dCS

ONLY THE MUSIC

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Welcome to *dCS*

At *dCS* we believe that the role of a hi-fi system is to preserve all of the subtle information on a recording through the reproduction chain and present it to the listener with every last nuance of the emotional content intact.

For example, if melody and harmony are the keys to musical beauty, then keeping the harmonic envelope of a note intact is the first step in musical reproduction. The ability to play several harmonically related notes (a chord) simultaneously and fully preserve all of this information is a feat only the finest music reproduction systems can achieve – something all *dCS* systems do.

The ability to play the right note at precisely the right time is also crucial – in music exact timing is essential for conveying the 'feel' of a piece of music. A great hi-fi system needs to communicate this both accurately and precisely because, without it, a recorded performance can sound anything from bland to unfathomable.

Finally, the right note must also be played at the right volume. Very few hi-fi systems achieve a true dynamic range by simultaneously reproducing the sound of both a loud instrument and a quiet one. Only when this is achieved does a system truly reproduce the feeling, the rhythm and the mood of a recording.

We are proud to say that some of the world's most famous and popular albums were recorded using *dCS* equipment. So, even if you don't own a *dCS* system, you can attribute that great recording partly to the work of recording engineers using our equipment. We think music makes the world a better place and that is why we are totally dedicated to making music sound as the artists intended.

Yes, our products are high end – a combination of world class craftsmanship and leading edge technology – but, for the people who invest in *dCS*, our systems offer the chance to experience that unique, spine-tingling moment when the world stops and there is…

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David Steven
Managing Director

Our products are high end – a combination of world class craftsmanship and leading edge technology.

Our Heritage

Founded in Cambridge, UK, by a group of expert electronic engineers, the company originally designed and manufactured high performance analogue-to-digital (ADCs) and digital-to-analogue (DACs) converters for major telecommunication companies and military agencies, whose major requirement was technology that delivered state-of-the-art precision, linearity and reliability.

Our success in this field meant that *dCS* quickly became known for the performance of our converters and so, recognising in the early 1990s that this technology had a key role in music recording and playback, we decided to concentrate on developing products for the digital recording industry. While our focus had changed, our commitment to producing systems of unrivalled accuracy had not and, consequently, our products were (and still are) used by some of the world's most successful recording studios and engineers around the world.

As a result of this work *dCS* began to employ some of the smartest and most creative people in the business and the company evolved into producing digital hi-fi systems which allowed music lovers around the world to enjoy stunning sound of unrivalled quality in their own home.

This focus on R&D also resulted in a range of proprietary *dCS* technologies of which the most significant is the legendary *dCS* Ring DAC™. Our products continue to set new standards of performance in terms of both objective test measurements and subjective listening.

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"In 1996 I mastered the industry's first-known high resolution 24 bit, 88.2 kHz digital recording using *dCS* converters. In 2000, again using *dCS* converters, I mastered the world's first pop DSD surround sound recording for SACD, The Guano Tapes 'Don't Give Me Names'. *dCS* was on the cutting edge of the state-of-the-art in 1996 and they still are on the cutting edge today.

Bob Ludwig
GATEWAY MASTERING & DVD, USA

Our 25 years of innovation include some milestone achievements and emphasise why we now set the standard for digital music reproduction

1988

Converters and Radar Systems for Military Applications

World's first 24 bit Converters for Professional Recording Studios

World's first 24 bit Converters for Consumer Audio

Redefining State-of-the-Art in Digital Audio

2012

Our Design Philosophy

Performance is Everything

At *dCS* we will only build audio products that are best in their class. Because of our unique architecture *dCS* products are not constrained by conventional design approaches and this allows us to focus on creating technologies and manufacturing products that deliver optimum performance.

People Matter

As a result of our commitment to innovation and leading the field in digital audio, we employ some of the best and brightest talent in the industry. At *dCS* our entire reputation depends on our people and we provide an environment where they can grow and flourish.

Anticipate the Future

Recognising that technology is constantly changing we have developed a completely flexible and modular product architecture that allows us to continually improve our products so music lovers can build and expand their *dCS* system over time.

Test and Test and Test Again

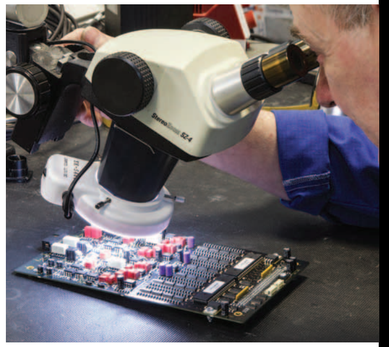
State-of-the-art performance is our number one requirement and for this reason we cannot rely on conventional testing hardware and software to measure our products because they exceed the capability of standard test equipment. Every unit we produce is rigorously tested using *dCS* converter technology that has been designed, built and maintained in-house.

Form Must Follow Function

At *dCS* our ambition is to make world beating, life-enhancing products. Our design approach is to balance world class craftsmanship with leading edge technology. There is a rich history of groundbreaking innovation inside every *dCS* unit and we only use materials and components that are of the highest quality.

Made in the UK

A typical *dCS* product is assembled by hand with a total build time of around one week. From the original concept to the point of shipping, we are proud to say that everything is designed, tested and manufactured in our Cambridge, UK, factory.



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Digital Audio Excellence

Perhaps the most important part of the music playback process is the digital to analogue conversion: this is when the digital data on a CD or computer file is converted into an analogue signal – the music we hear through speakers.

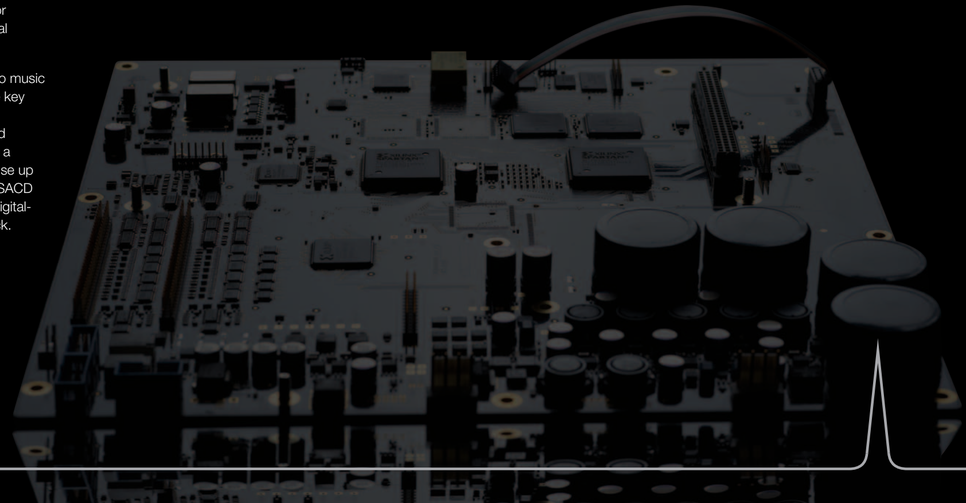
It is this process that *dCS* has been refining for 21 years and, by making the world's most advanced digital-to-analogue converters (DACs), master clocks and digital-to-digital converters (D2D), we can make the data on a CD or computer file sound more like the original recording than any other hi-fi system.

Over the years we have demonstrated to music lovers worldwide that, by separating the key functions of the digital playback chain, you can achieve huge sonic benefits and extraordinary musicality. For that reason a typical *dCS* reference system will comprise up to four separate units: Upsampling CD/SACD Transport, Digital-to-Digital Converter, Digital-to-Analogue Converter and Master Clock.

The positive contribution that each makes to the overall musical performance can easily be heard.

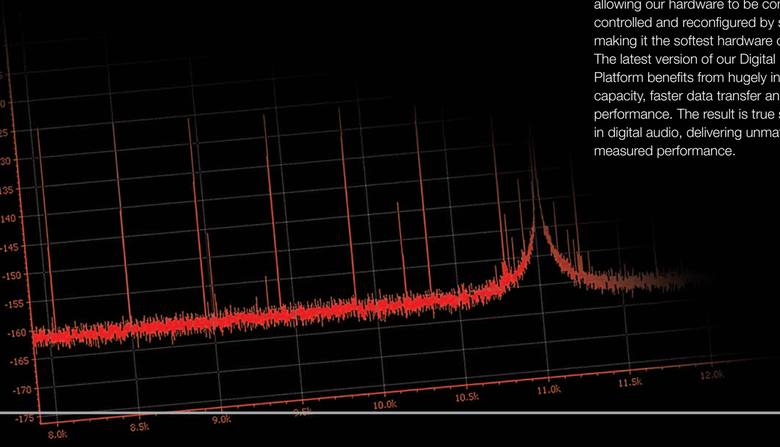
All *dCS* products express the same values of musical and technical excellence and, by utilising the same key technologies across the ranges, we can be sure that, whatever the source, the musical performance is guaranteed.

We can make the data on a CD or computer file sound more like the original recording than any other hi-fi system.



Key Technologies

dCS have been at the forefront of digital audio development for over 20 years. Upsampling, Oversampling, Clocking, PCM-to-DSD conversion are all areas in which *dCS* have taken a revolutionary path.



Our latest generation of products feature a number of technologies unique to *dCS*

dCS Digital Processing Platform

Our powerful digital processing platform is based around Field Programmable Gate Array (FPGA) and Digital Signal Processing (DSP) integrated circuits coupled to a microcontroller system. All of these use code developed and maintained by *dCS*. Our PCM interface and Phase-Locked-Loop (PLL) circuitry are essentially discrete and highly reprogrammable allowing our hardware to be completely controlled and reconfigured by software – making it the softest hardware on the market. The latest version of our Digital Processing Platform benefits from hugely increased FPGA capacity, faster data transfer and improved jitter performance. The result is true state-of-the-art in digital audio, delivering unmatched sonic and measured performance.

dCS Ring DAC

The legendary *dCS* Ring DAC™ combines exceptional linearity with very high speed operation. It is designed like no other digital-to-analogue converter and has been instrumental in our pioneering efforts to develop high resolution audio at very high sample rates.

All digital data processed by the *dCS* Ring DAC™ is digitally filtered, noise shaped and oversampled to our proprietary Ring DAC™ format which is 5 bit at either 2.822MS/s or 3.072MS/s. A digital feedback system forms the 'Ring' decoding the 5 bit data to control an array of high speed latches which, together with an array of equal value precision resistors, reconstruct the analogue signal.

Our unique 5 bit Ring DAC format has a huge amount of capacity to cope easily with existing audio formats and is equally as capable of handling new formats as they are developed. This novel and totally discrete approach delivers true 24 bit performance even at low signal levels and is a major improvement over any integrated solution, offering many sonic advantages including reduced crosstalk, standard-setting linearity and exceptionally stable performance.

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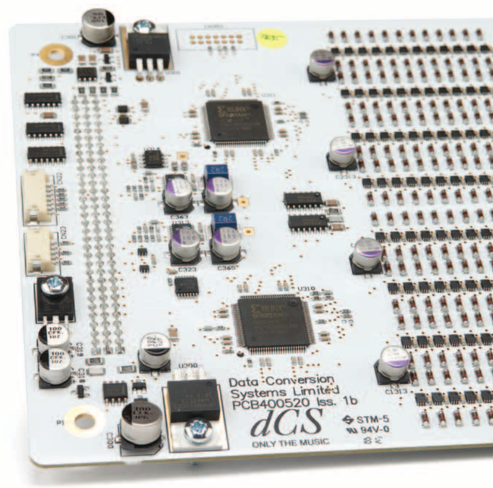
Clocking

In a digital audio system samples must be accurate in level and time but jitter, that exists in all digital systems, can result in timing errors in these samples with the result that the analogue signal is reconstructed inaccurately. *dCS* were pioneers in the use of external clocks in digital audio systems and our clocking technology has been continually refined so that our multi-stage Phase-Locked-Loop (PLL) system sets world-beating standards for accuracy and control of troublesome jitter from the incoming audio stream. Our innovation in this area has enabled us to develop a range of technologies that are both extremely flexible and readily software configurable.

Computer Audio

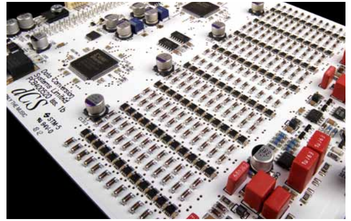
In recognition of the fact that many people are now playing music from computers or streaming audio across a home network, *dCS* has developed a range of new technologies to create optimal performance from these sources. Our award winning asynchronous USB interface ensures that the rate at which data is delivered to the DAC is independent of the computer's jittery clock. The sonic benefits are profound and, as a result, this approach to data rate control has now been adopted as the industry standard for computer audio. Our next major development in this field was network streaming of audio using the UPnP protocol. The *dCS* Vivaldi Upsampler features our very latest network streaming technology delivering unmatched technical and musical performance from a networked audio system.



Our unending quest for innovative new technologies that improve the musical experience ensures that our products continue to set the performance standard around the world.

Vivaldi

Launched in late 2012 Vivaldi is a complete digital playback system that offers unmatched sonic and measured performance. Designed for maximum flexibility with an array of input and output configurations it is easily set up and optimised for music systems with various digital sources.



Featuring the latest groundbreaking technology from *dCS* Vivaldi will transform your listening experience, taking your music collection to levels you have not heard before.

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Vivaldi Highlights

Vivaldi DAC

- Features standard digital inputs in addition to an asynchronous USB interface. The enhanced digital volume control allows direct connection to a power amplifier so that in the majority of systems there is no need for a separate preamplifier. Maximum output can be set at either two or six volts to suit different amplifier and speaker combinations.
- Featuring the latest generation *dCS* Digital Processing Platform designed to handle all high resolution musical formats up to DXD (24 bit data at 352.8 and 384kS/s) plus DSD. The optimised DSP filters available will ensure you can extract every last nuance of musical detail and emotion by tuning the system to suit your personal preference.
- Utilises the latest generation of our state-of-the-art *dCS* Ring DAC™ that delivers enhanced dynamic range, reduced jitter, improved channel separation and greatly improved musical realism.

Vivaldi Upsampler

- Accesses music from any digital source and converts the audio from its native sample rate to either high resolution DXD (24 bit data at 352.8 or 384kS/s), DSD (1 bit data at 2.822 or 3.07MS/s) or standard high resolution PCM (24 bit data up to 192 kS/s).
- Network connectivity to stream high resolution audio files stored on a computer or on network storage via UPnP™. Asynchronous USB input also allows direct connection of a PC, supporting high resolution audio up to and including 24/192kS/s and DOP (DSD over PCM).
- Apple™ authenticated and supports playback of iPod™/iPhone™ stored digital media, bypassing the internal DAC to ensure optimal performance.
- An array of independently selectable digital inputs and filter options elevates the performance of Red Book CD from CD Players or high resolution audio from digital streamers and servers to a previously unsurpassed level.

Vivaldi Transport

- Extracts revelatory levels of detail from both CD and SACD. All signal processing is controlled by electronics designed by *dCS*. It uses the TEAC Esoteric VRDS Neo™ mechanism which provides a brushless motor with heavy flywheel for stable disc rotation and super rigid construction.
- Features a Dual AES output that supports *dCS*-encrypted DSD to a *dCS* DAC from CD or SACD. Also offers the option of upsampling CD data to DXD.

Vivaldi Master Clock

- A powerful yet simple to use Grade 1 master clock. Featuring two banks of clock outputs capable of outputting different frequencies, the new auto-clocking mode in Vivaldi improves ease of use and minimises jitter.
- Used as part of the Vivaldi digital audio playback system it improves on an already spectacular sound and takes it into an entirely new domain. Images snap into sharper focus and the music displays a substantially greater sense of authority and power as well as, most importantly, offering noticeably higher resolution of detail.

Vivaldi redefines state-of-the-art in digital playback and represents the pinnacle of our ‘no compromise’ approach to product design – setting a new standard for the future of digital audio.

Scarlatti

Scarlatti needs no introduction and since its launch in 2007 has been the recipient of awards across the world for its extraordinary performance both in terms of objective measurements and the subjective musical experience it offers.

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Scarlatti Highlights

Scarlatti DAC

- The enhanced digital volume control allows direct connection to a power amplifier so that in the majority of systems there is no need for a separate preamplifier. Maximum output can be set at either two or six volts to suit different amplifier and speaker combinations.
- Designed to handle all high resolution musical formats up to DSD. The optimised DSP filters available will ensure you can extract every last nuance of musical detail and emotion by tuning the system to suit your personal preference.

Scarlatti Upsampler

- Accesses music from any digital source and converts the audio from its native sample rate to either DSD (1 bit data at 2.822 or 3.07MS/s) or standard high resolution PCM (24 bit data up to 192kS/s).
- Asynchronous USB input also allows direct connection of a PC, supporting high resolution audio up to and including 192kS/s and DOP (DSD over PCM).
- An array of independently selectable digital inputs and filter options elevates the performance of Red Book CD from CD Players or high resolution audio from digital streamers and servers to a previously unsurpassed level.

Scarlatti Transport

- Extracts revelatory levels of detail from both CD and SACD. All signal processing in Scarlatti is controlled by electronics designed by *dCS*. It uses the TEAC Esoteric VRDS Neo™ mechanism which provides a brushless motor with heavy flywheel for stable disc rotation and super rigid construction.
- Features IEEE1394 outputs that support *dCS*-encrypted DSD (1 bit data at the rate of 2.822MS/s) to a *dCS* DAC or Upsampler from CD or SACD.

Scarlatti Master Clock

- A powerful yet simple to use Grade 1 master clock with additional USB-SPDIF conversion based on our pioneering developments in studio and home audio. Featuring six Word Clock outputs and two SPDIF outputs for transmitting high resolution audio up to 24 bit data up to 192kS/s.
- Used as part of the Scarlatti digital audio playback system it improves on an already spectacular sound and takes it into an entirely new domain. With a clock added to a *dCS* system images snap into sharper focus and the music displays a substantially greater sense of authority and power as well as, most importantly, offering noticeably higher resolution of detail.

Scarlatti possesses the ability to unravel music like no other digital system – resulting in a performance that is simply stunning.

Paganini

The design philosophy behind the Paganini range was to expand the feature set of the one box Puccini and offer a system that would elevate the musical performance yet further. Elegant yet powerful Paganini is the entry point to the magic of digital separates offering all the functionality needed for the unique experience that is synonymous with *dCS*.

Paganini Highlights

Paganini DAC

- The enhanced digital volume control allows direct connection to a power amplifier so that in the majority of systems there is no need for a separate preamplifier. Maximum output can be set at either two or six volts to suit different amplifier and speaker combinations.
- Designed to handle all high resolution musical formats up to DSD. The optimised DSP filters available will ensure you can extract every last nuance of musical detail and emotion by tuning the system to suit your personal preference.

Paganini Upsampler

- Accesses music from any digital source and converts the audio from its native sample rate to either DSD (1 bit data at 2.822 or 3.07MS/s) or standard high resolution PCM (24 bit data up to 192kS/s).
- Asynchronous USB input also allows direct connection of a PC, supporting high resolution audio up to and including 24/192kS/s and DOP (DSD over PCM).
- An array of independently selectable digital inputs and filter options elevates the performance of Red Book CD from CD Players or high resolution audio from digital streamers and servers to a previously unsurpassed level.

Paganini Transport

- Designed to extract revelatory levels of detail from both CD and SACD. All signal processing in Paganini is controlled by electronics designed by *dCS*. It uses the TEAC Esoteric UMK 5™ mechanism.
- Features IEEE1394 outputs that support *dCS*-encrypted DSD (1 bit data at the rate of 2.822MS/s) to a *dCS* DAC or Upsampler from CD or SACD.

Paganini Master Clock

- A powerful yet simple to use Grade 1 master clock with additional USB-SPDIF conversion based on our pioneering developments in studio and home audio. Featuring five Word Clock outputs and one SPDIF output for transmitting high resolution audio up to 24 bit data up to 192kS/s.
- Used as part of the Paganini digital audio playback system it improves on an already spectacular sound and takes it into an entirely new domain. With a clock added to a *dCS* system images snap into sharper focus and the music displays a substantially greater sense of authority and power as well as, most importantly, offering noticeably higher resolution of detail.

Sharing many of the same key technologies found in the Scarlatti range the main differences are in the elegant chassis and transport mechanism.

Puccini

Puccini is a revelation – a complete digital front end that combines the elegant aesthetics of Paganini with state-of-the-art *dCS* upsampling, DAC, clocking and CD/SACD player technology. The result is a digital front end that offers everything a serious music lover needs.

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Puccini Highlights

Puccini Player

- Features 2 x SPDIF inputs so that Puccini Player can be used as a DAC. Optional DSD upsampling on these inputs improves the musical performance further.
- The enhanced digital volume control allows direct connection to a power amplifier so that in the majority of systems there is no need for a separate preamplifier. Maximum output can be set at either two or six volts to suit different amplifier and speaker combinations.
- The optimised DSP filters available will ensure you can extract every last nuance of musical detail and emotion by tuning the system to suit your personal preference.
- Designed to extract revelatory levels of detail from both CD and SACD. All signal processing in Puccini is controlled by electronics designed by *dCS*. It uses the TEAC Esoteric UMK 5™ mechanism.
- In common with Scarlatti and Paganini ranges, Puccini uses patented DSD signal processing and patented *dCS* Ring DAC.

Puccini U-Clock

- Features four Word Clock outputs that further reduce jitter and improve performance.
- Asynchronous USB input also allows direct connection of a PC and supports high resolution audio up to and including 24/192kS/s and DOP (DSD over PCM).
- Matched with the Puccini Player it improves on an already spectacular sound and takes it into an entirely new domain. With a clock added to a *dCS* system images snap into sharper focus and the music displays a substantially greater sense of authority and power as well as, most importantly, offering noticeably higher resolution of detail.

Puccini sets the performance standard for single box CD/SACD Players and DACs by optimising key *dCS* technologies in one stunning chassis.

Debussy

The entry point to the world of *dCS* and designed to be the hub of a 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.

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Debussy Highlights

Debussy DAC

- Asynchronous USB input also allows direct connection of a PC and supports high resolution audio up to and including 24/192kS/s and DOP (DSD over PCM).
- An array of independently selectable digital inputs completes the versatility of this powerful machine and elevates the performance of Red Book CD from CD Players or high resolution audio from digital streamers and servers to a previously unsurpassed level.
- The enhanced digital volume control allows direct connection to a power amplifier so that in the majority of systems there is no need for a separate preamplifier. Maximum output can be set at either two or six volts to suit different amplifier and speaker combinations.

Single box elegance at the cutting edge of standalone DAC design.

Vivaldi

				
Name	Vivaldi DAC.	Vivaldi Upsampler.	Vivaldi Transport.	Vivaldi Master Clock.
Type	**Digital-to-Analogue Converter.**	**Digital-to-Digital Converter.**	**Upsampling CD/SACD Transport.**	**Master Clock.**
Colour	Silver or Black.	Silver or Black.	Silver or Black.	Silver or Black.
Dimensions (WxDxH)	444mm/17.5" x 435mm/17.2" x 151mm/6.0".	444mm/17.5" x 435mm/17.2" x 125mm/5.0".	444mm/17.5" x 435mm/17.2" x 196mm/7.8".	444mm/17.5" x 435mm/17.2" x 125mm/5.0".
Weight	16.2kg/35.65lbs.	14.2kg/31.3lbs	23.2kg/51.1lbs.	13.6kg/29.9lbs.
Consumption	23W typical, 30W maximum.	15W typical, 18W maximum.	28W typical, 40W maximum.	10W typical, 12W maximum.
Control	IR or RS232. *dCS* Premium Remote as standard.	IR or RS232. Vivaldi Controller app. *dCS* Premium Remote as option.	IR or RS232. *dCS* Premium Remote as option.	IR or RS232. *dCS* Premium Remote as option.
Function	Uses proprietary latest generation *dCS* Ring DAC™ and Digital Processing Platform technology to operate as a standalone DAC or as part of a digital system.	Accesses music from any digital source and converts audio from its native sample rate to either DXD (24 bit data at 352.8 or 384 kS/s), DSD (1 bit data at 2.822 or 3.07 MS/s) or standard high resolution PCM (24 bit data up to 192 kS/s).	Designed to read both CD and SACD. Optional DXD and DSD upsampling. Uses the TEAC Esoteric VRDS Neo™ mechanism. All signal processing controlled by electronics designed by *dCS*.	Grade 1 master clock featuring two banks of clock outputs capable of outputting different frequencies.
Inputs	2x Dual AES or 4x AES/EBU. 1x USB2.0 interface on a type B connector, operates in asynchronous USB mode. 3x SPDIF (2xRCA + 1xBNC). 1x Toslink optical. 1x SDIF-2. 3x Word Clock inputs on 3x BNC connectors.	RJ45 – acts as UPnP renderer. 1x USB 2.0 interface on B-type connector. 1x USB 2.0 interface on A-type connector. AES3 on a 3-pin female XLR connector. 4x SPDIF on 2x RCA Phono, 1x BNC and 1x TosLink optical. 1x SDIF-2 PCM interface on 2x BNC connectors + Word Clock. 2x Word Clock input on 2x BNC connectors.	1x Word Clock input accepts 44.1, 88.2 or 176.4kHz.	1x Reference input on BNC connector can be used to lock to an external atomic clock or GPS reference at 1, 5 or 10MHz, TTL or AC compatible.
Outputs	1 pair balanced, floating analogue outputs on 2x 3-pin male XLR connectors. 1 pair unbalanced analogue outputs on 2x RCA connectors. All outputs may be set to 2V or 6V. 1x Word Clock output.	1x Dual AES interface on 2x 3-pin male XLR connectors, outputs *dCS*-encrypted DSD or DXD OR 2x AES3 interfaces. 2x SPDIF on 1x RCA Phono and 1x BNC. 1x Word Clock output.	1x Dual AES interface on 2x 3-pin male XLR connectors. 1x AES3 on 3 pin Male XLR. 2x SPDIF on 1x RCA Phono and 1x BNC. 1x SPDIF optical on Toslink. 1x SDIF-2 interface on 2x BNC.	8x Word Clock outputs, each group of 4 is independently buffered and may be set to 44.1, 48, 88.2, 96, 176.4 or 192kHz.
Maximum Sample Rates	USB: 24/192 PCM & DOP (DSD over PCM). Dual AES: 24/384 PCM, DOP (DSD over PCM) & encrypted DSD. Single AES & SPDIF: 24/192 PCM & DOP (DSD over PCM). Toslink: 24/96 PCM. SDIF-2: 24/96 & DSD.	UPnP: 24/192 PCM. USB: 24/192 PCM & DOP (DSD over PCM). Dual AES: 24/384 PCM, DOP (DSD over PCM) & encrypted DSD. Single AES & SPDIF: 24/192 PCM & DOP (DSD over PCM). Toslink: 24/96 PCM. SDIF-2: 24/96 PCM or DSD.	Dual AES: 24/384 PCM, DOP (DSD over PCM) & encrypted DSD. All other outputs carry 16/44.1.	
Performance	Residual Noise: Better than -113dB0 @ 20Hz-20kHz unweighted. (6V Setting). L-R Crosstalk: Better than -115dB, 20-20kHz. Spurious Reponses: Better than -105dB0 @ 20-20kHz.	Spurious Responses: Better than -100dB0 @ 20Hz-20kHz.		Better than +/-1ppm when shipped. Typically +/-0.1ppm when shipped and stabilised.
Updates	CD-R or USB.	CD-R or USB.	CD-R.	CD-R.

Scarlatti

				
Name	Scarlatti DAC.	Scarlatti Upsampler.	Scarlatti Transport.	Scarlatti Master Clock.
Type	**Digital-to-Analogue Converter.**	**Digital-to-Digital Converter.**	**Upsampling CD/SACD Transport.**	**Master Clock.**
Colour	Silver or Black.	Silver or Black.	Silver or Black.	Silver or Black.
Dimensions (WxDxH)	465mm/18.3" x 405mm/16.0" x 75mm/3.0".	465mm/18.3" x 405mm/16.0" x 75mm/3.0".	513mm/20.2" x 424mm/16.7" x 140mm/5.5".	465mm/18.3" x 405mm/16.0" x 75mm/3.0".
Weight	11.3kg/24.9lbs.	10.1kg/22.2lbs.	19.6kg/43.2lbs.	9.8kg/21.6lbs.
Consumption	22W typical, 30W maximum.	12.7W typical, 15W maximum.	25W typical, 40W maximum.	8W typical, 12W maximum.
Control	IR or RS232. *dCS* Premium Remote or Nevo Q50 as options.	IR or RS232. *dCS* Premium Remote or Nevo Q50 as options.	IR or RS232. *dCS* programmed Nevo Q50 as standard.	IR or RS232. *dCS* Premium Remote or Nevo Q50 as options.
Function	Uses proprietary *dCS* Ring DAC™ and Digital Processing Platform technology to operate as a standalone DAC or as part of a digital system.	Accesses music from any digital source and converts the audio from its native sample rate to either DSD (1 bit data at 2.822) or standard high resolution PCM (24 bit data up to 192kS/s).	Designed to read both CD and SACD. Optional DSD upsampling. Uses the TEAC Esoteric VRDS Neo™ mechanism. All signal processing controlled by electronics designed by *dCS*.	Grade 1 Master Clock reduces system jitter to extremely low levels. Mk2 units feature asynchronous USB to SPDIF converter for use as a gateway to computer audio.
Inputs	2x IEEE1394 6-pin ports. 1x Dual AES interface up OR 2x AES/EBU. 3x SPDIF (2xRCA+BNC). 1x Toslink optical. 1x SDIF-2. 1x Word Clock input on BNC connector.	1x USB 2.0 interface on B-type connector. AES3 on a 3-pin female XLR connector. 4x SPDIF on 2x RCA Phono, 1x BNC and 1x TosLink optical. 1x Word Clock input on BNC connector.	1x Word Clock input accepts 44.1 or 88.2kHz.	1x Reference input on BNC connector can be used to lock to an external reference at 1, 5 or 10MHz, TTL or AC compatible. 1x USB 2.0 interface on B-type connector*.
Outputs	1 pair balanced, floating analogue outputs on 2x 3-pin male XLR connectors. 1 pair unbalanced analogue outputs on 2x RCA connectors. All outputs may be set to 2V or 6V. 1x Word Clock output.	2x IEEE1394 6-pin ports. 1x Dual AES interface on 2x 3-pin male XLR connectors, OR 2x AES3. 2x SPDIF on 1x RCA Phono and 1x BNC. 1x SDIF-2 PCM interface on 2x BNC connectors + Word Clock. 1x Word Clock output.	2x IEEE1394 6-pin ports. 2x AES3 interfaces on 2x 3-pin male XLR connectors. 2x SPDIF on 1x RCA Phono and 1x BNC. 1x SPDIF optical on Toslink. 1x SDIF-2 interface on 2x BNC. 1x Word Clock output.	6x Word Clock outputs, independently buffered, may be set to 44.1, 48, 88.2 or 96kHz*. 2x SPDIF on 1x RCA Phono and 1x BNC, carry data from the USB input*.
Maximum Sample Rates	1394 : encrypted DSD data. AES & SPDIF: 24/192 PCM & DOP (DSD over PCM). Toslink: 24/96 PCM. SDIF-2: 24/96 PCM & DSD.	1394 : encrypted DSD data. USB: 24/96 PCM. AES & SPDIF: 24/192 PCM & DOP (DSD over PCM). Toslink: 24/96 PCM. SDIF-2: 24/96 PCM.	1394 : encrypted DSD data. All other outputs carry 16/44.1.	USB: 24/192 PCM*. SPDIF: 24/192 PCM*.
Performance	Residual Noise: Better than -110dB0 @ 20Hz-20kHz unweighted. (6V Setting). L-R Crosstalk: Better than -80dB, 20-20kHz. Spurious Reponses: Better than -100dB0 @ 20-20kHz.	Spurious Responses: Better than -100dB0 @ 20Hz-20kHz.		Better than +/-1ppm when shipped. Typically +/-0.1ppm when shipped and stabilised.
Updates	CD-R.	CD-R or USB.	CD-R.	CD-R or USB.

*= Mk2 Clocks with v2 software only.

Paganini

				
Name	Paganini DAC.	Paganini Upsampler.	Paganini Transport.	Paganini Master Clock.
Type	**Digital-to-Analogue Converter.**	**Digital-to-Digital Converter.**	**Upsampling CD/SACD Transport.**	**Master Clock.**
Colour	Silver or Black.	Silver or Black.	Silver or Black.	Silver or Black.
Dimensions (WxDxH)	460mm/18.1" x 400mm/15.8" x 110mm/4.4".	460mm/18.1" x 400mm/15.8" x 110mm/4.4".	460mm/18.1" x 400mm/15.8" x 110mm/4.4".	460mm/18.1" x 400mm/15.8" x 110mm/4.4".
Weight	11.0kg/24.2lbs.	10.6kg/23.3lbs.	11.5kg/25.3lbs.	10.5kg/23.1lbs.
Consumption	24W typical, 30W maximum.	12.7W typical, 15W maximum.	20W typical, 30W maximum.	8W typical, 15W maximum.
Control	IR or RS232. *𝒹CS* Premium Remote or Nevo Q50 as options.	IR or RS232. *𝒹CS* Premium Remote or Nevo Q50 as options.	IR or RS232. *𝒹CS* Premium Remote supplied as standard.	IR or RS232. *𝒹CS* Premium Remote or Nevo Q50 as options.
Function	Uses proprietary *𝒹CS* Ring DAC™ and Digital Processing Platform technology to operate as a standalone DAC or as part of a digital system.	Accesses music from any digital source and converts the audio from its native sample rate to either DSD (1 bit data at 2.822) or standard high resolution PCM (24 bit data up to 192kS/s).	Designed to read both CD and SACD. Optional DSD upsampling. Uses the TEAC UMK5™ mechanism. All signal processing controlled by electronics designed by *𝒹CS*.	Grade 1 Master Clock reduces system jitter to extremely low levels. Mk2 units feature an Asynchronous USB to SPDIF converter for use as a gateway to a computer or sound server.
Inputs	2x IEEE1394 6-pin ports. 1x Dual AES interface OR 2x AES/EBU. 2x SPDIF (2xRCA). 1x Word Clock input on BNC connector.	1x USB2.0 interface on B-type connector. AES3 on a 3-pin female XLR connector. 2x SPDIF on 2x RCA Phono. 1x Word Clock input on BNC connector.	1x Word Clock input accepts 44.1 or 88.2kHz.	1x Reference input on BNC connector can be used to lock to an external reference at 1, 5 or 10MHz, TTL or AC compatible. 1x USB 2.0 interface on B-type connector, operates in asynchronous USB mode*.
Outputs	1 pair balanced, floating analogue outputs on 2x 3-pin male XLR connectors. 1 pair unbalanced analogue outputs on 2x RCA connectors. All outputs may be set to 2V or 6V. 1x Word Clock output.	2x IEEE1394 6-pin ports. 1x Dual AES interface OR 2x AES/EBU. 2x SPDIF on 2x RCA Phono. 1x Word Clock output.	2x IEEE1394 6-pin ports. 2x AES3 interfaces on 2x 3-pin male XLR connectors. 2x SPDIF on 1x RCA Phono and 1x BNC. 1x Word Clock output.	5x Word Clock outputs, independently buffered, may be set to 44.1, 48, 88.2 or 96kHz*. SPDIF on 1x RCA Phono, carries data from the USB input*.
Maximum Sample Rate	1394 : encrypted DSD data. AES & SPDIF: 24/192 PCM & DOP (DSD over PCM).	1394 : encrypted DSD data. USB: 24/96 PCM. AES & SPDIF: 24/192 PCM.	1394 : encrypted DSD data. All other outputs carry 16/44.1.	USB: 24/192 PCM*. SPDIF: 24/192 PCM.
Performance	Residual Noise: Better than -110dB0 @ 20Hz-20kHz unweighted. (6V Setting). L-R Crosstalk: Better than -80dB, 20-20kHz. Spurious Reponses: Better than -100dB0 @ 20-20kHz.	Spurious Responses: Better than -100dB0 @ 20Hz-20kHz.		Better than +/-1ppm when shipped, 5°C–55°C. Typically +/-0.1ppm when shipped and stabilised.
Updates	CD-R.	CD-R or USB.	CD-R.	CD-R or USB.

*= Mk2 Clocks with v2 software only.

Puccini

		
Name	Puccini CD/SACD Player.	Puccini U-Clock.
Type	**Upsampling CD/SACD Player.**	**System Clock.**
Colour	Silver or Black.	Silver or Black.
Dimensions (WxDxH)	460mm/18.1" x 400mm/15.8" x 110mm/4.4".	460mm/18.1" x 400mm/15.8" x 58mm/2.3".
Weight	12.1kg/26.6lbs.	7.6kg/16.7lbs.
Consumption	30W typical, 40W maximum.	3W typical, 6W maximum.
Control	IR or RS232. *𝒹CS* Premium Remote supplied as standard.	None.
Function	Designed to play both CD and SACD with optional DSD upsampling. Uses proprietary *𝒹CS* Ring DAC™ and Digital Processing Platform technology to operate as a standalone DAC or CD/SACD Player.	System clock reduces jitter to extremely low levels. Features asynchronous USB to SPDIF converter for use as a gateway to a computer or sound server.
Inputs	2x SPDIF on 2x RCA connectors. 1x Word Clock input on BNC connector.	1x USB2.0 interface on 'B' type connector, operates in asynchronous USB mode.
Outputs	1 pair balanced, floating analogue outputs on 2x 3-pin male XLR connectors. 1 pair unbalanced analogue outputs on 2x RCA connectors. All analogue outputs may be set to 2V or 6V. 2x SPDIF on 2x RCA connectors carry CD data. 1x Word Clock output.	4x Word Clock outputs, independently buffered, may be set to 44.1 or 48kHz. 2x SPDIF (2xRCA) output data converted from the USB port.
Maximum Sample Rate	SPDIF inputs: 24/192 PCM & DOP (DSD over PCM)*.	SPDIF outputs: 24/192 PCM*.
Performance	Residual Noise: Better than -110dB0 @ 20Hz-20kHz unweighted. (6V Setting). L-R Crosstalk: Better than -80dB, 20-20kHz. Spurious Reponses: Better than -100dB0 @ 20-20kHz.	Better than +/-1ppm when shipped. Typically +/-0.1ppm when shipped and stabilised.
Updates	CD-R.	Loaded from ROM.

*= requires single-wire 24/192 and DOP (DSD over PCM) compatible software.

Debussy

	
Name	Debussy DAC.
Type	**Digital-to-Analogue Converter.**
Colour	Silver or Black.
Dimensions (WxDxH)	445mm/17.6" x 392mm/15.5" x 65mm/2.6".
Weight	8.8kg/19.4lbs.
Consumption	19W typical, 25W maximum.
Control	IR or RS232. *𝒹CS* Premium Remote supplied as standard.
Function	Uses proprietary *𝒹CS* Ring DAC™ and Digital Processing Platform technology to operate as a standalone DAC or as part of a digital system. Features USB input for computer audio.
Inputs	1x USB2.0 interface on 'B' type connector, operates in asynchronous USB mode. 1x Dual AES interface OR 2x AES/EBU on 2x 3-pin female XLR connectors. 2x SPDIF on 1xRCA + 1x BNC connector. 1x Word Clock input on BNC connector.
Outputs	1 pair balanced, floating analogue outputs on 2x 3-pin male XLR connectors. 1 pair unbalanced analogue outputs on 2x RCA connectors. All outputs may be set to 2V or 6V.
Maximum Sample Rate	All inputs: 24/192 PCM & DOP (DSD over PCM)*.
Performance	Residual Noise: Better than -110dB0 @ 20Hz-20kHz unweighted. (6V Setting). L-R Crosstalk: Better than -80dB, 20-20kHz. Spurious Reponses: Better than -100dB0 @ 20-20kHz.
Updates	CD-R or USB.

Our Values

The very special culture at *dCS* enables us to embrace change and push the limits of human ingenuity in order to make our world-beating digital audio products ever better. It is this passionate commitment to product and service excellence that sets *dCS* apart from the rest.

The *dCS* Product Promise

- We will design all of our products from the ground up using leading-edge technology – so that they perform better than anything else out there.
- We will ensure that our products have the very best measured performance on all important technical characteristics.
- We will build our products by hand in the UK to ensure superb product quality and reliability – testing each product exhaustively before it reaches our customer.

The *dCS* Customer Promise

- We will only sell products that offer the finest possible subjective performance in terms of musical reproduction.
- We will only sell our products through dedicated and extensively trained retailers who will optimise the performance of *dCS* products in our customers' systems.
- We will offer our customers the best possible after-sales service without question.

dCS
ONLY THE MUSIC

It's almost unfair; *dCS* seem to play in a league of their own.

STEREOPHILE

For me *dCS* remains the finest source of A/D converters whether hi-res. or ordinary-res; they excel in bandwidth, filter management and lack of noise modulation.

Tony Faulkner
GREEN ROOM PRODUCTIONS, UK

I can't overstate how much I enjoyed music through the Puccini/U-Clock; it was absolutely enthralling on CD, SACD and high-resolution sources. This is a digital front end I could live with for the rest of my life.

Robert Harley
THE ABSOLUTE SOUND

In all key areas this *dCS* combination delivers a benchmark performance.

Paul Miller
HIFI NEWS

Since using *dCS* converters I have won numerous awards for my recordings. Compared to other converters in all resolutions from 96k to 352 kHz and DSD they offer more energy and a fuller-bodied sound; but what is most amazing about them is that they capture the precise timbre of the original instruments. I now use them for all my recordings in order to get the most transparent sound from digital recordings.

René Laflamme
FIDELIO MUSIQUE INC, CANADA

But the Paganini is not just superb technically; the most remarkable thing it does is to make digital music enjoyable in an unselfconscious way, just like an excellent analogue system.

David Price
HIFI WORLD

Even now, almost 25 years after my first recording with *dCS* converters and countless shoot-outs against fierce competition, they are still my first choice for my daily music recording and post-production work. The way *dCS* translates MUSIC into the digital domain, and converts abstract electronic bits into MUSIC, is so far unrivalled in my opinion.

Bert van der Wolf
NORTHSTAR RECORDING, NETHERLANDS

Well – there you have it: the *dCS* Scarlatti and Puccini are the best digital sources I've yet heard.

Jonathan Valin
THE ABSOLUTE SOUND

Listening to the Paganini stack is a truly awesome musical experience.

Jeff Dorgay
TONE AUDIO MAGAZINE

dCS
ONLY THE MUSIC

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