

Review Weiss DAC501 converter – streamer – preamp

by Jaap Veenstra

PROS

- Very versatile
- Beautifully made
- Neutral, calm sound

CONS

- Volume contro; not lossles
- Filters not needed in our opinion



Intro

Daniel Weiss is a well known name in the studio world. With its beautiful AD converters – for Sony and others – for studio use, Weiss has acquired a strong position in the years that digital audio just emerged in the studio world. Many more converters were added later on. Think of the DAC2, DAC202... But even better known are the filters, such as the de-esser. We are testing a product where everything comes together: a dac, various filters, a streamer and even a headphone amplifier. Meet the Weiss DAC501

Price: € 7999





If you say the Weiss DAC501 is a d/a converter, you are short selling this device. It's much more than that. It's a streamer – UPnP and ROON – headphone amplifier, preamplifier and dac. As a bonus, it can do all kinds of tricks. Think of a vinyl emulation. Or de-essing. And there is even a – relatively basic – equalizer to tame room-modes a bit. In short: it's a bizarrely versatile device. In fact, you can connect the Weiss DAC501 to a few active monitors and you're done. And you're done at a very high level.

Precision

As we're used to from Weiss, the finish is sublime. The DAC2 may be old – and in terms of design somewhat outdated – the fit and finish is sublime. The DAC501 goes a (big) step further. The display is not only in colour; it is also touch sensitive. And it fits seamlessly into the front. The volume button is free of play, the seams of the hood are almost invisible... ..it's – in short – Swiss made.

And the same goes for the inside. Tight layout, top-notch components... The base – the power supply – consists of two AMGIS transformers. Digitally and analogue separated. For all DSP functions an Analog Devices ADSP-21488 DSP chip has been chosen. That's a big boy, as you can see on the picture.

For Ethernet and display control, an AM3352-series processor has been added (on a kind of subsidiary board). Behind that board we see two clocks: 44.1 and 48 kHz samplerates (and multiples thereof) are regulated separately, as it should be.

The dac section is in a separate, shielded section. When we open it, we see two ESS 9018K2M dac-chips. Dual mono. Analog out is done via both single ended and balanced outputs. The dac-board is

just like the rest, very tightly designed. Completely symmetrical. Anyway, that's the way it is supposed to be for 8000 euros.



The controls

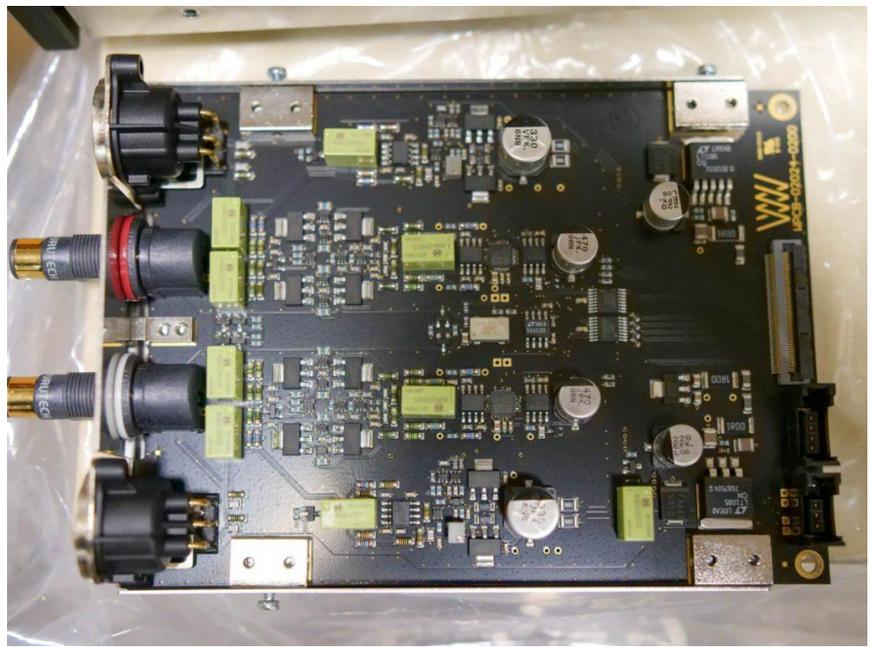
There are four ways to operate the Weiss. Yes, four... Let's start with the most logical. The device. In fact, you can control everything there. The screen is touch-sensitive, so you can tap through the device pretty quickly. With the volume knob – which is turn/push operated – you can go up and down through the functions. Turning it feels crazy: wrong way around. That took some getting used to for us.

You can also use the remote control to simply operate most of the functions. Then there is another possibility to stream via Roon and adjust the volume. Finally, there is the web interface. If you enter the ip address of the Weiss DAC501 – to be found in your router, or in the setup of the Weiss – you can use the web interface to control the device. That's very convenient. It's even possible to pause, play and skip tracks that play via Roon and UPnP.

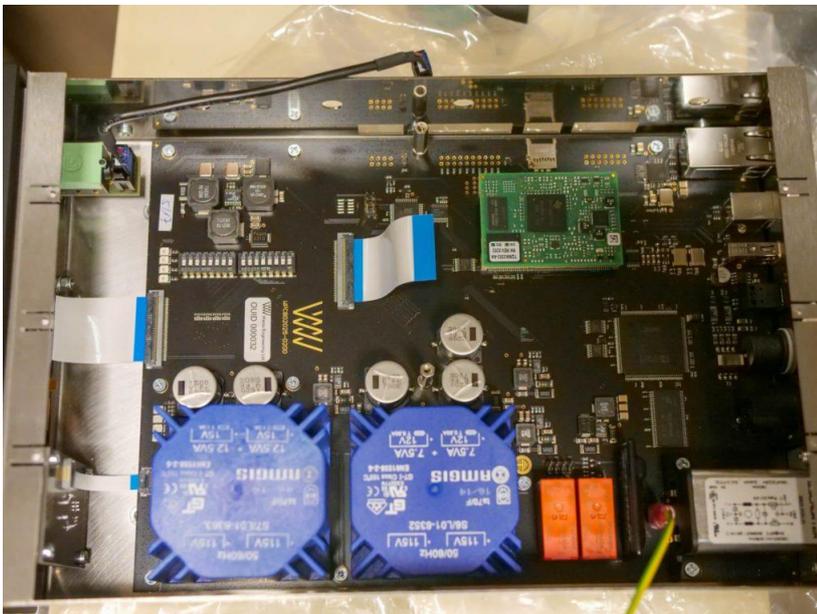
In short: plenty of possibilities!

We have already included the Weiss DAC501 in our dac multitest live stream of 19 March. There he controlled the Bryston 4B SST3 directly, as well as playing the Pass Labs XP-12. As speakers we used Focal Sopra No1. Cables come from Grimm (TPM), Audioquest (NRG1000) and 'standard' double shielded Ethernet cables with Telegartner plugs.

Filtering is provided by Isotek (Titan EVO3) and Kemp.



We have streamed from both Tidal and our NAS. Files are a mix of high-res and CD quality. All flac. Some also MQA, although the Weiss can't do much with that on its own. It's not MQA-dac, although ROON will take care of the first unfold. That's often up to 24 bit / 96 kHz.



The Sound

The Weiss DAC501 is an extremely neutral, almost modest converter / streamer / pre-amp. The sound is very clear, balanced and rich in detail. We were able to compare the Sonnet Morpheus with the Pavane (via the XP-12) during our multitest stream. And both creations of Cees Ruijtenberg play bigger and a bit warmer than the Weiss. The Sonnet gives the biggest picture and in our opinion also the highest resolution.

Now bigger and warmer seems better. But is it? Because if you're looking for the fairest reproduction, for example for studio work, you're not always looking for a 'nice' sound. They want precision and neutrality. And you have to be able to listen to it for a long time. With which your editor does not mean that Sonnet or Metrum does not play neutrally. Or is tiring to listen to. Cees's NOS creations do play very well and very honestly. Vocal work always get's to you very clean and emotional via a Metrum or Sonnet. A force not all dacs possess.

However, we have the feeling that the Weiss 'nailed' each track flawlessly when it comes to interpretation. Time after time we get the feeling it's just *right*. Time after time we think: 'oh yes...this way... yes...'. It plays with the conviction that it just knows how to do it. Every part of the track is easy to follow. Partly because of the absolute tranquillity that the dac radiates. It's very difficult to put into words exactly what that's all about. You should really just hear it. One way to do that is by hooking into the Live Stream reviews that we – if all goes well – are going to do on a monthly basis.

Filters

Then there are the filters. Which we see more as a fun addition. Think Vinyl emulation. Which, by the way, really sounds like vinyl... oddly enough. Then the de-esser that very effectively removes sharpness without sacrificing resolution. Again very nice. The equalizer idem: it will work fine in rooms where there are some annoying room-modes. Do measure before you start working with the EQ. Otherwise you will never get good results. In any case, that is our experience.

Finally, there is cross-talk cancellation. That filter should eliminate crosstalk in binaural recordings via a normal speaker system. By entering the distance of the speakers and the width of the head, the dac calculates what it needs to do to maintain the binaural effect through an ordinary stereo system. Cool, but again; just a nice addition, but not really needed in our opinion.

After testing the filters we especially enjoyed the excellent dac qualities. Roon works flawlessly, UPnP idem (we couldn't hear any difference) and also when we connect the Ambre to the Weiss we hear a more than excellent reproduction of music.

Volume

Now there's one thing we've noticed: if we adjust the volume via the Weiss, we see in Roon that it's no longer lossless. We've asked Daniel about that:

Alpha: I noticed that ROON mentions that the signal path is not lossless, because of the volume control. Is that true?

Daniel Weiss: This is correct. If you rise the volume to 0.0dB then it changes to lossless. Anything else than 0.0dB changes the bits.

Not bit-perfect. But changing bits doesn't have to mean throwing bits away. We don't hear any compression or artifacts when we lower the volume. There must be a smart algorithm behind this scheme. Still, the implementation of Sonnet / Cees Ruijtenberg is nicer. It simply adjusts the reference voltage of the dac. Smart. And 100% lossless.

CONCLUSION

The Weiss DAC501 is a particularly versatile, high-quality device. Streamer? Check. Preamp? Check. Dac? Check. Headphones? Check...! Web control? Check... filter settings? Yeah. What doesn't it have? Good question.

The sound is calm, detailed and neutral. Exactly what Weiss stands for. Again and again the dac surprises us with the feeling of playing 'the way it's supposed to be'. That's nice. There are dacs that are able to create a larger image, or offer more bass. Or perhaps more sparkle in the high-area's. But Weiss goes for balance, insight and a 'studio grade' neutrality.

The extra features in the form of Vinyl emulation, de-essing and room-mode control are fun. But we didn't use them in the end. Although I can imagine that the de-esser can still be quite handy. Nice device. But with a spicy price tag. But still: Alpha Approved!

For whom?

For whom is a Weiss DAC501? Quite simply. For those who go for simplicity. Grab this Weiss, couple a duo of – for example – nice PSI or ATC active speakers to it and you're ready to go. Ultimate neutrality in a very compact form factor. We love it. This is the small form factor, high performance 'mean machine' for the affluent hi-fi enthusiast.

