CAMBRIDGE AUDIO

AZUR 851

OUTSTANDING AUDIO PERFORMANCE

Cambridge Audio.
For People Who Listen.

Music lovers around the world are missing out. You're missing out.

Poor quality sound systems are everywhere, polluting our world with noise. We're forced to accept bad sound experiences as the norm, which means there are moments in your music, ideas from your favourite artists, that you've never felt in full. That's a crime.

Music is ever present. It shapes who we are. It inspires us, changes us, moves us. We define ourselves through our musical tastes. So why do we let it be demeaned and devalued? Don't we want to hear our music at its best?

We want you to hear your music at it's very best, as the artist intended it to be heard, with nothing added, nothing taken away. That's what we've always wanted because that's what music lovers like us deserve. It's why we are constantly experimenting, solving problems and creating new kit. It's why we've been doing what we do for the last 50 years. It's why we're always trying to make the listening experience better. Pure.

However you listen, whatever your budget, our goal is simple: Give you the best possible sound, at the fairest possible price.

AZUR 851 SERIES

Our award-winning Azur 851 series of hi-fi components are designed without compromise; they'll take your listening experience to new heights. Every component in the series has undergone thousands of hours of testing and tweaking. This is reference standard hi-fi.

Our Azur 851 series amplifiers are designed to be the heart of your system. You'll get incredible power balanced with precise control, and distortion levels that are barely measurable.

AZUR 851A
INTEGRATED CLASS XD AMPLIFIER

AZUR 851N
NETWORK STREAMER

AZUR 851C
UPSAMPLING DAC, CD PLAYER & PREAMPLIFIER

AZUR 851W
POWER AMPLIFIER

AZUR 851A

INTEGRATED CLASS XD AMPLIFIER

The Azur 851A possesses incredible power, finesse and astonishingly low distortion. In its design we assessed every component for sonic excellence and revised, reviewed and optimised the signal path for minimal distortion. Thousands of hours were spent testing and tweaking, the result is an amplifier we're incredibly proud of.

- Unique Class XD amplification – A true innovation in amplification gives incredible sound quality while remaining supremely efficient

- Big on power – Azur 851A has power in reserve to deliver outstanding dynamic range. Feel the impact of your music

- Immersive stereo separation – dual mono design means Azur 851A can present a beautiful stereo image, you can almost see the band

- All the Connections – with 8 RCA inputs and 2 balanced XLR connections, you can hook up practically any music source

- Beautiful black or silver finish – whichever you choose, you still get the all-metal construction for sonic protection

CLASS XD AMPLIFICATION

The Azur 851A uses our patented 2nd generation 'Class XD' amplification technology. Traditional Class A amps requires 'always-on' capacitors, which is enormously inefficient and generates excessive heat. Class AB was designed to offer a more efficient alternative but sacrificed some sound quality in the process. XD refines the AB approach to ensure any distortion is outside of the audible spectrum. The result is best-in-class audio quality, clean power and energy efficiency.

BIG ON POWER

Azur 851A's power comes from an enormous toroidal transformer. It's so big, it accounts for almost a third of the unit's weight. It's no surprise then that Azur 851A is able to deliver a huge 120 watts of power into 8 Ohms (Or 200 watts into 4 Ohms!). In simple terms, Azur 851A has the power to handle huge dynamic range with grace.

ALL METAL CONSTRUCTION

Azur 851A's all-metal construction with dampening ensures the premium components inside are well protected from external vibrations that can influence sonic performance. It's a nice bonus that it looks great and comes in a choice of either black or silver.

DUAL MONO

Azur 851A has completely separate left and right channels, meaning its truly a dual mono amplifier. This means it can offer a greater degree of stereo separation than certain competitors, resulting in a more vivid stereo image.

LET'S GET CONNECTED

Azur 851A has all your connectivity covered. 8x RCA connections are available for you to connect your music sources to. Alternatively, up to 2 of these sources can be connected via balanced XLR. There are also two RCA outputs allowing you to use the Azur 851A in preamplifier mode only.

INTEGRATED AMPLIFIER

If you're looking to take advantage of a more powerful amplifier, like the 200-watt Azur 851W, in conjunction with Azur 851A's leading pre-amplifier, you can do just that with the pre-amp out connection. With its own toroidal transformer, the Azur 851A's pre-amp is truly a class-leader on its own.

BALANCED VOLUME TOPOLOGY

New balanced volume topology gives ultra-fine control over volume, moving in 1dB steps, and ensures left and right channels are accurately balanced.

'For scale and power, not to mention build and style, the 851A is hard to beat.'

- WHAT HI-FI?

'A versatile and extraordinarily musical cornerstone... Earnestly recommended!'

- STEREOPHILE

AZUR 851N

UPSAMPLING NETWORK PLAYER WITH BUILT
IN DIGITAL TO ANALOGUE CONVERTER (DAC)

Offering award-winning digital and streaming performance – the Azur 851N is an outstanding network player. Its features include; 24-bit/384kHz upsampling from all sources, native 24-bit/192kHz playback, USB, digital audio inputs and streaming over WI-FI including UPnP and NAS drives, Tidal, Spotify Connect, Apple AirPlay, and DSD.

- Stream anything – thanks to our industry leading StreamMagic play over: Spotify Connect, Tidal, AirPlay, UPnP, Internet Radio and optional Bluetooth

- Extensive connectivity – optical, coaxial and USB Audio inputs means you can connect to a variety of sources. For outputs, RCA or balanced XLR options are available

- Upsampling DAC – Azur 851N plays practically any file type and supports up to 24-bit/192kHz. All audio is upsampled with our ATF2 technology to prevent jitter and ensure a clean signal

- Pre-amplifier – Azur 851N isn't just a network player, it's also a class-leading pre-amplifier

- Complete control – a dedicated smartphone app allows you to control playback remotely. A huge 4-inch screen means you can clearly see what's playing

Full technical specifications on **page 12**

ALL METAL CONSTRUCTION

Azur 851N's all-metal construction with dampening ensures the premium components inside are well protected from external vibrations that can influence sonic performance. It's a nice bonus that it looks great and comes in a choice of either black or silver.

PRODUCT OF THE YEAR.
THREE YEARS RUNNING.

For 3 years running, 851N has been award What Hi-Fi?'s product of the year award in the Streaming category.

WHAT HI★FI?
AWARDS 2016

PRODUCT OF THE YEAR
Best music streamer £1000-£2000
Cambridge Audio Azur 851N

WHAT HI★FI?
AWARDS 2017

PRODUCT OF THE YEAR
Best music streamer £1000-£1500
Cambridge Azur 851N

WHAT HI★FI?
AWARDS 2018

PRODUCT OF THE YEAR
Best music streamer £1000-£1500
Cambridge Audio Azur 851N

STREAMMAGIC

Azur 851N is built on our award-winning streaming platform, StreamMagic. We developed StreamMagic at our London HQ to support playback of multiple digital files and formats from a variety of sources. Enjoy gapless playback from a huge number of sources including Spotify Connect, Tidal, AirPlay, Internet Radio, NAS Drive/UPnP, optional Bluetooth (with BT100 adaptor) and much more.

EXTENSIVE COMPATIBILITY

You can experience your current music library on 851N without having to convert or replace files thanks to its extensive compatibility. 851N supports high-resolution files including ALAC, WAV, FLAC, AIFF, WMA, MP3, AAC, HE AAC, AAC+ and OGG Vorbis. USB audio input also enables streaming up to 24-bit/192kHz and supports DSD streams.

TIDAL   **Spotify**®   AirPlay   **Bluetooth**®

'Cambridge has done it again. A premium music streamer with the performance to match.'

'An accomplished network streamer, with amazing specs and build quality.'

BUILT IN DAC

The upsampled data passes through twin Analog Devices DACs (very high-end digital to analogue converters) which are implemented in a dual differential configuration meaning each channel has its own DAC. The result is lifelike stereo imaging where instruments can be heard in specific parts of your room with uncanny accuracy.

DIGITAL PREAMP

Not just a great network player, the Azur 851N is also an outstanding digital pre-amp that can be connected directly to a dedicated power amplifier, like the 851W. Keeping the signal digital to the last moment makes it less susceptible to analogue deterioration ensuring the best possible sound is achieved, even at very low volume levels.

851N NETWORK STREAMER + 851W POWER AMPLIFIER

NO MISSED CONNECTIONS

Digital source components such as TVs, smartphones, PCs or MACs can connect via optical, co-axial, AES/EBU and asynchronous USB Audio digital inputs. Music files in all the popular formats are supported, from MP3, through to FLAC/Apple Lossless, DSD64 and WAV 16-24 bit master files.

ADAPTIVE TIME FILTERING

No matter what digital files you play, they're first put through our 2nd generation Adaptive Time Filtering (ATF2) that upsamples everything to 24bit/384kHz. As a result, jitter – a type of unpleasant digital distortion common in digital audio and often caused by timing issues – is almost completely absent, ensuring no disruption to the enjoyment of your music.

OUTPUT OPTIONS

At the back of the Azur 851N, you'll find multiple connectivity options. Optical coaxial outputs provide digital connectivity and analogue is output either via RCA or balanced XLR.

MUSIC AT YOUR FINGERTIPS

Control the Azur 851N with the Cambridge Connect smartphone app, available on iOS and Android. Through the dedicated app you can access all your music libraries and control playback.

A BEAUTIFUL SCREEN FOR BEAUTIFUL ARTWORK

Put Azur 851N proudly on display. A gorgeous aluminium finish surrounds a 4-inch, full-colour display. Quickly see what's playing at a glance.

AZUR 851C

CD PLAYER, UPSAMPLING DAC & PREAMPLIFIER

Our finest CD player and DAC, the Azur 851C uses our extensive digital knowledge to become the cornerstone of your digital hub. No matter the source of your digital music, twin DACs in dual differential mode and 2nd generation Adaptive Time Filtering make the music sound as the original artist intended – extraordinary.

- State-of-the-art transport and servo – spin CDs with incredible accuracy and error correction for a second-to-none audio experience

- Upsampling DAC – Azur 851C plays practically any file type and supports up to 24-bit/192kHz. All audio is upsampled with our ATF2 technology to prevent jitter and ensure a clean signal

- Pre-amplifier – Azur 851C isn't just a CD player, it's also a class-leading pre-amplifier

- Digital Filters – chose between three options and find your ideal listening experience

- Flexibility by design – Azur 851C isn't just a CD player. It's a DAC and class-leading preamplifier, so it can quickly become the cornerstone of your digital music experience

Full technical specifications on **page 13**

BUILT FOR CD

CDs need to be spun at very precise speed – 480 RPM at the inner edge to 210 RPM at the outer edge – which is why we developed an audio-only transport built for accomplishing this one job with supreme precision. This transport is coupled with our S3 servo, which gives error-free data retrieval and jitter minimisation.

ADAPTIVE TIME FILTERING

No matter what digital files you play, they're first put through our 2nd generation Adaptive Time Filtering (ATF2) that upsamples everything to 24bit/384kHz. As a result, jitter – a type of unpleasant digital distortion common in digital audio and often caused by timing issues – is almost completely absent, ensuring no disruption to the enjoyment of your music.

ALL METAL CONSTRUCTION

Azur 851C's all-metal construction with dampening ensures the premium components inside are well protected from external vibrations that can influence sonic performance. It's a nice bonus that it looks great and comes in a choice of either black or silver.

BUILT IN DAC

The upsampled data passes through twin Analog Devices DACs (very high-end digital to analogue converters) which are implemented in a dual differential configuration meaning each channel has its own DAC. The result is lifelike stereo imaging where instruments can be heard in specific parts of your room with uncanny accuracy.

DIGITAL FILTERS

We built the Azur 851C with three selectable filters, linear, minimum and steep, this allows you to choose the type of sound that suits your ideal listening preferences.

DIGITAL FLEXIBILITY

The Azur 851C isn't just built for playback of CDs; we wanted to make the most of its ATF upsampling and superb DACs, so it's a complete digital hub which can connect to almost anything digital. It's got optical and co-axial digital in and outputs plus an asynchronous USB audio input. So you can connect up TVs, streamers, PCs, MACs and more, and everything will be upsampled to amazing hi-res quality.

PREAMPLIFIER BUILT-IN

The Azur 851C also has a digital volume stage built in and can be used as a pure pre-amplifier – just connect it straight into our 851W power amplifier or a pair of active speakers for further sonic benefits. Connect Azur 851C to other components either via the balanced XLR and RCA outputs.

'A massive amount of detail and terrific precision…'

- WHAT HI-FI?

'Well built, nicely finished, and a pleasure to use.'

- THE ABSOLUTE SOUND

AZUR 851W

200-WATT POWER AMPLIFIER DRIVERS

Delivering immense power and incredibly low distortion, the 851W power amplifier is perfectly matched to partner our network player; taking their pure signal and amplifying it with huge presence and authority.

- Unique Class XD amplification – A true innovation in amplification gives incredible sound quality while remaining supremely efficient

- Enormous power – Azur 851W has 200 watts of power that it delivers with style and grace

- Terrapin impedance buffering – designed to make pairing with preamplifiers and audio sources simple

- Flexible configurations – use in stereo, bi-amped or as a monoblock, depending on your system's needs

- Beautiful black or silver finish – whichever you choose, you still get the all-metal construction for sonic protection

THE POWER TO MOVE MOUNTAINS

With 200 watts of pure power, Azur 851W handles everything you through at it. But this isn't merely a celebration of brute strength: the breakthrough Class XD amplification at the heart of the unit offers beautiful musicality and astounding efficiency. This is power with style and grace.

ENORMOUS POWER

Azur 851W's power comes from its dual toroidal transformers. The massive primary transformer provides unrestricted power to the dual mono blocks without hum or buzz. The secondary transformer is smaller and used to power the rest of circuitry. The end result is 200 watts of distortion free power per channel (into 8 ohms).

ALL METAL CONSTRUCTION

Azur 851W's all-metal construction with dampening ensures the premium components inside are well protected from external vibrations that can influence sonic performance. It's a nice bonus that it looks great and comes in a choice of either black or silver.

CLASS XD AMPLIFICATION

Azur 851W uses our class-leading Class XD amplification for incredible sonic performance and efficiency. Rather than use Class A amplification wastes vast amounts of energy or a Class AB design, which is efficient but sonically limited, we developed Class XD from the ground up to be the best of both worlds.

FLEXIBLE CONFIGURATIONS

Azur 851W can be used in stereo, bi-amped or bridged mono configurations. In bridged mono mode into 8 Ohms the 851W is a stunning 500W monoblock amplifier. Into 4 Ohms, this figure increases to an incredible 800W.

TERRAPIN BUFFERING

Matching stereo components can be challenging. Not just because finding complimentary audio characteristics is an artform, but also because finding components with matching impedance can be time-consuming. Our Terrapin impedance buffering mitigates this challenge. It enables the Azur 851W to be paired with a huge variety of audio sources and pre-amplifiers without sacrificing musicality or audio performance.

CAP5 PROTECTION

Our proprietary CAP 5 protection system protects the Azur 851W, plus any connected equipment and speakers, ensuring ultimate reliability and peace of mind.

'A very substantial and capable amplifier.'

– HI-FI+

'This is an amplifier that demands attention, demands that you get comfortable in your chair, close your eyes and immerse yourself in the music.'

– ANDREWEVERARD.COM

AZUR 851N

DAC CONVERTERS	Twin Analog Devices AD1955 24-bit DACs
DIGITAL FILTER	2nd Generation ATF2 up-sampling to 24-bit/384kHz. Linear Phase, Minimum phase or Steep modes.
ANALOGUE FILTER	2-pole differential Bessel with DC servo (for both XLR and RCA outputs)
DIGITAL AUDIO INPUTS	1 x AES/EBU, 2 x S/PDIF coaxial and 2 x TOSLINK optical
USB AUDIO INPUT	USB Type B conforms to USB Audio profile 1.0 or 2.0 (user selectable)
ANALOGUE AUDIO OUTPUTS	Balanced XLR and unbalanced RCA analogue audio outputs
COMPATIBILITY	UPnP: Linear PCM 16-24 bit, 11.025-192kHz Local USB media:Linear PCM 16-24 bit, 11.025-192kHz USB Audio1.0: Linear PCM 16-24 bit, 44.1-96kHz USB Audio 2.0: Linear PCM 16-24 bit, 44.1-192kHz or DSD x64 (DSD also available over UPnP streaming), TOSLINK: 16-24 bit, 32-192kHz (using high quality TOSLINK optical cable) S/PDIF: Linear PCM 16-24 bit, 32-192kHz AES3/EBU: Linear PCM 16-24 bit, 32-192kHz BT100 Bluetooth receiver: A2DP plus aptX Internet radio: 16-24 bit, 11.025-192kHz
AUDIO FORMATS	ALAC, WAV, FLAC, AIFF, DSD (x64), WMA, MP3, AAC, HE AAC, AAC+, OGG Vorbis
ETHERNET	IEEE 802.3, 10 Base-T or 100 Base-T
WI-FI	IEEE 802.11 b/g or n (2.4GHz)
STANDBY POWER CONSUMPTION	<0.5W
COLOUR	Black or silver
DIMENSIONS (H x W x D)	115 x 430 x 360mm (4.5 x 16.9 x 14.7")
WEIGHT	8.1kg (17.9lbs)

AZUR 851C

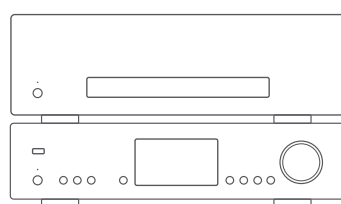|	
DAC CONVERTERS	Dual Analog Devices AD1955 24-bit DACs
DIGITAL FILTER	Analog Devices Black Fin ADSP-BF532 32 bit DSP performing 2nd Generation ATF2 upsampling to 24-bit/384kHz. Linear Phase, Minimum phase or Steep modes.
ANALOGUE FILTER	2 Pole Fully Differential Linear Phase Bessel filter
DIGITAL INPUT 1	S/PDIF 75 Ohms or TosLink optical
DIGITAL INPUT 2	S/PDIF 75 Ohms or TosLink optical
AES/EBU INPUT	XLR balanced 110 Ohms per phase
USB AUDIO INPUT	USB Type B conforming to Audio profile 1.0 or 2.0 (user selectable)
AUDIO OUTPUTS	Balanced XLR and unbalanced RCA analogue audio outputs
MAX POWER	40W
GAPLESS PLAYBACK?	Yes
COMPATIBILITY	USB 1.0 16-24 bit, 32-96kHz USB 2.0 16-24 bit, 32-192kHz TosLink 16-24 bit, 32-96kHz S/PDIF and AES/EBU 16-24 bits 32-192kHz CD playback is intrinsically limited to 16-bits 44.1kHz
THD (UNWEIGHTED) @ 1KHHZ 0DBFS	< 0.0004%
THD (UNWEIGHTED) @ 1KHZ -10DBF	< 0.0004%
THD (UNWEIGHTED) @ 20KHZ 0DBFS	< 0.0007%
IMD (19/20KHZ) 0DBFS	< 0.0002%
LINEARITY @ -90DBFS	+/- 0.2dB
LINEARITY @ -120DBF	+/- 0.4dB
STOP-BAND REJECTION (>24KHZ)	> 120dB
TOTAL CORRELATED JITTER	< 60pS for all digital inputs, CD playback and USB 2.0 < 180pS for USB 1.0
CROSSTALK @1KHZ	< -130dB
CROSSTALK @20 KHZ	< -114dB
OUTPUT IMPEDANCE	< 50 Ohms
0DB FS OUTPUT	2.2Vrms (2.2Vrms each phase for the balanced output)
IDLE CONSUMPTION	8W
STANDBY POWER CONSUMPTION	<0.5W
COLOUR	Black or silver
DIMENSIONS (H x W x D)	115 x 430 x 360mm (16.9 x 4.5 x 14.7")
WEIGHT	10.0Kg (22lbs)

AZUR 851A

POWER OUTPUT	120W RMS into 8 Ohms 200W RMS into 4 Ohms
THD (UNWEIGHTED)	< 0.001% 1 kHz at 80% of rated power 0.01% 20 Hz - 20 kHz at 80% of rated power
AUDIO INPUTS	2 x balanced XLR, 8 x RCA inputs
AUDIO OUTPUTS	Preamp output Record output
FREQUENCY RESPONSE	10 Hz - 50 kHz +/- 1 dB
S/N RATIO (REF 1W)	> 93 dB (ref 1W/8 Ohm)
INPUT IMPEDANCE	Inputs 1 and 2 (balanced) 20 kOhm, Inputs 1-7 unbalanced 20 kOhm Rec Input 20 kOhm
POWER AMP DAMPING FACTOR	> 110 at 1 kHz
MAX. POWER CONSUMPTION	800W
MIN. POWER CONSUMPTION	Active (no signal) 70W
STANDBY POWER CONSUMPTION	Standby <0.5W
TONE CONTROL	Shelving type Max bass boost/cut +/- 10 dB at 10 Hz Max treble boost/cut +/- 7.5 dB at 20 kHz
COLOUR	Black or silver
DIMENSIONS (H x W x D)	115 x 430 x 385mm (16.9 x 4.5 x 15.2")
WEIGHT	15.0Kg (33lbs)

AZUR 851W

POWER OUTPUT – STEREO/MONO	200W per channel into 8 Ohms 350W per channel into 4 Ohms
POWER OUTPUT – BRIDGED MONO	500W 8 Ohms 800W 4 Ohms
THD (UNWEIGHTED)	< 0.001% 1 kHz < 0.005% 20 Hz - 20 kHz
FREQUENCY RESPONSE	5Hz – 80kHz
S/N RATIO (REF 1W / 8 OHN)	>90dB (unweighted)
SENSITIVITY – STEREO OR MONO	1.5V rms unbalanced 1.5 + 1.5V rms balanced
SENSITIVITY – BRIDGED MONO	0.775V rms unbalanced 0.775V + 0.775V rms balanced
INPUT IMPEDANCES	Balanced input 38 kOhm Unbalanced input 68 kOhm
POWER AMP DAMPING FACTOR	> 110 at 1 kHz
STANDBY. POWER CONSUMPTION	Standby <0.5W
COLOUR	Black or silver
DIMENSIONS (H x W x D)	148 x 430 x 365mm (5.8 x 16.9 x 14.4")
WEIGHT	19.1kg (42.2lbs)

GREAT
BRITISH
SOUND

SINCE 1968

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