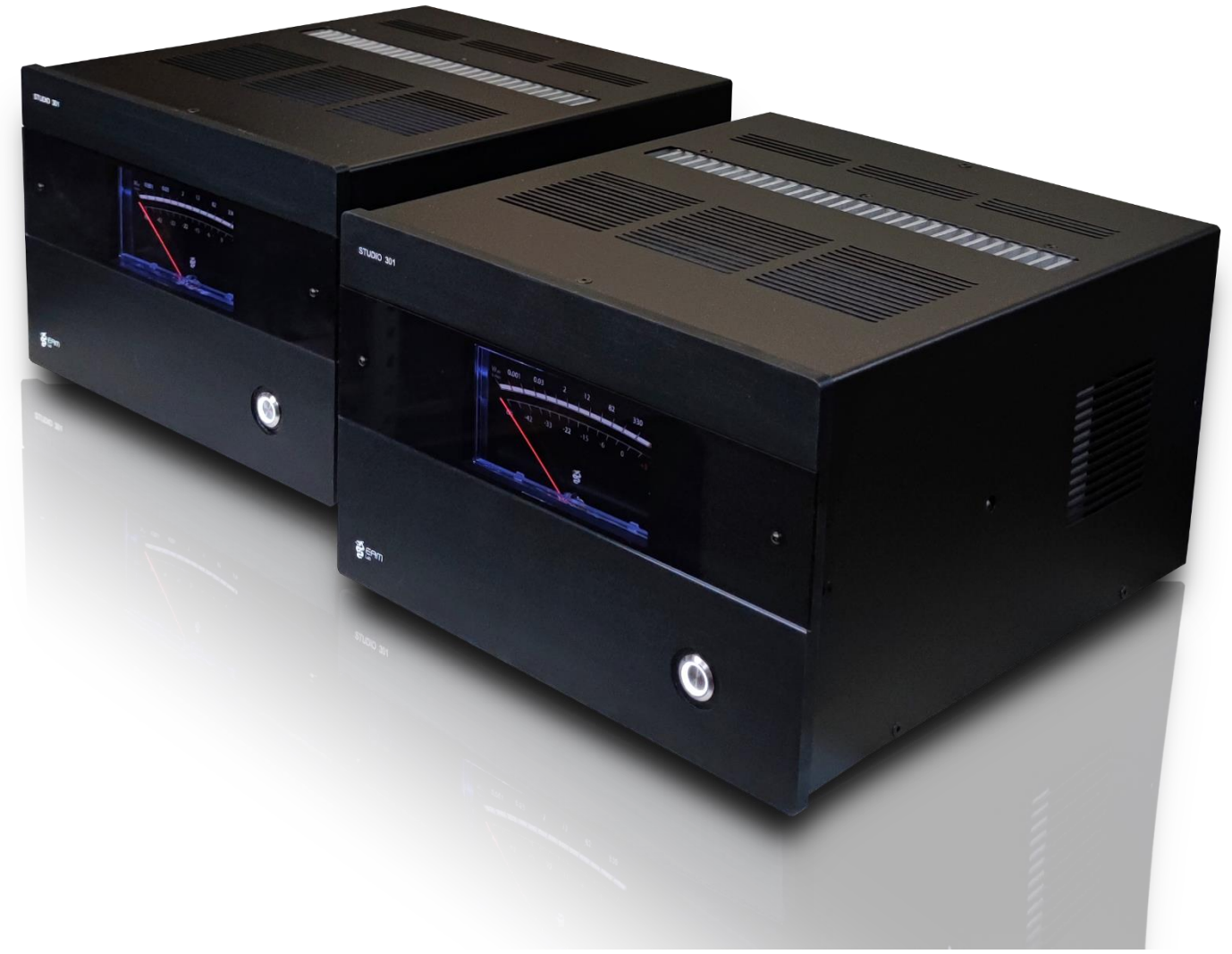


STUDIO 301 mono power amplifier

The STUDIO 301 is the successor to the previous 351 . In this latest version we have improved the design, now made thinner and easier to position in the room, especially if you intend to position the amplifiers close to the loudspeakers.

As usual we have given great importance to the power supply stage. This very important section for the amplifier has been completely redesigned compared to the previous model. the powerful toroidal transformer is mounted vertically to the chassis, isolated from the amplification circuits by a sheet metal partition and simultaneously by the power dissipator.

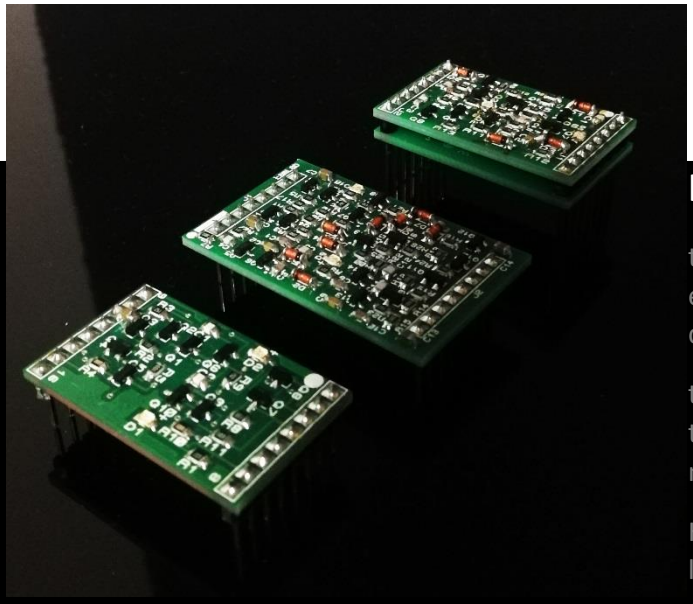
We have thus obtained a better rejection to disturbances by considerably raising the SNR rate (Signal To Noise Ratio) to achieve better cleanliness and intelligibility of the amplified signal.

Characteristics of the power stage

the very heart of every amplifier. For us, the extreme attention to this detail is essential.

The transformer, the heart of the success of the project, is built on our narrow and very specific characteristics. For us, total rejection of disturbances and vibrations is of primary and fundamental importance. It is no coincidence that the silence of our power transformers is a nameplate data of which we are fully proud and it is the result of many efforts and tests carried out in the field to reach a goal that is not easy to reach when powers of all kinds are involved. respect .

The rectifier circuit, on the other hand, is placed on a single PCB where the large capacitors and the diode bridge are located. This technique limits the use of flying leads by minimizing contact resistance and greatly shortening the path from the transformer to the final output stages by reducing overall impedance and allowing the circuit to respond faster by controlling the speakers better and more accurately. .



Input stage

the most delicate, fundamental and to be treated with extreme care, because even this stage, in the whole project, determines the general performance of the appliance

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

HDCA is assembled 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 through various stages of signal processing. The frequency response is flat between 2 and 150 Khz guaranteeing the optimal passage of the bandwidth to the final stage without altering the sound message

Mono philosophy, the reason for a choice.

Without digressing too much scientifically, the mono philosophy, in a nutshell, guarantees the best signal-to-noise ratio, a better separation between the channels and a greater power than its stereophonic alter-ego with the same dimensions.

Translated into purely sonic terms, one has the sensation of having a very large three-dimensional soundstage since each channel has its own dedicated housing, a sharper micro-contrast due to the high SNR ratio and without the interference (crosstalk) of the other channel. when housed in the same cabinet , an accurate focus of each individual instrument .

The search for the perfect amplification is a well-known theme in high-end audio. New technologies present new approaches, while looking to the past provides inspiration for the future.

It is in this spirit that we have developed the new STUDIO line , with a design recommended by the best tradition and with a specific target sound : Deep and expansive stage , accurate positioning of the image , extended and defined bass response and total control over the loudspeakers even at very low impedances

The power stage

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

6 pairs of high current bipolar transistors per channel ensure reliability and stability in any condition of use.

The new generation of circuits with SMD components allows shorter signal paths, a greater rejection to disturbances and a significant decrease in "microphonics" due to vibrations

Datasheet

- Power RMS 20Hz-20Khz — 300 W @ 8 ohm , 550 W @ 4 ohm , 900 @ 2 ohm
- power EIA @ 1Khz — 480 W @ 8 ohm , 700 W @ 4 ohm , 1300 @ 2 ohm
- Input impedance — 47 Kohm via XLR , 22 Kohm via RCA
- Slew/rate — 30 V/uS
- DF — 200 su 8 ohm a 50hz
- Input sensivity — 2.4 Vrms per piena potenza
- Gain — 26 db
- Frequency response — 10hz – 80 Khz +/- 0.8 db
- THD vs FR — 0.03% @ 1Khz per 300 Wrms su 8 ohm
- SNR — >115 db
- Dimension — 33 x 38 x 22 cm. (L x P x H)
- Weight — 20 kg

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