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Moon Neo 330A

Stereo/Mono Power Amplifier

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At $4300 USD, the Moon Neo 330A is Simaudio's lowest-price power amplifier. It's primarily meant for use as a stereo amp, for which it is specified to output 125Wpc into 8 ohms or 250Wpc into 4 ohms. Or two of them can be used in bridged mono, each producing 400W into 8 ohms.

Like all Simaudio products, the Moon Neo 330A is designed and manufactured at the company's headquarters in Boucherville, in Quebec. It is a companion to the Moon Neo 350P preamplifier, which I reviewed in March and thought bettered the sound of my own reference preamp, Hegel Music Systems' P20. I wondered if the Moon Neo 330A would impress me as much.

Description

The Moon Neo 330A ships in high-quality packaging of cardboard, foam, and plastic. Included are a heavy three-pronged power cord, a spare 6A fast-blow power fuse for my 120V version, a single 12V trigger cable, an owner's manual in French and English, and registration documentation to extend the standard one-year warranty to ten years (nontransferrable) at no additional cost. The Neo 330A's dimensions are identical to the Neo 350P's: 16.9"W x 3.5"H (including feet) x 14"D. It weighs

33 pounds and feels fairly dense. The Neo 330A shares the visual styling used for most of Simaudio's current models: thick, shapely, curved "cheeks" at either end of an even-thicker flat center panel, for a look more sculptural than that of the usual rectangular box. My sample was black across the center, with black cheeks -- the silvery feet contrasted nicely with it. The other options are all silver or my favorite, two-tone: black center with silver cheeks.

From top to bottom on the vertical midline of the almost empty faceplate are the Simaudio Moon logo, a blue power LED, and a small, round, silver Standby button. The vented top panel is made of a heavy-gauge, textured, black metal; the screws securing it are the only visible connectors. The side panels are deep-finned heatsinks of black-anodized aluminum. In fact, the Moon Neo combo of 350P preamp and 330A power amp is very attractive to look at. In the Neo 330A's published specifications, Simaudio states that it operates in true class-A for the first 5W of its claimed power output, then shifts to class-AB. Other specs: The frequency response is 10Hz-125kHz, +0/-3dB, and the signal/noise ratio at full power is 100dB.

The power consumption at idle is low, at 36W. The Neo 330A never produced significant heat when I used it, but was warm to the touch during loud listening. Simaudio says that such cool running results in less stress on parts and "longer life for the component as a whole." The Neo 330A also has high-quality proprietary bipolar transistors to, Simaudio says, expand bandwidth, lower distortion, and provide "unprecedented gain linearity." Custom toroidal transformers are used to ensure "excellent sound quality under all conditions," and to match the most difficult speaker loads. There is zero global feedback, for "more accurate musical reproduction with respect to tonality -- no colorations," and to widen the dynamic range.

The connections on the rear panel are typical for a power amp, with enough space between them for easy connection of all cables and interconnects. On the left are 12V SimLink proprietary trigger in/out ports for connection to other Simaudio gear, and an RS-232 jack for custom installations. On the right are the IEC-compatible power-cord inlet, the main on/off switch, and the fuse slot. In the center section are two pairs of speaker terminals with nuts of clear, knurled plastic; they accept banana connectors, have convenient slots in their plastic bases to guide bare wires or spades, and are easy to grip and tighten for a secure connection. The terminals are flanked by single-ended (RCA) and balanced (XLR) input jacks. Installed at the factory are removable jumpers that join pins 1 and 3 of the XLR jacks; leave these jumpers in place if you use the Moon Neo 330A unbalanced.

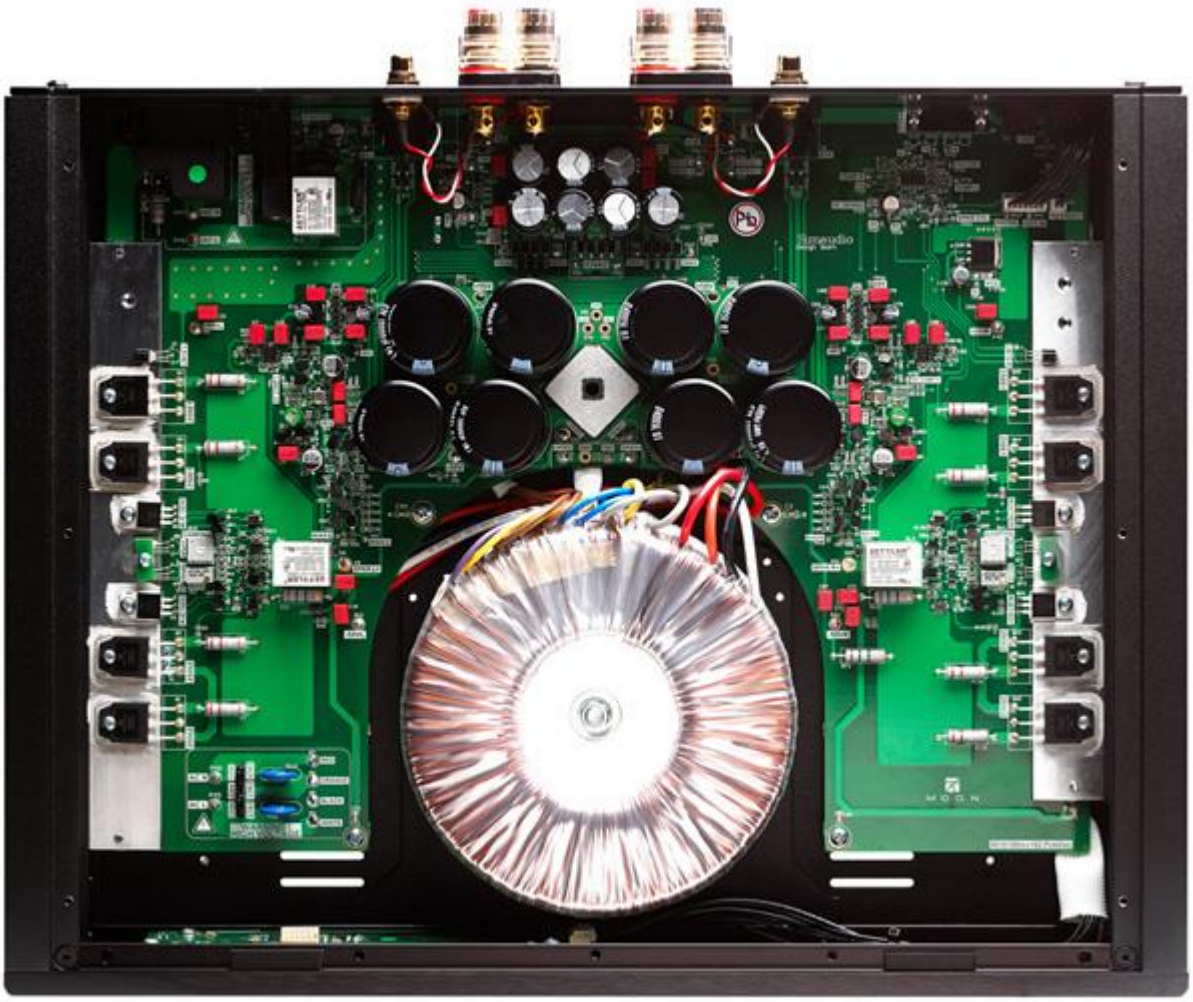
Setup

I generally used the Moon Neo 330A and 350P together to drive my Paradigm Reference Prestige 95F loudspeakers. To make comparisons, I swapped in my Audio Research D300 amplifier for the Neo 330A, leaving unchanged all other components and connections. Simaudio's long but nontechnical explanation of balanced operation in the Neo 330A's manual subtly recommends balanced over single-ended connections. I tested both and heard no notable differences in sound, but took Simaudio's advice and used balanced connections for my listening.

Listening

I've had the Stranglers' 1984 album, *Aural Sculpture* (16-bit/44.1kHz AIFF, Epic), for ages, but had never given its sound quality much thought -- until "Laughing" came on one night while iTunes was running on random and the Moon Neo 330A was powering my speakers. A lucid reproduction of the band's performance of this song appeared in my room -- the voices, and especially transients, were crisp without being harsh, and firmly anchored in space. End-of-word *s* sounds were reproduced without sizzle, and there were accurate reproductions of the sounds of singers' mouths opening and closing at the beginnings and ends of words. I found myself pulled into the music, and focusing sharply on the recording's clarity and its room-filling soundstage. Around the lead vocal are a variety of electronic percussion and keyboards, supported by bass and electric guitar. The bass guitar provides a firm underpinning, while the keyboards added typical 1980s melodies, supplemented by rhythm guitar. Each instrument and sound was clearer than I'd ever heard it before, and distinct from its neighbors on a huge apparent soundstage. I could easily envision an appropriately sized group of musicians and instruments, spread across and filling the width of the stage from left to right. None of the sounds was confined to

the positions of the left or right speakers; instead, the soundstage was suspended freely in my room, thoroughly detached from the speakers.



Next I tried “Leather and Lace,” from *TimeSpace: The Best of Stevie Nicks* (16/44.1 AIFF, Modern). The extreme detail that the Neo 330A was, by now, obviously capable of revealing gave me insight into nuances of this recording I’d never noticed. The introduction is played on acoustic guitar with a bit of airy keyboard. The guitar sounded accurate, but a little larger than I’d been used to hearing -- the 330A seemed to reveal more musical information. Each strummed chord was clear enough to let me discern individual strings -- as if a friend were playing an acoustic guitar in my room, but my room was now somehow bigger and more reverberant. Voices were similarly clear, but they, too, sounded unusually bigger and more present than before. Don Henley’s voice in this duet was revealed as having an underlying scratchiness I’d never before noticed in this recording -- and the soundstage was, again, huge, spreading beyond the physical boundaries of my room, the images on that stage very tangible. I felt that, with the Neo 330A, I was hearing the full content of this recording for the first time -- before, the details I was now noticing were masked.

Enya’s ethereal sound has always been big -- *really* big. Artificially big. Given what I experienced with the other recordings, it should be no surprise that the Neo 330A reproduced the illusion of an enormous soundstage with “Caribbean Blue,” from *Shepherd Moons* (16/44.1 AIFF, Warner Bros.). The fade-in began small and

centered, then grew and grew until it seemed to occupy a space larger than the speaker end of my listening room. The bass frequencies that underlie this piece were reproduced extremely clearly, with no bloat or overhang -- really tight. Subtle, high-pitched, harpsichord-like sounds in the melody were also exceptionally clean and tonally natural. Enya's highly processed, multitracked vocals in this song wander from left to right and from front to back, and I was impressed with how easy it was to follow her voices as they glided gracefully about the soundstage.

Carl Orff's *Carmina burana* is a large-scale work for orchestra, vocal soloists, and chorus. The recording of its well-known opening section, "O Fortuna," that appears on *The Power & the Majesty: Essential Choral Classics*, with Robert Shaw conducting the Atlanta Symphony Orchestra and Chorus (16/44.1 AIFF, Telarc), has a wide dynamic range that can tax an amplifier's power-output capabilities. It requires both ample power and sufficient accuracy to control the combination of very deep *fortissimo* sections bracketed by highly detailed *pianissimo* sections. The cymbal crashes near the beginning of "O Fortuna" were presented as well as I've heard outside the concert hall: loud and forward, without sounding like white noise. The mallets whacked against kettledrum heads were vividly rendered, with fabulous slam. The timpani's sounds were appropriately huge and tremendously deep without exhibiting any of the softened impact that lesser amplifiers display. The Neo 330A kept all low-frequency sounds under total control. Recurring passages in the double basses and cellos had a strong, clear presence. Deep-bass sounds that often lose the instrument's nuance and sound sloppy through lesser gear didn't faze the Neo 330A at all.

A second performance of "O Fortuna," from a 1969 recording of *Carmina burana* by the Boston Symphony Orchestra and Chorus conducted by Seiji Ozawa, demonstrated different sorts of details (16/44.1 AIFF, RCA). With the Neo 330A I had

a new experience: I could make out the voices of individual choristers. In this recording, the chorus is more forward; the orchestra is in more of a supporting role. Throughout this entire “profane cantata,” as Orff called it, I could easily discern individual choral voices and orchestral instruments. With equal clarity, the Neo 330A presented highly detailed reproductions of the vocal soloists in the quieter arias, and deep, powerful, full choral passages. Loud or soft, there was never a hint of sounds smearing together.

Overall, I found the Moon Neo 330A to be neutral -- utterly faithful to the signals fed through it, it added and/or subtracted nothing. There were no colorations. I found the same behavior in the matching Moon Neo 350P preamplifier I recently reviewed. With both Orff recordings, the Neo 330A’s neutrality let the recordings reveal themselves fully, without embellishment.

William Ackerman’s *Conferring with the Moon: Pieces for Guitar* (16/44.1 AIFF, Windham Hill) captures some great, highly detailed guitar playing. “Lago de Montañas (Mountain Lake)” has a close-miked sound for the two main instruments. The resonances of the charango’s strings and wooden body vividly presented the sound of this small Andean lute at what seemed the appropriate size. When he played quietly, I easily envisioned Ackerman’s deft, soft touch, while also noting the clear, subtle sounds of his hands moving on the strings. Similarly, the chuffing of the flutist’s breath was alluring because it was so similar to the instrument’s sound when being played in concert. Each instrument came forward at differing times to take the lead, then retreated to support other instruments. The Neo 330A’s clarity and neutrality presented this very convincingly -- it sounded as it would at a live performance, when a player steps forward to take a solo, then, when finished, steps back.

I like to hear if an amplifier can show its power with recordings that beg to be turned up loud -- it's a bonus when an amp can play really loudly *and* still fully control the speakers. Judas Priest's "You've Got Another Thing Comin'" is one of those numbers that seems designed to be played at the Nigel Tufnel-approved volume of "11." I selected it from the compilation *Metal Works '73-'93*, released in 1993 (16/44.1 AIFF, Columbia). The driving force of the pulsing kick drum and rapid rhythm-guitar riff at the rear of the mix was taut, laying a firm foundation for the rest of the band. The entrance of the lead guitar was exceedingly clear and very strong. Higher-pitched guitar solos screamed, each note clearly articulated without coalescing into a chaotic, rapid-fire mess, as happens with inferior amps. And Rob Halford's aggressive, slightly overwrought singing overlaid the whole thing. When I pushed the volume to levels verging on the dangerous (to my hearing), the Neo 330A kept everything in order as well as it did at more sedate levels. The solidity of the bottom end was awe inspiring, and the top never turned shrill. Everything just kept getting louder, as requested. The midrange remained in balance with the highs and lows, and kept the lead vocal clear and precisely enunciated. The sound was vibrant without being bright -- played LOUD, it made this track terrific to hear.

Comparison

My reference amplifier is a vintage Audio Research D300, designed and built when the company was based in Minnetonka, Minnesota, a few minutes' drive south of its current location, in Plymouth. The D300 is from a time when solid-state amplifiers were definitely bigger, on average -- the D300 is about twice as tall as the Neo 330A, with deep vertical heatsinks running down both sides. But despite the D300's size, its claimed power output is only a little higher than the Neo 330A's -- 160Wpc into 8 ohms -- and it ran a little warmer. I estimate that the surface area of the ARC's heatsinks is at least three times that of the Neo 330A's, which surprised me.

In comparison to the Neo 330A's, the D300's sound is laid-back. Judas Priest was less in-my-face in the fairly forward-sounding "You've Got Another Thing Comin'": When I turned up the volume, the bass and accent drums had a lower level of immediacy, and a slight added boominess that wasn't present with the Neo 330A; snare drums sounded less tight than the Simaudio's precisely rendered impacts of sticks on drumheads. Ackerman's "Lago de Montañas" sounded more distant via the D300; the flute and charango were slightly blurred and not as precisely positioned in space as their vivid renderings by the Neo 330A. The timpani in Orff's "O Fortuna" boomed through the ARC, compared to its taut slam through the Simaudio. Chorus

voices were somewhat smoothed over by the D300 rather than sounding clear and precise, as they had through the Moon Neo 330A.

I was taken aback by how much smaller soundstages were through the D300 -- this was true with every recording I played, but was most noticeable with Enya's "Caribbean Blue," which felt compressed in all dimensions compared to the Neo 330A's enormous stage. Stevie Nicks's "Leather and Lace" was slightly veiled through the D300, with a bit of softness reminiscent of the rolled-off sound of tubes. However, when I again played this track through the Neo 330A, I realized by comparison that all that smoothness had come with a loss of resolution. Distinguishing separate sounds on the soundstage was more difficult with the D300; I had to put more effort into listening to hear all the same details.

Now I know why the sound of the Stranglers' "Laughing" surprised me -- it sounded so much more striking through the Neo 330A because of the ARC D300's somewhat dark sound and lower resolution. The deeper I dug into my music collection and listened to it through the Moon Neo 330A, the more I felt I was hearing what was actually on the recordings -- no more and no less. The Neo 330A presented more of my music than I'd ever heard before.

Conclusion

Magnificent and palatial soundstages, coupled with neutrality, made the Simaudio Moon Neo 330A's sound in my system wonderful to behold. Its combination of high-quality electronic parts, high precision of construction, manufacturer reputation, ten-year warranty, sexy looks -- and, most important, its beautiful reproduction of every recording I played through it, regardless of musical genre, pace, or playback volume -- easily exceeded all of my needs.

When the Moon Neo 330A arrived, I wondered if it would impress me as much as had the Moon Neo 350P. It did -- and more.