



£750 ☎ 0870 900 1000 🌐 www.cambridgeaudio.com

CAMBRIDGE AUDIO AZUR 840C

Cambridge Audio's top CD player offers something genuinely new

It's not easy to do something really new with CD replay, especially at a sensible price, but Cambridge seems to have achieved it with the 840C. The big feature here is 384kHz upsampling. Usually upsampling is to a more modest frequency, generally 96kHz or 192kHz, but Cambridge's implementation of 384kHz is a first outside the rather esoteric reaches of the high-end stratosphere.

The company has worked closely with Swiss digital signal processing specialist Anagram Technologies. Anagram's approach to upsampling is different from the norm but the differences are in details, which are arcane in the extreme unless you're a DSP expert – basically it does the usual upsampling thing and simplifies analogue filtering requirements while making the most of 16-bit/44.1kHz audio. Not wanting to waste all this high performance digital stuff, Cambridge also offers two digital inputs so that the 840C can function as a DAC, too, applying the upsampling benefits to any other digital source you may have around the place. What with digital outputs (no, they don't function at 384kHz, and you couldn't find anything compatible to connect them to if they did!), remote control in/out sockets, RS232 for firmware updating and balanced audio outputs in addition to phono sockets, this unit has easily the busiest back panel in the group.

The front is more modest, with buttons for essential functions and a comprehensive display to show what's going on.

SOUND QUALITY

It's surely significant that our 'blind' listening panel greeted this player with an almost complete absence of superlatives but still had almost entirely positive things to say. Superlatives are nice and make good advertising copy, but in relatively quick-fire listening (which, of necessity, our panel sessions are) can sometimes be indicative of an imbalance in performance. But the feeling



here was that everything is very neatly slotted into place and in a sense the whole is greater than the sum of the parts. In a single word, the sound is satisfying. It makes sense of the musical structure and contains all the necessary elements but it never assigns its own sense of priority to them.

The nearest thing to outright criticism was a comment that timing didn't seem to equal the best in the group. That may be true, but it must be said that for some listeners there is no such thing as too much rhythmic 'kick' and in any situation the greatest degree of that will always be judged the best. Try as we might after the blind listening session, we couldn't find real fault with the 840C's sense of timing and we would rather just say that it doesn't exaggerate the trait.

It's always a good sign when imaging seems particularly stable, and that's the case here. It's also remarkably deep and instruments exist in a clear space of their own, with well-defined ambient clues and cleanly-defined instrumental timbre. In fact, tonality is admirably neutral, from bottom to top. Voices are very well differentiated from each other and free from any trace of sibilance. In short, the Cambridge is very good indeed. **HFC**

VERDICT

SOUND >> 88%

FEATURES >> 91%

BUILD >> 88%

VALUE >> 94%

An undemonstrative player that nevertheless admirably combines tonal neutrality, effortless detail and a fine sense of rhythm and timing. Its appeal further enhanced by flexibility as a DAC and its approach to upsampling.

HI-FI CHOICE OVERALL SCORE 91%

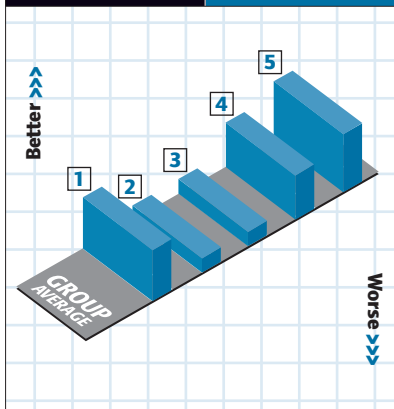


LAB REPORT

Not too surprisingly, there's not much we can find in the technical department to complain about. In areas where it's not the best in the group, it's one of the best. For example, Arcam beats it by a small margin on noise, but that's about 1dB improvement on already excellent performance. Distortion at full level is very good, but drop the level by only a couple of dB and the figure halves, leading to an effectively blameless performance at most frequencies and levels. Jitter is once again around the threshold of detectability, and the frequency response up to 20kHz is flat within a smidgin of a dB. Speed accuracy is exemplary and output level par for today's course.

There's just one thing... the Anagram Technologies filter is good, but it's not perfect and as commonly happens there's some aliasing around 22.05kHz. A slightly sharper slope on the filter would fix that, but would it improve the sound even further?

HOW IT COMPARES



- 1) Distortion >> +35%
- 2) Jitter >> +10%
- 3) Linearity >> +10%
- 4) Dynamic range >> +30%
- 5) Digital filter >> +40%

SPECIFICATIONS

Measurement	Rated	Actual
Maximum output level	-	2.12V
Total harmonic distortion	0.0008%	0.0007%
Signal-to-noise ratio	>113dB	108dB

CONCLUSIONS

Each of these players has its own strengths and weaknesses – it's all a matter of personal taste!

We mentioned at the outset that this is a group with quite a narrow price, so it is perhaps easier than usual to compare product performance and value. Or it looks like that at first – there's always a subjective fly in any easy-answer ointment. As so often happens, there's no logically obvious pecking order among these players, because so much depends on the priorities of the individual listener – you!

None of them is bad. They are all, as far as we can see, respectable, competent and

functional. This view we have reflected in the largely closely packed ratings, for which we make no apology. But none of them is perfect, which is why we entreat you to listen to as many of them as you can in order to see how their individual character suits your hearing. Our comments, lab findings and ratings will, we hope, assist you in flagging up areas of appeal, concern or interest.

All that said, we did end up with a soft spot the size of Texas for the Cambridge Audio Azur 840C. We're most impressed by its combination of high technology,

useful features (including digital inputs) and build quality, and it does offer some truly excellent sounds. One of its best features is that it does so without fuss or ostentation, and if you like show-off hi-fi you may not find it very exciting. But if you prefer listening to music, it's got a very great deal to recommend it.

Arcam, Naim and Quad are brands each with a strong 'family theme' but their players match that theme better visually, perhaps, than sonically. In fact, each has good and slightly disappointing features, with the Arcam warm and

inviting but a touch behind on detail, the Naim great at tonal honesty and resolution but sometimes uncertain in the bass, and the Quad big and bold but less assured in quieter moments.

We seem to have been a little less impressed by the valved models, though they differ considerably. The Vincent, indeed, has a lot to commend it in the way of 'traditional' valve virtues – warmth, listenability and so forth – but the Astin Trew does seem to us to have some issues with the presence band and it didn't quite hold our attention in the way the others did. **HFC**

TRY THEM WITH THESE

AMPLIFIERS

CREEK DESTINY £1,100

A svelte but powerful amplifier, which adds high-end control and resolution.

DENSEN BEAT B-150 £3,000

Seriously upmarket as integrated amps go, with a strong bass.

LOUDSPEAKERS

AVI NEUTRON IV £549

Fine little speaker which puts out sound with more body than you might expect.

DALI IKON 6 £899

Cracking floorstander that delivers a detailed and entertaining sound.

HINTS AND TIPS

>> When auditioning players, be aware that output levels are not always perfectly matched: louder often sounds 'better' in quick-fire demonstrations.

>> CD players aren't particularly microphonic, but any problems can be minimised by putting them out of the direct line of fire of the speakers.

>> Some players need a little warm-up time to sound at their best. If there's a 'standby' switch, use that instead of the mains switch – unless you're sure you won't be listening for a few days.

>> If the option exists to switch off the display and any other circuits, take it. The sound may well improve a touch.

CD PLAYERS AT A GLANCE



MAKE MODEL	Arcam DiVA CD192	Astin Trew AT3000	Cambridge Audio Azur 840C	Naim CDSi	Quad 99CD-S	Vincent CD-S6
PRICE	£875	£647	£750	£850	£650	£999
SOUND						
FEATURES						
BUILD						
VALUE						
OVERALL						
CONCLUSION	Offers a very comfortable and involving sound, but resolution of details is not always utterly searching.	Slight presence-band lift makes for forward images and less relaxed listening than some. Extended and tuneful bass a plus.	Undemonstrative, but combines neutrality, detail and timing. Enhanced by flexibility as a DAC.	Bass has great extension but slightly lacks control. Tonal neutrality higher up is excellent, however.	Revels in big music thanks to fearless presentation, but smaller-scale works can lack focus.	Despite occasional lack of bass precision and slightly limited image depth, gives a good feeling of presence to the sound.
KEY FEATURES						
ELEC DIG O/P	Yes	Yes	Yes	No	No	Yes
OPT DIG O/P	Yes	No	Yes	No	Yes	No
CD R-W	Yes	No	Yes	Yes	Yes	No
CD TEXT	Yes	No	No	No	No	No
BALANCED O/P	No	No	Yes	No	Yes	Yes
LAB CONCLUSIONS E = EXCELLENT • G = GOOD • A = AVERAGE • P = POOR						
DISTORTION	0.001% G	0.025% A	0.0007% E	0.0015% G	0.002% G	0.0015% G
JITTER	<0.1ns E	<0.1ns E	<0.1ns E	<0.15ns G	<0.12ns G	<0.14ns G
LINEARITY	<0.25dB G	<0.1dB E	<0.2dB E	<1.0dB A	<0.4dB G	<0.3dB G
S/N RATIO	109dB E	108dB E	108dB E	101dB G	100dB A	99dB A
STOPBAND REJECTION	102dB E	110dB E	103dB E	30dB P	48dB P	96dB G