



Although not previously recognised for its interest, in, let alone development, of digital audio, Exposure's first CD player seems destined for great success. Members of the design team have also been responsible for Orelle's players, including the CD-100E, which uses the same donor Philips board and CDM12 transport. The donor PCB plays host to transport serves, decoder and a Philips' TDA1545A 16-bit Continuous-Calibration DAC. This DAC's output is derived from 32 calibrated current sources which define the five MSBs (most significant bits) and a 2048-transistor current-divider that defines the remaining 11 LSBs, making 16-bits in total.

Like Orelle, Exposure adds its own power supply, off-board crystal clock and discrete Class-A analogue I-to-V and filter stages. The big difference, however, is in the choice of these partnering electronics, for Exposure's analogue filter stage is actually a derivative of the proven Class-A tape buffer used in its own amps. Hence the decently low sub-5ohm output impedance, making this player resilient to choice, and length, of interconnect cable. It will also drive low-input impedance amplifiers (like Musical Fidelity and Arcam) without difficulty. Features include random, repeat and program play modes, peak search and track skip with scan, digital volume and direct access supplied by remote control. Standard, but essential equipment for players at all prices these days

SOUND QUALITY

This struck our listeners as a very natural-sounding player, one capable of recreating a grand acoustic while its music retained a genuinely human touch. Christy Moore now had his 12-string under control, the powerful, almost percussive transients in perfect harmony with the rustic character of his voice. Even the

slight dynamic variations in the voice caused by his moving to and from the microphone position were now clearly audible, while the rattle of applause sounded less like someone trampling on a packet of Rice Krispies and more like an authentic show of appreciation. These are subtle but very important ambient clues regularly overlooked by Competing players, mere suggestions that give this player a real edge in recreating a genuinely believable performance.

Gershwin's 'An American in Paris' was tackled with great relish, giving the impression that either the orchestra was enjoying itself or the player was having equal fun in demonstrating just how effortless good music can sound. Its sheer easy-going character found our listening extending past each of the selected tracks. On the Basic CD, the languid-sounding trumpet was described as 'sweet as a nut' while the grumbling weight of Basie's piano and the breathy muted trumpet now revealed a concord not readily appreciated until this point. A sentiment that was echoed long into the evening.

CONCLUSION

Easy, unforced and uncoloured, the Exposure gently massages the ears with wonderful amounts of detail but without the annoying, mechanical precision of players which appear obsessed with the music's technical aspect. This player seemingly has the ability to anticipate the genre of the disc, judging the flavour and the temperament of the recording to capture its mood perfectly. 'This player should be on stage', remarked one listener. 'Wrap it up...', concluded another, 'I'll take a dozen.'

LAB REPORT

There is no intrinsic link between the inherent frequency accuracy of a clock (and I mean frequency, not stability) and overall levels of jitter. Both the Naim and Exposure players are practical examples of this. Despite the latter's exceptionally poor clock accuracy of +729ppm, resulting in a +14.6Hz shift at 20kHz, it suffers just 129psec-worth of data-induced jitter (1).

Indeed, 623psec of the 783psec total is accounted for by hum and PSU-induced patterns (2) which are not clock-related but do, in the correct dose, encourage the sort of warm and effusive sound enjoyed by our panel. Fortuitous coincidence, perhaps, but it works. Incidentally, if this technique is 'over-cooked' it can result in a lush but slightly over-blown colour see Musical Fidelity's E601 (HFN/RR Dec 96, PP41).

Inter-track and digital silence muting is accomplished via a relay, yielding a 'false' S/N of 122.7dB. Disabling this function reveals a real S/N ratio of 95.1dB with some +5.7dB of noise modulation. This is visible in its slightly reduced dynamic range (lighter green noise floor) (3) that can serve to disguise harsher-sounding distortions.

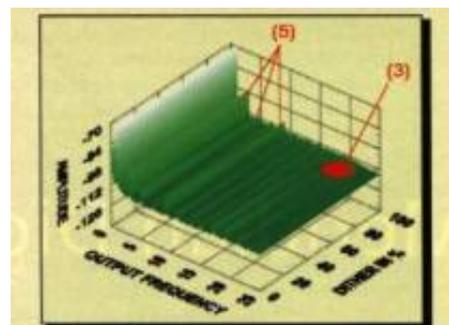


Fig 2a. Exposure CD Player: total jitter spectrum

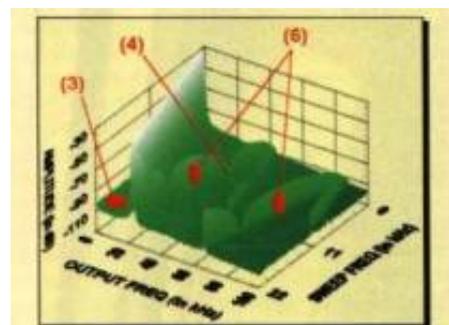


Fig 2b. Exposure CD Player: spurious output from 0-22kHz sweep at -30dB

Distortion is a modest 0.022- 0.045% at 30dB and predominantly 4th-order in origin (4), switching to odd-orders at lower levels (5). The modest 29dB suppression of digital images is also readily apparent (6).

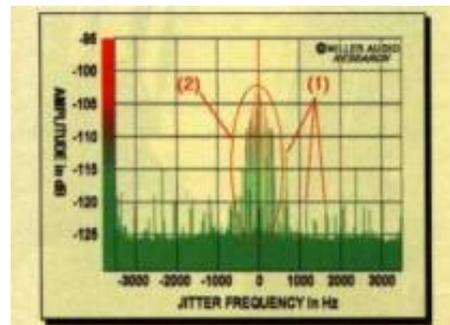


Fig 2c. Exposure CD Player: effect of dither, 1kHz tone at -70dB