



840 series



 **Cambridge Audio**  
Your music + our passion



# Introducing the 840 series

Your music + our passion

**At Cambridge Audio we have a passion. Your music.**

**We want your collection to realise its full potential,  
make you smile and raise hairs on the back of your neck.**

**Introducing the 840 series.**



Cambridge Audio has enjoyed forty years of hi-fi expertise which have been distilled into a range of products that all adhere to three core principles – stunning performance, ease of use and incredible value. Many of our engineers are musicians themselves and strive to ensure recordings sound as good as those toiled over for hours in the studio. Every last drop of performance is squeezed from each track revealing subtle nuances you never knew were there.

The 840 series marks the zenith of the critically acclaimed Azur range and explicitly displays the company's desire for audio nirvana. Comprising the 840A Class XD™ integrated amplifier, 840C upsampling CD player, 840E pre amplifier and 840W Class XD™ power amplifier, each product is a leader in its field offering unparalleled sound quality.

As with all Cambridge Audio products, they have been designed from the ground-up at our UK research and development headquarters in London. This centre of engineering excellence has been the birthplace of some of the world's most inventive proprietary technologies that continue to challenge the status quo such as our patented Class XD – first seen in this new range.



# System Selector

Components tailored to your needs



## 840A and 840C

In its simplest form, the 840 series is a fantastic two-channel hi-fi system using the multi-award winning 840A integrated amplifier and 840C upsampling CD player.



## 840C, 840E and multiple 840Ws

As well as a normal stereo configuration, several other two channel modes of operation are possible including Bi-Amped Mono and Bridged Mono modes.

In Bi-Amped Mono, two 840Ws are used with separate amplifier channels driving the bass units and tweeters. Each 840W drives one speaker.

Alternatively, in Bridged Mono mode each 840W again drives one speaker but differentially across its output channels acting as a 500W mono bloc amplifier.

Both options take the 840 Series into new heights of audio excellence. Further combinations of 840Ws are also possible for bi-amped bridged monoblocs using four 840Ws.



## ◀ 840C, 840E and 840W

For those wanting more power and even greater audio fidelity, combining the 840C CD player with the 840E and 840W pre/power combo provides a jaw-dropping set-up at a surprisingly down to earth price.

# Home Theatre

840 series, home theatre receiver & DVD player



## 840 Series and home theatre receivers

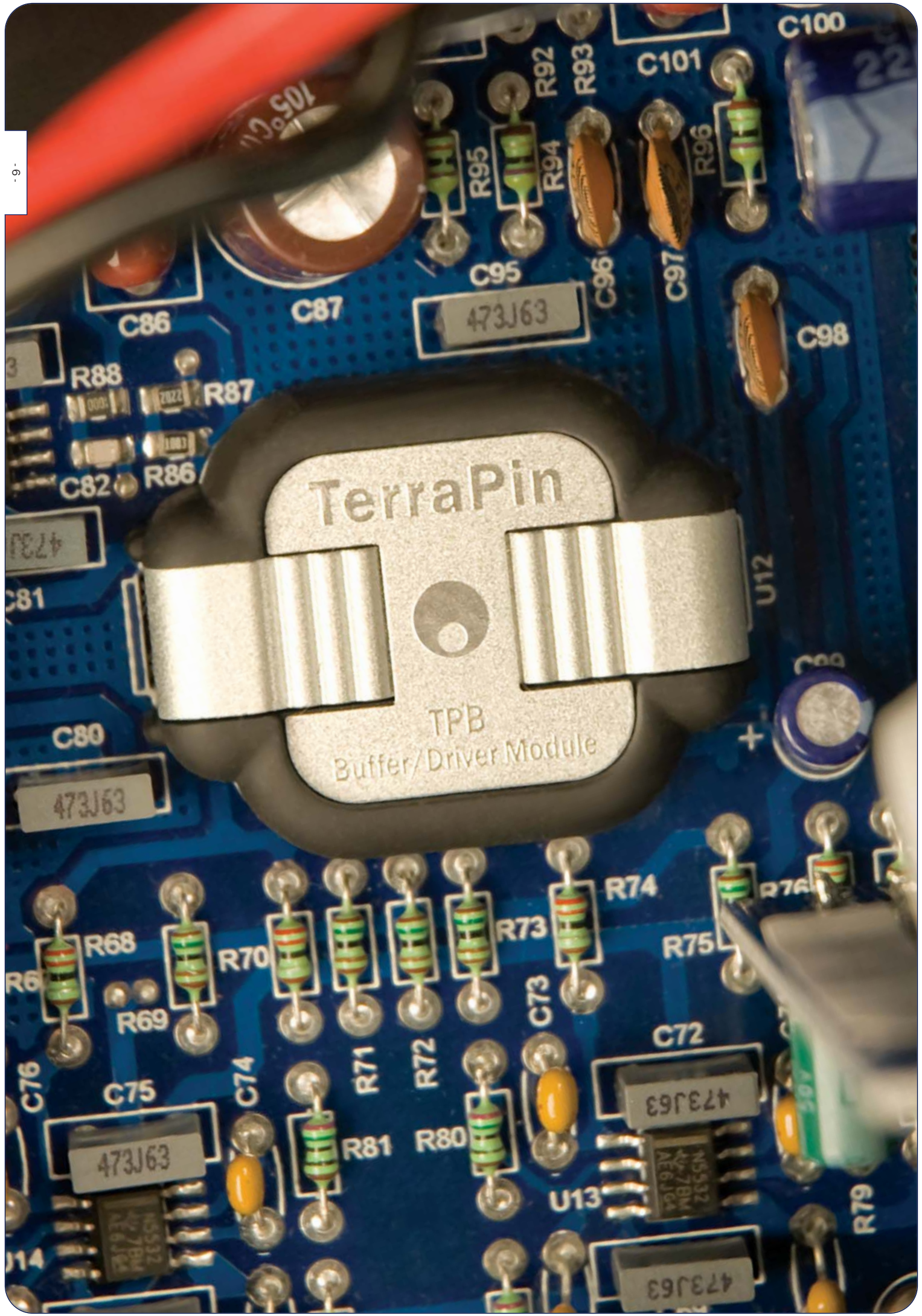
Any input of the 840A or 840E can be set for fixed gain for home theatre bypass mode. This feature means that as well as acting as an uncompromised 2-channel system, the 840 Series can at the same time provide the amplification for the front left and right channels of a surround sound set-up with a home theatre receiver providing the amplification for the other channels. For stereo inputs the 840A (or 840E and 840W) is the only device in circuit and controls the volume. In home theatre mode, the

attached receiver is in control with the 840A (or 840E and 840W) acting as a power amp for the left and right. The 840A gives the best possible stereo presentation, whilst for surround sound the home theatre receiver only has to deal with the centre and rear channels therefore working more efficiently. The end result is a sophisticated home theatre and stereo set-up which plays to each unit's strengths giving you the best of both worlds.



### iPod® Command

Cambridge Audio's Navigator style Azur remotes feature iPod Command which means they can control the basic functions of an iPod such as track skip and volume when used with a universal dock. They also control Azur amps, CD players, Incognito multi-room keypads and discrete commands for custom install use.



TerraPin

TPB  
Buffer/Driver Module

C100

C101

R92

R93

R96

C95

C96

C97

C98

C87

C86

473J63

R88

R87

C82

R86

473J63

C81

C80

473J63

U12

C89

TPB

Buffer/Driver Module

R74

R75

R76

R68

R70

R71

R72

R73

C76

C75

C74

R81

R80

C73

C72

473J63

U13  
NS532  
4778  
AF6164

U13

R79

473J63

U14

# 840 technology

Our technology explained

**Just like Tchaikovsky using an unprecedented 5/4 rhythm for a waltz in his Sixth symphony or the Beatles trying feedback as a musical effect on 'I Feel Fine', so Cambridge Audio has experimented and discovered novel ways of developing hi-fi. Our engineers are actively encouraged to broaden their minds and not be content with the accepted virtues of conventional methods. To this end, we have conjured a number of proprietary technologies which tackle a range of audio problems head on, find a solution and then provide a genuine alternative with benefits for you.**

## Class XD™

The vast majority of home audio amplifiers use either Class A or B designs which both have their advantages and disadvantages. In Class A the output transistors are modulated by the audio signal to turn more or less 'on' but never actually turn off, in Class B the output transistors do at some point turn off as



the output is passed from one transistor to another. It is at this point with the output moving from one transistor to another (the crossover point) that a small amount of distortion is created. This 'crossover distortion' is inevitable and although it can be minimised, it can never be completely eliminated. Class A of course avoids this small pitfall (because the transistors are always on) but at the expense of a lot of heat generation. Managing this heat and power dissipation inevitably means that Class A designs are much more costly and often of lower power output so as to minimise the heat as much as possible.

Class XD (crossover displacement) is a unique Cambridge Audio design which gives pure Class A operation at low levels, moving smoothly into an enhanced version of Class B at higher levels. This system should not be confused with Class AB, which inherently generates greater distortion at high levels than a pure Class B design.

XD technology feeds a controlled current into the output stage in a new way so that the usual Class B crossover point no longer occurs at zero volume - the worst possible position in terms of distortion - but at a significant output level.

The result is a smooth and linear transition between the two modes of operation, which differs significantly from the more abrupt, slightly distorted gain transition of a Class AB amplifier.

Amazing performance is combined with more than economic power consumption and the reviews speak for themselves. The technology has even won the company a CES Innovation Award.

## TerraPin™ op-amp modules

Cambridge Audio has a single minded dedication to producing the best audio performance possible and so during the development of the Azur 840E, we decided rather than use common op-amps for the critical low level gain stages, we would design our own op-amp modules which outperform these usual devices. Two variants of the Cambridge Audio TerraPin op-amp module are implemented in the 840E pre amplifier. The TPA amplifier (configurable for any gain) and TPB buffer (fixed unity gain) both include multi-layer shielding which provide maximum channel separation for excellent stereo imaging.

## Adaptive Time Filtering (ATF) upsampling process

All CD player designs have to contend with jitter. Jitter blurs the timing information of reproduced audio signals resulting in degraded audio quality. To combat this, the Azur 840C has an ace up its sleeve - Adaptive Time Filtering (ATF) upsampling. Developed with Anagram Technologies of Switzerland,



ATF draws a smooth curve fitting algorithm, during the resampling process. This path

closely follows the original data path dramatically reducing resampling errors caused by jitter appearing on audio clocks.

ATF also upsamples the digital data stream (up to 24 bits and 384kHz) for enhanced audio clarity, "upgrading" the investment you have already made in your CDs. You may be astonished once you begin to hear what you have been missing! The end result is tighter, more focused bass, increased stereo imaging, focus and separation for all musical instruments and voices.

# 840E pre-amp

Refined control...



**The 840E is a high-end pre-amplifier which uses Cambridge Audio's new proprietary TerraPin modules for**

**unprecedented audio fidelity forming the perfect partner for the accompanying 840W power amplifier. Rather than use common op-amps for the critical low level gain stages of the 840E (and 840W) Cambridge Audio instead decided to design its own audiophile amplifier modules. The subject of a dedicated research and development project these unique modules have been designed with single minded dedication to the very best audio performance possible.**

A sophisticated resistor ladder and relay based attenuator for volume (1dB steps) and balance controls allows remarkably accurate volume control with channel balance. Each channel has its own relays and ladder for superb stereo separation and imaging. This kind of feature is normally the preserve of exotic high-end equipment and is unheard of at this price point.

The Azur 840E makes room for eight inputs, two of which have both fully balanced (XLR) and unbalanced connections, ideal for use with the Azur 840C upsampling CD player. These inputs can be named as desired by the user on the custom-designed display to show CD, MP3, Phono etc. Volume, input and tone are also all controlled by highly sophisticated relay driven circuits. The display's backlight can be set to bright, dim or off. It matches the 840C's display and can be controlled from the Navigator remote.

### Customisable display

The 840A and 840E feature an extremely attractive and user friendly front panel display which is customisable to show which input is selected such as CD, MP3 or Tuner. The display is also dimmable and matches the 840C.



Completing the rear panel is an RS232 control port, and multi-room outputs to connect the 840E to custom installations. This plethora of connections enables complete integration with multi-room entertainment systems including two way interfacing with touchscreen control panels. Alternatively, the 840E is Incognito Ready™. This means that two additional rooms can access the source components connected to the 840E via Cambridge Audio's Incognito system amplified keypads and passive speakers or active in-ceiling speakers. An independent Incognito power supply links to the 840E, enabling audio and low voltage power to be transmitted to each Incognito keypad using only one run of CAT5 cable.

**incognito™**  
READY





# 840W power amp

...for incredible power



**The 840W is a novel high-end power amplifier with engineering passion at its heart. Despite being surprisingly inexpensive, it is sophisticated, upgradeable and enormously powerful yet still musical and light of touch.**

At the core of the 840W's strength is our patent pending, Class XD (crossover displacement) technology (first seen in the 840A) which has been subtly revised following continuing post-launch development and critical evaluation. This unique design gives pure Class A operation at low levels, moving smoothly into an enhanced version of Class B at higher levels. This system should not be confused with Class AB, which inherently generates greater distortion at high levels than a pure Class B design. XD technology feeds a controlled current into the output stage actively displacing the crossover point in a new way so that the usual Class B crossover point no longer occurs at zero volume - the worst possible position in terms of distortion - but at a significant

output level. The result is a smooth and linear transition between the two modes of operation, which differs significantly from the more abrupt gain transition of a Class AB amplifier. To facilitate this, the Azur 840W amplifier includes a massive, oversized low flux toroidal transformer.



In our ongoing development of Class XD we have conducted exhaustive research into further improvements of our amplifier designs to squeeze everything out of this innovative technique. This in turn led to a new output stage topology being

developed which has been incorporated into the 840W. Four pairs of very high current output transistors are used per channel (for the amplifier output) plus an extra high current transistor pair per channel for the XD circuit.

Using proprietary Class XD technology, the 840W's awesome 200W @ 8 Ohms gives excellent load driving ability or, a truly massive 500W @ 8 Ohms bridged mono can be harnessed for even 'difficult' high-end speakers.



# 840A v2

The original Cambridge Audio XD amplifier



**The 840A is a multi award-winning amplifier now using the second generation Class XD technology for unbeatable sound reproduction. Revised balanced inputs for lower distortion and noise and a more accurate volume control with even lower crosstalk for greater stereo imaging mean the 840A V2 improves on the hugely successful design of the original 840A.**

The Azur 840A amplifier includes a massive, oversized low flux toroidal transformer, incorporating a silicone-steel screen. To separate the delicate signals needed by the pre-amp from those needed by the power-amp, the 840A features a completely separate pre-amp toroidal transformer, mounted to the rear casework.

In addition to this innovative technology, the 840A also uses an extremely sophisticated resistor ladder / relay attenuator with gold-plated contacts for volume and balance control. This gives extremely low distortion with superb channel balance and incredibly accurate control in 1dB steps over the whole range.

Relays are also used for all input switching, more normally associated with designs costing many times that of the 840A, these components deliver extremely high isolation between inputs, whilst remaining completely free from the distortion associated with conventional semiconductor switching.

In our ongoing development of Class XD we have conducted exhaustive research into further improvements of our amplifier designs to squeeze everything out of this innovative technique. This in turn led to a new output stage topology being developed which has been incorporated into the version 2 of the 840A. Two pairs of very high current output transistors are used per channel (for the amplifier output) plus an extra high current transistor per channel for the XD circuit. Also included is the latest development of Cambridge Audio's proprietary CAP5 protection system.

**incognito™**  
READY



## Custom Installation integration

Not just a stand-alone hi-fi system, the 840 series is also able to be used with custom installations. The 840C, 840A and 840E feature RS232 ports, IR emitter In and Control Bus In/Out for seamless integration with third party solutions.



*The Incognito KP10 keypad*

They are also configured for Cambridge Audio's own Incognito multi-room entertainment system. Indeed, the supplied Azur Navigator style remote handsets can be used to control Incognito keypads in other rooms. Users in Incognito equipped rooms are then able to access the same or different music using the 840A or 840E as a mini multi-room central hub.

# 840C

Incredible performance at an amazing price



**The 840C, more than any other product, has truly redefined what is possible at a particular price point. *The Absolute Sound* magazine recently stated it produced the “best CD playback under \$5k” and would be comfortable at the front end of a “\$100k reference system - it’s that good.”**

The 840C embraces a raft of proprietary technologies including ATF (Adaptive Time Filtering) asynchronous up-sampling technology which has been developed in conjunction with Anagram Technologies of Switzerland. This system intelligently interpolates 16-bit/44.1kHz CD data to 24-bit/384kHz data, through the use of a 32-bit Analog Devices Black Fin DSP (digital signal processor). In turn this feeds two 24-bit/384kHz DACs from the same company in dual differential formation.

Each DAC handles just one channel for excellent stereo imaging, operating fully in differential mode for exceptionally low distortion and noise.

Both balanced XLR and unbalanced RCA outputs are fitted. Two digital inputs are also provided which even allow the up-sampling and playback of other sources such as a DVD player via the Azur 840C. In addition, a recording digital output can even allow bit-for-bit data or upsampled data at 48, 96 or 192 kHz to be recorded by a suitable device.



Two digital inputs are provided which allow the upsampling and playback of other sources such as a network music client or DVD player.



**EISA**

**AWARD**

**Best Product**

2007-2008

2-channel Amplifier

Cambridge Audio Azur 840A

# Awards

Read what the world's press have said

***“ I could easily live with the 840C at the front end of my \$100k reference system - it's that good.”***

*The Absolute Sound, USA (840C)*

***“ Cambridge has come up with a one-two punch that will be hard to beat. It would be impossible not to recommend this impressive combination.”***

*Hi-Fi News, UK (840E & 840W)*

***“ ... ces éléments constituent un véritable saut quantique...”***  
***“ ... these products constitute a veritable quantum leap...”***

*Prestige Audio Vidéo, France (840A & 840C)*

***“ The new 840E/W represent a new era for Cambridge Audio in terms of price and performance.”***

*Hi-Fi Choice, UK (840E & 840W)*

***“ As the greatest expression so far of Cambridge Audio's Class XD technology, the 840E/840W pre-power is a truly accomplished sounding solid-state combo... if you want to experience the physical scale and dynamic majesty of music I can think of nothing better for the money.”***

*Hi-Fi World, UK (840E & 840W)*

***“ Est-ce que le lecteur parfait? Dans sa catégorie de prix, il sera sûrement le lecteur à battre... “***

***“ Is it the perfect CD player? In its price range, it's surely the CD player to beat... “***

*Québec Audio & Vidéo, Canada (840C)*



Each year the European Imaging & Sound Association (EISA) assembles a panel of expert judges from some of the continent's leading hi-fi press to investigate the world's finest technology. After rigorous evaluation they return to vote on one product in each category that they believe offers not only exceptional levels of performance but also provides incredible value. This year they chose the Cambridge Audio Azur 840A Class XD integrated amplifier.



Similarly the Consumer Electronics Association (CES) bestows prestigious Innovations awards on products they feel truly show novel thinking. In the past two years, Cambridge Audio has won four such Innovations awards for its entire Azur 840 range.



# What the press say...

## A sample review of the 840E and 840W from Hi-Fi Choice



### This article was entitled "XD-rated" from Hi-Fi Choice magazine August 2008

"The 840E and 840W amplifiers see Cambridge Audio topping off its successful Azur range of products with a high-powered and highly flexible pre/power combination. Traditionally, Azur products have been at the budget end of things, but these amps represent something new and hit £2k.

As well as acting as a straightforward stereo power amplifier, the 840W can be used in either a bi-amped or bridged mono configuration. When bi-amping, one 840W of the pair powers each speaker so that its tweeter and woofer each has its own dedicated amplifier channel. Alternatively, the bridged mono mode allows two 840Ws to be used with each configured as a 500-watt monobloc. With the flick of a few switches and the repositioning of a few interconnects you could have four (or more) of these economical fire-breathers configured so that you have 500 watts on tap for every individual drive unit.

There's no doubt that there's some very clever electronics lurking within the 840W. The amplifier uses Cambridge's second generation proprietary Class XD technology, along with a new output stage that has been carefully adjusted to integrate with this novel topology.



The power amplifier, though, doesn't have any monopoly on advanced technology. The 840E preamplifier boasts its own share of sophisticated circuitry. For example, rather than use commonly available, off-the-shelf op-amps for the critical low level gain stages, Cambridge brewed audiophile modules, called TerraPins, which it

designed with the sole aim of extracting the best audio performance from the amplifier.

The 840E uses a sophisticated resistor ladder and relay-based attenuator for volume and balance control. Although this provides 1dB incremental volume adjustments, we found that much of its range seemed wasted in our system: with Mute being at -95dB and our normal listening level being around -20dB, that's 75dB of attenuation that we were never going to use. Even at our late-night-listening level of -30dB that is still a whole bunch of resistors hanging around doing nothing. Each channel features an individual array of relays and resistors to enhance the preamp's stereo separation and imaging performance.

All the information the user needs is presented through a customisable front panel display, which can be dimmed or

switched off when not needed. The display, which is described as user-friendly – as is every display these days – actually is and is a joy to use. Inputs can be renamed with more informative names than ‘Input 1’ or ‘Input 2’. On that subject, the 840E provides eight line-level connections, two of which can be balanced. The preamp offers a balanced output and the power amplifier has balanced input connections, so one can run the whole shebang in balanced mode with the flick of a few tiny switches on the rear panels. The preamplifier also incorporates RS-232 and multiroom connections to enable it to be used in custom installations: it will integrate with multiroom entertainment systems and touch-screen control panels. Naturally, it is fully equipped for use with Cambridge Audio’s Incognito system...

...Aimee Mann’s *Whatever* displays appropriate urgency and bite, probably because of the — much gentler — guitar driven nature of the music. Even so, there seems some diminution of leading-edge information evident, which reveals itself as a softened attack on cymbals and tambourines. As the CD progresses, it begins to seem that the amplifiers fare better with sparser mixes, greatly preferring the simple guitar, bass and voice intro to *Stupid Thing* to the more dense arrangement of *Fifty Years After The Fair* with its vocal layering and keyboards. We have no reservations, though, about the way this system handles Mann’s superb voice: it’s pitch perfect, beautifully dynamically shaded, and packed full of expression.

As the 840s appear to favour recordings with a bit of space around the elements we try Nic Jones’ *Canadee-I-O* from the album *Penguin Eggs*. This outwardly straightforward guitar and voice recording shows off these amplifiers to their best advantage. They create a realistic portrayal of both Jones’ guitar and his voice: furthermore, they easily convey his characterful playing, which uses techniques not usually employed by folk musicians.



The 840s expose these subtleties with alacrity while imbuing his steel-strung acoustic with a vibrant tonality and vivid dynamics. In fact, after a couple more tracks it dawns upon us that we are actually contentedly listening and tapping our feet to traditional folk music: this Cambridge duo clearly has a rare talent!

Playing Hugh Masekela’s rather busier *Stimela* from the CD *Hope*, it strikes us that the 840 pairing might appreciate better recordings and not suffer those that are less well put together. It does not simply favour uncomplicated mixes over more intricate arrangements, but it appears to relish the finer examples of the recordist’s art. The Masekela disc demonstrates that the amplifier does not sound over-polite or soft on drum and cymbal strikes as it had with the Aimee Mann disc.

Nor does it require a percussive or stringed instrument to produce leading edge information as Masekela’s assertive horn stabs and vocalising demonstrate on this faultlessly produced live recording. The new 840E/W represent a new era for Cambridge Audio in terms of price and performance. Owners of the HFC Gold

Award winning 840A v2 (£750) will find the duo a noticeable step-up. Audiophiles who aspire to the high end but only have modest spending power will welcome the performance per pound the duo offers, too.

Although we found the amps preferred well recorded discs, we’d encourage a lengthy audition with a wide range of music to see just what the 840E and 840W can do.”

HFC - Malcolm Steward  
August 2008

VERDICT	
<b>SOUND</b> ★★★★★	<b>PRO</b> Even when being worked hard the amplifier’s sound retains its composure and always appears secure and in control. Always delivers clarity and solid imagery.
<b>FEATURES</b> ★★★★★	<b>CON</b> Might sound a touch too reserved for some listeners, and definitely seems to prefer recordings that are better produced and engineered.
<b>BUILD</b> ★★★★★	
<b>VALUE</b> ★★★★★	
<b>CONCLUSION</b> These high-end amps from Cambridge are well built, well featured and offer great value for money. Always composed and controlled, even at high volumes, there’s plenty of clarity on offer here. They do prefer good-quality discs, however.	
<b>HI-FI CHOICE</b> <b>OVERALL SCORE</b> ★★★★★	





# The Absolute Sound

840C review from September 2007

*“The new Cambridge Audio 840C CD player left me shaking my head in wonderment at how Cambridge can sell this much CD player for \$1499. The 840C is packed with advanced features, sophisticated technologies, and high-quality parts that one finds in digital products costing upward of \$10k.*

*Here’s a sample of the 840C’s technology: custom transport mechanism; custom upsampling digital filter running on a 32-bit DSP chip; differential digital-to-analog converters; digital inputs; digital upsampled outputs; and balanced analog outputs.*

**“ Not only is the 840C easily the greatest value in digital sources in my experience, it must be considered one of the greatest bargains in all of high-end audio.”**

*Such an impressive feature and technology list, however, tells you nothing about how the player sounds. To know that, you must listen. Dropping the 840C into my reference system, I was stunned by its overall sound quality. I knew immediately that the 840C wasn’t a player to be measured against similarly priced products, but was worthy of comparison with reference-grade digital front ends.*

*For starters, the 840C doesn’t sound anything like a \$1500 CD player. It had a resolution, refinement, ease, grace, and musicality that were instantly recognizable as being different from every other product in the category. In fact, it’s hard to know where to begin praising the 840C. We could start with any part of the sonic fabric, but I’ll choose the treble reproduction, an area where CD players often reveal their shortcomings. The 840C had a delicacy, refinement, and sophistication in the top octaves that must be heard to be believed. Most digital near this price—indeed, most digital at any price—tends to make cymbals sound like undifferentiated bursts of white noise, with no inner character or clue as to the mechanism by which the sound was created. By contrast, the 840C had a completely natural top end that was smooth and gentle, yet bursting with fine*

*inner detail which gave high-frequency-rich instruments a remarkable timbral realism. Many \$5k players don’t approach the 840C’s beautiful rendering of the top octaves. The midrange was equally well served by this combination of resolution and ease. Instrumental tone colours were vivid and alive, as though the 840C had access to a wider colour gamut than other CD players. Most CD players anywhere near this price tend to homogenize timbres by overlaying them with a common synthetic character; the 840C portrayed timbres with a stunning naturalness.*

*The natural rendering of tone colour, coupled with the overall ease, made the 840C musically vivid without being sonically vivid.*

*The 840 also had a soundstage dimensionality that I haven’t heard before in a sub-\$5k digital front end. The 840C presented tightly focused images, with sharp outlines that were surrounded by a sense of palpable bloom. The result of the 840C’s ability to present instruments as distinct objects in three-dimensional space was a heightened ability to hear what each musician was playing. The subjective consequences of this objective change in the presentation cannot be overstated; rather than hearing a somewhat congealed and synthetic mass of sound, the 840C brought the music to life by conveying a convincing impression of individual musicians before me. In addition,*

*the 840C resolved reverberation tails down to a very low level, which further added to the illusion of hearing instruments in a large acoustic space.*

*Music through the 840C had an organic “rightness” and fundamental musicality that’s hard to describe. I heard a sonic coherence that translated to an enhanced ability to hear into the music and understand it more deeply. This was partly the result of the 840C’s remarkable ability to keep individual instrumental lines distinct, and partly because of the player’s tremendous sense of ease, smoothness, and liquidity. This player is amazingly free from midrange glare (often manifested on the leading edges of piano notes) and metallic hardness in the treble. Despite the 840C’s utter grace and ease, the player is tremendously good at resolving fine detail. This rare combination of ease and resolution is an important factor in musical involvement and long-term listening satisfaction.*

## Conclusion

*The Cambridge 840C CD player delivers the best CD playback I’ve heard from any player under \$5k—and it costs \$1499. Not only is the 840C easily the greatest value in digital sources in my experience, it must be considered one of the greatest bargains in all of high-end audio. Even if your budget for a CD player is considerably more than \$1499, I encourage you to audition the Cambridge 840C. In fact, I could easily live with the 840C at the front end of my \$100k reference system—it’s that good.*

TAS



# About us

**Cambridge Audio has a philosophy of using only the finest quality components, all models are developed using state-of-the-art test and measurement equipment and feature a number of our own proprietary technologies.**

**This commitment to engineering excellence means every Cambridge Audio product offers the best possible performance at an affordable price, while maintaining the company's classic aesthetic looks which blend in perfectly in any environment.**

But the main reason for Cambridge Audio's success... our people. We employ nearly 80 colleagues, the majority at our London headquarters, including over 20 engineers in a dedicated research and development facility. Every member of our team shares the same passion for music as you.



Our products have received countless five star reviews from the world's hi-fi, home cinema and gadget press but with the introduction of the Azur 840 series, these scribes have been left stretching for the dictionary to find new superlatives. As *The Absolute Sound* stated, "Not only is the 840C easily the greatest value in digital sources in my experience, it must be considered one of the greatest bargains in all of high-end audio..."

So if you thought Cambridge Audio was simply the master of budget audio it's time to take a fresh look at the UK's best-selling hi-fi brand by experiencing the Azur 840 series and see how it can transform your music collection.



Azur 840C upsampling CD player	
Frequency response:	20Hz - 20kHz +/- 0.1dB
THD:	@ 1kHz 0dBfs: <0.0005% @ 1kHz -10dBfs: <0.0004% @ 20kHz 0dBfs: <0.0007%
Linearity @ -90dBfs:	+/-0.5dB
Stopband rejection (>24kHz):	> 120dB
Signal to Noise Ratio, A-wtd:	< 113dB
Total correlated jitter:	< 130pS
Crosstalk @ 1kHz: Crosstalk @ 20kHz:	< -130dB < -114dB
Output impedance:	< 50 Ohms
Digital inputs:	Two - both with S/PDIF and Toslink
Digital input word widths supported:	16 - 24 bit
Digital input sampling frequencies supported:	32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz
Digital outputs:	S/PDIF and Toslink concurrently
Digital output word widths supported:	16, 20, 24 bit
Digital output sampling frequencies supported:	32kHz - 192kHz pass through (including 44.1kHz for CD) 48kHz, 96kHz, 192kHz upsampled
Audio output:	Single ended RCA/Phono and balanced XLR
Audio output up-sampling:	Fixed 24 bit, 384kHz
Dimensions (H x W x D):	115 x 430 x 360mm (4.5 x 16.9 x 14.7")
Weight:	8.5kg (18.7lbs)

# Technical specifications

For further product information, visit [www.cambridge-audio.com](http://www.cambridge-audio.com)



Azur 840E pre-amplifier	
Audio Inputs:	8 pairs gold plated RCA stereo phono inputs, or 6 RCA and 2 pairs XLR balanced inputs
Audio Outputs:	1 pair gold plated RCA stereo pre-outputs. 1 pair XLR balanced pre-outputs
Connections:	IR emitter input, RS232, Control Bus in/out, 12v trigger output / input / through 2 x Incognito type 2 A-BUS multi-room outputs, 1/4" headphone socket
Display:	Customisable LCD display with nameable inputs
Input Impedance:	Balanced 10k Ohm, line 68k Ohm
Frequency Response:	10Hz - 100kHz +/- 0.2dB
Signal to Noise Ratio unweighted:	>121dB >100dBu
THD (+ noise):	<0.0006% @ 1kHz <0.003% @ 20kHz
Max. Power Consumption:	36 Watts
Dimensions (W x D x H):	430 x 385 x 115mm (16.9 x 15.2 x 4.5")
Weight:	8.7kg (19.1lbs)

Azur 840W Class XD power amplifier	
Power Output:	200 Watts per channel into 8 Ohms 350 Watts per channel into 4 Ohms 500 Watts into 8 Ohms in bridged mono mode
Audio Inputs:	1 pair gold plated RCA stereo phono inputs 1 pair XLR balanced inputs
Audio Outputs:	1 pair gold plated RCA stereo phono outputs 1 pair XLR balanced outputs
Connections:	12v trigger in/out, Control Bus in/out, IR emitter in. A & B speaker premium gold plated binding posts
Damping factor:	>125 @ 1kHz
Frequency Response:	5Hz - 80kHz - 1dB
Signal to Noise Ratio (1W/80hm):	>90dB (unweighted)
THD (unweighted):	<0.001% 1kHz <0.005% 20Hz - 20kHz)
Power Consumption:	Max 2400W Active (no signal) <180W Standby <5W
Dimensions (H x W x D):	148 x 430 x 365mm (5.8 x 16.9 x 14.4")
Weight:	19.1kg (42.1 lbs)

Azur 840A (Version 2) Class XD amplifier	
Power Output:	120W RMS into 8 Ohms / 200W RMS into 4 Ohms
Input Impedance:	Input 1 (balanced) 20kOhm Inputs 2-7 20kOhm Tape input 20kOhm
THD (unweighted):	< 0.001% 1 kHz at 80% of rated power < 0.01% 20 Hz - 20 kHz at 80% of rated power
Frequency Response:	10 Hz - 50 kHz +/- 1 dB
Signal to Noise Ratio (1W/80hm):	> 93 dB
Power amp damping factor:	> 110 at 1 kHz
Power Consumption:	Max 800W Active (no signal) 70W Standby 7W
Bass:	Max bass boost/cut +/- 10 dB at 10 Hz
Treble:	Max treble boost/cut +/- 7.5 dB at 20 kHz
Dimensions (H x W x D):	115 x 430 x 385mm / (4.5 x 16.9 x 15.2")
Weight:	15.0kg (33lbs)



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