

Germany:

Series Test:

Metrum Acoustics Octave MKII NOS Mini DAC

And Metrum Acoustics HEX NOS DAC



Every now and then, someone comes along quietly and in a little room by themselves, makes something truly remarkable. That was the start with a small D/A converter from Holland. Inconspicuous and not very stylish but it and its successors are proving to be highly musical.















System:

MacBook Pro, Windows 7 Home, JPLAY, RipNAS Z500, JPLAY CD Player Ayon CD-1s iPod dock Cambridge iD100, Apple iPod Classic 160GB Rogue Audio MalValve Preamp four line Dayens Ampino Amplifier Klang + Ton "Nada "contrast Audio Monitor Speakers

About a year ago I had to deal with a converter which deeply impressed me. Several things were responsible. Firstly, it refreshed me in that it worked somewhat differently to most DACs that sit on my desk and on the other hand it led to a presentation of sound that, if one uses the correct signal source, proved absolutely stunning. I'm talking about the Octave DAC from Metrum Acoustics. In many ways, its makers have remained faithful to the original - one relates to the housing. In order to achieve a reasonable price it is rather functional and comes in rather plain gray (alternatively black) free from design frippery.

This is something quite personal and of more interest to me, is what I get offered technically and aurally. Buying 'Pretty' things for the apartment, I leave to the head of the household!

In this regard, the great-Octave-DAC has already earned a real 'word of mouth' worldwide reputation and its two successors are getting ready to improve on this even further. What remains first is its basic operation. Rather than use the seemingly inexhaustible standard 'off the shelf' D/A chips from a catalogue - used by most DAC manufacturers, true Industrial grade performance 'audio genes' are installed.

There is benefit if you have a designer experienced in ship navigation systems and later designing audio systems, able to combine such knowledge from both worlds. Employed here are R2-R-DACs, by no means the cheapest solution for converting digital to analog signals but the so-called Ladder DAC sound, has always impressed me. And this is what we have here - expanding on this experience: The four (or eight in HEX) DAC chips running in parallel configuration, directly drive the output to your amplifier. Current / voltage conversion and analog driver stages are unnecessary here. We continue with things that I find just fine: The NOS in the name stands for Non Oversampling. That and digital filtering will not take place here and what I call short signal paths and direct control. The small disadvantage is the potential vulnerability to jitter afflicted problems from Source devices. On the other hand: DACs which operate with Up - or Oversampling and perhaps re-clock, can help to eliminate associated Source jitter.

However, if you have a clean Source that provides a nice stable digital signal, then with this converter, extremely high sound potential is possible. Then you have the opportunity to enjoy top musical reproduction, otherwise hard-to obtain from standard designs. The Original NOS-DAC had no direct connection for computer use but in this regard however, does now.

A Xilinx FPGA that receives the USB data is inserted into the input and due to the asynchronous transmission of the data, is perfect for the Metrum-DAC and the most suitable signal input. In principle it is USB input from acclaimed Italian manufacturers M2Tech - as an OEM version. This company's converters are considered absolute specialist products and yes their hiFace has been put to the test many times.

Metrum modified these boards because they did not want to accept the USB power from hiFace. Here you can create RF noise. And so working in NOS (also big brother HEX), a hiFace device is used but internally supplied with a separate power source (Octave from PC and Hex dedicated Toroidal).

Thanks to this interface, implementation is offered in a princely fashion matching the rest of the converter. Again computer use differs somewhat from usual: for Macintosh users you need to install a driver, which suggests that one needs more than just pure USB 2.0 compatibility to make an effective computer connection. Only this may be less important for some. Many prefer to play their music from a CD transport or streaming device and therefore USB does not matter. Metrum Acoustics has a cheaper version without a USB module it can however be purchased separately at any time. I now had two Metrum Dacs in the listening room, awaiting music.

Firstly of course, the MKII version of Octave DAC and on the other hand its big brother, which works similarly in principle but even more attention and consideration has been paid to its design. Inside effectively, there are two DACs of Octave calibre now working together, both cleanly separated, supplied separately with power and fully balanced. This means: There are now eight converters per channel, four for each half of the signal wave. And this extra functional principle means: well, even more signal processing capacity sent to the analog outputs. Consequently, the HEX is now equipped with XLR outputs and also a few more Digital jack options.

AES/EBU connection, due to the fully symmetrical design is a logical step and is implemented here, also there's still a BNC connector and two Optical inputs. By using a fully Balanced design it offers natural connection to Preamps via XLR, the signal operating in full differential mode using fine Lundahl transformers - thus a near equivalent signal to that sent to the RCA jacks. Nevertheless, somehow this goes against the philosophy of the HEX converter

i.e. providing direct coupling of DAC's to the Preamp by adding extra components, even though they are of high quality. This of course offers room for a series of experiments. Although I was impressed listening in Frankfurt, first impressions of HEX DAC in our listening room in the presence of Jörg Klein, the Distributor, I started again the next day from the beginning. With the Octave converter I had already guessed how things might sound and now came confirmation: The thing plays like hell. Resolution, bass, neutrality, everything is one hundred percent to the point but what is truly remarkable - the Musicality. The flow of music is heavenly. Vocals are impressive and the entire sound stage is completely slag-free.

Next came the exciting question - how much more can a HEX-DAC bring to the party. And the answer to that came quite quickly: a lot. After I heard what its little brother could deliver, it was hard to believe there could be more. While the small Octave had already impressed me, like Witchcraft the HEX performed in all areas even better. Eventually I tried various Preamp inputs in order to better compare connections. Mr. Klein was right, using completely Balanced connections, removes a few veils providing a right Royal performance. That's musicality at the highest level, somehow it sounds completely different from what one is usually so accustomed to - with the many delta-sigma converters out there. And why is this important: Because it sounds simply heavenly. I'll tell you that once you have become involved with it for a while, you won't want anything else. At least not if you want to stay in this price range, because in this price sector it will be very difficult to find anything comparable.

Conclusion

Quite simply, the current Octave II NOS DAC is an absolute must in its price bracket. To better acoustically will require much more financial outlay. And then there is the great HEX big brother, which neatly can provide one even better quality. It too is an absolute blast for the money.

Christian Rechenbach

Verdict

"Quite simply: The Octave NOS DAC II is an absolute steal in its price range. To better will cost a lot more. And the larger Hex sits properly at the top in sound quality. Also for the money it is an absolute hit."