

MOON by Simaudio Nēo 280D Streaming DSD DAC with MiND

George de Sa

Digital audio is the source media chosen by most music listeners, whether casual listener, avid music lover, audio-video enthusiast or audiophile. There's no arguing with the utter convenience of digital music; easily stored, accessed and transferred; however, digital music playback varies greatly in sound quality. The digital source, which includes the digital music file, together with the digital music player are critical but so is the digital-to-analog converter (DAC), which handles conversion of those ones and zeros into analog signals. Over the last few years a tsunami of new DACs have come to market, each new generation elevating performance and adding features.

design features

The MOON by Simaudio Nēo 280D Streaming DSD DAC (\$2,400) is one of these latest generation DACs that caught my attention. Here was a DAC from a very reputable company that delivered a full feature set (playback of PCM and DSD files, fully-balanced design and inputs/outputs, and optional integrated MiND network player), an array of connection choices, enclosed in an attractive case and all at a very competitive price. No doubt the 280D benefits from the knowledge Simaudio has acquired over the 35+ years, together with trickle-down technology from the company's flagship MOON Evolution Series. In addition, as I've been happily using a MOON Nēo 350P preamplifier in my reference system, which has consistently impressed me with its quality, functionality and design, the Nēo 280D seemed to offer a perfect pairing opportunity.

The Nēo 280D is fully asynchronous and supports DSD up to DSD256 (USB only) as well as PCM from 44.1kHz to 384kHz (32-bit via USB only). With the 280D, there is a plethora of digital connectivity through a total of 8 digital inputs (AES/EBU x 1, S/PDIF x 2, TosLink x 2, USB x 1, Bluetooth with aptX and Ethernet / WiFi). Simaudio offers an optional MiND (MOON intelligent Network Device) module for an extra \$600 (included in my review sample),



which allows you to access your digital music library via a graphic interface. The MiND module was developed with TIDAL Music Service in mind (excuse the pun) and a free trial of TIDAL is offered with the 280D. DSD playback is supported via the USB input (up to DSD256) as well as via Ethernet using MiND (up to DSD64). The 280D offers an analog stage with a fully balanced differential circuit, providing maximum dynamic range and signal-to-noise ratio.

The MOON Nēo 280D is offered in three different attractive finishes: black, silver or black & silver. Like the 350P, the styling is reminiscent of the MOON Evolution Series. A solid 1/4" aluminum faceplate is flanked by curved cheeks that gives the 280D a very attractive face that will make it welcome on just about any enthusiasts rack. A rigid chassis construction minimizes the 280Ds susceptibility to external vibrations, and the overall feel of the case-work is most definitely solid. An LED array clearly identifies the selected input and file sample rate.

Hooking up the 280D was standard fair - hook up the necessary cables, screw in the antennae for the MiND module and you're off to the races. Setting up the MiND module for network streaming does take a little more technical prowess. I found that the instructions and online guide, with careful reading, were sufficient to get me on my way but I wouldn't call it easy. I did encounter some initial connection issues with my Windows 10 PC, running Asset UPnP with a hardwired Ethernet connection to the MiND. It turned out that the MiND

was not friendly with my network setup that uses a second router (in my basement listening room) bridged to the primary Rogers router (on the main level). Eliminating the secondary router from my setup cured the problem.

With the MiND app installed on my iPad I could now access the music on my network as well as through TIDAL. The interface is user friendly and provides a number of ways to view your music content. As with many other players, including my own Logitech Squeezebox Touch, what you see is largely dependent on the tagged file metadata; so it won't solve album art with WAV files. Searching through your music collection by artist, album or title is a breeze, and the same goes for creating your own playlists. In addition, most welcome was the control provided by the MiND app utilizing the SimLink between the 280D and 350P preamplifier. With the SimLink, the MiND app provided easy touch control of system standby power, digital input selection and volume adjustment.

performance

To evaluate the performance of the Nēo 280D, I introduced it in my reference music system. The associated equipment used was the MOON by Simaudio Nēo 350P preamp and both a Bryston 4B-SST2 as well as the new 4B3 (review forthcoming) amplifier. Loudspeakers used were the quadral Aurum Montan VIII, KEF LS50 as well as Focal Electra 1008 BE 2. Cabling was all Nordost Norse 2 (Heimdall 2 and Tyr 2) with a Qb8 power distributor. Digital sources included my Rega Apollo CDP

and Squeezebox Touch, connected to a PC.

I began listening to the 280D with my Squeezebox Touch as the digital music player. Immediately I noticed improved dynamics on the micro and macro level with a more defined soundstage, combined with a richer tonal palette that included added bass weight at the lowest frequencies. This was in comparison to my resident Alpha Designs Labs Esprit DAC. Though this alone was a considerable lift in performance, things only got better when I switched over to the MiND module as the music player. Along with the aforementioned qualities, I perceived a blacker background that I attribute to a lower noise floor. Resolution increased, allowing clearer images to be perceived, much like dialing in the focus on a camera lens. There was also an increased sense of realism in the depicted soundstage - clearer images, greater overall depth and height, combined with greater separation between individual elements. The flow of the music was also smoother, freer flowing and offered better timing.

Since the MiND is capable of DSD64 file playback, I downloaded some reference music files from the 2L website. One track was Arnesen: MAGNIFICAT 4. Et Misericordia. This track, originally mastered in DXD is offered in PCM and DSD in a number of resolutions as well as MQA. I had to download MinimServer to handle DSD on my PC, and once installed the MiND app displayed the MinimServer and gave me access to the DSD files for playback. Playback was as simple as a tap of the finger from there.

The DSD64 versions and up to PCM 24/192 kHz were no problem for MiND, though higher resolutions are beyond MiND currently and require the 280D to be directly connected to a computer via USB with appropriate playback software. Listening to the DSD64 version of this recording and comparing it to the PCM 16/44.1 and 24/192 as well as MQA, the 280D allowed me to discern the differences. The 16/44.1 was the least resolved as expected, DSD64 had greater texture, warmth and naturalness, while the 24/192 sounded clearer and more resolved but also was brighter. My surprise came when I played the MQA file. MQA is a new mastering & packaging format that is designed to capture the full-essence and resolution of the original master. To obtain the full benefit,

an MQA decoder is required, which sadly the MiND does not currently have; however, on the bright side, even without decoding, MQA promises sonic benefits given the associated mastering method; which is just what my listening confirmed. The MQA version had a similar level of detail to the 24/192 but was more harmonically balanced and complete to my ears, possessing greater smoothness, an acoustic warmth that manifested in more lifelike strings, vocals and delineation of individuals within the choir. Most pleasing was the texture, tonal complexity and the musicality that the MiND and 280D delivered with this MQA recording. My hope is that with Simaudio's continual updates to MiND that MQA decoding will be included. That said, the MiND and 280D proved themselves here to be incredibly capable of exposing the nuanced variances between the different formats/resolutions, all with sheer musicality.

I've been using TIDAL streaming for some time now and have been thrilled with the experience so it was great to see that Simaudio developed MiND to work seamlessly with TIDAL. One album I discovered on TIDAL is Freedom Song by The Oscar Peterson Big, recorded live in Japan. The track "Round Midnight" opens with an announcer, followed by the applause of the audience. Here the 280D via the MiND presented the track with an amazingly deep soundstage, larger than I've been able to achieve with any previous DAC I've used. The audience claps were very lifelike, discernable and anodyne, making me feel as though I had been transported back in time and dropped amidst the appreciative audience. It seems as though every minute sonic detail was being revealed, all in a most natural manner that had me constantly think I was hearing the performance in the flesh. Taking in Oscar's prancing over the keys was just mesmerizing and I felt myself being swept away with the beauty of the notes. Not only did the keys have their ivory twinkle but the body of the piano and the depth of the notes had a level of presence and palpability that was most believable. Dynamic swings in transition of Oscar's gentle keystrokes over to heavier play and back again, seized my attention. But there was something else here, not only was I hearing fine detail but it was wonderfully integrated within the tapestry of the music itself, making it hauntingly real.

I've heard other hi-resolution DACs in my listening room with comparable levels of detail but never one so adept at musical realism.

I have previously spent some time with Diana Krall's Glad Rag Doll album but had never really become a fan until the 280D with MiND. It was as though the 280D opened up new insight into the recording that significantly increased its musical appeal. Listening to the title track, the shadings of Diana's voice were luxurious. Her raspy phrasings were portrayed with a sombre sexuality that I had not previously experienced. Plucking of the guitar strings were resonant and tight as well as sweet.

6 String Theory is a Lee Ritenour album that features some very great talent. The track "Am I Wrong" features Keb 'Mo' vocals and though he is great himself, it is the bassline that makes this track so memorable. Here the Nēo 280D / MiND combo provided wonderful depth and control of the bass notes. Full, tight and articulate, I couldn't help but turn up the volume and grin at the pulsing of the woofers of my Aurum Montan VIII loudspeakers. The harmonica too jumped out with a lifelike brilliance, its natural burnished tone accompanied by customary bite. And lest I not mention the pungent lifelike crash of the cymbals. Instrument separation as well as side-to-side and front-to-back imaging was superb. I took note of the stable placement of images that was expressed in the absence of unnatural silhouetting that lesser DACs so often create.

The MOON by Simaudio Nēo 280D with MiND player is a winner combination in my book. The pairing digs deep, exposing the bones of the music but at the same time keeping the flesh on those bones - keeping it real. I think the 280D is a rare specimen in that it should equally please the analytic and the music lover - a nice place to be.

quickinfo

MOON by Simaudio
www.simaudio.com
450-449-2212

MOON Nēo 280D DSD DAC
Price: \$2,400 CDN

MOON MiND module
Price: \$600 CDN extra