

# dCS APEX

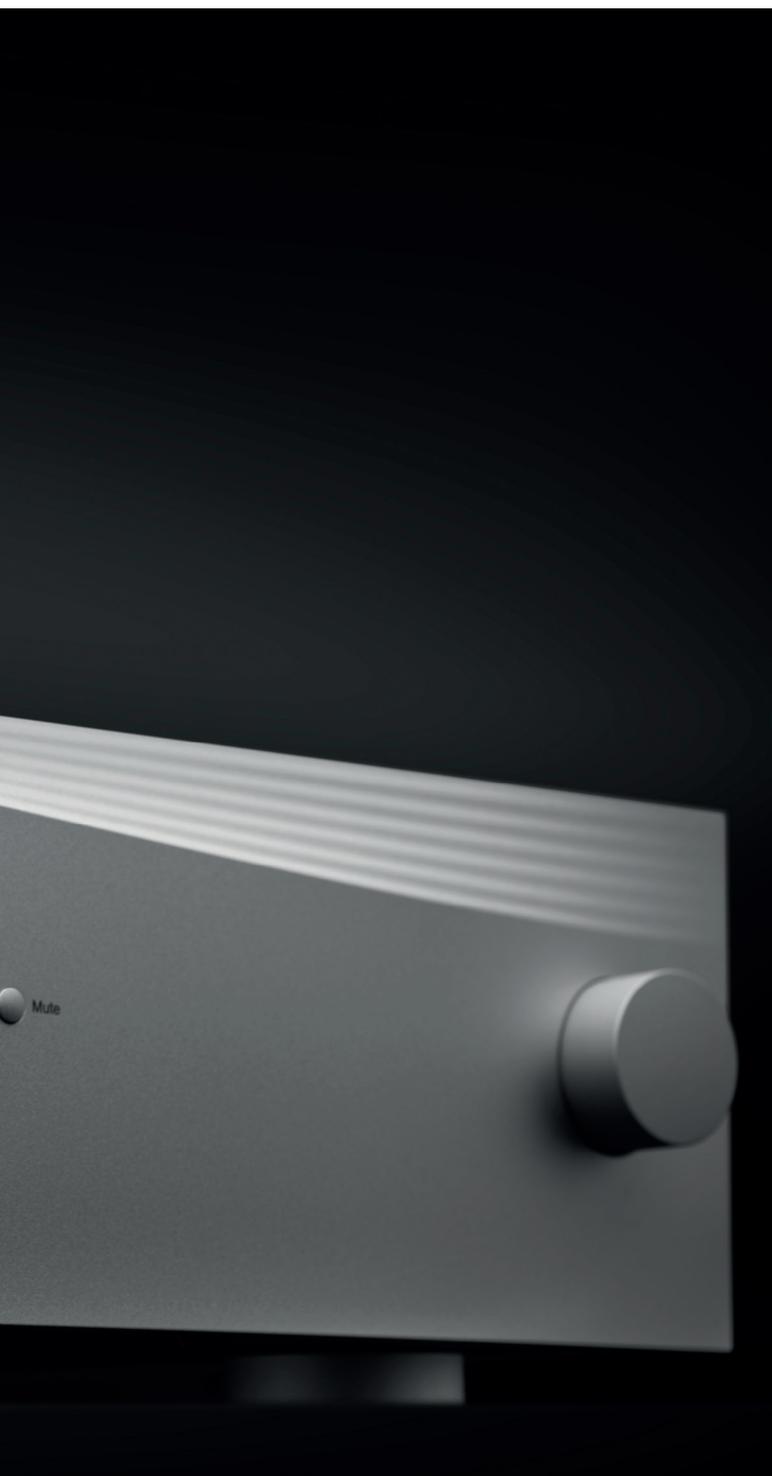
## digital converter upgrades

Chris Thomas



## EQUIPMENT REVIEW

### dCS APEX



In 2017, dCS offered owners an upgrade with an entirely new set of mapping algorithms for their Ring DAC. It was software-based, highly effective and free. It lifted the performance of the Vivaldi DAC I was using notably and was very well worth having. It also gave an indication that dCS were going to continue to expand the musical possibilities of their equipment through their Product Development Department and that owners could look forward to future upgrades as technologies moved forward. A few years have passed and now dCS are offering a new and much more profound upgrade, only this time it is hardware-based and it costs. But what a step forward it is!

It's called The Ring DAC APEX hardware, or just APEX for short. The latest production versions of relevant products now carry the APEX suffix. But it is also offered as a comprehensive upgrade in the form of a new main board as found inside the Vivaldi DAC, Vivaldi One plus the Rossini DAC and the Rossini player.

The Ring DAC (now around 30 years old) plus its controlling software are at the centre of the revisions, though the analogue output stages have also undergone development. This is the very heart of the system so although the DAC upgrades are essentially the main APEX feature, knowing dCS I doubt they let the opportunity to work on other details pass them by. They would probably call it 'housekeeping'. But the results are truly fascinating and beyond what I was expecting.

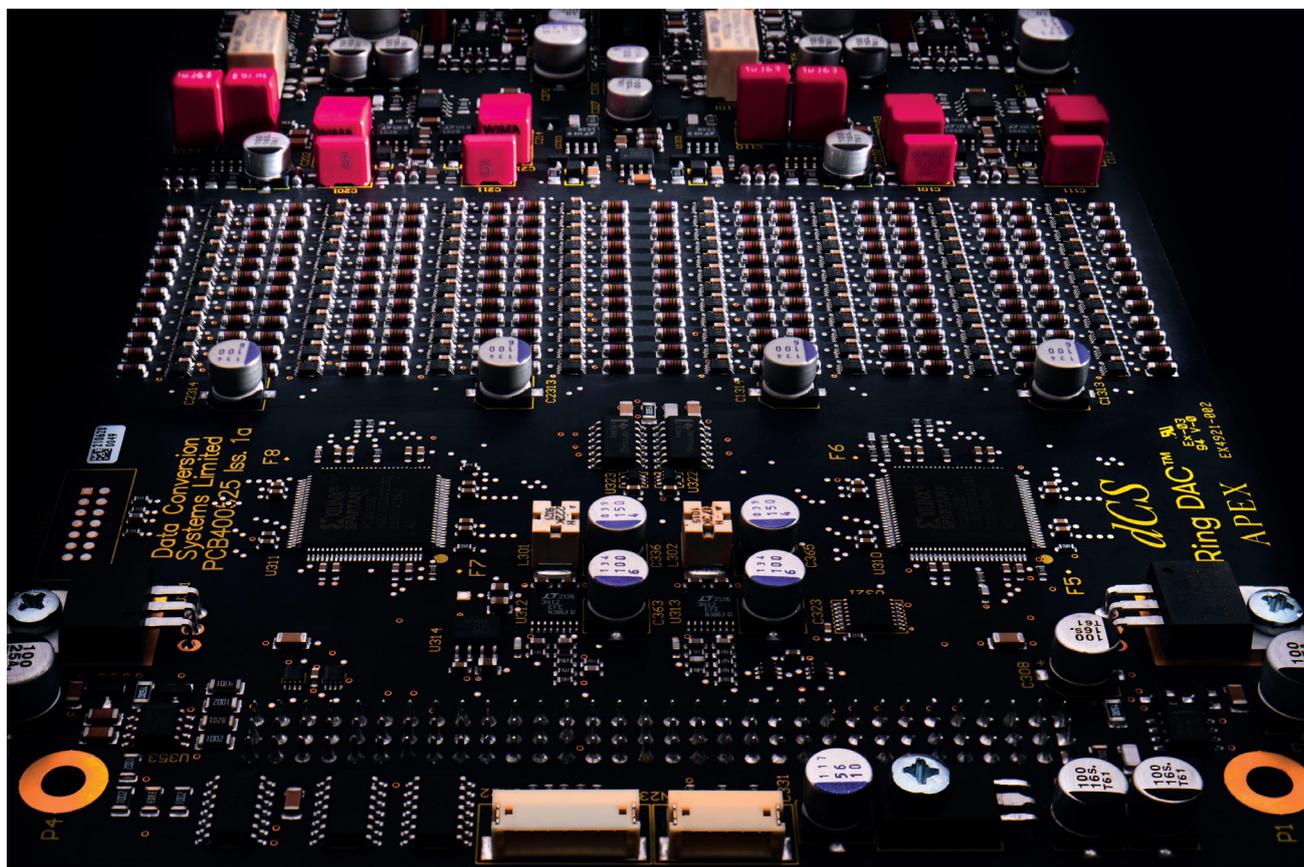
#### **Conception and implementation**

Director of Product Development at dCS, Chris Hales and his team began their work well over a year ago with an intense look at existing performance parameters. This involved developing new, bespoke tools to analyse through precise measurement where improvements might be made. But when you consider the enormous complexity of both the Ring DAC and its accompanying software support systems it's not hard to understand how a base point was an essential starting place. The greatest journeys begin with a single step. As the performance of the Ring DAC already exceeded the capabilities of conventional measuring equipment, Chris says that designing and implementing new measuring platforms was critical. Adding to that





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» was a familiar dilemma, perhaps related to The Observer Effect, where the measuring device itself had to be of such a standard that it would not itself introduce distortions, noise or bandwidth limitations to give the engineers misleading information. So, what might seem a relatively straightforward proposition of making improvements now takes on new multiple levels of complexity and indeed potential jeopardy. The analogue output stage of the DAC has always been available in both balanced and single-ended configurations with switchable output levels to suit various preamp input sensitivities. I have always preferred single-ended and the 6V output. In fact I tend to take the single-ended option whenever it is offered over the years as I usually find it more open. Also I have always preferred including a preamplifier instead of driving the power amplifier straight from the DAC. The APEX has challenged both of these views. Work has been done on the 2V output too to bring it closer to the more powerful and punchy 6V option, my choice for its drive and rhythmic freedom. Post APEX, I am now happily settled on the balanced outputs.

### How does it sound?

In a word, fantastic... and yet curiously different to what I was anticipating. For a couple of months prior to the APEX upgrade becoming available and in anticipation of its arrival I had use of a Vivaldi One, the limited edition single box SACD player/digital hub. A more perfect synthesis of digital components in a single compact space, it's hard to imagine. In a word, it is a magnificent way to access digital music.

Now, at this stage of the review it is vitally important that I establish that the Vivaldi One in standard trim had already set the bar very high. Yet, within the first couple of hours I understood that APEX had pushed back the boundaries by defining a whole new level of musical performance. In no way were these the small detail improvements I was expecting. This was a new style and shape of sound and the change is not subtle.

Since the Vivaldi and its stablemates have arrived the dCS sound has always had the ability to bring you closer to the music. But this whole APEX-effect is something else »

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dCS APEX



» entirely. Close to the music has become face to face with it and the stories and perspectives that flow out of the APEX-based products are in a new world for dCS.

There can be few real upgrades that don't retrospectively suggest lower background noise and APEX is no different. But the sense of black nothingness that lies deep within the production of so much music and against which the recordings exist is absolutely striking. This must be in some way part of the reason why the pure depth of the available musical stage seems to have expanded in all dimensions. This beautiful re-arrangement of recorded perspectives is thrilling. The physical distances between the lower-level content and the solo contributions certainly surprised me at first and a few months and several thousand songs later, they still have that power. The musical layering that the APEX brings is superb. Now, close-miked vocal or the up front soloist moves sharply across the room to within touching distance. When you hear the pure depth and contrast between the background or ambient instrumentation that just happens way in the distance and set against the blackness of nothingness, it brings a whole new interest and intensity to listening. The soundstage has been radically expanded. But the bass grabs you immediately. It is cleaner, has an intensely focussed leading edge and is very powerful. It just drives through time and space with enormous agility and carries the rest of the music along with it.

### Musical boundaries

It makes me think that I can no longer hear the musical boundaries that in a sense are the system's limitations of

time and space. I thought I knew my Wilson Duette 2's a lot better than I apparently do. Listening to Bailerio from *Songs Of The Auvergne*, a piece I know passably well was a revelation. It was one of the very first pieces I asked the APEX to unravel for me.

Satin smooth rendering of tonal colours and shading added to a feeling that the instruments were gliding in space with perfect projection and a gentle motion against this sea of silence. Then the vocal emerged, magnificently moving, yet sympathetic to the orchestral colour wash as that ebbed and flowed mysteriously somewhere in the distance. It was a subtly changing and nuanced expression of an orchestral tonal palette. As the system spoke I was loving not only how different it was but just how beautiful the piece had grown. I always admired it but now it was so musically ethereal and quietly powerful. It commanded my complete attention, drew me in and invited me to listen ever more intently. I couldn't tear myself away from it. As it ended I noted down that, bearing in mind this was the first piece I had listened to through the APEX, it was just about the best musical debut I had ever heard. The fact that it wasn't even run-in filled me with anticipation.

As the days passed and the music flowed I began to grow ever more fascinated and intrigued. There was no limit to the APEX's ability to connect me to whatever music I was playing either on CD or streaming through the excellent dCS Mosaic app. Peter Ostroushko's *Heart Of The Heartland* delivered its traditional homespun, plaintive country melody with a painfully poignant beauty. The sympathetic gentleness and restraint of the orchestra led





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» by his immaculate Mandolin playing encouraged me to stop listening to the APEX comparatively and just let the colourful waves flow over me. This is what audio really should be about. Trusting the system enough to connect emotionally with the music, letting it in and listening to what it has to say.

### Instrumental comparisons?

Ask any musician. There's something about playing a great instrument as opposed to merely a good one. You like one but you love the other and want it because you sense that it has the power within it to inspire you. You want to release something within yourself through it and you know that you will always be able to tap into its moods. Great instruments are not unlike great audio systems I think. They both make demands of you. A great instrument talks through you about feelings, details and emotion. Small changes are so much more meaningful and profound. It tells a story every time you play it. The closer you listen, the more intense the melodies are. The pure tonal colour and resolution that the APEX draws from the music, the greater your understanding and awareness of musical eloquence through phrasing becomes. Open yourself to its influences and it will tell you stories in a way you have never heard before. This is precisely what I have been hearing through the APEX and is the main reason why it is that much better than the older version.

*Sob Rock* by John Mayer is an interesting album and 'Shouldn't Matter But It Does' is one of those break-up songs that you sense John has put quite a bit of himself into. As it began, the APEX, not for the first time, caught me unawares. Something different was happening here it seemed as suddenly the gentle but atmospheric background synth that I hadn't really noticed before pointing the way through the chord changes. Now it was a much more serious song with the synth a brilliantly judged counterpoint sweetener for the acidity of the track. More bile and bitterness there I thought.

### Lone wolf

Drifting through the streaming world of new experiences while looking to satisfy my general taste for the unusual and obscure I found myself in the company of Sinnika Langeland and her album *Wolf Rune*. This is an ECM release and I've always had a soft spot for Manfred Eicher's

often dark, brooding musical view of the world of sound. This I discovered, was no different. Spacious, mythic music set in sharp relief against endless, barren Nordic landscapes. Classic Manfred for sure and compelling stuff sung in a language I don't understand, which has its own attractions. Not much in the way of foot tapping here so just let it happen and go with it. It's mysterious and overflowing with small surprises and delights. The Scandi-noir of music perhaps? APEX paints expressive pictures in sound right in front of your ears and they tell of a world, unlike ours, where anything is possible and musical conventions and recognisable tempos are of little consequence.

### A brilliant upgrade

APEX is a brilliant and totally worthwhile upgrade to the dCS range and if you already own a compatible product you are going to want it. I'd go so far as to say that you need it. I could provide so many more examples of how it worked its magic on me but it speaks for itself musically and also for the people within the company who I think deserve huge congratulations for both designing and delivering it. But, in another sense, the biggest beneficiaries are the artists and producers who make the music we love to listen to. APEX has certainly given them greater freedom of expression and translated their ability to talk to us of many things by expanding the vocabulary of their music and our inner connections to it. It really is that significant I think because emotionally, music has no boundaries and APEX walks that particular path with ease. +

### Prices and contact details

**Type** Upgrade for existing dCS owners (new dCS buyers will have APEX hardware fitted as standard). Factory fit upgrade only

**Specifications** as per existing dCS platform, typically 12dB greater linearity and lower noise against previous dCS model

**Ring DAC APEX Hardware is available for owners of the Vivaldi DAC, Vivaldi One, Rossini and Rossini Player.**

**Price** upgrade £6,000; Rossini DAC APEX £25,500; Rossini Player APEX £28,000; Vivaldi DAC APEX £33,000

**Manufacturer** dCS  [dcsaudio.com](http://dcsaudio.com)

**UK Distributor** Absolute Sounds

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