Debussy DAC
Digital-to-Analogue Converter

The Debussy DAC is the future hub of your digital playback system. Debussy combines the legendary *dCS* Ring DAC™ and our award winning asynchronous USB technology in one box to deliver a DAC that will extract amazing performance from any digital source.

Built to the highest specifications, Debussy features a sleek solid aluminium fascia, high grade aluminium casing, all metal buttons and is powered by *dCS* electronics. Whether you use CD or a computer as your source, Debussy will extract every last bit of detail from your music collection, bringing a reality to your music that you never heard before.

In common with our flagship Scarlatti, Paganini and Puccini ranges, Debussy uses our proprietary patented *dCS* Ring DAC™, which oversamples all incoming data to 5 bits at 2.822 or 3.07 MS/s.

Debussy DAC features standard AES3, Dual AES and SPDIF inputs in addition to the USB2.0 interface. The digital volume control allows direct connection to a power amplifier, thus in most cases removing the need for a preamplifier. Maximum output can be either two or six volts to suit different amp/speaker combinations. Two filters are provided offering listeners the choice of linear phase with pre-ringing or non-linear phase without pre-ringing.

When connecting a computer source Debussy DAC operates in "asynchronous" USB mode (NOT to be confused with asynchronous rate conversion), in which the Debussy DAC synchronises the audio by providing a feedback pipe to the computer. The computer is then effectively locked to the audio device, which provides a much more accurate clock and much lower jitter.

The PCM inputs on all our DACs are industry standard AES and SPDIF interfaces. There should be no difficulty using them with other manufacturers' equipment, provided it also complies with industry standards.

Debussy can be locked to an external word clock signal generated by a *dCS* Master Clock and this produces a substantial performance improvement.

Debussy also benefits from our 'soft' approach to programmable logic, allowing new software to be loaded from a *dCS* update disc or connected computer in order to add new features and adapt to future changes in digital formats.

dCS

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Technical Specifications

Type	Digital-to-Analogue Converter.
Colour	Silver and Black.
Dimensions	(W) 445mm x (D) 392mm x (H) 65mm (W) 17.6" x (D) 15.5" x (H) 2.6" Allow extra depth for cable connectors.
Weight	8.8kg/19.4lbs.
Analogue Outputs	Output Levels: 2V rms or 6V rms on all outputs, set by the Output Level switch on the rear panel. Balanced Outputs – 1 stereo pair on 2x 3-pin male XLR connectors (pin 2 = hot, pin 3 = cold) These outputs are electronically balanced and floating, the signal balance ratio at 1kHz is better than 40dB Output impedance is 3Ω, maximum load is 600Ω (a 10kΩ load is recommended). These outputs are electronically balanced and floating - the signal balance ratio at 1kHz is better than 40dB Output impedance is 3Ω and maximum load is 600Ω (a 10kΩ load is recommended). Unbalanced Outputs – 1 stereo pair of 2x RCA Phono connectors. Output impedance is 52Ω and maximum load is 600Ω (a 10kΩ load is recommended).
Digital Inputs	USB interface on a B-type connector will accept up to 24 bit PCM at 44.1, 88.2, 96, 176.4 & 192 kS/s. Operates in asynchronous mode. 2x AES/EBU on 3-pin female XLR connectors. Each will accept up to 24 bit PCM at 44.1, 48, 88.2, 96kS/s OR as a Dual AES pair at 88.2, 96, 176.4 & 192kS/s. 2x SPDIF on 1x RCA Phono and 1x BNC connectors. Each will accept PCM at 44.1, 48, 88.2 or 96kS/s up to 24 bits.
Word Clock I/O	INPUT - Word Clock Input on 1x BNC connector. Accepts standard word clock at 32, 44.1, 88.2 & 96kS/s
Residual Noise	Better than –110dB0 @ 20Hz - 20kHz unweighted. (6V Setting).
Spurious Responses	Better than –100dB0 @ 20Hz - 20kHz.
Filters	2 filters on Debussy give different trade-offs between the Nyquist image rejection and the phase response. Filter 1 is a classic sharp filter with linear phase and pre-ringing. Filter 2 is an alternative filter which has non-linear phase and no pre-ringing.
Software Updates	Loaded from CD or Computer via USB.
Local Control	IR (RC5) or RS232. A dCS Premium remote is supplied as standard.
Operating Systems	Tested on Windows XP/Vista/7 and Mac OSX. Operates in "Audio Class" mode. Class 1 mode (limited to 96kS/s) is available and does not require special drivers to be installed. Class 2 mode requires the dCS drivers (supplied) to be installed on Windows PCs but not OSX 10.6.3 or later.
Power Supply	Factory set for 100, 115, 220 or 230 V AC, 49 – 62Hz.
Power Consumption	19w.

Key Features

- Debussy DAC uses the latest version of the patented *dCS* Ring DAC™, which incorporates several detail improvements over earlier versions.

- The *dCS* Ring DAC™ is a discrete balanced design which does not use any off-the-shelf DAC chips commonly found in other manufacturer's products.

- Our proprietary 5 bit oversampling topology produces exceptional linearity across the dynamic range.

- All *dCS* products use a sophisticated multi-mode phase locked loop (PLL) which significantly reduces clock jitter.

- Faster, 100% accurate DSPs (within the bounds of their resolution) give improved filters revealing yet more fine detail.

- Higher capacity FPGAs (Field Programmable Gate Arrays) give more logic capacity and increase the scope for additional features and enhancements.

- Asynchronous USB mode prevents the computer source injecting jitter into DAC.

- Improved power supplies give lower running temperature and increased tolerance to AC supply variations.

- Our 'soft' approach to programmable logic allows *dCS* products to adapt to changes in digital formats and add new features by loading new software from a CD or a computer

- High grade aluminum chassis and laminated acoustic damping panels reduce magnetic effects and vibration.

About *dCS*

Since 1987 *dCS* has been at the forefront of digital audio – creating products that are a unique synthesis of exact science and creative imagination. For people who are serious about music, *dCS* audiophile products offer an unrivalled ability to transform digital audio into real music that you can hear, feel and experience.

dCS products are designed and hand built in the UK to deliver a totally unique listening experience. The best materials combined with decades of experience and skilled manufacturing guarantee amazing performance.

Contact *dCS*