FOLLOW-UP BY HERB REICHERT & KEN MICALLEF

THIS ISSUE: Herb Reichert on the dCS Bartók; Ken Micallef reprises his Schiit Sol review, trying it out with some better ancillaries.

DCS BARTÓK DAC/HEADPHONE AMPLIFIER

I finally get what those unboxing videos are all about.

As I deciphered my way through the dCS Bartók's triple boxes,¹ my sense of audiophile entitlement rose as I opened each successive box. Inside the last box, the Bartók was wrapped in a black velvet drawstring pouch. That made me smile until I realized that the Bartók was so big that I had nowhere to put it. It requires a shelf at least 19" deep that can support 36.8 pounds. My desktop system shelf is only 16" from its front edge to the wall; previously, the biggest DAC/headphone amp I've installed there was the Mytek Manhattan II, which only needed 14" front-to-rear (including space for cables) and only weighed 16lb.

On my desk, the dCS Bartók usurped 323 square inches (17" × 19" with cables connected). Which suggested to me that it was intended to be installed not on a desk or shelf but on a fancy equipment rack.

When I moved the Bartók to my not-so-fancy equipment rack, I discovered it provides no line-level inputs. Therefore, even though the Bartók includes the optional headphone amplifier, I'd need a second headphone amp to listen to LPs via headphones.

As I double-checked the innermost box, I realized the Bartók has a front-mounted volume control, but a remote control is not included.² Apparently, dCS intended the Bartók to be used via Ethernet with their own Mosaic Control app. Which is mostly what I did.

Listening

When the Bartók arrived, I was setting up my floor system so that I could roll some tubes for this month's Gramophone Dreams. After installing the Zu Audio Soul Supreme loudspeakers, I played *Benoît Menut: Les Îles* (24/96 FLAC Harmonia Mundi/Qobuz) performed by cellist Emmanuelle Bertrand. As I listened, I kept thinking that I've underestimated these Soul Supremes. They're much more resolving than I've told my readers. Maybe it's the amp? Or the Triode Wire Labs American Series speaker cable? I wondered.

Right then, powered by Ampsand-sound's Bigger Ben headphone and speaker amplifier, the Soul Supremes sounded like Quad 57s with *cajones*. I had never before experienced so much natural-sounding micro-micro information. That new nanodata just rippled and sparkled as it charged the

air between and behind the Zu speakers. I had never experienced this kind of electrostat-like definition from the always-fast but slightly grainy (and occasionally gruff) Soul Supremes. It was disturbing.

What I was experiencing was the dCS Bartók DAC forcing the Zu speakers to sound more dynamic, detailed, and scintillating than I ever heard them sound with the HoloAudio, in ways I never *expected* to hear from digital. It was a very exciting audio moment, and I had not done anything: no setup, or filter choices, no manual reading, nothing—except plug the Bartók into the system and listen casually.

Filters

Exploring the Bartók's filters was slightly daunting.

Usually, I pride myself on being able to distinguish the sound character of digital reconstruction filters; typically I end up preferring one or another type of linear phase, slow rolloff. With the Bartók, I struggled to grasp filter-to-filter differences. Its filters did not fall into any of my preconceived sonic types. After a couple of days experimenting (and asking friends what they use), I settled on Filter 3, mainly because I liked its bite and

contrast structure. It struck a nice balance between hard and soft, played the whole piano note, and kept the music taut and lively.

Via USB

The dCS Bartók is the first DAC I've used in my studio with an Ethernet port, which I was excited to try, but I thought I should begin by comparing the Bartók to my reference HoloAudio May (Level 3) via USB, using the same AudioQuest Cinnamon cable connected to my Mac mini.

Playing my new favorite Charles Mingus recording, *The Complete 1960 Nat Hentoff Sessions* (16/44.1 FLAC Essential Jazz Classics/Tidal), both DACs showed me how clear and descriptive and solidly *there* this recording presents Mingus and his band. Both DACs delivered the fun and excitement of that *there*-ness. But! The dCS Bartók took the excitement factor to a higher, more explicit level.

My only complaint with the HoloAudio May, which always seems completely insightful, exceedingly undigital, and extraordinarily neutral of tone, is that it can sound too matter-offact and maybe a little shy on vivo. I've noticed a similar just-the-facts manner with other, more expensive, R-2R DACs, so I presumed those qualities are a byproduct of the May's R-2R architecture.

The much more expensive dCS Bartók sounded as undigital and

1 The dCS Bartók costs \$14,500 plus \$2750 for the headphone-amplifier option. Data Conversion Systems, Ltd., Unit 1, Buckingway Business Park, Anderson Rd., Swavesey, Cambridge CB24 4AE, England, UK. Tel: (44) (0)1954-233950. US distributor: Data Conversion Systems Americas, Inc., Waltham, MA 02454-1443. Tel: (617) 314-9296. Web: dcsltd.co.uk.

2 A remote control *is* available, and remotes from other dCS products will control the Bartók, too.



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steady-handed as the May but delivered recordings with a more titillating vividosity that I found extremely appealing. It took recordings like this Mingus, which I already thought were superinvolving, and opened them up further, making them sparkle and dance in a way that didn't happen with the May.

Via Ethernet

Mosaic Control is the name of dCS's iOS and Android app for music streaming and device management. Downloading it from the Apple App Store allowed me to upgrade the Bartók to the latest firmware and (finally) experience streaming without my draught horse computer in the source chain. Everyone always told me that bypassing my computer would get rid of grunge and noise, but I never imagined how much new clarity I would experience. My Bartók listening via Ethernet forced me to admit that I've been a fool to hang on to my computer this long. (Too soon old, too late schmart.) Now it is forcing me to employ audio journalism's No.1 cliché: Many veils were lifted! Without the computer, recordings felt more alive, naked, and pure. Tidal seemed fresher and Qobuz seemed more hi-rez.

Also, with the Bartók via Ethernet, Tidal Masters (MQA) delivered more of its storied lucidity, tonal correctness, and spatial acuity than it does with the Mytek Manhattan II DAC (via USB). Also, playing *Bill Frisell, Dave Holland, and Elvin Jones* (24/44.1 MQA Nonesuch/Tidal), I noticed a distinctly improved sense of beat-and-rhythm-keeping, which I also noticed with the Bartók's other MQA renderings. In my studio, the Bartók made MQA new again.

With headphones

The dCS headphone amp is specified to put 1.4W RMS into 33 ohms and 0.15W RMS into 300 ohms. Output levels of full-scale, -10dB, -20dB, or -30dB may be selected in the menu.

As always, I began my headphone amplifier auditions with the superresolving, low-sensitivity (83dB/mW), 60 ohm, HiFiMan Susvara (\$5000) open-backs. If the Bartók drives the Susvara's gold-sputtered nano-thin planar-magnetic diaphragms, it will probably drive the rest of my headphone herd.

The main reason I use high-resolution headphones like the Susvara is



that they enable me to better "peer into" recordings like Cabaret Modern: A Night at the Magic Mirror Tent (16/44.1 FLAC Winter & Winter/Tidal). This album is a surrealistic sound collage that attempts (ironically) to mimic a live cabaret experience. Superficially, it is a homage to the famous 1966 John Kander and Fred Ebb musical Cabaret. It is very cinematic in its you-are-inside-the-tent effects. With the Bartók translating Cabaret Modern through the Susvara, the sound was squeaky-glass clean and direct. I felt more connected than ever to Nöel Akchoté and his band of artist-performers. The Bartók DAC made the collaged effects of MC chatter, singing, applause, and audience mumblings almost humorously obvious. Voices were so crisply rendered that syntax and semantics were exposed equally—in a way that made the words extra-humorous and extra-tongue-in-cheek.

Now, if I were asked by a bloke on the street what headphones to use with their new Bartók, I would likely recommend Focal's dynamic \$2995 Stellia closed-backs. They have an impedance rating of 35 ohms, and their 106dB/ mW sensitivity makes them a cinch to drive. The Stellia's pure beryllium domes transcribe almost as much data as the Susvara. Their cognac-andmocha styling makes them a perfect luxury-styled accessary to the Bartók's sleek design. Besides their powerful, extra-tight closed-back bass, the Stellia's chief sonic virtue is the vibrant intensity with which it portrays tonal gradations in the midrange. This makes them perfect for my latest obsession: 1952 Columbia recordings of the

Budapest String Quartet performing Beethoven quartets.

With the Stellia, Beethoven's Grosse Fuge in B-Flat Major, Op.133 (24/192 FLAC Columbia/Qobuz) was relaxed, detailed, and authoritative, but maybe a little astringent through the upper octaves. Sometimes with the Bartók (and Filter 3), the Stellia's beryllium dome got a little metallic-sounding. This never happened with the HoloAudio May or Mytek Manhattan II DACs, but then neither of those DACs played Beethoven's Grosse Fuge as vigorously or high-rez vividly as the dCS Bartók. To my ears and taste, the Bartók and Stellia made an attractive, lucid, and musically rousing partnering; one I could live with forever.

dCS crossfeed

I've never understood the attraction of crossfeed. As I said, I use headphones to excavate the smallest hidden sounds buried in a recording—especially the reverberation and 3D volumes of room air. I'm not looking for remixing or remastering—just the clearest possible view. But the dCS Bartók includes a crossfeed feature, so I felt obliged to try it, just in case it did something really special.

The stated purpose of crossfeed is to reduce those distracting right-left stereo effects that are unavoidably exacerbated by headphones. The first overtly right-left album I could think of was Sonny Rollins's Way Out West (24/192 FLAC Contemporary/Qobuz), so I tried it.

When I first engaged the Bartók's crossfeed (via the Mosaic app), the effect was pleasant enough but dull-

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ing, undermining engagement. Then I noticed what appeared to be two additional crossfeed options: Expanse 1 and 2. Hmmm? Expanse 1 seemed to restore musical energy lost with the simple crossfeed while simultaneously moving Sonny's sax to a center position, outside my head. Expanse 2 seemed to further enhance energy and three-dimensionality. Further comparisons with the original recording indicated these "expansions" involved a much more complex processing than a simple crossfeeding of stereo information.

Curious about what was happening, I discovered a white paper that explains dCS's apparently unique approach.³

The problem crossfeed aims to address is that with loudspeakers, the left ear receives information from the right speaker, and vice versa, at lower amplitude and with a slight delay. With headphones, there's much less of this. The cheap-and-dirty solution is to feed a fraction of the left-speaker signal to the right ear, and vice versa. That approach has some disadvantages, though—not least the fact that much natural reverberation information is contained in the difference signal

between the two channels, so the crossfed signal cancels some of it out. Another complication is that different headphones are tuned differently and that everyone's head is different—so in principle, crossfeed should be optimized for every headphone and each person's individual head. That's not practical.

The white paper explains the dCS approach, incorporated in the two Expanse options—how the incoming signal is equalized and preprocessed in the digital domain. Height and width information are enhanced, extending soundstage width and stabilizing reverberation content. Then, in the crossfeed stage, the signal is delayed to simulate left signals being heard by the right ear and vice versa. The delay and frequency profile of the crossfed signal is based on some "large corpus" (dCS's term) of head-related transfer functions—an average head, you might say-so that dCS's version of crossfeed doesn't work better for some people than for others.

I asked dCS's John Quick what the difference was between Expanse 1 and Expanse 2. "The difference between the two Expanse modes comes down

to the amount of recovered reverberant information the Expanse DSP delivers," he replied. "We provide this to allow listeners to decide for themselves what balance of instrumental timbre versus acoustic spaciousness suits them best."

So, dCS *did* concoct something special. Something I might approve of. Compared to the uncrossfed 24/192 *Way Out West*, Expanse 1 and 2 improved the punch, presence, clarity, and impact of this album.

Of the three crossfeed options—simple crossfeed and the two Expanse modes—I ended up preferring the Expanse 2 option, although ultimately I prefer the uncrossfed sound of the *Way Out West* LP, simply traced by my Koetsu phono cartridge.

vs Feliks Euforia

I was curious to see how the Bartók headphone amplifier would handle powering the 300 ohm, 97dB/mW ZMF Vérité closed-backs and how it would compare to the \$2599 Feliks Audio Euforia headphone amplifier. The tubed Euforia has no output

3 See https://bit.ly/3ubNQaF.



transformer, so the sound is lively, direct, and unmolested. I expected the sparkling vitality of the dCS DAC to complement the shimmering triodetubeness of the Euforia, and it did. The dCS DAC made the Feliks amp sound more awake and vital than it ever did with the HoloAudio May or the Mytek HiFi Manhattan II.

The Bartók's headphone amp delivered a classic, clean, solid state sound, which in comparison made the Euforia sound a little dawn-in-the-forest misty.

My alien abduction

Less than 1% of my music is stored in

files on hard drives. Despite people's urging, I have felt no pressing need to add a streamer or control app (like Roon) to my listening lifestyle. When I use Tidal or Qobuz, I've simply used their streaming apps, running them on my computer.

Obviously, and unfortunately, I did not grasp how my computer was *indeed* a sonic ashtray, and that giving it up would make the air in my music *that much* fresher. Likewise, I never imagined how a simple Ethernet cable and streaming control app could force me to reconsider what digital transparency sounds like.

At Munich High End in 2019, I kept grinning and effusively praising the Bartók when I auditioned it via its headphone amp. Therefore, I was not surprised at how easily and musically it handled every headphone I tried.

But the wonderment that overshadowed everything was: The *DAC* inside the Bartók hit my listening life like a UFO landing in my room. Its vibrant effect on familiar recordings was nothing short of spectacular. I am not exaggerating when I say that no digital component has raised the level of my listening pleasure as much as the dCS Bartók.—Herb Reichert

SCHIIT SOL TURNTABLE

Before the ink had dried on my review of the Schiit Audio Sol turntable,⁴ Stereophile la Jefa Jim Austin asked me to write a follow-up review on that feature-packed, \$799 analog machine. This wasn't going to be the typical, try-it-with-similar-components assessment; I did that last time, evaluating the Sol with the included cartridges, the Schiit Ragnarok 2 integrated, and the Klipsch RP-600M loudspeakers.

But with all its adjustability, it's clear that the Sol isn't your average entry-level 'table. In his manufacturer's comment, Schiit cofounder Mike Moffat wrote that the tonearm "is absolutely suitable for the finest of cartridges"—a remarkable claim considering that you can buy a spare for about \$200. Taking note of the Sol's apparent ambitiousness, I wanted to see how well the Sol would perform when mated with better cartridges—and preamps and so on—equipment not often paired with an \$800 turntable.

To briefly summarize the Sol's high-value options: interchangeable, 11" carbon fiber, unipivot tonearm; Audio-Technica AT-VM95EN cartridge (included); aluminum-alloy diecast platter; external asynchronous motor; fully adjustable VTA, azimuth, antiskate, arm height, and platter height.

Equipment used *this* time to critique the Sol: Denon DL-103 and Hana ML moving coil cartridges; Tavish Design Adagio Vacuum Tube phono stage; Shindo Laboratory Allegro preamp and Haut Brion power amp; Klipsch Forte floorstanding speakers; Shindo interconnects and AudioQuest Castle Rock speaker cables.

Before listening to the Sol with my reference ancillaries, I was curious if I could upgrade the turntable's perfor-

mance on its own terms. I thought I could better the gummy-feeling, corkand-rubber-composite mat that comes stock. I tried two mats sold by Music Hall: the Aztec Blue (\$88.99) and Moo Mats. Both are made from cork. The Aztec Blue is a three-layer cork mat that grips the platter while isolating the record. "This lowers record vibration and reduces acoustic feedback," the website says. The sadly discontinued Moo Mat is thicker, one side cork, the other side—I'm not making this up—cow fur.

I also tried the Spec AP-UD1, which is literally a lacquer of the sort used to make records. Manufactured in Nagano Prefecture, Japan, the AP-UD1 is sandblasted twice then covered in a vinyl-like surface.

I used the Audio-Technica AT-VM95EN cartridge, the base preinstalled Sol cartridge. The AT cart is a good all-rounder, and for my money more coherent and cleaner than the Grado Opus3 MM cart Schiit offers as an upgrade. I judged the three mats playing John Coltrane's "Bakai," from his 1957 mono debut, *John Coltrane* (LP, Prestige 7105). Joined by trumpeter Johnnie Splawn, baritone saxophonist Sahib Shihab, pianist Red Garland, bassist Paul Chambers, and drummer Albert "Tootie" Heath, "Bakai" is an Afro-Cuban workout.

When Trane enters to solo, it's like a blast furnace combusting hot air, his mulelike tone and rapid delivery of notes scorching. What had been a loose cocktail party is now a two-fisted brawl, but somehow beautiful. With the Sol mat, Trane's tenor was large and dead center in a soundstage reproduced with good detail and depth.

The Aztec Blue mat cleared away congestion that I had not been aware

4 The Schiit Sol with tonearm and Audio-Technica AT-VM95EN cartridge costs \$799. Schiit Audio, 22508 Market St., Newhall, CA 91321. Tel: (323) 230-0079. Web: schiit.com.

