

DEMOGRAF AUDIO

Solaria

Class A single-ended integrated amplifier on 45 triodes, 2 W

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

Sound

Instrumental · rock · metal · electronic

Solaria runs two 45 triodes single-ended in Class A, 2 W per channel. The 45 has a dense, saturated tone with a textured midrange and delicate treble close to the 300B — but its bass is faster and hits harder. That speed makes Solaria a good match for instrumental music, rock, metal and electronic music on high-sensitivity loudspeakers and headphones. A push-pull version doubles the power.

Compared with: 300B (Atlas)

Materials & build

Two chassis: the amplifier and an external supply with two 6D22S kenotrons, galvanic isolation, custom transformers and chokes.

- Output: 2 × 45
- Input: 2 × 6Zh4 (EL8, AL4, EF14, ML6 optional)
- Rectifier: 2 × 6D22S or 1 × 5C3S
- Weight from 45 kg with the power supply

COMPONENT	MANUFACTURER	COUNTRY OF ORIGIN
Output tubes 45	Selected and matched	US / EU / UK (NOS) / Other Vintage
Input tubes 6Zh4	NOS, selected	US / EU / UK (NOS) / Other Vintage
Rectifier tubes 6D22S	NOS, selected	US / EU / UK (NOS) / Other Vintage
Transformers and chokes	Demograf Audio (custom-wound)	or analog by Hashimoto / Tango / Tamura
Volume control	ALPS	Japan

Signal path

Input **RCA** → Volume **ALPS** → Input stage **6Zh4** → Output tube **45** → Output transformer **Custom-wound** → Output **Speakers · phones**

Specifications

Use	Universal: loudspeakers and headphones
Output power	2 W per channel at 8 Ω (Push-Pull version with double power available on request)
Amplifier class	Pure Class A
Channels	2 (Stereo)
Inputs	Analogue RCA (Optional: Balanced XLR)
Headphone outputs	1 × 6.3 mm TRS, 1 × XLR 4-pin (Optional: 2.5 mm, 3.5 mm, 4.4 mm Pentaconn, dual XLR 3-pin, Electrostatic/EST)
Speaker outputs	Standard binding posts (optional: Demograf Audio plugs)
Load impedance	8 Ω (Optional: 4 Ω / 16 Ω customisation)
Output tubes	2 × 45 tubes
Input tubes	2 × 6Zh4 or EL8 / ML6 / AL4 / EF14 optionally
Rectifier tube	2 × 6D22S — darker tone; or 1 × 5C3S — brighter signature
Volume control	ALPS potentiometer or optional Demograf Audio Custom Stepped Attenuator
Special features	Ground Lift switch (selectable ground loop isolation)
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 (with power supply)	From 45 kg / 99 lb
Dimensions	From 450 × 450 × 250 mm
Origin	Made in Kazakhstan by Dmitriy Gubchenko

Options

Circuit

- Single-Ended — classic, detailed sound, 2 W per channel
- Push-Pull — double the output power, a fuller midrange and bass · +50%

Input tubes

- 6Zh4 Tubes
- EL8 Valvo — More detailed sound
- AL4 — heavier bass and midrange
- EF14 — More authentic MF, e.g. Opera / Symphonic music
- ML6 — More neutral sound

Rectifier tube

- 6D22S — Darker sound
- 5C3S — Brighter sound
- Other Type (on request)

Output tubes

- 45 Tubes
- Other Similar Tubes (on request)

Component upgrades

- Premium Capacitors Suite (Duelund, Mundorf, Miflex etc.)
- Tango, Tamura or Hashimoto transformers and chokes, fitted on request
- Silver AMRG Resistors & Premium Cardas Wiring Kit
- High-End Connectors Suite (e.g. Furutech Top-Tier plugs)
- Solid-core Copper Speaker Connectors
- Premium Solid-core Copper Connectors with Galvanic Gold / Silver Plating
- Vintage Tubes
- Integrated Tone Control Block Module / Filter
- Transformer taps for 4 or 16 Ω (additional winding)
- Bi-wiring integration supplement
- Tri-wiring integration supplement
- One additional Analogue RCA Input
- One additional Analogue XLR Balanced Input
- Demograf Audio High-End Swiss-Stepped Pre-Amp (similar to Stevens & Billington TX-103)
- Variable GAIN Control Module
- 4.4 mm Pentaconn Output Termination
- Dedicated STAX Electrostatic Output Interface
- Fully Balanced XLR Amplifier Architecture
- Additional Reserve Matched Pair of low-noise Tubes

Mains inlet, outlets & contacts

- IEC C14 Chassis Input — Standard Spec
- IEC C20 High-Current Inlet — Heavy-Duty Spec
- 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
- Protective tube cage (child & pet safety)

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

Which tubes does the Solaria use?

Stock tubes are 45 output triodes, 6Zh4 input tubes and two 6D22S rectifiers (a single 5C3S for a brighter tone). Similar output tubes can be fitted on request.

How is the Solaria 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 Solaria 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.