



## MOON by Simaudio Nēo 280D MiND



**Device Type:** Digital to Analog Converter/Network Player  
**Input:** 1x AES/EBU, 2x Coax S/PDIF (RCA), 2x TosLink, 1x USB, Qualcomm aptX audio for Bluetooth, Ethernet (with optional MiND module)  
**Output:** unbalanced RCA, balanced XLR  
**Dimensions (W x H x D):** 16.9 x 3.4 x 13.1 in. / 42.9 x 8.6 x 33.3 cm  
**Weight:** 16 lbs. / 7.5 Kgs

### Shhh, Don't Tell Anyone

Simaudio makes fine-sounding, well-made, and (very) reasonably-priced gear. I'm afraid if this word gets out, they'll wise up and at least quintuple their prices, making them more appealing, ya know...sexy, to a certain sect of audiophiles.

The Nēo 280D MiND includes the optional MiND (MOON intelligent Network Device) module and offers just about every form of digital input you could ask for. The "fully asynchronous" USB input resolves PCM resolutions up to 32-bit/384kHz (DXD, too) and up to quad-rate DSD (DSD256). The network connection will handle up to DSD64. The other digital inputs max out at 24-bit/192kHz except Toslink which caps out at 96kHz.

HerE are some details on the 280D's insides from my contact at Simaudio: It uses a fully asynchronous DAC supporting native DSD64, DSD128 and DSD256 (USB only) and PCM up to 32-bit/384kHz including DXD (USB only). As well, it uses Digital Audio Signal

Processing using our M-AJiC32 (MOON Asynchronous Jitter Control in 32-bit mode) circuit; M-AJiC32 is based on ESS Technologies SABRE32 ES9018K2M circuit with 32-bit Hyperstream. The only point where clocking occurs—using our own Alpha Clocking System—is at the very end of the digital audio stream during the final phase of Digital-to-Analog conversion. This, along with ESS's "Sample Rate Conversion" circuit and the "Time Domain Jitter Eliminator" reduce jitter to 1 pico second. (note: the digital filter is contained within the DAC chip circuit)

Please keep in mind that a DAC's sonic performance is highly dependent on both the power supply and analog stage - 2 aspects we excel at.

On that last sentence, I'd add that thinking all DACs which use the same chips sound the same is like thinking that all nachos that use the same chips taste the same.

Here's an interesting bit from the 280D manual that's worth reading:

### Balanced Operation

When using an unbalanced interconnect, the audio signal runs through both the center wire and the shield/ground wire. Any noise picked up by this interconnect (ie. nearby magnetic fields such as an AC power cord) will be reproduced by both the preamplifier and amplifier, then heard through the loudspeakers. Conversely, a balanced interconnect has three separate conductors; one for the ground and two for the actual signal. These two signals are identical except that one is 180 degrees out of phase with the other. For example, when one conductor is carrying a signal of +2 Volts, the other will be carrying a signal of - 2 Volts. When these two inverted signals on a balanced line are output from the Nēo 280D, any noise picked up by the interconnect will be eliminated since a differential circuit amplifies only the difference between these two signals: Noise on a balanced interconnect will be equal on both conductors and therefore cancel out.

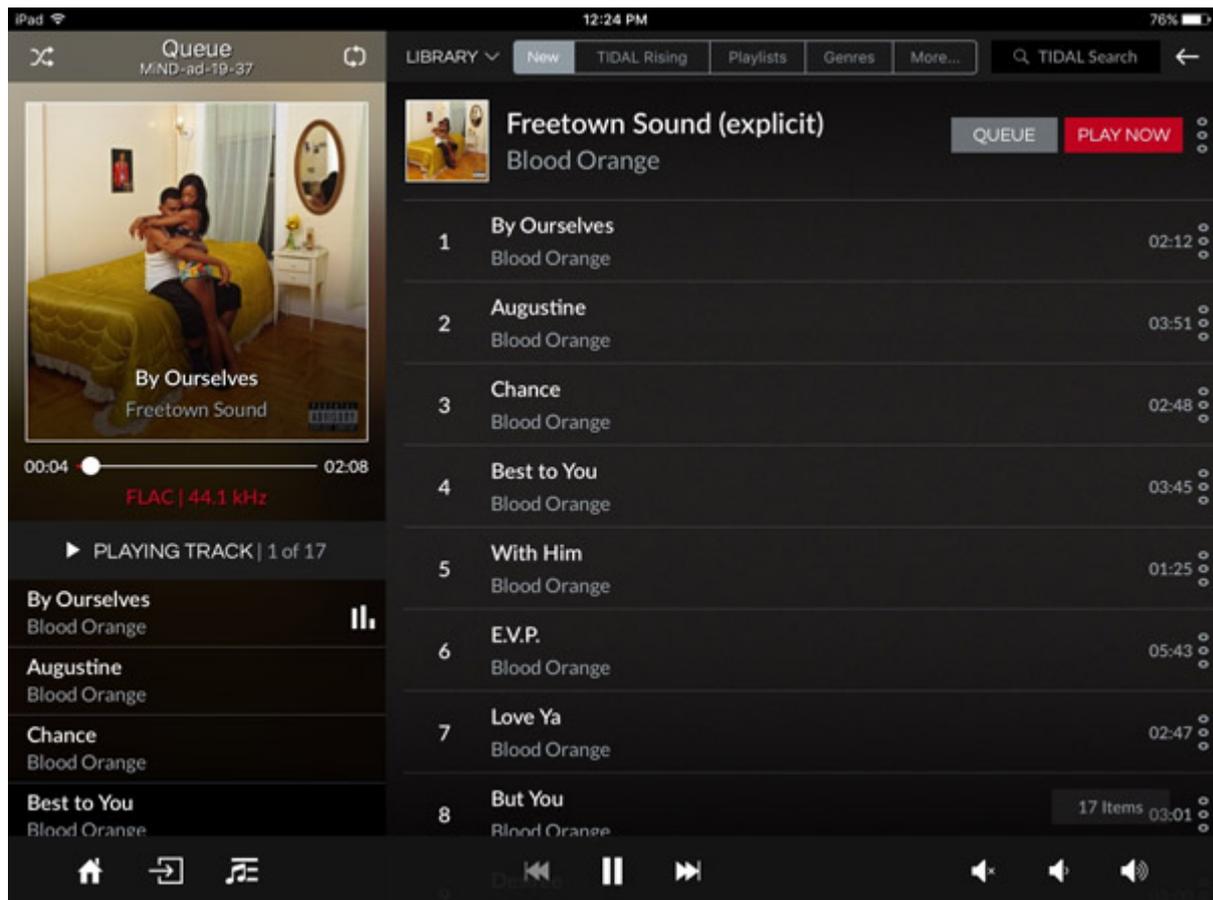
We've been talking about noise a lot lately and using balanced interconnects is another great way to eliminate it.



Using the 280D is very easy, i.e. no manual required. The front panel has a few buttons; Bluetooth pairing (BT), input select, and Standby. Red LEDs tell you which input is active and the sample rate of the music at play. The included plastic remote offers basic functionality which mimic the front panel buttons while adding "Mute". If you own other Simaudio components, you can control them as well with the same remote. The 280D includes the company's SimLink input/output for stringing your Simaudios together.

Overall the 280D's fit and finish are first rate and you'd The front panel's aluminum end caps and side panels come in black or silver and I find the sixteen pound heft adds to a feeling of solid reassurance.

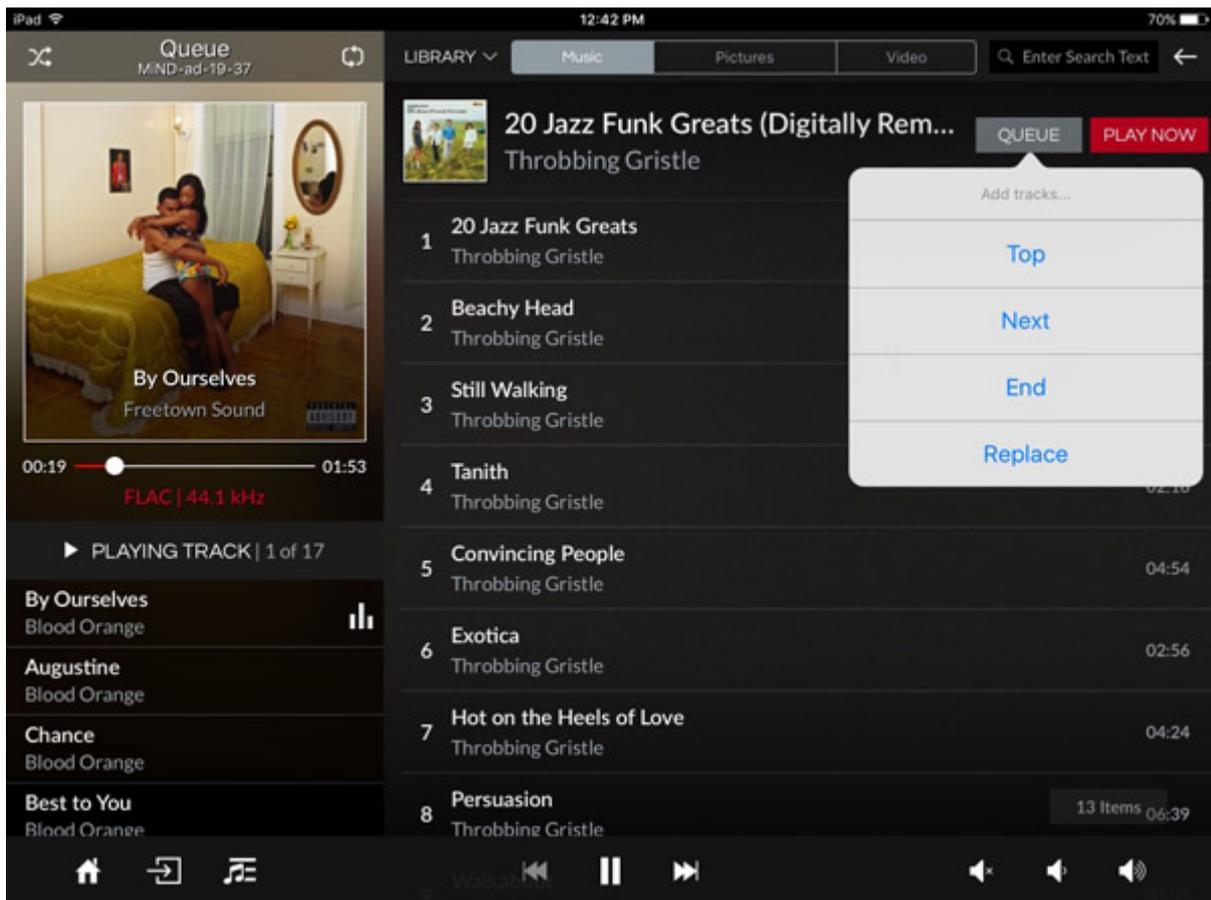
The review system includes my standard gear—the Ayre AX-5 Twenty driving the DeVore gibbon X with everything now tied together by Tellurium Q Black cabling and a length of AudioQuest Vodka Ethernet cable. USB-input listening was served by my microRendu.



## The MiND app

Simaudio considers the MiND app a work in progress and it has progressed very nicely since I reviewed the original MiND streamer. Major changes since then include the addition of Tidal (yea!) and an Android version of the MiND app (yea!). I asked my contact at Simaudio about the MiND becoming Roon Ready and it's in the works (yea!).

Functionally, the MiND app is a breeze to use and includes the functionality we've come to expect from any remote app. You can create and save Playlists, I don't, view your music collection by Genre, Years, Artists, Albums, and New Music (recently added). You can jump around your view by clicking on the vertical alphabet and search your collection. Managing the Queue is also self-explanatory offering the ability to save the current queue as a Playlist and adding music to the queue (Top, Next, End, Replace).



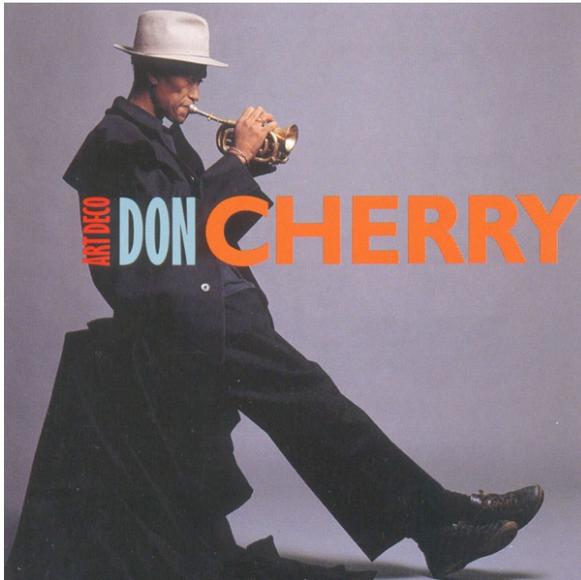
You can also change inputs directly from the app and control multiple MiNDs if you have them. I'm not to get into the nitty gritty of the MiND app but for anyone looking for answers to lots of questions, I recommend reading the thorough 29-page manual.



## Color Me Impressed

I listened to the Nēo 280D, on and off and on..., for some months and I found myself consistently asking, "Really?". This was accompanied at times with a slight chuckle and head shake, which translate into, "Yea, this thing really sounds this good."

A few sonic characteristics stand out; excellent clarity, superb control from bottom to top, and a very convincing portrayal of the sound image in every dimension. Music entered the barn completely separate and detached from my speakers, opening up well beyond their physical placement while the sound image remained rock solid and stable. Very nice.



I've been listening to a lot of new music of late so it wasn't until I entered *serious review mode* when I pulled out my *serious review tracks*. These consist of songs and albums I've been listening to, seriously, for many years, decades in some cases, so I know them like the back of my Ayre AX-Twenty (think about how many times I change connections back there). While I hate to harp on these 'test tracks' for fear of causing excruciating boredom for our readers, I have to say that Don Cherry's *Art Deco* sounded particularly stunning in terms of its place in space and the truly beautiful differentiation in voice between the various players.

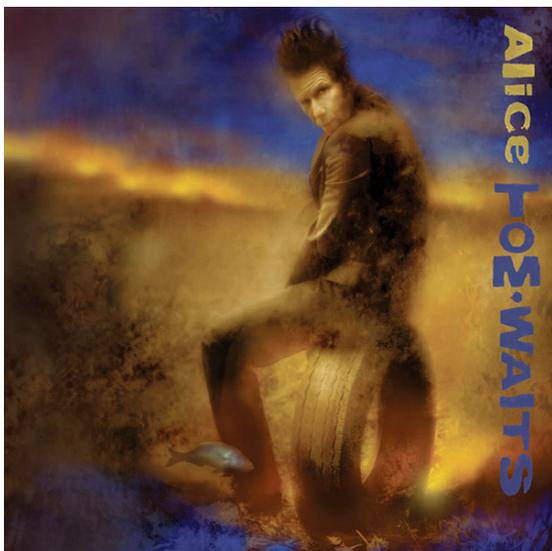


I love this recording for its music first but its simple, acoustic ensemble (trumpet, tenor sax, bass, and drums engineered by Rudy Van Gelder) make for a great reality test and the Nēo

280D passed with flying colors. Switching back to my reference Auralic Vega made for an interesting comparison as the Vega sounded somewhat *colored* in comparison. As if it was adding some tizz and bloom that wasn't in the recording; a tad overblown, over-processed leaving the Nēo 280D sounding more neutral and natural. When I said 'bottom to top', I'll emphasize that the 280D handles bass with the best of them; think bold and controlled.

I spent some time comparing the Nēo 280D's MiND and USB inputs and did not note a great sonic difference between them. Picking nits, I'd give a very slight edge to USB as it seemed to offer a bit more clarity, a touch more blackness. Of course USB also delivers the ability to pass DSD128 and 256 as well as higher sample rate PCM. Of even greater importance to me is that USB also comes with Roon as remote control. While the Simaudio Moon all has come a very long way since I first review it as part of my review of the original MiND, I still prefer Roon, which should come as no surprise to regular readers. All that being said, for people looking for a one-box network DAC solution, the Nēo 280D is a very good choice and Roon Ready is in the works.

Bluetooth sounded just fine streaming Tidal from my iPhone and while not on par with physical connections, it does offer a nice way to invite friends and family into your hi-fi.



Let's get back to some music. Tom Waits' "I'm Still Here" from *Alice* and Nick Cave & The Bad Seeds "Love Letter" from *No More Shall We Part* (a song about which author Jonathan Lethem wrote the "shattering simplicity" of its lyrics are "worthy of Shakespeare") both offer the emotional impact test which is largely dependent on detail, nuance and timing. You have to hear into these recordings down to the minutest shifts in breath and tone to hear the pain of their respective singers. Scale is also critical here as it also adds to emotional impact.

Let me explain. On "Alice" Tom Waits is accompanied by himself on piano, Colin Stetson on clarinet, Dawn Harms on violin, and Matt

Brubeck on bass. I have heard this recording through DACs that make Colin Stetson and Dawn Harms all but disappear, literally. Other DACs mush them up with Tom Waits to the point that you can't really tell what other instruments are helping Tom tell his story. The piano is close miked and some DACs, like the Vega, make it sound comparatively overblown, nearly overwhelmingly so. Not so with the Nēo 280D. Dawn Harms is very clearly well behind Tom, off in the distance if you will, adding to the feeling of longing and distance, the subject of this song. Colin Stetson's clarinet also dances off in the distance along with Matt Brubeck's bass until the very end where they all step up and join Tom for the closing lines, "You haven't looked at me that way in years / But I'm still here". Crushingly beautiful when delivered the way the Nēo 280 delivers it which is among the best I've heard.

I could go on and into every recording in this manner but it's not necessary because these traits apply to every single piece of music we listen to. Sure, some call them out in a more obvious manner, but they are always there. They are always important. The thing is, if you haven't heard them exposed at length in your system with your music, it may be difficult to imagine their impact. When you do hear it, it's painfully obvious. Especially in a song like "I'm Still Here".

I have heard even more in terms of that last bit of sparkle, life, and tonal saturation from DACs including the totaldacs (every one I've reviewed) and the dCS Rossini. Yes, think mucho more money. I also happen to have the Schiit Yggdrasil (\$2,299) here for review which will make for an interesting comparison I'll talk about in that review. Note that the Simaudio adds DSD and high-rate PCM playback along with an optional network player if these things matter to you.



### **The Sexy MOON by Simaudio Nēo 280D MiND**

As a €1950,- DAC, the Nēo 280D, which I'm going to call "Alice", is at the top of my heap and reaches beyond its price-point bettering the Auralic Vega according to my ears. Seeing as I've never felt this way before, I'd call that sexy. Adding the €550,- MiND module for network playback turns that DAC into an equally wonderful sounding all-in-one solution, just add NAS. Buyers looking for great sound and exceptional build quality at an exceptional price are encouraged to seek out the MOON by Simaudio Nēo 280D MiND for a seriously fun audition. If you have to, pretend it costs a lot more.