



ABOUT US

Ideon Audio is the brainchild of an audiophile music lovers team including an experienced audio engineer, who believed (and we still do) that people should have the chance to purchase high-performance digital reproduction devices without having to invest tens of thousands. The initial idea was to build what was up until then financially unattainable to many people.

The founding objective was simple: to design and manufacture digital audio devices satisfying two fundamental criteria:

a) to create an enjoyable and true audiophile sound identity: dynamic contrast and fast transients, wide bandwidth with an abundance of low-level detail and
b) to make it affordable, so that most people can have access to hi-end audio sound reproduction.

Our approach is to connect the listener with the experience of his or her favorite music. We use state-of-the-art technology, our experience as audiophiles, our shared passion for music and our fair share of hard work, to develop products which create excitement and inspire emotions to the listener: i.e. to turn sound into a total musical experience.

It took us a long time to technically finalize and implement our design philosophy. It is clearly expressed through our first device, the Ayazi DAC in early 2016. The Ayazi was highly praised by both users and reviewers and was considered a true shake up for the audio industry, offering tremendous sound at an affordable price.

Soon after, we researched heavily into improving computer sourced music reproduction. We also built further upon the Ayazi concept and with the old vision to build high performance accessible devices, we now have four Ideon Audio offerings:

- The **Ayazi DAC** – the entry level reference DAC. Hi-performance audio at an affordable price.
- The **3R USB Renaissance** – the USB re-clocking, regenerating, re-driving device, a worldwide hit.
- The **Ayazi mk2 DAC** – an Ayazi on steroids. Also, a new creation.
- The **Ideon Audio Absolute** – our latest DAC. Superlative sound beyond expectations and imagination.



The 3R™ USB Renaissance - connected between the digital output (host) and the DAC - dramatically improves the sound from digital audio computer files, music streaming services (like Spotify, iTunes, Tidal, etc.), even from low-res youtube playbacks!

It achieves excellent sound performance by uncovering hidden detail, enhancing dynamics, re-clocking the signal using ultra-low jitter oscillators and minimizing transmission losses. It effectively "upgrades" the sound: more detail, better bass, wider frequency range and dramatically better coherency overall.

“...gives a hi-end flavor to the sound of the usual streaming services...”

Philippe Wattel
Author
musichi suite audio player

There is a wealth of musical content readily available, mostly offered online in mediocre resolution. Thanks to the 3R sound transformation we now can enjoy our favorite music as it should sound!



THE 3 Rs:

- highly improves signal transmission from the USB cable (USB rail) through a cutting edge **re-drive** chip.
- replaces and **regenerates** the USB signal utilizing a high quality low noise power supply.
- **re-clocks** the USB signal utilizing low-jitter oscillators.

THE RESULT IS EUPHORIC! The 3R provides a perfectly perceptible sonic upgrade, offering high-end features in any system, with analytical, yet relaxing

musical sound, very big soundstage and extended low and high frequencies. With 3R you «dig in» the music, retracting information unnoticed earlier. Bass comes out massive, extended and highly controlled, while high frequencies are more detailed, airy and considerably extended.

absolute

High Resolution DSD, DXD DAC



KEY FEATURES

- Balanced operation, balanced and single ended outputs
- Ideon USB and S/PDIF inputs
- Ideon's modular, quad channel (balanced) analogue output stage
- Extreme Ideon linear power supply configuration; seven (7) local power supplies and dual, exceptionally large main power supplies. Selected audiophile components throughout
- Two main transformers, custom hand-made for audio applications
- Ideon Audio proprietary internal AC filter circuit takes care of incoming power filtering
- ESS ES9038PRO 32-bit 8 channel, Hyperstream Dac
- Industry's highest dynamic range (DNR), up to 140dB
- Three ultra-low jitter clocks
- Ideon Audio on-board re-clocking and USB signal regeneration & re-driving circuit

TECHNICAL SPECIFICATIONS

General	
Dimensions (W x H x D)	423 x 98 x 320 mm
Power Supply	AC 110-120 V ~ / 220-240 V ~ 50/60 Hz
Power Consumption	30 W (operation), 0.5 W (standby)
Operating Temperature	41°F - 95°F, 5°C - 35°C
Operating Humidity	15% - 75% No condensation

“ Great chefs combine selected ingredients to create culinary masterpieces; so did we, at Ideon Audio, set out to create our own sonic masterpiece, selecting and combining the latest electronics into a device that transforms digital signals into a superlative musical experience.

Ideon Audio, The Absolute; superlative DAC

At Ideon Audio we undertook the task of reaching the holy grail of digital sound reproduction... And to propose a device so highly performant, it will transform the information contained in source files into the absolute plausibility of live music, much as the best reel-to-reel master tapes and the best analogue turntables can do.

The Ideon Audio Absolute DAC is this device. The sonic end-result is beyond what any of us and any of our fans ever imagined is possible.

The sound is vast, superlatively confident; the sense of space and dynamic contrast are beyond imagination, reaching a superb sonic experience.

The Ideon Audio, Absolute DAC comes at a price; overall however, we feel that we have now reached and possibly surpassed the sonic merits of the outlandishly priced, top performing DACs at the top end of the audio constellation!

USB Audio Input (USB B Type)

Input Format	Stereo PCM, Stereo DSD (DoP v1.1)
PCM Sampling Frequencies	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz
PCM Word Length	16-bit, 24-bit, 32-bit
DSD Sampling Frequencies	2.8224 MHz (DSD64), 5.6448 MHz (DSD128)

Coaxial Digital Audio Inputs

Input Format	Stereo PCM, Stereo DSD (DoP v1.1 or native)
Sampling Frequencies	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
Word Length	16-bit, 24-bit
DSD Sampling Frequencies	2.8224 MHz (DSD64)

DAC Performance Specifications

	XLR Output	RCA Output
Output Level	4.5 Vrms	2.3 Vrms
Frequency Response	20 Hz - 160 kHz (+0/-2.4 dB)	20 Hz - 20 kHz (+0/-0.04 dB)
THD+N at 1 kHz (A Weight, 20 Hz- 20 kHz)	< -120 dB	< -120 dB
Channel Separation	> 130 dB	> 130 dB
Signal-to-Noise Ratio (A Weight, 20 Hz- 20 kHz)	> 130 dB	> 130 dB
Dynamic Range	(1 kHz -70 dBFS, A Weight, 20 Hz- 20 kHz)	



ayazi

384 kHz DXD high-resolution DAC

The affordable reference.

The Ayazi DAC was designed and fine-tuned specifically to reveal the musical magic encoded in the numbers, that are stored within digital medium.

Sound reproduction: exceptionally wide dynamic range, ultra-low distortion and low noise, accurate sound stage, and musical congruity. And we wanted it to be user-friendly and affordable!

The Ayazi DAC offers support for up to 24-bit/384kHz audio via USB and 24-bit/192kHz over S/PDIF. DSD64 and DSD128 playback is supported on USB (all via on-the-fly software conversion to 352.8/24).

INPUTS: For the Ayazi S/PDIF input we settled on a low-jitter re-clocking controller from Wolfson, which offered us the best sound coupled with convenience. The USB input is full class-2 with our proprietary electrostatic protection, effectively shielding the system from electrostatic discharge.

CONVERSION: Unlike many other sigma-delta implementations, the converters we selected for the Ayazi DAC incorporate patented time-domain jitter eliminator technology. This helps to deliver music free from clock jitter common in digital audio systems.

CLOCK: To further refine the Ayazi's sonic performance, we selected Crystek's CCHD-957 HCMOS oscillator. This component sports -100dB/Hz close-in phase noise and a noise-floor of -169dB. It matched our circuit design perfectly. Not surprisingly, the oscillator was designed for audio to begin with.

THE POWER SUPPLY: It took a very long time to refine and tune the Ayazi power supply. The aim: to provide more than adequate power and importantly, maintain a very low noise threshold, as well.

Sound reproduction: exceptionally wide dynamic range, ultra-low distortion and low noise, accurate sound stage and musical congruity.

KEY FEATURES

- Coax and USB digital inputs, switchable from the front panel
- Class 2 USB input with electrostatic protection
- Support for up to 32-bit/384kHz DXD audio via USB and up to 24-bit/192kHz via coaxial
- DSD64 and DSD128 playback support on USB (via on-the-fly software conversion to 352.8/24)
- Time domain jitter elimination technology DAC chip
- Low jitter, re-clocking S/PDIF input
- Dedicated high speed asynchronous dual clock audio USB processor
- New clocking architecture femto clock. Clocking architecture pushes jitter and noise floor below perceptible levels in our circuit
- In house designed ultra-low noise power supply, custom-made transformer
- High capacity main DC filter, selected audiophile series capacitors

TECHNICAL SPECIFICATIONS

OUTPUT FULL-SCALE	2.0V RMS
FREQ. RESPONSE	10Hz-25kHz (+/- 0.5dB)
SNR	(DC to 20kHz) >112dB
THD+N	(1kHz FS 96 kS/s) <0.002%
CROSSTALK	-110dB
USB INPUT	Transfer mode: Asynchronous (dual clock)
	Device class: Type 2 or above
	Bit depth: 32 bit
SPDIF / COAXIAL INPUT	Sampling rates: 44.1, 48, 88.2, 96, 176.4, 192, 352.8, 384 kHz
	Bit depth: 24 bit
OUTPUT	Stereo unbalanced impedance: 250 Ω
DIMENSIONS	29cm X 17cm X 8cm



384 kHz DXD high-resolution DAC

ayazi mk2

The Ayazi mk2. An Ayazi on “steroids”.

Ayazi mk2 has all the features and the musical character that made Ayazi so popular, plus some serious audiophile tweaks that take the overall performance of the DAC, to an even higher level.

The result is an enhanced Ayazi with sound to match.

INPUTS: For the Ayazi S/PDIF input we settled on a low-jitter re-clocking controller from Wolfson, which offered us the best sound coupled with convenience. The USB input is full class-2 with our proprietary electrostatic protection, effectively shielding the system from electrostatic discharge.

CONVERSION: Unlike many other sigma-delta implementations, the converters we selected for the Ayazi DAC incorporate patented time-domain jitter eliminator technology. This helps to deliver music free from clock jitter common in digital audio systems.

CLOCK: To further refine the Ayazi’s sonic performance we selected Crystek’s CCHD-957 HCMOS oscillator. In mk2 we added a second high performance CCHD-957 oscillator to vitalize the sound even more. The result is a lower noise floor than the original Ayazi, better clocking and a heightened sense of authority.

THE POWER SUPPLY: It took a very long time to refine and tune the Ayazi power supply. The aim: to provide more than adequate power and, importantly, maintain a very low noise threshold as well.



THE AYAZI MK2 ADDITIONAL FEATURES

- A newly designed faceplate
- A second clock. Now there are two high quality CCHD-957 oscillators by Crystek. The result is a more effortless presentation of music and great sound improvement especially with lower resolution files.
- A greater power supply.
- High quality, gold-plated IEC connector.
- Audiophile grade gold-plated RCA connectors.
- Specially designed metallic isolation feet.

TECHNICAL SPECIFICATIONS

OUTPUT FULL-SCALE	2.0V RMS
FREQ. RESPONSE	10Hz-25kHz (+/- 0.5dB)
SNR	(DC to 20kHz) >112dB
THD+N	(1kHz FS 96 kS/s) <0.002%
CROSSTALK	-110dB
USB INPUT	Transfer mode: Asynchronous (dual clock)
	Device class: Type 2 or above
	Bit depth: 32 bit
	Sampling rates: 44.1, 48, 88.2, 96, 176.4, 192, 352.8, 384 kHz
SPDIF / COAXIAL INPUT	Bit depth: 24 bit
	Sampling rates: 44.1, 48, 96, 192 kHz
OUTPUT	Stereo unbalanced impedance: 250 Ω
DIMENSIONS	29cm X 17cm X 8cm



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