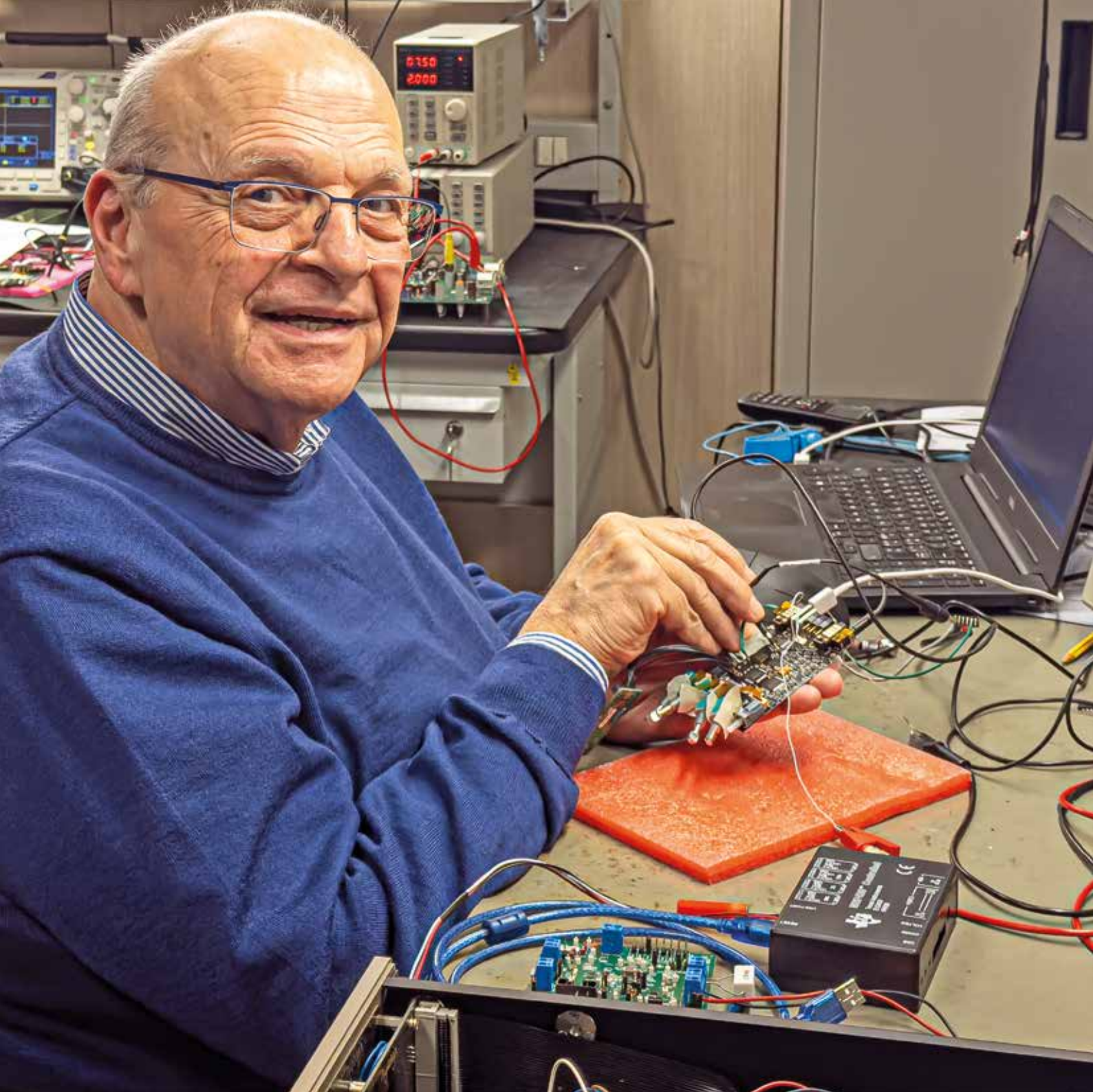


A new sound stage in your headphone with  **elisa**







“

I remember that, years ago, while listening to music on my headphones, I was amazed by the amount of details that finely crafted headphones could offer, but at the same time, by how far they were from reproducing the three-dimensional stereo image that anyone could experience when playing their own audio system. That was the spark that eventually led to the creation of ELISA.

”

**Engr. Cesare Mattoli**

Founder of AUDMA, designer of the ELISA circuit, and Managing Director of Hi-Tech Solutions, a company based in Umbria with over 25 years of experience in the field of industrial automation and instrumentation. He has applied the scientific rigor of engineering to solve one of the most debated limitations of headphone listening: the lack of three-dimensionality.

# The evolution of ELISA

A research and continuous improvement journey lasting over 40 years



**The origins  
of an intuition**



**New technologies,  
new horizons**



**ELISA is born:  
the revolution takes place**



**The goal:  
MAESTRO HPA1**

1978

The research aimed at recreating a three-dimensional sound image in headphones begins. A pioneering first experiment lays the foundation for the future.

1993

With the evolution of audio components, the project is refined. The first key principles of spatial sound processing are defined.

2022

The first prototype featuring the ELISA circuitry is created: it's the HPA1P. Musicians and audio professionals enthusiastically test it, and confirm its innovative value.

2024

After two years of improvement, the first official AUDMA product is born. Fully designed and built in Italy. Patented ELISA technology is ready to revolutionize headphone listening.



# ELISA

## The acoustic illusion that transforms your headphones into a sound system

Listening with headphones has always meant sacrificing the three-dimensionality of sound. The sources seem in fact positioned between the ears or even 'inside the head,' making the listening experience less natural, less realistic.

### **With ELISA, this limit is overcome.**

Thanks to an exclusive scientific approach and a patented technology, the ELISA circuitry reconstructs the ambiance, depth, and soundstage of a true Hi-Fi system in your headphones, thus offering an immersive experience never felt before.

more realistic  
and natural  
listening

a true  
room-like sound  
system in your  
headphones

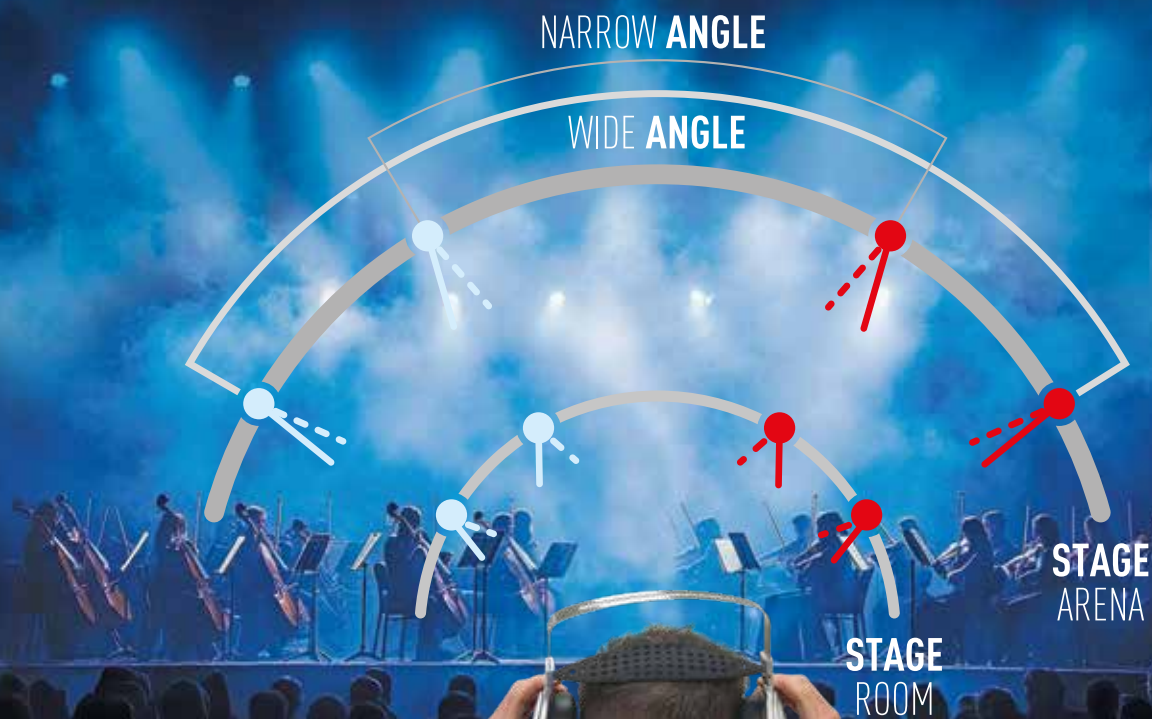
three-  
dimensional  
reconstruction  
of the  
soundstage

designed in Italy  
and world wide  
patented



★ PATENTED ★





### Operating diagram of the ELISA technology.

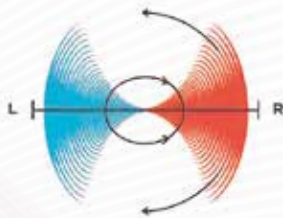
The ELISA circuitry recreates the three-dimensionality of listening from a speaker system in your headphones, by processing the stereo signals through a network of controlled delays and crossovers.

**The result is a spatially coherent sound image**, with instruments and voices positioned in front of the listener, in a virtual acoustic environment adjustable via the STAGE and ANGLE controls.



# Beyond the listening experience, inside the technology

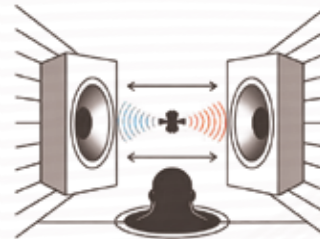
The principles that make the ELISA effect unique



## Reprocessing of the right and left channels

ELISA does not simply 'reproduce' the sound like any amplifier would do. It reprocesses sound, by mixing part of the right signal into the left channel (and vice versa), and simulates what actually happens when listening to a sound system inside a room.

The system introduces controlled, delayed, and balanced crosstalk, based on an analysis of environmental acoustic phenomena. This allows the sound wave behavior to be recreated in a three-dimensional space, while maintaining phase coherence and tonal clarity.



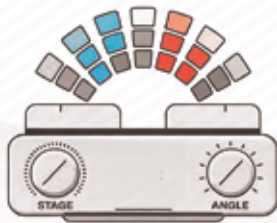
## Simulation of the listening environment: the 'room' effect

ELISA reconstructs in headphones the spatial perception normally experienced in a listening room, by making the sounds 'exit' the head and positioning them in front of the listener, with their depth and width.

This effect is achieved through a network of calibrated delays and attenuations that simulate a real listening environment. This creates a virtual soundstage where each instrument has its own position in space.



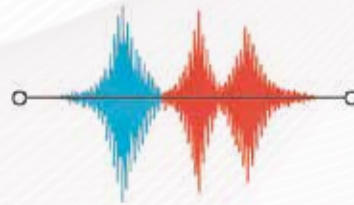
**Watercooler 2024**  
**AIO/System of the Year**  
Audma Maestro  
HPA-1



## Soundstage control: STAGE & ANGLE

With ELISA, you can adjust the sound width (Angle) and depth (Stage), tailoring the soundstage to your preferences.

- "STAGE: controls the intensity of the simulated environmental effect. The 'Room' and 'Arena' modes adjust the degree of spatialization.
- ANGLE: manages the width of the stereo image, from more focused ('Narrow') to very wide ('Wide')."



## Restoration of natural coherence

When listening with ELISA, the instruments seem positioned in real space, and no longer flattened between the ears. The sound becomes natural, open, and immersive.

ELISA acts on interaural time delay (ITD) and interaural level difference (ILD) to produce a response that is consistent with human auditory perception, while maintaining the integrity of the musical message.





# The elegance of engineering

Every detail suggests a perfect listening experience.

Each AUDMA product is not just a concentration of technology, but also an object to admire, to touch, to experience.

Design is an integral part of the listening experience: clean lines, carefully selected materials, and an aesthetic coherence that reflects the precision of sound.

The ELISA circuitry is housed within meticulously crafted chassis where every element is designed to last and to communicate the uniqueness of the AUDMA vision.

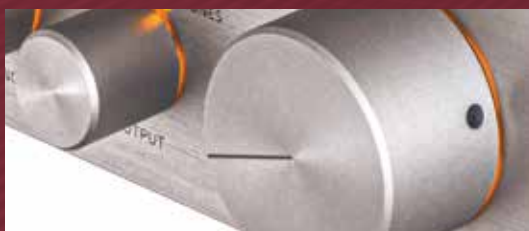
**From the connectors to the volume knob, nothing is left to chance.**





**The semi-circular dials of the MAESTRO HPA1 are not just a style choice.**

Analog tools, featuring arc scales and discreet backlighting, are the perfect balance between form and function. In the left V-meter, for example, it is possible to read the direct VU signal of the left channel and the EL signal processed by the ELISA circuitry of the right channel, displaying the intensity and vice versa.



**Value can be felt. Even to the touch.**

Every element of the MAESTRO HPA1 is designed to offer not only extraordinary performance but also a complete sensory experience.

The premium finishes represent a perfect blend of function and aesthetic refinement: silk-effect surfaces, micrometric fittings, and carefully crafted details.

The solid metal knobs, finished with an exclusive soft-touch treatment, provide a velvety effect that adds a tactile dimension to the interaction with the product.

Every gesture becomes natural, precise, and enjoyable.

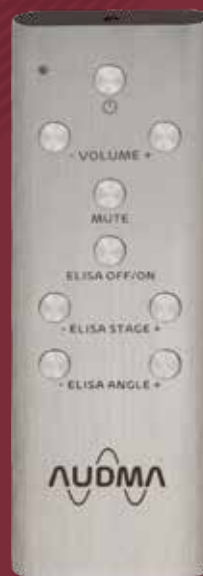
It's a matter of style, control, and attention to details, that makes the user experience as engaging as the listening experience.



**Backlighting.**

The dynamic lighting of the indicator LEDs and V-meters automatically adjusts to ambient brightness to provide an optimal visual experience.

Additionally, the courtesy backlighting of the knobs makes operation simple and intuitive even in low-light conditions or in the dark.



**Remote control.**

Remote control with premium finishes, designed to offer complete and intuitive control.

It allows an easy management of power on/off, volume, mute function, activation/deactivation of ELISA, stage, and angle.

An accessory that combines practicality and style.





# MAESTRO HPA1

The amplifier that transforms listening into emotion.





**MAESTRO HPA1** is the reference amplifier signed by AUDMA, featuring **ELISA**, the patented technology that reproduces in headphones the three-dimensionality of real room listening.



Designed and built in Italy, MAESTRO HPA1 is the result of decades of research and passion for sound. Every component is selected with audiophile rigor: from the dual mono power supply to VELVET SOUND™ DACs, from connectors to physical controls designed for the most demanding listeners.

It's not just a headphone amplifier.

**It's a complete system**, capable of adapting to any source and delivering a natural, engaging, and dynamic listening experience.



The original version of the MAESTRO HPA1 embodies the AUDMA vision: technical precision, minimalist design, and the power of ELISA technology encapsulated in an amplifier designed to redefine headphone listening.

# MAESTRO HPA1

Every detail, a choice of precision.

MAESTRO HPA1 is not only a sonic marvel but also a carefully designed object from every perspective. From the placement of the front controls to rear connectors, up to the sturdiness of the structure: everything is crafted to ensure ergonomics, functionality, and aesthetic coherence.

Discover every aspect of MAESTRO: each element has a meaning, and every choice is the result of listening and engineering.

## ELISA Controls

Dedicated knobs to activate and adjust the Stage (depth) and Angle (width) effects.

## Analog ELISA indicators

Two semicircular dials featuring arc scales and backlighting display signal levels.



## Input selector

Switching between digital and analog sources.

## Balance

Audio balancing that allows for fine adjustment of the sound distribution between the left and right channels, ensuring a balanced and personalized listening experience.

## Output

Quick switching between output modes: Line, Mute, and Phones, for easy and immediate control.

## Phones

Headphone connection via 4-pin XLR, Pentaconn, and 6.3 mm jack connectors (including an adapter for mini jack), ensuring superior audio versatility.

### Main switch and fuse holder

Safety and reliability guaranteed even during intensive use.

### Line outputs

Direct connection to Hi-Fi systems or external amplifiers (XLR and RCA).

### Analog inputs

- unbalanced RCA
- balanced XLR



### Smart power supply

Automatic voltage switching for global compatibility.

### Digital inputs

- Coaxial RCA
- Optical TOSLINK
- USB 2.0

Dual mono power supply with audio transformers built to specifications.

Nichicon electrolytic capacitors

Wima Red series audio capacitors



Alps Alpine motorized potentiometers

Alpha rotary switches





# MAESTRO HPA1 BLACK EDITION

An exclusive outfit for an inimitable sound.

The Black Edition of the MAESTRO HPA1 stands out for its refined and timeless design, enhanced by a matte black finish that emphasizes its contemporary and minimalist character.

Made with the highest quality materials, and intended for those seeking a perfect balance between aesthetics and audio performance, this version offers a superior listening experience wrapped in a distinctive and elegant design.





HPA1  
MAESTRO



The Black Edition version enhances the design of the MAESTRO HPA1 with a sophisticated matte finish, crafted for those who seek the utmost in both style and performance.



# MAESTRO HPA1 LUXURY EDITION

Functional beauty, protected fidelity.

The Luxury Edition of the MAESTRO HPA1 is entirely crafted from solid aluminum, chosen not only for its aesthetic impact but also for its excellent shielding properties against external interference, to keep the audio signal cleaner, more stable, and quieter. This version also features a faster warm-up, allowing the system to reach maximum performance in a shorter time.

The design is further refined by the embossed side grilles and the AUDMA logo engraved on the top panel: exclusive details for those who seek the best ever.







Solid aluminum, engraved on the top, and unique details: the Luxury Edition embodies the most noble side of the MAESTRO, combining elegance and advanced performance.



# 4 YEARS OF PROTECTION FOR YOUR LISTENING EXPERIENCE

Enduring reliability, guaranteed support.

Each AUDMA product is built to last, with carefully selected components and rigorous quality checks at every stage.

That's why we offer a full 4-year warranty, to demonstrate our confidence in the materials, design, and Italian craftsmanship that distinguishes us.

The warranty covers every electronic and mechanical part, with no limitations on usage.

Whether you're a demanding audiophile or an audio professional, with AUDMA you're protected over time.

Reliability, transparency, continuity: three values you'll hear in every note.

## Always at your side.

Do you need help, information, or assistance?

AUDMA provides you with a dedicated customer service, designed to respond quickly and competently.

- ✓ **Dedicated call center with specialized staff**
- ✓ **Email support for technical and commercial assistance**
- ✓ **Updated online manuals and documentati**

Contacting us is easy, and receiving support is immediate.

All the details are available at [www.audma.it/en/support](http://www.audma.it/en/support)



# 4 YEARS WARRANTY



MIN

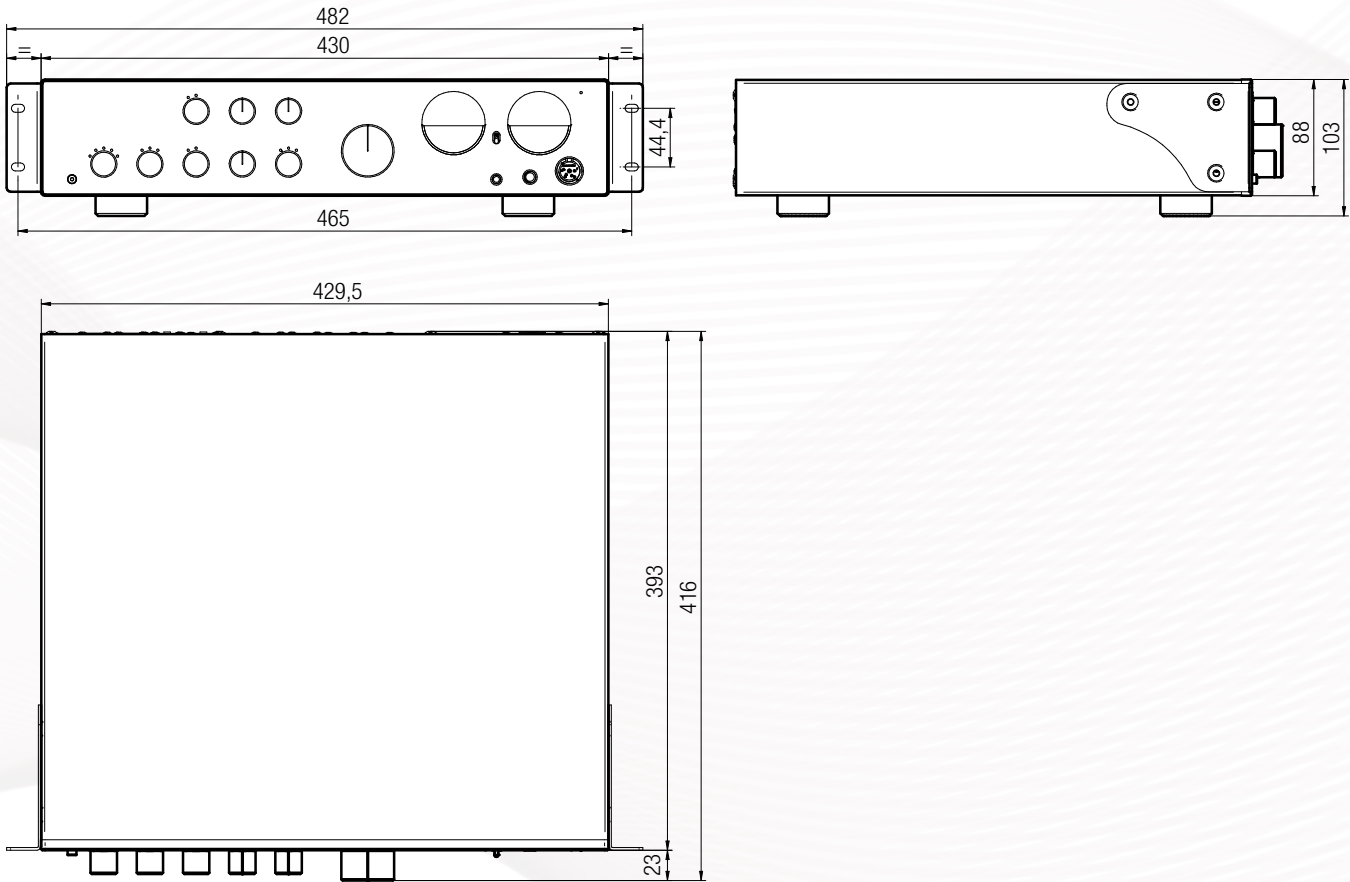
MAX

VOLUME





# Technical specifications for Maestro HPA1



**Headphone amplifier equipped with ELISA circuitry (Electronic Loudspeaker Imaging Simulating Amplifier).**

Operating range	It can be used with all dynamic headphones with an impedance of $\geq 6$ Ohms.
ELISA circuitry and commands	Off/On, Stage, Angle
Other controls	phase (left, 180°, right), mode (mono, stereo), balance, volume
Analog inputs	1 unbalanced stereo RCA line, 1 balanced stereo XLR line
Digital inputs	coaxial, optical, USB
Input sensitivity	adjustable 0/+10 dB
Input resistance	20 kOhm
Digital section performance	Resolution up to 32-bit, maximum sampling frequency PCM 768 kHz / DSD256, automatic PCM/DSD selection
Output power (1 kHz @ 1% THD, 32 $\Omega$ )	2 x 1 W
Output power (1 kHz @ 1% THD, 140 $\Omega$ )	2 x 4,4 W
Output power (1 kHz @ 1% THD, 300 $\Omega$ )	2 x 2 W
Outputs	line, headphones, direct
Headphone outputs	1 XLR 4-pin , 1 Pentaconn, 1 jack 6,3 mm with mini jack adapter
Output gain	Adjustable 0/+6/+12/+18/+24/+30 dB
Signal-to-Noise Ratio	115 dB
Frequency response	20 Hz - 20 kHz +/- 0,01 dB
Consumption	max 100 W, idle 3 W
Remote control functions	System On/Off, Volume, Mute, Off/On ELISA function, ELISA Stage, ELISA Angle
Size	43 x 11 x 40 cm (LxAxP)
Weight	8.7 Kg





AUDMA is a brand of  
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