

PS Audio NuWave DAC Review

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PS Audio, out of Boulder, CO, has been a major player in high end audio for decades. Their power distribution/conditioning units and digital source components have been go to products for droves of audiophiles who value high value and high performance. The lists of PS Audio's innovations and market firsts are extensive and highly impressive. Their power cords have also been a mainstay in a highly competitive market. I personally use several throughout my systems, on everything from CD players to HDTV's, with great results.

PS Audio is known as a company constantly striving to push the envelope, bringing cutting edge products to the market based on sound engineering and at very sane price points. The Digital Link series of DAC models were a huge success for the company, which leapt ahead of many other manufacturers with the introduction of the uniquely designed PerfectWave DAC and Memory Player transport. The PerfectWave DAC is now in its second generation, appropriately named the PerfectWave DAC II.

If you believe in trickle down product design, then the introduction of the PS Audio's brand new [NuWave DAC](#) is welcomed news. The company says they have applied much of the technology found in the PerfectWave series in a more affordable package. The NuWave DAC retails for \$995. I arranged for a review sample, and was told the initial production run had sold out, based on initial buzz and the popularity of their previous digital converters.

Patience is priceless, and I shortly thereafter received a review sample in silver. It is also available in black casework. The NuWave is very impressive in build quality and feature set, even at double the price. There are three digital inputs: two S/PDIF in the form of a coaxial and optical, and one "asynchronous" USB input. The coax and USB inputs handle sample rates up to 24-bit/192kHz, while the optical input is limited to 96kHz. The USB input is plug-and-play with an Apple computer, and for Windows machines you must download a driver from the PS Audio website.

The NuWave DAC offers something unique at the sub \$2000 price point, and that is optional upsampling to 192kHz. A front panel button allows you to select "Native" or "192kHz". *Native* leaves the incoming sample rate unchanged, while *192kHz* upsamples to, you guessed it, 192kHz. PS Audio advises experimenting with different recordings to see what setting is most pleasing. Everything about the NuWave DAC's layout and connectors is first class all the way. Other features, noted by PS Audio in their literature include:

- *Designed and Built in Boulder, Colorado*
- *RCA and XLR Balanced Outputs*
- *High Current "Class-A" Analog Output Stage*
- *Extremely Low-Jitter PerfectWave Clocks*
- *Fully-Balanced Fully-Discrete Analog Electronics*
- *Burr Brown 24 bit DAC Chipset*

Set Up and Listening

Set up for the NuWave DAC was as straightforward as can be. But there have been a few additions to my system, so a few more ways to put a DAC through its paces. First, I used my go to AC cable for digital components, the Element Cable Red Storm. I used [Stager Silver Solids](#) for interconnects, and three USB cables, including the [Audioquest Forest](#), [WireWorld UltraViolet](#), and the DH Labs USB. I also used [DH Labs TosLink and Coax cables](#).

My sources were multiple. I had a Musical Fidelity CDT connected via coaxial, a Squeezebox Touch connected via optical and USB, and an HP PC running Windows 7, loaded with Jriver Media Center, with FLAC files on an external hard drive. After installing the required driver, the PC was connected to the NuWave DAC via USB. I used the NuWave DAC in two systems. First, in my main system, with Audio Research electronics driving the excellent [Martin Logan Ethos speakers](#). Then in another system with a McIntosh MA6600 integrated amplifier driving Harbeth Compact 7ES3 speakers.

First up was my [Squeezebox Touch](#) connected via optical streaming FLAC files. I cued up the 24-bit/96kHz download of Bob Dylan's monumental *Highway 61 Revisited*. The various instrumental backing on this landmark album has always been slightly homogenized on all previous versions I have heard, save for maybe the SACD. But the NuWave DAC offered up precise, detailed sound with tremendous clarity. Each distinct part was in its proper location within the soundstage, and easily distinguishable.



I streamed numerous albums and heard a consistently engaging, *big* sound, with no glare or mechanical artifacts. The NuWave was bold and lightning quick with high frequency transients. Bass was weighty, precise, and articulate. I don't normally get caught up in such things, but recorded detail was spotlit in the most pleasant way, and I found myself noticing parts on certain recordings that were previously not as distinguishable from the whole.

Switching over to the coaxial input, I used my Musical Fidelity CDT transport. Having just received a stash of remastered Jethro Tull from Amazon, I started off with their mid-70s master work, *Songs From The Wood*. The sonic goodness heard via the optical connection was just as evident here, with precise images, impressive textures, and distinct sound layers courtesy of Tull mastermind, Ian Anderson. The title track was magical sounding, with Anderson's overdubbed vocal intro, flute parts, and acoustic guitar sounding remarkably present.

Spinning a more modern recording, *Queen Of Hearts*, by world fusion master Jai Uttal, yielded plenty of musical pleasure. On this outing, Uttal blends his usual Indian inflections with reggae and dub beats. The NuWave DAC rendered the prominent bass lines with unusually tight precision, with no overhang into the lower midrange. Uttal's distinct, soulful voice was beautiful in timbre, and it was easy to get lost in the exotic, hazy melodies.

Comparing the NuWave DAC to my reference [Bryston BDA-1](#), which retails for \$2300, more than double the NuWave, was interesting. They were way more similar than not. The only real difference detected was a *slightly* warmer overall sound with the BDA-1. The NuWave was ever so *slightly* more forward sounding. Also, engaging upsampling seemed to change the sound more on the BDA-1. Selecting upsampling on the NuWave resulted in a more subtle effect. As a matter of fact, in the manual, PS Audio recommends the Native setting for most recordings. A decent guess might be the high precision clocks in the NuWave are really doing their job.

To evaluate the NuWave DAC's asynchronous USB input, I used the aforementioned Windows laptop running Windows 7, with Jriver installed, with recommended settings. All that I needed to do was install the driver and select the NuWave DAC as the sole output device. I had a stash of FLAC albums connected via a hub-powered SeaGate drive in resolutions varying from standard Redbook to 192kHz.

I worked my way through CD rips from Gary Jules, Frank Sinatra, and newcomer Sam Carter, and through higher resolution material from The Doors, McCoy Tyner, Stevie Wonder, and others. I heard sound that was high end in every way and every bit as good as the S/PDIF inputs. The 24/96 download of Dylan's *Highway 61* sounded every bit as revealing of what was going on in the recording as it did streamed through the S/PDIF inputs. The 192kHz download of Stevie Wonder's mega classic *Songs In The Key Of Life* was a real knockout, coming as close as I have heard digital sound to vinyl's analog ease.

I can fully report the NuWave DAC's USB in input is excellent indeed. Incidentally, in using the three USB cables noted above, I was only able to hear minor differences, and that took furrowed brow and several rounds of swapping out cables to hear. Overall, the Audioquest was the most balanced, while the DH Labs and WireWorld cables were a bit more forward sounding, though highly resolving.

The NuWave DAC was then installed in my second system, with the McIntosh/Harbeth combination. My source was my second Squeezebox Touch, connected via a Kimber OPT1 Toslink cable, and then via a DH Labs USB cable. This was made possible by the amazing free EDO Applet which allows the Touch to stream 192kHz files and output audio via USB.

Call it system synergy, or whatever you like, but the NuWave DAC was a stellar match. I continued exploring music from deep in my collection, including albums from Hungarian jazz guitarist Gabor Szabo, and the recent 40th Anniversary remaster of King Crimson's *Islands*. These are highly textured recordings, with esoteric instrumentation and unusual arrangements. The NuWave DAC was exceptionally coherent, and had no issues untangling challenging music.

I also streamed a lot of symphonic stuff, like Rachmaninoff's *Symphonic Dances* and Rimsky-Korsakov's *Scheherazade*. I very much enjoyed the texture the NuWave DAC brought to orchestral music. Strings were woody and vibrant and, across the board, instruments rendered with a natural ease. At this point, it was becoming obvious to me the NuWave DAC was an exceptional component at the \$1000 price point.

For the last phase of my evaluation, I concentrated on vocal music. I had just gone on a bit of buying spree, purchasing a bunch of older Johnny Mathis recordings that have been recently remastered on CD. The remasters are excellent, with a great analog vibe, and great pains were taken to preserve the sonics of the original tapes. Well, the NuWave DAC was just the sweetest match for Mathis and his absolutely velvety voice. Mathis in his prime had the ability to wring the deepest emotions from even well worn standards. His version of "A Taste Of Honey" from the 1966 album, *The Shadow Of Your Smile*, done as a slow, longing ballad, is just devastating. The NuWave DAC got right to the heart of the music.

In comparison to the wonderful Musical Fidelity V-DAC II, at \$350, the NuWave DAC made the music sound a bit larger in scale. Backgrounds were noticeably quieter with the PS Audio, which was no surprise, given the quality of the NuWave DAC's power supply. Tonally, they were similar, but at three times the price, the PS Audio had the overall edge in sonics, and its USB input handles up to 192kHz, as opposed to 96kHz for the Musical Fidelity. Lastly, I would give a slight edge to the NuWave's XLR outputs. Of course this will depend on your amplification. The McIntosh MA6600 is a fully balanced design.

Conclusion

The sub \$1000 DAC market is very crowded these days. PS Audio, with their Digital Link, up through version III, has been a player in this field for many years. The NuWave DAC is a game changer in that it uses trickle down technology from PS Audio's flagship DAC, the PerfectWave DAC II. Quite a few budget DAC units have come through my listening rooms, and none had the build quality and the big, engaging sound of the NuWave DAC.

There was really no area, sonically, the NuWave DAC lacked. If I was to nitpick on the ergonomics, on my wish list would be a sample rate indicator and possibly an optional remote control for selecting input and upsampling. But again, this is a wish list, and these features are rarely, if ever, found at this price.

The PS Audio NuWave DAC simply must be auditioned by anyone looking for a DAC anywhere under \$2000. It delivers the sonic goods, is ruggedly built in Boulder, CO, and has an excellent sounding USB input. Far from being the DAC flavor of the month, the NuWave DAC is based on decades of digital engineering. **Highly recommended.**

[Review System 1](#)

CD Transport: Musical Fidelity M1 CDT
Server: Squeezebox Touch w/ CIA VDC-SB power supply via Ethernet to MAC Mini w/ Western Digital & Seagate external drives.
DAC: Bryston BDA-1
Headphone Amp: Pro-Ject Head Box II
Headphones: Grado SR60
Preamp: Audio Research SP16
Amplifier: Audio Research VS55
Speaker: Martin Logan Ethos, Thiel CS2.4
Cables: Stager Silver Solids, Kimber KCTG (IC), Transparent MM2 Super (IC), Transparent Plus (Speaker) Acoustic Zen Tsunami II (AC), Transparent (AC), Shunyata Venom (AC) Element Cable Red Storm (Digital AC), DH Labs TosLink, DH Labs AES/EBU, Audioquest, Forest, WireWorld Ultraviolet, DH Labs USB(USB) DH Labs (USB)
Accessories: Symposium Rollerblocks, Shakti Stone, Audience Adept Response aR6 power conditioner, Salamander rack

[Review System 2](#)

CD Player: Marantz 5003
Music Server: Squeezebox Touch via Ethernet to MAC Mini w/ Western Digital & Seagate external drives.
DAC: Musical Fidelity V-DAC II
Integrated Amplifier: McIntosh MA6600, Electrocomaniet ECI 3
Tape Deck: Revox A77
Speaker: Harbeth Compact 7ES3
Cables: Kimber Hero HB, DH Labs White Lightning (IC), QED Genesis Silver Spiral (Speaker), PS Audio (AC), Mojo Audio (AC), DH Labs TosLink, Audioquest Forest USB, Wireworld Ultraviolet USB
Accessories: Cable Pro Noisetrappor, Sound Anchors Stands, Wiremold, Keces XPS, Audience Ar2p

