

**TANNOY**<sup>®</sup>

Advance information

*Alnico Magnet System*

Definition DC10A

...Refining the art of sound



## Definition DC10A

The sweet and refined sound of Alnico motors; the precise articulation of Dual Concentric drivers; the elegant and contemporary style of Tannoy Definition.

The Tannoy Definition DC10A is a speaker of pure refinement. A single point source Alnico Dual Concentric™ driver matched to Tannoy's latest birch-ply cabinet design. Definition DC10A draws extensively on the acoustics of Tannoy's Prestige series, delivering unrivalled sweetness and purity of sound, wrapped in the ultra-contemporary and luxurious Definition series aesthetic. A thoroughly modern loudspeaker, rich with traditional values.

## The Alnico magnet system

The DC10A's 10" Dual Concentric driver draws its inspiration from the classic Duals found in some of Tannoy's most successful and longest running Prestige series models. Powered by the highest quality Alcomax 3 Alnico motors, this classic driver magnet material has exceptional field strength and is electrically conductive. This minimises non-linear voice coil inductive effects and reduces micro distortions from eddy currents, leading to a sweet, natural and inherently coherent sound.

Alnico, a ferrite alloy containing aluminium, nickel and cobalt, has long been regarded as the musician's driver material of choice.

From instrument amplifiers to guitar pick-ups, Alnico is revered across the music industry for its inherent musicality and dynamics as well as its ability to resolve low level information and texture in the music. Tannoy has long used Alnico drivers in its range topping loudspeakers to best reproduce every note and intonation that the musician intended. From orchestral works to folk and rock music the Alnico sound is consistently rich and engaging, delivering realism rarely achieved by ferrite ceramic drivers.

## Dual Concentric™

The Alnico powered 10" DC driver of the DC10A uses the latest iteration of Tannoy's aluminium alloy tweeter with PepperPot WaveGuide™. Mid and low frequency reproduction is handled by a multi-fibre cone, allied to an Alcomax 3 Alnico magnet assembly engineered to sit on the outside of the voice coils. This configuration delivers the greatest magnetic flux density across the poles, employing to full effect the smoothness and musicality of the Alnico magnet system. Each DC10A driver is hand assembled by Tannoy engineers before being tested and mounted into the cabinet with a unique bracing mechanism incorporating Tannoy's Differential Material Technology™ (DMT™). The result is unsurpassed rigidity of the driver/enclosure coupling to ensure optimum performance of the DC10A Dual Concentric driver.

## Cabinet

Further developing the award winning Definition concept, the DC10A uses a beautifully sculptured cabinet formed from Tannoy's proprietary ply-wood laminate tooling. Each cabinet is constructed from the finest grade birch wood, sourced from cooler, slower-growing regions to further improve the cabinet's natural acoustic properties. The laminates are carefully assembled and bonded under great pressure to ensure uniform density and pressed onto a former to create the DC10A's complex parabolic curves that minimise acoustic resonances and internal reflections. Less coloured and more natural sounding than typical fibreboard cabinets, the DC10A's large internal volume is rear-port loaded and tuned for smooth and natural LF extension.

## Crossover

The Definition range pioneered the use of Deep Cryogenic Treatment (DCT) of the entire crossover assembly. Using a 'simple, straight' design philosophy for an ultra-clean signal path, the crossover incorporates low loss laminated core inductors and superior polypropylene capacitors that are acoustically damped using Tannoy DMT™ compound. Once fully assembled, the entire crossover is super-cooled to minus 190°C and thawed over a set period of time using a proprietary DCT process. This permanently reduces internal stresses in the microstructure of the crossover's components, joints and conductors, leading to further improved signal transfer and greater resolution of fine detail.

## Wiring

Minimal crystal boundary PCOCC wiring, selected by extensive audio testing, is used exclusively in the Definition DC10A. The terminal block features substantial WBT Nextgen™ 24k gold plated high purity copper speaker binding posts, renowned for their excellent sound, security and corrosion resistance. Tannoy's unique fifth speaker terminal is incorporated, giving users the option to electrically ground the driver chassis to reduce potential RF interference in the audio system. With tube-based amplification and some solid state designs, grounding the driver chassis to the amplifier further improves dynamic range and enhances the fine textural detailing of the sound.

## Stabilisation and tuning

No two listening rooms are the same and Tannoy has incorporated two key tuning features on the DC10A. The DC10A plinth is a heavyweight all-metal design that gives broad-base stability and rigidity to speaker placement. Using innovative top-adjustable floor spikes each speaker can be easily and precisely levelled from above the plinth. Moreover, the DC10A cabinet is engineered with a Mass Loading Cavity (MLC) in the lower section, gas sealed from the main cabinet. This can be fully or part filled with a range of particle materials from fine mineral aggregates to dedicated loudspeaker ballast. The additional mass and cabinet damping achieved can further improve low frequency response, tightening fast bass notes and defining subtle nuances and character of bass instruments.

## Style

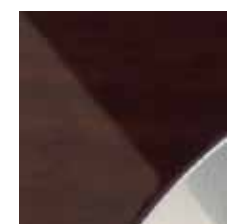
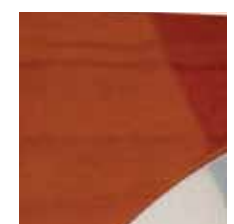
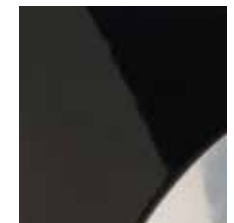
The Definition range heralded a new era in contemporary loudspeaker cosmetics; the range's smooth lines and deep-gloss finish being complemented with fixing-less aluminium trims and discrete Tannoy branding. The truly distinctive and elegant look has been mapped onto the larger DC10A cabinet, creating a distinctive and contemporary sculpture. Available in deep-lustre black, or lacquered real wood veneers in cherry or dark walnut, each Definition cabinet is hand-finished to the highest standards. Rich, articulate and expressive in sound; elegant, contemporary and organic in style, Definition DC10A embodies purity, refinement and Tannoy's eight decades at the forefront of loudspeaker design.





## Technical Specifications

	<b>DC10A</b>
<b>PERFORMANCE</b>	
<b>Recommended amplifier power</b> (Watts RMS)	30 – 300
<b>Continuous power handling</b> (Watts Peak RMS)	150
<b>Peak power handling</b> (Watts)	600
<b>Sensitivity</b> (2.83 Volts @ 1m)	93 dB
<b>Nominal Impedance</b> (Ohms)	8
<b>Frequency response</b> (-6 dB)	28 Hz – 22 kHz
<b>Dispersion</b> (degrees conical)	90
<b>DRIVE UNITS</b>	
<b>Dual Concentric™ high frequency</b>	51 mm (2") Aluminium alloy dome, Alnico magnet system with Pepperpot Waveguide™
<b>Dual Concentric™ low frequency</b>	250mm (10") treated paper pulp cone with twin roll impregnated fabric surround. 52 mm (2") edge wound voice coil, Alnico magnet system
<b>CROSSOVER</b>	
<b>Crossover frequency</b>	1.1 kHz
<b>Crossover Type</b>	Bi-wired, hard wired passive low loss 2nd order LF, 2nd order compensated HF, Cryogenically treated
<b>CABINET</b>	
<b>Enclosure type</b>	Twin Rear ported
<b>Dimensions</b> H x W x D Inc plinth & grille	1135 x 345 x 438 mm (44.7 x 13.6 x 17.2")
<b>Volume</b>	103 Litres (3.64 cu. ft.)
<b>Weight</b>	42.7 kg (94.1 lbs)
<b>Finish</b>	High gloss black High gloss cherry High gloss dark walnut



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