

DEMOGRAF AUDIO

Hades

Class D amplifier with a built-in DAC — 70 W stock, up to 1 kW, for headphones and loudspeakers

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

Sound

Electronic · rock · orchestral peaks · demanding planar headphones

Hades combines a Demograf Audio DAC and a Class D power amplifier in one compact chassis. The output transistors are switched by a dedicated PWM chip and a custom output choke filters the switching carrier, so the amplifier turns power into sound rather than heat. Stock output is 70 W per channel, and it can be built up to 1 kW — enough for demanding dynamic and planar headphones and full-size loudspeakers. A hybrid version with a 6Zh4 or EF55 tube input stage is available.

Materials & build

Custom in-house transformers, and capacitors from Jamicon, Nichicon, Nippon, Epcos, Vishay and Mundorf.

- DAC: Cirrus Logic CS4397 stock; R-2R, programmable-logic, TDA1540/1541/1547, PCM63, PCM1704 optional
- Inputs: S/PDIF coaxial, USB Amanero; RCA analogue
- Outputs: speakers, 6.3 mm, XLR 4-pin
- Ground lift switch

COMPONENT	MANUFACTURER	COUNTRY OF ORIGIN
DAC chip CS4397 (stock)	Cirrus Logic	USA
USB interface	Amanero	Italy
PWM controller and output choke	Demograf Audio	Own manufacture
Transformers	Demograf Audio (custom-wound)	or analog by Hashimoto / Tango / Tamura
Capacitors	Nichicon / Nippon Chemi-Con / Mundorf	Japan / Germany

Signal path

Input **USB · S/PDIF** → Converter **CS4397** → Input stage **Solid-state / tube** → Power stage **PWM Class D** → Output choke **Custom** → Output **Speakers · phones**

Specifications

Use	Universal: loudspeakers and headphones
Speaker output power	70 W per channel as standard (up to 1 kW to order)
Headphone output power	5–70 W
Amplifier topology	Class D Solid-State (optionally hybrid version with tube stage)
Channels	2
Amplifier inputs	RCA Analogue (XLR optional)
Speaker outputs	Standard binding posts (Demograf Audio terminals optional)
Headphone outputs	6.3 mm · 4-pin XLR (optional: 2.5 mm, 3.5 mm, 4.4 mm, 2×3-pin XLR)
Impedance	Stable into 4–16 Ω loads
DAC inputs	S/PDIF Coaxial · USB Amanero (optionally others)
DAC outputs	RCA Analogue (XLR optional)
Internal wiring	Proprietary “RareCoreFusion” Alloy wire (other options available)
Mains	100 / 120 / 230 V — set at order time, plug to match (NEMA, Schuko, BS 1363 / type G)
Weight	From 5 kg
Dimensions	From 330 × 220 × 110 mm
Origin	Made in Kazakhstan by Dmitriy Gubchenko

Options

Output power

- 70 W
- 100 W
- 150 W
- Other (up to 1 kW — specify on order)

Input stage

- Solid-State Class D
- Standard 6Zh4 Tube Input Stage for Class D (Hybrid version)
- Premium EF55 Tube Input Stage for Class D (Hybrid version)

DAC

- Cirrus Logic CS4397
- Premium R-2R Resistor Ladder DAC Module
- Demograf Audio programmable-logic module
- Philips TDA1540
- Philips TDA1541
- Philips TDA1547
- Burr-Brown PCM63
- Burr-Brown PCM1704

Component upgrades

- Premium Capacitors Suite (Duelund, etc.)
- Custom transformers and chokes
- AMRG Resistors & Premium Cardas Wiring Kit
- Exotic Top-Tier Connectors Suite
- Solid-Core Copper Speaker Connectors
- Multi-DAC Topology
- Premium Solid-Core Copper Connectors with Galvanic Gold / Silver Plating
- Integrated Tone Control Block Module / Filter
- Bi-Wiring Integration Supplement
- Tri-Wiring Integration Supplement
- Demograf Audio Swiss-Stepped Pre-Amp Circuit
- Variable GAIN Control Module
- 4.4 mm Pentaconn Output Termination
- Dedicated STAX Electrostatic Output Interface
- Fully Balanced XLR Amplifier Architecture
- Upgraded External Power Supply (PSU)
- ALPS Volume Control
- Demograf Audio Swiss-Stepped Pre-Amp
- One additional Digital S/PDIF Coaxial Input
- One additional Digital BNC Input
- One additional Digital AES/EBU Input

- One additional Master Clock Input
- Raspberry Pi 5 Streamer Inside
- Phase Control
- Low-pass filter (LPF)
- One additional Digital TOSLINK (Optical) Input
- One additional Digital I2S (HDMI Type) Input
- One additional Analogue RCA Output
- One additional Analogue XLR Balanced Output
- One additional Analogue RCA Input
- One additional Analogue XLR Balanced Input

Mains inlet, outlets & contacts

- IEC C14 Chassis Input
- Heavy-Duty Spec: IEC C20 High-Current Inlet
- European Standard: Schuko (Type F)
- US / Japan Standard: NEMA 5-15R (Type B)
- British Standard: BS 1363 (Type G)
- Universal Interface: Direct IEC C13 Outlets
- Pure Copper Unplated (e.g. MSound MS-06(Cu)) — Organic & Balanced Tone
- Gold Plated Contacts (e.g. Furutech FI-09(G)) — Warmth & Rich Midrange Texture
- Rhodium Plated Contacts (e.g. Furutech FI-09(R)) — Fast Transients & Fine Detail

Finish & chassis

- Standard configuration
- Priority build (+50% of the price)
- Precision-Milled Metal Chassis
- CNC Milling
- Contoured Bent-Metal Enclosure
- Exotic Hardwood Chassis
- Glass-Integrated Aesthetic
- Premium Wood Inlays & Accents
- Solid-Billet Metal Enclosure
- Advanced Galvanic Finishing
- Custom Dimensions & Form Factor
- Parameter Status Display
- Multifunction Remote Control Suite

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 Hades use tubes?

Hades is solid-state as standard. The hybrid versions use a 6Zh4 or EF55 tube in the input stage.

How is the Hades 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 Hades 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.