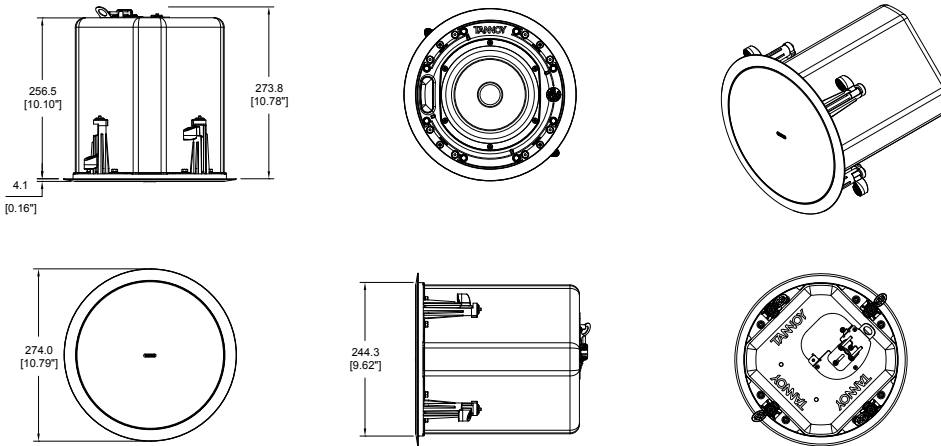
## CMS 603DC BM

Hole Cut-out Size: 253 mm



## CMS 603ICT BM

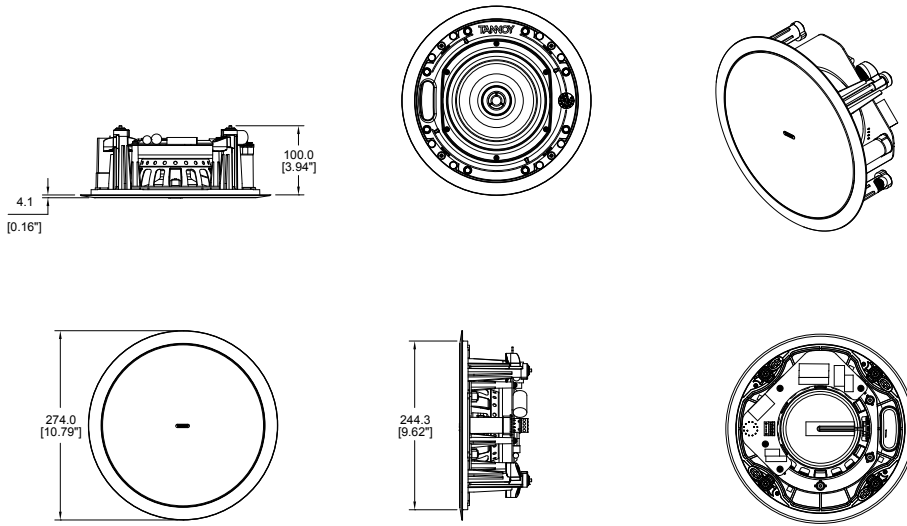
Hole Cut-out Size: 253 mm



## 8. CMS Series Model Dimensions

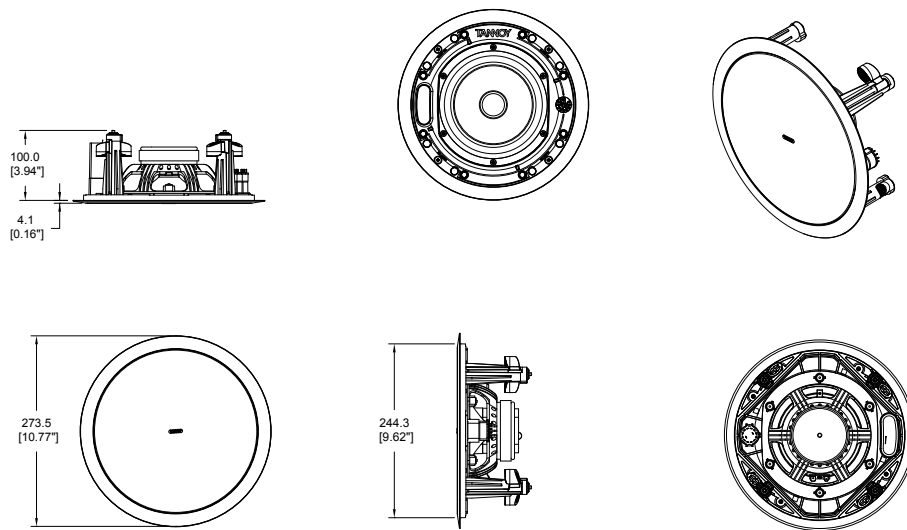
### CMS 603DC PI

Hole Cut-out Size: 253 mm



### CMS 603ICT PI

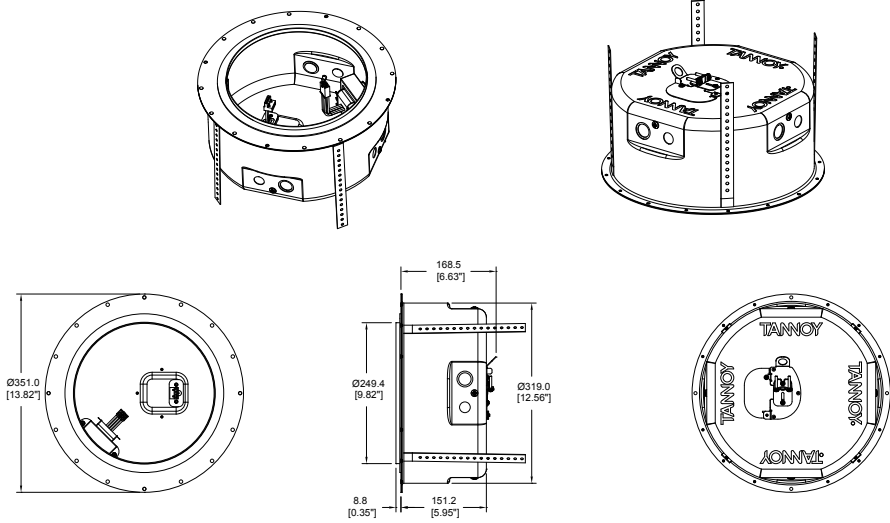
Hole Cut-out Size: 253 mm



# 8. CMS Series Model Dimensions

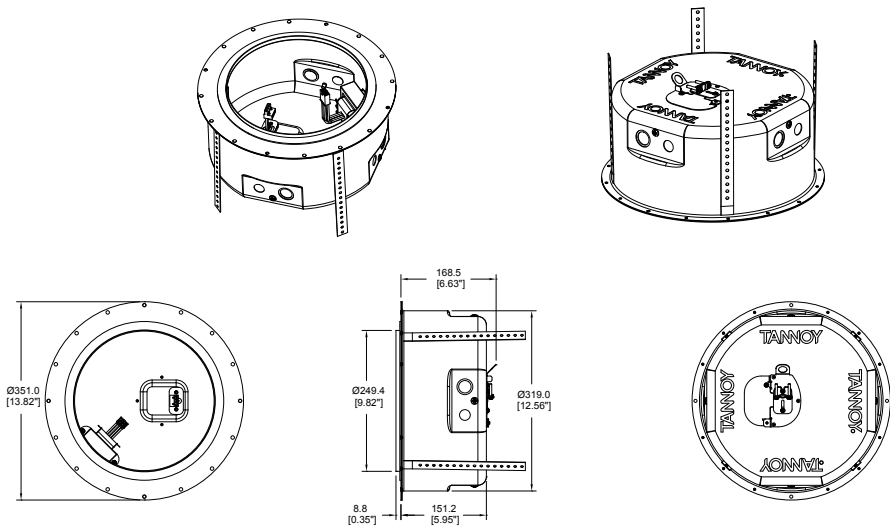
## CMS 603DC PI BACKCAN

Hole Cut-out Size: 253 mm



## CMS 603ICT PI BACKCAN

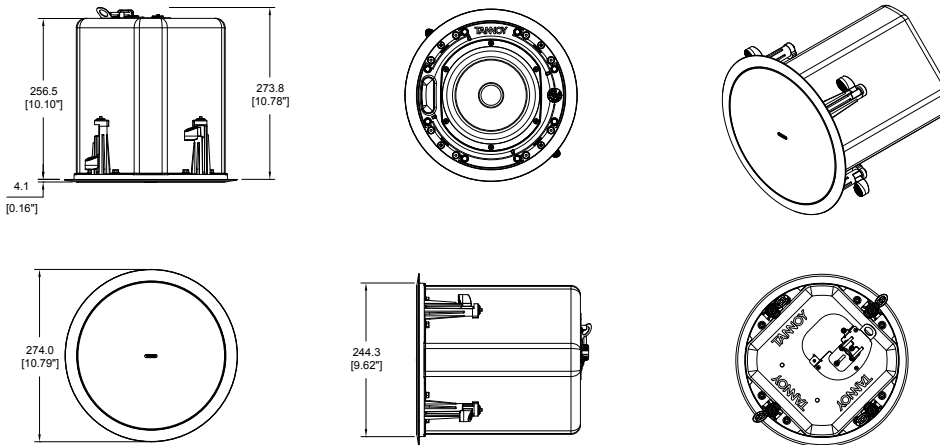
Hole Cut-out Size: 253 mm



## 8. CMS Series Model Dimensions

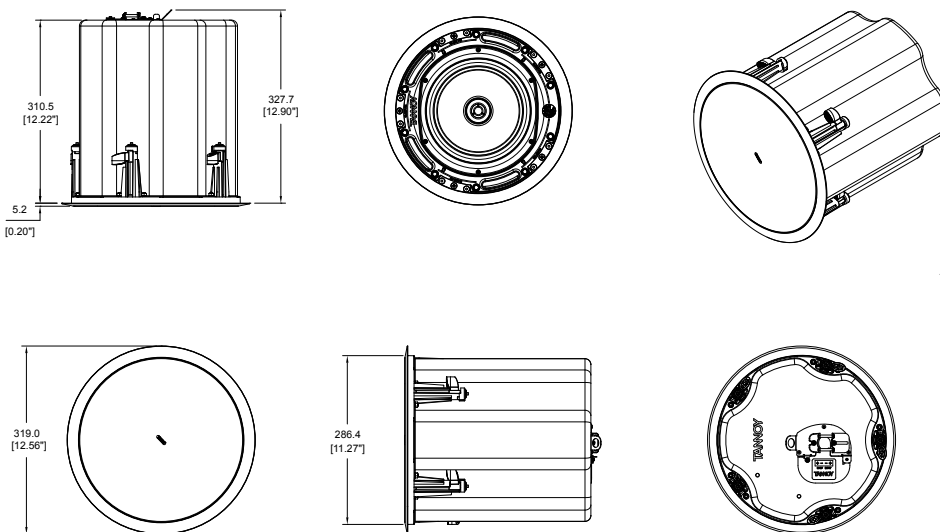
### CMS 603ICT LS

Hole Cut-out Size: 253 mm



### CMS 803DC BM

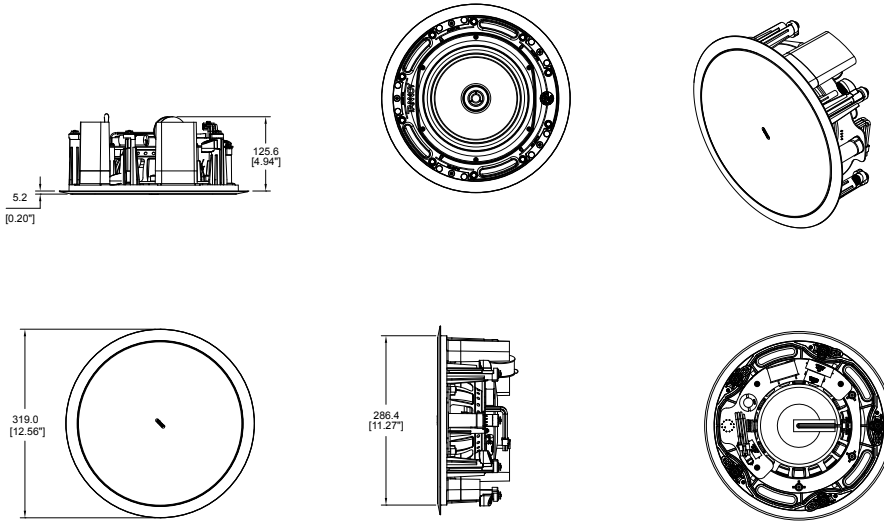
Hole Cut-out Size: 295 mm



## 8. CMS Series Model Dimensions

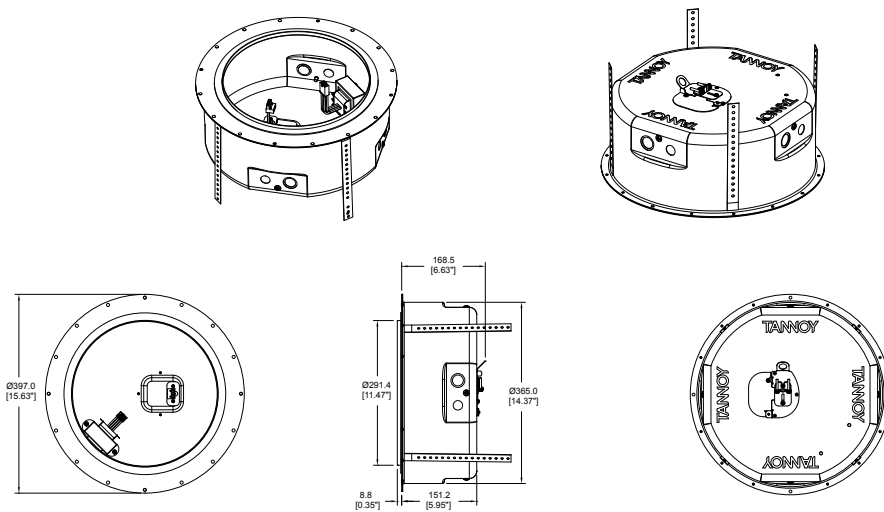
### CMS 803DC PI

Hole Cut-out Size: 295 mm



### CMS 803DC PI BACKCAN

Hole Cut-out Size: 295 mm

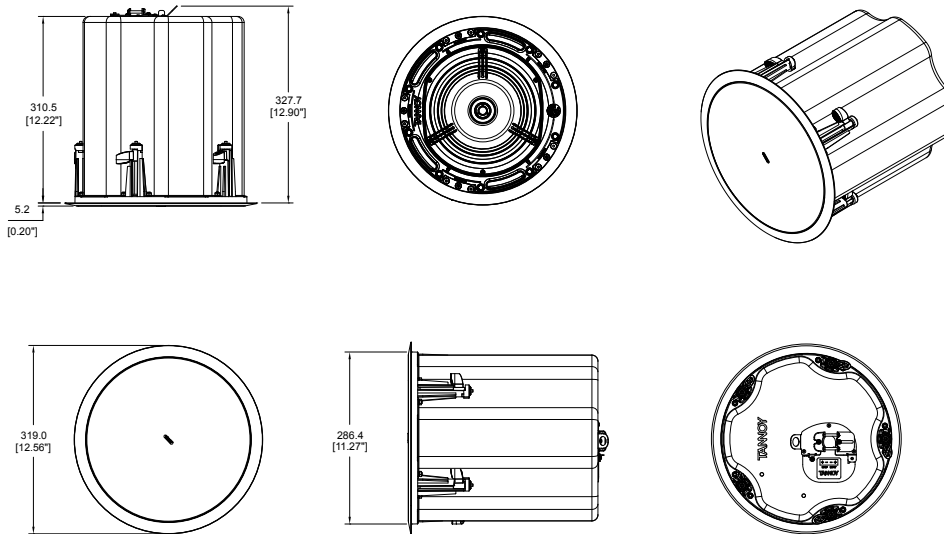




## 8. CMS Series Model Dimensions

### CMS 803DCQ

Hole Cut-out Size: 295 mm



## 9. Technical Specifications

### CMS 403DCe Model

Performance	
<b>Frequency response (-3 dB) <sup>(1)</sup></b> BM Backcan	110 Hz - 50 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> BM Backcan	80 Hz - 54 kHz
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	88 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	90 degrees conical
<b>Power Handling <sup>(3)</sup></b>	
Average	60 W
Programme	120 W
Peak	240 W
<b>Recommended Amplifier Power</b>	120 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	106 dB
Peak	112 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) / OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) / OFF & low impedance operation

Transducers	
<b>Dual Concentric point source driver</b>	1 x 100 mm (4.0") Dual Concentric driver, using Omnimagnet technology
<b>Low Frequency</b>	35 mm (1.38") voice coil, treated multi fiber paper pulp cone
<b>High Frequency</b>	20 mm (0.79") PEI dome

Physical	
<b>Enclosure</b>	
Backcan	Reflex loaded UL 94V-0 rated ABS
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Min / Max clamping range: 0.0 mm (0.0") / 20.0 mm (0.79") Recommended clamp torque: 1.5 Nm
<b>Backcan</b>	
Blind Mount (BM)	Complete with fixed backcan
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	205.0 mm (8.07")
Front of ceiling to rear of pod	147.6 mm (5.81")
<b>Hole cutout diameter</b>	187 mm (7.36")
<b>Net Weight (ea)</b>	2.75 kg (6.06 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
8001 7410 CMS 403DCe	White / Paintable
8001 4180 CMS 403e Plaster (Mud) Ring	Zinc Plated Steel



**Notes:**

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

A full range of measurements, performance data, CLF and Ease™ Data for CMS 403DCe can be downloaded from [www.tannoypro.com](http://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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# 9. Technical Specifications

## CMS 403ICTe Model

Performance	
Frequency response (-3 dB) <sup>(1)</sup>	110 Hz - 22 kHz
Frequency range (-10 dB) <sup>(1)</sup>	80 Hz - 24 kHz
System sensitivity (1 W @ 1 m) <sup>(2)</sup>	88 dB (1 W = 4 V for 16 Ohms)
Nominal Coverage Angle	90 degrees conical
Coverage Angle (1 kHz to 6 kHz)	120 degrees
Directivity Factor (Q)	5.26 averaged 1 kHz to 6 kHz
Directivity Index (DI)	6.30 averaged 1 kHz to 6 kHz
Power Handling <sup>(3)</sup>	
Average	50 W
Programme	100 W
Peak	200 W
Recommended Amplifier Power	100 W @ 16 ohms
Nominal Impedance (Lo, Z)	16 ohms
Rated maximum SPL	
Average	105 dB
Peak	111 dB
Transformer Taps (via front rotary switch)	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) / OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) / OFF & low impedance operation
Crossover	7 kHz inductively coupled

Transducers	
Low Frequency	100 mm (4.00") mineral loaded polypropylene
High Frequency	19 mm (0.75") ICT aluminium dome

Physical	
<b>Enclosure</b>	
Backcan	Reflex loaded UL 94V-0 rated ABS
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	
Safety ring located at rear of enclosure for load bearing safety bond	
<b>Clamping Design</b>	
Min / Max clamping range: 0.0 mm (0.0") / 20.0 mm (0.79")	
Recommended clamp torque: 1.5 Nm	
<b>Connectors</b>	
Removable locking connector with screw terminals with "loop through" facility	
<b>Compliance</b>	
UL-1480, UL-2043, CE	
<b>Dimensions</b>	
Bezel diameter	205.0 mm (8.07")
Front of ceiling to rear of pod	147.6 mm (5.81")
Hole cutout diameter	187 mm (7.36")
Net Weight (ea)	2.86 kg (6.31 lbs)
Included Accessories	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
Optional Accessories	Plaster (mud) ring
Packed Quantity	2

Ordering Information	
Part Number	Colour
8001 7760 CMS 403ICTe	White / Paintable
8001 4180 CMS 403e Plaster (Mud) Ring	Zinc Plated Steel



#### Notes:

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

A full range of measurements, performance data, CLF and Ease™ Data for CMS 403ICTe can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

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# 9. Technical Specifications

## CMS 503DC Models

Performance	
<b>Frequency response (-3 dB) <sup>(1)</sup></b> BM Backcan	85 Hz - 50 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> BM Backcan	74 Hz - 54 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> PI Backcan	70 Hz - 54 kHz
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	89 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	90 degrees conical
<b>Power Handling <sup>(3)</sup></b>	
Average	60 W
Programme	120 W
Peak	240 W
<b>Recommended Amplifier Power</b>	120 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	107 dB
Peak	113 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) / OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) / OFF & low impedance operation

Transducers	
<b>Dual Concentric point source driver</b>	1 x 130 mm (5.0") Dual Concentric driver, using Omnimagnet technology
<b>Low Frequency</b>	35 mm (1.38") voice coil, treated multi fiber paper pulp cone
<b>High Frequency</b>	20 mm (0.79") PEI dome

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	
<b>Clamping Design</b>	Safety ring located at rear of enclosure for load bearing safety bond Security toggle clamp Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36") Recommended clamp torque: 1.5 Nm
<b>Backcan Options</b>	
Blind Mount (BM)	Complete with fixed backcan
Pre Install (PI)	Separate backcan for pre-installation
<b>Cable Entry Options</b>	
<b>Conduit Knockouts on PI Backcan</b>	Cable clamp & squeeze connector for conduit up to 22 mm 3 Sets of horizontal positions 19 / 22 / 28 mm (0.75" / 0.87" / 1.10")
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	205.9 mm (8.11")
BM Model: Front of ceiling to rear of backcan	188.0 mm (7.40")
BM Model: Front of ceiling to top of safety loop	205.3 mm (8.08")
PI Model: Front of ceiling surface to rear of speaker unit	133.3 mm (5.25")
PI Model: Front of accessory backcan bezel to top of safety loop	153.5 mm (6.04")
<b>Hole cutout diameter (all models)</b>	190 mm (7.48")
<b>Net Weight (ea)</b>	
CMS 503DC BM	4.1 kg (9.04 lbs)
CMS 503DC PI	3.1 kg (6.83 lbs)
PI Backcan	2.6 kg (5.73 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
<b>8001 7420</b> CMS 503DC BM	White / Paintable
<b>8001 7430</b> CMS 503DC PI	White / Paintable
<b>8001 4180</b> CMS 503 Plaster (Mud) Ring	Zinc Plated Steel
<b>8001 7550</b> CMS 503 PI Backcan	Zinc Plated Steel
<b>8001 7880</b> CMS 503 Arco Grille	White / Paintable



## Notes:

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

A full range of measurements, performance data, CLF and Ease™ Data for CMS 503DC can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

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# 9. Technical Specifications

## CMS 503DC LP Model

Performance	
Frequency response (-3 dB) <sup>(1)</sup>	88 Hz - 22 kHz
Frequency range (-10 dB) <sup>(1)</sup>	77 Hz - 24 kHz
System sensitivity (1 W @ 1 m) <sup>(2)</sup>	89 dB (1 W = 4 V for 16 Ohms)
Nominal Coverage Angle	90 degrees conical
<b>Power Handling</b> <sup>(3)</sup>	
Average	60 W
Programme	120 W
Peak	240 W
<b>Recommended Amplifier Power</b>	120 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	107 dB
Peak	113 dB
<b>Transformer Taps</b> (via front rotary switch)	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) / OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) / OFF & low impedance operation

Transducers	
<b>Dual Concentric point source driver</b>	1 x 130 mm (5.0") Dual Concentric driver, using Omnimagnet technology
<b>Low Frequency</b>	35 mm (1.38") voice coil, treated multi fiber paper pulp cone
<b>High Frequency</b>	20 mm (0.79") PEI dome

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Security toggle clamp Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36") Recommended clamp torque: 1.5 Nm
<b>Cable Entry Options</b>	Cable clamp & squeeze connector for conduit up to 22 mm
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	274.0 mm (10.79")
Front of ceiling to rear of backcan	98.6 mm (3.88")
<b>Hole cutout diameter</b>	253.0 mm (9.96")
<b>Net Weight (ea)</b>	3.3 kg (7.27 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
8001 7930 CMS 503DC LP	White / Paintable
8001 7890 CMS 603 Arco Grille	White / Paintable



## Notes:

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

A full range of measurements, performance data, CLF and Ease™ Data for CMS 503DC LP can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

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## 9. Technical Specifications

### CMS 503ICT Models

Performance	
<b>Frequency response (-3 dB) <sup>(1)</sup></b> BM Backcan	85 Hz - 22 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> BM Backcan	74 Hz - 24 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> PI Backcan	71 Hz - 24 kHz
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	89 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	90 degrees conical
<b>Coverage Angle (1 kHz to 6 kHz)</b>	105 degrees
<b>Directivity Factor (Q)</b>	5.6 averaged 1 kHz to 6 kHz
<b>Directivity Index (DI)</b>	7.0 averaged 1 kHz to 6 kHz
<b>Power Handling <sup>(3)</sup></b>	
Average	50 W
Programme	100 W
Peak	200 W
<b>Recommended Amplifier Power</b>	100 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	106 dB
Peak	112 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) / OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) / OFF & low impedance operation
<b>Crossover</b>	7 kHz inductively coupled

Transducers	
<b>Low Frequency</b>	130 mm (5.00") mineral loaded polypropylene
<b>High Frequency</b>	ICT aluminium dome

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Security toggle clamp Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36") Recommended clamp torque: 1.5 Nm
<b>Backcan Options</b>	
Blind Mount (BM)	Complete with fixed backcan
Pre Install (PI)	Separate backcan for pre-installation
<b>Cable Entry Options</b>	Cable clamp & squeeze connector for conduit up to 22 mm
<b>Conduit Knockouts on PI Backcan</b>	3 Sets of horizontal positions 19 / 22 / 28 mm (0.75" / 0.87" / 1.10")
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	205.9 mm (8.11")
BM Model: Front of ceiling to rear of backcan	188.5 mm (7.42")
BM Model: Front of ceiling to top of safety loop	205.8 mm (8.10")
PI Model: Front of ceiling surface to rear of speaker unit	131.7 mm (5.19")
PI Model: Front of accessory backcan bezel to top of safety loop	153.5 mm (6.04")
<b>Hole cutout diameter (all models)</b>	190 mm (7.48")
<b>Net Weight (ea)</b>	
CMS 503ICT BM	3.85 kg (8.49 lbs)
CMS 503ICT PI	2.85 kg (6.28 lbs)
PI Backcan	2.6 kg (5.73 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
8001 7500 CMS 503ICT BM	White / Paintable
8001 7510 CMS 503ICT PI	White / Paintable
8001 4180 CMS 503 Plaster (Mud) Ring	Zinc Plated Steel
8001 7550 CMS 503 PI Backcan	Zinc Plated Steel
8001 7880 CMS 503 Arco Grille	White / Paintable



Notes:

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

A full range of measurements, performance data, CLF and Ease™ Data for CMS 503ICT can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

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# 9. Technical Specifications

## CMS 503ICT LP Model

Performance	
Frequency response (-3 dB) <sup>(1)</sup>	88 Hz - 50 kHz
Frequency range (-10 dB) <sup>(1)</sup>	77 Hz - 54 kHz
System sensitivity (1 W @ 1 m) <sup>(2)</sup>	89 dB (1 W = 4 V for 16 Ohms)
Nominal Coverage Angle	90 degrees conical
<b>Power Handling</b> <sup>(3)</sup>	
Average	50 W
Programme	100 W
Peak	200 W
<b>Recommended Amplifier Power</b>	100 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	106 dB
Peak	112 dB
<b>Transformer Taps</b> (via front rotary switch)	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) / OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) / OFF & low impedance operation

Transducers	
<b>Low Frequency</b>	1 x 130 mm (5.0") mineral loaded polypropylene
<b>High Frequency</b>	ICT

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Security toggle clamp Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36") Recommended clamp torque: 1.5 Nm
<b>Cable Entry Options</b>	Cable clamp & squeeze connector for conduit up to 22 mm
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	274.0 mm (10.79")
Front of ceiling to rear of backcan	98.6 mm (3.88")
<b>Hole cutout diameter</b>	253.0 mm (9.96")
<b>Net Weight (ea)</b>	3.1 kg (6.83 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
8001 7940 CMS 503ICT LP	White / Paintable
8001 7890 CMS 603 Arco Grille	White / Paintable



## Notes:

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

A full range of measurements, performance data, CLF and Ease™ Data for CMS 503ICT LP can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

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## 9. Technical Specifications

### CMS 603DC Models

Performance	
<b>Frequency response (-3 dB) <sup>(1)</sup></b> BM Backcan	75 Hz - 30 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> BM Backcan	50 Hz - 30 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> PI Backcan	46 Hz - 30 kHz
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	91 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	90 degrees conical
<b>Power Handling <sup>(3)</sup></b>	
Average	80 W
Programme	160 W
Peak	320 W
<b>Recommended Amplifier Power</b>	160 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	110 dB
Peak	116 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	60 W (83 Ω) / 30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / OFF & low impedance operation
100 V	60 W (165 Ω) / 30 W (330 Ω) / 15 W (660 Ω) / OFF & low impedance operation

Transducers	
<b>Dual Concentric point source driver</b>	1 x 165 mm (6.5") Dual Concentric driver, using Omnimagnet technology
<b>Low Frequency</b>	44 mm (1.75") voice coil, treated multi fiber paper pulp cone
<b>High Frequency</b>	25 mm (1.00") PEI dome

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Security toggle clamp Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36") Recommended clamp torque: 1.5 Nm
<b>Backcan Options</b>	
Blind Mount (BM)	Complete with fixed backcan
Pre Install (PI)	Separate backcan for pre-installation
<b>Cable Entry Options</b>	
<b>Conduit Knockouts on PI Backcan Connectors</b>	Cable clamp & squeeze connector for conduit up to 22 mm 3 Sets of horizontal positions 19 / 22 / 28 mm (0.75" / 0.87" / 1.10") Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	274.0 mm (10.79")
BM Model: Front of ceiling to rear of backcan	255.8 mm (10.07")
BM Model: Front of ceiling to top of safety loop	273.3 mm (10.76")
PI Model: Front of ceiling surface to rear of speaker unit	100.7 mm (3.96")
PI Model: Front of accessory backcan bezel to top of safety loop	168.5 mm (6.60")
<b>Hole cutout diameter (all models)</b>	253 mm (9.96")
<b>Net Weight (ea)</b>	
CMS 603DC BM	6.6 kg (14.56 lbs)
CMS 603DC PI	3.65 kg (8.05 lbs)
PI Backcan	3.68 kg (8.11 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
<b>8001 7440</b> CMS 603DC BM	White / Paintable
<b>8001 7450</b> CMS 603DC PI	White / Paintable
<b>8001 4181</b> CMS 603 Plaster (Mud) Ring	Zinc Plated Steel
<b>8001 7560</b> CMS 603 PI Backcan	Zinc Plated Steel
<b>8001 7890</b> CMS 603 Arco Grille	White / Paintable



Notes:

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

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# 9. Technical Specifications

## CMS 603ICT Models

Performance	
<b>Frequency response (-3 dB) <sup>(1)</sup></b> BM Backcan	78 Hz - 22 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> BM Backcan	51 Hz - 24 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> PI Backcan	46 Hz - 24 kHz
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	91 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	90 degrees conical
<b>Coverage Angle (1 kHz to 6 kHz)</b>	92 degrees
<b>Directivity Factor (Q)</b>	7.1 averaged 1 kHz to 6 kHz
<b>Directivity Index (DI)</b>	7.9 averaged 1 kHz to 6 kHz
<b>Power Handling <sup>(3)</sup></b>	
Average	60 W
Programme	120 W
Peak	240 W
<b>Recommended Amplifier Power</b>	120 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	109 dB
Peak	115 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	60 W (83 Ω) / 30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / OFF & low impedance operation
100 V	60 W (165 Ω) / 30 W (330 Ω) / 15 W (660 Ω) / OFF & low impedance operation
<b>Crossover</b>	7 kHz inductively coupled

Transducers	
<b>Low Frequency</b>	165 mm (6.50") mineral loaded polypropylene
<b>High Frequency</b>	ICT aluminium dome

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Security toggle clamp Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36") Recommended clamp torque: 1.5 Nm
<b>Backcan Options</b>	
Blind Mount (BM)	Complete with fixed backcan
Pre Install (PI)	Separate backcan for pre-installation
<b>Cable Entry Options</b>	Cable clamp & squeeze connector for conduit up to 22 mm
<b>Conduit Knockouts on PI Backcan</b>	3 Sets of horizontal positions 19 / 22 / 28 mm (0.75" / 0.87" / 1.10")
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	274.0 mm (10.79")
BM Model: Front of ceiling to rear of backcan	256.5 mm (10.10")
BM Model: Front of ceiling to top of safety loop	273.8 mm (10.78")
PI Model: Front of ceiling surface to rear of speaker unit	100.0 mm (3.94")
PI Model: Front of accessory backcan bezel to top of safety loop	168.5 mm (6.60")
<b>Hole cutout diameter (all models)</b>	253 mm (9.96")
<b>Net Weight (ea)</b>	
CMS 603ICT BM	TBA
CMS 603ICT PI	TBA
PI Backcan	3.68 kg (8.11 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	Colour
<b>Part Number</b>	
8001 7520 CMS 603ICT BM	White / Paintable
8001 7530 CMS 603ICT PI	White / Paintable
8001 4181 CMS 603 Plaster (Mud) Ring	Zinc Plated Steel
8001 7560 CMS 603 PI Backcan	Zinc Plated Steel
8001 7890 CMS 603 Arco Grille	White / Paintable



### 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 603ICT can be downloaded from [www.tannoypro.com](http://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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## 9. Technical Specifications

### CMS 803DC Models

Performance	
<b>Frequency response (-3 dB) <sup>(1)</sup></b> BM Backcan	47 Hz - 30 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> BM Backcan	40 Hz - 35 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b> PI Backcan	41 Hz - 35 kHz
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	92 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	90 degrees conical
<b>Power Handling <sup>(3)</sup></b>	
Average	90 W
Programme	180 W
Peak	360 W
<b>Recommended Amplifier Power</b>	180 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	112 dB
Peak	118 dB
With THP60 - Average	110 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	60 W (83 Ω) / 30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / OFF & low impedance operation
100 V	60 W (165 Ω) / 30 W (330 Ω) / 15 W (660 Ω) / OFF & low impedance operation

Transducers	
<b>Dual Concentric point source driver</b>	1 x 200 mm (8.0") Dual Concentric driver, using Omnimagnet technology
<b>Low Frequency</b>	44 mm (1.75") voice coil, treated multi fiber paper pulp cone
<b>High Frequency</b>	25 mm (1.00") PEI dome

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	
	Security toggle clamp
	Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36")
	Recommended clamp torque: 1.5 Nm
<b>Backcan Options</b>	
Blind Mount (BM)	Complete with fixed backcan
Pre Install (PI)	Separate backcan for pre-installation
<b>Cable Entry Options</b>	
<b>Conduit Knockouts on PI Backcan</b>	Cable clamp & squeeze connector for conduit up to 22 mm
	3 Sets of horizontal positions 19 / 22 / 28 mm (0.75" / 0.87" / 1.10")
<b>Connectors</b>	
	Removable locking connector with screw terminals with "loop through" facility
	UL-1480, UL-2043, CE
<b>Compliance</b>	
<b>Dimensions</b>	
Bezel diameter	319.0 mm (12.56")
BM Model: Front of ceiling to rear of backcan	310.5 mm (12.22")
BM Model: Front of ceiling to top of safety loop	327.7 mm (12.90")
PI Model: Front of ceiling surface to rear of speaker unit	125.6 mm (4.94")
PI Model: Front of accessory backcan bezel to top of safety loop	168.5 mm (6.63")
<b>Hole cutout diameter (all models)</b>	295 mm (11.61")
<b>Net Weight (ea)</b>	
CMS 803DC BM	8.5 kg (18.74 lbs)
CMS 803DC PI	4.9 kg (10.80 lbs)
PI Backcan	4.0 kg (8.81 lbs)
<b>Included Accessories</b>	
	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	
	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
<b>8001 7470</b> CMS 803DC BM	White / Paintable
<b>8001 7480</b> CMS 803DC PI	White / Paintable
<b>8001 4650</b> CMS 803 Plaster (Mud) Ring	Zinc Plated Steel
<b>8001 7570</b> CMS 803 PI Backcan	Zinc Plated Steel
<b>8001 7900</b> CMS 803 Arco Grille	White / Paintable



Notes:

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

A full range of measurements, performance data, CLF and Ease™ Data for CMS 803DC can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

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# 9. Technical Specifications

## CMS 803DCQ Model

Performance	
<b>Frequency response (-3 dB) <sup>(1)</sup></b>	47 Hz - 30 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b>	40 Hz - 35 kHz
BM Backcan	
<b>Frequency range (-10 dB) <sup>(1)</sup></b>	41 Hz - 35 kHz
PI Backcan	
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	93 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	60 degrees conical
<b>Power Handling <sup>(3)</sup></b>	
Average	90 W
Programme	180 W
Peak	360 W
<b>Recommended Amplifier Power</b>	180 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	113 dB
Peak	119 dB
With THP60 - Average	111 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	60 W (83 Ω) / 30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / OFF & low impedance operation
100 V	60 W (165 Ω) / 30 W (330 Ω) / 15 W (660 Ω) / OFF & low impedance operation

Transducers	
<b>Dual Concentric point source driver</b>	1 x 200 mm (8.0") Dual Concentric driver, using Omnimagnet technology
<b>Low Frequency</b>	44 mm (1.75") voice coil, treated multi fiber paper pulp cone
<b>High Frequency</b>	25 mm (1.00") PEI dome

Physical	
<b>Enclosure</b>	
Backcan	Zinc plated steel
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Security toggle clamp Min / Max clamping range 9.5 mm (0.37") / 60 mm (2.36") Recommended clamp torque: 1.5 Nm
<b>Cable Entry Options</b>	Cable clamp & squeeze connector for conduit up to 22 mm
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	319.0 mm (12.56")
Front of ceiling to rear of backcan	310.5 mm (12.22")
Front of ceiling to top of safety loop	327.7 mm (12.90")
<b>Hole cutout diameter (all models)</b>	295 mm (11.61")
<b>Net Weight (ea)</b>	8.5 kg (18.74 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring, Arco grille
<b>Packed Quantity</b>	2

Ordering Information	
Part Number	Colour
8001 7490 CMS 803DCQ	White / Paintable
8001 4650 CMS 803 Plaster (Mud) Ring	Zinc Plated Steel
8001 7900 CMS 803 Arco Grille	White / Paintable



## 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 803DCQ can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

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# 10. Painting

If desired, the grille and baffle panel may be painted to match the surrounding décor.

Painting the baffle:

- Carefully mask off the driver assembly using the paint mask provided to ensure that the paint does not come into contact with the cone and roll surround.
- Apply several thin coats of paint – this will provide a better finish than one overly thick coat.

Painting the grille:

- Carefully remove the acoustically transparent grille cloth from the reverse side of the grille.
- Paint the grille and then replace the grille cloth - several thin coats of paint will provide a better finish than one overly thick coat.
- Re-bond the grille cloth to the grille over the entire area using a light spray-adhesive to avoid audible resonances.

# 11. Warranty

**No maintenance of the CMS Series loudspeaker is necessary.**

As part of the MUSIC Group, Tannoy is committed to providing the highest quality products, service and user experience for our customers. One element of this commitment is our after sales support which now incorporates our extended Limited Warranty. In the event of any concern that is not addressed by this extended Limited Warranty we would ask you to contact us at [care@music-group.com](mailto:care@music-group.com)

For full warranty details including the extended Limited Warranty, please visit <http://www.music-group.com/warranty.aspx> and register your purchase online at [www.music-group.com](http://www.music-group.com) or [www.tannoy.com](http://www.tannoy.com)

# 12. Declaration of conformity

(in accordance with ISO/IEC 1750-1)

Document No: CE-CMS3-1

We: Music Group Innovation SC Ltd  
Rosehall Industrial Estate, Coatbridge, ML5 4TF, United Kingdom

In accordance with the following Directive(s):

2004/108/RC	Electromagnetic Compatibility (EMC)
2011/65/EU	Restriction of the use of certain hazardous substances (RoHS)

Hereby declare that:

Type of equipment	In-Ceiling Loudspeakers
Models	CMS 403DCe, CMS 403ICTe, CMS 503DC BM, CMS 503ICT BM, CMS 503DC PI, CMS 503ICT PI, CMS 503DC PI BACKCAN, CMS 503ICT PI BACKCAN, CMS 603DC BM, CMS 603ICT BM, CMS 603DC PI, CMS 603ICT PI, CMS 603DC PI BACKCAN, CMS 603ICT PI BACKCAN, CMS 603ICT LS, CMS 803DC BM, CMS 803DC PI, CMS 803DC PI BACKCAN, CMS 803DCQ

Is/are in conformity with the requirements of the following documents:

Ref. No	Title	Edition
BS EN 55103-1	Electromagnetic compatibility. Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Emissions	2009
BS EN 55103-2	Electromagnetic compatibility. Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Immunity	2009

Name: Philippe Robineau  
Position: Director of Engineering  
Done at: Coatbridge  
Date: 23/11/2015



Director of Engineering  
Tannoy  
23 November 2015

# Notes

[tannoypro.com](http://tannoypro.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. All specifications are subject to change without notice.  
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