



## CLASSIC 302 power amplifier

We have entered a new era of high-quality music playback components. CLASSIC 302 has been designed with care and attention to the smallest details, both internally and externally.

A new circuit design, latest generation devices, a new design for power transformers. All mixed with our twenty years of experience in the sector to guarantee sound reproduction with absolute fidelity.

The new transformers guarantee stability and precision of the sound message even at low impedances and high listening pressures. The proven dual mono implementation provides greater signal stability and better channel separation which translates into a wide, deep soundstage with well-positioned instruments within the sound message, making the speakers literally disappear.

This amplifier is able to drive a wide range of speakers, thanks to its power reserve and inexhaustible current. Furthermore, its elegant and modern design fits perfectly into any environment, making it a perfect complement to your audio system.

## The heart of our performance: the power stage

the true heart of every amplifier, especially for our amplifiers, is for us a given of extreme care and detail of fundamental importance, resources and commitment.

CLASSIC 202 is equipped with two transformers with separate windings and wound on a single core for a total power of 1,200 Va which power the rectifier circuits mounted on a single PCB without loose wiring such as to allow a connection without contact resistors.

This design shortens the electrical path from the transformer to the final output stages, reducing overall impedance and allowing the circuit to respond faster while better controlling the speakers and more accurately.



### The power transformer :

*this is where the greatest resources are used to guarantee maximum sound performance. Undersized or poorly designed transformers contribute to a degradation of the sound message through mechanical vibrations and a dispersed magnetic flux entering the delicate circuits.*

*Even high inductions, often used to save on the number and cost of windings, contribute to the decline in performance, often resulting in premature saturation of the core with the consequent limit of the maximum current that can be delivered.*

## The technology in our transformers

**DIMENSIONS and WEIGHT:** it is an almost certain data to ensure good performance, however these two measurements if considered as an end in themselves do not guarantee the final result. It is a set of further additional factors that determine the difference between a good transformer and an excellent transformer.

We cannot tell you point by point how we build our transformers being subject to factory veto but we can describe the major requirements to understand the efforts implemented in 20 years of research, study and evolution of materials that we use on a large scale.

Such as an extremely low induction, toroidal cores made of iron and magnesium powder, innovative coil winding and interlacing technique and last but not least, a copper magnetic shielding throughout the body.

You won't hear a more stable and silent transformer than ours!

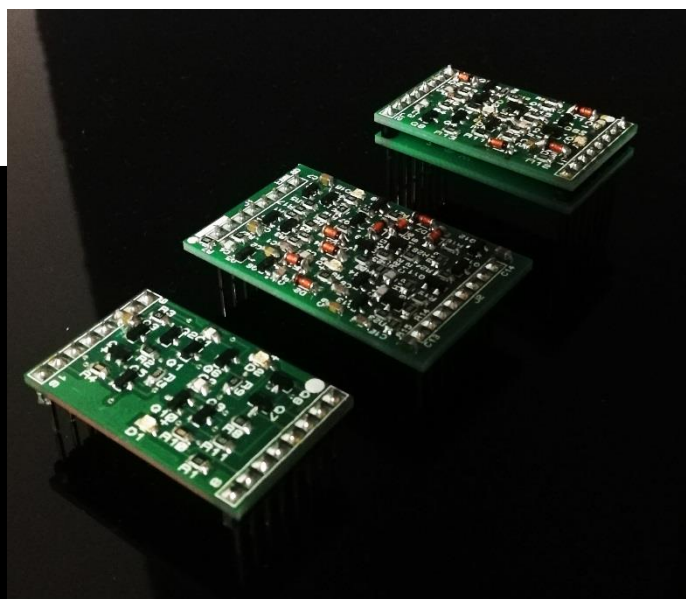
## Balanced connections. Why prefer them

There are many conflicting opinions on this connection. There are those who say that they are useless in the domestic environment, those who say that they degrade and dirty the sound, others that they only serve to determine a higher cost of the equipment for purely commercial purposes.

In part, all of this could only be true if this aspect of the project is neglected or poorly designed.

Recent technical field tests have also demonstrated that if the overall project is executed to perfection, the final result can be considered the maximum in terms of musicality, transparency and dynamics.

Think about it: with a signal that travels in counter-phase on two conductors and a screen braid that only acts as a screen (in single ended the screen also carries the signal) the swing voltage rate is increased. The signal is transferred without losses and interference to the receiving component which "decomposes" it, determines the wrong values and eliminates them from the sound message.



## Balanced input stage, our philosophy

the most delicate, fundamental part and to be treated with extreme care, because it is also this stage that overall determines the general performance of reproduction

this delicate task is entrusted to our proprietary HDCA modules now in their third version. Today even more refined, clear and transparent.

we assemble them with components selected for their linearity and bandwidth characteristics. The circuit operates in an open loop and the feedback is so low as to become practically negligible.

The circuit operates in pure class A and does not use decoupling capacitors across the various signal processing stages.

## What does this mean when translated into sound?

Greater transparency and therefore detail, better sharpness, greater and more contrasting dynamics, an increased infra-instrumental black that sculpts and contours every single voice and instrument of the sound message.

## The power Stage

revolves around a circuit design in helmet configuration. This tested configuration of ours allows a wide and extended bandwidth and the driving of the power amplifiers takes place via a Darlington type configuration.

8 pairs per channel of latest generation bipolar transistors ensure reliability and stability in any condition of use, load or current request.

A new integration of the circuits with SMD components allows shorter signal paths, greater noise rejection and a notable decrease in "microphonics" due to vibrations



The power transformer, in addition to being shielded, is mounted under an iron cover which further increases its rejection of disturbances. The entire filter bank and the rectifier diodes are instead mounted on a PCB with 70 micron copper without air wiring.

This decreases the contact resistance providing a higher current input and with greater transfer speed increasing the damping factor and control over the speakers

## Technical specifications

Dual mono amplifier operating in class A up to 10 Watt

- Power RMS for channel @ 1Khz ,both channel driven  
330 W @ 8 ohm  
600 W @ 4 ohm  
1000 W @ 2 ohm
- Power EIA for channel da 20 Hz a 20 Khz , both driven  
520 W @ 8 ohm  
900 W @ 4 ohm  
1400 W @ 2 ohm
- Input impedance :  
47 Kohm via XLR , 22 Kohm via RCA
- Slew/rate  
35 V/uS
- Damping Factor  
>300 su 8 ohm a 50hz / 150 Hz / 500 Hz
- Input Sensivity  
2.4 Vrms full power @ 8 ohm
- Frequency response  
10hz – 80Khz +/- 2db
- THD vs FR  
0.003% @ 1Khz per 300 Wrms @ 8 ohm
- Input CMRR > 80 db
- SNR weighted A >110 db
- Dimension 43x 42 x 21 cm. ( P x L x H )
- weight 38 kg

[www.eamlab.com](http://www.eamlab.com)

Made in Italy



