-Review-

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I have no idea how did the courier managed to bring it up to my apartment. The guy was even smaller than me, he carried it for half an hour, but he did it. I was not at home at the time, but the other day, when he saw me through the window of his corporate car, he waved at me – so I guess he still likes me. The box that he carried to my third floor, at first glance does not seem particularly impressive. It's rather big, I admit, but nothing suggests a weight comparable to an iron

block.



The amplifier called Shinai, that was delivered in this box, weighs 40 kg, and when packed it is even 50 kg. The device is compact in size, measuring just 318 x 196 x 473 mm, and delivers just 37 watts output per channel for both 4 and 8 Ω loading, which is something one might expect rather from a tube amplifier. But its damping factor is much higher at > 160 and distortion is lower. It is made in Italy by Grandinote. I do not know if you remember, but in April I described the Audio Video Show Prague 2017 show, that High Fidelity was a press partner with. Selected systems were awarded the Best Sound Awards. Among them was a system based on an amplifier that now I can tell you about.

And there is a lot to talk about. Under the inconspicuous "hood" there is a technology that allows you to control the vast majority of loudspeakers in medium and larger rooms. The company offers both integrated amplifiers, preamplifiers and power amplifiers - stereo and mono. There is also a phonostage and an audio files player. The lineup is grouped into two lines: Magnetosolid and Magnetosolid - VHP; Shinai belongs to the former.

The company became quite famous after the German magazine "Audio" rated the Grandinote Demone Mono Block amplifiers at 140 points which a maximum, an absolute top rating, something like the "perfection". During the 45 years of this magazine's existence, the maximum score was obtained only by three (three!) products, including the said monoblocks. Shinai belongs to the basic line of this manufacturer, but it also features all the basic ideas that Massimiliano (Max) Magri, the owner and chief designer of Grandinote, used also in his most expensive monoblocks.

The most important technique is called Magnetosolid. What is Magnetosolid? As we read in the company's materials is the name of Max's patented technology, which is a combination of two elements: ferromagnetic and "solid state". Although this may seem mysterious, in fact it is a development of a technique known ever since the audio transistors were first introduced - after the current output stage there are audio transformers, same as in tube amplifiers. Let me remind you that the output transformers used after a semiconductor output is sort of a trademark of the American McIntosh.

Grandinote uses a slightly different, patented solution developed by Max:

In the past, a well-known American company designed a solid-state amplifier with output transformers. But that was it: a semiconductor amplifier with transformers at the output. My Magnetosolid amplifiers are different: they are actually tube amplifiers with semiconductor components replacing tubes. At their output there is a transformer, because the tube amplifiers must have it in the output.

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When someone talks about "tube sound" or "transistor sound", what I hear is a "colored sound". Of course, I understand the function of the stereotype in the understanding of the world around us and the fact that it has a positive role to play, because it allows us to explain complex things in short words (what is dangerous is keeping it always short without explaining details when they are needed), but in audio terms such as "tube sound" and "solid-state sound" are so strongly connected with emotions that they become more than just stereotypes, they become dogmas.





I can not help it though, and with the Shinai amplifier I shall use this type of pick and I will say that this is a perfect example of so-called "vintage sound". Except that it has been transplanted into the 21st century, keeping all of its key elements (advantages) and adding to this more of them based on many developments that were created since 1950s and 1960s. From the "tube sound" it differs in that it is difficult to call it a "warm sounding", or to claim that treble or bass are rolled-off, or to even think about any problems with macro-dynamics. It is also different from a "transistor sound" because there is no hint of these stereotypical "coolness", "thinness" or harshness" of the sound.

Before I started my assessment, I read that the Grandinote amplifiers easily drove many magneto- and electro-static speakers, but I had to hear it for myself how graciously and easily they drove my Harbeth M40.1 to accept and understand what it's all about. This is the case in which the power given on paper does not feel like what we can actually hear. As if other companies misinterpreted their measurements and simply exaggerated specifications of their products. No, it was not as dynamic and just free-flowing sound as from my 150-watt (at 8 Ω) Soulution 710 monster. The difference was, however, much smaller than in the case of many other, according to their specifications, much more powerful power amplifiers and integrated amplifiers that I'd tested. Shinai sounded as if it had several hundred watts at its disposal.

But these are "tube" watts, so to speak. Please forgive this inconsistency - I just wrote that this is a dangerous stereotype - but it is a good time to return to this topic for a moment. Especially since we have explained the rules. "Tube" watts are those that do not relate to the hardening of the sound. The problem with powerful solid-state amplifiers is that they almost always have to use many parallel-coupled transistors. And there are no two identical ones. For top devices a lot of time is invested in paring transistors, but even than there is no 100% compatibility. Hence the popularity of solutions using only a single transistor. But they also have their problems and the only constructions whose advantages outweigh the disadvantages - I am talking of the devices I have heard - are the small Nelson Pass First Watt and the TelluriumQ Iridium 20.



Massimiliano did not stop in his research on developing this solution. He also developed a new type of output transformer offering even better performance. But these are very, very expensive in production. That is why all Grandinote amplifiers are available in two versions: with basic or with more expensive transformers. The latter are called Magnetosolid-VHP, where VHP stands for: "Very High Performances".

SHINAI

The unusually large weight in such a small chassis comes from the use of ferromagnetic elements (transformers) in it. As it reads in the company materials, it was about combining the advantages of semiconductor and solid state circuits while eliminating their disadvantages. For a user, besides the weight, it does not have to matter though. For him it will be important that Shinai is an integrated amplifier, equipped with two unbalanced RCA inputs and two balanced XLRs. The circuit is fully balanced, so the signal behind the RCA inputs is immediately symmetrized. The gain stages work in class A without feedback.

This is a dual mono design, which means that in a single chassis there are two identical mono devices, with two identical amplifiers, with separate power supplies, which amplify the positive and negative halves of the signal. This helps to reduce a crosstalk between channels and thus improves imaging. The channels are completely separated - each of them is powered using a separate power cable, which one should consider when buying this device. But it is also the best possible channel separation in a stereo amplifier.

Its chassis features a narrow front and large depth (see Audio Alto). On the front there is a LED display, which makes reading it quite easy. On the sides there are six buttons that change the volume, active inputs, mute the device, and with the sixth one user can enter the menu of the device where he can personalize some settings such as the initial volume level for particular input, "sleep-time" for the display, balance between channels, etc. You can also change input 1 to a line output.

The Shinai is delivered with a nice, small remote control.

MAGNETOSOLID® TECHNOLOGY

An official launch of Magnetosolid by Massimiliano Magri (or Max for his friends), the founder and designer of the company, happened in 1996, i.e. from his first amplifier when he was still a student of electronics. His first designs were based on tubes, because it was easier to achieve a good sound with them, than with semiconductors. From the very beginning, he called his creations Grandinote, even though the company did not exist yet.

His adventure with transformers Max had started even earlier - at the age of 20 he bought his first winding machine for audio transformers. Perhaps that is why all of its amplifiers, first using tubes, and now also based on semiconductors, feature output transformers. These experiences and the studies devoted to this subject gave his a solid base for creating the Magnetosolid technology.

At the beginning of the millennium, Massimiliano closed the chapter on tube amplifiers, and three years later, in 2003, he had a ready-made amplifier of a new type. As he recalls, it was a pure coincident that already a prototype sounded a lot like a tube amplifier, even though there were none inside ... Unfortunately, it presented also some downsides of this technique - the sound was not controlled well enough and did not have enough energy in it. Still, people listening to this amplifier were "surprised that a solid-state could sound like a 300B tube."

The first finished device with Magnetosolid technology was the A Solo model of 2005. In the same year Grandinote company was established. As Max says, when compared his sound to the best amplifiers on the Italian market it was clear to him that only the biggest solid-state amplifiers had more power and better controlled bass than the A Solo. His next mission was to eliminate these drawbacks.

The answer was the Prestigio model, which entered the market in 2007, after seven years of research and development of numerous prototypes. A Solo production was halted a year later, and replaced by the Shinai. Then Max did something that no other company would have decided to do - he promised all his customers who had bought A Solo before that if they choose to buy Shinai he would buy their old amps back offering them a decent price. Soon, he had all A Solo models in his warehouse and Shinai models appeared in systems of many of his customers instead. Because, as he says, "one thing matters - sound quality, the rest is not important."

Just like twenty years ago, also today his amplifiers feature output transformers – back then he used them in tube amplifiers, today in solid-state ones.



Shinai is just as good if not better. And that is because I couldn't hear any limitations to its bandwidth or dynamic range, nor could I hear it artificially warming the sound up - and such "warming up", i.e. a substitute of a "tube sound", is nothing else but coloring of the sound. The Italian amplifier modifies the signal too, but in a more subtle way that affects the music less. It goes towards a slightly darker and rounder sound, moving the selectivity, i.e. isolating the individual sound sources, down the line of its priorities. And at the same time it is perfectly resolving and palpable. And all that is very similar, i.e. going in the same direction, as my, costing over 270 000 PLN two-box system!

As I said, the frequency response is very good. The lowest bass is less differentiated than with Soulution, but it is equally well-controlled. Its attack is a bit rounded and decay slightly shortened. But its is rich and saturated, fleshy, dense, simply really very good. Same goes for the other range extreme, the treble. These have excellent density and weight. You can hear all the nuances of good recordings like Takeshi Inomata's *The Dialogue*. But also the electronic pulsing from the latest Kraftwerk's album *3-D* was outstanding.

With no album I reached a moment when something sounded too hard, harsh or even slightly unpleasant. Shinai has the rare ability to present the better side of recording without warming it up and without reducing the differentiation. This is a high-end device that, thanks to several "tricks", bypasses the weaker sides of many recordings, without emphasizing the good sides. Unlike - let's go back to it for a moment - most tube amplifiers, it does not hide the "dirt", it does not swipe them under the rug. And yet, I felt as though there were fewer of them. Perhaps, while not focusing on them, it finally discovers the real face of the recordings, not their artifacts.

I listened was wondering how would vocal recordings sound like, because it is the voices that on most recordings sound worst. As I said, the Italian amplifier reminded me in many areas (actually in most of them) my own reference system. It is able to, for example, present the size and scale of the vocals captured by a closely-placed microphone and slightly "tweaked" during mixing and mastering, such as Nat 'King' Cole's from Master CD-R disc by ABC (Int.). His voice was saturated, dense, although it had a slightly smaller volume than when played by the reference system. This is how a little less power manifested itself, not by reducing the dynamics or shortening the bass. This is also how a higher resolution of Ayon and Soulution manifests.

With such a huge price difference, however, these are "natural" modifications and surely they did not come as surprise. I could only wonder why these differences weren't much bigger. Shinai is one of few amplifiers capable of combining all aspect of sound together so well that without head-to-head comparison one won't even realize that Naim Statement offers much higher dynamics and so-called "headroom" (a subjective one, because it features a regulated power supply), that the Phasemation MA-1000 power amplifiers deliver even softer sound, and that the Tenor Audio 175S is even warmer and delivers more palpable sound.

Summary

Such comparisons are not, at least in my opinion, necessary. The Italian amplifier has its own way to present music and its own sonic character. Everything in its sound is well structured, orderly, and some elements such as softness, fullness, density, both range extremes extension and dynamics, are simply delightful. And the "vintage sound" I mentioned at the beginning? It's more of a feeling than specific elements that could be pointed out. Shinai has much to do with Andreas Spreer's recordings from Tacet Audio, with the sound of the Manley Stingray II(Polish), with Siltech Double Crown (Polish) cables. It is about coherence, cohesion of the sound, without emphasizing the treble. The only part of the band that is slightly highlighted is the range of 600-800 Hz, thanks to which the drums cymbals have a strong foundation and energy.

- Testing Methodology

The Shinai amplifier was supposed to be placed on the top shelf of the Finite Elemente Pagode Edition rack. I have its classic version, not the HD one, but I reinforced the top shelf by inserting four specially prepared for this purpose, Franc Audio Accessories Tablette feet. Its size, however, ruled out this option - the device is really deep and one need a proper rack for it to give it enough space. So I had to set it up like other big amplifiers - in front of the rack on the Acoustic Revive platforms. Max clearly states in the manual not to do this (not to place this amp in front of the speakers), but I did not have a choice.

I felt pretty confident about it since the same placement had not hurt other amplifiers before, such as Vitus Audio SS-101, Abbysound AX-2000, Audiopax Magiore m50, KR Audio Electronics Kronzilla VA680(Polish), Dan D'Agostino Master Audio Systems Momentum Stereo, Phasematiom MA-1000 (Polish) and Naim Audio Statement NAP S1 (read HERE or HERE). The only big amplifier that was placed on my rack was the Kondo Ongaku but only because it featured six feet.

Shinai was powered using two Acoustic Revive Power Reference Triple-C power cables plugged into Acoustic Revive RTP-4eu Ultimate (4300 EUR) power strip, powered using Acrolink Mexcel 7N-PC9500 power chord (2,5 m, rhodium-plated plug; 17 990 PLN/2 m), plugged into Furutech FT-SWS ® wall socket; The socket uses a separate power line with Oyaide Tunami Nigo, 6 m cable and Hi-Fi Tuning fuse.

To maintain synergy, I also used Triple-C Acoustic Revive speaker and XLR interconnect cables. The source was the Ancient Audio AIR V-edition CD player, and the Cantano W turntable with Cantano T arm (worth 70,000 PLN). Shinai was compared to the Ayon Audio Spheris III tube preamplifier (139,900 PLN) and the Soulution 710 power amplifier (130,000 PLN, not produced anymore) that drove Harbeth M40.1 speakers.

- Sound -

Recordings used for the test (a sele- ction)

- Brendan Perry, Ark, Cooking Vinyl/Vinyl 180 VIN180LP040, 2 x 180 g (2011)
- Kraftwerk, 3-D The Catalogue, KlingKlang | Parlophone 95873424, 7 x CD (2017)
- Nat 'King' Cole, *The Nat King Cole Love Songs*, ABC (Int.) | Master Tape Audio Lab AAD-245A, "Almost Analogue Digital", Master CD-R (2015)
- R-men, *I thought about you*, T-TOC Records MCDR 3002, "Platinum Gold Sound", Master CD-RIIa (2010)
- Shubert, Sonata for Piano in G Major, Op. 78 D894, "Fantasie-Sonate", wyk. Valery Afanassiev, Denon Co-78923, "Mastersonic | One-Point Recording", CD (1994)
- Sohn, Tremors, 4AD/Hostess CAD3403CDJ, CD (2014)
- Takeshi Inomata, *The Dialogue*, Audio Lab. Record/Octavia Records OVXA-00008, SACD/CD (1977/2001)
- Tsuyoshi Yamamoto Trio, *Misty*, Three Blind Mice/Cisco Music TBM-30-45, ,,Twenty-Fifth Anniversary Limited Edition | No. 0080/1000", 45 RPM, 2 x 180 g LP (1974/2004)

Japanese_issues available at



Listen to this device with any loudspeakers using any recordings – that won't be a problem as it is extremely versatile. You should listen to it and decide whether you really need a preamplifier in your system, or whether you truly need some huge amp delivering an output of hundreds watts and whether a high selectivity is something you really require. If you don't need these things, or - so to speak - at a low energy level, you should give this amplifier a chance. It's the high-end at its best. And as a bonus you will have a wonderfully spacial presentation with huge soundstage.

- Design-

The amplifier has a longitudinal form, with metal side walls painted black and a separate top panel made of polished steel. You may see your reflection staring at you also from the rear panel. The front is made of aluminum. As I said before, the front features a medium size red LED display and six buttons. On the rear there are two pairs of RCA and XLR inputs and two pairs of single speaker outputs. Below there are two IEC power inlets – one for the left and one for the right channel.

Inside you will find two identical vertically placed amplifiers. They are facing each other with large radiators running along the whole depth of the chassis. The top and bottom of the chassis feature multiple ventilation opening and the radiators are very large. This should not be surprising, because the amplifier gets very, very warm during operation – remember to leave a lot of space around it for proper ventilation. All stages of this amplifier work in class A, and the output stage (for each channel) features a single transistor per branch.



On the sides there are large toroidal transformers, screwed vertically to the shield separating them from the circuits - one works in the power supply section and the other is the output transformer. Because of the transformer output, the output power is the same for 4 ohms and 8 ohms loadings. Before the transformers there is one output transistor per branch, i.e. two per channel. The entire layout is balanced, so the output stage works in a push-pull configuration. Not only does each channel have its own power supply, but also each branch is powered by a separate secondary winding. This is one of the few cases in which a balanced connection may offer a better sonic results than an unbalanced one.

The amplifier is delivered in a professional, Italian-made case made of a rigid, impactresistant plastic. This case features wheels, which is a welcome addition when you have to move this heavy device around.

The remote control reminded me the famous Apple one. It is rather small but handy and functional.

Specifications (according to manufacturer)

Output: 37W (4 and 8 Ω) Damping factor >150 Frequency range: 2Hz – 240KHz Weight: 40kg Dimensions (S x W x G): 318 x 196 x 473mm Power consumption: 270W