

TANNOY CVS 301 In Ceiling Loudspeaker User Guide

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CVS 301 In Ceiling Loudspeaker



CVS Series

CVS 301 / CVS 301-BK

3" In-Ceiling Loudspeaker for Installation Applications

CVS 401 / CVS 401-BK

4" Coaxial In-Ceiling Loudspeaker for Installation Applications

CVS 601 / CVS 601-BK

6.5" Coaxial In-Ceiling Loudspeaker for Installation Applications

CVS 801 / CVS 801-BK

8" Coaxial In-Ceiling Loudspeaker for Installation Applications

CVS 801S

8" In-Ceiling Subwoofer Loudspeaker for Installation Applications

CVS 801S LZ

8" In-Ceiling Subwoofer Loudspeaker for Installation Applications – Low Impedance Operation Only

Important Safety Instructions



CAUTION A

RISK OF ELECTRIC SHOCK!

DO NOT OPEN!

Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock

Use only high-quality professional speaker cables with $\frac{1}{4}$ " TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualified personnel.

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



Caution

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.



To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution

These service instructions are for use by qualified service personnel only.

To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

1. Read these instructions.

- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Use only attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel.
 - Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.
- 16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- 17. Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.
- 18. Do not install in a confined space, such as a book case or similar unit.
- 19. Do not place naked flame sources, such as lighted candles, on the apparatus.
- 20. This apparatus may be used in tropical and moderate climates up to 45°C.

LEGAL DISCLAIMER

Music Tribe accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph, or statement contained herein. Technical specifications, appearances and other information are subject to change without notice. All trademarks are the property of their respective owners. Midas, Klark Teknik, Lab Gruppen, Lake, Tannoy, Turbosound, TC Electronic, TC Helicon, Behringer, Bugera, Aston Microphones and Coolaudio are trademarks or registered trademarks of Music Tribe Global Brands Ltd. © Music Tribe Global Brands Ltd. 2023 All rights reserved.

LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding Music Tribe's Limited Warranty, please see complete details online at **community.musictribe.com/pages/support#warranty**.

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. The loudspeakers in this series are for indoor dry use.

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, cut-out template, and paint mask.

A plaster (mud) ring, 48" tile rail is also available as an optional extra.

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.

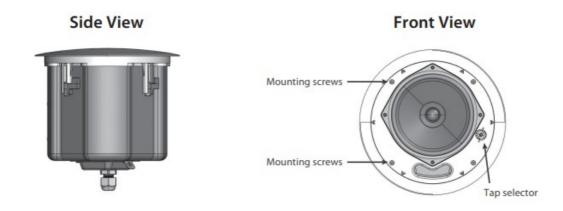
Recommended torque setting: 1.5 Nm.

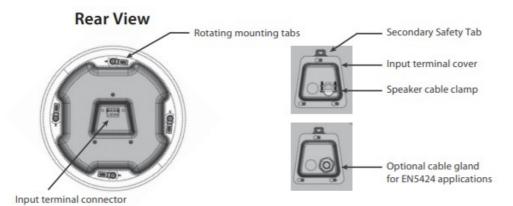
Tannoy will not be held responsible for any damages caused by the improper installation of these loudspeakers.

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.

Product Feature Identification (CVS-601 shown)

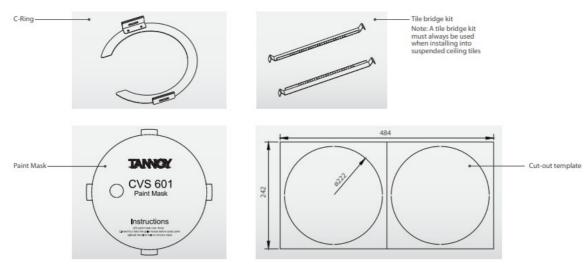




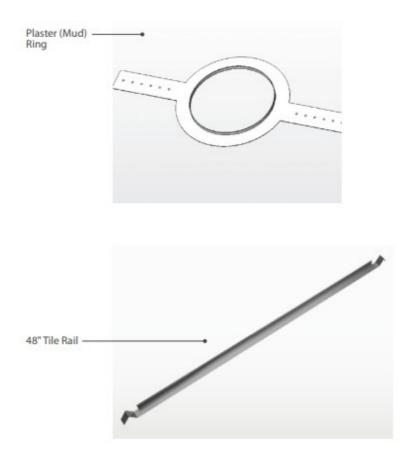
Auxiliary support ring is not shown

Accessories

Standard Accessories



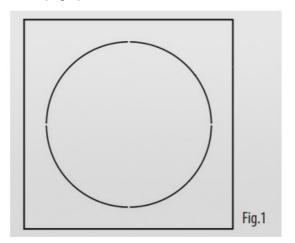
Optional Accessories



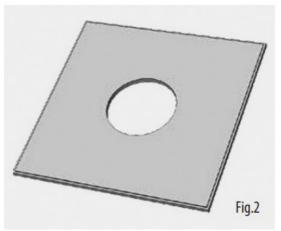
Installation Guide for Suspended Ceilings

NOTE: The speaker images shown are for guidance only, and may not exactly represent your particular model.

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. (Fig.1)



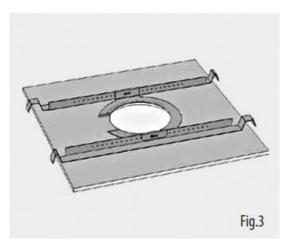
2. Cut out the hole in the ceiling tile using a circular saw or pad saw (Fig.2). Place the C-ring and tile-bridge on top of the ceiling panel, aligning the C-ring over the hole, and screw the C-ring to the tile bridge using the fixings provided. (Fig.3)



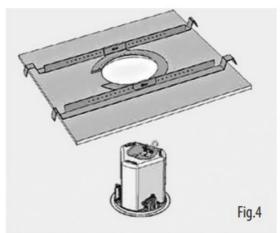
3. Slide the speaker assembly through the hole and turn the screws on the front of the speaker to extend the mounting wings. Tighten the screws until a firm grip is achieved.

If using a power driver, Tannoy recommends a torque setting of 1.5 Nm. (Fig.4)

DO NOT OVERTIGHTEN!



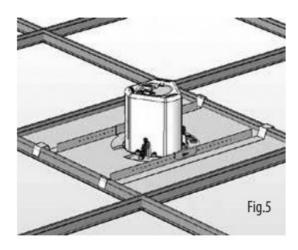
4. Slide the tile panel back into the suspended ceiling. The tile bridge ends will catch over the railings, supporting the weight of the speaker. (Fig.5)



5. Connect a secondary support line to the 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.

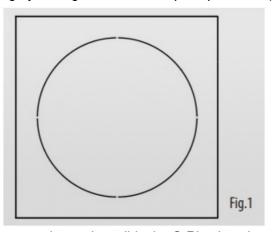
Go to page 15 for instructions on wiring and set-up instructions.



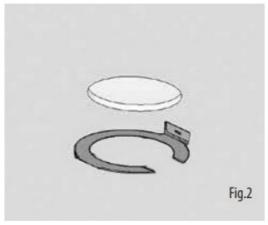
Installation Guide for Drywall Ceilings

NOTE: The speaker images shown are for guidance only, and may not exactly represent your particular model.

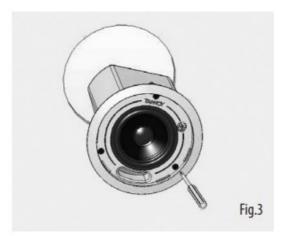
1. Mark the cut-out area on the ceiling by tracing around the template provided. (Fig.1)



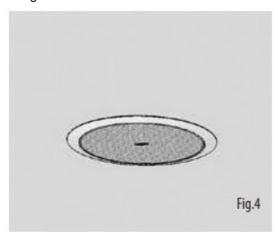
2. Cut out the hole in the ceiling using a pad saw, then slide the C-Ring into the ceiling, aligning it over the cut-out hole. (Fig.2)



3. Go to page 15 for wiring and set-up instructions then return to point 4 below.



4. Connect a secondary support line to the 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.



- 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. (Fig.3)
- 6. Insert grille by pushing it onto the speaker.

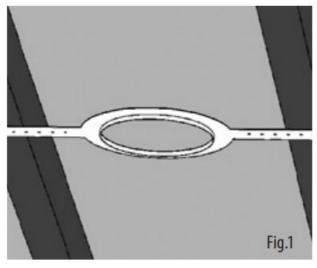
DO NOT OVERTIGHTEN!

Installation Instructions for Optional Plaster Ring

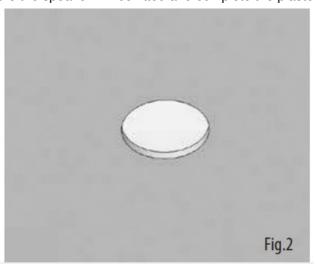
An optional plaster (mud) ring bracket is available from Tannoy. This bracket is designed to be pre-installed into newly constructed, non-suspended ceilings.

NOTE: The speaker images shown are for guidance only, and may not exactly represent your particular model.

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

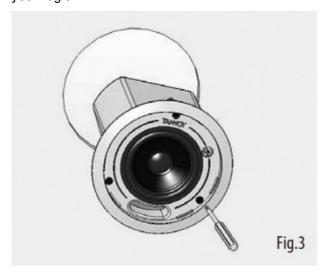


2. Lay the speaker wiring to where the speaker will be fitted and complete the plastering work on the ceiling.



- 3. Cut out the hole in the ceiling using a pad saw. (Fig.2)
- 4. Go to page 15 for instructions on wiring then return to point 5 below.
- 5. Connect a secondary support line to the 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.

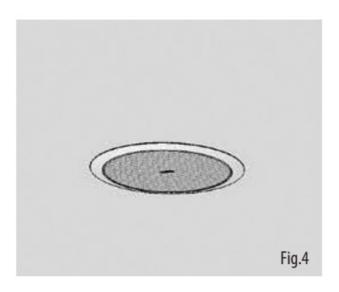


6. Slide the speaker assembly through the hole and turn the screws to extend the mounting wings. Tighten the screws until a firm grip is achieved.

If using a power driver, Tannoy recommends a torque setting of 1.5 Nm. (Fig.3)

DO NOT OVERTIGHTEN!

7. Insert grille by pushing it onto the speaker. (Fig.4)



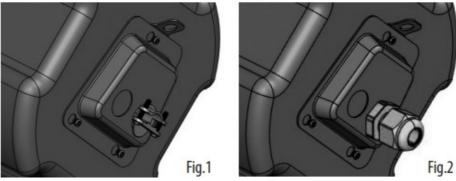
Wiring and Setting Up

NOTE: The speaker images shown are for guidance only, and may not exactly represent your particular model. We recommend the use of insulated speaker wiring of between 12 and 18 AWG.

WARNING: The power to the amplifier must be turned OFF when making connections to the loudspeakers. All connections must be checked before turning the amplifiers.

- 1. Remove the wiring cover at the back of the speaker can to access the removeable Euro-type connector plug and socket.
- 2. The speakers come with a standard speaker cable clamp (Fig.1), and an optional gland for EN5424 applications (Fig.2).

(Please note that EN5424 does not cover the CVS 801S and CVS801SLZ subwoofers.)



3. Feed the cable through and attach to the Euro-type connector (Fig.3).

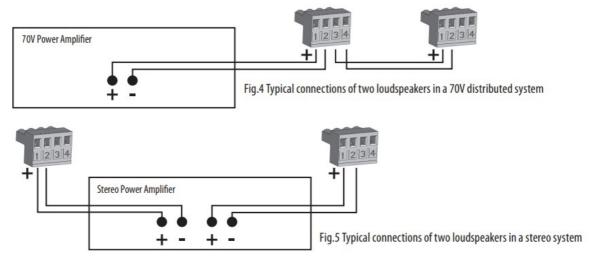


- 4. For connection to an amplifier, use Pins 1 and 2 (Figs.3, 4, 5):
 - Make sure that the wiring polarity is correct, where:
 - Pin 1 is positive
 - Pin 2 is negative

For connection to additional speakers in a distributed line (Fig.4)

Pins 3 and 4 are used to loop thru to additional speakers:

- Make sure that the wiring polarity is correct, where:
- Pin 3 is positive
- Pin 4 is negative



- 5. Tighten the cable clamp or cable gland and plug in the Euro-type connector to the loudspeaker. Replace the rear cover and securely tighten the supplied screws.
- 6. The speaker is fitted with a multi-tap transformer for use in distributed-line systems (Fig.6). There is also a LOZ tap. Select the required tap before pushing the grill in place. The average impedance of each speaker in this range is 8 Ohms in the LOZ setting.

CAUTION: THE SPEAKER IS SUPPLIED IN LOW IMPEDANCE MODE. NEVER CONNECT THE SPEAKER TO A 70/100 VOLT AMPLIFIER WHILE THE SPEAKER IS SET FOR LOW IMPEDANCE (LOZ).

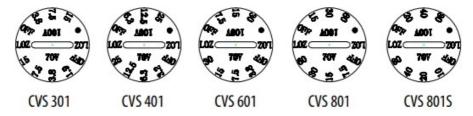
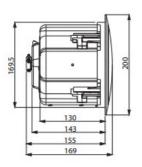
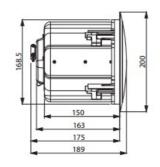


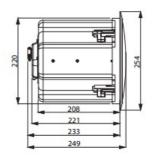
Fig.6 Speaker Tap Selector Switches

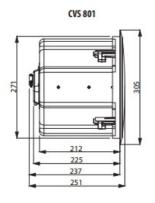
Dimensions (mm)

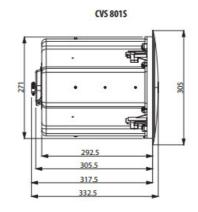


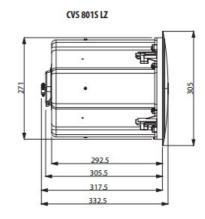












Specifications

	CVS 301	CVS 401	CVS 601	CVS 801	CVS 801S	CVS 801S LZ
Performance						
Frequency res ponse (+3dB, - 3 dB)	85 Hz-19 kH z	102 Hz-20 kH z	105 Hz-20 kH z	88 Hz-20 kHz	66 Hz-200 Hz	66 Hz-200 Hz
Frequency res ponse (-10 dB)	68 Hz-20 kH z	70 Hz-20 kHz	74 Hz-20 kHz	65 Hz-20 kHz	53 Hz-200 Hz	53 Hz-200 Hz
Sensitivity at 1 m/1W	85 dB	84 dB	90 dB	90 dB	92 dB	92 dB
Directivity fact or (Q) average d 1 kHz to 6 k Hz	4.1	5.4	7.3	10.2	N/A	N/A
Directivity inde x (DI) average d 1 kHz to 6 k Hz	6.1	7.3	8.6	10.1	N/A	N/A
Power handli ng (LoZ) *1 Average	20 W	30W	50 W	90 W	100 W	100 W
Programme	40 W	60 W	100 W	180 W	200 W	200 W

Peak	80 W	120 W	200 W	360 W	400 W	400 W
Recommended amplifier powe r	40 W @ 8 Ω	60 W @ 8 Ω	100 W @ 8 Ω	180 W @ 8 Ω	200 W @ 8 Ω	200 W @ 8 Ω
Nominal Impe dance (Switch to LoZ)	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω	8 Ω
Rated maximu m SPL (1 m, S witch to LoZ)	101 dB	102 dB	110 dB	113 dB	115 dB	115 dB
Average	98 dB	99 dB	107 dB	110 dB	112 dB	112 dB
Peak SPL	104 dB	105 dB	113 dB	116 dB	118 dB	118 dB
Transformer t aps 70 V	15 W/7.5 W/ 3.8 W/1.9 W	25 W/12.5 W/ 6.3 W/3.2 W	30 W/15 W/ 7.5 W/3.8 W	60 W/30 W/ 15 W/7.5 W	80 W/40 W/ 20 W/10 W	N/A
100 V	15 W/7.5 W/ 3.8 W	25 W/12.5 W/ 6.3 W	30 W/15 W/7. 5 W	60 W/30 W/1 5 W	80 W/40 W/2 0 W	N/A
Coverage angle	S					
500 Hz	180°	180°	180°	180°	N/A	N/A
1 kHz	Horizontal: 1 33°; Vertical: 130°	Horizontal: 12 5°; Vertical: 118°	Horizontal: 1 24°; Vertical: 124°	Horizontal: 106°; Vertical: 118°	N/A	N/A
2 kHz	Horizontal: 7 9°; Vertical: 82°	Horizontal: 82 °;Vertical: 81°	Horizontal: 8 0°; Vertical: 76°	Horizontal: 124°; Vertical: 107°	N/A	N/A
4 kHz	Horizontal: 1 55°; Vertical: 166°	Horizontal: 88 °; Vertical: 86°	Horizontal: 7 6°; Vertical: 92°	Horizontal: 63°; Vertical: 65°	N/A	N/A
Transducers Low frequency	76 mm (3") P P cone	100 mm (4") PP cone	165 mm (6.5") PP cone	200 mm (8") PP cone	200 mm (8") Paper cone	200 mm (8") Paper cone
High frequency	N/A	20 mm (0.79") coaxially mo unted	20 mm (0.79") coaxially mo unted	25 mm (1") c oaxially moun ted	N/A	N/A
Physical						
Enclosure	Blind mount (BM)	Blind mount (BM)	Blind mount (BM)	Blind mount (BM)	Blind mount (BM)	Blind mount (BM)
Back can	Anodized ste	Anodized ste el	Anodized ste	Anodized ste	Anodized steel	Anodized ste
Baffle	Reflex loade d UL 94V-0 r ated ABS	Reflex loaded UL 94V-0 rate d ABS	Reflex loaded UL 94V-0 rat ed ABS	Reflex loaded UL 94V-0 rate d ABS	Reflex loaded UL 94V-0 rate d ABS	Reflex loaded UL 94 V-0 rated AB S
Grille	Aluminum, p owder coated	Aluminum, po wder coated	Aluminum, powder coate d	Aluminum, po wder coated	Aluminum, po wder coated	Aluminum, p owder coated

Safety feature s	Rear enclosu re safety ring for load-beari ng bond	Rear enclosure saf ety ring for lo ad-bearing bo nd	Rear enclosu re safety ring for load-beari ng bond	Rear enclosure saf ety ring for lo ad-bearing bond	Rear enclosur e safety ring f or load-bearin g bond	Rear enclosu re safety ring for load-beari ng bond
Clamping desi gn	Security togg le clamp	Security toggl e clamp	Security toggl e clamp	Security toggl e clamp	Security toggl e clamp	Security toggle clamp
Connectors	Euroblock-st yle connector with screw te rminals (with input cover a nd cable gland supplie d)	Euroblock-styl e connector w ith screw ter minals (with i nput cover an d cable gland supplied)	Euroblock-sty le connector with screw te rminals (with i nput cover an d cable gland supplied)	Euroblock-sty le connector with screw ter minals (with i nput cover an d cable gland supplied)	Euroblock-styl e connector w ith screw term inals (with inp ut cover and c able gland su pplied)	Euroblock-sty le connector with screw te rminals (with i nput cover and cable gla nd supplied)
Dimensions	1			1		
Bezel diameter (grille max dia meter)	200 mm (8")	200 mm (8")	254 mm (10")	305 mm (12")	305 mm (12")	305 mm (12")
Rear face of b affle to rear of back can	130 mm (5.1 2")	150 mm (5.91	208 mm (8.1 9")	212 mm (8.35	292.50 mm (1 1.52")	292.50 mm (11.52")
Rear face of b affle to top of s afety loop	143 mm (5.6 3")	163 mm (6.42 ")	221 mm (8.7 0")	225 mm (8.86	305.5 mm (12 .03")	305.5 mm (1 2.03")
Rear face of b affle to rear of flex conduit	155 mm (6.1 0")	175 mm (6.89	233 mm (9.1 7")	237 mm (9.33	317.5 mm (12 .5")	317.5 mm (1 2.5")
Hole cutout di ameter	φ172 mm (6. 77")	φ172 mm (6. 77")	φ222 mm (8. 74")	φ273 mm (10 .75")	Φ273 mm (10 .75")	Φ273 mm (1 0.75")
Net weight	2.41 kg (5.30 lbs) ±10%	2.77 kg (6.09 lbs) ±10%	3.8 kg (8.36 l bs) ±10%	5.35 kg (11.7 7 lbs) ±10%	7.93 kg (17.4 5 lbs) ±10%	7 kg (15.4 lbs) ±10%
Included accessories	Metal grille, c able gland, fl ex conduit, C -ring, tile-brid ge kit, paint mask, cutout template	Metal grille, c able gland, fl ex conduit, C- ring, tile-bridg e kit, paint ma sk, cutout tem plate	Metal grille, c able gland, fl ex conduit, C -ring, tile-brid ge kit, paint mask, cutout template	Metal grille, c able gland, fl ex conduit, C-rin g, tile-bridge kit, paint mas k, cutout tem plate	Metal grille, c able gland, fle x conduit, C-ri ng, tile-bridge kit, paint mask, cutout t emplate	Metal grille, c able gland, fl ex conduit, C -ring, tile-brid ge kit, paint mask, cutout template
Optional acces sories (Not ev aluated by UL)	Mud ring 48" Tile rail	Mud ring 48" Tile rail	Mud ring 48" Tile rail	Mud ring 48" Tile rail	Mud ring 48" Tile rail	Mud ring 48" Tile rail
Packed quantit y	1 pair	1 pair	1 pair	1 pair	1 pair	1 pair

*1 Average power rating is under IEC-shaped pink noise with a 6dB crest factor for 100 hours continuously. **Other important information**

Important information

- 1. Register online. Please register your new Music Tribe equipment right after you purchase it by visiting musictribe.com. Registering your purchase using our simple online form helps us to process your repair claims more quickly and efficiently. Also, read the terms and conditions of our warranty, if applicable.
- 2. Malfunction. Should your Music Tribe Authorized Reseller not be located in your vicinity, you may contact the Music Tribe Authorized Fulfiller for your country listed under "Support" at <u>musictribe.com</u>. Should your country not be listed, please check if your problem can be dealt with by our "Online Support" which may also be found under "Support" at musictribe.com. Alternatively, please submit an online warranty claim at musictribe.com BEFORE returning the product.



Music Tribe Commercial MY Sdn. Bhd. 1-17-02, Suntech @ Penang Cybercity 1-12-01, Lintang Mayang Pasir 3 11950 Bayan Baru, Pulau Pinang, Malaysia CoC No.1438-CPR-0658 DoP No. CPR-CVSEN54-02

EN 54-24:2008

Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings CVS 301, CVS 301-BK, CVS 401, CVS 401-BK, CVS 601-BK, CVS 801-BK

Type A

Hereby, Music Tribe declares that this product is in compliance with

Directive 2011/65/EU and Amendment 2015/863/EU, Directive 2012/19/EU,

Regulation 519/2012 REACH SVHC and Directive 1907/2006/EC, and this passive product is not applicable to EMC Directive 2014/30/EU, LV Directive 2014/35/EU.

Full text of EU DoC is available at https://community.musictribe.com/

EU Representative: Music Tribe Brands DK A/S

Address: Gammel Strand 44, DK-1202 København K, Denmark

UK Representative: Music Tribe Brands UK Ltd.

Address: 8th Floor, 20 Farringdon Street London EC4A 4AB, United Kingdom



Documents / Resources



TANNOY CVS 301 In Ceiling Loudspeaker [pdf] User Guide

CVS 301 In Ceiling Loudspeaker, CVS 301, In Ceiling Loudspeaker, Ceiling Loudspeaker, Loudspeaker

References

- Music Tribe
- Music Tribe
- m Music Tribe
- Music Tribe
- Music Tribe
- User Manual

Manuals+, Privacy Policy