

Network Bridge



The *dCS* Network Bridge acts as an elegantly simple but hugely powerful interface between your digital music and your DAC.

The hardware platform in Network Bridge enables you to stream high resolution music files from network attached storage, connected USB drives, online streaming services as well as Apple devices via Apple Airplay, outputting bit perfect audio direct to your DAC.

The native Network Bridge app provides full control of the wired and wireless streaming capabilities as well as the input, output and clock settings. The Network Bridge app is based on the same network streaming and app technology used in our flagship Vivaldi series – providing an intuitive interface for you to quickly and easily organise and manage your entire digital music library.

Designed for simplicity, a single, powerful FPGA platform is the heart of the unit and the Network Bridge is Roon™ ready, also supporting streaming services such as TIDAL™, and Spotify™.

Featuring clean, bit-perfect operation, the Network Bridge currently plays files sampled at rates up to 24-bit, 384kS/s, supporting all major lossless codecs, plus DSD/64 or DSD/128 in native or DoP formats.

Compatibility with legacy *dCS* DACs is assured by an integer down-sampling feature. This downsampling feature converts high res data (for example DXD or DSD) to 24 bit PCM at either 176.4/192kS/s or 88.2/96kS/s – bringing the data within a range supported by your DAC.

Network Bridge also supports the simple yet highly effective *dCS* 'auto clocking' architecture as used in Vivaldi and Rossini, which minimises jitter and improves sound quality significantly.

The Network Bridge firmware can be updated easily from the internet using the control section of the app. This allows *dCS* to add new features or improve the performance of the product during its production lifetime.

Designed and made in Great Britain to the highest standards, Network Bridge's elegant chassis uses aerospace-grade machined aluminium to reduce sound-degrading mechanical vibration and magnetic effects. Multi-stage power regulation is employed to isolate the sensitive clock circuitry from digital processing noise.

Network Bridge

TECHNICAL SPECIFICATIONS

Type	Network Bridge.
Colour	Silver or Black.
Dimensions (WxDxH)	360mm/14.2" wide x 245mm/9.65" deep x 67mm/2.65" high. Allow extra depth for cable connectors.
Weight	4.6kg/10.2lbs.
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.
Word Clock I/O	2x Word Clock Inputs on 2x BNC connectors, accept standard word clock at 44.1, 48, 88.2, 96, 176.4 or 192kHz. The data rate can be the same as the clock rate or an exact multiple of the clock rate. Sensitive to TTL levels. Word Clock Output on 1x BNC connector, carries Word Clock at the same frequency as the data rate up to 96kHz.
Data Formats	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.
Conversions	User-selectable down-sampling to match legacy DACs: - 176.4 & 352.8 > 24/176.4 or 24/88.2 - 192 & 384 > 24/192 or 24/96 - DSD/64 & DSD/128 > 24/176.4 or 24/88.2 This feature is set by the Network Bridge App.
Software Updates	Download and update functionality available via the Network Bridge App.
Local Control	<i>dCS</i> Network Bridge App for Unit Configuration and Music Playback or UPnP compatible control app.
Power Supply	Factory set to either 100-120, 220-240V AC, 50/60Hz.
Power Consumption	6.5W typical, 50W maximum.

KEY FEATURES

- Streamlined FPGA-based design.
- Accepts data from UPnP, asynchronous USB-on-the-Go and Apple Airplay.
- Streaming services supported include TIDAL, and Spotify Connect.
- Roon ready.
- Optional down-sampling to match legacy DACs.
- Auto clocking system improves ease of use and minimises jitter.
- Multi-stage power regulation isolates digital and sensitive clock circuitry.
- Firmware-upgradeable from the internet for future functionality and performance upgrades.

ABOUT *dCS*

dCS has been at the forefront of digital audio since 1987. Its unique expertise in digital signal processing means that it has played a vital innovating role in digital music recording and playback over the years, and makes its products sound like no others.

The company has won numerous awards for its range of class-leading digital converters, all of which use the bespoke, custom-designed Ring DAC™ architecture – created during the company's time working on specialist radar applications for military aviation.

dCS products are unrivalled in their class – not only for sonic performance, but also for build quality. Designed and manufactured in the United Kingdom using only the best materials and components, they offer state-of-the-art sound, superlative reliability and are uniquely upgradeable as new formats appear.

CONTACT *dCS*

Data Conversion Systems Ltd

✉ Unit 1
Buckingham Business Park
Swavesey
Cambridgeshire
CB24 4AE
UK

@ info@dcsltd.co.uk

🌐 www.dcsltd.co.uk

🐦 dCSonlythemusic

Copyright © 2016, Data Conversion Systems Limited. All rights reserved.

dCS, *dCS* logo, Ring DAC and all other *dCS* product names are trademarks or registered trademarks of Data Conversion Systems Limited.

Data Conversion Systems Limited disclaims any proprietary interest in trademarks and trade names other than its own.

All specifications are subject to change and, whilst they are checked for accuracy, no liabilities can be accepted for errors or omissions.