

RTL2

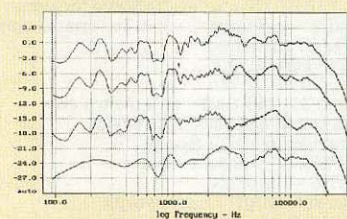


Fig 2a. TDL RTL2: response family, 1m. From top: on-axis; 15° vertically off-axis; 30° vertically off-axis; 30° laterally off-axis

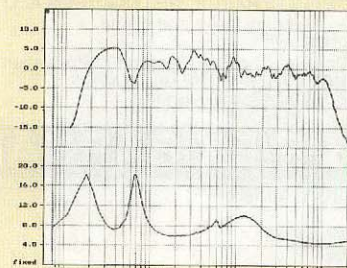


Fig 2b. TDL RTL2: room-averaged response at 2m, 1/3 octave weighting. Lower trace shows impedance, 4ohms/div

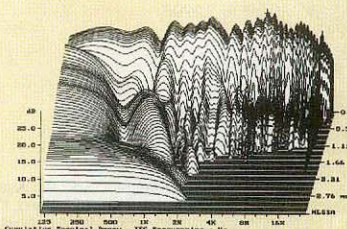


Fig 2c. TDL RTL2: MLSSA 'waterfall' display of cumulative spectral decay

Switching to vocal renditions, however, the midrange imbalance was thrown into relief. Sibillance was noticeably enhanced, and treble voices given prominence over other choristers. String tone was too light, so that cello lost out in its fight with both violin and double-bass.

You will have gathered that there was little to excite the listener. Apart from low bass power and sparkling treble, there was little attack or incisive detail to command attention. The balance was unobjectionable and encompassed the softness and niceness that lulls you into a peaceful repose, but there was nothing here to set the nerves a-tingle.

TDL RTL2

Designed as floor-standers, the RTL2s seem altogether too diminutive to act as transmission line designs. Two points save them: one is that the crossover integration is good enough to enable a consistency of performance over a wide listening angle, including moving off axis vertically. The height of the treble unit, an impossibly low 65cm above floor level, means that for true on-axis listening one has to slouch down in a position that is guaranteed to provoke back problems. But the speaker does seem to have been balanced for a higher listening axis, retaining its treble sweetness and midrange integration from a more normal seating posture.

The second point concerns the restriction of the line to a narrow slot bending its way along the back and base of the cabinet, leaving most of the internal volume to absorb output from the rear of the bass unit. The line tunes this volume to resonate around 40Hz, filling in the lower reaches of the bass unit admirably. It doesn't attempt to emulate the incredibly extended bass of the TDL transmission line models, so the restricted cabinet size is no real detriment to low frequency performance.

SOUND QUALITY

Nor is the bass much like the typical exaggerated lumpiness of many commercial reflex port designs. Thankfully TDL have avoided the temptation to overpower the listener with an excess of low frequency power, preferring instead an understated bass performance which moves air only when called upon to do so. With good amplification the bass was well proportioned and free breathing, due to the lack of boxiness and distortion provided by the good air flow and high degree of midrange attenuation from the 'reflex transmission line'.

Unexpectedly I was able to move

the RTL2s back against a rear wall to 'warm up' the lower octaves without much sign of an over endowment of LF.

In this position the RTL2s proved themselves to be good domestic musical partners, accommodating a wide range of music, and diverse equipment too. The overall effect was one of softness, mainly due to the bass performance, allied to a smooth and sweet midrange and clean and detailed treble. Stereo was open and spacious, with good dispersion aided by the narrow front baffle, and little interference experienced from the grilles. Undoubtedly the recessed treble unit helped here too, as well as reducing discontinuities in its response.

As one nearly always sits above the tweeter axis, the soundstage spread behind the speakers, even when a soloist was given a spot-lit close-miked forward projection. The view of a performance was thus from the balcony rather than the stalls, a feature that many may prefer. Similarly there was little immediacy to the sound, always a feeling of withdrawal from close proximity with the performers. If one finds this an attractive characteristic, then the RTL2 offers notably good tonal accuracy and detailing at this price level.

TDL RTL3

As the largest of the RTL models, one might expect the RTL3 to approximate most closely to the transmission line principle.

There is indeed a brace running vertically behind the bass units which strengthens the cabinet and helps reduce resonant effects in the large area of the side panels. But, as the large cut-outs in the panel show that this is not used to divide the cabinet acoustically, the line/port is provided by a horizontal shelf at the base of the cabinet whose length and entry/exit area is calculated to tune the large volume of the cabinet to 30Hz.

SOUND QUALITY

Initial impressions were of a well balanced speaker with a smoothly integrated upper midrange and treble matched by a deeply extended, if not ideally controlled, bass output. Listening to choral passages revealed a hollow nature predominant in male vocals, and a mild overhang to percussion. The major effect was to muddle and obscure important midrange detail; a great shame since the important presence region was well handled. The speaker was thus best suited to recordings with a brighter balance, provided it is not artificially induced, in order to cut through the murk. Treble perfor-

LAB REPORT

Of this group, the RTL2's test results indicated the best aligned set of responses, despite a small elevation in level through the crossover region. Although the output below 1kHz still showed some depression, the room averaged response shows how rear wall loading helps restore power in this area, producing an overall balanced output throughout the room. The impedance graph clearly shows the first major cone breakup mode at 600Hz, and also the reflex action of the 'line'. This was better damped than the RTL1 and gives a strong bass output around its tuned 40Hz. The MLSSA 'waterfall' of cumulative decay is relatively clean, though the lower midrange suffers from some extended overhang. Impedance is an easily driveable 5-6ohms.

Test results

	TDL RTL2
Power suitability	20 to 80W
Recommended placement	near wall
Response consistency	good
Bass frequency roll-off (-3dB point in room)	30Hz
Sensitivity (for 2.83V or 1W, 8ohms, 1m)	88dB
Impedance (minimum/typical/ease of drive)	4.5ohms/6ohms/good
Dimensions (hwd/mm)	750x200x220
Typical retail price (inc VAT)	£249.95