

Products Range 2015

LAB 12
Handcrafted High-End Audio





Audiophile Integrated Amplifier

Integre4 – The centre of your modern high end audio system

From the first steps of our design, we focused on achieving a wide open sound which is usually unprecedented in an integrated amplifier. Integre4 can drive any pair of speakers to remarkable audio performance with the convenience of a new age, one chassis design which saves you from large bunches of cables, unsuccessfully matched devices and of course wasting space and money. With 2 x 45 Watt from two pairs of 6550 you will receive warm and tight low frequencies, definite tube vocals and analytical high frequencies that will never sound anything but natural.

Top reproducing performance with proofs

We use four (two independent for each channel and not common tube for both channels) low noise dual triodes driver tubes to achieve perfect soundstage and a low crosstalk between channels. The exceptionally regulated high voltage power supply guarantees an absolutely free of noise signal. Eleven low ESR and high capacity capacitors can provide the instant energy that the amplifier may need to reproduce the most demanding music programs even at higher volume. For the sake of natural sound, we designed a pair of perfectly matched Ultra Linear output transformers which, in combination with the power amplification stage, stay stable in any speaker impedance. Power and output transformers have been designed to live out of the chassis, not only for this great retro style look, but to ensure that we have the best magnetic shielding near the driver and power stage of the amplifier.

Bias adjustment, easier than ever

One of the most important things in all tube amplifiers is the tubes' bias point. We got some steps beyond the LED bias indication and we developed a precise and stable bias monitoring system using a powerful digital processor. Taking advantage of this feature, you can easily monitor the bias point of each power tube on the OLED multifunctional display of Integre4. Without needing any external equipment, you can accurately adjust the anodes current of any pin compatible tube. You will find a list with the recommended bias values for any compatible tube in Integre4 owner manual so it is easier than ever to match your amplifier to your personal taste of sound by selecting your favourite model of tubes.

Smart protection and monitoring system

A central digital processor offers a sophisticated control and protection system not only for soft starting the power tubes but also for continuously monitoring all tubes and high power parts and protecting them from a high, out of normal range current. Integre4 also takes care of the tubes lifetime by automatically setting the amplifier in sleep mode after realizing a long period with idle input signal. Integre4 will also wake up automatically when an input signal triggers the input again. This smart protection system will also remind you to check the bias or replace your tubes considering the tubes working hours and the bias setting point.



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Connectivity and extendibility through I/O Upgrade Modules

Five analogue inputs are available through the input selection. You can change the displayed name of each input or just disable it if no device is connected. All inputs are controlled from the main processor and the signal reaches the driver stage via high grade relays. With our I/O Upgrade Modules, you can extend integre4 functionality with high quality Phono Stage, USB/Coaxial/Optical DAC or XLR inputs and more without adding extra devices on you rack. Integre4 also offers a standard 6.3mm headphone output that fully exploits the amplifier power stage by using a dedicated adaptation circuit and not by replicating the signal with conventional operational amplifiers. As a result you can enjoy the rich sound of your speakers on your headphones too.

Usability and style

Every function of Integre4 is reachable from both navigation rotary button in face plate and the remote control. All useful information is displayed in the big legible multifunctional OLED display. The overall smooth and solid construction is highlighted further with our new grey matt colour for

Features:

- EL34, 6550, KT88, KT120 compatible (6550 form factory)
- Remote Control
- Large OLED display
- Blue Velvet ALPS motorized potentiometer
- Matched tubes
- Sophisticated Bias Adjustment
- Connectivity and extendibility through I/O

Upgrade Modules

- Smart protection and monitoring system
- No feedback design
- Handcrafted custom audio grade transformers
- Special audio grade matched parts in every stage
- SRSG® implementation
- Gold plated teflon rca connectors
- Gold plated tube sockets
- 5mm aluminum face panel with luxury painting

Specifications:

- Power: 230/240 Vac 50Hz
- Power consumption: 350 VA max
- Output power: 45 watt per channel (6550)
- Frequency response: 15Hz - 60KHz (-1dB)
 - Input impedance: 50K ohms
- Tube complement: 4x 6n1p , 4x 6550 (EL34, KT88, KT120 compatible)
- Inputs: 5x line stereo RCA connectors (Available upgrades)
 - Color : Matt Grey
- Dimensions (WxHxD): 43x19x29 cm
 - Weight: 13Kg



Multifunctional Power Distributor / Conditioner

Gordian – Your system deserves clean and abundant power

Whatever your audio system setup is, clean and abundant power is the nutrition that will make it reveal its strength and virtuousness. It is well known that an inadequate power distributor may kill the dynamics of your audio system and that a noisy AC power line could affect its performance on midrange and high frequency signals.

Gordian is here to distribute all the power that your system may need even at extreme situations without losing its strength. It is also here to gently clean up the unwanted artifacts from your power supply using a well-designed, adaptive network of inductors and MKP capacitors.

Conductors of very large cross section, high quality tight sockets and industrial grade bindings constitute the unshakable electrical network that delivers the power to your system. The “star” topology of the inner connections reduces to the minimum the noise transfer between you devices while guarantees that no ground loops will be developed.

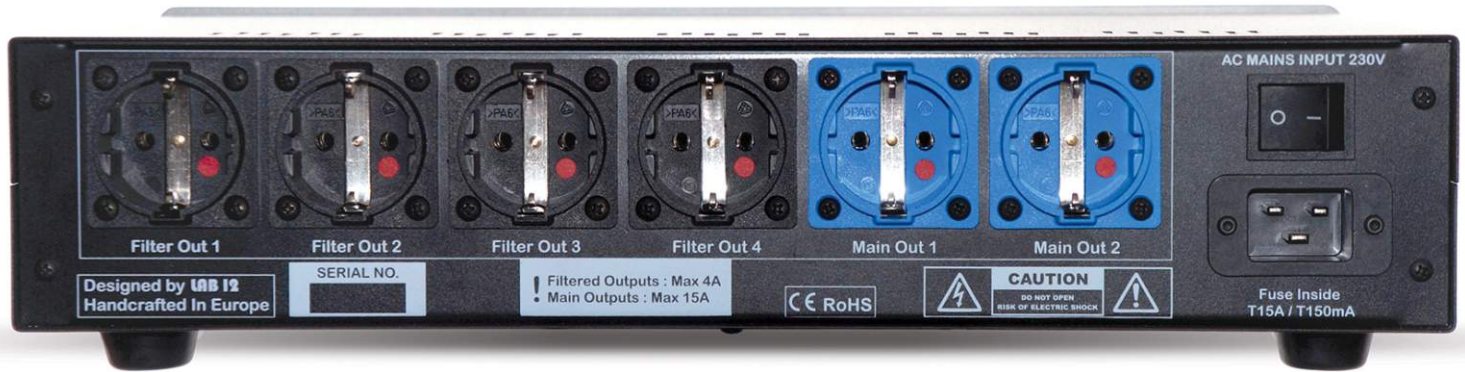
A serious power analyzer

Gordian cares about the quality of your power source more than you think. It incorporates an industrial grade power analyzer which lets you inspect all the aspects of the AC power signal. Some of the available metrics are

- Frequency (accuracy 0.0005%)
- Total Harmonic Distortion (THD - accuracy 0.005%)
- RMS Voltage/Current
- Power Consumption
- Power Factor
- FFT (Frequency analysis)
- DC Voltage

and more...

You can use these metrics to trace the AC signal of your provider, inspect the power consumption of your audio system, investigate problems on your local electric network (eg find household devices that affect the quality of your power source) or decide on the optimal filtering mode (see Configurable noise filtering below). All the information is accessible in the big legible OLED display.



Multifunctional Power Distributor / Conditioner

Configurable noise filtering - Power factor correction

All kinds of noise cannot be treated effectively by the same type of filters and overusing multiple types of filters for healing all the types of possible artifacts on the power line would definitely affect the dynamics and the character of your audio system. For this reason, Gordian filtering network is designed to be configurable giving you the opportunity to adapt it to the problems of your AC power line by selecting the most appropriate available configuration.

The user manual of Gordian contains a complete configuration guide that will help you select the most appropriate mode by teaching you how to interpret correctly the extensive information you get from the integrated power analyzer. However, if you trust your ears more than mathematics you could just experiment with the various configurations and keep your favorite one.

Gordian can also improve the power factor of your system by applying a bank of specialized capacitors in parallel with your system power line. This will correct the apparent power phase angle, which means that your system will absorb more effectively the power of your power line.

Automated adaption to the problems of your power line

If you don't want to bother configuring the filtering mode at all, you can set Gordian to "Auto Adapt" mode and let it choose the optimal filtering configuration for you by mathematically analyzing the power characteristics of your line.

Gordian will find the best configuration that targets the frequencies and the origin of your AC power line noise without affecting the dynamics and other characteristics of your audio system. You can be sure that you will have the best filtering result without altering the character of your sound.

Add Gordian at your system chain and feed your gear with high quality power.

Features:

20A knock cable included



Class A Line Preamplifier

PRE1 aims at exactly the same target as all our products do, to achieve a warm, musical and most of all realistic sound that remains enjoyable even after many hours of listening. We achieved to give PRE1 a high class performance, much higher than its price range. It is a great choice to be combined with a solid state or tube power amplifier. In both ways PRE1 will give this known warm, friendly and analytical sound of LAB12.

Internally we use a matched pair of E88CC tubes in a special configuration and a solid state power supply with 4 regulation stages offering smart filtering and more than enough capacity. Dual mono philosophy and Fine Symmetry® exist in every stage of the internal circuit and of course we use SRSG® topology in this gear too. Special selected parts like MKP audio grade capacitors and resistors with 0.1% accuracy also contribute the production of the final detailed sound and the wider resolution.

PRE1 offers five analog inputs and two preamplifier outputs, so you can easily drive a bi-amping system or a power amplifier and active subwoofer(s) with no problem. Input selection can be performed by the on face rotary switch or by the remote control.

PRE1 can be purchased in our standard Matt Black or Pearl White colors but can also be available in a custom color of your choice.

Features:

- Handcrafted audio grade transformers
- Special Audio Grade parts in every stage
- No feedback design
- SRSG® implementation
- fine symmetry® implementation
- Gold plated Teflon rca connectors
- Gold plated tube sockets
- 5mm Aluminum face panel with luxury painting
- Five Years Guarantee

Specifications:

- Power: 230/240 Vac 50Hz (1A fused)
- Power consumption: 60 VA max
- Frequency response: +0-3dB, 5Hz to 100kHz
- Distortion: 0.04% at 2V RMS output
- Gain: 21dB
- Maximum output: 11V RMS
- Output impedance: 900 ohm
- Tube complement: 2x E88CC dual triode
- Warm up time: 1 minute
- Inputs: 5x line stereo (RCA connectors)
- Preamp outputs: 2xline stereo (RCA connectors)
- Available colors: Matt Black, Pearl White, Custom color
- Dimensions (WxHxD): 43x11x29 cm
- Weight: 5 Kg



25 Watt Class A Power Amplifier

We ask the best from KT-150 so we support this with our finest goods. Power and output transformers and all parts are selected and perfectly matched as class A amplifier require. The 300 watt power transformer offers effortlessly all the power Suono can require. Big Nippon capacitors and separate choke for each channel regulate and offer unlimited power supply. Audiophile coupling capacitors are there to add a transparent flavor between Russian driver triodes and power pentodes.

You can instantly choose between triode and Ultra Linear mode to tailor the sound in the mood of the moment. Power transformers offer two outputs for perfectly matching with 4 or 8 ohm speakers.

Nissei VU meters are there again in face plate bringing to your eyes similar emotions with your ears. Our new matt black or Pearl White color on face plate and transformers covers contribute to the overall sense of quality.

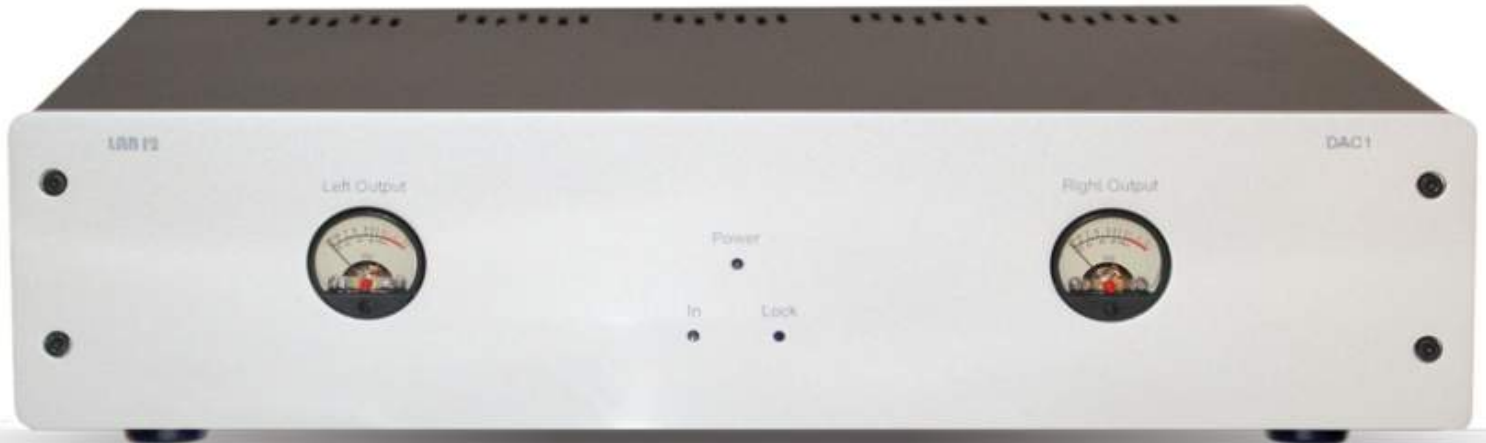
Take a chance to listen the best octal Single Ended class A power amplifier ever build.

Features:

- KT150 matched tubes
- Manual Bias Adjustment
- Triode / ultra linear selector switch
- Handcrafted custom audio grade transformers
- No feedback design
- High power transformer
- Special audio grade matched parts in every stage
- SRSG® implementation
- Fine symmetry® implementation
- Gold plated teflon rca connectors
- Gold plated tube sockets
- Analog retro nissei VU meters
- 5mm aluminum face panel with luxury painting
- Five years guarantee

Specifications:

- Power: 230/240 Vac 50Hz
- Power consumption: 300 VA max
- Output power: 25 watt per channel (KT 150)
- Frequency response: 20Hz-20KHz (-0.9dB)
- Input impedance: 100K ohms
- Output impedance: 4,8 ohm
- Tube complement: 2x 6n2p 2x KT-150
- Inputs: 1x line stereo (RCA connectors)
- Available colors: Matt Black, Pearl White,
- Dimensions (WxHxD): 43x19x29 cm
- Weight: 17Kg



Non Oversampling DAC with Tube Output

We are analog sound lovers, this is a true, but nowadays digital signals flow in every modern audio system. The challenge was to achieve sound as close to the vinyl sound through a DAC. By combining digital and asynchronous USB inputs with classic non oversampling TDA1543 and a tube based output stage we managed to achieve a really musical DAC that sounds like a perfect tuned High End turntable.

Every component of DAC1 is designed to provide smooth and pleasant sound. We achieved the character of pure analogue sound with non oversampling conversion by 8 matched parallel Phillips TDA1543 in sophisticated configuration and smooth output through Dual triode tube I/V stage. All components are carefully chosen after hours of listening and testing, while great attention has been paid to all the details that affect the final outcome (special audiophile power capacitors, NOS tube and more).

DAC will be a pleasure not only for your ears but for your eyes too. With its solid construction, handcrafted finishing, luxury metal painting and retro analogue V/U meters you will fall in love with it for sure.

Features:

- Asynchronous 24/96kHz usb input
- 8 x 16bit in Non Oversampling mode (matched)
- Triode tube I/V analog output stage (New Old Stock SQ tube)
- 6 Separate Regulated Power Supplies
- Handcrafted audio grade transformer
- Dale 1% (digital stage) and AB carbon Resistors (analog stage)
- High Capacity Audiophile capacitors (Nichicon gold tune)
- Better vibration isolated chassis
- Ebony wood cones
- Gold plated RCA Teflon (input, output)
- Analog retro nissei VU meters
- 5mm Aluminum face panel with luxury painting
- Five Years Guarantee

Specifications:

- Power: 230/240 Vac 50Hz (1A fused)
- Power consumption: 60 VA max
- Inputs: 1xSPDIF (Coaxial RCA), 1xUSB2, optional optical
- Frequency response: 20Hz to 20 KHz +0dB/-1dB
- Output level: 2.25Vrms
- THD: lower than 0.2%
- Available colors: Matt Black, Pearl White, Custom color
- Dimension (WxHxD): 43x11x29 cm
- Weight: 6 Kg



OTL Tube Headphone Amplifier with DAC and Preamplifier Output

A headphone amplifier, which would offer the desired sound, regardless of the quality of your headphones. It would upgrade your sound experience no matter if you use a cheap or a high quality, expensive pair of headphones.

And since we are into tubes, what else could be most suitable from offering a full tube OTL headphone amplifier?

First of all, you can use the preamplifier output as it is, having a really audiophile preamplifier to connect your power amp of your system.

And what else can you do?

HPA offers two analog inputs and one direct usb input, so you can potentially connect almost any device....

In other words, you have a headphone amplifier and a DAC in the same device! Just connect your laptop and your headphones and enjoy your music collection without compromising the audiophile sound.

As every LAB12 device, the full tube OTL headphone amplifier is a solid, fully handcrafted device with luxury, metal paint finishing. We want you to enjoy what you see as much as what you hear.

That's why HPA have this great success and anyone who had the chance to listen to it, even for a while, just loved it...

- Features:
 - 1 USB input
 - OTL tube headphone amplifier
 - 3x 6N1P tubes (matched output pair)
 - Blue Velvet ALPS Potentiometer
 - Handcrafted audio grade transformers
 - Special Audio Grade parts in every stage
 - Five separate regulated Power Supplies
 - SRSG® implementation
 - Gold plated Teflon rca connectors
 - Gold plated tube sockets
 - Analog retro nissei VU meter
 - 5mm Aluminum face panel with luxury painting
 - 2 analog, RCA line inputs
 - 1 analog RCA line Preamp output
 - Coaxial output (from USB input)
 - 5mm Aluminum face panel with luxury painting
 - Five Years Guarantee
- Specifications:
 - Power: 230/240 Vac 50Hz (1A fused)
 - Power consumption: 70 VA
 - Input impedance: 50K ohm
 - Output impedance: 32-600 ohm
 - Frequency response: 5 Hz to 100K Hz (-3dB)
 - Available colors: Matt Black, Pearl White,
 - Custom color
 - Dimension (WxHxD): 32x11x29 cm
 - Weight: 6 Kg



Class A, Single Ended Power Amplifier

This new Class A, Single Ended amplifier can cooperate gratefully with any preamplifier on the market and it is the perfect match for TRUE or HPA. Mighty has the ability to nail you down on your couch and make you listen all your music collection again. All the power you need for a normal range pair of speakers is here but the most remarkable point is that you will receive a fluid, wide and addictive consonant sound with any choice of music style.

As always, we choose a well-studied, stable design with our first priority being the enjoyable sound. We choose the best sounding parts and we make more listening tests than you can imagine, to finally achieve this lovely sound character.

The luxury paint of the 5mm aluminum face plate exists on the output transformers covers too, so the overall feeling of the device is really attractive and eye catching.

Features:

- Triode / ultra linear selector switch
- Handcrafted custom audio grade transformers
- No feedback design
- Toroidal power transformer
- Special audio grade matched parts in every stage
- SRSG® implementation
- Fine symmetry® implementation
- Matched tubes
- Gold plated teflon rca connectors
- Gold plated tube sockets
- Analog retro nissei VU meters
- 5mm aluminum face panel with luxury painting
- Five years guarantee

Specifications:

- Power: 230/240 Vac 50Hz
- Power consumption: 170 VA max
- Output power: 9 watt per channel
- Frequency response: 20Hz-20KHz (-0.9dB)
- Input impedance: 100K ohms
- Output impedance: 4,8 ohm
- Tube complement: 2x 6n1p , 2x el34
- Inputs: 1x line stereo (RCA connectors)
- Available colors: Matt Black, Pearl White, Custom color
- Dimensions (WxHxD): 43x19x29 cm
- Weight: 8.5Kg



Passive Attenuator / Input Selector

TRUE is designed to keep every detail of this low level, sensitive signal unaffected from your source to your power amplifier. Connect TRUE to your system, give some playing hours to let TRUE get “familiar” with your devices and finally enjoy the music. Because at the end this is the only thing we are looking for...

Features:

- Blue Velvet ALPS Audio Grade potentiometer
- High Grade Input Selector
- 5mm Aluminum face panel with luxury painting
- Five Years Guarantee

Specifications:

- Input impedance: 50 kohm
- Output impedance: 0 – 50kohm
- Available colors: Matt Black, Pearl White, Custom color
- Dimension (WxHxD): 32x11x29 cm
- Weight: 3,5 Kg



AC Main Power Cable

After a lot of testing on both entry level and High End equipment we couldn't find a component that cannot be improved by replacing the OEM AC cable with Knack.

We take advantage of the cable internal capacity and inductance we achieve through the choice of materials and our special implementation technique to give Knack its filtering capabilities. The KNACK AC Power Cable suppresses a very large percentage of the EMI and RFI noise and supplies (3x6mm² conductors) as much current your wall socket can give.

Three double insulated, tinned pure copper conductors all stranded, with steel shield for live and neutral conductor, inside braided polyester (PET) sleeve are terminated with custom made high quality plugs with tight connections and gold plated conductors.

The perfect choice to upgrade the power of your devices.

Specifications:

- Independent braided copper shield to phase and neutral cores
- High grade gold plated connectors (mk2 version)
- Rating: 220-240Vac 16 Amp continues current
- Total conductor thickness: 3x6mm² (3AWG)
- Cable resistance: 3,38 mΩ/m
- Internal capacitance: 700pf
- Length: 1, 5 meters

custom colors

LAB 12
Handcrafted High-End Audio



Most devices can be purchased in our two standard luxury colors (matt black, Pearl white) or in any special metallic color you may desire. Give to your gear a unique luxury looking, pleasuring, not only your ears, but your eyes too...

