

studio 1m and studio 0.75m



TDL
ELECTRONICS

® transmission line speakers

TDL Electronics was amongst the first to exploit metal dome tweeter technology. Employing much of the same expertise, TDL has now concentrated upon equally sophisticated metal cones for bass and midrange reproduction. These are introduced in two loudspeaker systems – the TDL Studio 1m and the TDL Studio 0.75m. The 'm' is for metal, which in this case is aluminium – black anodised, as are the tweeters. This anodising increases the stiffness of the diaphragm, raising break-up resonances beyond the frequency range in which they are utilised. This metal cone technology produces a level of midrange detail which fully complements the extended bass produced by transmission line loading.

Metal cones are not new – examples date back to the 1950s. Their revival follows the introduction of Compact Disc, from which the quality of master tape can be expected in the home. This has led to programme material not only of full dynamic and frequency range, but possessing vibrance akin to that of a live performance. The speed of propagation of sound through metal cones is faster. Thus the listener is presented not only with qualities expected of fine recordings but also with that 'attack' so integral a part of the musical experience.

To achieve this requires more than the ad-hoc provision of a metal cone. The characteristics of the cone itself – its hardness; thickness and weight; its profile – formed to a critical radius; the density of anodising; its critical damping and termination – all interact to determine final performance. Phase integrity between tweeter and woofer is paramount. Metal cones require meticulous crossover design, involving more components of higher specification, from which discontinuities in the off-axis response are avoided. Since both units are metal, they provide a seamless transition between mid and high frequencies.

Each loudspeaker employs full transmission line loading, providing that musical underpinning so much admired of TDL. With bass units built within diecast chassis, vented pole magnets ensure ultra-linear excursion, whilst 'Kapton' voice coil formers provide high power handling. Hence the metal cone drivers in the TDL Studio 'm' speakers are more than just revisiting ideas from the 1950s!

Both the TDL Studio 1m and the TDL Studio 0.75m are suited to the average or smaller size listening room. Positioning of the speakers is not critical; transmission line speakers neither rely

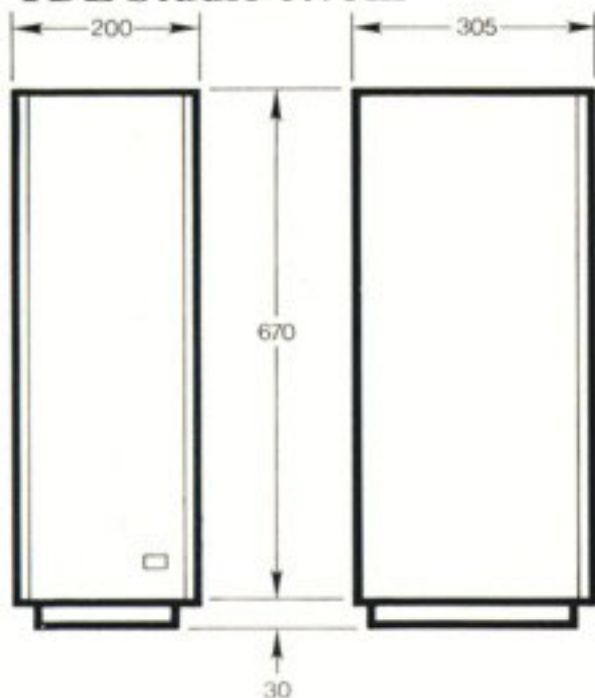


upon a corner location nor do they require electronic equalisation to maintain bass output. However, they should be angled inwards to avoid first order reflections that would otherwise detract from an optimum stereo sound stage.

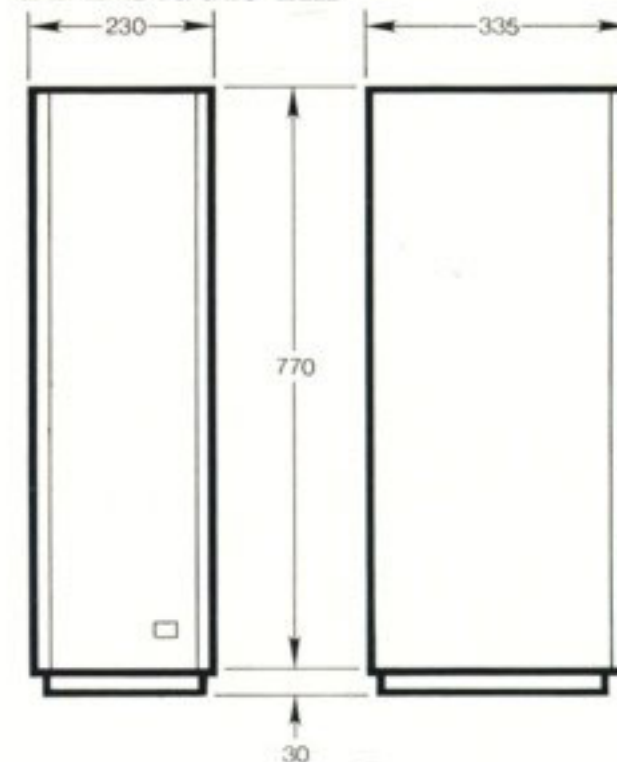
Custom built stands are available, substantially constructed of box steel section with adjustable spikes. These lift the speakers from the floor, enable them to be tilted backwards if required, and are particularly advantageous in reducing room coupling and acoustic feedback. Use of these stands enhances performance, especially when positioned on a wooden floor.

The speakers come ready for bi-wiring or even bi-amplification. They present an easy load and will more than adequately fill the listening area, even when driven from a modest sized amplifier. Because the delicate midrange performance of the metal cone is balanced by the effortless bass of the transmission line, there is less psycho-acoustic justification for playing these speakers too loud. Instead the TDL Studio 1m and TDL Studio 0.75m provide a greater degree of listening pleasure over a much wider musical repertoire.

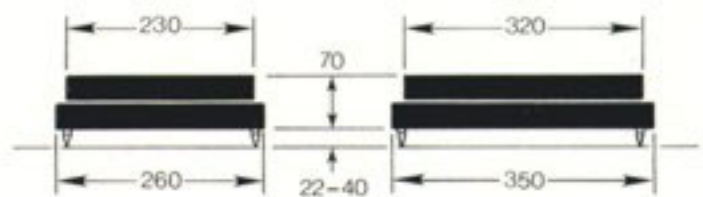
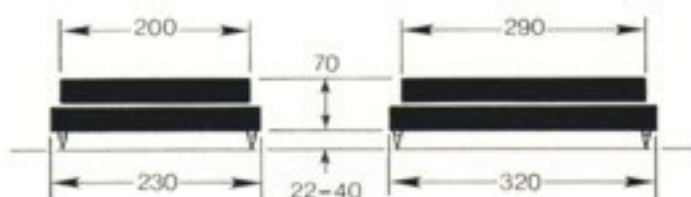
TDL Studio 0.75m



TDL Studio 1m



Stands



Dimensions

Specifications	TDL Studio 0.75m	TDL Studio 1m
SYSTEM	Transmission line loading – floor standing.	
DRIVE UNITS	Bass unit 13.5cm Black anodised aluminium metal cone, phase plug, Kapton voice coil former, vented pole magnet and cast alloy chassis. Tweeters 2.5cm black anodised aluminium suspended metal dome, ferro-fluid damped with rear chamber.	Bass unit 16.5cm Black anodised aluminium metal cone, phase plug, Kapton voice coil former, vented pole magnet and cast alloy chassis. Tweeters 2.5cm black anodised aluminium suspended metal dome, ferro-fluid damped with rear chamber.
CROSSOVER	Electrical 12 element 2 way – 4th Order at 2kHz, separately terminated via 1.5mm OFC cable.	
FREQUENCY RANGE	30Hz – 20kHz	28Hz – 20kHz
IMPEDANCE	8 ohms nominal	8 ohms nominal
EFFICIENCY	85dB for 1 watt @ 1 metre	86dB for 1 watt @ 1 metre
POWER REQUIREMENTS	30 – 100 watts	30 – 120 watts
FINISH	Walnut with brown grille or black ash with black grille – real wood veneer – other finishes to special order.	

Subject to alteration without notice.



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