Air time

Boasting a welter of functions including aptX Bluetooth, the new Arcam irDAC-II is a hard act to follow, says **David Price**

Lest we forget, Arcam has past form on DACs. It wasn't playing catch up when legions of other digital-to-analogue converters were saturating the market a few years back. It didn't need to because it produced Britain's first standalone model. Back in the late eighties, it launched the Delta Black Box. It cost £299, had one input and ran up to a 16-bit/48kHz resolution – all possible from the best DAC chip of the day, the 16-bit, four-times oversampling Philips TDA1541. It sold like hot cakes, and brought the concept of an 'offboard digital converter' to the hi-fi masses.

Warp forward to four years ago, and the DAC revival began in earnest, so it was no surprise to see Arcam launch another. This time, it wasn't a black box, but rather a small, silver oblong – called the rDAC. I reviewed it as part of a Group Test (*HFC* 357) around that time and couldn't believe how good it was at the price. The little aluminium silver case sported the Wolfson WM8741 DAC chip – then one of the best of its day – and had a major 'first' inasmuch as it was the first 'affordable' DAC to offer asynchronous USB connectivity. This meant that the master clock of the Arcam clocked the computer's USB output, reducing jitter and conferring audiophile respectability on an interface that was once regarded with great contempt.

The headline news is a new headphone amplifier stage, new Bluetooth aptX input and the adoption of the ESS ES9016K2M Sabre DAC chip. This is interesting because like the Philips and Wolfson before it, this little slice of silicon is currently flavour of the month.

DETAILS

PRODUCT
Arcam irDAC-II

ORIGIN
UK/China

TYPE
DAC/preamplifier/headphone amp

WEIGHT
1.1kg

DIMENSIONS (WxHxD)
194 x 44 x 124mm

FEATURES
- 1x asynchronous USB; 2x coaxial; 2x optical; 1x Bluetooth aptX inputs
- 24-bit/192kHz PCM and DSD128 support
- ESS ES9016 Sabre DAC
- Fixed and variable analogue outputs

DISTRIBUTOR
Arcam

WEBSITE
arcam.co.uk

Indeed, if we're being honest, it's more like flavour of the middle of the decade, proving highly popular in a wide range of applications, alongside its 9018 bigger brother.

One clever thing the ESS Sabre DAC does is to play out DSD, and this functionality is duly present on the irDAC-II. As well as 24-bit/192kHz PCM, it handles DSD128. Indeed, the USB input itself runs up to 384kHz, with coaxial topping off at 192kHz and optical at 96kHz. This is plenty versatile enough for most people (DSD isn't exactly omnipresent yet), and the irDAC-II is bolstered by its myriad inputs – two each of coaxial and optical, plus USB. The headphone output stage is said to come from the company's flagship A49 integrated amplifier. Inside, the engineers have apparently left no passive component unturned in their quest to keep electrical noise down, reduce jitter and shorten the signal path.

The irDAC-II itself isn't, if we're being honest, quite as lovely a thing as the original rDAC. Rather like the new Mini has got better as a car, but also bigger, fatter and uglier, so the new Arcam looks like it's developed a taste for the good life and comfier clothes. That's perhaps a little unfair, because it's still a perfectly handsome thing – but it just isn't the small, minimalist piece of aesthetic perfection that the original rDAC was.

The volume control is interesting, because the irDAC-II has effectively grown up into a digital preamplifier. It's very versatile with a choice of fixed and variable line outs, and also that headphone socket. It also comes supplied with a small remote, making its transition from source component to preamp all the more smooth. Those lovely front lip-mounted input LEDs are retained, and change colour to denote the presence of a signal. All in all, this is now a fully featured heart of an audio system – just add a power amp and loudspeakers, plus a digital source of course…

Sound quality

Hooked up via its coaxial input to a decent mid-price CD spinner, and it's hard to get your head around the fact that you're listening to a relatively inexpensive front end. Via the fixed-line outputs, I wasn't expecting quite as a good a sound as I get – open, detailed and expressive, there is a lot to like. One of my favourite eighties pop albums, Scritti Politti's *Cupid And Psyche* finds itself on, and *Word Girl* proves a delight. This is a big, punchy-sounding production with a powerful bassline, and the irDAC-II really rather relishes it. I wouldn't say it has quite the strongest bottom end around, but it is still tight and animated. The whole song revolves around this and so is given a real boost by the expressive nature of the low frequencies. Things are propelled along further still by the crisp, well-defined midband which has plenty of fine detail and catches the attack transients of those classic eighties early digital synthesisers in all their glory. Instruments are located positively in the mix, and up top the Arcam proves well able to capture the sparkle of those vintage hi-hat sounds without ever striking a harsh note.

HOW IT COMPARES

Audiolab's £600 M-DAC (*HFC* 368) is probably the best at or near the Arcam's price. By getting progressively bigger and more sophisticated, the irDAC-II now finds itself having to slog it out with the big boys! The M-DAC uses the more expensive version of the ESS Sabre chip, the 9018, and is very well engineered. It's packed with features too, including an excellent display, but doesn't offer wireless aptX Bluetooth or DSD – which perhaps rather shows its age. The Audiolab has a fractionally wider, punchier and more powerful sound, but the Arcam is subtly warmer and doesn't seem quite so processed. The irDAC-II wins on style, but the M-DAC is more practical.

Staying with this era, but moving to some more considered rock music, Elvis Costello's *Shipbuilding* comes over with crystalline clarity. This poignant song recorded back in 1983 still sounds 'box fresh' today through the new irDAC. Costello's voice isn't an easy one to reproduce at the best of times, but this little box of tricks is not defeated by the challenge. Tonality isn't quite as warm as the rDAC of five or so years ago, but there's so much more information coming through; the oldie may be golden, but it's also opaque compared with the forensic precision of this latest incarnation. It has far more focus, and is livelier too with a really propulsive gait. There's definitely an ESS Sabre sound, but it's less mechanical than in some other implementations, and smoother too. This new DAC catches the power of the song well and frames it with almost architectural precision, showing off this excellent recording in a most favourable light.

It does a good job of reproducing a myriad of sources and file formats

Moving on to USB, and my MacBook Pro and copy of Audirvana are duly summoned. I plug in my trusty USB lead and begin running the gamut of my hi-res files. Overall it is a noticeable step up, bringing appreciable benefits over Compact Disc in terms of the scale and depth. Bass is fractionally stronger and certainly more dynamically expressive, while the midband seems to fall back rather further behind the plane of the loudspeakers than it has previously. Kate Bush's superb *Snowflake* (24/96) is wonderfully immersive and her voice smooth if a little lacking in warmth, while Alex De Grassi's *The Water Garden* via DSD is glass-clear and breathtakingly open. The current dearth of Direct Stream Digital music won't last forever, so this is a worthwhile feature to have.

Although aptX is the hi-fi variant of Bluetooth, it's no match for CD, let alone hi-res. But still the irDAC's implementation is excellent, proving stable and glitch-free. It sounds surprisingly good too, making it a very usable and convenient feature. Sonically there's a small penalty to pay in terms of focus and depth perspective, but it remains decently smooth and certainly keeps its innate musicality – that fundamental sense of fun is retained. Overall, an impressive performance across all inputs then.

Conclusion

With a wide range of inputs, preamp functionality, fine sound, distinctive yet pleasing styling, plus excellent build and finish, there is much to like about Arcam's irDAC-II. It's a fully rounded product that works in a fuss-free way and makes a good job of reproducing a myriad of sources and file formats. Highly recommended then, with the only caveat being that competition is strong. As ever, try before you buy if you can ●

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY ★★★★★
VALUE FOR MONEY ★★★★★
BUILD QUALITY ★★★★★
FEATURES ★★★★★

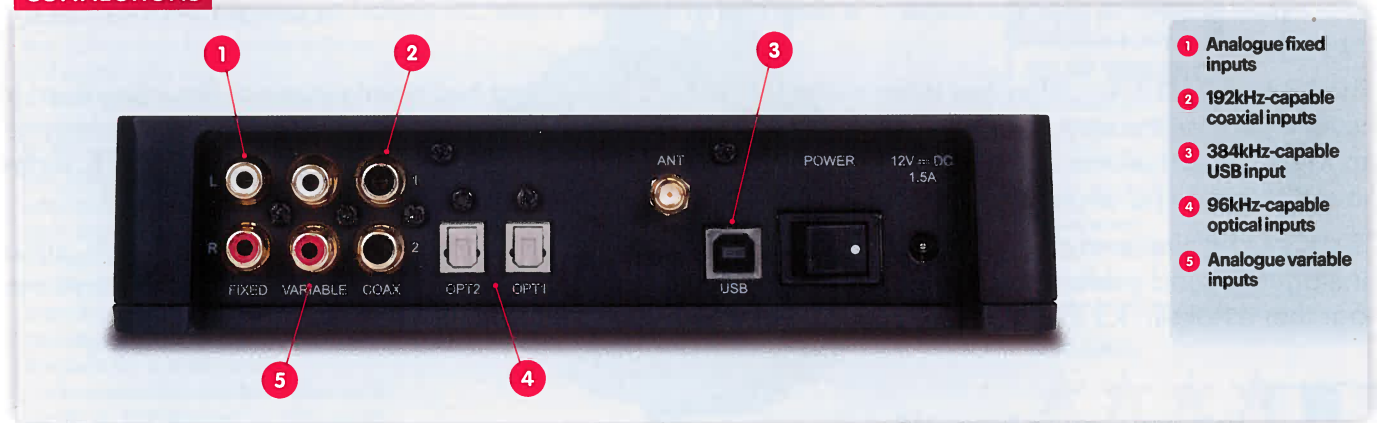
LIKE: Super build and finish; features; connectivity; sound

DISLIKE: Faces some stiff competition at this price point

WE SAY: Excellent value do-it-all DAC preamp

OVERALL ★★★★★

CONNECTIONS



1. Analogue fixed inputs
2. 192kHz-capable coaxial inputs
3. 384kHz-capable USB input
4. 96kHz-capable optical inputs
5. Analogue variable inputs