

# Ideon Audio $\Omega$ N+ DAC and preamp

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**T**he Ideon Audio Absolute range of products is an unparalleled collection of digital audio products (tested in Issue 215) that can stand toe-to-toe with the best of them. The Absolute DAC (itself tested in issue 201) has recently received a 'Meta' upgrade and will be the subject

of a review later. But, as the name suggests, 'Absolute' has a large price tag. For those who can't quite reach to Absolute levels, there's  $\Omega$ N. The  $\Omega$ N DAC (with optional preamp, which is known as the ' $\Omega$ N+') shares much with the Absolute model at a considerably more attainable level.

Like its bigger brother, the  $\Omega$ N DAC uses an ESS chip (the ES9028A PRO converter chip in this case, the ES9038 PRO in the Absolute ), with dedicated software written in-house at Ideon Audio's Athens design studio. This software is firmware-upgradable should the need arise. Another ESS chip from the PRO family is used for the USB audio input module, which is again subject to a lot of in-house custom coding. Both Ideon DACs process PCM signals up to 32 bit/384 kHz, plus DSD64 to DSD512 natively.

## No bristling

The  $\Omega$ N does not bristle with digital inputs. It has USB Type B, and coaxial S/PDIF via BNC or RCA. The inputs are galvanically insulated, however. It outputs to XLR and RCA, and the topology of the circuit is fully balanced. The  $\Omega$ N+ adds two analogue inputs (XLR and RCA), with one stereo set of XLR and RCA outputs.

That Ideon Audio can so change the  $\Omega$ N from a high-performance DAC to a high-performance DAC-meets-preamp is a heavy clue about the internal architecture of the product. It uses a discrete, low-noise, low-interference linear power supply, and not switch-mode. The toroidal transformer is flanked by lots of high quality capacitors, and the presence of that transformer is made abundantly clear when you try to lift the  $\Omega$ N+ out of its flight case.

Ideon implemented a 'true zero' signal path on  $\Omega$ N+ preamp stage. The tracks connecting the internal DAC chip to the preamp stage are less than half a millimetre apart on the main board. This short signal path minimises noise and harmonic distortion while maximising transparency and dynamic range. >>





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» The IQN+ also features a digitally (software) controlled analogue attenuator. Once again, this helps to reduce noise and distortion while increasing overall accuracy. Rather than taking the more commonplace ‘bit chopping’ approach to digital attenuation, Ideon designed the preamp stage as a separate device, with the highest-grade components and a refreshing absence of compromises.

Ideon Audio does not compromise component quality elsewhere, either. The IQN and IQN+ use the same high precision femto clocks as their big brother and give each a power supply, which is claimed to guarantee extremely low jitter. Two of these clocks sit on the USB board (one for multiples of 44.1kHz sampling frequency and one for multiples of 48 kHz) and another on the actual converter board.

Even before the digital stream is tied to that clock, that if it passes through USB, the signal is fed through the company’s proprietary three-stage noise-busting circuit, which is – yet again – a technology drawn down from the Absolute . The datastream is fed through that HyperStream eight-channel digital architecture, into Ideon’s own capacitorless output stage... and it all seems remarkably familiar to anyone who has seen the Absolute design.

It invites a question; so much has trickled down from the top line, what remains to justify the big hitter DAC? The chonky Absolute has a larger multistage power supply that dwarves that of the IQN, it runs a more selected range of chips and components and that gives a still greater signal-to-noise ratio, and it’s even more tank-like in build!

Having heard both (albeit with some time between them and not the latest ‘Meta’ version of the Absolute ), I can say with some certainty that you do get what you pay for in the bigger DAC, but the IQN comes extremely close in outright performance terms. What’s more, unless you are playing at the absolute (pun intended) pinnacle of audio performance, the IQN is more than good enough.

### Bass - now with added grip

What they share is an incredibly bold, powerful and organically ‘grippy’ bass. The IQN grabs hold of your speaker cones like a happy terrier and won’t let go of them until it’s satisfied with a spot of Rammstein or Infected Mushroom. That stupid smile breaks out across your face at that moment as you realise just how much precision the Ideon Audio is putting into that bass, and just how rewarding that sounds.

For non-bassheads, this also has a boon. It underpins the music in a way that gives instant solidity and authority to a piece of music. The final movement of Mahler’s Eighth Symphony [Solti, Decca] is delivered with such force, you start to wonder if the music should come with minimum safe distance recommendations. Hell, the DAC unleashes such a powerful bass energy into your system, you could get a suntan from Pablo Cazals playing a few Bach Cello suites [Archiv]. Listen to the title track to *Night Train* by Oscar Peterson [Verve] or, better yet, ‘Straight, No Chaser’ from *Genius of Modern Music Vol 2* by Thelonious Monk [Blue Note]. In the former case, Peterson might play very laid back, but those vast hands of his were working that





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» piano surprisingly hard. And Monk, well... he was just 20 years ahead of everyone and remains so today, but his power and control over the instrument just shines here.

Good bass alone does not a DAC make. Fortunately, the rest of the performance is built on that solid foundation and is a joy to sit in front of. The level of detail and precision to that sound is only matched by its sheer musicality, very much in line with the IQN's bigger brother's handling of music. Play something small, lithe and acoustic, or big, syrupy and electronic and it just extracts the best from the performance, adding none of its own character or influence along the way. I went from Anna B Savage [*in*|FLUX, City Slang] to The Orb [*UForb*, Big Life] via everything from Albinoni to ZZ Top and it just brings out those little details (like finger squeaks on nylon-stringed guitars) without losing sight of the intent of the musicians.

Few DACs in the field are equally comfortable with expansive soundstaging and a orderly sense of rhythm. It's clearly a mission statement of Ideon Audio because the IQN nails both extremely well. I think this is the balance point; as other DACs in its class tip one way or other, even slightly.

We went with the DAC with the optional preamplifier. Mixing two things can either produce great things (like the guy who saw a steak and said, "I know what this needs... lobsters!") or terrible things (like the guy who saw a steak and said, "I know what this needs... Nutella!"). Adding a preamp section to a DAC has typically delivered 'variable' results. The skills required to make a good DAC differ from those that produce a great preamp. The IQN+ is one of the exceptions, and the preamp is more than just some afterthought or a convenient way to cut down on some shelf space. The IQN+ preamp stage perfectly matches the DAC, with that outstanding bass presentation, authoritative dynamic range and superb detail shining through. It also

has excellent soundstaging properties. It's not the most feature-packed or input-laden preamp on the market (with just two line XLR/RCA inputs and one XLR/RCA pair of preamp outputs alongside the DAC outputs), but in sonic terms, it's no slouch.

### More inputs?

Shortcomings are very thin on the ground. That rotary control knob takes some getting used to. The RCA, BNC, and USB digital inputs should be joined by AES/EBU and other connections at this price. Some might also expect a clock input on a DAC at this level. And that's about it.

The Ideon Audio IQN DAC (and IQN+ with preamplifier) are a welcome addition for those after some proper high-end performance without the Absolute costs. Unless you are in the market for a pinnacle digital statement piece, the IQN really stands out among its rivals. That bass is so intrinsically 'right' that it single-handedly justifies the price of admission, in my opinion. If you set aside the sleek advertising and fancy front panels of some of the better-known big hitters and instead concentrate on what sounds fantastic, the Ideon Audio IQN DAC is the one to beat. +

### Technical specifications

**Type:** DAC with optional preamplifier stage

**Digital inputs:** 1x RCA S/PDIF, 1x BNC S/PDIF, 1x USB Type B

**Analogue inputs (IQN+ only)** 2x RCA stereo line level input, 2x XLR line level inputs

**Supported formats:** 44.1kHz-384kHz PCM, up to 32 bits. Native DSD up to 8x DSD

**THD (A-weighted, 20Hz-20kHz, DAC section):** <110dB

**Channel Separation (IQN, IQN+):** >130dB

**Dynamic Range:** 132dB (IQN), 121dB (IQN+ line inputs)

**Finish:** Black, Silver

**Dimensions (WxHxD):** 46x8x30cm

**Weight:** 13kg

**Price:** IQN £16,950, \$17,900, €16,900

IQN+ £19,950, \$22,000, €19,900

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**Manufacturer** Ideon Audio

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