Technical Data Sheet

DVS 4 / DVS 4t





Features

- 100 mm (4.00") coaxial transducer for high performance and durability
- 110 degree controlled conical dispersion for optimum coverage
- Exceptional performance to value ratio
- Weather resistant rated IP64 to EN60529 (IEC529)
- Stylish, durable ABS enclosure available in black or white
- Phase coherent design for superior vocal articulation and music reproduction
- No crossover required, ensuring better phase, impedance and sensitivity response and increased durability
- Painted steel yoke bracket supplied
- Low insertion loss 30 W transformer for use in distributed audio installations (DVS 4t only)

Applications

- Indoor and outdoor commercial, professional and residential installations
- High level stereo or monaural background or foreground music and speech paging systems
- Theme parks
- Theme bars
- Reception / waiting rooms
- Airports, convention centres and hotels
- Business music systems
- Boardrooms and offices
- Retail outlets and shopping malls
- Restaurants and cafes
- Corporate audio visual
- Residential developements

Product description

Designed for a wide variety of discrete small scale sound reinforcement applications, the Tannoy DVS 4 is an ultra compact surface mount loudspeaker of exceptional value and acoustic performance. A full bandwidth loudspeaker designed for commercial, professional and residential applications where environmental durability and high quality sound reproduction are required. For both indoor and limited outdoor use, these speakers are ideally suited to stereo or monaural background or foreground music systems in such applications as diverse as theme park attractions, retail premises, restaurants and cafes, hotel lobbies and bars, corporate audio visual, residential developments and houses of worship.

The point-source design comprises a 100 mm (4.00") mid bass driver with a coaxially mounted 19 mm (0.75") high frequency section mounted in a stylish injection moulded surface-mount enclosure manufactured from ABS material. The new device is certified for water and dust ingress protection to IP64 standard and is currently pending UL Listed status (UL-1480) making it a perfectly capable performer in challenging interior areas such as swimming pools, saunas or work areas where unusually high levels of dust or moisture may be present, as well as most outdoor applications where extreme environmental or harsh weather conditions are not a typical concern.

The highly durable and scuff resistant, high impact ABS enclosure is available in black or white painted finish and comes with an aluminium grille designed with optimum aesthetic sensitivity in mind. A steel mounting bracket is included, which fits easily to the device via finger-tightened plastic screw-nut on the top and bottom of the enclosure, making installation quick and hassle-free.Thanks to the point-source driver design, the DVS 4 can be mounted vertically or horizontally without compromising the dispersion and coverage control.

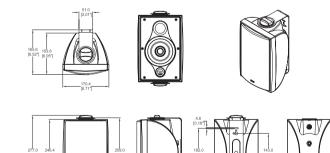
Transformer version - the DVS 4t

The DVS 4t model option is equipped with an internally mounted low insertion loss line transformer for 70 V or 100 V distributed sound applications. Wattage taps are configurable to the following settings via a rotary tapping switch, which is located on the back panel.

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

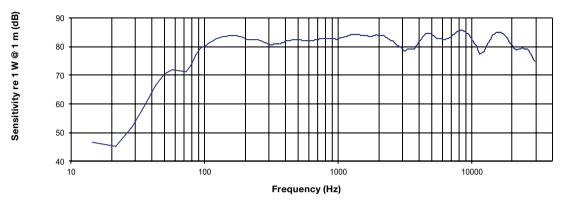
Physical data

Dimensions HxWxD: Net Weight: Net Weight (DVS 4t): Finish: 277.0 mm x 170.4 mm x 165.6 mm, (10.91" x 6.71" x 6.52") 1.8 kg (3.96 lbs) 2.3 kg (5.07 lbs) Black or white aluminium



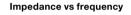


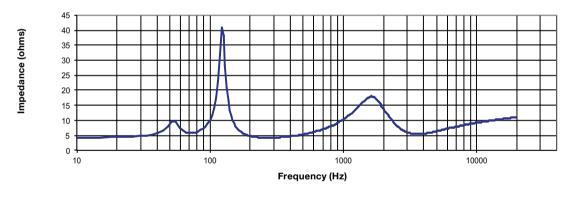
DVS 4 / DVS 4t



1 m on-axis Frequency Response

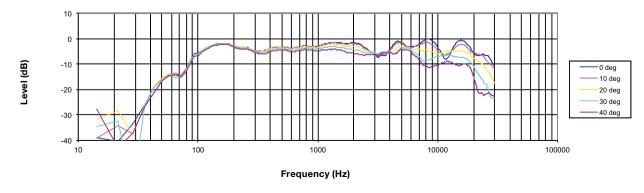
Anechoic Frequency Response





Impedance

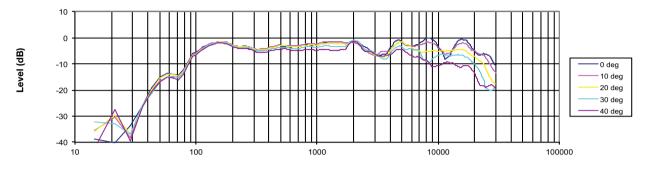
Off-axis Frequency Response



Technical Data Sheet Performance measurements

DVS 4 / DVS 4t

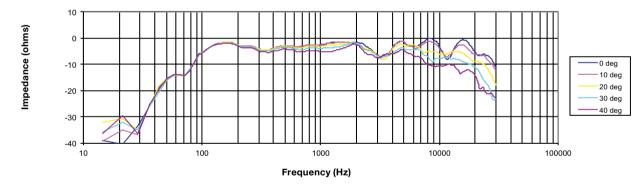
Upper Vertical Off-axis Frequency Response



Frequency (Hz)

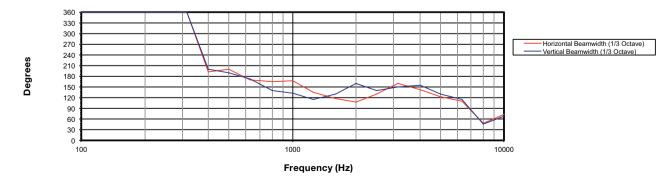
Upper Vertical Off-axis Response

Lower Vertical Off-axis Frequency Response



Lower Vertical Off-axis Frequency Response

Beamwidth vs Frequency

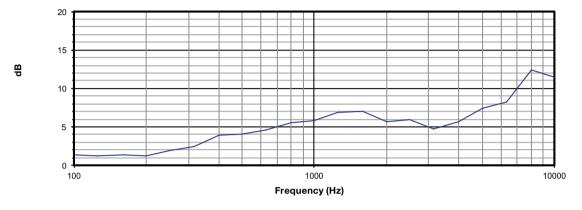


Beamwidth

Technical Data Sheet Performance measurements

DVS 4 / DVS 4t

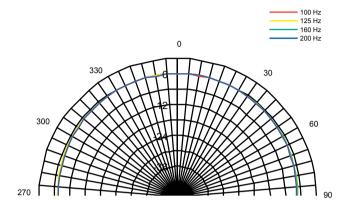
DI vs Frequency

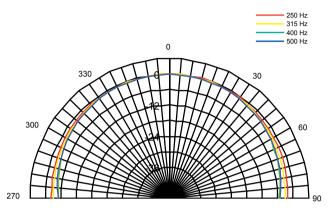


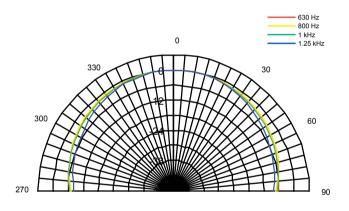
Directivity Index

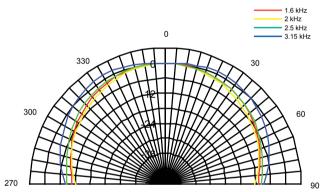
Technical Data Sheet Polar plots (1/3 octave) Horizontal

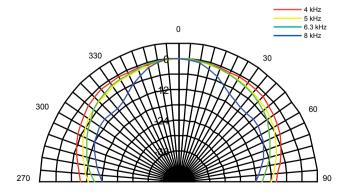
DVS 4 / DVS 4t

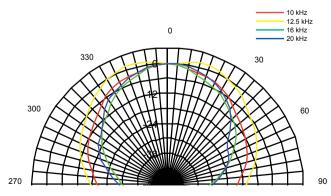






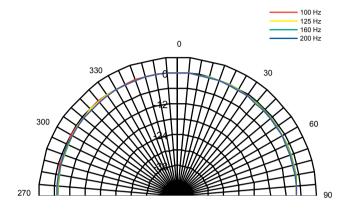


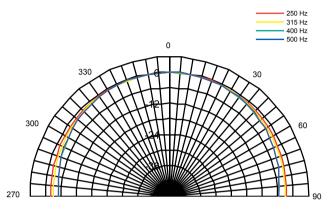


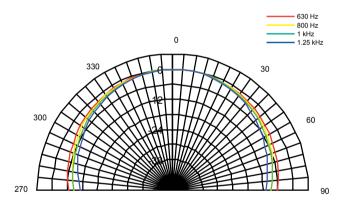


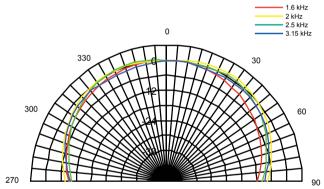
Technical Data Sheet Polar plots (1/3 octave) Vertical

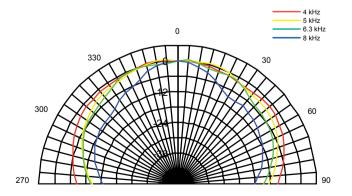
DVS 4 / DVS 4t

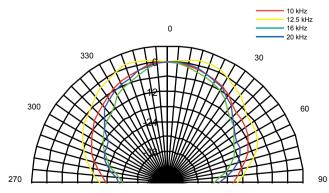












Technical Data Sheet Architectural specifications

DVS 4 / DVS 4t

DVS 4

The weather resistant, surface mount speaker system shall consist of a 100 mm (4.00") mineral loaded mid bass driver with coaxially mounted 19 mm (0.75") high frequency unit and passive frequency dividing network optimally tuned vented, injection moulded high impact polystyrene (HIPS) enclosure IP64 to EN60529. The protective grille shall be constructed from aluminium with a weather resistant coating.

Performance of the DVS 4 surface mount speaker shall meet or exceed the following criteria: The system shall have a conical coverage pattern of 110 degrees (-6 dB). Frequency response measured on axis shall be 75 Hz - 20 kHz (-10 dB) from rated sensitivity, average over stated bandwidth. Measured 1 metre in an anechoic chamber) with no equalisation. Sensitivity shall be 84 dB (1 W = 2.45 V for 6 Ohms). Long term power handling capacity as defined in EIA-426B test shall be 40 W, recommended amplifier power 80 W. The nominal system impedance shall be 6 Ohms (in low impedance setting).

A removable Euroblock type locking connector with screw terminals to secure wire termination with "loop through" facility shall be provided. A yoke mounting bracket shall be included with the speaker system.

The dimensions shall not exceed (H) 277.0 x (W) 170.4 x (D) 165.6mm (10.91 x 6.71 x 6.52")

The surface mount system shall be the DVS 4

DVS 4t

The weather resistant, surface mount speaker system shall consist of a 100 mm (4.00") mineral loaded mid bass driver with coaxially mounted 19 mm (0.75") high frequency unit and passive frequency dividing network optimally tuned vented, injection moulded high impact polystyrene (HIPS) enclosure IP64 to EN60529. The protective grille shall be constructed from with a weather resistant coating.

Performance of the DVS 4t surface mount speaker shall meet or exceed the following criteria: The system shall have a conical coverage pattern of 110 degrees (-6 dB). Frequency response measured on axis shall be 75 Hz - 20 kHz (-10 dB) from rated sensitivity, average over stated bandwidth. Measured 1 metre in an anechoic chamber) with no equalisation. Sensitivity shall be 84 dB (1 W = 2.45 V for 6 Ohms). Long term power handling capacity as defined in EIA-426B test shall be 40 W, recommended amplifier power 80 W. The nominal system impedance shall be 6 Ohms (in low impedance setting).

The DVS 4t speaker system shall be equipped with a 30 W high performance line transformer for use with 70.7 or 100 Volt distributed audio systems with 30 W / 15 W / 7.5 W / 3.75 W* Watt, OFF and low impedance settings.

A removable Euroblock type locking connector with screw terminals to secure wire termination with "loop through" facility shall be provided. A yoke mounting bracket shall be included with the speaker system.

The dimensions shall not exceed (H) 277.0 x (W) 170.4 x (D) 165.6 mm (10.91 x 6.71 x 6.52")

The surface mount system shall be the DVS 4t

*70 Volt only

Technical Data Sheet Specifications

DVS 4 / DVS 4t

Performance		
System	DVS 4	
Frequency response (-3 dB) (1)	75 Hz - 20 kHz	
Frequency range (-10 dB) ⁽¹⁾	60 Hz - 30 kHz	
Rated sensitivity (1W @ 1m) (2)	84 dB	
Dispersion (-6 dB)	110 degrees conical	
Directivity factor (Q)	6.5 averaged 1 kHz to 10 kHz	
Directivity Index (DI)	5.3 averaged 1 kHz to 10 kHz	
Power Handling		
Average	40 W	
Programme	80 W	
Peak	160 W	
Recommended Amplifier Power	80 W @ 6 ohms	
Nominal Impedance (Lo, Z)	6 ohms	
Rated maximum SPL (1 m, Lo Z) (2)		
Average	100 dB	
Peak	106 dB	
Crossover Point	3.9 kHz - 2nd order LF, 2nd order HF	

10% full power (4.9 V)		Harmonics		
		2nd	3rd	
	250 Hz	0.738%	0.772%	
	1 kHz	0.145%	0.234%	
	10 kHz	0.070%	0.070%	
1% full power (1.55 V)				
	250 Hz	0.320%	0.311%	
	1 kHz	0.078%	0.174%	
	10 kHz	0.087%	0.087%	

19 mm (0.75")

Aluminium, Painted

1.8 kg (3.96 lbs)

5.4 kg (11.9 lbs)

Yoke bracket

2

"loop through" facility Rotary switch

277.0 x 170.4 x 165.6 mm (10.91" x 6.71" x 6.52")

ABS

100 mm (4.00") mineral loaded cone material

Euroblock type removable locking connector with screw terminals with

Transducers

Low Frequency **High Frequency**

Physical Enclosure

Grille Connectors Transformer Setting Dimensions (H x W x D) Net Weight (ea) Shipped weight

Supplied Accessories Packed Quantity

Transformer Version (specifications as above except)

Transformer Taps (via front rotary switch)	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) /
	OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) /
	OFF & low impedance operation
Maximum wire gauge for connector	2.5 mm ² CSA (AWG12)
Safety Agency Ratings	UL-1480, CE
Net Weight (ea)	2.3 kg (5.07 lbs)
Shipped Weight	6.2 kg (13.66 lbs)

Ordering Information Part Number	Colour
8001 6710 DVS 4	Black
8001 6711 DVS 4	White
8001 6720 DVS 4t	Black
8001 6721 DVS 4t	White



Notes:

- 1. Average over stated bandwidth. Measured at 1 metre on axis in an Anechoic Chamber
- 2 Unweighted pink noise input, measured at 1 metre in an Anechoic Chamber
- A full range of measurements, performance data, CLF and Ease™ Data for DVS 4 can be downloaded from www.tannoypro.com.

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods will always equal or exceed the publishing specifications, which Tannoy reserves the right to alter without prior notice. Please verify the latest specifications when dealing with critical applications.

Copyright (c) 2016 Tannoy Limited. All rights reserved.