

# MOON by Simaudio Neo 230HAD Headphone Amplifier / DAC Review by Michael Liang

## The Dynamic Dual

I am often asked by readers to recommend a “good” headphone amplifier. One that’s within reach for a beginner audiophile with a small collection of high-end headphones. This is a difficult question to answer because there are literally hundreds of makes and models, in all price points, that one could choose from today.

The Simaudio MOON Neo 430HAD was my first experience with a Simaudio product. It impressed me so much that I ended up buying the review unit for personal use and also as the reference headphone amplifier for reviewing purposes. Since the Neo 430HAD would set you back \$4300, it is not for someone just getting their feet wet in the hobby. It turns out that Simaudio makes a pint-sized headphone amplifier for \$1499 – MOON Neo 230HAD. Going through the deets on Simaudio’s website and the 230HAD’s owner’s manual, the little guy is nearly as full-featured and impressively spec as its big brother.

from owner's manual:

“Single-ended inputs (RCA) x 1, Mini-jack input x 1, Digital Inputs: S/PDIF (RCA) x 2, USB x 1, Toslink x 1, up to Quadruple (11.2896MHz) DSD256 DAC, up to 1W @50 Ohms, 1.25Ω output impedance, dynamic range 118dB, signal-to-noise 114dB @full output”



## Time For A Closer Look

The MOON Neo 230HAD is desk friendly at only 7" wide – half the width of its big brother. Fit and finish of the all-aluminium chassis equals to the 430HAD. Quality-philes will not be disappointed by the smooth, solid feel of the analog volume knob. Getting the amp up and singing is easy. A single USB cable to my MacBook, AC power (both are Nordost Heimdall2) and my old friend the Sennheiser HD800 headphones, and I am off to the races. This literally takes less than a minute. This pairing proves to be stellar. HD800 is known to be a little edgy in the highs and bass shy – not the case with the Neo 230HAD. The amplifier has a warm and natural sound similar to a vacuum tube amp sans the occasional tube noises and warmup time. In Bon Jovi's This Left Feels Right album (an acoustic rendition of his popular '80s classics). His voice sounds intimate, front and center in the soundstage. Instruments in the mix reach beyond the headphones. Whoever says headphone listening does not compare to speakers has not tried this setup. The synergy between Sennheiser HD800 and MOON Neo 230HAD is nothing less than stellar. I wonder if the HD800 was one of the reference headphones used in the amplifier's development.



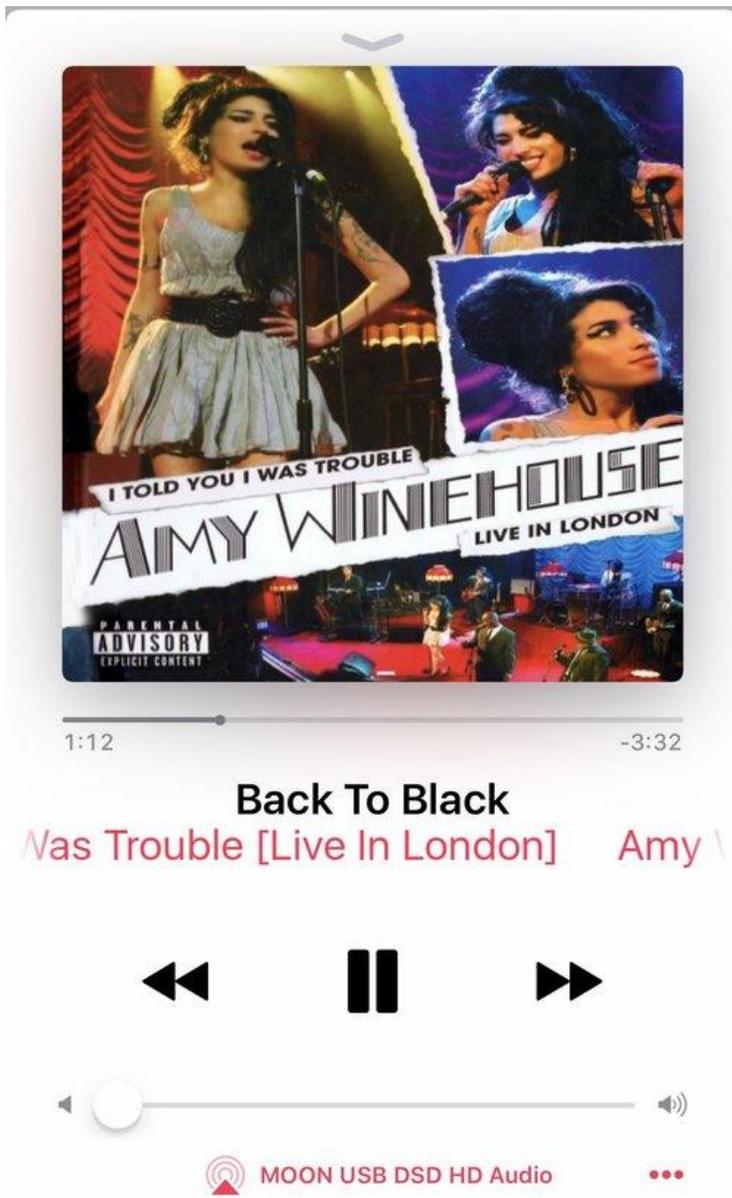
Also in the lab is the new ENIGMAcoustics Dharma D1000 headphones. This is not your typical dynamic driver or planar magnetic headphone. ENIGMAcoustics came up with a way to marry an electrostatic super tweeter with a 52mm dynamic driver. They call it Electrostatic/Dynamic Hybrid. The result is very good. Dharma D1000 sounds fuller with more pronounced mid-bass compared to Sennheiser HD800. Pairing Dharma D1000 with the Neo 230HAD gave me a musical listening experience, more forgiving on the recording quality than with the Sennheiser HD800.



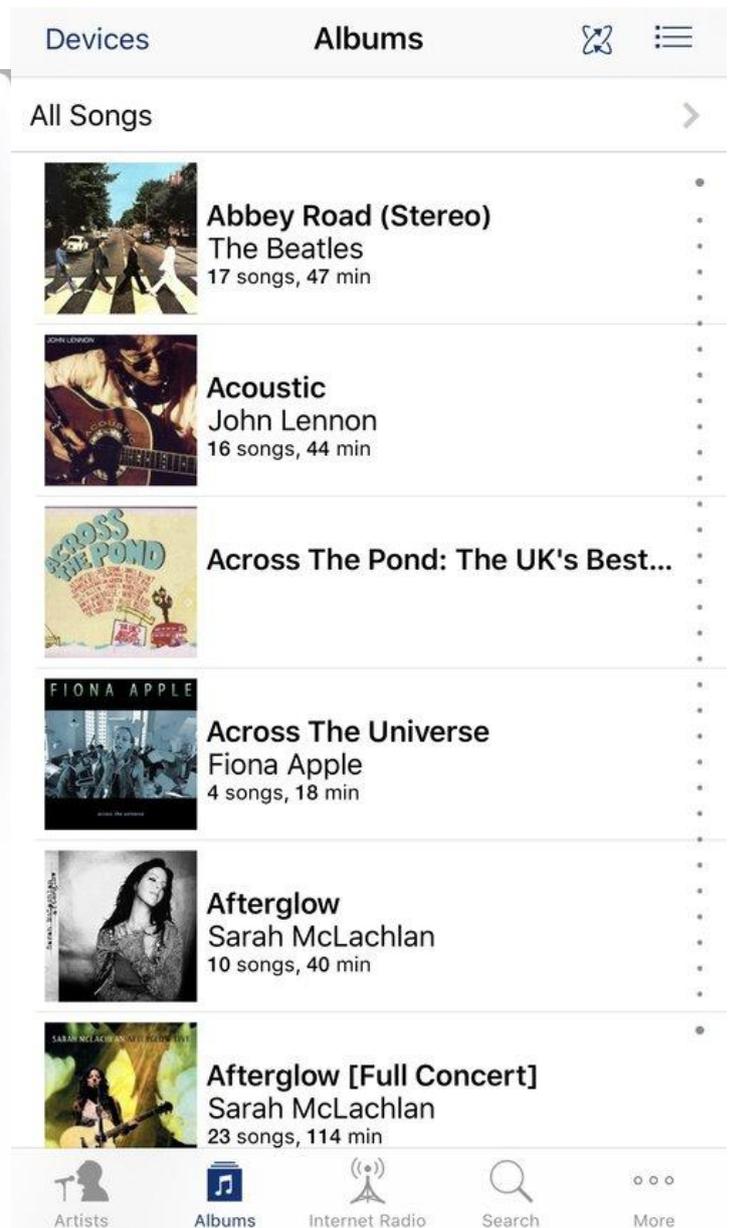
### Hidden Easter Egg

One feature that we are starting to see less and less of on amps/DAC at this price point is the optical (TOSLINK) input. Users of Sonos Connect or Apple's \$99 Airport Express (AE) set up to stream music wirelessly over the home network would appreciate the optical input. For the majority of the evaluation period, the Neo 230HAD served very well as my bedside listening station using an AE setup to stream music via iTunes from my headless (no monitor) MacMini in the living room. My entire music library, including internet radio, can be controlled on an iPhone/iPad with the iTunes Remote app from Apple. An easter egg I found hidden in the DAC is the ability to play music from an iPhone/iPad (Apple's Lightning to USB camera adapter required). The

playback resolution is limited to 24-bit/48kHz through the stock Apple Music app, but you can get a third-party app (Onkyo HF Player) for Hi-Res files up to Quad DSD. If you subscribe to Apple Music or TIDAL, you now have a record store in the palm of your hand. Enjoy endless music through the great-sounding 32-bit/384kHz Hi-Res DAC. The one thing I wish the Neo 230HAD has is automatic input selection. This would save my lazy butt from having to physically press the input selection button to go between optical, USB and analog. I know, first-world problems.



Screenshot: Music app on iPhone



Screenshot: iTunes Remote app

## Return On Investment

I threw the AKG K701, Grado RS1i, HiFiMan Edition X, beyerdynamic T1 2nd gen, Sony MDR-Z7 with Kimber Kable upgrade, Sennheiser HD650 and Oppo PM-1 headphones at the Neo 230HAD. They all pair really well with plenty of power and headroom to play loud. There was never a time in the review that I felt the urge to go back to my 430HAD. For anyone who has a small collection of headphones and doesn't need balanced input / outputs, the Neo 230HAD is an exceptional performer at an outstanding value.

Screenshot: Onkyo HF Player app

