

## PRESS RELEASE

### All seasons in one Vivaldi

*Widely termed as the most exclusive and progressive digital playback system ever created, HFX Systems is proud to add the much-acclaimed Vivaldi four-box player from Data Conversion Systems (dCS) to its offering.*

30 June 2014, Johannesburg: Setting a new standard for the future of digital audio – the Vivaldi redefines state-of-the-art in digital playback. Designed for maximum flexibility with an array of input and output configurations, Vivaldi is easily set-up and optimised for today's music systems that comprise various digital sources. Featuring the latest groundbreaking technology from dCS, Vivaldi will transform your listening experience, lifting your music collection to levels you have not heard before.

Says Eugene Oosthuizen from local retailer, HFX Systems: "It's an easy decision to call dCS's new Vivaldi the most ambitious digital playback system ever created. This four-box player, comprising the Vivaldi DAC, the Vivaldi Upsampler, the Vivaldi Transport, and the Vivaldi Master Clock, is a no-holds-barred upgrade of dCS' previous system, the Scarlatti, which itself had been long considered as the most advanced on the market. With best-in-market technology, it's no coincidence that so many electronics and loudspeaker manufacturers have chosen to use the Vivaldi to demonstrate their products at shows."

The four components of the Vivaldi comprises: the **Vivaldi DAC** (R323 000), which can decode every digital resolution, from MP3 to DSD to DXD (a 24-bit/358.8kHz PCM format used primarily for editing DSD files) and everything in between; the **Vivaldi Upsampler** (R220 000), which can upconvert the lowest-resolution MP3 data to 24/384, DSD, and DXD or any format in between; the **Vivaldi Master Clock** (R178 000), containing two groups of four clock outputs, which can be independently set; and the **Vivaldi Transport** (R452 000), a smooth, quiet, quick-booting SACD/CD drive based on TEAC's Esoteric VRDS Neo disc mechanism, considered by many to be the world's finest. This is controlled by dCS-designed signal-processing electronics, and can also upsample CDs to DSD or DXD.

Says Eugene: "Each Vivaldi unit can be used as standalone piece, or as part of a complete Vivaldi digital audio playback system, and will guarantee a performance of effortless realism each and every time. Common to all four units, the dCS 'soft' approach to programmable logic makes it extremely easy for users to update Vivaldi software, whether adding new features, installing performance upgrades or adapting to changes in digital formats. All four units also boast a redesigned multi-stage Phase-Locked-Loop (PLL) system, which sets world-beating standards for accuracy and control of troublesome jitter from the incoming audio stream."

Below is a more detailed overview on each of the Vivaldi units:

## **The Vivaldi DAC**

Vivaldi DAC uses the latest groundbreaking technology from dCS including next generation versions of the dCS Ring DAC™, Digital Processing Platform and Clocking System so that, as the hub of a digital audio system, an array of features guarantee amazing performance from any digital source.

Vivaldi DAC features standard AES3, Dual AES, SDIF-2 and SPDIF inputs, in addition to an asynchronous USB 2.0 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.

The unique design of the legendary dCS Ring DAC™ combines exceptional linearity with very high-speed operation enabling it to deliver true 24-bit performance even at low signal levels. The latest generation of the Ring DAC™ incorporates a number of important technical advances that have resulted in it offering enhanced dynamic range, reduced jitter, improved channel separation and greatly improved musical realism.

The powerful digital processing platform of Vivaldi DAC is based around Field Programmable Gate Array (FPGA) chips, Digital Signal Processing (DSP) chips and a microcontroller system. Vivaldi DAC represents true state-of-the-art in digital audio by offering twice the logic capacity of previous generations, emphasised by its unmatched sonic and measured performance.

The redesigned multi-stage Phase-Locked-Loop (PLL) system used in Vivaldi DAC sets world-beating standards for accuracy and control of troublesome jitter from the incoming audio stream. Featuring a completely new interface 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 to Vivaldi DAC owners will ensure you can extract every last nuance of musical detail and emotion by tuning the system to suit your personal preference.

*The dCS Vivaldi DAC retails for R323 000 from HFX Systems. Visit [www.hfxsystems.co.za](http://www.hfxsystems.co.za) for more information or to find a retailer closest to you.*

## **The Vivaldi Upsampler**

Vivaldi Upsampler is designed to act as the hub of a digital audio system and will transform your listening experience, taking your music collection to levels you have not heard before.

Operating as a digital-to-digital converter, 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 384 kS/s), DSD (1 bit data at 2.822 MS/s), or standard high resolution PCM (24 bit data up to 192kS/s). The

results gained from the Vivaldi Upsampler are extraordinary – offering a more vibrant, 3-dimensional, transparent and effortless performance.

The Vivaldi Upsampler features a wired network connection and can stream high-resolution audio files stored on a computer or on network storage via UPnP. The additional asynchronous USB input on Vivaldi Upsampler also allows direct connection of a PC and supports high resolution audio up to and including 192kS/s and DSD in DOP format. The USB interfaces run in an Asynchronous USB mode, which makes Vivaldi Upsampler immune to jitter from the typical computer's noisy clock.

Vivaldi Upsampler is Apple Authenticated and supports playback of iPod/iPhone-stored digital media, bypassing the iPod/iPhone internal DAC to ensure optimal performance. USB memory hardware is also supported. An array of independently selectable digital inputs (RJ45, USB, AES, SPDIF, SDIF-2, Toslink) 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 to a previously unsurpassed level.

Control of such a versatile product is extremely simple with the user having the choice of using the full colour front panel menu, Vivaldi Controller App or the premium dCS remote control. The Vivaldi Controller App also allows users to change DAC inputs and volume, simplifying the control experience further.

*The dCS Vivaldi Up Sampling Drive retails for R220 000 from HFX Systems. Visit [www.hfxsystems.co.za](http://www.hfxsystems.co.za) for more information or to find a retailer closest to you.*

### **The Vivaldi Transport**

Vivaldi Transport is designed to extract revelatory levels of detail from both CD and SACD and is the ultimate machine for silver disc replay.

Vivaldi Transport uses the TEAC Esoteric VRDS Neo™ mechanism, which provides a brushless motor with heavy flywheel for stable disc rotation and super rigid construction.

In order to enhance the cleanness of the power supply and isolate the mechanism from the electronics, Vivaldi Transport features a completely new chassis design that has separate power circuits for the digital processing and CD/SACD mechanism sections. This has resulted in near silent operation.

Vivaldi Transport features a Dual AES output that supports encrypted DSD (1 bit data at the rate of 2.822MS/s) to a dCS DAC from CD or SACD. Vivaldi Transport also offers the option of upsampling CD data to DXD (24 bit data at the rate of 352.8kS/s) and transmitting this data over the same Dual AES interface.

SACDs are played in their native DSD format, again using the Dual AES interface. Native CD data is available from 4 PCM outputs (1x AES/EBU and 2x SPDIF, 1x SDIF-2), as is down-sampled SACD data.

Vivaldi Transport is intended to be used with the matching Vivaldi DAC or with any suitable industry standard DAC. The unit may be run either in Master mode or with the DAC as the system clock. Adding the Vivaldi Master Clock to the system will enhance the overall performance even further.

*The dCS Vivaldi Transport retails for R452 000 from HFX Systems. Visit [www.hfxsystems.co.za](http://www.hfxsystems.co.za) for more information or to find a retailer closest to you.*

### **The Vivaldi Master Clock**

Vivaldi Master Clock is a powerful, yet simple-to-use Grade 1 master clock based on pioneering developments in studio and home audio. Featuring two banks of clock outputs capable of outputting different frequencies, Vivaldi Master Clock uses the latest groundbreaking technology from *dCS*.

In a digital audio system samples must be accurate in level and time but jitter, which exists in all digital systems, can result in timing errors in these samples, causing the analogue signal to be reconstructed inaccurately.

In a *dCS* system, the DACs can act as the system master clock, but listening tests have shown that there is no substitute for a high- quality, dedicated master clock. All *dCS* Master Clocks are subjected to rigorous in-house testing. The crystal oscillators are pre-aged and selected for long-term stability and then individually calibrated over a wide temperature range to ensure consistent optimal performance. Vivaldi Master Clock uses a sophisticated microcontroller system to ensure smooth correction as the temperature changes and this approach gives a more stable result than either oven controlled crystal oscillators or even atomic clocks.

All *dCS* master clocks are designed to generate industry standard Word Clock on 75-ohm co-axial cable. Other manufacturers' equipment that has been designed to accept standard Word Clock can be used with our clocks. Vivaldi Master Clock may be slaved to an external reference (such as an atomic clock or GPS reference) if increased accuracy is desired. Our sophisticated multi-mode Phase-Locked-Loop (PLL) significantly reduces jitter from the reference source.

Used as part of the Vivaldi digital audio playback system, Vivaldi Master Clock 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.

*The dCS Vivaldi Master Clock retails for R178 000 from HFX Systems. Visit [www.hfxsystems.co.za](http://www.hfxsystems.co.za) for more information or to find a retailer closest to you.*  
ENDS

Released on behalf of HFX Systems ([www.hfxsystems.co.za](http://www.hfxsystems.co.za)) by The Line ([www.theline.co.za](http://www.theline.co.za), [ant@theline.co.za](mailto:ant@theline.co.za)).