

Vioelectric DAC: The V800

Courtesy: Headfonia <http://www.headfonia.com/vioelectric-dac-the-v800/>



ABOUT THE AUTHOR

Lieven is living in Europe and is a Headfonia writer and Mike's second hand. Coming from a musical family he's always been interested in good sound. Unlike his family members the only musical instruments he plays are amps and dacs. He loves discovering new products while staying faithful to the good old Sennheiser HD650. Taking pictures is a real challenge but seeing happy readers in the end is what it's all about for him.



ABOUT THE AUTHOR

Mike started Headfonia in 2009. He enjoys doing reviews and taking pictures especially when they turn out really nice. He enjoys writing but loathes doing grammar checks. Answering questions people post on the site, though sometimes feel like a burden, is actually something he enjoys doing. It's a good feeling to be able to give people answers to their questions.

Disclaimer: The V800 unit came directly from Vioelectric in Germany and it is a temporary sample that will be going back after the review is done. Mike's store is also selling Vioelectric products and therefore I will be doing most of the review so there can be no doubt of partiality. Of course I have already reviewed both the [V100](#) and [V200](#) amplifiers, so I'm familiar with the brand and the house sound.

This is a double review. Black text is Lieven's, Blue is Mike's.

The Start

This is the third review already of a unit made by Vioelectric by LakePeople, the HiFi brand with pro-audio roots+as everyone knows by now . This time it is the V800 Digital to Analog Converter that's up for review, a unit you've been asking us to review for quite some time now.

Ever since I first got in contact with Vioelectric to discuss a possible V200 review sample, they were honest and asked if I wouldn't be interested in reviewing the V100 first. All units are made in Germany and they want to make sure the quality is always at the best level and as a result it is not always easy to keep up with the increasing demand of units. For the same reason Vioelectric promised to send me the V800 right after the Munich fair as they would be more easily available by then.

And so the V800, in the usual Vioelectric shipping box, arrived a couple of weeks ago right after I posted my Rein Audio X3 review on here. These are both closely priced and European so I'd certainly be comparing both DACs later in this review.

I've heard so many good things about the Vioelectric V100 & V200 amplifiers so I had a good faith that they will sound good somewhat even prior to importing the amplifiers to be sold on the Headfonia Store. The V800 DAC however, was more of a blind buy for me as I absolutely have no idea how the DAC will sound and if it'd give a good performance for the price. Just because Vioelectric has PRO-roots and just because they've been making good amps doesn't mean that the DAC would be good.

When the unit arrived I put the V800-V200 pairing for display at the store and they do look good when paired together. Over the next couple of weeks I took time to audition the pairing while at the same time doing other DAC reviews including the Asus Xonar Essence One and the Muses Edition, Burson's new PCM1793 DAC, alongside the Lavry DA10, Fostex HP-A7-A8, Neko D100 Mk2 and the Benchmark DAC1 that we happen to have at the store. The store does sell Fostex, Neko, and Vioelectric gear (everything else I used here are 2nd hand units from customers), so if you want to discount the impressions, just discount mine as everything Lieven wrote are totally his own.

The Unit - Extended Version

As you can see in the pictures this DAC looks busy+and both front and back panels are full of buttons, dials, connectors and leds. Size of the DAC is identical to the V100 and V200 and so it makes for a great slick looking stack. Build quality and look and feel is the same as with the amplifiers: excellent! If you want more info on that I advise you to read our earlier reviews of Vioelectric products.

On the back panel you will find a AES/EBU . XLR balanced input, an optical input, a coaxial input and of course the USB input. (Inputs are 24-192 aside for USB and opto (24-96)). You also get a digital out and an analog balanced and unbalanced output. And of course there's the power connector, who would have guessed! On the front you get a digital volume control which I will come back to later, you have the power button and the typical Vioelectric blue LED and several different LEDs and buttons to show you what input you are using and what re-sample rate. I couldn't find any info on the internals itself and so I contacted Vioelectric again, to get a non-surprising reply: 'I just heard from one of our HK dealers that the Chinese guys have copied our V800, so in the future we have to be careful with the details of our gear+. A serious problem not only Vioelectric is suffering from, a few weeks after I

reviewed the X3 from Rein Audio they confirmed me their X3 DAC had been copied in China as well. Small companies spend a lot of money developing a new DAC or amp and to see their investment get ruined by cheap Chinese copies is awful and the worst thing is these Chinese companies can hardly be touched. And on top of that, just because someone copied schematics doesn't necessarily mean you will get the same quality (Quality of PCB, components used, transformer, etc), therefore we at Headfonia suggest to go for *the real thing* and not put your faith in a cheap Chinese knock-off. But back to the V800 as we did get the green light to share some things after all.

For re-sampling the V800 uses a SRC4392 chip. Of course not everyone is a fan of up-sampling (check the comments later for more info) and so the V800 gives you the option to use it or not. The USB receiver chip is the Tenor TE0722L so that's how it will show up when you connect your pc. The D/A convertor used is a PCM1792 as they feel there simply is no better one around. They have checked other famous and hyped convertors which have really impressive dynamic range like the ES9018 but being from the professional division they know that distortion counts higher than dynamic reach and so the PCM1792 was chosen as it scores better in that field. The V800 gives you the choice to re-sample once (original sample rate), twice (if >110kHz the original rate is used) and 4 times. There's also a best setting that uses a sample rate of 96kHz, the rate the convertor performs best at. (What I've mostly used for the review). As Vioelectric says "Most people don't know that beyond 100 kHz sample rate a D/A convertor will half its internal oversampling . resulting in about 3 db performance losses"

The upsampling options, I find mostly adds a tiny bit of brightness. For me who favors a darker tonality, I'm most happy with the resampling set to off. I find it gives me not only the darkest sound but also the darkest background and (surprise!) best depth.

As promised a last comment from Vioelectric on the Digital volume control before we get to the sound part: Analog output level is controlled by means of a potentiometer on the front panel. Its setting is translated in the digital domain only, thus excluding any kind of scratching, crosstalk or gang errors. Since the potentiometer affects data word length (and so: signal accuracy), a setting closest possible to the right end stop should be chosen to achieve the maximum desired loudness. I've been playing with the volume control in the beginning but I've always kept it at 95% ever since. Standard analog output volume is set at +15dBu for balanced and +9dBu for unbalanced.

The Sound

I try not to talk too much about the technical aspects of amps and DACs in my reviews cause the most important is how it sounds but this time I really found it important to mention a little bit more as usual, I initially even wanted to talk about the different stages but I can do that later in the comments if anyone is interested. Those of you who don't care about what's inside the box probably took a short cut to this part anyway and are anxiously waiting for the verdict.

For this review I mostly used the USB-connection from my laptop as this is what most users will end up using. The amps used are mostly the Vioelectric V200 and a custom built tube amp. I had to connect the V800 to the V200 unbalanced as my balanced cables Mike made me seem to have died on me and I had no other pair around to test it. Headphones used are the Beyerdynamic T90, the Audez LCD-2 and the Hifiman HE-500. I used higher end headphones on purpose cause they best reveal the difference of the DAC. Or differently put: with a source of this level you want to use a top tier headphones to enjoy/notice what the DAC is capable of. As recommended by Vioelectric I chose the best position for the re-sampling and fed it with different bit rate files.

The most important thing to say about this DAC's sound is its neutrality. It converts everything with a lot of detail and it does not add anything to the music. No bass or an extra thick warm layer, nothing. The sound you get is clean and uninfluenced yet still smoothly flowing. You'll get a lot of detail, clarity

and an accurate neutral sound. And that doesn't mean it is an overly analytic and boring DAC, au contraire, as I said it sounds quite smooth. The V800 manages to get the detail out of your music but it stays perfectly in the middle of things: not boring or bright or warm, no extra bass but reality is what you get making it smooth across all frequencies. The Rein Audio X3 in comparison has a really thick smooth layer added to the sound, making it warmer, more lush sounding.

Sound staging, left-right balance, 3-dimensionality and positioning are very good in this setup. There's enough room between the instruments so you get an open non congested sound, without being overly spacious. There isn't really anything to complain about, it's that well made. It's an open sounding, good and complete DAC as it should be at this price level and it's hard to find flaws. Where most neutral DACs often come out being dry and boring, the V800 can be described by these two words: neutral and musical.

To me the smooth word comes out before the neutral part when I describe the V800 DAC. If you ask me how it sounds, I would say that it's extremely smooth. The neutral part that Lieven described, while not the first thing that came to mind, is something that I'd go well, okay I can understand why he said that. It's definitely far from a colored DAC like the Ref7.1, Neko D100, or Ayon Skylla II, but comparing neutral DACs like the Benchmark DAC1, Lavry DA10/11, Fostex HP-A7/A8 would all result in a yeah they're fairly neutral statement, though each having their own particular way of sounding neutral. Take a listen to all these different DACs and you would say that none boasts a particularly strong coloration yet they have their own way of doing this neutrally.

Going to a more tangible observation, Violectric's V800 retrieves detail better than the Burson Sabre and PCM1793 DACs, Benchmark's DAC 1 (I have the original version not the newer models), and the Fostex HP-A7. It's less detailed than the Lavry, the Fostex HP-A8, the Asus Xonar (especially Muses edition), the Ref7.1 and Ayon Skylla. It really is not a champion in detail retrieval but that's not really what you're buying with this approximately \$1,300 DAC. The way it presents minute detail softly in the background is particularly soothing to the ears and for instance I like how the V800 was smoother and less tense than the sound of the Lavry or the Asus Xonars. It doesn't try too hard to be detailed and articulated, instead it has a relaxed way of bringing a good amount of technicalities into the music. Soundstage width is pretty good but I'd like to hear more depth in the sound. Additionally background can be blacker (Lavry DA11, HP-A8, Neko D100, Ref7.1, Skylla are all blacker and with more depth).

Coming from the X3 DAC was quite the change though as the X3 DAC is a very musical and warmer sounding DAC, having more influence on the music. I think both DACs are more or less at the same level of detail retrieval and sound stage (X3 might be a bit wider), however with the V800 you get neutrality where the X3 adds even more smoothness and a bit of warmth making it a more musical less neutral DAC. Those of you who have read the Rein Audio X3 DAC review maybe remember I absolutely love the LCD-2 with their DACs and while the V800 certainly did very good to say the least, I can't say it made me fall in love as much as the X3 DAC did in combination with the V200. Completely other story however with the HE-500, maybe this headphone is the more analytical of the two, but the synergy with the V800 was amazing and I've never heard the HE-500 to sound this good in combination with my amps. The Beyerdynamic T90 with my custom built tube amplifier sounds wonderful, incredibly good. It's a mix of both worlds: the clarity and detail from the V800 that the T90 loves and the smoothness and warmth of the tube amp. A perfect combination.

Pairing with the V200 is definitely the sweet spot of this DAC and vice-versa. I don't think I enjoy a pairing as enjoyable for the V200 as with the V800. The two blend very well together to produce this highly refined, smooth sounding system with ample of power to drive even the Hifiman HE-6 to better levels than the Burson Conductor one box set up (and any other DAC/Amp box in the market that I've tried). By itself, the V800 is an okay \$1K level DAC and if you're looking for extremely high levels of resolution I would recommend going to either the Asus Xonar Essence Muses or Fostex's HP-A8. Or

even the mostly underrated Neko D100 Mk2 DAC (seriously one of the best DACs ever - just under the radar).

By itself, I don't think the V800 is just a good DAC. It doesn't break any price-performance records in the price that it's being offered for, and though the sound is good, it doesn't strike to be extremely special in the sea of other DACs. If you want the highest level of detail retrieval for \$1K that has got to be the Asus Muses Edition which comes pretty hot after, but not quite, the level of the Fostex HP-A8. If you want something with a relaxed tone, good musicality, and still good technicalities, NekoAudio's DIY-like creation is my best recommendation for up to \$3K. But if you're using the V200, and are running either the LCD-2/LCD-3, or Hifiman HE-500/HE-6, then the V800-V200 set up is extremely super good and so far unmatched (especially for the Hifiman, Audeze users with bigger budget can go for StudioSix though it's amp only for \$5K).

Where does that put us?

Is the V800 a great DAC: Yes. I would without doubt choose the V800 cause it does everything right and it would easily show the influence a new part of my setup would have on the sound. It's as neutral as Switzerland in times of war and it's enjoyable. What more to ask for?

As said before, if you want a DAC that does nothing wrong, that shows you in detail what is in the original file and you like a neutral and clear sound without being over-analytical then you will love the Violectric V800 for sure. Is the V800 worth its price? To me it is, especially when you have the higher end headphones and amplifiers to hear the difference. Price is 1.100" inside the EU and 924" for the rest of the world, you can buy it from your local dealer or from the [international online shop on the violectric website](#).

I wonder what Violectric has in store for us next!