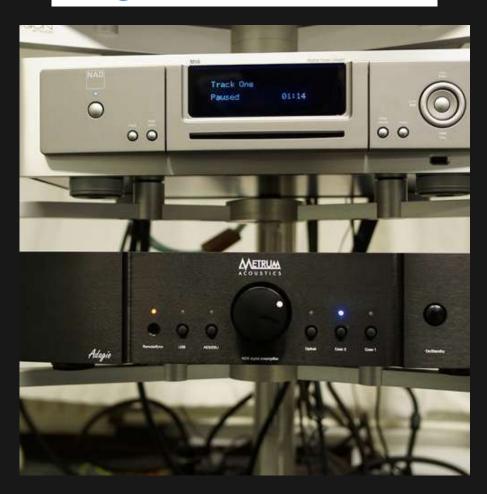




The Netherlands: Jaap Veenstra

Review Metrum Acoustics Adagio – DAC / Pre



Intro:

What a product this is – again! The Adagio is a real window (without the glass) ... It offers an insight into recordings that we really seldom hear. Now the Pass Labs has been a particularly transparent Preamp for this goal. But the Adagio just goes one step further; tighter, more detail, less colouring.



The question is whether anyone wants this? Because the fact is each link is audible. And sharply noticed. Cable not right? Audible. Source flat ...? Horrible. Power not in order? ... Audible.

But if everything is correct then ... Magic. The Adagio's presents an unprecedented holographic sound, rich in detail and very precise. Pure enjoyment. And at a very reasonable price!

Who has not heard of Metrum Acoustics yet ... if not, it really is time now. The Dutch company has specialized in D/A converters. And specifically NOS Dacs (Non Oversampling). After several models in where the output voltage is fixed, it is time for a new version with volume control: Metrum Acoustics Adagio. Oops ... we're crunching bits!

We liked the company Metrum Acoustics initially. Because it's just a nice company. Founder Cees Ruijtenberg began working in High Fidelity in the 80's. First with Electrostatic loudspeakers. Later, also electronics. The breakthrough came - in our opinion starting with NOS Dacs. This conversion approach floats around non oversampling and affords enormous benefits according Ruijtenberg. The lack of Digital filtering also dramatically reduces artifacts. However, there were only a handful of chips available then. Time to look beyond the Audio sector! The Quad, Hex and Octave were born.

Later Cees Ruijtenberg decided to develop his own chips. The first DAC with these chips is the Pavane. A special device, because it is a very clever - involving use of a complex trick: it splits a digital signal in two, to avoid having to use the lower register in a DAC. This has the advantage that not only is the noise floor much lower but also that low-level information is converted in a much more linear fashion: the "soft" bits can indeed be enhanced and made available to the 'upper register "of the Dac . A win/win situation. But it involves a lot of programming and complex analog circuitry to put the two parts back together.

DAC2 chips

Part of the complexity is solved with the new generation of DAC chip. These are, inter alia, in the Adagio but also Pavane can be upgraded (factory refit). With these, an FPGA chip is already built in for splitting the audio signal. Each module contains two Dacs . Logically, the FPGA directly controls two converters : the upper part of the bits (16 Bit audio split into 8 with one half set to"0") goes to one DAC and the other half is enhanced and goes to the second DAC.



Inside the Adagio







As we have stated, the Metrum Acoustics Adagio features a newer generation of DAC chip: the DAC TWO. These modules each have two 16-bit R2R ladder converters. So in fact we are talking about sixteen R2R ladders in total. That is quite something! In fact, the Adagio is a kind of Pavane "on steroids" with volume control.

By using this scheme it achieves true 24-bit/192 kHz and a 24 bit DAC that really gets resolution. The noise floor around -140 dB lies with both the Pavane and the Adagio. The Adagio must measure even better.

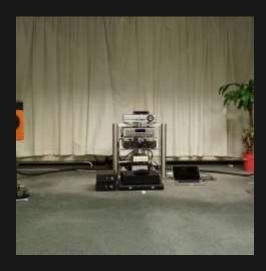
Reference voltage

We were afraid that Cees Ruijtenberg went crunching bits to enable the volume control. We see that very often. And 99 times out of 100 it does not work properly. Even if they sample the digital signal at exorbitant values it can compress those signals. The fact is: you hear digital volume controls almost always.

Another way to adjust volume is to regulate the output voltage directly with a potentiometer. However: you always lose some low-level information. How good a potentiometer is, matters also. How good would it be if you could come up with an out of the box 'meter' solution? Cees has addressed this differently. He applies the reference voltage which, inter alia, regulates the output voltage of the DACs.

He starts with 10 volts and can thus work downward. And that is excellent ... and without loss. There are in fact no discarded bits. And the signal does not need to go through a potentiometer.

The Setup





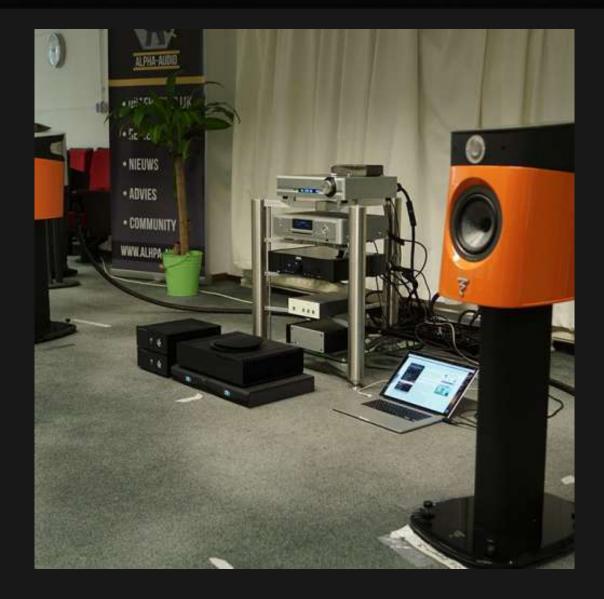


We prepared the new Metrum Acoustics product in a system including a NAD M50 Streamer, Pass Labs XP10 Preamp, Focal Sopra No1 Speakers and Amplifiers from Hypex and Benchmark. Cables: AudioQuest - Earth, Yukon, NRG1000, Diamond Coax and Tubulus - Argentus. So we tried various cables.

The Metrum Acoustics has both single ended outputs - RCA - and Balanced. We have balanced in play. The inputs - Optical, Coax, BNC, USB and AES - we mainly used Coaxial. We also used the USB input (M2Tech, 24/384kHz). It's High-res and you need to install a driver on a Windows machine.

We tried the Adagio with and without the Preamplifier. Purely to see what the Pass can do in this set-up. And so how does the Adagio sound as a pure Dac? Surprising results. We have rarely doubted such a test ... And that says something about the Adagio!





Music time! We have had the Metrum a few days - more than a week - to warm up well and then put it to various tests. Including the Triple Test. During operation we had both the Pass Labs XP10 in between and then removed.

Damn...

We find words hard to describe the Adagio. Often you can talk about 'body', dynamics, warmth, holographic, or possibly even clean. None of this applies to the Adagio. The Adagio we feel - simply transforms the digital signals to analog. And then the power goes to either the power amplifier or the stairs. That's it ... Boring? No ... anything but!

What the Metrum Acoustics Adagio does - is do things incredibly well. It lets you hear what is happening both in the music and in your system. Now this can be a heavenly experience – when the recording is good and in the right system - or very frustrating; *hellish* just to stay in theme. We're going to be honest: we had here a fight at the beginning of the Adagio test.



It sounded at first pushy and a bit raw. Pass Labs XP10 did better in our opinion. An all-rounder, which some may prefer. And a better, more powerful low frequency range ... Hmmm ... that's crazy. More links in the chain are often not better. And frankly, we do not recognize at all the 'Metrum sound' in the Adagio.

After changing a lot of cables, sources, plugs and with correct polarity - yes: the home of the painter ... everything suddenly comes together. No barriers, no intrusiveness ... just music. What an experience it is ! Now we hear a Pavane ... but even cleaner. The Adagio seems - using the DAC2 modules - to bring us a little closer to the music. More precision, more insight, more speed. And perhaps slightly more holographic.

What is better?

But what is truly beautiful? With or without a Preamp? This remains a difficult issue, because it is a question of what you want to hear. Pass Labs XP10 adds a very thin sauce. Is this coloring? Yes, but very light. The mids are warmer and the highs a bit softer. Also it puts something in the way of power and dynamism. And that may be no bad thing. We find it not at all disturbing. In fact, some albums benefit.

The Adagio we see as a kind of Hyper-Dac. A musical measuring device. A Reference for those looking for a studio recreation in the living room. But without the often found somewhat sterile character. The DAC has no grain or coloring and nothing sounds anything more beautiful than it is. No 'larger than life' at Metrum. Everything is right where it belongs and also in the right proportions. In short, sober, neat ... Dutch.

We finally turned our attention and removed the Pass. The insight and the ease with which the Adagio plays is really addictive. Pass Labs does something to the sound. However minimal it is: it is audible. And since we are purists, this is not better in this case. Now Mr René van Es also tested Adagio (and funnily enough also with an M50 source, comparing with a Pass XP10). And he is captivated by the sound. And we know that he has now taken an Adagio. That says enough, right?

Good	Not so Good
Very rich in detail	Remote feels cheap
and holographic	No HDMI (quite handy)
and precise.	Critical
DAC good for ungrading I	