TANNOY®

PRECISION D

ADVANCE PRODUCT INFORMATION

Taking full advantage of significant advances in digital speaker measuring techniques such as Klippell™ symmetry and non-linear distortion analysis, laser scanning interferometry, acoustic CAD simulation and our own cutting edge acoustic technologies, Tannoy engineers have developed two new active monitors. The new Precision D range incorporates the latest Tannoy Dual Concentric™ driver and WideBand™ Technology to deliver near field monitoring speaker designs that set new standards of acoustic performance and accuracy.

Precision D active monitors provide superior bandwidth, significantly low levels of distortion, very smooth response, extremely accurate phase control, high sensitivity levels and input source flexibility. Add in a comprehensive calibrated EQ facility for mid / near / close field working in full / half /quarter and eighth space environments, midband and high frequency trim shelving controls, a choice of power and cabinet sizes, analogue and digital input trim facilities, and user requirements can be satisfied for all listening environments and applications.

Tannoy's core technology, the Dual Concentric™ is unlike ordinary drive units in that it is effectively two drivers, properly merged into one. The high-frequency unit is positioned on the back of the low frequency driver so that they are on the same axis. As a result sound energy is propagated from the same point and delivered through the centre of the low frequency cone providing a true point source. This integrated approach provides a constant time delay over the frequency spectrum offering better transient performance and sound quality with better harmonic alignment than a displaced source monitor design. The crucial benefit at the mix position is the delivery of a more natural and cleaner sound with greatly enhanced intelligibility.

Characteristic of the Dual design is a very wide 'sweet spot' with an exceptionally even response throughout the listening area and extraordinary transient response. This phase accurate Tannoy designed drive unit has, for all these reasons, been the choice of professional studio engineers for decades.

Tannoy has been at the forefront of developing loudspeakers with WideBand™ performance. Extending the high frequency roll-off out to 51kHz corrects the time or phase response at the upper end of audibility, resulting in enhanced accuracy and 'air', improved clarity within the essential mid band area, and even enhancing definition of low frequencies. Tannoy WideBand™ Technology is an essential component of the Precision monitor design delivering increased tonal accuracy of the individual instruments in the recording process - a mix-critical factor allowing the best EQ and placement decisions to be made.

Tannoy engineers have researched ways of dealing effectively with the acoustic effects of mid, near and close field listening distances, in order to compensate for the relative size and distance of the acoustic source and resultant spherical / plane wave dilemmas. Additionally, the effect of boundaries near a monitor speaker, such as walls, support tables and mixing console surfaces can change the air load on the low frequency cone piston and consequently the radiating efficiency in the 100Hz to 800Hz region.

A set of DIP switches on the rear control panel of the new Precision D active monitors allow the selection of an optimum speaker response for real life and often difficult monitoring situations so that the frequency response at the listener's ears is always as linear and flat as possible. Optimisation can be preset for far field (>2m), mid field (1~2m), near field (~1m) and close field (<0.5m) situations in combination with free space (4pi), half space (2pi), quarter space (pi) and extreme eighth space (pi/2) corner situations. Precision D Active monitors can therefore be optimised for varying listening distances in difficult acoustic spaces; varying meter bridge positions, against and adjacent to walls or reflecting surfaces, in corners, in corners on shelves or brackets, table top / space restricted PC/Mac based sound editing environments and stand mounted or soffit mounted configurations. (see graph overlleaf).

PRECISION 6D

PRECISION 8D

PRECISION D

ACTIVE STUDIO MONITORS

PRECISION D

Precision D	6D	8D
Frequency response (1)	59Hz-51kHZ	44Hz-51kHZ
Max SPL (2)	116dB	119dB
Distortion	< 0.5%	< 0.4%
Dispersion (@-6dB)	90 degrees	90 degrees
Drive Units - LF/MID	165mm (6”) Dual Concentric™ constant directivity driver with multi fibre paper pulp cone	200mm (8”) Dual Concentric™ constant directivity driver with multi fibre paper pulp cone
Dual Concentric™ HF	25mm (1”) titanium dome neodymium magnet system	25mm (1”) titanium dome neodymium magnet system
SuperTweeter™	25mm (1”) titanium dome neodymium magnet system	25mm (1”) titanium dome neodymium magnet system
Shielded	Yes	Yes
Electronic System		
Inputs	600Ω balanced Combi XLR/Jack SPDIF RCA	
SPDIF Sample Rate	44.1 – 96kHz	44.1 – 96kHz
Sensitivity	775mV for 100W	775mV for 100W
Crossover Frequency	2.5kHz	2.2kHz
Amplifier Output Power	LF – 75W HF – 35W ST - passive feed from HF	LF – 120W HF – 60W ST - passive feed from HF
Outputs	SPDIF Slave out RCA	SPDIF Slave out RCA
User Controls	Front panel mounted on/standby/mute LED indicator Rear trim +6/-12dB 80Hz hi-pass switch (for AV use) 16 - way DIP switch selection for optimum response (see chart)	
Power Supply	Fixed mains voltage - region specific (to order) 110/220/230v	
Cabinet		
Type	Optimised bass-reflex loaded	
Construction	MDF cabinet and front baffle, tongue and groove front and back	
Finish	Black cabinet, grey painted baffle with brushed aluminium inlay	
Accessories	Activ-Assist PC/MAC based software-measuring system to assist with the setting of the DIP switches to reach a substantially linear and flat response at the monitoring position.	

NOTES :
(1) +/- 3 dB , measured at 1m in an anechoic chamber.
(2) Peak SPL at mix position for 1 pair driven

Features:

- 40mm thick contoured baffle with brushed aluminium inlay
- Dual Concentric™ constant directivity drive unit
- Driver lossy-coupled to cabinet
- 10 screw driver chassis fixing
- Tannoy SuperTweeter™ takes the monitor bandwidth performance out to 51kHz
- Extended HF phase response
- Ferrofluid™ cooled HF units
- SPDIF 96KHz input with slave output to second speaker
- Left/Right/Mono select on SPDIF
- Balanced XLR/Jack Combi input connector
- +6/-12dB trim control on SPDIF and analogue line input.
- 80Hz high-pass switch (for AV use)
- Front mounted On/Mute/Energy saver switch
- Front mounted LED status indicator
- Rear mounted mains isolation switch
- Far/Mid/Near field select
- Full//Half/Quarter/Eighth space select
- Bass alignment select
- Mid band trim select
- HF trim select
- Factory HF trim for service / workshop calibration
- Full CSA/CE/CCC/CB approvals

Applications:

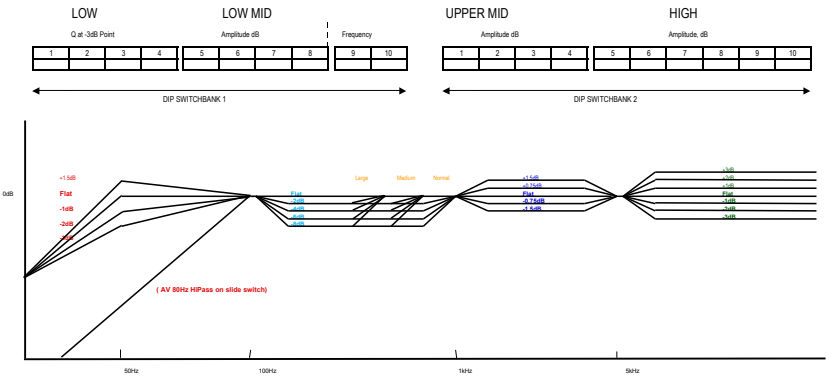
- Home studios/composition
- Project studios, users of PC/MAC DAW’s
- Professional recording, broadcast, post production studios & editing suites
- Off air monitoring
- Educational facilities
- Closefield/nearfield Monitoring
- Surround Monitoring
- Playback quality monitoring

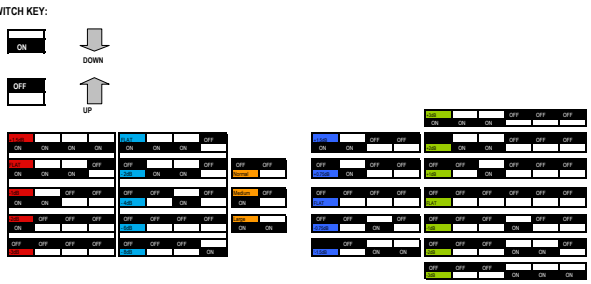
DUAL CONCENTRIC™ POINT SOURCE, CONSTANT DIRECTIVITY DRIVER

Tannoy Precision D active monitors will accept a standard SPDIF digital input, retaining the signal in the digital domain. In digital mode the SPDIF interface has both receive and transmit-onwards connections to enable loop through to the second speaker to preserve the SPDIF 75 ohm termination impedance. A three-position switch on each monitor speaker selects whether the speaker decodes the left or right channel of the digital stream. A true mono position is provided for monitoring the mono combination of the stereo signals, for example when monitoring programme material for off air mono broadcast and limited bandwidth radio transmission intelligibility. Balanced analogue inputs are also provided allowing either XLR or 3 way jack plugs. 0dBv corresponds to full output and a trim control operates +6dB to –12dB re 0dBv on both analogue and digital inputs (post DA converters)

Rigid cabinet design, point source, constant directivity driver, WideBand™ Technology and a powerful calibrated EQ facility combine to provide class-leading precision in studio monitoring.

Precision DIP switch EQ chart (diagramatic view)





TANNOY® | DUAL CONCENTRIC™ | ACTIV ASSIST™

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