

ADL

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Alpha Design Labs STRATOS DAC-ADC Preamplifier

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Having been an audiophile for almost 30 of my 40 years on this planet, I've seen more than a few changes in audio software and hardware. One particular change in hardware I lament more than almost any other is the demise of the full-function preamplifier. Those of you close to my age or older probably remember them. Time was, having a preamp in your hi-fi rig meant you had a standalone component that accepted a bevy of input signals, and provided gain and volume control for them -- said signals perhaps originating from a record player, a reel-to-reel deck, a cassette deck or two, and an AM/FM tuner . . . maybe even from a CD a player, if you had an early-1980s to mid-'90s preamp.

Back then, it was almost mandatory that a preamp be able to process the signals from these sources in a multitude of ways: Adjustable phono impedance, gain, and turnover? Check. Tape-monitor loops and recording controls? Check. Multiband tone controls, balance control, switches for phase reversal and mono? Check all. I suppose it's no surprise by now that nearly all of those features, and many of those sources, have gone the way of the dodo. Even if there were such a thing as a modern-day version of the full-function preamplifier, what would it look like?



It might look a little something like the Alpha Design Labs Stratos (\$1399 USD). If the name is unfamiliar to you (it was to me), ADL is part of a Japanese company, the Furutech Corporation, that's been in business since 1988. ADL's product line isn't extensive; they seem to center their design efforts more on complete components such as headphone amps and DACs, rather than on the cables, plugs, and individual parts Furutech is known for. The Stratos combines in a single case D/A and A/D converters, a phono preamp and headphone amp, and a line amplifier. That case is surprisingly compact, measuring 8.5"W x 2.5"H x 7.1"D and weighing just under three pounds.

A quick glance at the Stratos's front panel shows how well equipped it is. At the left are a small, round Power/Standby button and a three-position recording-level toggle switch; at the right, a Volume/Input Select knob. Between these are a small display screen, 16 status and input LEDs, and XLR and 1/4" headphone jacks.

The Stratos's rear panel is almost as densely populated. Digital connections include a USB Type B 2.0 input/output jack, a coaxial input, and one each TosLink optical input and output jacks. Analog connections comprise L/R line inputs and outputs and a phono input (all RCA), a pair of L/R XLR outputs, a phono ground lug, and a minijack for the external 15V DC power supply. A card-style remote control is included.



ADL describes the Stratos as a “DAC and ADC digital preamplifier” -- about as accurate a description as any. Its DAC section, based on the 32-bit/384kHz ESS Sabre2 9018K2M converter chip, can process PCM signals with depths of 16 to 32 bits, and sampling rates of 44.1, 48, 88.2, 96, 176.4, 192, 352.8, and 384kHz. It can also process native DSD64, DSD128, and DSD256. Note that the S/PDIF inputs and output are limited to a maximum resolution of 24/192; the USB input must be used for higher-resolution PCM and all DSD signals. For A/D conversion, the Stratos uses a Cirrus Logic CS5340 ADC fixed at 24/192. With these converters, and both analog and digital inputs/outputs aboard, you can use the Stratos to make your own recordings; the recording-level attenuator can be set to output levels of +6, 0, or -6dB.

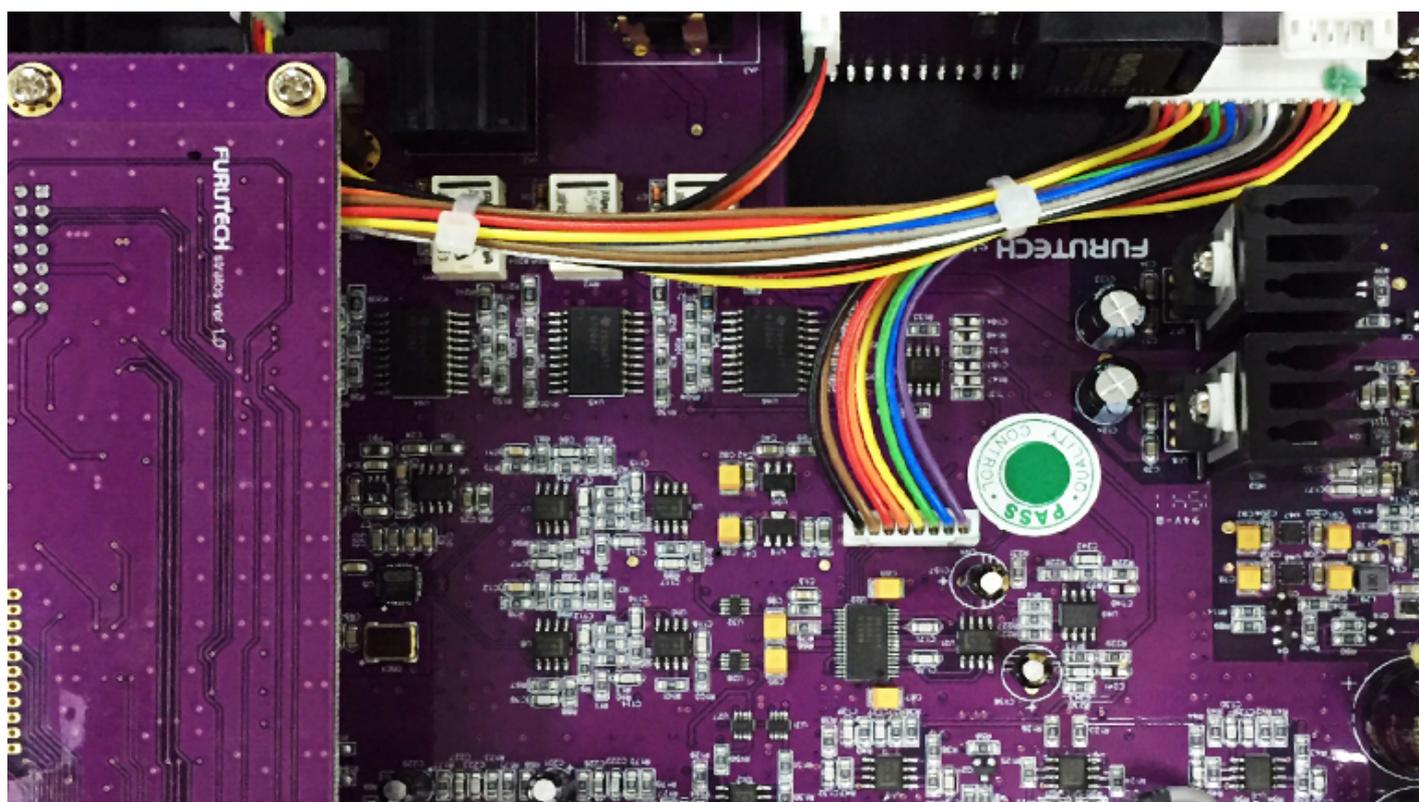
The Stratos's RIAA phono section accepts both moving-magnet and moving-coil cartridges, with specified respective input sensitivities of 4mV and 0.4mV. The input impedance and capacitance are 47k ohms/100pF (MM) and 100 ohms/1000pF (MC). The headphone amplifier uses three separate Texas Instruments TPA6120A2 chips. Two of these drive the left and right XLR outputs, while the third drives the 1/4" stereo

headphone jack. The recommended headphone impedance ranges from 12 to 600 ohms, and the power output from 100 to 1000mW.

Listening

After giving the ADL Stratos a thorough burn-in, I decided to first evaluate its DAC section. I cued up *Primal Scream*, by David Chesky's Jazz in the New Harmonic Quintet (24/96 AIFF, Chesky). Right from the start, the Stratos impressed me with its warm tonal balance, reproduction of detail, and altogether smooth sound. In "Check Point Charlie," for example, Peter Washington's double bass sounded weighty and fulsome, with a large, in-the-room presence. Nor was this achieved at the expense of detail or clarity: The Stratos also reproduced Washington's bass with the kind of pitch definition and articulation you might expect from a much more expensive converter. Album after album, the Stratos displayed a knack for balancing bass quantity and quality without the bass dominating the rest of the audioband.

Moving higher in the audioband highlighted one of the ADL's greatest strengths: its excellent midrange. Often enough, I'll hear a component that at first impresses with gobs of detail, only to realize, with extended listening, that this "detail" has been achieved by an elevation of the mids. Not so the Stratos: The voicing of its midrange has been expertly judged -- it was naturally open, and neutrally balanced against the rest of the audioband even as it delivered copious detail.



For example, through the wrong DAC, Neko Case's voice can sound too piercing or nasal, as is easily heard in such tracks as "Vengeance Is Sleeping" and "Fever," from her *Middle Cyclone* (256mbps MP3, Anti-). The Stratos sailed through these torture tests with ease, letting Case's voice sound powerful and clear, but without glare or stridency. What's more, the Stratos's uncanny way with detail meant I could easily hear how Case enunciates quickly sung words with precision and poise, and the restraint with which she employs subtle vibrato to accentuate her falsetto and the trailing ends of long, lingering notes. If it's midrange reproduction you're after, the ADL Stratos has you covered.

In terms of spatial reproduction, the Stratos's qualities of imaging and soundstaging equaled its fine midrange. In Alisa Weilerstein's performance of the Dvorák Cello Concerto, with Jiri Belohlávek conducting the Czech Philharmonic (24/96 AIFF, Decca), Weilerstein's cello seemed vividly carved in three-dimensional space, making it easy to "see" every stroke of her bow as she coaxed from her instrument that bold, gorgeously haunting sound. It had such a strong, you-are-there presence that at times it sounded almost tangible. So, too, did the orchestra, which also had excellent image specificity and solidity. Orchestral sections were easily distinguishable, clearly drawn on a wonderfully wide and deep soundstage that extended well beyond my speakers' outer edges.

One area in which the Stratos might be considered less great than merely good was in dynamic range. With Lang Lang's recording of Rachmaninoff's Rhapsody on a Theme of Paganini, with Valery Gergiev conducting the St. Petersburg Mariinsky Theater Orchestra (16/44.1 WAV, Deutsche Grammophon), the ADL tracked nearly the full range of dynamics, from pianissimo to fortissimo, with accuracy and verve, letting me focus more on the music than the sound. But while this was a notable accomplishment by any measure, the Stratos had limitations here: When I pushed the volume a little too far, a bit of compression set in to ever-so-slightly stunt that last bit of dynamic expressiveness. Still, the Stratos performed quite convincingly in this regard, even if it can be eclipsed by some other DACs.



Speaking of other DACs, my own, an Arcam irDAC (\$699.99, discontinued), is a remarkable little machine with a generous number of inputs, a high quality of construction, and a remote control. In my system, the irDAC has bested some much costlier competition, and in many respects held its ground against Simaudio's Moon Neo 260D (\$3000 with optional DAC). Since the irDAC offers a warm, smooth sound similar to the Stratos's, I was eager to compare them.

First up was "Magpie to the Morning," from Neko Case's *Middle Cyclone*, and the irDAC instantly reminded me of why I'd fallen in love with it in the first place: for its impeccable, completely mesmerizing way with pace, rhythm, and timing. While the Stratos sounded similar to the irDAC in rhythmic articulation, it couldn't quite

match the Arcam when it came to pushing the music forward in a propulsive, exciting manner: In this regard, the irDAC just sounded more incisive and believable.

But I had a hunch that the Stratos could hold its own in the midrange, and in this regard it did *not* disappoint. With the ADL, Thom Yorke's voice on Radiohead's *The King of Limbs* (16/44.1 WAV, XL) sounded purer and clearer than through the Arcam irDAC. Here, the Stratos's excellent way with detail made for cleaner vibratos, more explicit vocal fry, and more defined enunciation. Synth-piano chords also sounded better delineated and more tonally pure. And with the Stratos in the chain, the horns, electric guitars, and acoustic piano on Radiohead's *Amnesiac* (16/44.1 WAV, Capitol) all had a shade more tonal development, harmonic complexity, and inner detail, while sounding altogether smoother. While the Arcam irDAC was no slouch through the mids, the ADL Stratos consistently bettered it by a small but audible margin.

In other sonic criteria, the Stratos held its edge in the areas I'd already heard it excel in -- soundstaging, imaging, reproduction of detail -- while the irDAC took prizes for dynamic expression and treble extension. In fact, the Stratos could sound a little closed-in in the highs compared to the Arcam. The sound of Alexandre Côté's *Portraits d'Ici* (24/96 AIFF, Effendi), is a hair on the warm, rich side -- it needs no help in this regard. But through the Stratos, Rich Irwin's cymbals came through sounding a bit dull, robbing the music of some of its contrast and sparkle. Through the Arcam, the same cymbals sounded appropriately recessed on the stage, while retaining all their natural shimmer and bell-like tone.



I also compared the Stratos's phono stage and headphone amp to two standalone components: the Graham Slee Products Revelation M phono preamp (\$1599), and the Schiit Audio Lyr headphone amplifier (\$449). As I listened to the Smiths' self-titled debut album (LP, Rough Trade/Sire 25065-1), the Stratos delivered the same warm, smooth sound I'd heard through its DAC section -- but compared to the GSP Revelation M, it fell short in terms of midrange liquidity, treble refinement, and bass impact. Dynamics, too, were somewhat attenuated, and instruments lacked the roundness of tone and transparent imaging they had through the GSP. All in all, the Stratos held its own in sheer musicality, and even revealed a smidge more inner detail and articulation through the midrange.

Listening through headphones to the title track of Leon Bridges's *Coming Home* (192kbps MP3, Columbia), the singer's voice sounded a bit more raspy and less liquid through the Stratos than through the Schiit Lyr, while the ride cymbals sounded less extended through the highest octave. Bass was also noticeably less impactful and weighty, and pitch definition went down a couple of notches. As might be expected, the Schiit bested the Stratos overall, but it wasn't at all embarrassed by the comparison. And in daily use -- *i.e.*, *not* doing direct comparisons -- I found the ADL's headphone amp completely satisfying.

When the dust of this exhaustive shoot-out had finally settled, I found it hard to choose a winner. The Arcam irDAC comes with additional inputs, and the GSP Revelation M offers an adjustable mono switch and turnover frequencies; the ADL counters with higher resolution, DSD playback, A/D conversion, and recording functions. Ultimately, a combo of Arcam irDAC, GSP step-up, and Schiit Lyr would best serve those looking for the most musicality for the price, which is probably as it should be -- after all, we're talking *three* components that together cost almost three times the ADL's price. This takes nothing away from the Stratos: It held up against some pretty stiff competition, and managed to do so as a single small box at a lower price. In my book, that makes the ADL Stratos a winner.

Conclusion

So then -- is the ADL Stratos the one "preamplifier" to rule them all? For a good many music lovers out there, and with the types of systems it's likely to be used in, the answer will be an enthusiastic *yes*. Its multi-format, multi-input capabilities will be boons to anyone looking for a simple way to get excellent sound from a multitude of today's sources, and its versatile DAC-ADC features provide unmatched playback and recording quality, and flexibility for the price. It makes thoroughly enjoyable music with a singular voice that's mildly warm, pleasingly smooth, well detailed, and surprisingly pellucid.

Sure, you can get more clarity, tonal refinement, and extension at the frequency extremes by spending more money. And the Stratos's phono stage doesn't quite reach the high bar set by the rest of the design. But you'll have to spend a lot more in time and effort trying to find a collection of components that does everything significantly better than what a single Stratos can do. If I'd auditioned this thing while I was putting my system together, I'd have seriously considered buying it before deciding on anything else: The ADL Stratos is a fine example of what a well-designed control center should be, and it offers terrific value for the level of sound quality and features offered. If you're in the market for a reasonably priced, preamp-style interface for your sources and headphones, take the ADL Stratos for a spin: you just might find that it's all the preamp you need.

... *Oliver Amnuayphol*

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Associated Equipment

- **Loudspeakers** -- Living Voice Avatar, KEF R700
- **Headphones** -- AKG K701, Bowers & Wilkins P5, Phonak Audeo PFE122
- **Integrated amplifiers** -- Modified Audio Note L3 EL84 with C-core transformers, Marantz PM-KI Pearl
- **Phono preamplifier** -- Graham Slee Products Revelation M
- **Step-up transformer** -- Custom-made Sowter Magnetics 9570 (1:10)

- **Sources** -- Arcam irDAC DAC; Apple MacBook Pro computer running JRiver Music Center 20; NuForce U192S USB converter; Sony SCD-XA777ES SACD/CD player; Rega Research RP8 turntable, Lyra Delos cartridge
- **Interconnects** -- Custom single-core, copper coaxial interconnects (RCA); Blue Jeans Cable LC-1, Wireworld Starlight 7 USB and coaxial interconnects
- **Speaker cables** -- Tellurium Q Ultra Black, Wireworld Oasis 6
- **Power cords** -- Wireworld Aurora 5.2 and Electra 5.2

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Price: \$1399 USD.

Warranty: One year parts and labor.

<http://www.soundstageaccess.com/index.php/731>