

# Bartók APEX

The Next-Generation Bartók



When we release a new product at dCS, it marks the beginning of a journey that spans the life of the product.

dCS's engineers continually research how to improve existing technologies and products, a discovery process motivated by our drive to deliver unrivalled measured performance and the resulting musical experience.

Often, innovation comes in the form of software. With the recent Bartók 2.0 software update, we improved DSD upsampling and added new filter options. Mappers originally designed for Vivaldi APEX and Rossini APEX are now available in Bartók. The Mappers control how data is presented to the Ring DAC™ core. Bartók now includes three Mapper settings. It also includes DSD128 capability and an additional filter setting for DSD.

Additionally, our products feature a modular approach to construction. The design allows for future upgradeability, which enables us to offer new hardware to existing owners. Such was the case with the Vivaldi APEX and Rossini APEX. Now, we are excited to invite existing owners to upgrade their Bartóks. Units upgraded to Bartók APEX are identical to the new model in every way, including the APEX nameplate on the rear panel.



## The New Bartók APEX Further Elevates the Listening Experience

The Bartók APEX retains the original's powerful, dynamic and detailed soundscape and adds elements of resolution and refinement previously only achievable with the Rossini or Vivaldi APEX. dCS engineered Bartók APEX to inform and inspire.

APEX sets a new benchmark for transparency. It organically resolves the finest details and uncovers textures and subtleties that most systems overlook. From the broadest dynamic swings in volume to the subtlest shifts in tone, Bartók APEX reveals each aspect of a recording with a sense of effortless refinement and control.



## The Ring DAC APEX

The dCS Ring DAC is integral to all dCS DACs and integrated music players. This novel invention—one of several bespoke technologies created by dCS—is one of the reasons our systems have earned global acclaim for their transparency and fidelity.

Developed from the ground up by dCS engineers, it features a combination of proprietary hardware and software that has been carefully honed and refined over three decades to deliver a world-leading technical and sonic performance.

In 2022, we released APEX, a significant update to the Ring DAC's hardware, which allowed us to enhance further the musical performance of our Vivaldi DAC, Rossini DAC, and Rossini Player. Our obsession with remaining at the forefront of measured and musical performance meant that it was only a matter of time before we developed an APEX upgrade for Bartók owners.

The latest-generation Ring DAC APEX hardware brings several benefits. Noise and distortion have been further reduced, and linearity increased by over 12dB. Our subjective listening tests, in turn, have revealed a number of sonic improvements, with listeners noting enhanced dynamics, rhythm and timing, greater soundstage resolution and image focus, blacker backgrounds, and a heightened sense of realism.

More information about the Ring DAC's unique architecture, and its advantages over other technologies, can be found in our digital resource paper: [Understanding the dCS Ring DAC](#).

*dCS*  
Ring DAC™  
APEX

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The Ring DAC APEX: one of several bespoke technologies created by dCS that have earned our systems global acclaim for their transparency and fidelity.



For APEX, the engineering team made extensive changes to the Ring DAC's hardware. With the exception of the resistor array, which remains unchanged, the latest-generation Ring DAC hardware is all new.

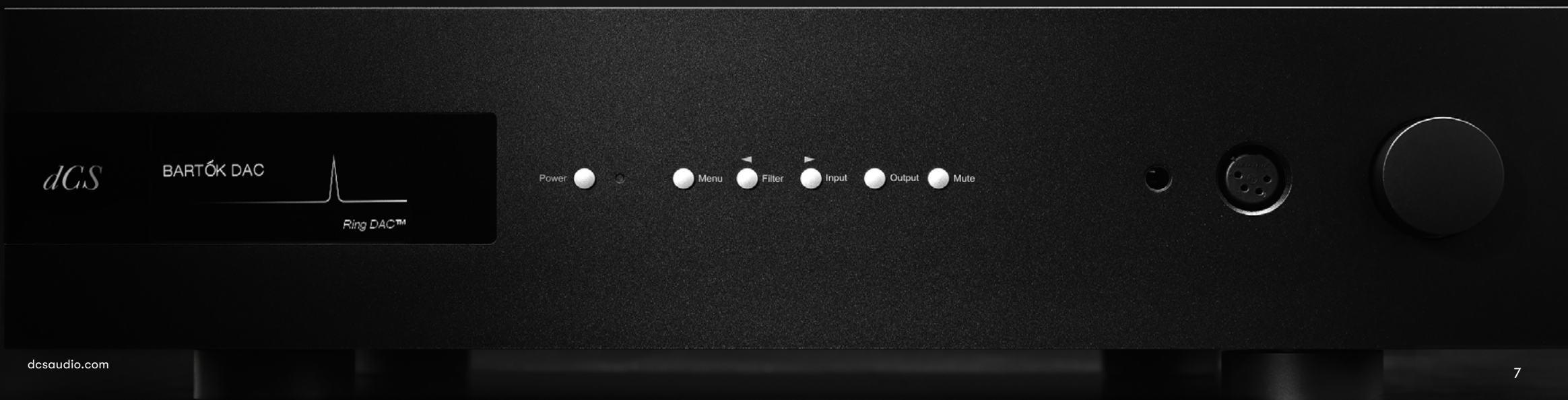
**Improvements Include:**

- Modified reference supply that feeds the Ring DAC, resulting in lower output impedance
- Enhanced the filter, summing and output stages of the Ring DAC
- Improved the symmetry of summing stages
- Created an all-new output stage
- Reconfigured the main Ring DAC circuit board
- Replaced individual transistors on the board with a compound pair

## Designed and hand-assembled at our headquarters in Cambridgeshire, England

Bartók APEX is born from meticulous craft, exhaustive development, and obsessive attention to detail—a pursuit of musical purity that has inspired us to reimagine the limits of sound reproduction. Sharing the same electronics as our Vivaldi and Rossini systems, it features the latest generations of the Ring DAC™ APEX, clocking architecture, and digital processing platform—a unique combination of hardware and software unrivalled in its sonic and technical performance.

Bartók APEX combines precision engineering with an elegant and timeless aesthetic. Standard-setting build quality means Bartók APEX withstands even the most intensive use and reliably delivers superb sound quality at all volume settings and outputs. With flexible and upgradeable software and hardware, Bartók can grow and evolve, providing a state-of-the-art listening experience for years to come.



## The Bartók APEX upgrade program will commence March of 2023

In addition to the launch of our next-generation Bartók APEX, we are making our Ring DAC APEX hardware available to existing Bartók owners through a global upgrade programme. Owners of the dCS Bartók are eligible to purchase upgrades, allowing them to receive the latest generation hardware without the need to purchase a new system.

Customers who purchase an upgrade will receive the new APEX hardware, plus a new APEX escutcheon. dCS will also issue a one-year warranty on all upgraded units, free of charge. Please contact your local dealer for pricing and details.





We have already begun shipping the Bartók APEX to our network of specialist dealers and distributors in the United States, UK, Europe and Asia. Click [here](#) to access the dCS dealer locator tool.

Dimensions	444mm / 17.5" x 430mm / 17.0" x 115mm / 4.6". Allow extra depth for cable connectors	Wordclock I/O	2 x Word Clock Inputs on 2 x BNC connectors, accept standard Word Clock at 44.1, 48, 88.2, 96, 176.4 or 192kHz. The data rate can be the same as the clock rate or an exact multiple of the clock rate. Sensitive to TTL levels. 1 x Word Clock Output on 1x BNC connector. With Sync Mode set to Master, a TTL-compatible Word Clock is output
Weight	16.7kg / 36.8lbs	MQA	Full decoding and rendering of MQA data from the Network and USB2 inputs. Final rendering of unfolded MQA data only from the other inputs
Converter Type	dCS proprietary Ring DAC topology	Residual Noise	24-bit data: Better than -113dB0, 20Hz - 20kHz unweighted (6V output setting)
Digital Inputs	Ethernet network port on RJ45 connector, accepts 24-bit 44.1 - 384kS/s PCM, DSD/64 & DSD128 in DFF/DSF format; USB 2.0 interface on B-type connector, accepts 24-bit 44.1 - 384kS/s PCM, DSD/64 & DSD128 in DoP format; USB On-The-Go interface on A-type connector, accepts 24-bit 44.1 - 384kS/s PCM, DSD/64 & DSD128 in DFF/DSF format; 2 x AES/EBU inputs on 3-pin female XLR connectors, accepts 24-bit 44.1 - 192kS/s PCM, DSD/64 & DSD/128 in DoP format; 1 x Dual AES pair, accepts 24-bit 88.2 - 384kS/s PCM, DSD/64 & DSD/128 in DoP format; 1 x SPDIF on RCA Phono connector, accepts 24-bit 44.1 - 192kS/s PCM & DSD/64 in DoP format; 1 x SPDIF on BNC connector, accepts 24-bit 44.1 - 192kS/s PCM & DSD/64 in DoP format; 1 x SPDIF optical on Toslink connector, accepts 24-bit 44.1 - 96kS/s PCM	LR Crosstalk	Better than -115dB0, 20Hz - 20kHz
Analogue Inputs	1 x pair balanced outputs on 2 x XLR connectors. Output levels: 0.2V, 0.6V, 2V, 6V rms for a full-scale input, set in the menu. Output impedance: 3Ω. Maximum load: 600Ω (10k-100kΩ is recommended); 1 x pair unbalanced outputs on 2 x RCA connectors. Output levels: 0.2V, 0.6V, 2V, 6V rms for a full-scale input, set in the menu. Output impedance: 52Ω. Maximum load: 600Ω (10k-100kΩ is recommended)	Spurious Responses	Better than -105dB0, 20Hz - 20kHz
Headphone Outputs	1 x stereo balanced output 4-pin male XLR connector; 1 x stereo unbalanced output on 6.35mm (1/4") 3-pole jack. Full-scale output levels: 1.4W rms into 33Ω, 0.15W rms into 300Ω. Minimum headphone impedance: 33Ω	Filters	PCM mode: up to 6 filters give different trade-offs between the Nyquist image rejection and the phase response. DSD mode: 4 filters progressively reduce out-of-audio band noise level
		Conversions	DXD as standard or optional DSD upsampling
		Software Updates	Download and update functionality available via dCS Mosaic Control app
		Local Control	dCS Mosaic Control app for unit configuration and playback. RS232 interface (controlled by a 3rd party automation system). dCS Universal Remote is available as an optional extra
		Power Supply	Factory set to either 100, 115/120, 220 or 230/240V AC 50/60Hz
		Power Consumption	30 Watts typical / 50 Watts maximum



## Learn more about Bartók APEX



Watch our Bartók APEX launch film, which will debut on February 10, 9:00am EST, and which features interviews with dCS Managing Director David Steven, Director of Product Development Chris Hales and Technical Director Andy McHarg [here](#).



Read our in-depth article on the development of APEX [here](#).



More information about the Ring DAC's unique architecture, and the advantages this offers, can be found in our digital resource paper, [Understanding the dCS Ring DAC](#).



Click [here](#) to access Bartók APEX images

Click [here](#) to access images of the dCS Ring DAC APEX

You can also learn more about dCS's range of technologies via our online Innovation hub. See [dcsaudio.com/innovation](https://dcsaudio.com/innovation) for more information



If you have any questions regarding the launch of Bartók APEX, or would like to request additional information or assets, please contact the dCS marketing team at [marketing@dcsaudio.com](mailto:marketing@dcsaudio.com)

More information about dCS, our products, our heritage and our technologies is available at [dcsaudio.com](http://dcsaudio.com)

