Review of TAD D-1000 player, by Alan Sircom, 08/2015 on :

## the absolute sound

## TAD D1000 CD/SACD player



Why would anyone buy a disc player in 2015? Because the market for CD/ SACD players is far from dead, especially at audio's higher end. But, it's becoming increasingly difficult for smaller companies to find decent OEM transport mechanisms, so the number of new players is diminishing. TAD – Technical Audio Devices laboratories – is not affected by the present disctransport hardscrabble, because TAD remains under the auspices of Pioneer Electronics. The fact that the migration away from disc-based music replay has not gained anything like the same traction in Japan as it has in Europe or the US only helps to make a strong case for a new, high-performance, CD/ SACD player like the D1000.



There are still a number of extremely high-grade disc spinners made in Japan. We still see Accuphase, Esoteric, Luxman, and TAD, but there are others that are seldom seen beyond Asia. It's a mark of just how seriously disc-based replay is taken in Japan that the D1000 is TAD's 'entry-level' player, despite being built to a standard that most Western audio brands would happily put at the top of their tree.

TAD has recognised the changes in the international market though, by producing a similar DA1000 digital converter, which is essentially a D1000 without the transport mechanism (a lot of the main components – including clock, converter, power supply, and chassis – are common to both designs). The two are not entirely identical; the D1000 retains the CD/SACD transport part, while the DA1000 features a linear volume control, for direct connection to a power amp, and a headphone amplifier (the next batch of D1000s will feature a volume control, too). Right now though, we are still in a world that would consider the DA1000 to be a D1000 without the SACD/CD player section, rather than looking at the D1000 as a DA1000 with added disc transport. That may seem like a semantic distinction, but it's an extremely important one. It means that currently, the CD/SACD transport mechanism is not vestigial, and the polycarbonate disc is not considered 'legacy' by TAD.

TAD prides itself on extreme clock accuracy on all its digital devices, and the D1000 features a custom-designed UPCG (Ultra-Precision Crystal Generator), suggested to lower the C/N (carrier/noise) ratio from 'around -50dB' in conventional players to –100dB. This suggestion of a clock improving the noise in a system at first appears to be a very different suggested aim compared to the normal jitter-lowering ideas found in other systems, but in effect this points to the same issue from a different direction. TAD opts for a high-precision oscillator because of its comparatively long working life and start-up speed.



This clock is coupled to a pair of Burr-Brown PCM1794A DAC chips in balanced arrangement, which output to TAD's own custom I/V (current-to-voltage) conversion circuit. This custom circuit exists because every I/V conversion system is effectively a trade-off between noise and slew-rate, and TAD felt all off-the-shelf compromises were making that trade in the wrong direction. The use of a PCM1794A means SACD and DSD signals are not native, however. I'm not convinced this is wrong on moral grounds and, in listening, this conversion did not 'hobble' DSD or SACD replay in the slightest.



The shared parts between player and DAC also mean a truly first-rate USB input. This is obviously vital for the DAC, but is increasingly important for the player as an increasing amount of high-resolution audio is only available through downloads. The USB input (somewhat pompously called the 'Asynchronous USB Communication Engine') is a completely isolated circuit board in its own right, capable of handling up to 32bit/384kHz PCM and 5.6MHz DSD audio files, if your computer is up to the task. A 2.5GHz Intel i7-equipped Apple MacBook Pro with 16GB of RAM running the latest version of Audirvana Plus was up to the task: currently, Windows users should be able to achieve the same performance with a similarly 'nails hard' PC with the appropriate drivers and programs.

The other shared parts are the massive power supply (with a toroidal linear power supply for the analogue bits, a separate feed for the digital domain), and a powerfully built chassis designed to minimise vibration. This chassis is a 8mm thick aluminium design with a very low centre of gravity. Subsystems – such as that aforementioned power supply block, and the transport mechanism – have the potential for introducing vibration or resonance, and TAD mounts these individually and separately to the chassis, using different tools for each job, such as a brass bass plate for the power supply.



The disc mechanism itself is made from aluminium, and is black anodised in the sections where reflections from laser scatter could be an issue. It's a low vibration system from first principles (even before being mounted to a solid chassis) right down to the servo mechanism. This shouldn't comes as a great surprise, given TAD's Pioneer connection – the company has long known how to make a high-grade disc transport; just look to the Elite range for examples. The whole device sits on adjustable feet, and the player comes with a thin bar-like remote control: no cheap plastic giveaway here.

Our sample was the UK demonstrator, so any discussions of run in of new models would be guesswork: our one arrived with more than enough miles on the clock to gauge that. We'd class it a 'top shelf' device in more than one sense – it's the kind of product that deserves to be shown off, it's large enough that it might not easily slot into some of the smaller rack systems, and perhaps most importantly the orange LED indicators are positioned below the transport mechanism, so it's best viewed straight on rather than looking down on the player.

All of this heavyweight build and fine internal architecture is great, but how does it sound? In a word – captivating! This is the kind of player that makes you realise how good digital audio can be, and makes you also realise why so many people remain 'unconvinced' by digital – it's because they simply haven't heard digital of this calibre.

Don't take this to mean the D1000 is some kind of analogue-simulator, trading the insight and detail of digital for a faux turntable-like warmth. This is digital, just the best of digital. It has all the high-frequency extension and

clarity of good digital audio, but without the glare and 'over-sharpened photo' effect that sometimes brings. This becomes especially noticeable on SACD: 'Der Hölle Rache' from Mozart's 'Die Zauberflöte' [Diana Damrau/Jér 'mie Rhorer/Le Cercle de l'Harmonie, Erato, from The Perfect Sound SACD from the 2014 Hong Kong High-End AV Show] should be extended, dynamic, and bold in the treble, as befits the Queen of the Night's ultimate temper tantrum. Typical CD/SACD replay will pitch that into hardness and brashness, and the usual compensating audio presentation will make it sound like almost saccharine and blunted. On the D1000, we get all of the energy, all of the rage, and none of the impediments.



What you'll hear irrespective of file format is unforced, but uncompromised detail from the D1000. This is not simply insightful, and not the same thing you get from most digital systems. In base audio terms, the D1000 sound is typified by a big, taut bass, an open midrange, lots of inner detail, plenty of instrument articulation and clarity, oodles of dynamic range, and a huge soundstage with excellent solidity of instruments within that 3D image. But it's a lot more than that: there's cohesiveness to the sound that transcends the normal coherence of an instrument across its frequency range. It's the sense of musicians interacting with one another, whether that's on a fairly basic four-four level (such as Meg and Jack White playing 'Seven Nation Army' [Elephant, XL Records]) or a more rhythmically-challenging jazz set (such as the 7/4, 7/8 time switching 'Optimism' from the Vijay Iyer trio's 2012 hit Accelerando [ACT]), or the interplay of the Eroica Trio interpreting Brahms's 'Hungarian Dance' [EMI]. You get all the usual leading edge detail, the musicians breathing, the sense of space around the instruments where relevant, but you also get that sense of real people playing together in real time. That is something precious few replay systems do well, and the D1000 makes you realise just how rare and valuable that ability really is. It would be easy to lump the TAD D1000 in with an all-TAD system, and almost overlook it as a worthwhile standalone front-end in its own right. Easy, but stupid. If CD and SACD are 'going away' (they aren't), then we've been saving the best 'til last, and the D1000 is easily one of the best CD and SACD players on the planet right now. Very highly recommended.