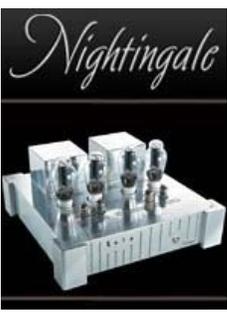


May 2005
Enjoy the Music.com



**Joe Audiophile Listens...
 Audio Note DAC 2.1x Signature**

Review By Scott Faller
[Click here to e-mail reviewer](#)



Going back a few years ago, I was covering the first Midwest Audio Fest that took place in Lima Ohio. Mike Baker decided that the great Midwest had gone too long without having its own high-end audio show. In turn, Mike single handedly organized what turned out to be one heck of a good show. Granted, it was largely ignored by the 'big guys' like Krell and Levinson but it drew a tremendous amount of attention from the tube and high efficiency crowd. Manufacturers of the likes of Bruce Edgar with his immortal Edgar Horn, Ron Welborne of Welborne Labs, John Wolff of Classic Audio Reproductions and his fabulous JBL Hartsfield reproductions, Klaus Bunge of Odyssey Audio, plus the countless others showed up for three days of (mostly) tube bliss.



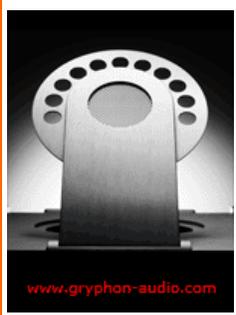
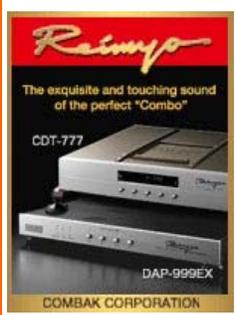
One of the manufacturers that was there was David Cope showing the Audio Note line. These guys don't need much if any introduction. To anybody that has followed the high-end market knows that the Audio Note reputation precedes itself. Peter Qvortrup has designed countless pieces of audio gear that satisfy the masses.

The Audio Note 'entry level' gear starts with the very affordable high(er) efficiency AX speakers at \$400 a pair. The price, quality and selection of gear goes up from there. Personally I own the TT-1 turntable and love it. It's a mid-priced suspended table which sounds great. A friend of mine owns a pair of the AZ-2 speakers which give similarly priced contenders some serious pause for concern. Audio Note also offers reasonably affordable DAC, preamp, amp and speaker kits for those of us who are mechanically inclined.

Then there is Peter's Ultra-ophile gear that receives loads of great press. This is the breathtakingly expensive line SET amps, preamps, turntables, speakers and DAC's abound. Peter literally has something for every audiophile out there.

As luck would have it, I spent a fair amount of time in David Cope's Audio Note room one evening listening in awe of the system he had put together. David's sources were a Voyd turntable with an AN 1s arm, the IO Two cartridge at the whopping output of .05mv (no typo) and the S3 mc step-up transformer. This was all being fed into M5 Phono stage. Next was the digital side of things and the CDT Two transport with the DAC 3.1x. All of the sources were fed into the Quest Silver Signature 300B monoblocks. And finally, we listened to all of this through the Audio Note E/SPE and the K/SPE's. The sounds were positively lovely. There were a few rooms that stood out to me back then so I decided that over the next couple of years that I would review some of my favorite pieces.

This brings me to the Audio Note 2.1x signature DAC. Last year, I decided to contact Peter to see if he were up for a review of one of his mid-priced DAC's. Without hesitating Peter said yes. Not long after, I received a relatively large, well packed box what contained the 2.1x sig. As you well know, a DAC takes the best part of a couple of hundred hours of run in before it begins to settle down. I decided to plug it into the digital output of my Arcam 8se and let things run its course. I had to chuckle to myself when I started the run in. My poor little Arcam keeps getting its arse stomped by these tubed designs I keep setting next to it. I really don't mean to





pick on it because the Arcam 8se actually sounds pretty darned good as a stand-alone opamp based CD player. One thing is for sure, I'd bet the guys at Arcam have put my picture up on a board and throw arrows at it.

Sometimes Things Go Awry

I have to state something up front. I've had this DAC for way too long. It's been almost a year since it arrived. After the DAC had run in, I decided to test it on my 2A3 and Lowther based system. During set up I decided to plug my digital out from my AH! Njoe Tjoeb into the 2.1x sig, then run both outputs into my NEC AVX-910 so I could do a true A/B of the two DAC's. Sounds perfectly logical doesn't it? This is the kind of stuff you guys love to read about, one piece of gear kicking another's butt, mano et mano.

Well, things didn't work out quite like planned. When I did the A/B I'd be damned if I could hear much of a difference. Guessing, it was maybe 5% or so in favor of the 2.1x sig. Well, I contacted Peter to let him know what I was hearing (or not hearing in my case). He suggested looking at my Lowthers. Personally, I knew it wasn't the PM2A's or my amp but I did suspect my pre might have not been up to the challenge. So just recently, I upgraded my Korato preamps. Not to a different pre, but I took it down and replaced the coupling and output caps with Chris VenHaus' Teflon V-Caps and OIMP caps. After letting these things run in for about 300 hours I figured it was ready to test the AN DAC 2.1x Signature. Let me just say this, both of my preamps were *completely* transformed (look for a full review of the OIMP caps soon).

On the subject of the upgrades, I have to be completely clear with you guys on this one. If I hadn't taken both of my preamps down and upgraded them with, well.... Expensive parts -- the V-Caps in particular -- I would have written the Audio Note off as not being worth the money. With the old Hovlands and Solens that resided in this pair of pre's, they absolutely veiled the sound. In turn, as revealing as my 2A3 and Lowthers are, they were definitely limited by my pre.

In my communications with Peter, he was right to a certain extent. There was something which wasn't allowing me to hear what the 2.1sig had to offer. The limiting factor were my coupling caps rather than the Lowthers. See, if you can't hit a higher level of resolution with your system, quality gear like the Audio Note 2.1 sig DAC will seem like an overpriced piece of witchery. You'll never be able to hear much of a difference between it and a lesser quality piece. As it always is, resolution comes with a price. How do you know if you've attained that level of resolution with your system? I'm afraid that's one for another article.

Audio Porn

Before I get into the sound, lets take a look at the basic design of The Audio Note 2.1 Signature DAC. This DAC is 18 bit resolution and uses the Analog Devices 1865N which is compatible with the 24-bit/96kHz DVD format. This means if you run your DVD-Audio player into the 2.1x sig it will truncate the signal to 18-bit resolution. The 2.1x sig uses a 6DJ8 tube in SRPP mode. The 6DJ8 provides a lot of choices when it comes to tube rolling. Peter shipped this one with a pair of JAN/Philips 6922's. Something a bit different about this tubed DAC is that fact that the power supply is tubed also. It uses the 6X5 rectifier tube. This one too gives you lots of options for tube rolling.

The other interesting thing that Peter has done is to remove the analog 'brick wall' filter which filters out anything above 20kHz. You still aren't going to get any musical info above that 20kHz wall because of the source material (the CD) but one thing that it does do is remove a bunch of parts that put a choke hold on the sound. Some disagree with this concept. I'm not here to argue the merits of the engineering either way, I'm just looking at it logically, fewer parts = better sound (typically). I'll leave the engineering to those more proficient in DAC design to fight about.

As I'm told by the United States distributor David Cope, the Audio Note DACs have always avoided the digital brick wall filter but did use a gentle, high quality analog filter for a number of years. About a year and a half ago, they discovered that even the analog filter caused significant masking and loss of fine detail. With some subtle design enhancements, Peter found a way around that too.

As you look at the picture of the inside,



you can see why this piece costs what it does. She's completely loaded up with Audio Note Tantalum resistors, Black Gate caps, the far more expensive Rubycon's and finally, the output coupling caps are Audio Note copper foils. Something you may not be aware of is that Audio Note winds all their transformers. They don't use any off the shelf transformers in their designs.



The overall build quality is impeccable. This piece is rather large compared to many other DAC's on the market at 17 x 11.5 x 5.5 (DxWxH in inches). The front face is a thick solid piece of glossy black Plexiglas with Audio Note 2.1x Signature DAC silk screened and a single red LED. The casing is stamped heavy gage metal painted in black. Overall, it is very understated yet very elegant looking.

The DAC comes with a simple IEC female connector so you can experiment with different power cords. Peter has furnished you with a pair of silver plated RCA outputs along with a RCA and a BNC digital input. Also furnished are a pair of grounds should the need arise to ground the DAC between the transport or your preamp.

The Sound

As I plugged the 2.1x sig into my 2A3/Lowther system, the first thing I wanted to do was to start rolling the tubes. Not that there is necessarily anything wrong with the JAN/Philips but I've found that my ears tend to like others a bit better (at least in this system). After a few discs and even more tubes, I settled on a pair of CV2492's. I think they are Brimars (or so I was told). They seemed to bring out more detail without losing the bottom end. After the output tubes I started rolling the rectifier tube. There I settled on an old NOS Sylvania. It was the icing on cake, a fine match. It added just the right amount of texture to the 2.1's presentation.

For years I've used my AH! Njoe Tjoeb as a benchmark for other CD players. Rightfully so, for the dollars this little gem costs it does a damned fine job. In this case (I hate to say), it was completely outclassed. I soon discovered how it isn't even close in a direct comparison. What I did (again) was connect the Audio Note 2.1x Signature DAC directly to the AH!'s digital output so I could use it as a transport. In turn I connected both the 2.1 and the AH! To the NEC AVX-910 source-switching unit so I could actively A/B these two via the remote control.

The first disc I used was Zero 7's *When It Falls*. As I switched back and forth between the two DAC's I couldn't help but notice how forward the AH! Machine was. The soundstage was up in your face. The Audio Note's presentation was very smooth and relaxed. By smooth and relaxed, I don't mean veiled. All of the detail and extension was there but the sound opened up becoming more spacious and less 'forced' sounding.

As I rolled through more and more discs, I became smitten with the presentation of the Audio Note. Each disc took on a whole new life. The sounds are more focused. The images created became much sharper and more realistic in proportions. Another thing that jumped out at me was how much deeper the soundstage was using the 2.1x sig. The AH! projected a stage depth that was a solid 5 feet (or so) behind the speakers. The Audio Note's stage easily went back double that amount. In turn, it also made my Lowthers completely disappear which is no easy feat (you know what I mean if you own Lowthers).

The other interesting thing that happened was that, though the music became subjectively more focused and tighter, there was a sense of more 'air' around everything. The music began to literally fill the room as opposed to just coming from the speakers. On several orchestral pieces, namely Stravinsky's Rite of Spring, the sound began to surround me at my listening seat. The performance seemed to take on a new dimension with the Audio Note.

Lucy Kaplansky's latest release, *The Red Thread*, was particularly lovely when played through the 2.1x sig. Lucy has a folkie, acoustic guitar driven ensemble that's almost bluegrass, but not quite. She has a deeper, more mature sounding voice than her contemporaries like Allison Kraus. This makes for a very intimate 60 minutes. This particular CD is recorded quite well and the Audio Note 2.1x Signature DAC conveyed Lucy's personal magnetism extremely well. The vocal reproductions were very smooth without a hint of sibilance. Her voice on this CD proved to be a good judge of the Audio Notes midrange capabilities. Her voice was naturally warm and liquid without sounding artificial. Her acoustic guitar retained most all of it's dynamics and never sounded 'flat' (dynamically speaking) as it can on a lesser DAC.

So In The End...

I was simply amazed at how refined this DAC sounded. So many try to overdue the music by

bringing too much detail to the forefront. In turn, they can become aggressive sounding. The 2.1x Signature DAC retained all of the detail without being overbearing or fatiguing in the least. It was a welcomed change over the sound of the typical DAC's that have passed in front of me over the past few years.

When it comes to 'refinement' and audio gear, I've learned one thing over the years; you get exactly what you paid for. That's not to say that lesser expensive gear sounds bad. It's just that better engineered gear using better quality parts (generally) sounds better. I've found this to be true time and time again. This holds true with the Audio Note 2.1x Signature DAC. Where the Audio Note takes you, is well worth the price of admission.

Here at the end of my time with the Audio Note 2.1x Signature DAC, I'll have to admit that I'm definitely going to miss this piece when it's shipped back. I've not heard a better DAC in my system. Though it still isn't vinyl, it's quite a few steps closer. For those of you in the market for a true high end tubed DAC, I can wholeheartedly recommend the Audio Note 2.1x Signature. Keep in mind if your audio budget is a bit larger, Audio Note offers six models above the 2.1 that (I can only imagine) get better as the price goes up.

My Ratings

Please keep in mind this rating system is used to compare the Audio Note DAC against absolute perfection, or a cost-no-object DAC (which Peter also offers). If you see what you think may be a low(ish) score, it's because there are DAC's that are even more refined but consequently cost considerably more. In turn, I feel I need to leave room in the ratings system to accommodate those DAC's.



Tonality	
Sub-bass (10Hz - 60Hz)	
Mid-bass (80Hz - 200Hz)	
Midrange (200Hz - 3,000Hz)	
High-frequencies (3,000Hz on up)	
Attack	
Decay	
Inner Resolution	
Soundscape width front	
Soundscape width rear	
Soundscape depth behind speakers	
Soundscape extension into the room	
Imaging	
Fit and Finish	
Self Noise	
Value for the Money	

Specifications

Type: Digital to analog converter with tube output stage

Digital Inputs: Audio Note silver-plated RCA & BNC, XLR AES/EBU optional

Phase: normal, inverter selector switch

Digital Input Pulse Transformer: TRANS-279, copper wired

Receiver Chip: Crystal CS8414CS

Digital Converter: AD1865, 18-bit

Internal Wire: AN-V silver interconnect for analog stage

Output Stage: 6DJ8/ECC88/6922 anode follower

Power Supply: choke filtered, 6X5WGT valve rectifier

Chassis Material: aluminum

Weight: 18 pounds

Dimensions: 17 x 11.5 x 5.5 (DxWxH in inches)

Price: \$3,875

Company Information

Audio Note (UK) Limited
Unit C, Peacock Industrial Estate
Lyon Close
125-127 Davigdor Road
Hove
East Sussex, BN3 1SG
United Kingdom

Tel: +44 (0)1273 220511
Fax: +44 (0)1273 731498
Email: info@audionote.co.uk
Website: www.AudioNote.co.uk

Audio Note US Distributor
Triode & Company
20 Hugh Drive, Brooklyn, CT 06234

Voice: (860) 779-7761
Website: www.triodeandco.com
E-mail: davidcope@triodeandco.com

 ShareThis

[Add Us To Your Favorites](#)

[Link Your Website To Us](#)

[Make Us Your Homepage](#)

[Get Our Audiophile Internet Browser V10](#)

Our free content is greatly helped with your kind support.



All contents copyright 1995 - 2010 Enjoy the Music.com
May not be copied or reproduced without permission. All rights reserved.

[Sitemap](#) | [Industry News](#) | [Press Releases](#) | [Privacy](#) | [Manufacturer Links](#) | [RSS Feed](#) | [About Us](#) | [Contact Us](#)