

## CMS 3.0 SERIES

In-Ceiling loudspeakers



**CMS 503DC PI**  
**CMS 603DC PI**  
**CMS 803DC PI**

# TANNOY

Quick Start Guide

# 1 Introduction

This Quick Start Guide (QSG) provides the basic information required to install and connect the pre-install (PI) 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 blind-mount versions, please refer to either the CMS BM 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

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 and the CMS 803DC models have the transformer pre-attached to the inside of the backcan; the CMS 503DC models have the transformer pre-attached to the loudspeaker assembly.

1. Attach the backcan to a secure fixing point. This can be done one of three ways:

**METHOD 1:** Fix to a secure point using suitable fixings attached to the four fixing holes on the PI backcan. (Fig. 1)



Fig.1

**METHOD 2:** Fix to a secure point using suitable fixings and the flexible straps attached to the PI backcan. (Fig. 2)



Fig.2

**METHOD 3:**

**a.** Attach the PI backcan to the option pre-mount plaster ring using the fixing points provided with the pre-mount ring. (Fig 3).



Fig.3

**b.** Secure the wings of the pre-mount ring to a secure fixing point using suitable fixings.

2. Attach conduit to the backcan using one of two methods:

**METHOD 1:** 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.4)

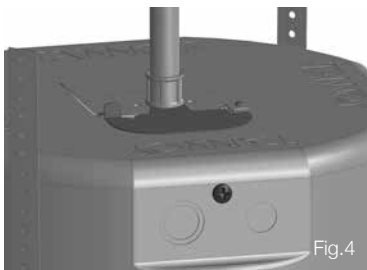


Fig.4

**METHOD 2:** Use any of the three knock-out points at the sides of the backcan (19 mm, 22 mm or 28 mm diameter). (Fig 5)



Fig.5

3. If conduit not used, run 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 backcan.

4. Cut a hole in the proper ceiling location using the supplied cut-out template (self-adhesive backing) and a pad saw. Place the pre-install backcan over the hole.

5. Proceed to Section 5 following on wiring and setting up. Return to Step 6 below.

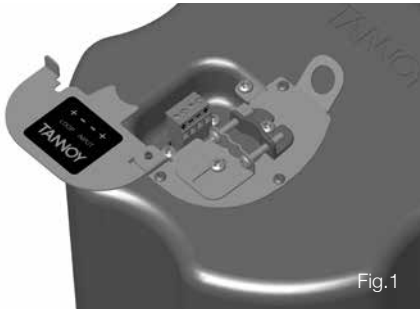
6. Slide the speaker assembly through the hole. Turn the screws (denoted "Screw Fix") clockwise on the front of the speaker to extend the mounting wings. Tighten the screws until a firm grip is achieved. (NOTE: Screws have a PoziDriv head; use of a PoziDriv driver is recommended). If using a power driver,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



Fig.6

# 5 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)

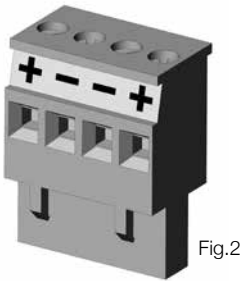


2. For connection to an amplifier, use Pins 1 and 2

- 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 PI Dimensions

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

### CMS 503DC PI

Hole cut-out: 190 mm  
Diameter<sup>1</sup>: 205.9 mm (8.11")  
Height<sup>2</sup>: 133.3 mm (5.25")

### CMS 503 PI BACKCAN

Diameter: 288.0 mm (11.34")  
Height: 153.5 mm (6.04")

### CMS 603DC PI

Hole cut-out: 253 mm  
Diameter<sup>1</sup>: 274 mm (10.79")  
Height<sup>2</sup>: 100 mm (3.94")

### CMS 603 PI BACKCAN

Diameter: 351 mm (13.82")  
Height: 168.5 mm (6.63")

### CMS 803DC PI

Hole cut-out: 295 mm  
Diameter<sup>1</sup>: 319 mm (12.56")  
Height<sup>2</sup>: 125.6 mm (4.94")

### CMS 803 PI BACKCAN

Diameter: 397 mm (15.63")  
Height: 168.5 mm (6.63")

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

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

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