

# Relentless Primeval

Of course we know that D/A converters matters, but rarely or never as much as Ideons massive statement. **Text** Mats Meyer-Lie **Photo** H&M



**Build quality and finish**  
**Overall sound quality...**  
**... the staggering bass performance specifically...**



**... and a price tag to match**

“Probably the best beer in the world!” has long since been the tongue-in-cheek slogan for beer maker Carlsberg. As for the Greek digital specialist Ideon, no such false humbleness is in place. Not when it comes to **Absolute €**, which they state as the best sounding DAC in the world. It constitutes a staggering, almost provocative jump from the brands normally so ascetic and down-to-earth products, like the little USB clock 3R USB Renaissance for about 350 dollars, or the DAC Ayazi around 3.000 dollars. The latter was the first product of the company, that soon earned cult status among enthusiasts after it’s arrival in 2016.

With its bone breaking weight and just as cracking price tag, the Ideon converter is firmly placed in the highest spheres of digital audio technology. Nothing has been left to chance. Nor electrically or mechanically, and to make sure the electronics get the best possible conditions, the 27 kg (!) heavy box is milled out of a massive lump of aluminium. It renders statute and damping, but also carefully shielded sections, and Ideon firmly believes this is just as important as the electronic circuits.

As for the circuits... A one-eyed hunt for strict digital performance, have left many of us believing what is around the DAC-chip to be equally, if not more important

for the sound. Indeed, some engineers mean that the DAC-chip itself only counts for about 20% of the overall sound quality, while things like the power supply, receiving circuitry, voltage conversion and more, are far more important. In the case of Ideon, this led them to go for what many still mean is the best converter chip in the world: ESS’s 8-channel 768 kHz/32-bits chip.

**But just about** there, all similarities to the competitors ends, because Ideon not only have an own solution to connect the channels for a balanced output. No, the Ideon construction is the culmination of a three year long project, where the company left all concerns behind and went all-in, not least with the power supply. Or rather power supplies, because here we find three transformers, of which two are very oversized and specially developed toroids: one for the digital side and one for the analogue.

They feed a staggering bank of 45 small, smoothing capacitors of 1.000 micro farads and a further 80 carefully chosen audio capacitors, most of them with silk fiber isolation. In other words, they rather go for many, small and hyper fast capacitors instead of just a few large, but slow ones. They also use an active rectifying circuit, developed in-house, that totally eliminates noise and voltage spikes.

But here’s also 17 (!) extremely linear and low noise voltage regulators with massive bypass filtering for best possible transient characteristics. An often overlooked bottleneck for D/A converters are the receiving circuits. At Ideon they are partly self-developed, where for instance the input signal is filtered in three steps to minimize jitter noise. For the same reason, they use no less than three of the best FS oscillators around (femto second) for re-clocking and separate clocks for USB and S/PDIF inputs.

Another crucial area, where the company have put great effort, is the current to voltage conversion, *after* the DAC chip. Out of the chip, namely, comes a current signal that has to be transferred to a corresponding voltage swing. Many would consider this so called I/V stage to have a more profound effect on the end result than the DAC chip itself, and in the case of Ideon, a lot of effort has also gone into this. The following analogue section is minimalistic, but fully balanced with meticulously selected, discrete components and a totally symmetric feed into the four signal sides.

**In other words:** with Absolute € Ideon wanted to give the digital chip the best possible and over dimensioned environment to work within, and at the same time peel away everything not necessary. For that rea-

# Power

3 snabba

- Box milled out of aluminium
- 3 transformers
- Many small capacitors



A DAC with relatively few inputs, but everything out of the utmost class. The re-clocking unit (top) has FS-clocks.

We could go on and on about this this colorful and majestic

converter and how it sounded more organically skin-deep and analogue fluid than anything we heard. But where other well-made analogue sounding converters make you think of soft, slightly rounded vinyl reproduction, Absolute E reminded of a large, 2-track master tape recorder with 76 centimeters per second speed.

Think of a relentless freight train and you get the parallel. But what about the re-clocking unit? We tried it dutifully back and forth before returning the equipment. And for sure, the sound got even better, with (even) more blackness and space, but when the converter sounded as good as it did on its own, it felt a bit premium rate. But as always: if we had tried it for a longer period, we probably couldn't have lived without it, just as little as the breathtaking Absolute E...

Like so often in these stratospheric price ranges, a warning must be issued: listening to the Absolute E is very much at your own risk!

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son, this converter has but a few functions and only three inputs: coaxial, USB and AES/EBU and two pairs of outputs – RCA and XLR. That's it!

In very much the same ascetic spirit, there's only one control knob, with multi functionality that soon enough was very easy to use. With the knob you choose which input to use and which one of the converters seven self-programmed PCM filters or four DSD filters you want you use, but here you can also manage things like de-emphasis. If you want, the converter can be set to variable output and through the XLR connections it gives impressive 9 volts – enough to drive long cables or difficult power amplifiers.

Absolute E may be simple and ascetic, but its built like a safe! Very much the same thing is true for the smaller Absolute Time – a separate 15 kg's clock unit for S/PDIF and USB signals, that seemed a bit over the top, considering what was already inside the converter.

If there's one thing companies like ASR, MSB or for that matter Naim have taught us over the years, is that you can never have a big enough power supply. And with the low voltage at hand with D to A circuitry, this is even more important, not to say crucial. Ideon knows this, having taken a standard chip (sort of...) and giving it For-



## Ideon Absolute E



**Price** 423.995 kr

**Funcionality** 32-bits D/A-omvandlare

**Resolution** 32 bitar/384 kHz PCM alt. 4xDSD

**Digital in** S/PDIF (koax), USB, AES/EBU

**Digital out** NeJ

**Analogue out** 1 par RCA, 1 par XLR

**Remote control** Yes

**Headphone jack** No

**Size** (WxHxD) 49x12x35 cm

**Weight** 27 kg

## Ideon Absolute Time

**Price** 80.995 kr

**Funcionality** Digital re-clocking

**Clocking** 12,8 MHz

**Digital in** USB, S/PDIF (koax)

**Digital out** USB hi-speed, S/PDIF

**Size** (WxHxD) 49x12x18 cm

**Weight** 15 kg

**Info** [metawave.se](http://metawave.se), [ideonaudio.com](http://ideonaudio.com)

## Peripheral equipment

**Digital source** PC/dCS Rossini APEX, AVM CS8.3

**Pre-amplifier** Hegel H30

**Amplifiers** Gryphon Diablo 300, Burmester 956 Mk.2

**Speakers** Perlisten S7t, QLN Prestige 3, B&W PM1

**Cables** Jorma Statement, Transparent Ultra