

## **CMS 3.0 SERIES**

**In-Ceiling loudspeakers**



**CMS 403DCe**  
**CMS 503DC BM**  
**CMS 603DC BM**  
**CMS 803DC BM**

# **TANNOY**

Quick Start Guide

# 1 Introduction

This Quick Start Guide (QSG) provides the basic information required to install and connect the blind-mount (BM) versions of Tannoy CMS Series in-ceiling loudspeakers.

For additional information, including product technology, photo identification of product features, dimensional drawings, and complete technical specifications, please refer to the full CMS Series Operation Manual.

For installation of CMS Series pre-install (PI) versions, please refer to either the CMS PI Quick Start Guide or the full CMS Operation Manual.

## 2 Safety Notices

Some regional construction codes require the use of a secondary method of securing loudspeakers in 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.

**Electrical Safety Notice:** to comply with the standard UL1480, metal-clad flexible conduit (BX) is required for connection to the terminal block for proper earth grounding.

**SAFETY NOTE:** In order to comply with the relevant fire safety regulations (i.e. 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:

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

## 3 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.

## 4 Installation in 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)



Fig.1

2. Cut out the hole in the ceiling tile using a pad saw following the broken line indicated on the template.
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.2)

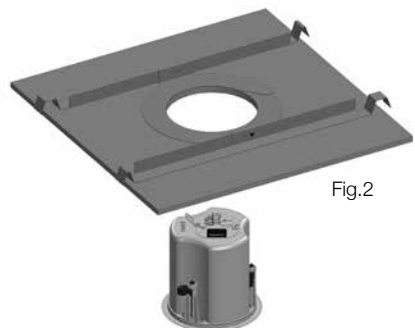


Fig.2

4. Go to Section 7 following 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.2)

**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. (With the CMS 403DCe, replace the front trim to conceal mounting screws.)

**NOTE ON INSTALLATION OF CMS 403DCe:**

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.

## 5 Installation in Sheetrock Ceilings

1. Position the cutout template (self-adhesive backed) on the ceiling. (Fig. 1)



Fig. 1

2. Cut out the hole in the ceiling using a pad saw following the broken line indicated on the template. Slide the C-ring into the ceiling, aligning it over the cut-out hole. (Fig. 2)

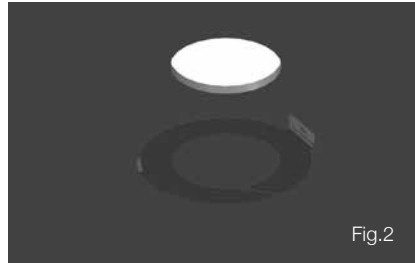


Fig.2

3. Follow steps 4 through 6 in section 4 above.

## 6 Installation of Optional Plaster Ring

The optional plaster (mud) ring is designed for pre-installation into newly constructed, non-suspended ceilings.

1. Nail or screw the plaster ring to the joists. (Fig. 1)

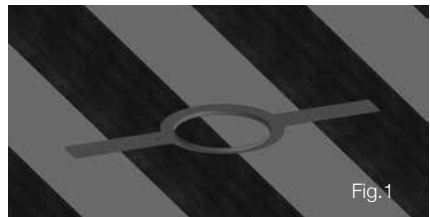


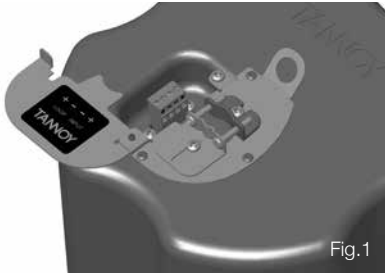
Fig.1

2. Lay the speaker wiring to where the speaker will be fitted. Complete the plastering work on the ceiling.

3. Follow steps 4 through 6 in Section 4 above.

# 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)

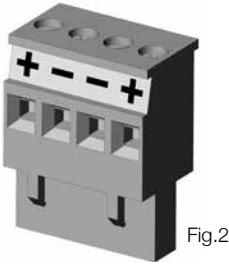


2. For connection to an amplifier, use Pins 1 and 2 (Fig.2)

- 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



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.**

CMS 403DCe and CMS 503DC 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.

CMS 603DC 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.

## 8 CMS Series BM Dimensions

Please refer to the full CMS Series Operation Manual for dimensional drawings.

### CMS 403DCe

Hole cut-out: 187 mm Diameter<sup>1</sup>: 205 mm (8.07")  
Height<sup>2</sup>: 147.6 mm (5.81")

### CMS 503DC BM

Hole cut-out: 190 mm Diameter<sup>1</sup>: 205.9 mm (8.11")  
Height<sup>2</sup>: 205.3 mm (8.08")

### CMS 603DC BM

Hole cut-out: 253 mm Diameter<sup>1</sup>: 274 mm (10.79")  
Height<sup>2</sup>: 273.3 mm (10.76")

### CMS 803DC BM and CMS 803DC Q

Hole cut-out: 295 mm Diameter<sup>1</sup>: 319.0 mm (12.56")  
Height<sup>2</sup>: 327.7 mm (12.9")

<sup>1</sup> Maximum, including bezel ring

<sup>2</sup> Maximum to top of connector, from lower ceiling surface