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dCS LAUNCHES NEW FLAGSHIP VIVALDI 2.0 SYSTEM

dCS announces its new Vivaldi 2.0 series – bringing a comprehensive package of improvements to what many regard as the best digital music source in the world.

The original Vivaldi was launched in late 2012 to widespread critical acclaim. Music industry professionals and audiophiles alike declared it to be the finest sounding digital front end on sale.

Comprising the Vivaldi Transport, Vivaldi DAC, Vivaldi Upsampler and Vivaldi Master Clock, this cost-no-object, flagship system pushed the boundaries of what was then possible with digital replay. Vivaldi processed practically every digital format and offered a vast array of input and output configurations. At its heart was the dCS Ring DAC™, a unique, bespoke-designed digital converter that offers superlative sound quality and technical performance.

As with every dCS product, subsequent firmware updates have improved its functionality and performance. Now though, dCS has made a number of landmark hardware and software improvements to the system, warranting the 2.0 suffix. The changes are designed to make Vivaldi easier to use, more flexible and even better sounding.

The improvements 2.0 comprise include double-speed DSD upsampling on the Transport, while the DAC gets additional gain settings, a new mapping algorithm and a new DSD filter. The Vivaldi Upsampler adds the option for double-speed DSD upsampling, and it also acquires a new galvanically isolated Network and USB interface board that improves performance and supports TIDAL, Airplay, Spotify Connect plus a new control and playback app.

The new mapping algorithm (mapper) is a milestone in the development of the dCS Ring DAC™, which forms the heart of the Vivaldi DAC. Taking over a year to model and implement in software the new mapper improves on the technology at the heart of what makes dCS unique. The 5-bit binary music data obtained after the oversampling and digital filtering stages is mapped on to forty eight latch outputs at the core of the Ring DAC.   These drive balanced currents which are mixed filtered and amplified to produce the analogue output signal. The new algorithm has been developed to run at higher speeds while better avoiding mismatches between the latches or resistors occurring as errors correlated with the signal. The results of the new mapper are superior linearity, even at very low signal levels.

This sophisticated mapper functionality is implemented in the dCS Ring DAC™ through dedicated FPGAs, offering dCS the power to improve and change these fundamental algorithms through software control. This unprecedented flexibility allows the user to choose their desired mapper from a simple menu item. Version 2.0 software allows for two new mappers together with the original for comparison. Subjectively, both new mappers bring more detailed, expressive and tonally full-bodied character over the original, but offer subtle differences in sound that users can choose between, depending on their preference and ancillary equipment.

The new, highly optimised DSD filter fitted to the new Vivaldi DAC was created to provide better impulse response than previous DSD filters and has virtually no ringing. High frequency noise has also been better suppressed outside the audio band to be more universally amplifier friendly by presenting the amplifier with a cleaner signal. This manifests itself in a more dynamic, dimensional sound across the entire audio band.

Vivaldi Upsampler's new network interface board and control app lets listeners manage their music playback experience from any source in an elegantly simple way – accessing CD/SACD, iRadio, USB, traditional digital and UPnP sources - all from one control point. It has built-in TIDAL, Airplay and Spotify Connect functionality and is fully firmware upgradeable to accommodate future music services. A new galvanically isolated Network and USB interface comprises part of the Upsampler upgrade and the result is a quieter, more natural sound on these inputs.

Vivaldi DAC and Transport owners can simply update to 2.0 by requesting their free software update disc from their authorized retailer. Existing Vivaldi owners upgrading the Upsampler to 2.0 will require a hardware upgrade which can be performed at an authorized dCS service centre.

Once the new 2.0 software has been installed then as with all dCS products, Vivaldi's firmware can be easily updated in the future via CD, USB or the new internet download and update functionality, to add new features or improve performance over its lifetime.

Availability:
May 2016

Summary:

• Vivaldi is dCS' flagship digital playback system, widely regarded as the best in the world

• the new dCS Vivaldi 2.0 range is a major step-change in technical and sonic performance

• Vivaldi Transport gets 2x DSD upsampling

• Vivaldi DAC gets a new Ring DAC mapper, improved clocking and new DSD filter

• Vivaldi Upsampler gets new network and USB hardware, new Playback and Control app, 2x DSD up sampling

• Vivaldi plays music from virtually any digital source and is compatible with nearly all formats

• designed and built in the United Kingdom with superlative, cost-no-object quality and finish

• Vivaldi is firmware-upgradeable for future functionality and performance upgrades

• Prices: Vivaldi Transport (£25,724), Vivaldi DAC (£20,999), Vivaldi Upsampler Plus (£14,500), Vivaldi Master Clock (£10,184)

About dCS
Since 1987 dCS has been at the forefront of digital audio, creating world-beating, life-enhancing products that are a unique synthesis of exact science and creative imagination. Each of our award-winning product ranges sets the standard within its class for technical excellence and musical performance. As a result, dCS digital playback systems are unrivalled in their ability to make music.

All dCS products are designed and manufactured in the United Kingdom using proprietary technology, and materials and components of the highest quality. A carefully judged balance of our unique heritage and world-class engineering ensures there is a rich history of ground-breaking innovation inside every dCS system.