

# DSD delight

Antelope Audio has added DSD playback to its well-regarded range of DACs. Jon Myles says it makes for a compelling product.

**A**ntelope Audio's Zodiac Gold DAC came as a pleasant surprise earlier this year. Not every company with a formidable reputation in pro-audio equipment manages to translate that into successful consumer hi-fi products.

But the Gold DAC/preamp/headphone amp and associated Voltikus power supply unit garnered a five-globe review in our February issue.

Indeed, our measured performance tests rated it among the best designs currently available – as did extended listening sessions with both CD and hi-res files. So much so that I've been using it as a bit of a reference point ever since.

Obviously, Antelope is not content to rest on its laurels. So now we have the Zodiac Platinum – promising even better performance than its counterpart. Obvious differences include the name, the colour (platinum instead of gold)

and, er, the price – £4,250 for the Platinum/Voltikus combination compared to £3,095 for its counterpart.

The not-so-obvious differences go a bit deeper and are more interesting but undeniably rather more complicated.

Chief among them is that Antelope has added support for the Direct Stream Digital (DSD) file format (both 64 and 128) together with the ability to up-sample to DSD 256.



Now, DSD files are rather thin on the ground at the moment. After all, you won't be buying them on Amazon or iTunes any time soon.

But there is a growing catalogue of material from labels such as Blue Coast Records – and the format does have an air, separation and grace which is a world away from CD.

With the Zodiac Platinum Antelope utilises two Texas Instrument DAC chips but has its own Field Programmable Gate Array system to handle the up-sampling duties.

The Voltikus power supply unit has also been upgraded and the attached umbilical cord which connects it to the main DAC is of a new design which is said to enhance sound quality.

Apart from those improvements the Platinum replicates the Gold's specifications – with full 24bit/384kHz file capability utilising Antelope's proprietary "Oven Control" technology which houses the clock in a shielded container

where the temperature is kept constant.

Jitter management is also handled by the company's proprietary Acoustically Focused Clocking

"Michael Tilson Thomas and the San Francisco Symphony's DSD file of Mahler's 'Symphony No 1' comes across with a flow that only the best analogue can match"

technology.

The main unit is relatively compact at 165mm/112mm/190mm (H/W/D) dimensions and its six digital inputs consist of USB, one AES/EBU, two coaxial S/PDIF and two Toslink. In addition there are both balanced and RCA analogue inputs

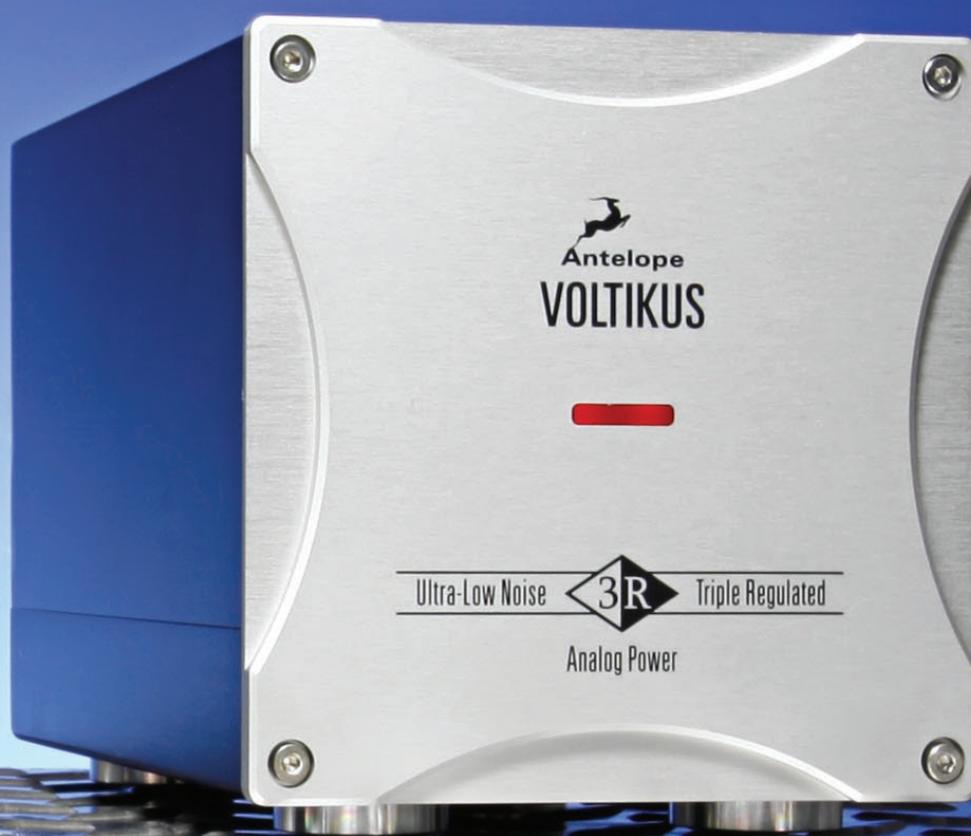
which by-pass the digital circuitry to be fed directly to the preamp's volume control.

Output options consist of both balanced and unbalanced analogue as

well as both AES and S/PDIF digital.

Inputs are selected by toggling through the options via the source button on the front – and intelligently the Antelope's circuitry auto-senses what connections are in use and ignores redundant inputs.

The fascia also features full-sized



headphone outputs (i.e. 1/4in) with a dedicated volume control, as well as power, mute, mono and standby buttons.

Also supplied is a sturdy remote control – and Antelope supplies a Mac/Windows/Linux driver on its website to handle DSD playback.

Luckily, there's also control panel software available for download, which is useful because the basic unit's front panel controls are far from intuitive. Suffice to say a thorough read-through of the instruction manual is a must to fully understand all of the Zodiac Platinum's features. But, then again, this is a sophisticated DAC from a pro-audio manufacturer so it's only to be expected.

**SOUND QUALITY**

Suffice to say, the Zodiac Platinum follows on from the Gold in having a thoroughly refined, smooth and authoritative sound.

Its detail retrieval, soundstaging and overall musicality are among the best we have heard from any DAC.

Play a 24/96 file of, say Diana Krall, and the detail the Platinum brings is as good as the Zodiac Gold.

But its real

trick is the DSD upsampling. Play Art Lande's 'Kiss In A Shadow' with the unit set to up-sample and the piano has a body, tonality and depth that is simply magical.

Michael Tilson Thomas and the San Francisco Symphony's DSD file of Mahler's 'Symphony No 1' also comes across with a flow that only the best analogue can match.

Here instruments are placed precisely, all elements of the orchestra being placed in the correct space.

Compare the same recording via CD and the music takes a slight step back with a noticeably harder edge and less atmosphere. It's not unpleasant – but enough for you to know that DSD through the Zodiac Platinum is a step forward.

As such, it's obvious Antelope Audio have pushed the boundaries again with this latest DAC.

The only caveat is the fact that DSD files are still relatively few and far between – and unless they become more common then the excellent Zodiac Gold is still a stellar performer.

**CONCLUSION**

The Antelope Zodiac Platinum is one of the best DACs available at any price. The addition of DSD playback and up-sampling means it is virtually future-proof.



**USB, plus AES/EBU, optical and and electrical S/PDIF inputs, plus analogue inputs and outputs in balanced (XLR) and unbalanced form. There's clock input too.**

**MEASURED PERFORMANCE**

The XLR output gives a massive 7.8V output swing from a full level digital input (0dB) and best dynamic range as a result, by keeping signal above the noise floor of the output amps. The EIAJ Dynamic Range value was an impressive 123dB with a 24bit resolution signal, just as before. This fell to 121dB from the unbalanced analogue outputs – still a high value.

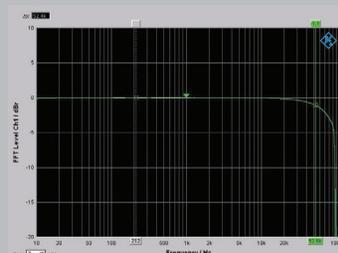
The electrical S/PDIF input worked to 192kHz and so did the optical, unlike the Gold. Frequency response reached 50.5kHz with 192kHz sample rate, before rolling off smoothly to 96kHz our analysis shows, so the Zodiac Platinum exploits high sample rate well.

Distortion was again the lowest we have measured to date, just 0.016% at -60dB with a 24bit resolution signal, and this held at all sample rates. With 16bit (CD) the figure was a low 0.2%.

There is no gain from analogue phono input to phono output and the output overload ceiling is 2.6V. There is x4 gain from the analogue phono input to the balanced XLR output however, and a 10V maximum output swing. So the XLR output can be used as a preamp with gain, but the phono outputs have no gain; the volume control affects both.

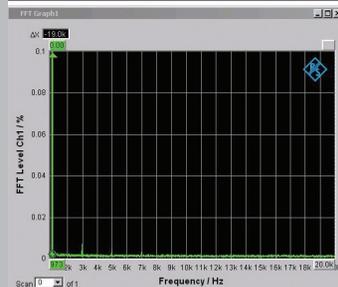
The Zodiac Platinum measures very well in all areas, being up amongst the best designs currently available, so sound quality is again likely to be of a high standard. NK

**FREQUENCY RESPONSE**



**DISTORTION**

THD at 0dB	Level RMS	Frequency
0.0160 %	7.7894 mV	997.00 Hz
OFF	OFF	OFF



<b>Frequency response (-1dB)</b>	
CD	4Hz - 50.5kHz
<b>Distortion</b>	(%)
0dB	0.0005
-60dB	0.016
<b>Separation (1kHz)</b>	115dB
<b>Noise (IEC A)</b>	-121dB
<b>Dynamic range</b>	123dB
<b>Output</b>	10V XLR, 2.6V Phono

**ANTELOPE AUDIO ZODIAC PLATINUM £4,250**



**OUTSTANDING - amongst the best**

**VERDICT**

A superb DAC that offers pre-amp/headphone capability with superb sound.

**FOR**

- Sound quality
- DSD playback
- pre-amp

**AGAINST**

- price
- confusing controls

Antelope Audio  
www.antelopeaudio.com