

## PS Audio DirectStream Memory Player

n the new age of hi-fi, the reliance on physical media has continued to diminish, while NAS-based digital libraries and streaming services continue to gain ground. Only the venerable long-playing record has managed to fly against the face of this trend, although the real numbers remain small.

Even so, there are still many who nurture large collections of CDs and SACDs, and who continue to use optical media as a primary source of storing music data. For them, the arrival of the PS Audio Direct-Stream Memory Player (hereafter referred to as the DMP) is an intriguing development.

Disc players and transports used to be commonplace, but as CD sales have continued to diminish, and music downloads have flourished, the demand for these players has shrunk proportionately, too.

High-end brands such as dCS, Esoteric, Accuphase and others continue to produce transports, yes. But the mainstream brands have rationalised their transport offerings.

The PS Audio DMP is notable not only because it's one of only a few new, musiconly disc transports to be released in the past 12 months or so, but also because it introduces some fresh thinking to the category — specifically as far as SACD playback is concerned.

It also showcases an updated version of the PS Audio Digital Lens, a technology first developed by the company almost 25 years ago. At the heart of the Digital Lens approach is the complete mechanical and electrical isolation of the disc and drive from the data stream.

At the time, this was achieved by storing the data stream extracted from the optical disc in an intelligent RAM buffer, and then applying a dedicated, low-jitter master clock to the stored data before forwarding it to the DAC.

The new DMP takes the principles of the Digital Lens a few steps further by using a Field Programmable Gate Array and a more sophisticated architecture to achieve major advances in jitter and noise reduction, as well as digital signal isolation.

According to PS Audio, the new Digital Lens employs a single, large-scale integrated FPGA with a segmented structure that includes intelligent RAM, two-way isolated communication with the optical drive, and near-field output latches controlled by an ultra-low jitter fixed clock. The result promises to deliver a digital data stream

devoid of the vagaries of noise, jitter and interference.

But wait, there's more. The DMP is able to extract the raw DSD layer from SACDs directly and to pass it on to the PS Audio DirectStream DAC in its native, master tape-quality form.

This wasn't previously authorised in the interests of preventing unauthorised copying of the master-quality data stream. But the DMP sends the raw data to the DirectStream DAC in encrypted form via the I<sup>2</sup>S interface, which prevents copying, but lays bare the full glory of the high-def DSD stream outside the Sony/Philips DAC environment for the first time.

The I<sup>2</sup>S interface is considered superior to the more common AES/EBU XLR or SPDIF coaxial interfaces because the clock data and music data are transferred using separate conductors in the HDMI cable.

By comparison, conventional digital interfaces combine clock and music data in a single digital stream. Unfortunately, I<sup>2</sup>S is a relatively rare interface, but in the context of the DMP/DirectStream combination, it makes complete, sonic sense.

The PS Audio DMP follows the aesthetic approach of the DirectStream DAC in both





design and proportions. The all-metal enclosure has rounded corners and a gloss black top panel, while the fascia hosts a large, colour touch-screen display on the right, and the disc transport drawer on the left.

By the way, the transport mechanism and board used in the DMP are sourced from Oppo, which has a pretty impressive reputation for the quality of its universal

The illuminated PS Audio logo serves as an on/standby switch, while a USB Type A port accepts memory sticks for quick access to stored music - PS Audio warns that it's not meant as an interface for large content libraries on a portable hard drive, for instance.

The front display shows the title and track data of the inserted disc, as well as the cover art. It can also be configured to show the track listing, and displays icons for the basic transport controls: stop, play, pause, track skip and disc load/eject. Set-up options can also be accessed via the display.

The rear panel is populated by three I2S and three SPDIF coaxial digital outputs. Why three? Because the DMP will read multichannel SACDs, and can output the 5.1 digital channels accordingly. In stereo



mode, only the stereo/front coaxial or I2S outputs are relevant. There's also a single AES/EBU output.

The rear panel also offers an Ethernet socket, which allows the DMP to download cover art and metadata, as well as a SD card slot, which is used for firmware updates, or to store the downloaded cover art and metadata.

For the listening sessions, I compared, in the first instance, the DMP to my longtime reference Esoteric UX-03 SE universal deck, with both the DMP and the Esoteric playing the Red Book 44/16 layer from several SACDs. The resulting PCM data stream was then sent to my DirectStream DAC.

I then compared the DMP's Red Bookbased performance with the downmixed SACD layer, both fed to the DirectStream via AES/EBU. And then, finally, I compared the sound of the downmixed DSD layer via AES/EBU to unsullied, undiluted DSD via the I2S interface.

I started off with Nils Lofgren's Acoustic Live on Analogue Productions SACD, which sounded rich and rewarding via the Esoteric. The live recording embraces the rich, full tone of Lofgren's acoustic guitar, while exceptional dynamics and an airy, accessible soundstage capture the electricity of the performance.

The UX-03 SE did a fine job of exposing the essence of the recording: a richness of timbre, a spacious and inviting soundstage, and the presence and immediacy so typical of live performances. I know this disc well, and I found myself completely engaged with the performance.

Tasked with the same track, 'Little On Up', the PS Audio sounded similar, although the delivery was better defined. There was a stronger sense of attack and energy, while fine details were brought to the fore with improved clarity and precision.

The soundstage was slightly more expansive, which in turn afforded the music a bit more breathing space, adding a stronger sense of dimension to the delivery.

Opting for the DSD layer, but allowing the DMP to downsample it to 88/24 PCM made for an unexpected, further gain in resolution and dimensionality. Now, the sound started assuming an unmistakable three-dimensionality that positioned instruments and vocals more spatially specific than before.

In turn, this ramped up the sonic accuracy of the rendition, affording each element closer attention, and bringing more of the music to the listener.

Okay, that was pretty good, I thought.

## Software



Nils Lofgren — Acoustic Live (Castle Track/Acoustic Sounds SACD) Diana Krall — The Girl In The Other Room (Verve SACD) Roger Waters — Amused To Death (Columbia SACD) Dire Straits — Brothers In Arms (Vertigo/JVC XRCD) Bruch - Violin Concerto in G Minor Op. 26 - Zukerman/ LA Philharmonic (CBS CD)

## Associated Equipment



Esoteric Audio EX-03SE universal player PS Audio DirectStream Junior DAC PS Audio DirectStream DAC Naim Uniti2 one-box system Vivid Audio V1.5 loudspeakers TelluriumQ Black interlinks and speaker cables

The DMP was certainly managing to make one of my favourite recordings sound more exciting and more engaging than I remembered. Clearly, this wasn't just another ho-hum disc spinner ...

Even so, the jump from downmixed to true, native DSD was quite astonishing. It lifted a previously unnoticeable opaqueness, allowing unfettered access to the full harvest of tonality and detail.

The subtle piano, usually almost sonically invisible on the left channel, suddenly became a clear, contributing entity, while the synth that saunters in towards the end of the track enjoyed similar prominence.

Nor were these elements simply extracted — they were revealed without losing sight of their contextual contribution. Thus, the performance retained its balance and composure, but the listener was afforded a richer, more accurate and also more musically satisfying performance.

The same trends became apparent when I switched to Diana Krall's *The Girl In The Other Room* (Verve SACD). With the Esoteric as transport, the sound was smooth and tidy, with a strong emphasis on Krall's vocals, while offering loads of insight.

But the DMP was just able to extract so much more musical information, and contextualise it so much more believably. Even the downsampled DSD layer was delivered with greater intensity and more succinct imaging.

The native DSD layer exposed nuances and details that were simply absent before. Again, overall staging and imaging was particularly riveting, with an immersive quality that was almost hypnotic.

Importantly, the DMP's abilities aren't restricted to SACDs. Using the I<sup>2</sup>S interface, the gains in overall resolution and sonic integrity were significant. An XRCD edition of Dire Straits' *Brothers In Arms* that has always sounded a little bright, assumed greater depth and stature while sacrificing none of the clarity and detail.

Staging and imaging definitely benefited too, affording the music more space, and creating a more engaging, embracing listening experience.

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The PS Audio DirectStream Memory Player is an exceptional transport — specifically so when paired with the DirectStream DAC. It's a combination born in audio heaven, with the I<sup>2</sup>S interface playing a pivotal role in the overall result.

Because my entire music library (vinyl aside) resides on my network, I haven't handled and played so many CDs and SACDs for a very long time. But if the PS Audio DMP were mine, and given that I already own a DirectStream DAC, I would have to reconsider my commitment to only streaming music. I've never heard SACD sound so good.

That's why those who own a significant SACD collection should really make a point of auditioning the DirectStream duo — the two devices reveal exactly what SACD should sound like, and why it's actually the superior medium it always promised to be.

Yes, the PS Audio DirectStream Memory Player is a superior piece of kit.

Deon Schoeman

## (VITAL STATS)

	3x coaxial RCA (front, rear, centre/sub), AES/EBU
Connectivity	RJ45 10/100 Ethernet
	CD, CD-R/W, HDCD, SACD, DVD-R/W data discs
	AAC FLAC OGG ALAC M4A OGM AVI M4V
	WAV DFF MP3 WMA DSF MP4
Dimensions (WxHxD)	
Weight	19 kg
Price	R87 000
Verdict	
Unveils layers of detail and musicali	ty on SACDs and CDs that simply weren't audible
before. I2S interface a key element	of this elevated performance. Best paired with
PS Audio's DirectStream or DS Junior	r DACs.
Supplied by	PL Computers
	082 578-5708
e-Mail	paul@plcomputers.co.za
Website	www.psaudio.com

**OUR RATING: 87 / 100**