

## dCS Network Bridge

by Rafael Todes



**D**ata Conversion Systems (dCS) is based just outside Cambridge (UK) and has its roots in some of the first analogue to digital converters as used for military applications in the 1980's. This naturally led to some of the first high-res pro audio converters, and the rest is history. The company is one of the UK's top purveyors of digital systems, and the Network Bridge is one of its most recent additions, albeit at a surprisingly reasonable price, for dCS at least.

For those befuddled by the concept of a 'Network Bridge', it exists to provide a connection between digital files and a DAC. This can be in the form of network attached storage, USB sticks or drives, and finally (for the moment) online services such as TIDAL and Spotify. The output is bit-perfect and should in theory be several steps better than playing music from a laptop or PC, due to the dedicated nature of the device.

A bespoke app controls the Bridge. Using an iPhone 7+, having downloaded dCS's offering from the App Store, I was up and running with the Bridge in a few minutes. The Bridge needs a network cable, as it is not currently Wi-Fi enabled. This is due to be developed in a later release, and an aerial

socket is currently lying dormant, waiting for instructions... which sounds a bit like a sleeper cell!

The Bridge can play files sampled at rates up to 24-bit, 384kHz, supporting all major lossless codecs, plus DSD/64 or DSD/128 in native or DoP formats. For OAP DACs, the Bridge's downsampling feature converts high-resolution data (for example DXD or DSD) to 24 bit PCM at either 176.4/192kHz or 88.2/96kHz – bringing the data within a range supported by a vintage DAC. There are external clock inputs, and it shares dCS's 'auto clocking' architecture as used in Vivaldi and Rossini, which is said to minimise jitter and improve sound quality significantly. Internally, multi-stage power regulation is used to isolate the sensitive clock circuitry from digital processing noise. It is also Roon ready.

Physically the unit is a handsome if not minimalist box. Constructed in aircraft-grade aluminium, an oblong silver or black affair, with a solitary, humble blue LED on the fascia. The rear sports a single USB input for memory drives, but not for a computer input. It is not possible to connect a computer to the Bridge via USB. This doesn't upset me too much, as dCS has other, better ways of doing this, and USB to my mind isn't the most satisfactory way to deliver music anyway. ▶

*“The Bridge layers that orchestral sound, so that each row of this Mahlerian orchestra was etched in space.”*



► There is more choice on outputs, but similarly there is no USB for a DAC. Instead, there are S/PDIF and dual AES XLR outputs, as well as a SDIF-2 interface.

For this review, I took the Bridge to be a stand-alone unit, and did the vast quantity of my listening with the Chord DAVE DAC, rather than use the dCS eco-system of products, to see what this reasonably-priced unit does on its own four feet!

Running the Bridge through my Chord DAVE, with a Chord Signature Digital cable, through a VAC Signature preamp and VAC Phi 200 monoblocs, driving B&W802d2 speakers, left me initially – having heard Solti conduct Mahler’s 5th Symphony on Decca – with a pang of guilt. Why had I not heard it sounding like this before in my system? Had I not been feeding my mighty DAVE DAC previously with a high enough quality source?

What comes out via the Bridge is absolutely superb. The Bridge layers that orchestral sound, so that each row of this Mahlerian orchestra was etched in space, and provided a hugely wide palette of orchestral colours. In particular, the cellos and basses, so often a problem, sounded not only really crisp, but also powerful. It wasn’t a case of more or less, just greater attack to their output, greater articulation, a frightening realism to their sound. The colour of sound they were producing is nothing short of Technicolor!

When the orchestra hit a climax, the grip the Bridge applied was spellbinding; nothing squeezed out, every morsel of the orchestra remained like a giant 60-person fist!

I wouldn’t say the sound was ‘beautiful’, because this would be hugely simplifying what the Bridge does. It presents the orchestra as a series of subtly differentiated colours: some beautiful, some earthy, but all accurately rendered. The timing of the bass is impeccable; it sounds perfectly coherent and ‘right’. This recording incidentally is from TIDAL, and it is impressive how far online streaming services have come.

TIDAL and Spotify are embedded in the Bridge natively. This I would have thought is best for sound quality, but means when TIDAL changes, dCS has to issue updates. It is for this reason that dCS is going down the Chromecast route, to both enable Qobuz, (which now has a high-res streaming option) as well as MQA decoding. I am told this will be bit-perfect.

Listening to Ray Gelato play ‘Basin Street Blues’ [*The Full Flavour*, Linn Records], against an Esoteric K-05 CD player, with S/PDIF out into the Chord DAVE played off an hard disk (i.e. CD versus the Network Bridge), this is the closest I’ve come to struggling to find a difference between silver versus hard disk. The ‘Beast’ with a clock equalled my CD transport, but that was northwards of £40,000. This is doing very similar things, and while there may be tiny differences in the 3D space ►

▶ of both versions, I wouldn't say one was 'better' than the other. That for me is a game changer at a very reasonable price for what is celestially high end.

Listening to some hard-disk rendering of the Linn recording of Mozart's ever youthful and charming 29th Symphony, Charles Mackerras conducting the Scottish Chamber Orchestra, 192KHz, the recording reminded me of that 'master tape' sound I have heard in the control room (the 'box') on a session using analogue reel-to-reel tape. Solidity, punch, tautness, and grip are just some of the adjectives that spring to mind. It really does sound like being in the presence of a live orchestra, in the way I don't often hear with digital kit. It is earthy and very real, and a far cry from the mashed-up, over-processed electronic-y sound that lesser digital dishes out. The Bridge is really showing the capabilities of high-resolution audio.

I have also noticed playing back the live recordings of the Allegri Quartet I have made that I have never heard sound better. They are high-resolution, (I recorded us at 96kHz/24 bit), and completely unprocessed. The dCS seems totally in its element dealing with this dynamic range and speed of transients, and doesn't balk at this challenge in the slightest. Organic, is the word I'd use for what I hear, and very natural. The instruments sound natural, the surrounding space sounds natural, and there is an abundance of both sweetness and grunt!

Using my iPhone 7+, the App works well, but being the possessor of fat fingers, I do find the size of some of the commands is a bit too small and fiddly. The arrow to return to a previous screen is approximately 2mm wide, miss this and you are onto another command altogether. I appreciate that on an iPad, this is fine, but a plea here for maybe the next version of the app to be a bit more considerate to those of us who are fat-fingered!

I have heard and indeed had on extended loan dCS products that I admired and respected, but somehow they seemed to be monolithic and not soulful for the type of listening I did. The Network Bridge and current generation of Vivaldi kit however feels to me to be different animals. They are extremely transparent, revealing, and natural sounding, and in my books are a state-of-the-art group of products and in the case of the Bridge, for a knock-down price.

So I'd say that if you are looking for a state-of-the-art Network Bridge, together with the purchase of a hard-disk, you are being catapulted way up the audio ladder for a ridiculously reasonable outlay. However, you will only hear what the dCS can do, when partnered with a DAC of its equals and with a system to match. +

## TECHNICAL SPECIFICATIONS

**Type:** Streaming Bridge

**Streaming Services Supported:** Tidal and Spotify, with Chromecast to follow to enable Qobuz and MQA

**Supported File Types:** FLAC, AIFF & WAV – up to 24 bit PCM at 44.1, 48, 88.2, 96, 176.4, 192, 352.8 or 384kS/s. ALAC – up to 24 bit PCM at 44.1, 48, 88.2, 96, 176.4 & 192kS/s. AAC, MP3, WMA & OGG - up to 24 bit PCM at 44.1 or 48kS/s. DFF, DSF & DoP – DSD/64 & DSD/128. Apple AirPlay – 44.1 or 48kS/s.

**Control Software:** dCS Network Bridge App for Unit Configuration and Music Playback or UPnP compatible control app

**Digital Inputs:** Network interface on an RJ45 Gigabit Ethernet connector – Acts as a UPnP™ renderer operating in asynchronous mode, streaming digital music from a NAS or local computer over a standard Ethernet network, decoding all major formats. Network and built-in WiFi accept data streamed from an iPod, iPhone or iPad via Apple AirPlay™. Music can be streamed from the internet via Spotify Connect™ or Tidal™, the Network Bridge is Roon™ ready. USB 2.0 high speed interface on type A connector operating in asynchronous mode, streams digital music from external drive.

**Digital Outputs:** 2x AES/EBU on 3-pin male XLR connectors, each outputs PCM at up to 24 bit 192kS/s or DSD/64 in DoP format. Used as a Dual AES pair, the interface outputs PCM at up to 384kS/s, DSD/64 & DSD/128 in DoP format. 1x SPDIF on 1x RCA Phono connector, outputs PCM at up to 24 bit 192kS/s or DSD/64 in DoP format. 1x SDIF-2 interface on 2x BNC connectors, outputs PCM at up to 24 bit 96kS/s or SDIF-2 DSD/64.

**Dimensions:** 36cm/14.2" wide x 24.5cm/9.65" deep x 6.7cm/2.65" high

**Weight:** 4.6kg/10.2lbs

**Price:** £3,250

**Manufacturer Information:** Data Conversion Systems Ltd

**URL:** [dcsltd.co.uk](http://dcsltd.co.uk)

**UK Distributor Information:** Absolute Sounds

**URL:** [absolutesounds.com](http://absolutesounds.com)

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