

TANNOY®

CVS

INSTALLATION MANUAL

CVS 4 | CVS 6 | CVS 8

CVS

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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REVISION DATE: 19 November 2015

6481 0487

CVS 4 HOLE CUTOUT SIZE: 180 mm

CVS 6 HOLE CUTOUT SIZE: 250 mm

CVS 8 HOLE CUTOUT SIZE: 320 mm

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1. INTRODUCTION

Thank you for purchasing this Tannoy Ceiling loudspeaker. This product range is suited for high-level music and speech reinforcement applications requiring exceptional sonic quality with uncompromised reliability.

2. UNPACKING

Every Tannoy product and accessory is carefully inspected before packing. After unpacking, please inspect your product to make sure no damage has occurred in transit. In the unlikely event of any damage, would you please notify your dealer immediately and retain your shipping carton, as your dealer may ask you to return the faulty unit to them for inspection.

Each CVS loudspeaker is packed in pairs and provided with the following accessories as standard; C Ring, tile-bridge kit, grille, cut-out template, and paint mask. A plaster (mud) ring is also available as an optional extra.

3. SAFETY NOTICES

Some regional construction codes require the use of a secondary method of securing loudspeakers in ceiling to provide security of a backup 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. 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.

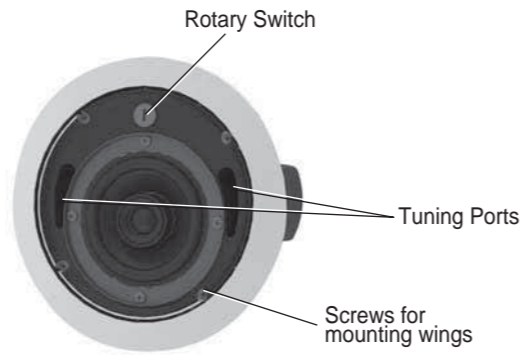
SAFETY NOTE:

In order to comply with the relevant fire safety regulations (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: -

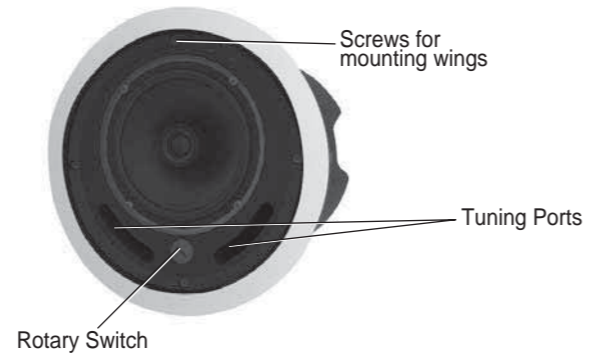
- a) use of terminal blocks (for connection to primary) with a melting point of not less than 650°C, for example constructed from ceramic materials;*
- b) use of terminal blocks of a lower melting point but protected with thermal insulation;*
- c) use of terminal blocks such that, on melting, an open-circuit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

4. PRODUCT FEATURE IDENTIFICATION:

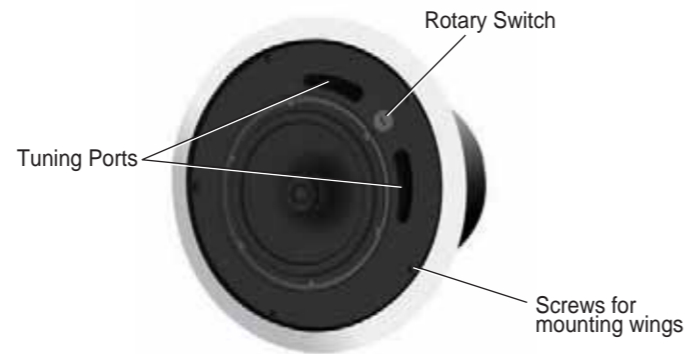
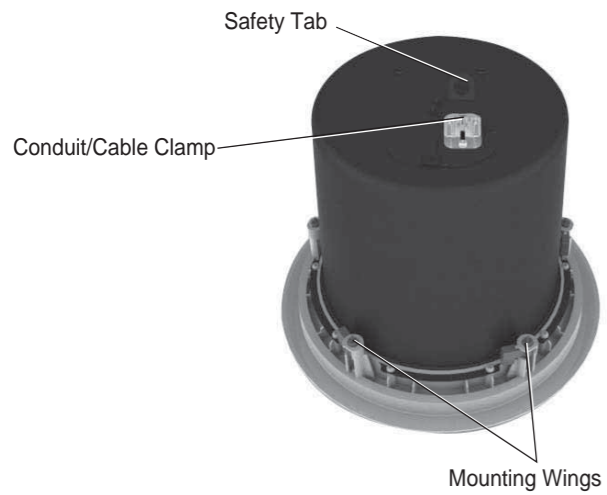
CVS 4



CVS 6

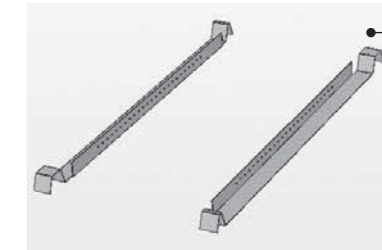
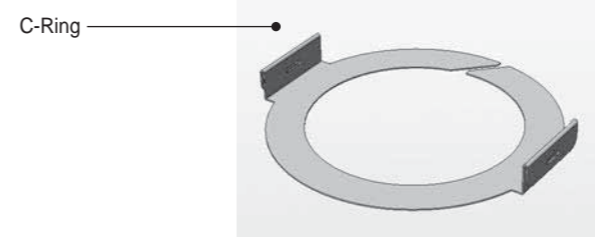


CVS 8

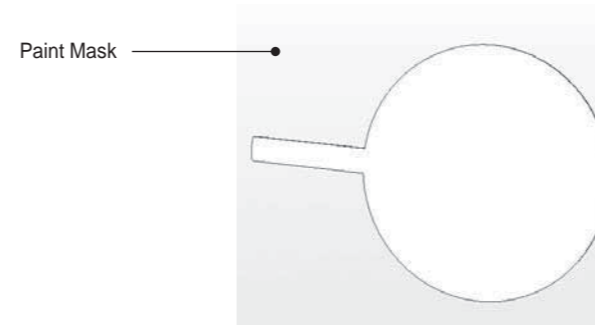
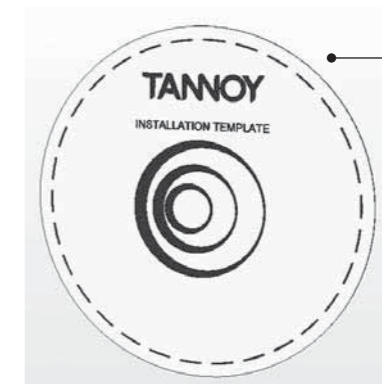
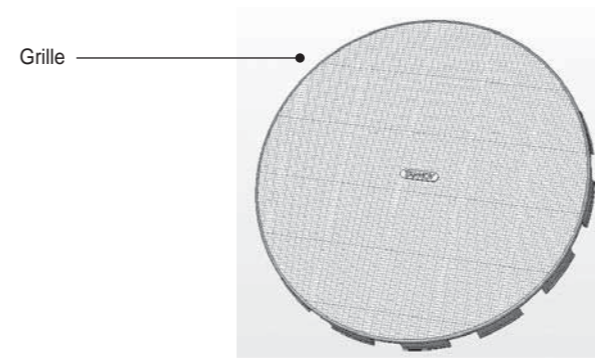


5. ACCESSORIES:

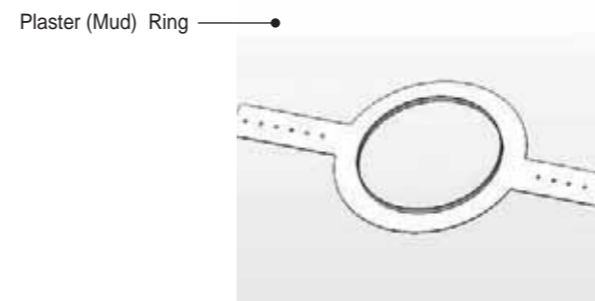
Standard Accessories



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



Optional Accessories

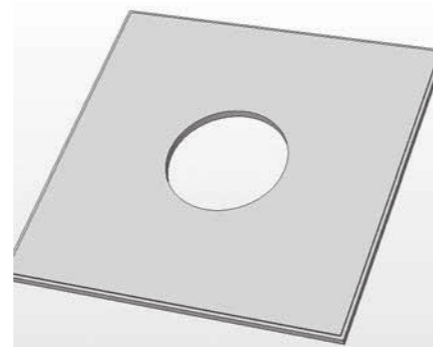


6.1 MECHANICAL INSTALLATION GUIDE FOR SUSPENDED CEILINGS

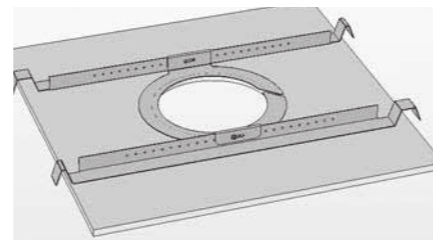
- 1** Remove the ceiling tile from its frame and place it on a flat surface. Mark the cut-out area on the ceiling tile by tracing around the template provided.



- 2** Cut out the hole in the ceiling tile using a circular saw or pad saw.



- 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.

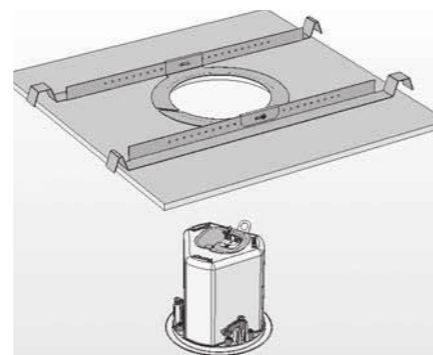


- 4** Slide the speaker assembly through the hole and turn the screws on the front of the speaker to extend the mounting wings. Tighten the screws until a firm grip is achieved.

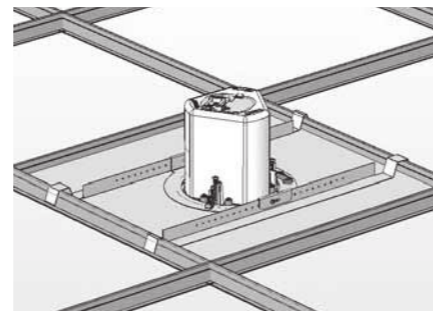
If using a power driver, Tannoy recommends a torque setting of 1.5 Nm.

DO NOT OVERTIGHTEN!

- 5** Slide the tile panel back into the suspended ceiling. The tile bridge ends will catch over the railings, supporting the weight of the speaker.



- 6** Connect a Secondary Support Line to safety tab. Some construction codes require use of this secondary support point, which should connect to a separate secure support point using a suitable support line. Consult construction codes in your region.



Go to section 7 for instructions on wiring and set-up instructions.

6.2 MECHANICAL INSTALLATION GUIDE FOR SHEET-ROCK (PLASTER BOARD) CEILINGS

- 1** Mark the cut-out area on the ceiling by tracing around the template provided.



- 2** Cut out the hole in the ceiling using a circular saw or pad saw, then slide the C-ring into the ceiling, aligning it over the cut-out hole.



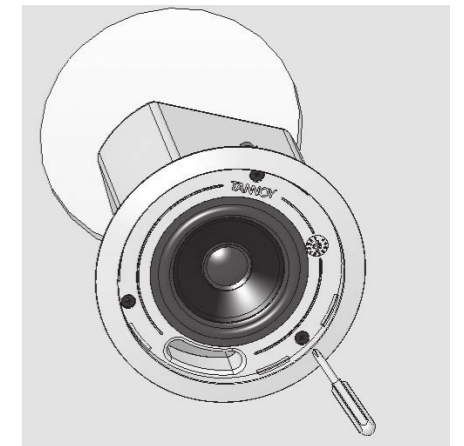
- 3** Go to section 7 for wiring and set-up instructions then return to point 4 below.

- 4** Slide the speaker assembly through the hole and turn the screws to extend the mounting wings. Tighten the screws until a firm grip is achieved.

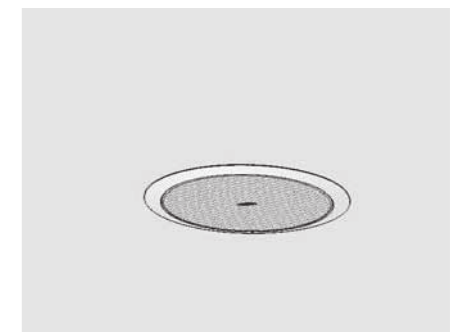
If using a power driver, Tannoy recommends a torque setting of 1.5 Nm.

DO NOT OVERTIGHTEN!

- 5** Connect a Secondary Support Line to safety tab. Some construction codes require use of this secondary support point, which should connect to a separate secure support point using a suitable support line. Consult construction codes in your region.



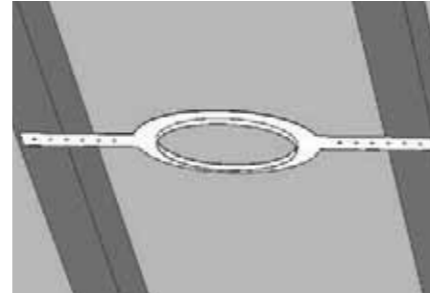
- 6** Insert grille by pushing it onto the speaker.



6.3 MECHANICAL INSTALLATION INSTRUCTIONS FOR OPTIONAL PLASTER RING:

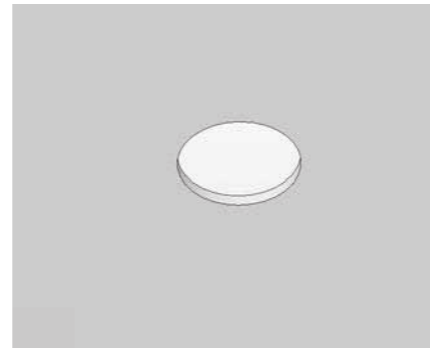
An optional plaster (mud) ring bracket is available from Tannoy. This bracket is designed to be pre-installed into newly constructed, non-suspended ceilings.

- 1 | Nail or screw the plaster ring to the joists.



- 2 | Lay the speaker wiring to where the speaker will be fitted and complete the plastering work on the ceiling.

- 3 | Cut out the hole in the ceiling using a circular saw or pad saw.



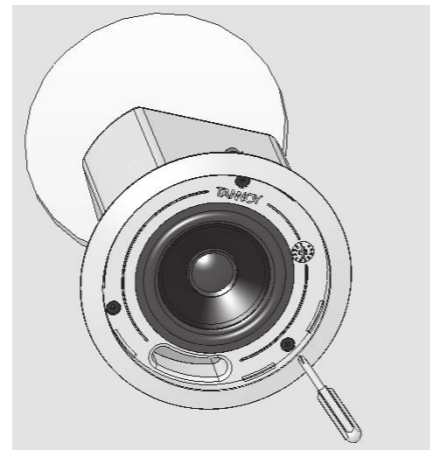
- 4 | Go to section 7 for instructions on wiring then return to point 5 below.

- 5 | Slide the speaker assembly through the hole and turn the screws to extend the mounting wings. Tighten the screws until a firm grip is achieved.

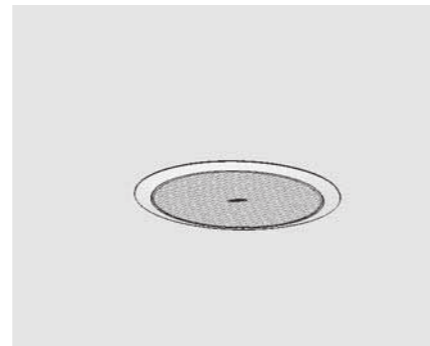
If using a power driver, Tannoy recommends a torque setting of 1.5 Nm.

DO NOT OVERTIGHTEN!

- 6 | Connect a Secondary Support Line to safety tab. Some construction codes require use of this secondary support point, which should connect to a separate secure support point using a suitable support line. Consult construction codes in your region.

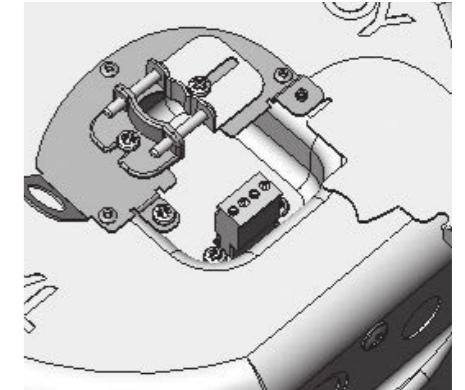


- 7 | Insert grille by pushing it onto the speaker.



7. WIRING AND SETTING UP:

- 1 | Open the wiring cover at the back of the speaker can to access the Euro type connector plug and socket.

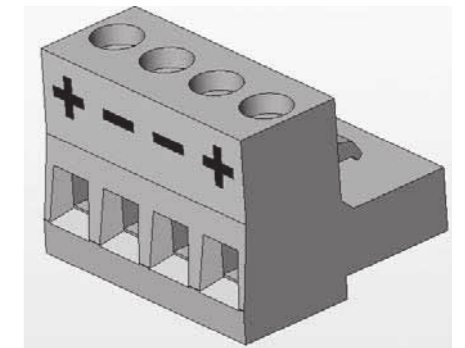


- 2 | For connection to an amplifier, use pins 1 and 2:

- 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:

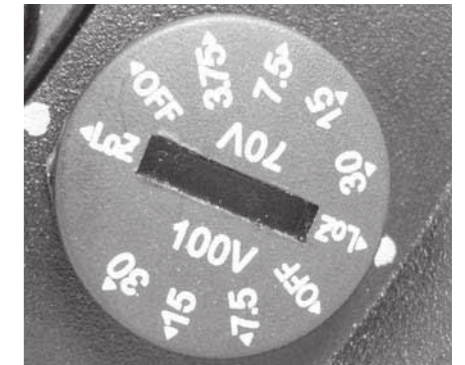
- Pin 3 is negative
- Pin 4 is positive



- 3 | Close the wiring cover and tighten both screws on the cable clamp. Use the rotary switch located on the front of the unit to select whether you wish to use the speaker in a low-impedance or distributed-line application.

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.

- 4 | The CVS 4 is fitted with a 30 W transformer. When used in distributed-line systems, the transformer can be tapped at 30 W, 15 W and 7.5 W, with an additional 3.75 W tapping for 70.7 V line systems.



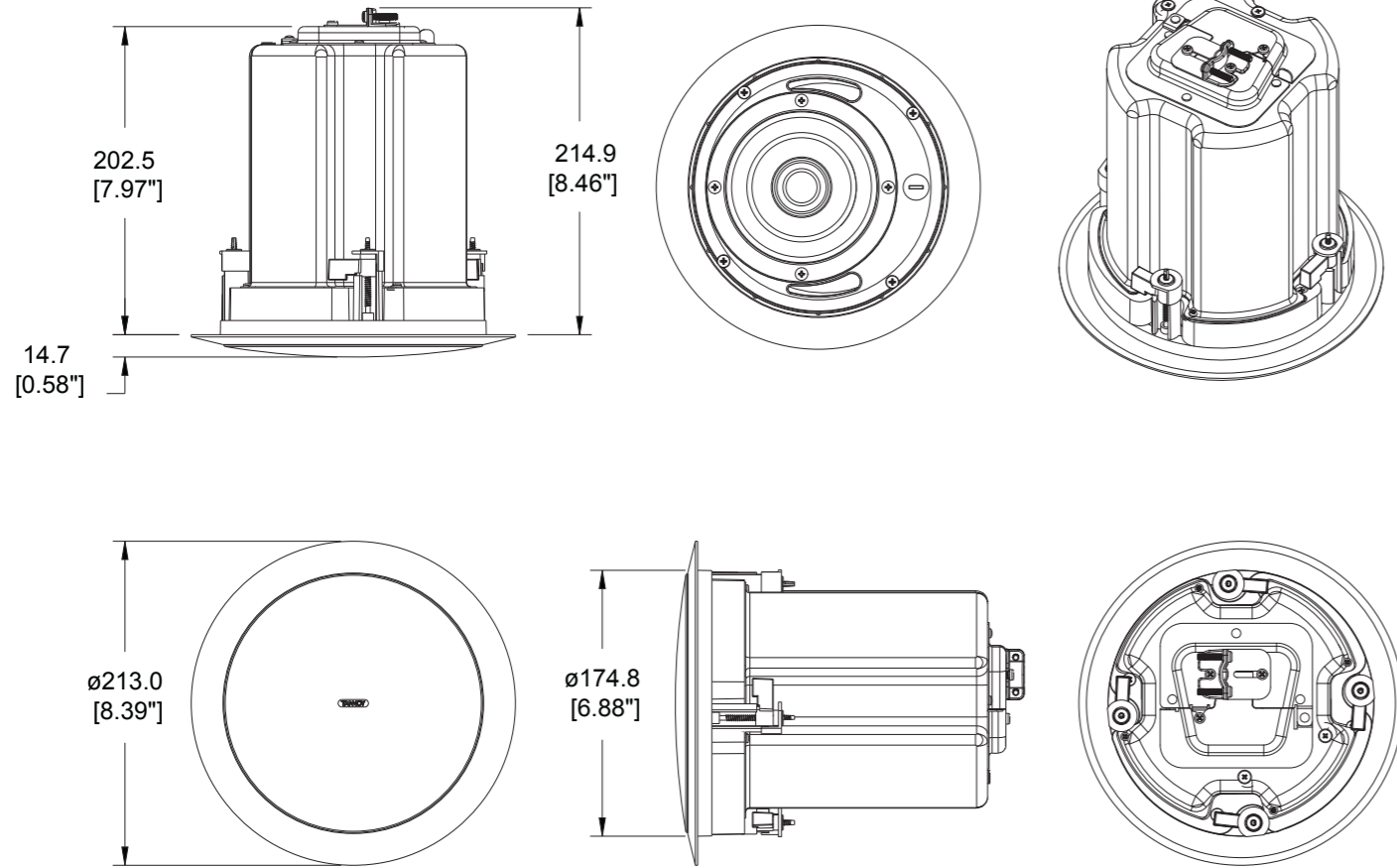
- 5 | The CVS 6 is fitted with a 60 W transformer. When used in distributed-line systems, the transformer can be tapped at 60 W, 30 W, and 15 W, with an additional 7.5 W tapping for 70.7 V line systems.

- 6 | The CVS 8 is fitted with a 60 W transformer. When used in distributed-line systems, the transformer can be tapped at 60 W, 30 W, and 15 W, with an additional 7.5 W tapping for 70.7 V line systems.



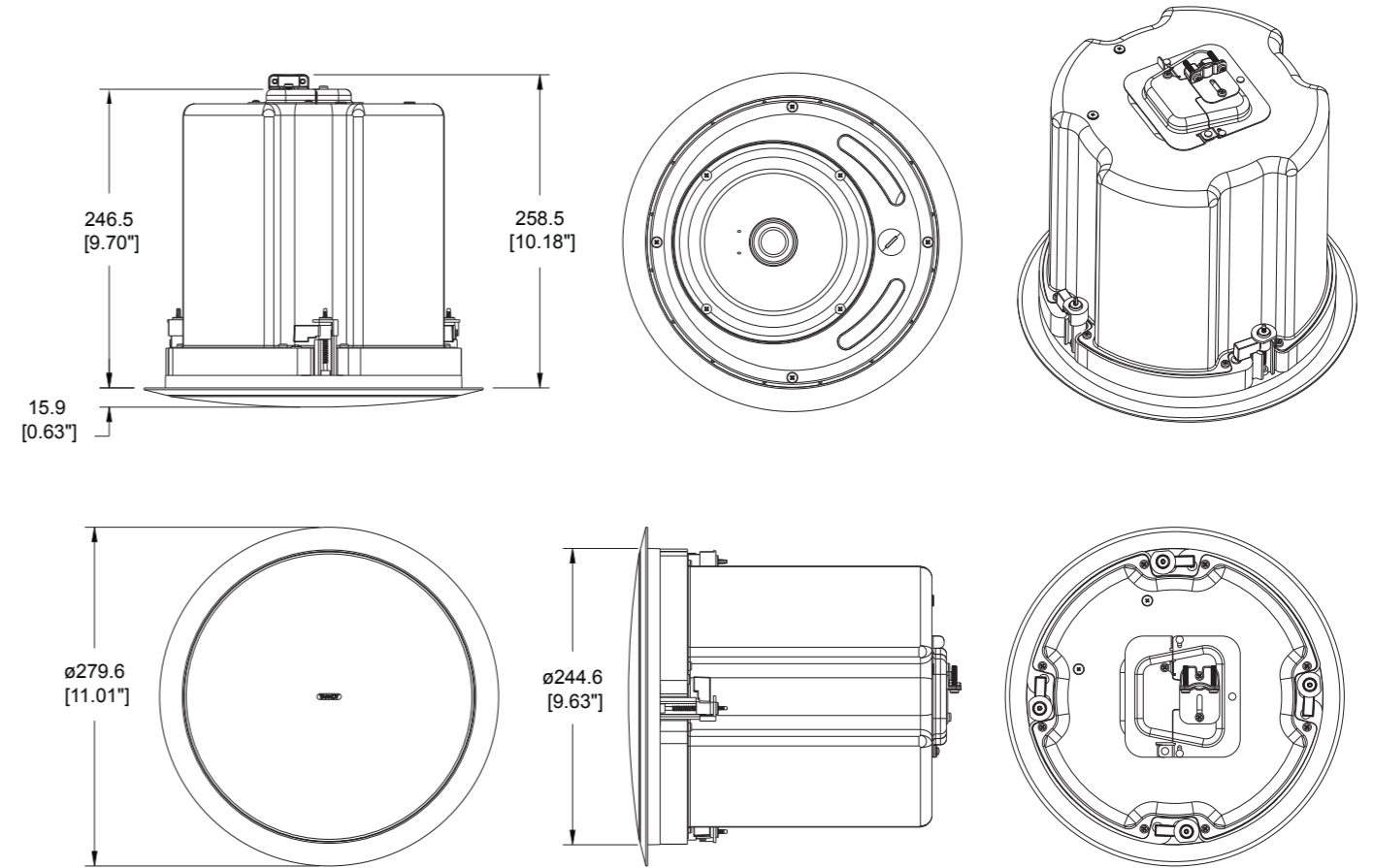
8.1 CVS 4 DIMENSIONS:

CVS 4 HOLE CUTOUT SIZE: 180 mm



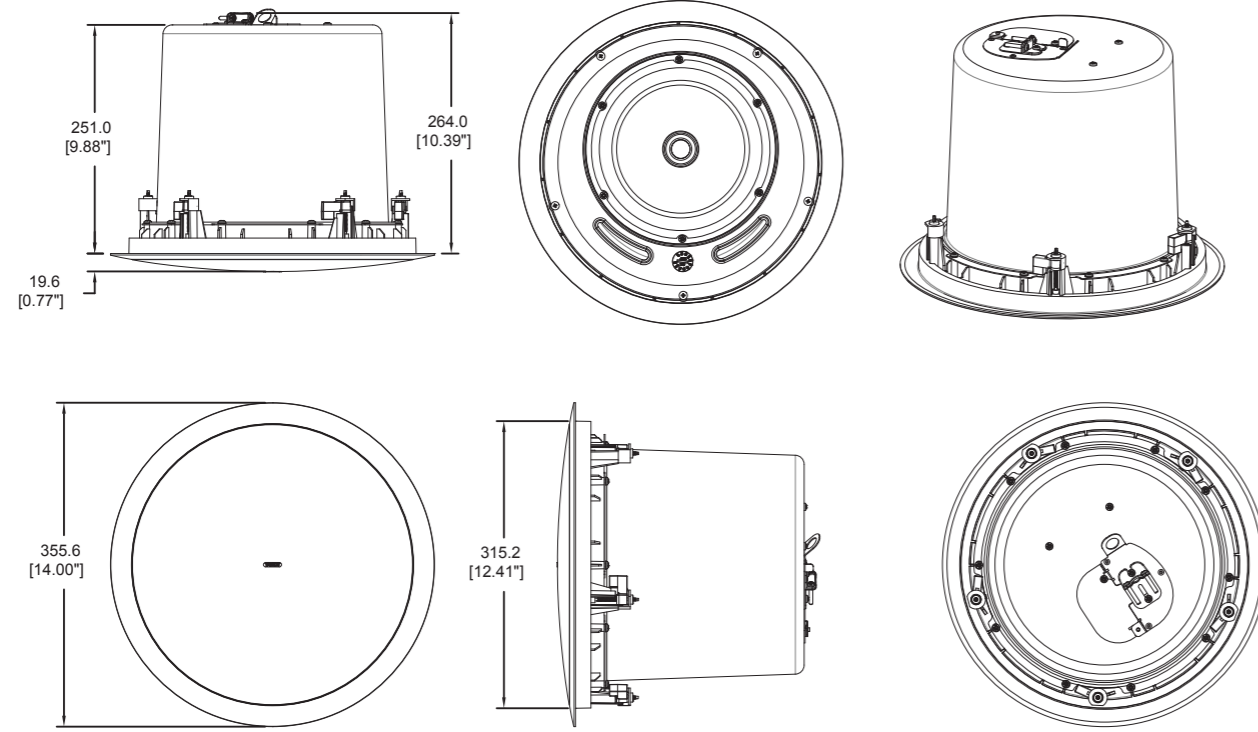
8.2 CVS 6 DIMENSIONS:

CVS 6 HOLE CUTOUT SIZE: 250 mm



8.3 CVS 8 DIMENSIONS:

CVS 8 HOLE CUTOUT SIZE: 320 mm



CVS4

TECHNICAL SPECIFICATIONS

System	CVS4	
Frequency Response (-3 dB)⁽¹⁾	85 Hz - 19 kHz	
Frequency Range (-10 dB)⁽¹⁾	77 Hz - 22 kHz	
System Sensitivity (1 W @ 1 m)⁽²⁾	87 dB (1 W = 2.45 V for 6 Ohms)	
Nominal Coverage Angle	90 degrees conical	
Coverage Angle (1 kHz to 6 kHz)	102 degrees	
Directivity Factor (Q)	5.6 averaged 1 kHz to 6 kHz	
Directivity Index (DI)	7.1 averaged 1 kHz to 6 kHz	
Rated Maximum SPL	103 dB (average) 109 dB (peak)	
Power Handling ⁽³⁾		
Average	40 W	
Programme	80 W	
Peak	160 W	
Recommended Amplifier Power	80 W @ 6 Ohms	
Nominal Impedance	6 Ohms	
Transformer Taps (via front rotary switch)	30 W / 15 W / 7.5 W / 3.75 W / OFF & low impedance operation	
100 V	30 W / 15 W / 7.5 W / OFF & low impedance operation	
Distortion		
1% Full Power	2nd Harmonic	3rd Harmonic
250 Hz	0.231%	0.112%
1 kHz	0.229%	0.253%
10 kHz	0.163%	0.025%
10% Full Power	2nd Harmonic	3rd Harmonic
250 Hz	0.99%	0.169%
1 kHz	0.816%	0.323%
10 kHz	0.444%	0.027%
Crossover Point	2.7 kHz	
<small>Notes</small>		
<small>(1) Average over stated Bandwidth. Measured in an IEC baffle in an Anechoic Chamber</small>		
<small>(2) Unweighted Pink noise input, measured at 1 m on axis</small>		
<small>(3) Long term power handling capacity as defined in EIA - 426B test</small>		

Transducers	
Low Frequency	100 mm (4.00") Mineral Loaded
High Frequency	19 mm (0.75")
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	
Cable Entry Options	Cable clamp & squeeze connector for conduit up to 22 mm
Connectors	Removable locking connector with screw terminals with "loop through" facility
Safety Agency Ratings	UL-1480, UL-2043, CE
Hole Cutout Diameter	180 mm (7.08")
Dimensions	
Bezel diameter	213.0 mm (8.39")
Front of ceiling to rear of back can	202.5 mm (7.97")
Front of ceiling to top of safety loop	214.9 mm (8.46")
Net Weight (ea)	2.60 kg (5.73 lbs)
Included Accessories	C Ring, tile bridge, paint mask, cutout template, grille
Optional Accessories	Plaster (mud) ring



CVS6

TANNOY

TECHNICAL SPECIFICATIONS

System	CVS6	
Frequency Response (-3 dB) ⁽¹⁾	79 Hz - 21 kHz	
Frequency Range (-10 dB) ⁽¹⁾	60 Hz - 24 kHz	
System Sensitivity (1 W @ 1 m) ⁽²⁾	91 dB (1 W = 2.45 V for 6 Ohms)	
Nominal Coverage Angle	90 degrees conical	
Coverage Angle (1 kHz to 6 kHz)	93 degrees	
Directivity Factor (Q)	7.7 averaged 1 kHz to 6 kHz	
Directivity Index (DI)	8 averaged 1 kHz to 6 kHz	
Rated Maximum SPL	109 dB (average) 115 dB (peak)	
Power Handling ⁽³⁾		
Average	60 W	
Programme	120 W	
Peak	240 W	
Recommended Amplifier Power	120 W @ 6 Ohms	
Nominal Impedance	6 Ohms	
Transformer Taps (via front rotary switch)	60 W / 30 W / 15 W / 7.5 W / OFF & low impedance operation	
100 V	60 W / 30 W / 15 W / OFF & low impedance operation	
Distortion		
1% Full Power	2nd Harmonic	3rd Harmonic
250 Hz	0.439%	0.140%
1 kHz	0.396%	0.458%
10 kHz	0.235%	0.023%
10% Full Power	2nd Harmonic	3rd Harmonic
250 Hz	1.16%	0.214%
1 kHz	1.014%	0.685%
10 kHz	0.944%	0.047%
Crossover Point	2.5 kHz	

Notes
 (1) Average over stated Bandwidth. Measured in an IEC baffle in an Anechoic Chamber
 (2) Unweighted Pink noise input, measured at 1 m on axis
 (3) Long term power handling capacity as defined in EIA - 426B test

Transducers	
Low Frequency	150 mm (6.00") Mineral Loaded polypropylene ICT™
High Frequency	19 mm (0.75")
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	
Cable Entry Options	Cable clamp & squeeze connector for conduit up to 22 mm
Connectors	Removable locking connector with screw terminals with "loop through" facility
Safety Agency Ratings	UL-1480, UL-2043, CE
Hole Cutout Diameter	250 mm (9.84")
Dimensions Bezel diameter	279.5 mm (11.01")
Front of ceiling to rear of back can	246.5 mm (9.70")
Front of ceiling to top of safety loop	258.5 mm (10.18")
Net Weight (ea)	4.75 kg (10.47 lbs)
Included Accessories	C Ring, tile bridge, paint mask, cutout template, grille
Optional Accessories	Plaster (mud) ring



CVS8

TANNOY

TECHNICAL SPECIFICATIONS

System	CVS8	
Frequency Response (-3 dB) ⁽¹⁾	79 Hz - 21 kHz	
Frequency Range (-10 dB) ⁽¹⁾	60 Hz - 24 kHz	
System Sensitivity (1 W @ 1 m) ⁽²⁾	93 dB (1 W = 2.45 V for 6 Ohms)	
Nominal Coverage Angle	90 degrees conical	
Coverage Angle (1 kHz to 6 kHz)	84 degrees conical	
Directivity Factor (Q)	14.7 averaged 1 kHz to 6 kHz	
Directivity Index (DI)	11.7 averaged 1 kHz to 6 kHz	
Rated Maximum SPL	111 dB (average) 117 dB (peak)	
Power Handling ⁽³⁾		
Average	60 W	
Programme	120 W	
Peak	240 W	
Recommended Amplifier Power	120 W @ 6 Ohms	
Nominal Impedance	6 Ohms	
Transformer Taps (via front rotary switch)	60 W / 30 W / 15 W / 7.5 W / OFF & low impedance operation	
100 V	60 W / 30 W / 15 W / OFF & low impedance operation	
Distortion		
1% Full Power	2nd Harmonic	3rd Harmonic
250 Hz	0.33%	0.25%
1 kHz	0.15%	0.63%
10 kHz	0.12%	0.03%
10% Full Power	2nd Harmonic	3rd Harmonic
250 Hz	1.10%	0.25%
1 kHz	0.55%	0.70%
10 kHz	0.52%	0.03%
Crossover Point	6 kHz	

Notes
 (1) Average over stated Bandwidth. Measured in an IEC baffle in an Anechoic Chamber
 (2) Unweighted Pink noise input, measured at 1 m on axis
 (3) Long term power handling capacity as defined in EIA - 426B test

Transducers	
Low Frequency	Coaxial 200 mm (8.00") mineral loaded cone material
High Frequency	19 mm (0.75")
Physical	
Enclosure	
Back can	Blind Mount (BM) 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	
Cable Entry Options	Cable clamp & squeeze connector for conduit up to 22 mm
Connectors	Removable locking connector with screw terminals with "loop through" facility
Safety Agency Ratings	UL-1480, UL-2043, CE
Hole Cutout Diameter	320 mm (12.60")
Dimensions Bezel diameter	355.6 mm (14.00")
Front of ceiling to rear of back can	251.0 mm (9.88")
Front of ceiling to top of safety loop	264.0 mm (10.39")
Net Weight (ea)	5.3 kg (11.68 lbs)
Included Accessories	C Ring, tile bridge, paint mask, cutout template, grille
Optional Accessories	Plaster (mud) ring

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

11. WARRANTY

No maintenance of the CVS 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

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 or www.tannoy.com

12. DECLARATION OF CONFORMITY:

(in accordance with ISO/IEC 1750-1)

Document No: CE-CVS-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	Ceiling loudspeakers
Range name	CVS
Models	CVS 4, CVS 4 Micro, CVS 6, CVS 8

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: 19/11/2015



Director of Engineering
Tannoy
19 November 2015



NOTES

NOTES
