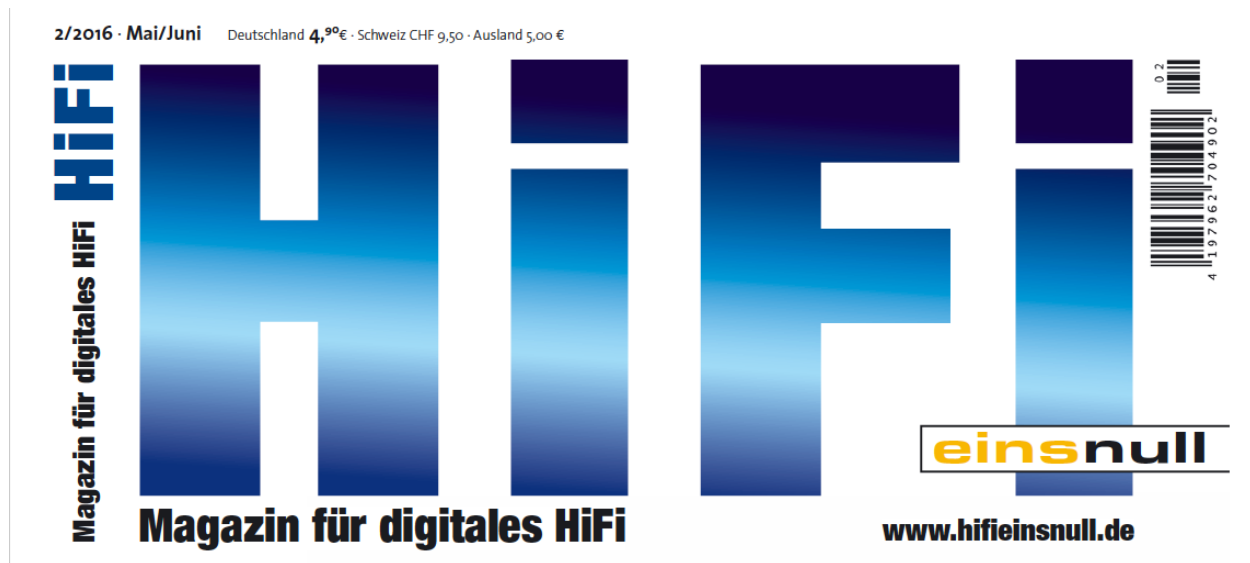




Magazine for digital HiFi High-End-DAC with top features

- Ideal for multiple equipment at the same time
- Better sound also from UHD-TV

Test: Bryston BDA-3 D/A Converter



Consistent

Digital Hi-Fi is admittedly a complex topic, however some components exaggerate a bit with technical games. Bryston on the other hand, keeps in focus what is important.

Peripheral Equipment: _____

- Sources: MacBook Pro, Audirvana Plus
- MacBook Pro, TIDAL
- USB Cable: CAD Revelation
- RCA Cable: Avinity Reference Line
- Amplifier: NAD C356 BEE Media
- Loudspeakers: KLANG+TON "Nada"

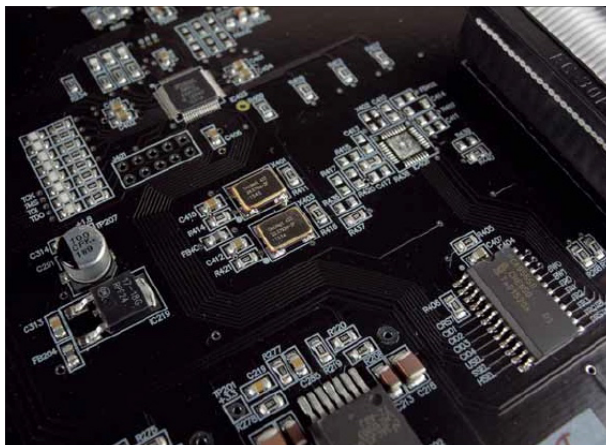
There are components where one immediately notices how genuine they are, and an example of this is the new Bryston BDA-3 D/A converter. Actually a very slim component, with just about 92 mm height, and despite this the D/A converter weighs a tidy four kilogram. At a time when a D/A converter can theoretically make do with thin sheet metal and a tiny circuit board the BDA-3 simply exudes assured significance.

A quite large part of the weight is attributable to the typical Bryston front panel which can also be found in similar form in the smaller BDA-2 D/A converter, although the rest of the cabinet also does not skimp on material, it's simply professional quality. While other DACs leave it at a tiny display and perhaps on or two pushbuttons for source selection, the Canadians insist upon absolutely clear configurations. Every input in the BDA-3 has its own selector switch including a status light. The BDA-3 D/A converter dispenses with a display and indicates used sampling rate with the help of 12 diodes, each of which are assigned to a specific value. Thus with just a glance the appropriate clock frequency can be noted, and all necessary information is communicated. Although the BDA-3 also incorporates an infra-red interface over which it can receive signals from a remote control, it is not included with the DAC, but available as a separate accessory. The remote control is not absolutely

necessary, even though the BDA-3, as usual, offers an enormous amount of connectivity.

As a supplier for recording studios Bryston naturally did not forgo the inclusion of an AES/EBU input, supplemented with an optical input and even two S/PDIF inputs. Just like in the BDA-2 DAC, these are represented by a coaxial and a BND input. In order to keep up with the times naturally a USB-B input cannot be missing, and Bryston goes all out and makes two of these inputs available. Actually not a bad idea because in the future the universal input with always higher sampling rates will be more present than today. Therefore one is already well setup here and one can use Streaming-bridge as well as Musik-computer without constant reconnecting. However USB is not the only trendsetting digital interface which the Bryston D/A converter offers, because in addition four HDMI inputs find a place here. Connected to a TV set, Blu-ray Player, or game console, stereo signals can be processed so that the poor sound of flat-screen TVs can be produced by the home HiFi stereo system instead.

DUAL AKM DAX's



Via HDMI output, video signals up to 4K resolution can be transmitted to a TV set. While I already thought during the test of the BDA-2 DAC (HIFI EINSNULL 5/2016) that there is almost no component that the BDA-2 cannot process. I soon learned better. But now I take a definite stance and maintain that at this time one will find no better equipped DAC than the Bryston BDA-3. One merely has to forgo a clock input, which in view of the good internal timing is acceptable.

For this Bryston utilizes two different crystals which process the different frequency multiples, without the necessity of conversion, i.e. one crystal for multiples of 44.1 KHz, and another for multiples of 48 KHz which is particularly important for processing TV sound. Furthermore nothing in the BDA-3 is left to chance, and unnecessary double duties of the components are prevented. Thus the paths of

digital and analog signals are completely separated, and even the current supply is separated between digital and analog. Finally there are even two channel separated AK4490 DAC chips inside, which consistently process the incoming signal flow.

Already from the quantity of status LEDs one can discern the large amount of possible sampling rates which can be processed by both of the 32 bit AKM chips. Per S/PDIF the limit for optical signals is 96 KHz, and 192 KHz for the other three inputs, each with 24 bit. The same holds true for HDMI whereby even DSD64 is supported here. However one only obtains the full benefits of the performance of the BDA-3 D/A converter per USB since here PCM is supported up to 384 KHz with 32 bit, and likewise DSD up to full 11.2 MHz. Equally consistent as with the inputs, Bryston keeps it up with the sampling rates.



All of this may seem to be extremely technical and unapproachable, but what finally comes out is anything else but emotionless. Already CD quality appears to be very differentiated and spatial, even without the switchable upsampling to 174.6 and respectively 192 KHz. With increasing resolution the performance of the BDA-3 always gains bit by

bit more dynamism, and while doing so the DAC appears to know exactly what is important with each kind of genre, so that rock radiates sufficient force combined with precise bass and percussion instruments. Blues, jazz, and classics on the other hand, retain their necessary finesse, especially in the upper frequency ranges, and profit from good dynamic range. Despite enormous depth of detail, the AKM chips do not stint with musicality, so that the BDA-3 DAC does indeed offer genre overlapping captivating music. Hence the Bryston Company knows what is important, and delivers an absolutely noteworthy D/A converter in which nothing is left to chance.

Philipp Schneckenburger

HiFi

“Bryston’s BDA-3 is an absolutely significant representative of current audio technology.

It is superbly made, technically of the highest performance, outstandingly feature equipped, and at the same time sound wise stunning.

It is an ideal partner for all source components.”

Translated from the German by Peter Ullman