

Ideon Audio Absolute ε DAC, Stream and Time digital replay system

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There are several ways to make a truly high-end digital device. The first – and most common – is to ‘pimp out’ an off-the-shelf chipset, usually with a fancy output stage. The path less trodden is to ‘roll your own’ DAC, either as a ladder of resistors to act as a (usually 16-bit) conversion process or the less ‘steampunk’ way that means writing a LOT of code. But there is a third way... the Ideon way.

You see, Ideon’s chief engineer Vasilis Tounas is a bit of an ‘engineer’s engineer’ in digital circles. Where some of us might kick back a bit and listen to an album, watch a movie or read a book, Tounas spends his downtime flicking through pre-release digital design briefing papers from ESS. This is not because he has someone on the inside passing him secret papers, but because ESS value and use his contributions to circuit design and coding of their digital converters and filters. But, someone who knows the workings of a digital chip that intimately isn’t going to give out all his secrets and Tounas saves his special sauce for Ideon.

We are kind of going over old ground here, as this is the reason why the Ideon Audio Absolute ε DAC received an absolute (pun intended) blinder of a review in Issue 201 and became our Cost-No-Object DAC of the Year in 2021, but it’s worth reiterating.

But this review pulls together all of Ideon Audio’s flagship line, with the Absolute ε DAC meeting the Absolute Stream music server, and Absolute Time redriver, reclocker, and regenerator for USB and S/PDIF. Beyond the Absolute (which sounds like a bad prog-rock album title), Ideon Audio also makes an entry-level line (the Ayazi mk2 DAC and 3R Master Time Black Star USB redriver, reclocker, regenerator box) and an intermediary IQN DAC with optional preamp. There’s also a portable audio 3R USB device that acts as a fascinating proof of Ideon’s concepts.

The reason for introducing the whole family is to explain just how Ideon came about. George Ligerakis is an information-management expert who is also a major-league audiophile. Long before Ideon was Ideon, Ligerakis bought a low-cost DAC kit from Vasilis Tounas, which Ligerakis thought blew away his highly rated and considerably more expensive digital converter. Impressed by the kit, George asked Vasilis if he could make an even better DAC. The result was the first version of the Ayazi. It was clear this whole thing had some legs, and by 2016, Ideon Audio was formed to bring out the best in digital.

Return to the Absolute

Having made the best DAC Ideon could make, the company went and made a better one, and then improved on that until we get to the Absolute ε. To recap on that Issue 201 review, the Absolute ε is built around the ESS





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Sabre 9038PRO chip, but with 4,000 lines of Ideon-derived custom code to unlock the chip's potential. The Absolute ϵ DAC will decode any PCM signal up to 384kHz/32-bit and DSD up to DSD1024. It doesn't offer MQA decoding, but it is a Roon-certified endpoint. In addition, its USB input is also a custom design rather than an off-the-shelf solution, and the analogue stage features a unique quad-architecture that is fully balanced throughout. It does have both XLR and RCA outputs, and a classic collection of digital inputs including the aforementioned USB, coaxial S/PDIF and AES/EBU.

Clearly there is a missing input in the list and that's Ethernet. That's not an accident; the task of handling streamed music is – perhaps not altogether unsurprisingly – handled by the Absolute Stream. This is an extremely flexible that is the only streamer that plays the audio kernel of the file – live – without any processing, due to Ideon's unique approach of stripping all computer processes from the streamer to make it like an analogue product. So, the Stream can act as a UPnP streamer for locally stored music, online sources like Tidal, Qobuz and internet radio. It can be used as a Roon bridge. It has an Ethernet input and two re-clocked USB outputs (one with a 5V power rail voltage, one without), and you can also connect up to two USB external hard drives. There is optional internal storage up to 4TB, and it can support PCM files to 384kHz/32bit precision and up to 8xDSD. Once again, MQA is MIA.

The trio is completed with the Absolute Time, which is a USB reclocking device that takes the USB output from the Absolute Stream, reclocks it, and outputs the signal on USB to the DAC. It can also reclock S/PDIF with a sample rate reclocking ceiling of 192kHz; in this context, that ceiling is immaterial, but if you are considering using the Absolute Time and Absolute ϵ with an upsampling CD transport, the 192kHz ceiling is worth noting. That being

said, it's a function of S/PDIF rather than a conscious limitation on Ideon's part. The femto clock circuit is also on an upgradable board should there be changes to Absolute Time in the future (and we've just moved from bad prog-rock albums to mediocre sci-fi plots... I guess products with names like Absolute Time just lend themselves to a narrative that sounds pretentious).

Common ground

The Absolute line does share of common ground. Each one features a sophisticated linear, ultra low noise power supply and each is housed in a matching hewn-from-solid-billet aluminium chassis; The Time is not as deep or as tall as the DAC and isn't as deep as the Stream, but that still adds up to a 15kg clock. The Absolute Time can be ordered in a full-depth chassis for a more uniform look between the three products, but given the trio weigh 65kg all up and the full-size chassis will likely bring that figure to over 70kg, I'd exercise caution. Your spine and your equipment table will thank you for your reserve.

Surprisingly high mass aside, installation, care and feeding are straightforward. Plug the Absolute Stream into your network switch (please use something better than the cheapo one most people use... from personal experience) and if you have music on USB drives, plug them in too. Then connect the USB output of the Absolute Stream into the USB input of the Absolute Time and the USB output of the Absolute Time into the USB input of the Absolute ϵ DAC. You can try using the USB pathway with or without the 5V rail, but you'll just end up using the one without the voltage anyway so save yourself the trouble. Ideon provides its own web-based music management system, but you've just spent a lot of money on hardware... pony up for Roon and a Roon Core source. The Ideon app is fine, however.





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» The reason for the connection map is because it highlights one of the difficulties with lots of high-end digital devices that mercifully doesn't apply here; undue cable spaghetti. If you are using a top-end digital front end and wish to use it with appropriately top-end cables, that's a small fortune in wire. Sometimes... not so small; if you think of running a full set of, say, Nordost Odin 2 digital cables to connect up a full four-box dCS Vivaldi APEX rig, you are staring down the barrel of a six-figure sum to get all your digital ducks in a row. By way of contrast, the Absolute trio needs one Ethernet cable, two USB cables, three power cords, and your choice of balanced or single-ended interconnects. Yes, that can still get very 'spendy' at the extreme high-end, but it's still a considerable saving.

Staying with dCS for a moment, the Cambridge company often recommends using its digital sources direct into a power amplifier, but Ideon does not. There are pros (sounds more direct without a preamp) and cons (low volume levels get progressively dynamically flatter sounding due to bit-chopping) to both ways of connection, but my personal preference is to continue to use a preamp whenever possible as Ideon recommends. The large knob on the front of the Absolute ε is more than just a volume control; it selects source, controls the display and grants you access to the seven digital filter options Ideon provides. And you can drill a lot deeper too, tangling with the chip's dithering, on-board jitter-busting and de-emphasis options, all of which can be used to perfectly fine-tune your digital front end to both your digital needs and your analogue requirements. It can be perfectly set-up to work with a range of digital sources and blend well with the rest of your system.

Back in DAC

I'm trying not to go over old ground here, but the Ideon Absolute ε DAC to a very large extent defines the sound of the

system. Almost. The Ideon's subtle textural approach to music replay is equally met by a big-boned approach that is perhaps an ideal balance of bonuses. It most definitely doesn't sound like digital audio in the conventional sense; it's not the 'clean and crisp' presentation that people often associate with good digital. But neither is it soft-sounding or a 'vinyl emulator'. It just sounds like music, really well played, effortlessly dynamic and powerful bass. That much held from the first time I experienced the Ideon Absolute ε DAC.

But that sound was filtered through what was feeding that DAC, and moving over to the full Absolute trio took that superb digital performance and moved it up several notches. The Absolute Stream and Absolute Clock combined feed the Absolute ε an extremely fast and expressive sound, with the kind of leading-edge impact and pace normally associated with either the live event or extremely good vinyl. Put simply, the Ideon trio make a lot of top-end digital sound 'processed'.

Here's what I mean: take 'Animales hambrientos' by Bebe [*Cambio De Piel*, Warner Spain]. This track is extremely atmospheric but has some cleverly generated synth percussion sounds to the far sides of the soundstage, which are then joined by a subtle bit of acoustic resonator guitar, all underpinned by a bass line that pulsates in both tempo and intensity. It rarely sounds 'bad' but many systems seem to paint this as a legato tapestry between the loudspeakers. In fact, the speed of the percussion should add a little bit of menace to the sound, which it does perfectly here. It's one of the first times I have heard that through a streamed source, especially as I tried it through Tidal, rather than a locally ripped and stored disc.

It's also exceptionally dynamic; 'Laterus' by Tool (from the album of the same name) had all the explosive power you expect from the band, and more dynamic range than I've normally experienced from streaming. I realised that, if anything, I had understated the performance of the DAC. »



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» Nothing was out of place, and if you had said this was master tape or a spinning SACD, I wouldn't have been at all surprised by the sound quality of the Absolute trio. The DAC remains naturalistic in presentation with a bass that's deep, powerful and satisfying. Recordings I know very well that delve into the bottom end – such as the obligatory 'Chameleon' by Trentemøller [*The Last Resort*, Poker Flat] delved into new places, and not simply new depths. There are things – scary, deep bass things – on that track that I heard for the first time and given I've played that track under critical-listening conditions so many times, that's impressive.

Or, perhaps more accurately, not impressive at all. It's how music is supposed to sound when played through good audio; freed from the constraints of circuit and cone. The striking transparency of the sound, in terms of detail, instrument and voice articulation, soundstaging and that sense of being in the studio or concert hall with the musicians that you get from the Ideon Audio Absolute trio is something to savour. It doesn't come along too often.

Almost a character change

I found the presentation of the complete Ideon stack to be quite different in character to that of the Absolute € on its own. Not completely different, but what I felt was 'presence' in the first sitting was more 'direct' and energetic. It still covered all the ground from audiophile approved sounds to badly-recorded 1970s soul. But it was more 'up-front' than before. It was also a pleasing directness; more 'to the point' than 'in yer face', to the point where it made a lot of what I would consider effortless sounding replay systems to be too soft and saccharine sounding. Absolute Stream is a revelation.

The Ideon Audio Absolute €, Absolute Stream and Absolute Time reset my value system regarding streaming, and especially streaming from sources like Tidal. I admit to

some bias against these formats in the past because of the variable sound quality, but Ideon's Absolute trio bring out the very best they can deliver. I think this is quite simply one of the best complete digital sources you can buy today. It sets the standard! +

Technical specifications

Absolute € DAC

Inputs USB, AES/EBU, coaxial

Formats supported 44.1kHz to 384kHz PCM up to 32 bits.
Native DSD up to DSD 1024 (up to 8x DSD)

Outputs One pair XLR and RCA, fixed and variable selectable

Dimensions (WxHxD) 49x11x35cm

Weight 28kg

Price €44,000

Absolute Stream streamer

Integral storage Up to 4TB

External storage Two USB ports for connecting external HDs.
NAS connection through LAN port.

Dimensions (WxHxD) 49x11x35cm

Weight 22kg

Price €19,900

Absolute Time clock

Input USB and S/PDIF

Output USB and S/PDIF

Additional 12.8MHz Master clock on BNC jack

Dimensions (WxHxD) 47x11x17.5cm

Weight 15kg

Price €9,500

Manufacturer Ideon Audio  ideonaudio.com

US distributor Audioskies  audioskies.com