Review of Grandinote SHINAI by Christiaan Punter, 09/2021 on :



# Grandinote Shinai Class-A integrated amplifier



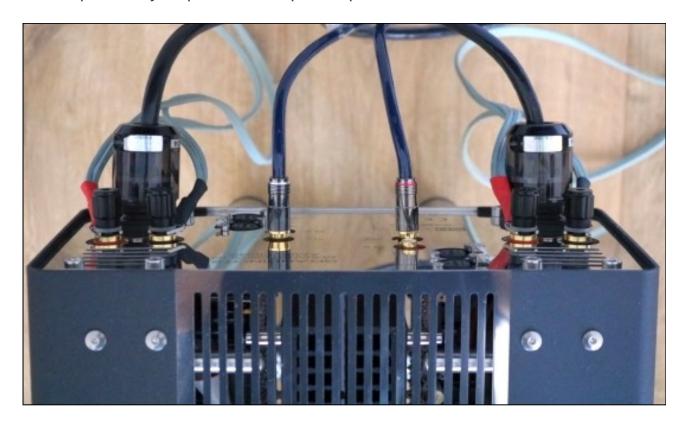
# Magnetosolid

There are only two basic types of amplifiers: tube amplifiers, and solid-state amplifiers. But Grandinote has set out to combine aspects from both in their products. They do this using what they call the Magnetosolid principle. So, what does this entail? The exact definition remains something of a trade secret, but apparently, tube amplifier schematics are used without using tubes. What is unveiled is that the Shinai uses output transformers like in a tube design but with some changes specific to the Grandinote study. The term Magnetosolid is the union of Magneto and Solid. Magneto is for ferromagnetic components, referring to the output transformers while Solid is for solid-state components, as in the transistor output devices.

Further, it's mentioned that the output transformers are a consequence of the tube schematics and that the products employ Direct-Coupling stages, meaning that no capacitors are used in the signal path. While the latter statement might be true for the Shinai integrated amplifier, it does not apply to the Volta and Celio source products that both have inline capacitors, again, much like tube products tend to do.

### Shinai

The Shinai integrated amplifier uses only two output transistors per channel in a simple push-pull configuration and in a true dual-mono setup to deliver 37 Watts in pure Class-A (speaker impedance not mentioned). Not only are the channels 100% separated (two heat sinks in the middle with the gain stages on the left and right sides and finally the power supplies on the outer sides), the amp actually requires two separate power cables!



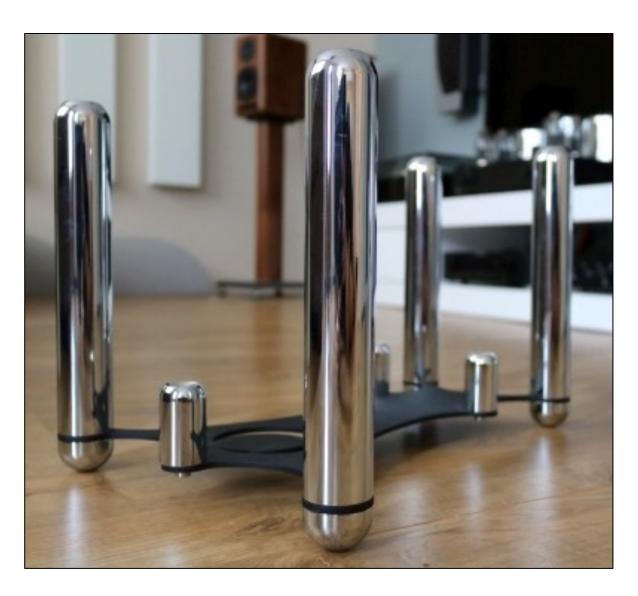
According to the specifications, the Shinai employs no feedback but as far as I know, a transistor cannot work without some form of feedback, so I figured that what was meant is that the amp employs no global feedback. Upon checking with the manufacturer, designer Massimiliano Magri responded, (slightly paraphrased):

"Feedback is part of the output signal that returns to the input. The Grandinote products have no output signal returned to the input, not locally, not partially. Really my friends, Grandinote products are TOTALLY feedback-less!!!!."

That's certainly interesting.

It's also indicated that the amp has no capacitance between the stages (but does so prior to the output transistors) and that it has a very low output impedance, resulting in "a very high damping factor". The specs indicate that the Shinai has a damping factor of over 150. Now, while that doesn't appear to be very high in light of values of 1000 that you typically see for Class-D amplifiers, I should note that, depending on the design, relatively low damping factors can still yield superb bass control. Moreover, one can question whether such extreme values actually result in the best or most beautiful sound. In any event, according to the manufacturer, the Shinai "should have the kind of bass control that tubes can only dream of". It's a bold statement but one that I would later actually find to be true.

At 40kgs and with a relatively compact size of 318 mm wide x 196 tall x 473 mm deep, the amplifier feels extremely solid and is so heavy that it is best handled by two persons. The amp offers two RCA inputs and two XLR inputs and that's it, nice and simple. All the connectors feel comfortingly robust.



### Combo Stand

The Combo stand is custom-made for the Grandinote stereo integrated amplifier or stereo power amps, together with a Volta or Celio source component. There are various other Stand options that cater to the preamp or a preamp combination, and for the mono power amps, and some of them are available in two different heights. The Stand-Combo that I used for this review is available only in a 272mm height. Since the stand has been designed specifically for this amplifier, I started my listening as intended, with the Shinai amp on top, its rounded feet perfectly fitting the pillars' dimples, and the Celio in the rack's lower position, just for the looks. I will review the Celio and the Volta separately.

As it would turn out, the Combo stand greatly affects how the amp sounds. I will describe all this in great detail and in a stepped approach. Therefore, please make sure to read the entire review prior to forming an opinion.



# Xavian system

System. Connected with two Belden 19364 cables with Bals Schukos and Oyaide C-004 IEC connectors, a Siltech Paris cinch interlink, and van den Hul Skyline Hybrid speaker cables, the amp was mounted on the Combo Stand. It goes without saying that audio products need warm-up time. Some more than others, but it's rarely not a factor. The Shinai is no different, but in order to relay the full experience, I will describe how it sounds cold or warm and on its Combo Stand or on the Artesania Modular Floor platform.

Upon the first switch-on and granted no warmup, the Shinai rewarded with the big, lush, and rich sound and with the immediate musical appeal that one typically expects from a Class-A amplifier. In the context of this system and placed on the Combo Stand, the bass is of the rich and saturated and slightly mellow kind but rather than being slow or lacking impact, the music is reproduced in an involving and upbeat manner with truly excellent pacing and remarkably great dynamics.

During the first few tracks, while the amp was still warming up, it had a full and rich tonality, but there was also a slight dryness and hardness in the treble, reminiscent of how typical transistor amplifiers can negatively affect the sound. At this point, in a strange association that I wouldn't understand until later, in a way, the Shinai reminded me of the early Class A Krell amplifiers, but with a decidedly richer delivery and a more organic feel. Even so, and even without any optimizations in terms of cables or otherwise, the amp made me relax and enjoy the ride and that's always a good sign!

During what was probably the sixth track, I noticed how the treble had lost any trace of hardness and had become fluid. Not only that, the entire frequency range now manifested in a uniform manner, with an utterly freeflowing, supremely liquid presentation and a soundstage that filled the entire room. There was most definitely something to this alluring delivery that literally made me surrender to the music as it washed over me. At this point, the aforementioned link with Krell was shattered and made room for another association. Now, the Shinai more resembled the Jadis sound as I know it from the JP80 and JA30 pre/power combo: big, lush, and smooth. But the Shinai added to this with more grip and better and more varied pacing to make for a delivery that is not only highly natural and non-electronic but also well-detailed, open, and exciting. Somehow, the Shinai is just as supremely liquid as it is energetic and gripping. What's more, it's not only dynamic and expressive, it has the kind of breathing, unrestrained, and varied dynamics, as opposed to the steadily loud presentation that many transistor amplifiers have. This is a very important factor in making the music sound realistic and involving.

Although it sounded great from a cold start, I'd say that the amp really came on song after about 45 minutes. Pierre Costers of Colab confirms that he usually allows the amp to warm up for 30 minutes prior to any listening and a warm-up of 1 hour for serious listening.



Counter-intuitively, the Ayon Spirit III KT-150 tube amplifier actually sounds comparatively drier, darker, less liquid, and free-flowing than the Sinai. I'll let that sink in... But I will note that the Ayon does have an unusually non-tube-like sound. In fact, it has a more ballsy and concentrated delivery than many transistor amplifiers, the Shinai included. As regular readers know, I've always admired the Ayon for its solid sound and especially its remarkable bass. It has a toe-tapping and highly rhythmic delivery that works particularly well with 80's soul, hip-hop, and other electronic music without ever highlighting the treble. But even though I love the Ayon's slam, there's an inescapable allure to the Shinai's glorious and effortlessly continuous delivery. I won't say that the Ayon prevents an emotional connection but it certainly comes easier with the Shinai. And I have yet to find a style that it does not reproduce with verve.

Note: the source component on the Combo Stand's lower level will be reviewed separately

Compared to the Ayon and contrary to that amp, the Shinai's bass does have that slight bloom and roundness that I have come to associate with transformer-coupled outputs and whether or not the Shinai employs these, that's one aspect in which the amp mimics tube sound. In line with those expectations, the Shinai's bass is not of the chiseled-from-granite kind as it can be with some transistor amplifiers.

But as I mentioned, the amp is absolutely not slow, and most certainly not blurry. Then, there are the glorious midrange, the flow, and the effortless soundstaging for which tube products are typically praised and which strangely make the Ayon sound a little sober, and, in a way, more like a transistor amp than the Shinai that actually is a transistor amp. This just goes to show that it's dangerous to make generalizations with respect to amplification techniques and audio equipment.

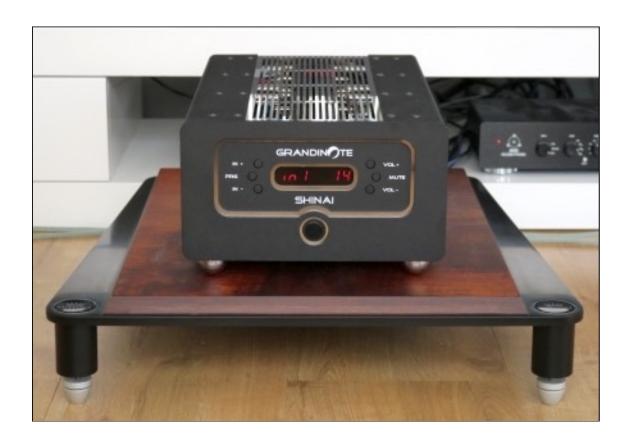
Even though the Shinai offers a nice dose of bloom and gentle warmth, importantly, there's absolutely no excess of warmth and also no "saddle" effect, in which the midrange is structurally dialed back compared to the bass and treble. Principally, the amp just sounds linear, and it adapts to the music. When playing Toni Braxton or Anita Baker, the Shinai delivers the music with what seems like a subtle golden glow but as soon as you play something spicy like Robert Palmer's You Are In My System, or basically, anything produced by Michael Frank, the amp immediately flexes its muscles, throws out any idea of sugar-coating and slaps me right in the face with its immediate dynamics! It may sound as if I am being overly dramatic, but really, I am not exaggerating. Whenever I play something spicy, it comes out as such, totally unrestrained.

It's the seemingly impossible: a very neutral and linear amplifier that is fast, expressive, and dynamic but equally lush, liquid, and seductive, but this is exactly what the Shinai + Combo Stand achieves.

### The Combo Stand's Attribution to the sound

So far, I've listened to the Shinai mounted on its Combo stand. But even before placing the amp on the stand, I noticed that it's not exactly very rigid. There's a large amount of flexibility that is caused by the rather small pieces of metal that connect the four legs. No doubt, the design looks really nice but with the amp placed on top it has a rather large amount of play and you can easily rock it side to side or front to back, or in any direction, really. Would that be by design?

The thing is, as I have described above, the amp sounds absolutely great on the stand. But still, I needed to know what would happen when the amp was placed on a very solid foundation. Thus, I moved the Artesania Modular Platform to the secondary room and got some help to place the amp on it without switching it off. Muscle-man Francois (Jeromeke) of BelHIFI is happy to move around this amp's 40kg's all by himself. With two persons, it's so easy that you may feel ashamed and wonder if the second person was even needed but if you have a bad back or are of a certain age, I really recommend remaining on the cautious side. I've had a hernia and that's no fun.



As suspected, the amp's sound is indeed affected considerably by the move from its floaty stand to the very sturdy floor platform. To my surprise, however, it wasn't all good. The bass sure benefitted a great deal as it became tighter, more incisive, and more grounded to the point that the amp sounded more like a multi-transistor powerhouse than a minimalistic 37-Watt amplifier. This in itself is generally a good thing and I certainly enjoyed it. But the entire presentation now became more stilted, as if the amp suddenly shedded any transformer-related signature and threw out all of its tube-ness. Put differently, it made me think of the difference between an amp with low feedback versus one with a lot of feedback.

The tonality really did not change very much at all and the soundstage was still filling the room. The rhythm was still bouncy, and even though the bass was now more neutral and accurate, and indeed similar to the Ayon, somehow, the Shinai was technically more impressive but now moved me less. Of course, this impression was relative and with prolonged listening on the Artesania platform, my internal compass leveled again and I could totally get into the sound again.

This substantiated my feeling that the amplifier could indeed be designed with the Combo Stand in mind. Pierre Costers added the following:

"In my knowledge, the vertical stability is more important than the horizontal one, look at Grand Prix Audio racks, very expensive, and some turntable manufacturers (who all have incorporated this element in their design), and also the ground onto which the rack is placed."

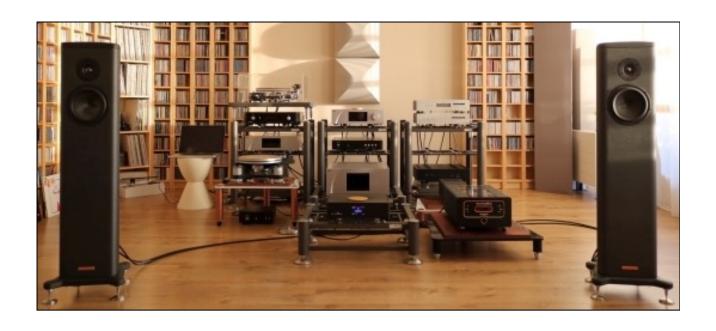
# Power, Watts, and Speakers

To further complete my impressions of the Shinai, I moved it to the main listening room where it was again placed on the Artesania platform with the help of my friendly neighbor Bart, so as to compare two similar situations. In the main room, I use the Magico S1 MkII speakers. Even though these are the brand's smallest current speakers, the S1's form a relatively difficult impedance for many amplifiers, especially tube amplifiers. Of course, although the Shinai amp is advertised as incorporating certain aspects of tube amplification, there are most definitely no tubes on board.

The Shinai may have only two transistors per channel (4 in total), delivering a relatively measly 37 Watts, but from experience, I know that Class-A amplifiers tend to be highly capable in terms of supplying current, even into difficult loads. What this means is that the limitation in terms of Watts becomes really only a limitation in terms of maximum output. In other words, the amp will theoretically reach its limit sooner when playing very loudly than with an amplifier that supplies more Watts. It should be noted, however, that the Decibel to Watts ratio is not linear. Our hearing is made to perceive very soft sounds as well as very loud sounds and in order to achieve this, it applies what I guess you could call some form of compression. As it follows, double the power (+3dB) gives around 25% increase in perceived volume, four times the power (+6dB) gives around 50% increase in perceived volume, and it takes a staggering 10 times the power (+10dB) to achieve 100% increase in perceived volume.

At 70 Watts (in Pentode mode), the Ayon offers double the amount of power of the Shinai, but the Shinai played easily as loudly while never showing any signs of compression and always giving me the feeling that it could go much further. So, you see, Watts figures are relative and they can be gravely misleading. You can even have an amplifier with a rating of hundreds of Watts, only to discover that it has a relatively poor current capability due to a high output impedance as a result of an inadequate power supply, meaning that it will struggle with difficult loads, in spite of its seemingly high power. With the 8-ohm Xavians that are only moderately efficient at 88dB, in any event, the Shinai's 37 Watts proved to be more than plenty, as the amp simply player louder and louder in my tests without ever showing any signs of being anywhere near the end of its rope. Even when I play much more loudly than I like, and possibly near the Xavians' limits, the amp sounds as confident as it does when playing at a moderate level.

So, long story short, given the total absence of any constraints in terms of power when using the Xavians, I'm confident that the Shinai amp will have more than ample reserves for most regular speakers. What I am hoping to find next, is that the Shinai will also drive the more complex Magicos with gusto. so, let's see, shall we?



# Magico System

In the <u>main system</u>, I'm starting with the Shinai on the Artesania Modular Floor Platform, connected with the <u>AudioQuest Fire</u> RCA interlink, the <u>Jorma Trinity</u> speaker cables, and two Belden 19364 power cables with Bals schukos and Oyaide C-004 IEC connectors, driving the Magico S1 MkII speakers.



Even though I am quite spoiled with my main system, it remains a pleasure to listen with the secondary system. In spite of consisting of relatively affordable components, it always seems to make the best of any situation without sounding overly colored and seemingly without obscuring any details.

Of course, when switching to the main system, it's immediately clear that the sound can indeed be improved in multiple aspects, most notably in terms of precision, linearity, and transparency and these are things that please my mind. The funny (or perhaps not so funny) thing is that the level of enjoyment or emotional involvement is not necessarily any higher when moving from the secondary system to the main system. Fortunately for me, the emotional aspect is also not lower – phew! In any event, it's just easier with the big boy's system to hear what goes well or not so well in the recordings and the signal chain. If there's something wrong, you'll be confronted with it, but if you get everything right, the sound is magnificent.

Well, as it turns out, my Krell association was not entirely off! Not only does the Shinai drive the Magicos with two fingers up its nose, but it also does this while exercising the kind of solidity and iron grip over the woofers that I am used to from, indeed, Krells, and more recently, the <a href="#">Anthem STR</a> and <a href="#">Classe</a> <a href="#">Delta</a> amplifiers.



There's never any doubt that the amp is in complete control over the woofers and that makes for an incredibly punchy, lively, and dynamic delivery. However, as in the Xavian system, this iron-fisted behavior also finds its way into the midrange and treble which in this system now appear almost a little blunt. Very expressive for sure, but not as refined as I heard it in the secondary setup, certainly not when used with the Combo Stand where the components had a rare synergy that resulted in a seductive mix of liquidity and control in equal measure.

But even though it's not exactly lush or "golden", the sound in the main system also has a remarkable effortlessness and the uncanny ability to grab hold of one's attention. Its presentation is not super-precise in terms of imaging or focus but big and room-filling and simultaneously coherent and of a whole. And in this respect, it's still as if I am hearing the best of solid-state (bass control), combined with some of the aspects that tubes do best (spaciousness and emotional involvement). But in the context of this system, I wouldn't call it the best of both worlds because I am also clearly hearing the Shinai's transistor roots. Of course, it is pretty darn near impossible for any transistor amp to not sound like a transistor amp. In my book, the CH Precision A1.5 with its retina-like resolution comes closest by sounding neither like tubes nor like transistors. And, alas, this comes at an eyewatering price tag. More often than not, those amplifiers that are said to mimic tube sound really only mimick the negative aspects of tube amplifiers, being roundness and excess warmth. The Shinai amplifier does not fall in that trap. Although the amp had a different perspective in this setup, I also heard yet again how well-balanced it is. It's neither warm nor cold but actually beautifully linear, highly dynamic, and incredibly rhythmic. A few tracks in, I noticed how my foot had continuously been tapping while I was humming along. Clearly, the amp is making music in an engaging manner. At about the 30-minute mark, the treble edge had again mostly subsided, but overall, the sound remained a little rough and matter-of-fact. If I had to reach a conclusion at this point, the amp would get top marks for being so blissfully energetic, free from smear, and highly involving, oh, and super solid, too! The Shinai is not as highly resolving and as refined as the A1,5 or some other more affordable amplifiers that major in these aspects, but I kid you not, it is actually more dynamic, impactful, and robust than the 33K Swiss amp. Quite surprising. But still, I wasn't hearing the organic quality and the magical liquidity that was so abundantly present in the other setup. Then it hit me... that was with the Combo Stand!



# Returning to the Combo Stand

The Artesania Modular Floor platform had made it possible for the Shinai amp to deliver some of the most potent bass that I have heard in this room but now I just had to know. Given the large difference that I heard in the secondary setup, just precisely how would the amp's sound change in the main system when placed back on its dedicated stand?



With the Shinai back on the Combo Stand, that question was answered right away and it was fully in line with my earlier perceptions. As in the other setup, the bass became less incisive and a little rounder than with the Artesania platform but it was still amazingly powerful given how "floaty" the Combo Stand is. Importantly, the remaining bluntness that I noted earlier was indeed gone, replaced with a gentle smoothness and captivating liquidity. While the Combo Stand did not raise the amplifier's resolution, it was now once again clear to me why I originally found the Shinai to deliver the normally unachievable, that is, speed and impact as well as deep saturation and superb flow. It's the kind of delivery that makes one undergo the performance rather than dissecting it. Remarkably, the amp pulls this off with Xavian Perlas as well as Magico S1's, two VERY different speakers!

While I prefer the Shinai with its Combo Stand, I also have huge respect for its performance when used with a rigid support such as the Artesania platform. Even if the amp sounds very noticeably "solid-state" that way, I remain impressed with its superlative bass control and dynamic impact. But even when placed on the Combo Stand, it does not have the cuddly and overly smooth sound that I was expecting from a 37-Watt Class-A amplifier.



## Side Notes

Although I have tried all the cables in my arsenal with the Ayon and specifically chose the van Den Hul Skyline Hybrid as the most ideal cable with the Ayon amplifier, in retrospect, I think I should have also tried the Jorma Trinity speaker cables in the secondary setup with the Xavians and with the Shinai on the Combo Stand. That would probably have tightened up the bass while retaining the amp's alluring liquidity. Something similar goes for the speaker cables and power cables where warmer-sounding ones could perhaps be more ideal when the amp is placed on a robust platform. Pierre Costers added the following:

"We get very very nice results with <u>Way Cables</u> by the way... (!) The point for me is to reach the top for a fraction of the price (of a component upgrade), by carefully adapting the power cables and interconnects.

For all the Shinai's splendor, I find its remote control unit to be unworthy. It works just fine but the layout could be better and its membrane buttons are too clicky and do not provide a nice tactile feel. Even though it is made from solid aluminum and doesn't look cheap per se, I don't find it fitting for an almost 12.000-euro Italian amplifier.

### Pierre Costers added:

About the remote control, hum... I am already happy to find one. And according to the ladies, they found it simple to use and a smart design. Ok, it is not a Homecinema 321 button unit or expensive bling 2kg gold, but personally, I am happy with it. Better than the basic Chinese plastic ones. Another aspect that surprised me is that the amplifier's cabinet is highly resonant. Not only does it ring in a gong-like manner when tapped, it even rings when you sing or speak (to yourself, as I tend to do) when you are near it. Imagine what sound from the speakers will do. However, none of this seems to stand in the way of it sounding absolutely marvelous so this is kind of an academic point.

### Conclusion

It's the seemingly unachievable: a very neutral and linear as well as exceedingly robust amplifier that is also fast, expressive, and dynamic, but equally lush, liquid, and seductive. Then add to this the capability to drive Magico S1 MkII speakers just as easily and as musically pleasingly as small stand mount speakers. The Shinai achieves it all. To be fair, one should ideally include the Combo Stand to achieve the best balance between solidity and liquidity. But just look at that gorgeous assembly, wouldn't you want the stand for its looks alone?

