



Sweden : PAVANE

## A Dac with different technology



Dutch Metrum Acoustics has built a DAC that violates the conventional wisdom about how digital signals are processed.

The music on CD is, as most people probably know, recorded with a sampling frequency of 44.1 kHz. And therefore the first CD players worked with the same frequency. It did not however, take long until someone came up with the idea to re-read the signal several times, so-called oversampling. The idea of oversampling is to increase the resolution of the digital signal and so reduce noise. At the same time, you could avoid the very steep - and sound destructive - low pass filters that are otherwise needed to distinguish the signal from the 44.1 kHz sampling rate.

Since then oversampling has become more or less standard. But a couple of Hi-Fi manufacturers, including Audio Note and Dutch Metrum Acoustics, consider oversampling does more harm than good and therefore do not employ oversampling in their digital converters and CD players. We have been listening to Metrum Acoustics top model, Pavane, which costs just under 50 000.



## NOS

Metrum Acoustics use NOS technology for Pavane. It is not an acronym for "New Old Stock", as they say but "NonOverSampling". But it is not far away, as manufacturers of oversampling free digital converters, often have to work with old DAC circuits from the CD Player's childhood, where they must find old surplus stock.

Metrum Acoustics has instead developed its own DAC circuit called Transient. It can handle sampling frequencies up to 384 kHz (via USB port) but only if the original signal is that sampling frequency. No messing with the incoming signal sample rate.

## Eight DAC circuits

There are no shortage of parts inside Pavane, either in number or quality. While most engineers would have used a DAC circuit to convert the signal, sitting here are eight ! First, Pavane is built with dual mono construction, with separate power supplies and circuit boards to each channel. A third power supply takes care of the other logic circuits.

To gain a greater dynamic range and lower noise floor, conversion is distributed between two DAC circuits, which takes care of the top and bottom information within the dynamic range. And so everything is completely symmetrically constructed. One Lundahl output transformer sums the Balanced signal to the RCA outputs.

Everything is wrapped in a well-built aluminium cabinet with glass top. The extent to which mechanical damping is necessary in a DAC, is a question where there are many differences of strong opinion. But suppression is here anyway and when we get up to this price range, it may well look delicious too. The total weight is 10 kg.



### *Minimalist remote control.*

Operating is simple. Five buttons on the front panel activates a different input. Since there is only an On/Off button. The remote control is even simpler, since it only has a single button that switches between the five inputs. There is no volume control, so Pavane can only be used as a DAC, not as a Digital Preamplifier. Otherwise, it could have saved a part of the signal chain. Especially when each component costs as much as a good used car.

### **Brutally honest**

Pavane is a brutally honest DAC, which is not - to any significant degree – to say it adds or takes away anything from signal processing. By far, pure sound is unveiled and prominent. Acoustic instruments sound real and present in a way that I cannot remember having heard before. A clarinet sounds as if made of wood. And the details ! It comes by listening to how each string swings in an acoustic piano. When it comes combined with the electric guitar, you can with surgical precision, hear the amplifier being used. It also means less successful recordings are revealed in all their lack of perfection. Fortunately, this happens less frequently than expected. For Pavane reveals details in recordings that have so far been hidden.

At first the atmosphere feels a little subdued. On closer listening, it turns out however, that Pavane is just not exaggerating the room acoustic - just reproducing it in the size it has on the recording. Dense, intimate recordings are naked in the living room. But when there is space - whether it is real or contrived - on a recording, it fills the living room both in width and height.



## Conclusion

Metrum Acoustics Pavane is a technical unconventional DAC, proving that the standard method, is not the only way which can provide a good result. Pure sonically, it is fully in the same class as other High-End converters. Its ability to convey the sound of the recording is among the best. Suiting will depend on your sound ideals and the rest of your system. But it is certainly worth taking into account, if you value digital audio converted into such high quality.

Its main competitors are unlikely to be Digital converters but very ambitious Digital Preamplifiers.

- *Super Honesty, detailed sound with no artificial colouring and reverb. From this perspective, the price is actually reasonable.*
- *The price of almost 50 000 means Pavane is a DAC for few audiophiles. In particular, it needed a good Preamp to partner.*

