# TANNOY.





#### **Product Description**

The Tannoy CVS4 is a full bandwidth ceiling speaker system comprising a 100mm (4.00") mid bass driver with a coaxially mounted 19mm (0.75") high frequency section mounted in a vented, injection moulded, paintable front baffle manufactured from UV/weather resistant UL94V-0 ABS material.

The mineral loaded polypropylene cone material and nitrile rubber surround enhance durability and long-term reliability. This compact unit is specifically designed for all applications requiring the combination of excellent sonic quality for music and speech reinforcement and exceptional reliability.

The CVS4 is equipped with a low insertion loss 30W line transformer easily configurable to the following settings via front baffle mounted rotary tapping switch:

### 70V systems: 30W / 15W / 7.5W / 3.75W / OFF & low Impedance operation 100V systems: 30W / 15W / 7.5W / OFF & low Impedance operation

The CVS4 is supplied with an integral zinc-plated steel back can, with recessed termination box, to satisfy the vast majority of installation application requirements. The removable locking connector has screw terminals for secure wire termination and "loop through" facility. Strain relief is provided by a clamping mechanism for use with plenum rated cable or conduit. Security toggle clamps make for quick and easy installation, while two tile support rails and one C-ring are also included in the package. A plaster (mud) ring is available as an optional accessory.

#### Features

- Coaxially mounted 100mm (4.00") mineral loaded woofer with rubber surround and 19mm (0.75") soft dome diffraction loaded tweeter.
- High power & high sensitivity with extended frequency response and very low distortion
- Wide, controlled constant directivity dispertion for optimum coverage.
- UV/weather resistant UL94V-0 ABS front baffle
- · Easily accessible tapping switch on front baffle.
- Low insertion loss 30W line transformer
- · Ferrofluid cooled neodymium HF
- Packaged with tile rails and C-ring for quick & easy installation and simple stocking logistics

#### Applications

- · Multi-zone foreground music & paging systems
- · Boardrooms & offices
- Business music systems
- · Airports, convention centres, hotels
- · Reception / waiting rooms
- · Houses of worship
- · Retail outlets / shopping malls
- · Lounges / bars
- Cruise ships
- Courtrooms
- JL

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### **TECHNICAL SPECIFICATIONS**

System	CVS4	
Frequency Response (-3dB) <sup>(1)</sup>	85Hz - 19kHz	
Frequency Range (-10dB) <sup>(1)</sup>	77Hz - 22kHz	
System Sensitivity (1W @1m) <sup>(2)</sup>	87dB (1W = 2.45	5V for 6 Ohms)
Nominal Coverage Angle	90 Degrees Cor	nical
Coverage Angle (1kHz to 6kHz)	102 Degrees Co	onical
Directivity Factor (Q)	5.6 averaged 1kHz to 6kHz	
Directivity Index (DI)	7.1 averaged 1kHz to 6kHz	
Rated Maximum SPL	103dB (average) 109dB (peak)	
Power Handling		
Average	40W	
Programme	80W	
Peak	160W	
Recommended Amplifier Power	80W @ 6 Ohms	i
Nominal Impedance	6 Ohms	
Transformer Taps (via front rotary switch)		
70V	30W / 15W / 7.5W / 3.75 / OFF & Low Impedance operation	
100V	30W / 15W / 7.5W / OFF & Low Impedance operation	
Distortion		
10% Full Power	2nd Harmonic	3rd Harmonic
	0.231%	0.112%
250Hz	0.0000/	0.253%
250Hz 1kHz	0.229%	0120070
	0.229% 0.163%	0.025%
1kHz 10kHz <b>1% Full Power</b>	0.163% 2nd Harmonic	0.025% 3rd Harmonic
1kHz 10kHz <b>1% Full Power</b> 250Hz	0.163% 2nd Harmonic 0.99%	0.025% 3rd Harmonic 0.169%
1kHz 10kHz <b>1% Full Power</b> 250Hz 1kHz	0.163% 2nd Harmonic 0.99% 0.816%	0.025% 3rd Harmonic 0.169% 0.027%
1kHz 10kHz <b>1% Full Power</b> 250Hz	0.163% 2nd Harmonic 0.99%	0.025% 3rd Harmonic 0.169%

Transducers		
Low Frequency	100mm (4.00") mineral loaded cone	
High Frequency	19mm (0.75") soft dome	
Physical		
System Type	Ceiling speaker with integral (blind mount) Back can	
Enclosure		
Backcan	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	
Min / Max Clamping Range	9.00mm (0.35") / 34.00mm (1.34")	
Recommended Clamp Torque	1.5Nm	
Cable Entry Options	Cable clamp & squeeze connector for conduit up to 22mm	
Connectors	Removable locking connector with screw terminals with "loop through" facility	
Safety Agency Rating	UL-1480, UL-2043, CE	
CVS4 Hole Cutout Diameter	180mm (7.09")	
Dimentions Bezel Diameter	213mm (8.39")	
Front of Ceiling to Rear of Backcan	202.5mm (7.97")	
Front of Ceiling to		
top of safety loop	214.9mm (8.46")	
Net Weight (ea)	3.8kg (8.38 lbs)	
Included Accessories	C Ring, tile bridge, paint mask, cutout template, grille	
Optional Accessories	Plaster (Mud) Ring	

Notes

(1) Average over stated bandwidth. Measured at 1 metre on axis.(2) Unweighted pink noise input, measured at 1 metre in an anechoic chamber

(2) onweighted pink holse input, measured at 1 metre in an anechoic chamber

A full range of measurements, performance data, and  $\mathsf{Ease}^{\mathsf{TM}}$  Data can be downloaded from www.tannoy.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, which Tannoy reserves the right to alter without prior

notice. Please verify the latest specifications when dealing with critical applications.

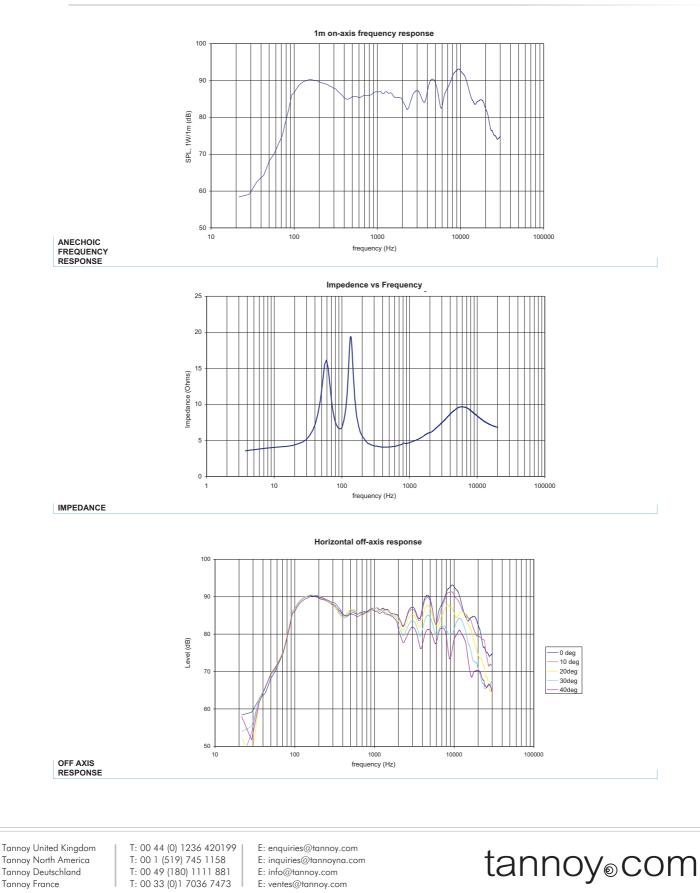
#### **Ordering Information**

PART NUMBER 8001 4230 8001 4180 MODEL NAME CVS4 CVS4 Plaster (Mud) Ring COLOUR WHITE / PAINTABLE ZINC PLATED STEEL PACKED QTY 2 10 PACKED WEIGHT 9.6kg (21.16 lbs) 6.25kg (13.78 lbs)

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### PERFORMANCE MEASUREMENTS

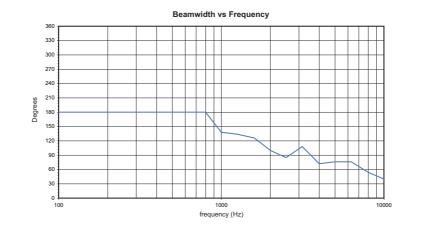


CVS 4 data file // issue 1.08 // 06.05.09

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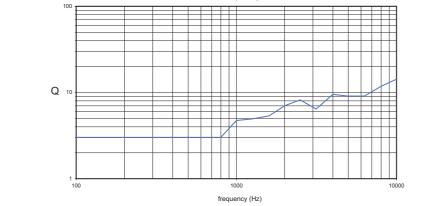
### PERFORMANCE MEASUREMENTS

CVS 4



BEAMWIDTH





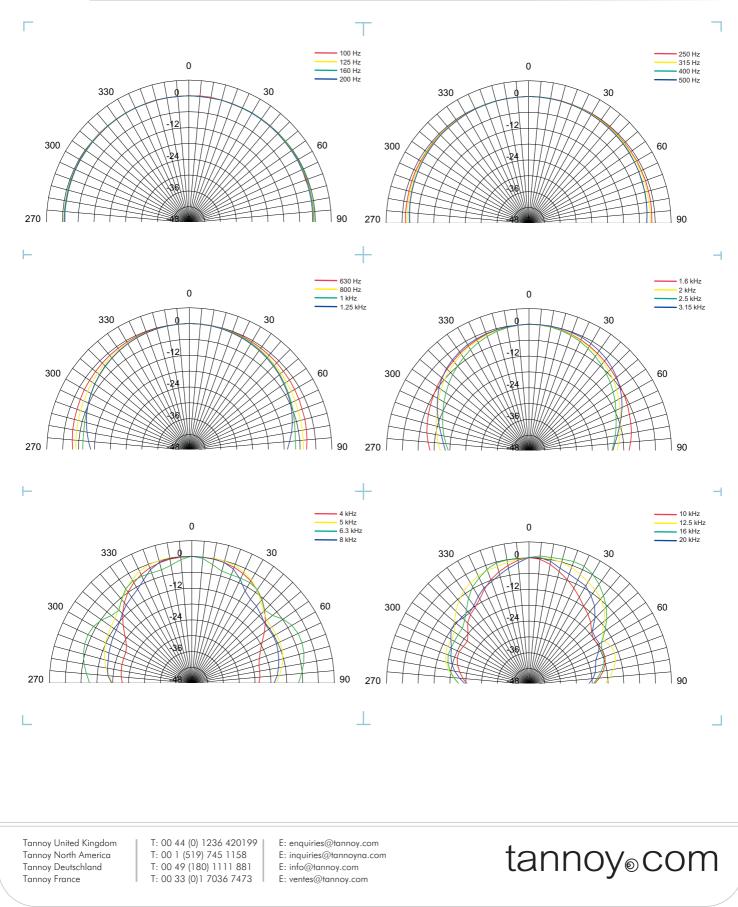
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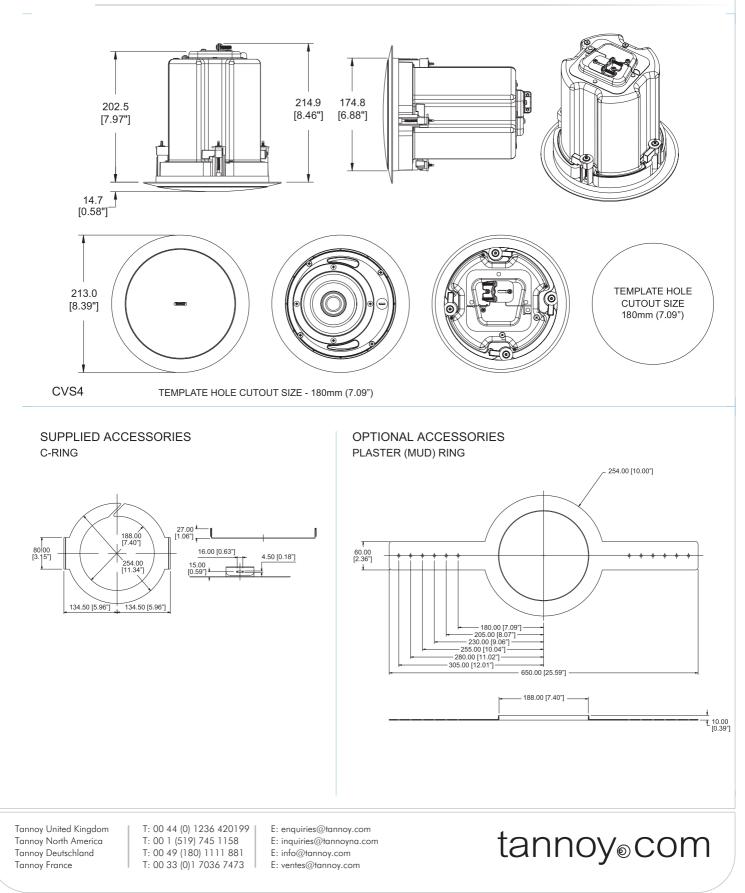
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**PERFORMANCE MEASUREMENTS** POLAR PLOTS (1/3 OCTAVE)



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### **DIMENSIONAL SKETCHES**



#### Architectural specifications

CVS<sub>4</sub>

The Ceiling Speaker System shall consist of a 100mm (4.00") mineral loaded mid bass driver with coaxially mounted 19mm (0.75") high frequency unit and passive frequency dividing network mounted in a vented, injection moulded, paintable front baffle in UL94V-0 ABS material.

The backcan shall be constructed of zinc plated steel. A recessed termination box shall be integrated with the backcan, a removable locking connector with screw terminals for secure wire termination with "loop through" facility shall be provided. Strain relief will be provided by a clamping mechanism for use with plenum rated cable or conduit. A safety ring is located on the rear of the backcan for a load bearing safety bond.

Performance of the ceiling speaker shall meet or exceed the following criteria: The system shall have a conical coverage pattern of 102 degrees (1kHz to 6kHz). Frequency response measured on axis shall be 77Hz -22kHz (-10dB from rated sensitivity, measured in an IEC baffle in an anechoic chamber) with no equalization. Sensitivity shall be 87dB (1W @ 1m). Long term power handling capacity as defined in EIA-426B test shall be 40W, recommended amplifier power 80W. The nominal system impedance shall be 6 Ohms (in low impedance setting).

The ceiling speaker shall be equipped with a 30W high performance line transformer for use in 70.7 or 100 Volt distributed audio systems with 30, 15, 7.5, 3.75 Watt taps available. An easily accessible rotary switch located on the front baffle shall be available for selecting transformer and low impedance settings. A weather resistant perforated steel grille covers the transducer and switch.

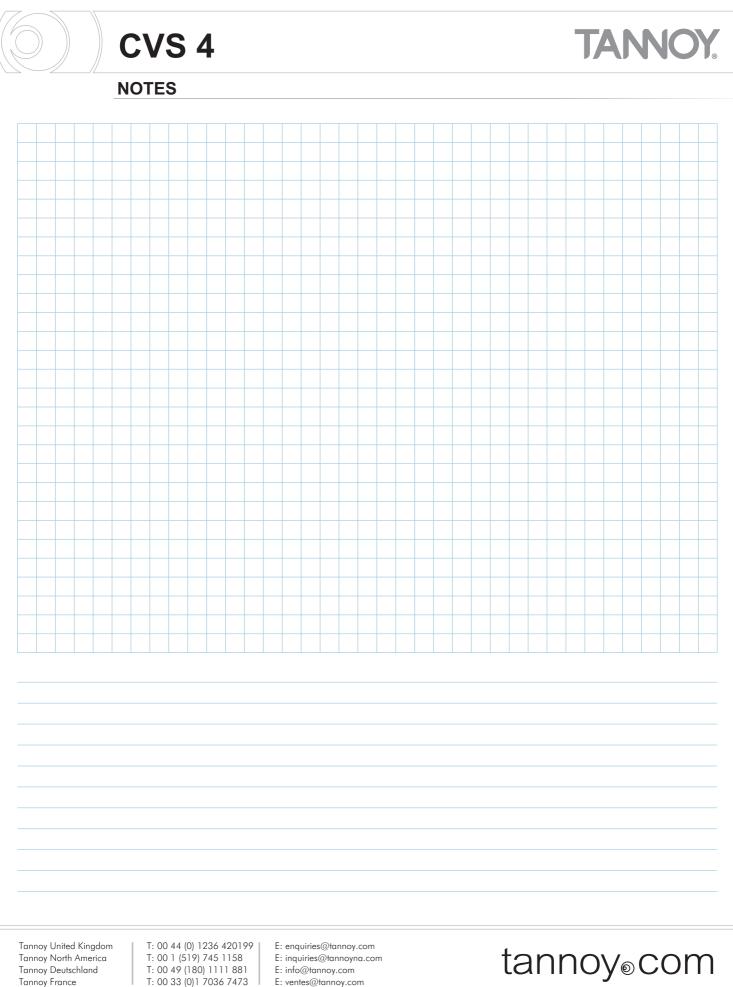
Two support rails and one C-Ring shall be included with the ceiling monitor system. The front face diameter shall not exceed 213mm (8.39"), overall depth from the front of the ceiling to the top of the safety loop shall not exceed 214.90mm (8.46"). The template cut out diameter shall be 180mm (7.09").

#### The Ceiling Monitor System shall be the ..... CVS4.

\*70 Volt only

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