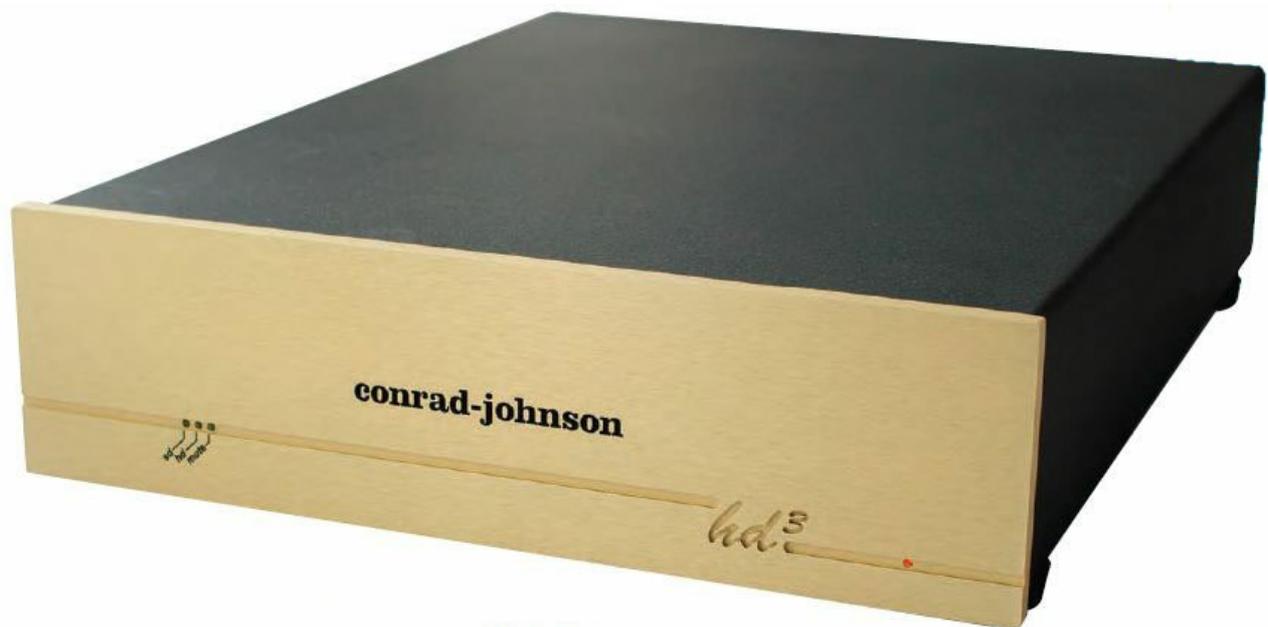


Conrad-Johnson HD3 USB DAC (Hi-Fi+ 85)

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The conrad-johnson HD3 DAC defines how the audio business is changing in perfect microcosm. The DAC is a 24-bit, 96kHz design that sports just one input – a USB socket – and will be sold direct by the distributor to keep the costs down (while £1,995 is not bargain basement price, if it went through a formal dealer distribution chain, the price would go up by a significant amount). It's also indicative of the changes in audio that c-j's first digital front end for some years is a computer-audio DAC, rather than a CD player.



The HD3 uses a Burr-Brown delta-sigma chipset for the D-A process and this is fed by that galvanically-isolated asynchronous USB input. The digital side is powered by the USB input itself – so those thinking of using a custom cable with a severed Vbus +5v line will end up disabling the DAC in the process. It also means the lock lights on the left of the front panel will light and the device will be recognised by a computer even when there is no plug in the HD3's socket. There's no lock light beyond 96kHz, in part because post-96kHz USB connectivity is still something of a mess. But it invites the question of whether 192kHz is a goal worth attaining, anyway. I'd rather have a DAC that sounds this good with my ripped CDs, than something that sounds bright and tinny all the way up to 192kHz.

Once the signal goes analogue, it needs mains power to drive the output stage, bristling with polypropylene/Teflon capacitors, metal foil and metal film resistors in the manner to which all good c-j users have become accustomed. This also gives the HD3 a best of both worlds scenario; the USB power feeding the digital conversion process from a galvanically-isolated but essentially optimal 5V USB input without the possibility of ripple from the mains, and mains power driving the more hungry analogue output stages, without the need for a separate and dedicated power circuit for the digital side.

It's all served up in a half-sized box with a cool laser-cut HD3 line across the front panel, and some of the nicest powdercoating I've seen on a top-plate. This doesn't mean much, but it's the details that count. Be careful of the front panel edges, though; they are almost Densen-sharp!

The analogue output delivers a very healthy output. In fact, rated at 3.5V, it's healthy enough to challenge some older line inputs without some form of attenuator in place. In most cases though, it won't be an issue at all, but will sound perceptibly louder than many rivals. In fact, the higher output will make it seem 'better' rather than 'louder', giving it something of an advantage in comparison. An advantage that it really doesn't need, because it is also better sounding than many rivals when those volume levels are brought in check.

The HD3 is very much a product of today. It has got the sort of sound that typifies the best of modern computer audio-ready DACs. It's inherently open, with an entertaining bounce that keeps the melody and the fun factor ever present. It's these aspects that draw people to computer audio. Where the HD3 scores highly is that it doesn't also come with the elements that help push them away, like the brashness and the 'all top, all bottom, nothing in between' sound common to many computer audio systems. In other words, it brings some much-needed Conrad-Johnson sonic values to the table.

In fact, what defines the HD3 is completely at odds with what most DACs aimed at computer audio try to do. We are possibly still in the early stages of the computer audio 'migration' and the first DACs to make the crossover often seem to highlight detail as if to show how exciting the format can be. Trouble is, many people want to be able to listen long-term rather than be temporarily awestruck by the detail. It's why people keep coming back to vinyl in a thoroughly digital age. It's the secret sauce of the Conrad-Johnson DAC, too. It's not analogue-y sounding, it doesn't make your PC sound like a record deck, but it does temper some of the bright and shiny sound of computer audio today.

This has two great advantages; it makes good music more enticing and it makes bad music more like good music. While there is good frequency extension at both ends of the scale, unlike many computer-derived sounds, the HD3 also remembers there's an awful lot in between called 'mid-band' and it does it extremely well, making an intrinsically 'right' sound in the process. So, when you listen to Al Green stepping up to the mic, that seductive soul voice is irresistible and somehow leads you to Jeff Buckley, then to Bessie Smith and on to Rufus Wainwright. Mozart speaks to you in musical sentences, Wagner's leitmotifs are like little sonic portraits and the Right of Spring makes you want to throw chairs. It's all good.

That honest, yet tonally rich midrange gives an openness and presence to almost everything it touches. And this is where the 'makes bad music more like good music' kicks in. Sadly, not every recording is of pristine quality; signal compression (as opposed to data compression) is a function of a lot of modern music and brightness and the lack of dynamic range that results stumps many a DAC that highlights brightness and relies

on showing off its dynamic range. The HD3 doesn't seem so showy, and as a consequence dynamically-compromised recordings don't sound quite so dreadful here. It shows Muse as a bunch of talented musicians who push the sound too far, not a tuneless noise that has you reaching for the next track.

The DAC world is vastly overstocked and its numbers are growing fast. Sometimes it gets difficult to justify the existence of yet another converter. Fortunately, that's not a problem here; the HD3, by virtue of the sheer enjoyment it builds in the music it plays means it deserves very high recommendation.

Technical Specifications

C-J HD3

Input: Asynchronous USB B-Type

Output: 2x RCA phono

Output level (0 dB): 3.5 Vrms

S/N Ratio: better than 100 dB

Frequency response: 2 Hz to 20 kHz +0/- 1.0 dB

Total harmonic distortion: less than 0.05%

Dimensions (WxHxD): 25.4x7x33cm

Weight: 3.2kg

Price: £1,995

Manufactured by: Conrad-Johnson Design Inc

URL: www.conradjohnson.com

Distributed by: Audiofreaks

Tel: +44 (0)20 8948 4153

URL: www.audiofreaks.co.uk