



## **THE POWER OF MONOTRIODES NEUTRAL TONE OF SOUND**

Only a few years since its inception, Nikic Audio Team (NAT) is a leader in their field due to their products' high quality and reliability. They have quickly inspired a fan base around the world.

The Company (NAT) will soon be introduced to audiophiles in Italy. Thanks to the interest and passion of Mr. Antonio Ferro of Esperianze Audio, NAT's electronic systems will become available to buyers in Italy, and thereupon Serbia. Each component is designed and manufactured in Serbia. The founder and inventor, Dejan Nikic, whose last name features in the name of the company, NAT (Nikic Audio Team), wanted to introduce to these markets high-quality amplifiers inspired by ambitious and difficult to realize models. Dejan Nikic didn't think to beat the competition with aggressive pricing; he targeted maximum quality, without compromise. Component selection is crucial and done with high precision in order to guarantee the realization of excellent ideas. A wide range of product series under the NAT brand name are completely based upon schematics of electronic vacuum tubes, and contains four models of pre-amplifiers, one of which is phono, five types of monoblock amplifier, and one integrated hybrid amplifier. Each model includes two cables for the power supply, and one system for electronic adjustment from the electronic tube. This is unique in its category for its "use" of a "plasma" category tube.

The subject of this text is the "Utopia" pre-amplifier product line, with two boxes, and the "Magma M" monoblock amplifier product, a lighter version of the "Magma" amplifier, distinguished by its lesser voltage and power consumption.

### **PRE-AMPLIFIER**

The "Utopia" pre-amplifier is characteristic for its wide frequency range and lack of transformers or coupling capacitors in the signal path. What makes it very special is its both direct and constant power supply, which offers a very unusual solution for an electronic channels pre-amplifier. Nevertheless, this is a pre-amplifier with two boxes, of which the second is without a separate power supply, as is common. The choice of components and functionality of the fore-mentioned elements is a groundbreaking solution. Bigger and heavier than these two boxes is the dominant "Control Unit," which contains within itself the assembly for the power supply as well as control buttons, while the second unit-box "Line Stage" contains analog circuit

elements with electronic channels. This division allows for the complete isolation of "dirty" circuits, which would "contaminate" the sound, which instead passes through circuits that maintain the highest possible purity of sound.

Both boxes are made of aluminum so sturdy it seems to belong more to a tank than an amplifier, without compromising aesthetics and the necessary flow of air for cooling internal components. Each box rests on four supports with "sandwich" construction, designed to prevent unwanted vibration.

The Control Unit has on its front a digital display with blue backlighting of adjustable intensity, and four primary function buttons. On the center back of the box is the IEC port, meant for the power cable, which is connected to the main switch and supports two inputs, of which one is for digital data, and the other for analog data which are further necessary for connecting the Line Stage box and its functionality. The component for internal power supply contains two high-quality filters, one for the analog parts and the other for powering the digital controls, "custom-made" two-torus transformers of low leakage, and divided into 11 phases for each channel. Volume control of the sound is based on 16 relays with gold and silver contacts, and may be adjusted on a scale of 1 to 100.

Line Stage exclusively contains the analog component. The audio signal is controlled by triode electronic valves of low audio impedance, which operate in the precise class A, with completely zero feedback. The front end is totally without command and offers only a small centrally located LED display that displays the operating status from power-on. The back end board of the device is of greater complexity and supports four inputs and two outputs that are available to Utopia, visibly displaying female RCA adapters, gold-plated and isolated with teflon. Also found on the back end are two ports for cables connected to the control unit.

Internal construction is dual mono without any elements that could change the maximal integrity between two channels and defined by a very short audio path to output. As an accessory to this pre-amplifier, a remote control has been built, made of two monoblocks of finely machined aluminum.

### **MONOBLOCK AMPLIFIER**

The monoblock amplifier of type "Magma M" is a lighter version of the powerful type "Magma" amplifier, which is the most powerful representative amplifier of NAT. It depends on a probably unique mechanism, which allows power of 80 W in Class A from one mono-triode amplifier with an electronically single-ended vacuum tube, or actually from one configuration that is characteristic for its high definition, and low power. With adequate voltage, it is possible to easily power almost any amplifier, thanks to the use of the particular electronic vacuum tube EIMAC 250 TH, a triode with direct NOS heating which used to be utilized for power supply within the industry. The most powerful amplifier "Magma," version 450 TH, is able to reach the unbelievable power of 160 W in Class A. Those sorts of tubes or lamps are especially unique due to their impressive stature, with the dimensions of a enormous soap bubble. The model name "Magma" is actually derived from that, since during operation the electronic anodes light-up in a manner reminiscent of volcano lava. With regard to these tube lamps, audiophiles or jealous competition has insisted that some of their components must surely be harmfully radioactive. Apropos, it must be mentioned that this type of vacuum tube was originally designed for systems work within the industry for power supply. The truth is, it does have a high voltage, and could, if operated within its maximal range, be cited hazardous, but if utilized as properly anticipated for amplifiers, which manufacture sound, these lamps operate at a very low voltage, thereby removing any dangerous risk, and guaranteeing longevity of the system. In addition, it should be pointed out that "Magma" amplifiers respect CE standards, and are guaranteed for the safety of all components, which is very important to the NAT brand.



La vista dal basso  
del finale evidenzia  
una cura  
costruttiva assoluta.

For many, the amplifier of type "Magma M" is sufficient, since it allows 90% of the absolute quality of the superior type "Magma," while costing exactly half as much. Special attention is paid to the whole system realization, as well as the components enclosed within the durable aluminum casing. The power-on switch is found on the front, and allows limits to be set up to 30W of the available power; if this is not enough, system cooling is reduced and electrical energy consumption increased. The back end has ports for the power supply, input jacks for RCA connection or balanced XLR (NAT manufactures balanced pre-amplifiers for those who wish to utilize that type of connecting scheme), and three jacks for output to speakers, with the condition that the positive terminal is connected when the average impedance of the speakers has a resistance of 8 or 4 Ohm.

The top-of-the-line "Magma M" amplifiers support firstly big NOS electronic vacuum tube and electronic channel driver, before two large and heavy transformers for power supply and output. Like the "Utopia" pre-amplifier, the "Magma M" amplifier utilizes a common power supply with zero feedback topology. The big electronic tube is mounted on the exterior for better ventilation, protected by glass, and on the front so to avoid possible damage. NAT has announced that it will also integrate a comprehensive casing for the electronic tube that does not reduce cooling or ventilation, but with a finer aesthetic and safety to the system. Adjustment of bias is completely automatic and no intervention is necessary on the part of the system user.

### AUDIO EXPERIENCE

Pre-amplifiers and amplifiers are delivered to the customer in sturdy wooden cases, which, thanks to their mounted handles, allow comfortable and safe transport, taking into consideration the heavy load that is secured.

The assembly of the amplifiers is quite simple, and the large vacuum tube of the amplifiers fits precisely into the packing material, with one click demonstrating that it is secured correctly. The installation of the pre-amplifiers requires a little bit more attention, and attention must be paid to two boxes, which are included parts, so that they are mounted one on top of the other, to ensure the functionality of the system.

In order to demonstrate to myself the sound of the amplifier and pre-amplifier, I decided to take the NAT system home and hook it up to my home audio system, despite the distance involved in transport. NAT amplifiers formed a connection ring between the cd/sacd Emm Labs CDSA SE reader and Sigma Acoustics M-line Eclipse 2.3 Piano speakers, so that my integrated The Grifphon Diablo amplifier lost a stride to the four NAT amplifier boxes. All cables were White Gold series Prestige M, except for the speaker cables, which were of series Sublimis, and the power supply cables for the "Magma M" amplifier, for which I used NAT power supply cables.



L'accoppiata NAT  
nella sala d'ascolto  
dell'autore.

A couple seconds were required to power-on the amplifier due to the necessary warm-up time for the lamps, while the pre-amplifier front-end display showed the time elapsed since power-on until operation. Among other things, "Utopia" has a stand-by function, during which all main components are activated so that time to operation is reduced, but able to reach full system performance capacity.

System power-on is silent, while background buzz from the speakers is hardly noticeable. A few CDs are all that are required to be listened in order to understand the greatness of the NAT system with all of its components. The amplifier truly embodies all characteristics in this example, with electronic vacuum tubes,

together with unbelievable speed of response, the functioning and capability of modulation in a wide range of desirable frequencies. The audio experience has ease in configuration and a constant harmony providing pleasant sound, which I would remark is fine, supplementing the cleanliness and warmth typical to a monodiode, as well as a number of details and nuances, which are always being newly discovered. The tone of the sound is without a doubt neutral, giving the NAT brand the characteristics of an ideal manufacturer with distinctive transparency. Female vocals are carefully reproduced with the least wavering and at the same time expanding towards alto, having a clarity that supports untouchable sharpness and typical human breath, providing a range that gives meaning to the reality and nature of manufactured sound.

While listening to a few discs, the feature that enchanted me more than the synergy between the "Utopia" and "Magma M" was the unbelievable ability of the spatial recreation of stage sound. The width of the stage now eclipses the physical boundaries of space between the speaker, and the emphasized depth is realistic considering the noise in any space within which the systems are integrated. In this age when the fashion of the theater is even more defined with 3D projection, it would be interesting to display to the audience 3D sound, which is truly unbelievable. Two speakers are enough; no 3D accessories are required.

Comparing the NAT brand system with the accomplished achievement of my wonderful Diablo system, I noticed that when the volume is significantly increased, the parameters of the amplifier with electronic vacuum tubes are still quite easily read. I didn't notice one moment wherein the "Magma M" amplifier had a short reach, or were distorting. However, in isolated incidents while listening to the symphonies of Beethoven, which have an incredible intensity and dynamism commencing of a sudden, percussion and cymbals did not have as much sharpness as would be expected.

Finally, I wish only to point out the immense pleasure of the audio experience, the great harmony emphasized even during lower volumes, and the clarity kept and brought forth by the sound.



## CONCLUSION

The offering of NAT's products in our domestic market presents a great stimulus toward increased competition between companies building the most modern systems for audiophiles. Sales prices for "Utopia" pre-amplifiers and "Magma M" amplifiers are appropriate to high-end systems, directed toward those who seek the best. Their price lists are based upon the high quality of all their system components, as well as the innovative ideas and actualization of those complex models which have managed to give the advantage to electronic lamps while minimizing their weaknesses. Their ability to perform in numerous ways allows assembly with practically any diffuser making it an extremely secure purchase for anyone looking for an amplifier with the equipment for harmony, transparency, and neutrality of sound. Since this is a relatively new brand in the marketplace, it is sure that the future of the NAT systems will be the desire of many audiophiles.

## SUMMARY

In the undefined and unexplored field of high quality systems, it is always possible to find exceptional products which were beforehand unknown or unheard of. Searching for those products is quite difficult, but the importer and distributor EsperienzeAudio, which has fortunately succeeded in making NAT (whose products are top of the line no matter whether considered by quality of manufacture, technical excellence, or audio performance) available in Italy and Serbia, must be applauded.

*Image 2:* Back end of amplifier; very simple.

*Image 3:* Internal view of the amplifier.

*Image 4:* NAT products connected in an audio room.

*Image 6:* Back end of the "Utopia" pre-amplifier. Ports on the right side serve to connect the Line Stage box, top, and Control Unit, below.