

AN ITALIAN COUPLE

by **BEBO MORONI**

T

he small (but really not so small) **Audiogram** company in Pisa continues to amaze us. Instead of trying to slavishly imitate or copy products of more or less famous companies, the Tuscan enterprise draws inspiration from Angela, the first lady manager of Italian hi-fidelity, Simone, a kind of *deus-ex-machina* who dedicates himself to both project design and the development of the company, and the *jack-of-all-trades*, Massimiliano. The company was founded in 1990 by the late Jean-Serge Di Giorgio (mourned worldwide), a most valid **Naim** distributor. It is sad

that fate led this very young gentleman and also a refined designer towards a death as Saint-Exupéry would have desired, but not so for us and all his friends. As I said, the company started as a **Naim** distributor, but from the beginning distinguished itself for its independent and very avant-garde production. The first objects that issued from this Pisa factory and ended up in the hands and enthusiastic ears of critics were the integrated **MB1** and **MB2**, with a very original and exciting aesthetic and electronic design. They were among the first audiophile integrated (probably the very first) to be entirely remote controlled. Their success worldwide was

AUDIOGRAM
PR200
PW200
AMPLIFIER
PREAMPLIFIER

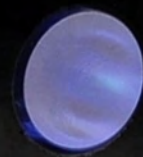


PW200

PR200

AUDIOGRAM

PHONO Vol 27



PHONO Vol 27

such that **Audiogram** has decided to focus on project design and construction rather than distribution of third-party equipment. Production expanded little by little, until it formed the present, the rich catalogue, from which we extracted and tested two real and proper pearls. The two top elements of the electronics' range in **Audiogram** production: the **PR 200** preamplifier and the **PW 200** power amplifier, whose price is practically unbeatable considering their characteristics.



PR200



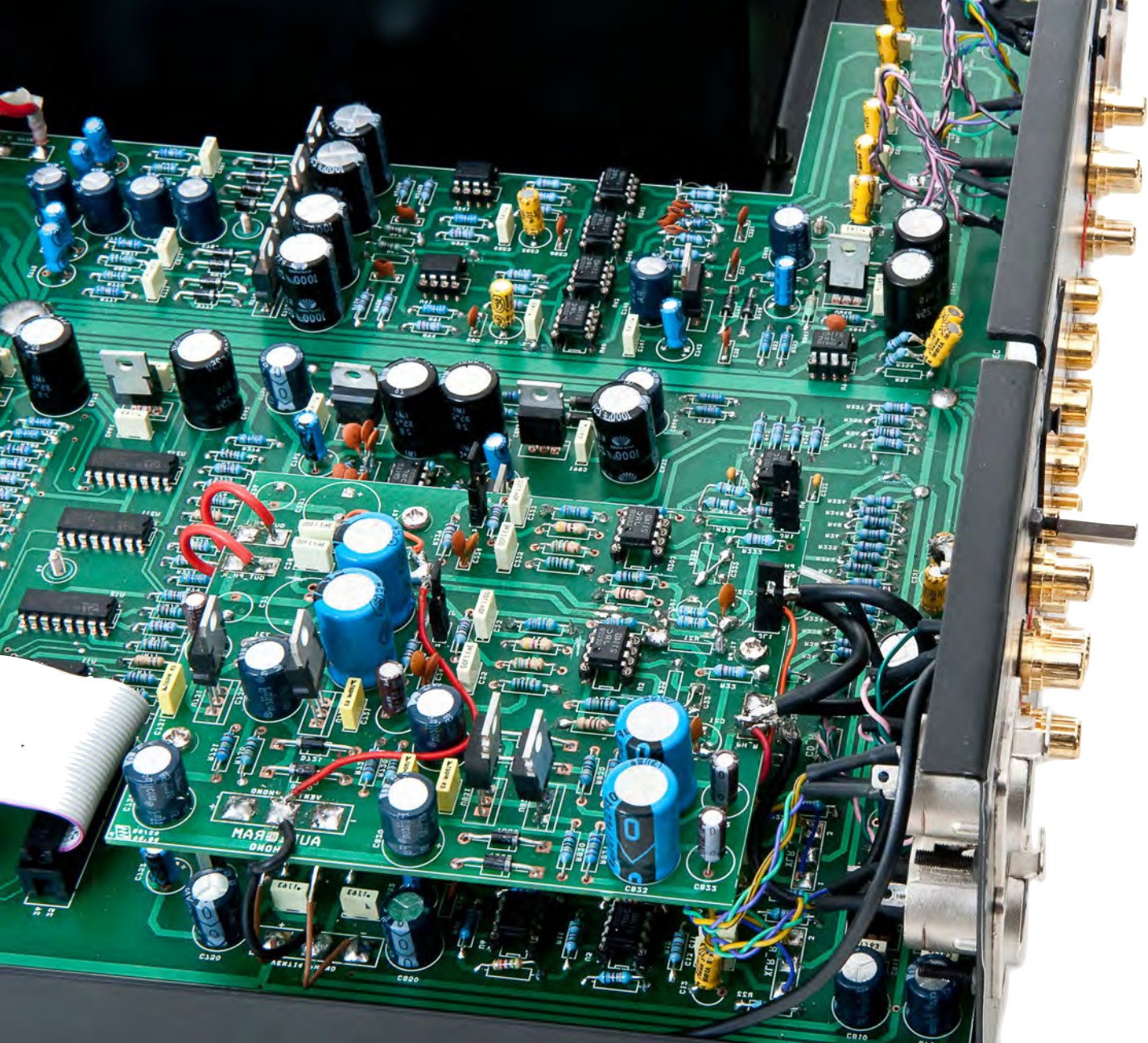
A HEALTHY (AND VERY EFFECTIVE) PHILOSOPHY
Audiogram has always believed in the importance of designing and producing apparatus of absolute prestige which would be branded as reference products by any other manufacturer. Because of this, products such as the **MB** integrated amplifiers have happily kept their stand in the catalogue since 1990.

Each product occupies a definite position within the range and keeps it through the years while it is continually updated with the latest design developments. We have in mind the **MB1** which, since 1990, was updated a number of times and redesigned, maintaining however a clean and linear style which has always been its distinguishing mark. The same goes for the loudspeakers, the stand-alone bookshelf models introduced five years ago, and whose finishing since then has been improved along with small technical overhauls. But the loudspeakers have remained in the catalogue with the same features. The Audiogram philosophy is to have products which are durable due to their functions, design and characteristics, offering great sound and technical reliability.

TWO AMAZING (AND VERY DIFFERENT) MUSIC MACHINES

The stereo output stage of **PW 200**, once the top cover is removed, immediately draws attention due to its massive toroidal transformers (specifically produced for the company) of 600 VA each, both enclosed in a shielded box. The **PW 200** has a power of 170 W on 8 ohms per channel, balanced and unbalanced outputs and double

PR200



loudspeaker connectors for bi-wiring. The on/off button on the front is made out of a solid Plexiglas block; inside there are two luminous indicators, blue to show the amplifier is “on”, whereas a red led signals out overloading. The circuitry is Hexfet based: 6 selected pairs for each channel with a remarkable capacity of 20 amperes each. The Hexfets were chosen for they are extremely fast devices, with a very high transfer curve, great power capacity and very low internal resistance (R_{ds} and so on), ideal for high class amplification. The amplifier’s internal construction does not have any



part in common between the right and left channels, with the exception of the power plug. In short, a real dual-mono.

The circuitry topology is not particularly important (it is a “common” AB class), no matter how refined and despite the quality of each component. The real uniqueness of this amplifier lies elsewhere: the voltage after the transformer is rectified by 16 ultra-fast diodes and undergoes a filtration of 22000 uF on a first board, after which the power supply is transferred to the power amps boards. Their peculiarity is that on each board of the amplifiers and in the proximity to each transistor (12 for each board), a 3300 uF condenser is placed (one for each transistor) so that at every request of the recording, the musical signal is supplied with an abundant quantity of energy.

Special importance is assigned, obviously, to the power

supply, not only for its capacity and stabilization, but also for the almost total absence of runaways and minimising of contacts. The chassis is manufactured using laser machines and numerically controlled lathes, able to guarantee top level industrial construction standards, notwithstanding the artisanal dimension of the Italian company. The front panel is in aluminium and crystal: the use of crystal, besides being an important design element, ensures the panel's lifelong aesthetics (which could not be achieved using, for example, plexiglas or some other transparent methacrylate) to equal, at least, the technical life of this piece of equipment. Also the engraving on the front panel is done by laser, with the aluminium carved in depth without using paints which could easily deteriorate. The PR 200 preamplifier, from a purely mechanical viewpoint, retraces the design of the PW 200. From an electronic standpoint the preamplifier presents a conspicuous series of really interesting aspects.

Speaking of the basics, the PR 200 has eight pairs of line inputs (one balanced), a MM-MC phono input, an MP3 input (with a different sensitivity compared to the others), two pairs of outputs to the amplifier, both balanced and unbalanced (with bi-amping possibilities) and a Rec Out. Power supply is enclosed in a shielded metallic box and is composed of a toroidal 250 VA tran-



IL PW200



sformer and a board that carries out a first rectifying and filtration phase. Various power supplies lead out of this box to reach the motherboard. The amplifying circuitry makes use of quality low-noise op-amp with very high transfer curves, helped by a good supply of local power stabilisers. Everything listed above should be enough to obtain high performances, but the real heart of this apparatus is the volume control, crucial element of all pre amplifier systems: this device is made of an electronic selector composed of multiple switches with dual power supply which select the appropriate series of metallic stratus resistors. This circuit is preceded by a buffer stage which ensures extreme stability, independently from the position (256 in all) of the volume control. The number of volume positions appearing on the display corresponds to the real position multiplied by four, that is a number

every four steps. The other particular feature of the **PR 200** lies in the possibility of acquiring a big optional board with four channels, which can be easily inserted into the preamplifier, whose back panel is already prepared with the relevant inscription. This board allows the DVD inputs to become a six channel analog input. Associated with a multichannel player, this allows for the transformation of a purely stereo piece of equipment into a stereo/multichannel amplifier though maintaining the original characteristics of all the other

inputs. A really interesting option that, with a limited cost, allows even a “shy” audience to enjoy the unquestionable potentialities of multichannel amplification.

LISTENING TEST

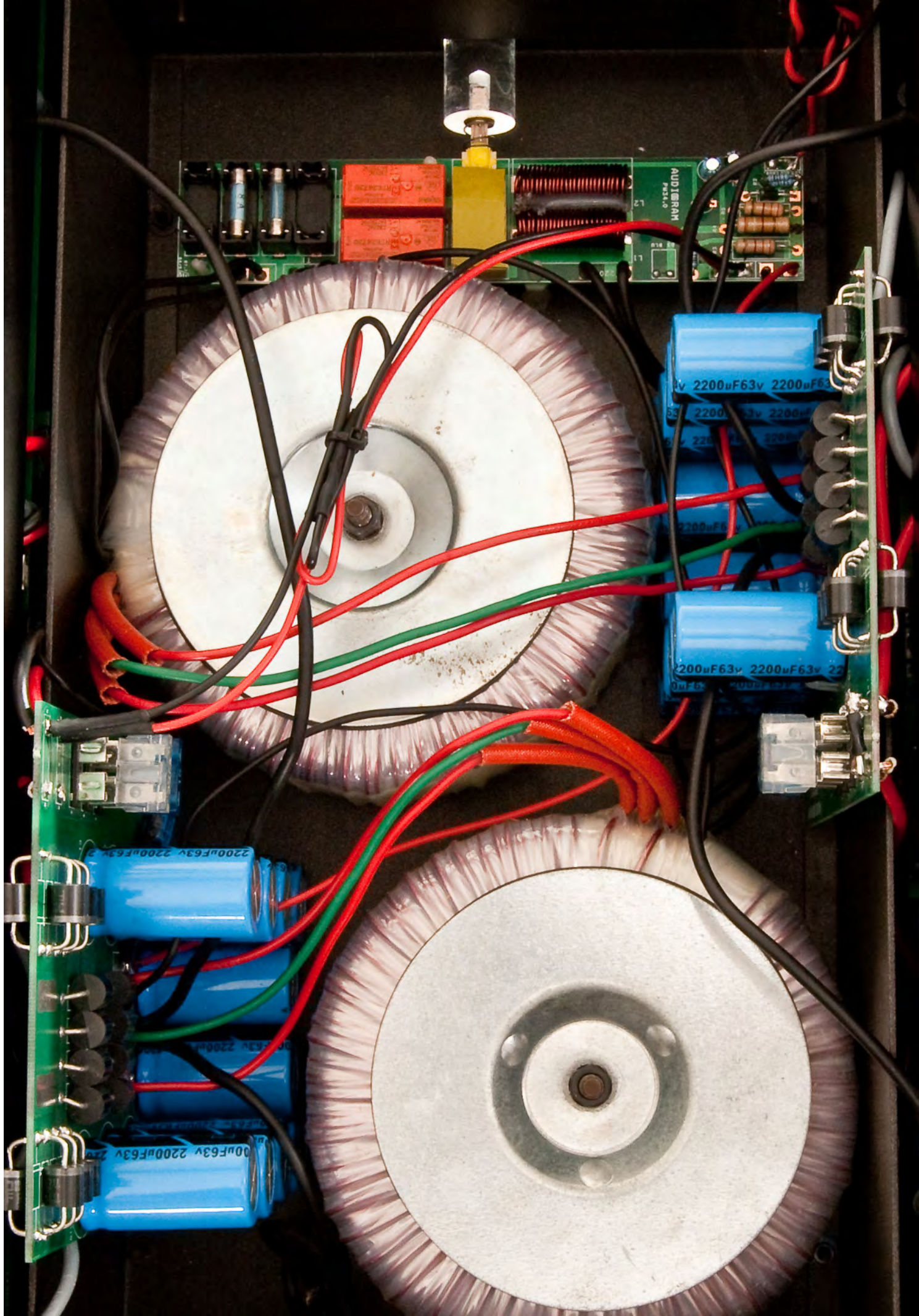
I have been familiar with this couple, and generally with the rest of the **Audiogram** products, ever since the first prototypes, and have had the chance to listen to it in the most various circumstances, in association with **Audiogram** loudspeakers but also with **Thiel, Kharma, Egglestone, Klipsch** speakers, getting at all times a very concrete and positive impression. I still get the same impression now, when playing the **PR 200/PW 200** pair with my **Tannoy Dimension TD 12**, which moreover, are extraordinary speakers, but other than easy notwithstanding their good sensitivity. My **Tannoy** are used to be driven by what I believe to be one of the best electronic couples (surely one of the best, if not the best, solid state amplifier) ever produced, the mythical **Harman Kardon Citation XXP** and **XX** by Matti Ojala.

And yet, once again the impression is that of finding oneself before a high class amplification way above its average purchase price, or, to use a term I do not quite like, of purest hi-end extraction.

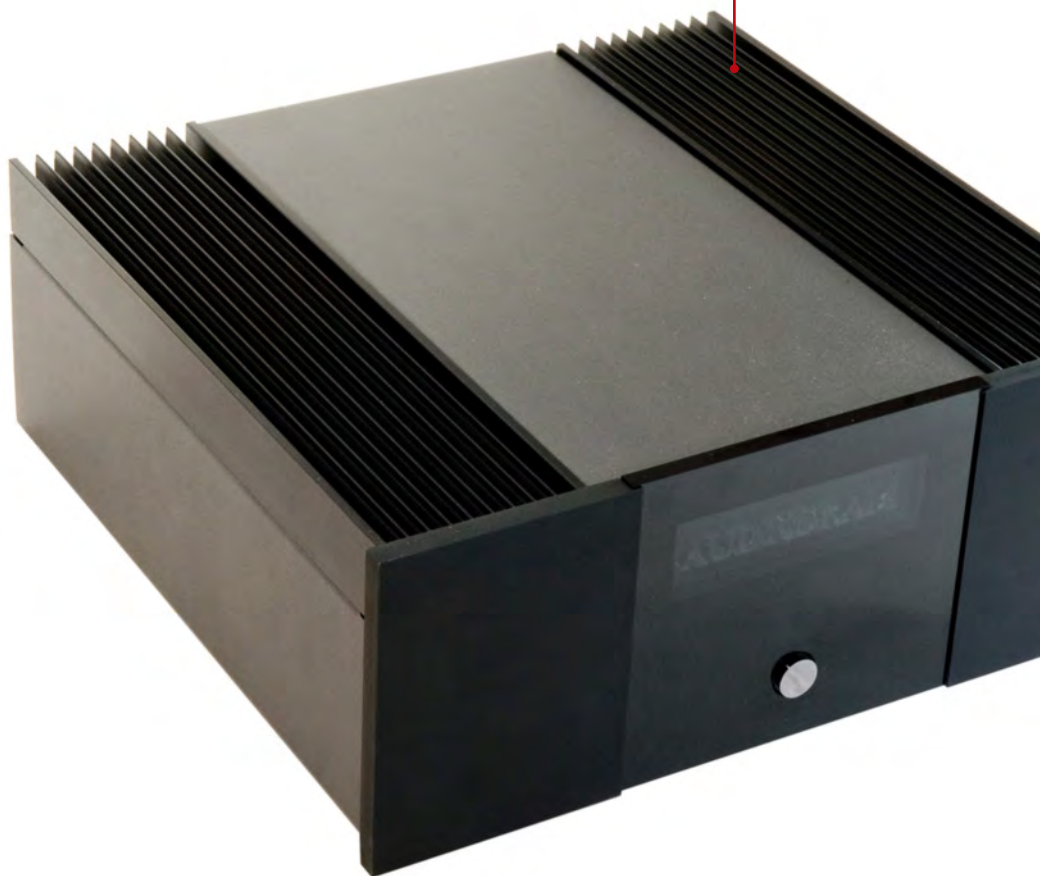
The preamplifier is very quiet, its strong points being precision and attention to minute aspects revealing the most refined nuances. Notwithstanding this, it is other than a “flittering” pre-amp, or on the contrary, a Freudian analyst. The sound is really solid and earthy, with a touch of romanticism (a musicality at times slightly driven towards the melodic and sentimental front which is

A really interesting option that allows even a “shy” audience to enjoy the unquestionable potentialities of multichannel amplification.

ing
ven
nce
the
ble
ies
nel
ion



PW200



not at all negative), capable of a very refined top end, and a liquid and crystal-clear midrange at the same time with an unusually not at all “hard” solid bass, on the other hand, never giving any hint of rubbery sensations in its mid-high zone, something which I have quite often heard lately from preamplifiers which like this one are capable of going very low with a controlled bass.

The power amp is massive, imperious, overflowing if necessary, yet always maintaining extreme tonal coherence, homogeneity and composure. It can drive even the hardest speakers with the most tormented loads without breaking, and I have to say, it matches perfectly with the (not simple, do not believe in legends) double concentric **Tannoy**, doing what many transistor amps are not able to achieve with the legendary DC (Dual Concentric): keeping intact the miraculous cohesion between coaxial woofers and tweeters. The **TD12** moreover has this small SuperTweeter masterpiece that limit themselves to refinishing the higher range without heavy interferences in the overall reproduction. The SuperTweeter however is a very discrete but equally delicate compo-

ment: it takes even just a light sign of excessive exuberance in the high range to make it prone (always discretely but perceptibly) to *scream*. None of this occurs with the **PW 200** which, as I noted on other occasions, is a fantastic *balancer*.

It gives out a lot of current really, and the **Tannoys** practically soar up, invading the space with solid and “concrete” music as I said initially. Etherealness is a thing for other amplifies, or rather for other electronic couples: the **Audiogram** one loves to sculpt music, light-and-dark etchings, giving the impression of a realism hard to surpass if not at prices with too many zeroes.



This smart personality perfectly reflects itself in the three-dimensional reconstruction of the image, which appears extended and with the horizon going deep into space. It is a touchable and perceptible image, not only to the ear but “on the body” of the listener, immersed in

a dense and shared musical space, thanks also to an excellent presence effect, which seems to be in contradiction with the said depth effect. In short, this Italian couple has reaped worldwide success not by chance, despite the pace of production is that of a small company striving to guarantee quality and performance through precise manufacturing, checking and final tests. It is an electronics couple which can withstand practically any type of competition.

