

**Pros:** Intensely musical and articulate. Outstanding smooth treble that matches well with the HD800

**Cons:** No analog input, no coaxial or AES/EBU digital inputs, finite power capacity with the HD800, lack of DSD256 support, and no stated plans for MQA

I have had my eye on the Ayre Codex ever since I saw Jude's review of it on Head-fi TV. Ayre's high-end credentials in both the DAC and amp space are impeccable, with iconic products like the QB-9 DSD, but this is their first foray into the headphone amp space, and quite frankly, into this low a price point. (\$1795)

Similarly, I have had my eye on the Sennheiser HDVA 600, due to it's beautiful design, and the excellent reviews it's been getting.

## My Objectives

I have been searching for the ideal DAC and amp to complete my system, which is bookended by the Auralic Aries Mini streamer/DAC as the source, and the Sennheiser HD800 (with Anaxilus mod) as the transducer. I had found the Aries Mini's DAC surprisingly nice, and so have been wondering which system combinations would be right for me within a budget of ~\$2000:

- Use the Aries Mini's own DAC along with an amp like the Sennheiser HDVA 600
- Use a DAC/Amp like the Codex, the Moon 230HAD, NuPrime DAC-10H, or the Questyle CMA 600i
- Use a separate DAC and a separate headphone amp. This could get pricey!

While I have not come even close to comparing all these options, I was fortunate to have a long weekend with both the Ayre Codex and the Sennheiser HDVA 600 gracing my rig. Many thanks to Casey McKee of Ne Plus Ultra in Austin for the Codex loaner, along with some assorted high-end cables. This review covers my impressions of the two pieces in my system. I had already had several weeks to acclimate to the HDVA600/Aries Mini combination, so that was my baseline. I should also mention that all the gear - listed in the System Description section below - had been burned in for several hundred hours, so nothing I heard should be attributable to insufficient burn-in.

## What I expected to hear

Based on reviews I had read, I completely expected the Codex DAC to be outstanding. More unclear to me was how the Codex would fare as a headphone amp - especially against a dedicated amp like the HDVA 600 that is acclaimed to match well with the HD800. Needless to say, what I expected to hear and what I

actually heard were completely different.

## Sonic Impressions

The music I used in my listening is listed in an appendix below.

My baseline system for several weeks had been the Aries Mini streamer+DAC feeding the HDVA 600. The HDVA 600, in turn, had replaced a Benchmark DAC-1 HDR, which had been doing duty as a pure headphone amp. Compared to the Benchmark, the HDVA 600 elevated the sound quite remarkably. Once burned in, the HDVA 600 had a rich, warm palette with excellent articulation. I could see why it was such a good match with the HD800. By warm, I mean a pleasing solidity in the lower registers, and the midrange had a sweetness that was lovely. But it was in the treble that the HDVA 600 really shone compared to the Benchmark. Where the DAC-1 could make all but the best recorded music sound quite harsh, the HDVA 600 removed that etchiness remarkably. Most impressive about the HDVA 600 was the prodigious amount of power on tap. Even with the input gain on the back set at 10 o'clock, I rarely had to dial the volume above the 50-60% mark.

Several upgrades happened after the HDVA 600 was in place, and each step (replace stock power cables, Black Dragon headphone cable, balanced mode) yielded a small but noticeable improvement.

How ironic then that the addition of the Codex yielded improvements over the HDVA 600 that could be described in very similar ways! In the optimal configuration:

- Aries Mini → Cardas USB cable → Codex DAC/amp → balanced Black Dragon cable → HD800

the Codex was a revelation. I could not believe how much it further improved over the gains I had previously made with the HDVA 600! There was a feet-tapping rhythmic “rightness” to the music. Maybe this is what people mean by PRAT. It’s hard to describe, but I heard it. Instruments were much easier to isolate because there was more air around them. The soundstage was much larger. And finally, the tonality. I would still give the edge on the low bass to the HDVA 600. The HDVA 600 was no slouch on the midrange either, but I felt the Ayre added an almost liquid character that was beguiling. However in the treble, just like the improvement of the HDVA 600 over the DAC-1, the Codex completely outclassed the HDVA 600. Until I heard the Codex, I had been rather pleased with the HDVA 600. With the Codex, I realized how much more relaxed and, yes, airy - or is it Ayre’y - the high notes sounded. Astoundingly, I found myself describing the HDVA 600’s treble as edgy and harsh. The difference was most apparent on music with tambourines (Cossack Dance), cymbals/high hat (Take Five), brass (Mahler’s 5th), but was apparent on every piece.

My final test was to have my emphatically non-audiophile wife - who is ironically blessed with golden ears :) - have a listen. She reinforced my opinions in about 10 mins. After listening to Why Worry by Dire Straits on the Codex, she declared it to be a goose-bump inducing experience, the best she had ever heard. In fact, after that she found the HDVA 600 "unlistenable," which is terribly unfair to such a great piece of gear.

This is the irony of high-end audio. Sonic differences in gear can be small, BUT - once heard, going back is really hard!

So how much of the overall differences I heard can be attributed to the Codex's DAC versus it's headphone amp? To attempt to answer that, I did two comparisons:

- Amp comparison - Hold the DAC constant - use the Codex - and compare these two setups
  - Codex → Black Dragon balanced cable → HD800
  - Codex → Cardas XLR interconnects → HDVA 600 → Black Dragon balanced cable → HD800
- DAC comparison - hold the amp constant. Since only the HDVA 600 has multiple analog inputs, I had to use it as the amp, and compare the following
  - Aries Mini → RCA interconnect (single ended) → HDVA 600 → Black Dragon balanced cable → HD800
  - Aries Mini → Cardas USB cable → Codex → Cardas XLR interconnects → HDVA 600 → Black Dragon balanced cable → HD800

## Amp Comparison

Essentially all the differences I described above in the overall section were evident even if I used the Codex DAC into both amps. This just floored me. I was not expecting the Codex to be such a better sounding amp. I should reiterate the superior low end of the HDVA 600. Also, maybe it's because I like to listen to my HD800's rather loud, but on some classical pieces, I was dialing up the volume on the Codex to >95%. This could mean with some particularly inefficient cans, the Codex may not have enough power. For me, with the HD800, I tried enough music from my collection to feel satisfied that I wouldn't have that issue, but it could be a concern.

## DAC Comparison

Here again, I had a surprising finding. I found it extremely hard to tell the Codex apart from the Aires Mini. This too was unexpected - I expected the Codex to smoke the Aries Mini. Perhaps the HDVA 600 was limiting the DAC differences. I don't know. Since the Codex didn't have any analog inputs, we'll never know if the differences in the two DACs would have been more noticeable with the Codex as amp. This to me is the other limitation of the Codex - the lack of an analog input. In any case, I had nothing better by way of amps to do this DAC comparison.

## Conclusion

The Codex is an **outstanding** DAC/amp, especially at its \$1795 price. I could easily see it as an end game DAC/Amp solution for a large segment of headphone users. It may even be the end game solution for me. It does have some limitations: no analog input, no coaxial or AES/EBU digital inputs, finite power capacity with the HD800, lack of DSD256 support, and no stated plans for MQA. Maybe future Ayre products will address these things. Ayre has a pretty good track record of doing right by its customers to provide upgrade paths where possible. If these limitations are not showstoppers, you owe it to yourself to audition the Codex.