



Product description

VLS 30 is a passive column array loudspeaker with a complement of 14 x 3.5" (89 mm) LF transducers mounted in vertical array with an assembly of densely spaced 16 x 1" (25 mm) HF transducers mounted co-axially over a section of the LF (in an intuitively engineered, super-imposed chassis).

VLS Series is the first Tannoy product to incorporate FAST™ (Focussed Asymmetrical Shaping Technology), delivering unique acoustic performance benefits including asymmetrical vertical dispersion, gently shaping the coverage towards the lower quadrant of the vertical axis.

VLS 30 packages this performance in a slender and narrow profile, aesthetically refined, powder-coated aluminium chassis with curved stainless steel grille; ensuring a sleek aesthetic and ultra-discrete appearance. Like the other 2 models in the range, VLS 30 can be ordered in either black or white as standard, with custom RAL colours available.

The device is IP65 rated for dust and water ingress, salt spray and UV resistant and subject to rigorous high/low operational temperature and humidity testing – making VLS 30 suitable for both indoor and outdoor use. Mounting is made easy via supplied flying and mounting brackets.

Specification and design is aided by the use of Ease Focus v2.0 software, a generic, intuitive and easy to use three-dimensional acoustic simulation software. The software and relevant tutorials are free to download from the Tannoy website.

VLS 30 features an integrated low insertion loss line transformer, configurable to various tapings via rotary switch, for use in high voltage distributed audio systems (100 V / 70 V).

Features

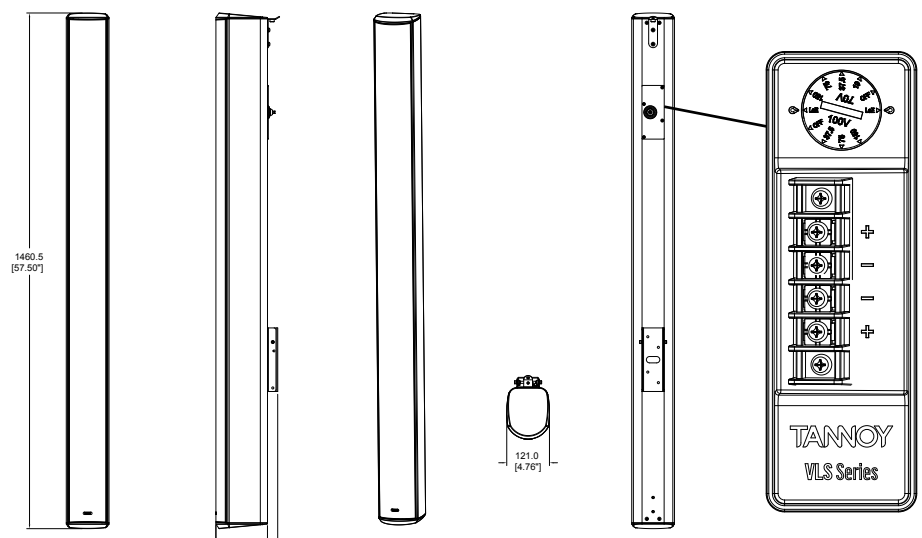
- 14 x 3.5" (89 mm) LF driver array
- FAST (Focussed Asymmetrical Shaping Technology) delivers improved intelligibility in typical listening plane and greater flexibility in mounting location
- Asymmetrical vertical dispersion: +3 degrees / -11 degrees (-4 degrees bias)
- Highly consistent coverage pattern
- Peak output 126 dB
- Sleek architecturally-sensitive profile
- Easy to install, mounting brackets included
- Easily accessible transformer tapping switch
- IP65 rated for water and dust ingress protection
- Available in black or white
- Integrated low insertion loss transformer for 100 V / 70 V operation

Applications

- Houses of Worship
- Transportation hubs
- Retail spaces and concourses
- Conference rooms
- Lecture theatres
- Auditoria
- Gymnasiums
- Convention centers
- Museums
- Stadium concourses
- Multipurpose venues
- Challenging acoustic spaces
- Architecturally sensitive spaces

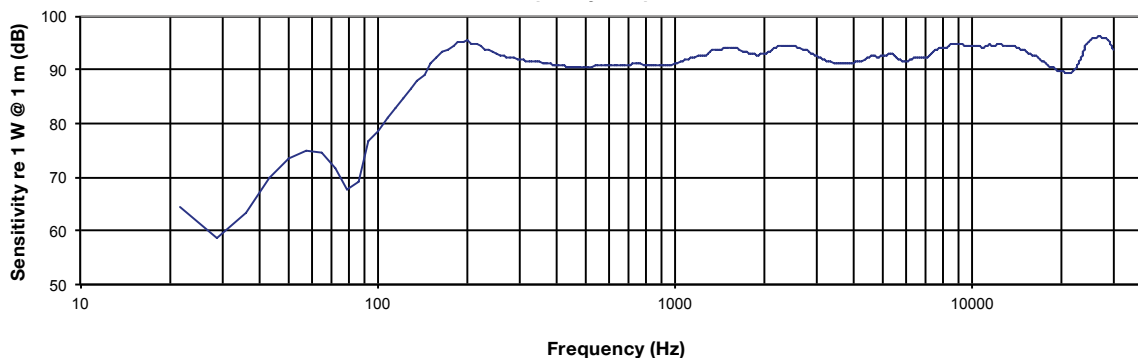
Physical data

Driver complement:	14 x 3.5" (89 mm) woofers, 16 x 1" (25 mm) metal dome tweeters
Dimensions HxWxD:	1460.5 x 121 x 146 mm, (57.5 x 4.8 x 5.7")
Weight:	20 kg (44 lbs)
Enclosure:	Aluminium extrusion
Finish:	Paint Ral 9003 (white) & Ral 9004 (black)
Protective Grille:	Painted stainless steel



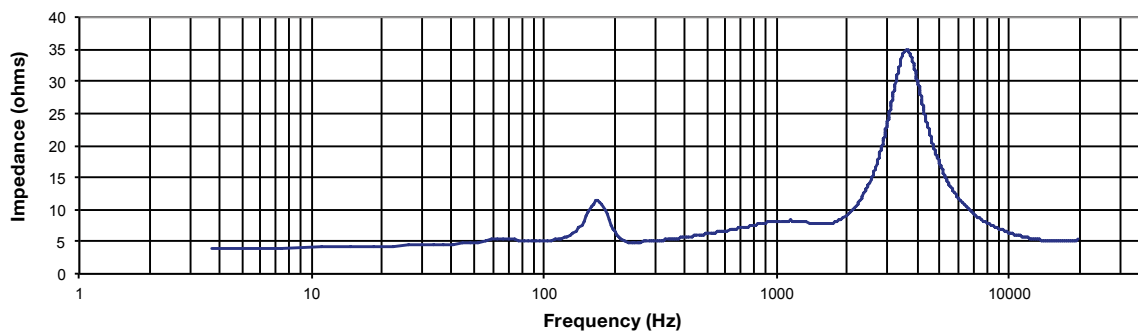
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1 m on-axis frequency response



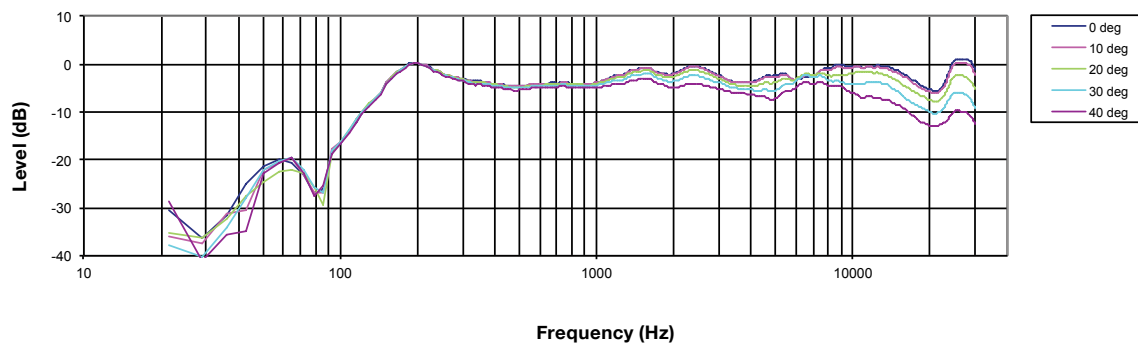
Anechoic frequency response

Impedance vs frequency



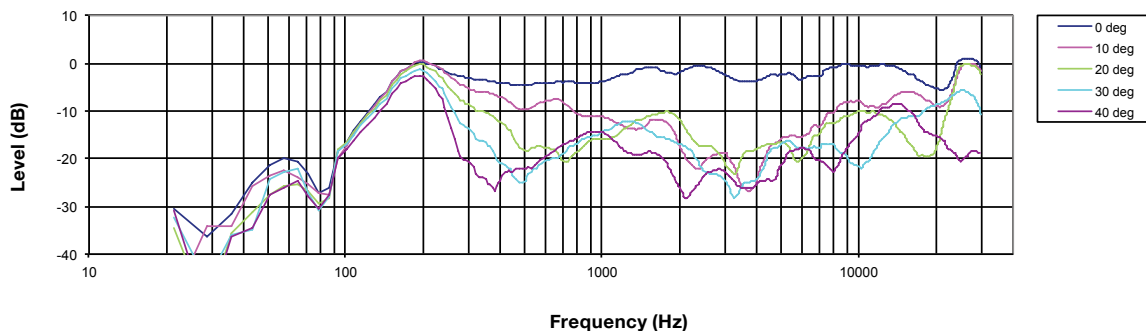
Impedance

Horizontal off-axis frequency response



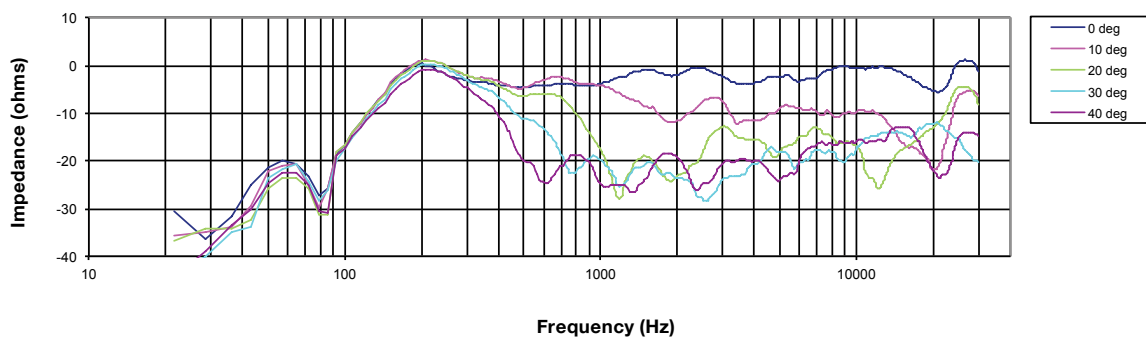
Off-axis response

Upper vertical off-axis frequency response



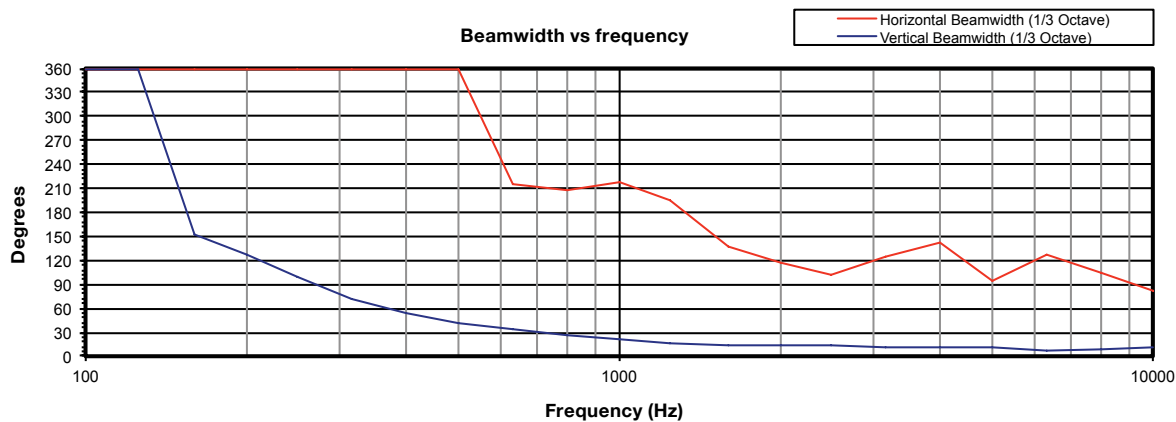
Off-axis response

Lower vertical off-axis frequency response

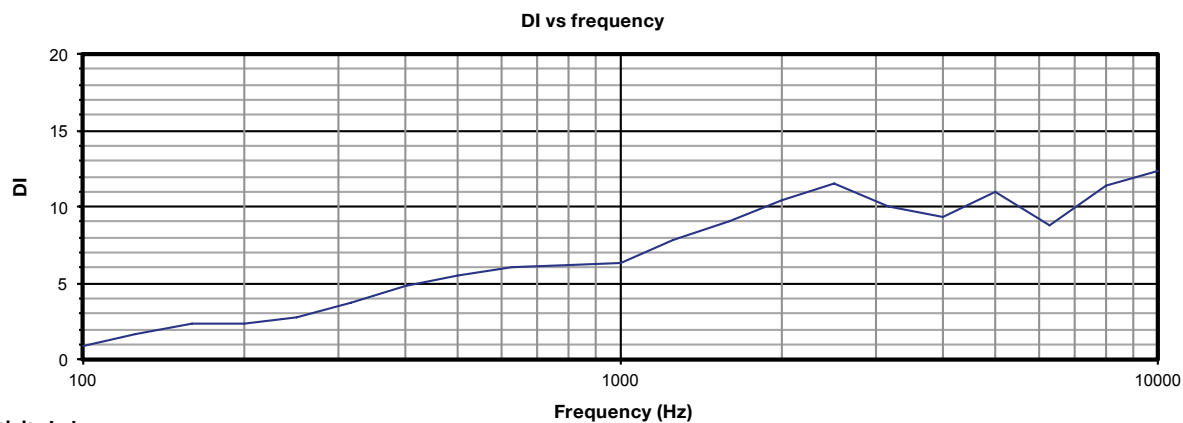


Off-axis response

Beamwidth vs frequency



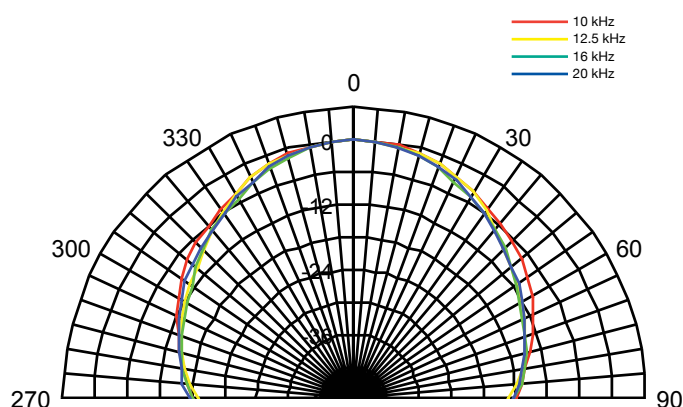
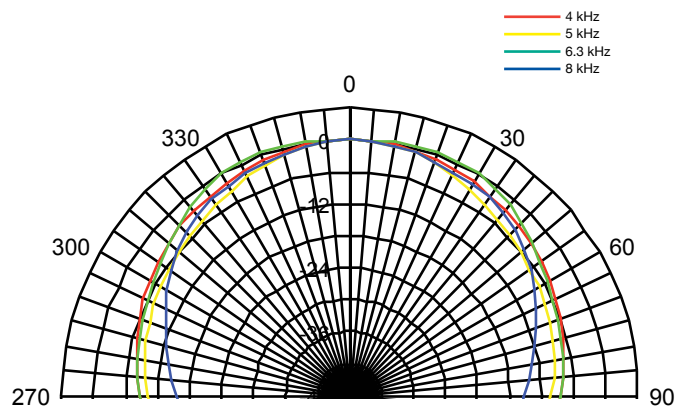
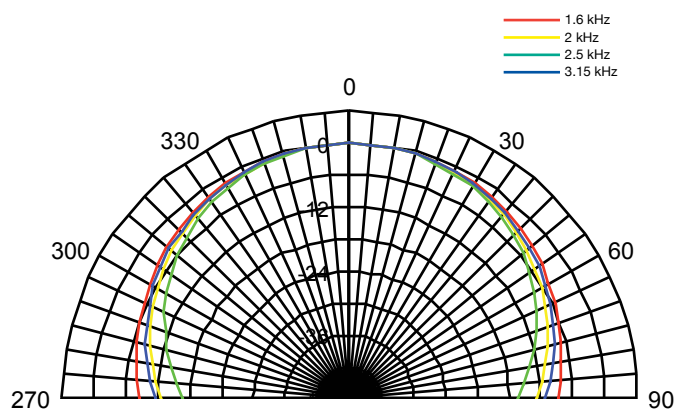
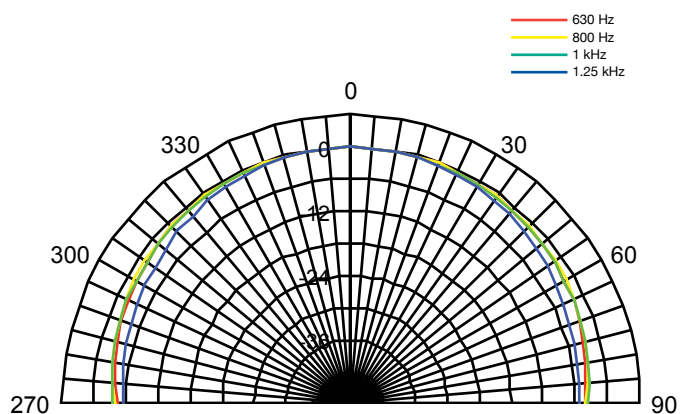
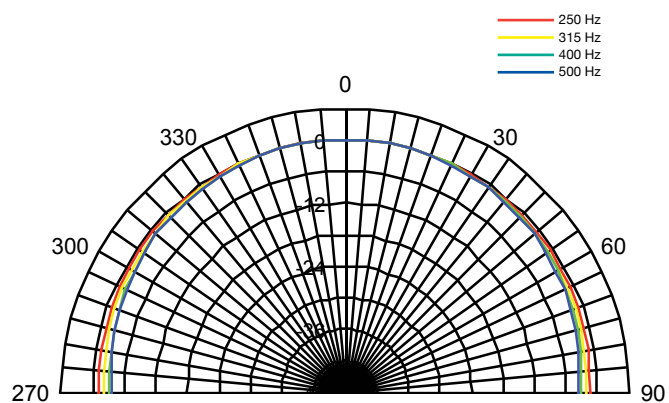
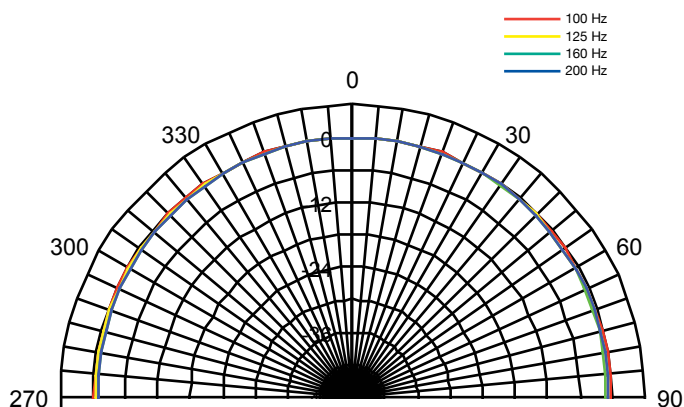
Beamwidth



Technical Data Sheet

Polar plots (1/3 octave) horizontal

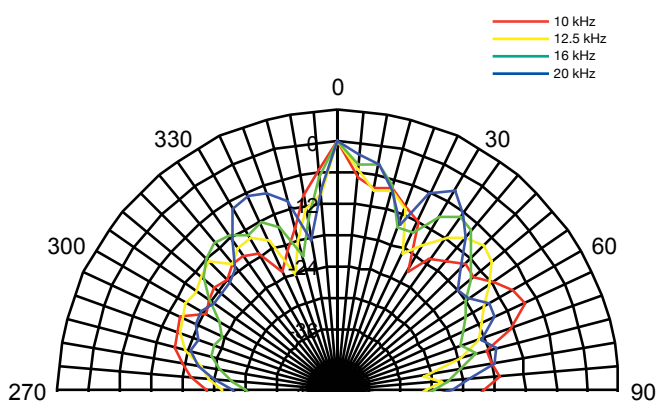
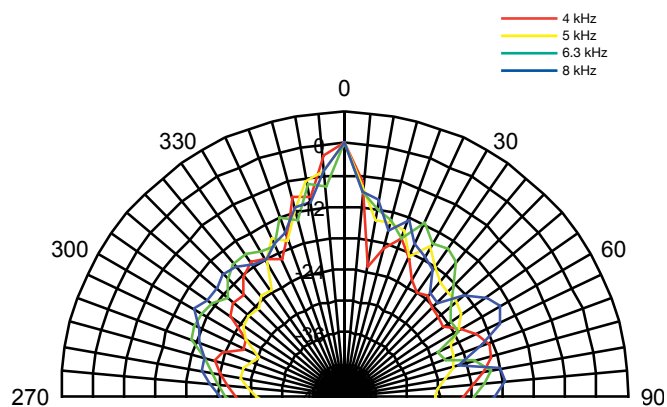
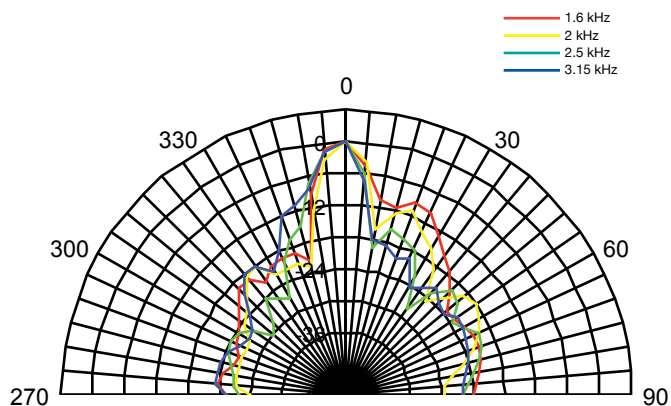
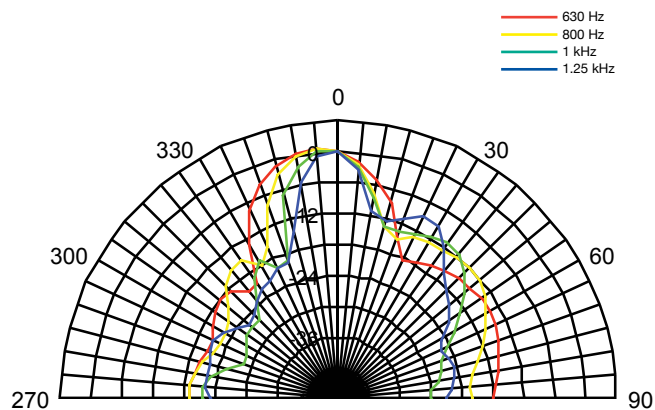
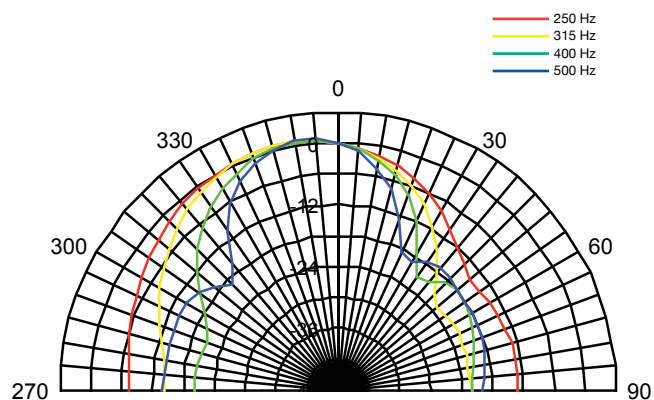
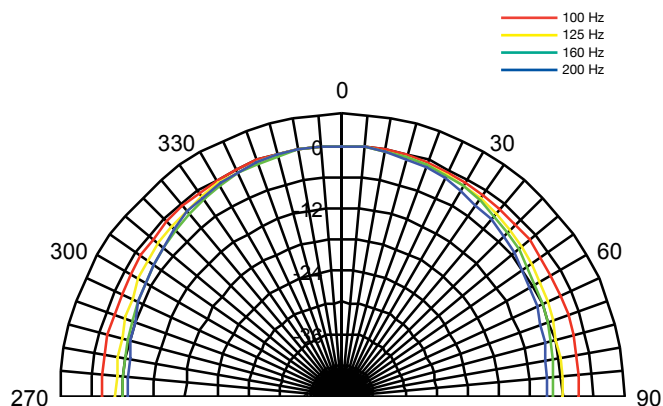
VLS 30



Technical Data Sheet

Polar plots (1/3 octave) vertical

VLS 30



Performance

Frequency response (-3 dB) ⁽¹⁾	120 Hz - 22 kHz
Frequency range (-10 dB) ⁽¹⁾	90 Hz - 35 kHz
System sensitivity (1 W @ 1 m) ⁽²⁾	94 dB
Horizontal dispersion (-6 dB)	130 degrees horizontal
Vertical dispersion (-6 dB)	+ 3 degrees / - 11 degrees (-4 degree bias)
Driver complement	14 x 3.5" (89 mm) woofers 16 x 1" (25 mm) metal dome tweeters
Crossover	Passive network utilising Focussed Asymmetrical Shaping Technology (FAST) Crossover point 2.5 kHz
Directivity factor (Q)	15 averaged 1 kHz to 10 kHz
Directivity Index (DI)	11.8 averaged 1 kHz to 10 kHz
Power Handling ⁽³⁾	
Average	400 W
Programme	800 W
Peak	1600 W
Recommended Amplifier Power	1200 W @ 4 ohms
Nominal Impedance (Lo Z)	6 ohms
Rated maximum SPL (1 M, Lo Z) ⁽²⁾	
Average	120 dB
Peak	126 dB
Transformer Taps (via front rotary switch)	
70 V	150 W / 75 W / 37.5 W / 19 W / 9.5 W / 5 W OFF & low impedance operation
100 V	150 W / 75 W / 37.5 W / 19 W / 9.5 W OFF & low impedance operation

Distortion

10% full power	Harmonics		
		2nd	3rd
	250 Hz	1.60%	0.91%
	1 kHz	0.14%	0.15%
	10 kHz	0.63%	0.26%
1% full power			
	250 Hz	0.57%	0.43%
	1 kHz	0.06%	0.06%
	10 kHz	0.21%	0.14%

Physical

Enclosure	Aluminium extrusion
Finish	Paint RAL 9003 (white) & RAL 9004 (black) Custom RAL colours available (additional cost and lead-time)
Connectors	Barrier strip
Fittings	Flying bracket, wall mount bracket, input panel cover plate and gland
Dimensions (H x W x D)	1460.5 x 121 x 146 mm (57.5 x 4.8 x 5.7")
Net Weight (ea)	20 kg (44 lbs)
Packed Quantity	1

Ordering Information

Part Number	Colour
8001 7020	Black
8001 7021	White



This product is environmentally protected to IP65 rated standard.

Notes:

1. Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
2. Unweighted pink noise input, measured at 1 metre on axis
3. Long term power handling capacity as defined in EIA - 426B test

A full range of measurements, performance data, CLF and Ease™ Data for VLS 30 can be downloaded from www.tannoypro.com.

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods may introduce variations in actual performance; however, actual performance always will 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.

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