

DEMOGRAF AUDIO

Hyperion

Delta-sigma DAC on the Cirrus Logic CS4397 with a solid-state or tube output stage

Made by Dmitriy Gubchenko. Every unit ships with a Manufacturing Record stating its country of origin and a bill of materials.

Sound

Vocal · jazz · chamber and orchestral · long listening sessions

A delta-sigma DAC that sounds unhurried

Hyperion is built around the Cirrus Logic (Crystal Semiconductor) CS4397, a multibit delta-sigma converter known for an organic, natural presentation. The midrange is expressive, the low end deep and controlled, and harmonic decays are left to fade on their own rather than being cut short.

Where it fits

It takes S/PDIF coaxial and USB (Amanero) — Red Book over coaxial, up to 24-bit / 192 kHz and DSD256 over USB — and drives a line input at 2 V. Stock output is solid-state; a tube output stage on 6Zh4, EF14, EL8, AL4 or ML6 can be fitted for those who want more body and air around voices.

Built for your system

Each unit is tuned to the order: output stage, rectifier, output level, transformers and inputs are agreed before the build starts. A ground-lift switch helps break hum loops in larger systems.

Compared with: Reference Tube DAC (multibit versions)

Materials & build

Chassis and parts

The stock unit comes in a classic black metal housing; hardwood, milled metal and glass versions are made to order. Transformers are galvanically isolated, and the internal wiring is Proprietary “RareCoreFusion” Alloy.

- Inputs: S/PDIF coaxial, USB (Amanero); I2S, AES/EBU, BNC, optical and master-clock inputs on request
- Output 2 V, RCA (4 V and balanced XLR optional)

- Rectifier: solid-state, or 5Ts4M / 5Y3 kenotron
- Ground lift switch

COMPONENT	MANUFACTURER	COUNTRY OF ORIGIN
DAC chip CS4397	Cirrus Logic (Crystal Semiconductor)	USA
USB interface	Amanero	Italy
Output tubes 6Zh4 / EF14 / EL8 / AL4 / ML6 (option)	NOS, selected	US / EU / UK (NOS) / Other Vintage
Rectifier 5Ts4M / 5Y3 (option)	NOS, selected	US / EU / UK (NOS) / Other Vintage
Power transformers (galvanically isolated)	Demograf Audio (custom-wound)	or analog by Hashimoto / Tango / Tamura
Internal wiring: Proprietary “RareCoreFusion” Alloy	Demograf Audio	Own manufacture

Signal path

Input **USB · S/PDIF** → Converter **CS4397 delta-sigma** → Output stage **Solid-state / tube** → Output **RCA · 2 V**

Specifications

Type	Digital-to-analogue converter, delta-sigma
DAC chip	Cirrus Logic CS4397
Frequency range	10 Hz – 20 kHz
PCM	16-bit / 44.1 kHz via S/PDIF; up to 24-bit / 192 kHz via USB (Amanero)
DSD	Up to DSD256 via USB (Amanero)
Digital inputs	S/PDIF coaxial · USB (Amanero)
Analogue outputs	RCA unbalanced (balanced XLR optional)
Output voltage	2 V (4 V optional)

Output stage	Solid-state; tube 6Zh4 / EF14 / EL8 / AL4 / ML6 optional
Rectifier	Solid-state; 5Ts4M or 5Y3 kenotron optional
Transformers	Galvanically isolated
Internal wiring	Proprietary “RareCoreFusion” Alloy wire
Features	Ground lift switch
Mains	100 / 120 / 230 V — set at order time, plug to match (NEMA, Schuko, BS 1363 / type G)
Weight	From 10 kg, depending on configuration
Dimensions (W × D × H)	430 × 450 × 120 mm (custom sizes available)
Origin	Made in Kazakhstan by Dmitriy Gubchenko

Options

Output stage

- Solid-state output
- 6Zh4 tube output
- AL4 tube output
- EL8 tube output
- EF14 tube output
- ML6 tube output
- Tube-switching module

Rectifier

- Solid-state rectifier
- 5Ts4M kenotron
- 5Y3 kenotron
- Other type, specified on order

Output level

- 2 V
- 4 V
- Other, specified on order

Components

- Premium capacitors
- Custom transformers and chokes
- AMRG resistors and Cardas wiring kit
- Top connector set
- Multi-DAC topology
- Upgraded external power supply
- Vintage tubes
- ALPS volume control
- Demograf Audio Swiss-stepped preamplifier
- Integrated Class A amplifier
- Integrated Class D amplifier
- Tone control / filter module
- Raspberry Pi 5 streamer inside
- Spare matched pair of low-noise tubes

Extra inputs and outputs

- S/PDIF coaxial input
- BNC input
- AES/EBU input
- Optical (TOSLINK) input
- I2S (HDMI) input
- Master clock input
- Additional RCA output
- Balanced XLR output

Mains inlet and contacts

- IEC C14 inlet
- IEC C20 high-current inlet
- Pure copper contacts, unplated
- Gold-plated contacts
- Rhodium-plated contacts

Finish

- Classic black metal housing
- Precision-milled metal chassis
- Contoured bent-metal enclosure

- Solid-billet metal enclosure
- Exotic hardwood chassis
- Glass-integrated design
- Wood inlays and accents
- Galvanic finishing
- Custom dimensions
- Status display
- Remote control
- Priority build

Regional version

- 230 V — Schuko plug (Europe)
- 120 V — NEMA plug (North America)
- 100 V — NEMA plug (Japan)
- 230 V — BS 1363 / type G plug (UK · Middle East)

Photographs










Questions & answers

Does the Hyperion use tubes?

Hyperion is solid-state by default. If you choose a tube output stage (6Zh4, EF14, EL8, AL4 or ML6) or a 5Ts4M / 5Y3 kenotron rectifier, those tubes are selected and matched before fitting. Tubes are consumables and are not covered by the warranty.

How is the Hyperion serviced?

Each unit ships with its own measurement report. The circuit is kept simple and serviceable, and Demograf Audio gear is serviced for as long as parts exist.

How is it delivered?

Shipping and insurance are paid by the buyer and shown as a separate line in your quotation. Every unit is packed for long-distance transport in heavy-duty flight cases and a wooden crate.

Which mains voltage and plug?

Each piece of gear is built for 100 V, 120 V or 230 V mains with the matching plug (NEMA, Schuko or BS 1363 / type G). The voltage is fixed at order time, so tell us where the unit will be used.

How long does the Hyperion take to build?

Build time is six months or more from the queue deposit, depending on the configuration and the queue; delivery takes from one month after completion. The atelier builds seven instruments a year. A priority build is available for an extra 50% of the price: your unit is moved ahead in the build queue.

Ordering

- Built individually, to order. A 50% deposit places the unit in the build queue.
- Build time is six months or more, depending on the configuration and the queue.
- One-year warranty; after it, paid repair. Every unit ships with its own measurement report.
- Configuration, prices in your currency and the seller for your country: demografaudio.com
- E-mail: shop@demografaudio.com.