



JUNE 2009

NAT SYMMETRICAL

Reviewer: Frederic Beudot

Financial Interests: [click here](#)

Digital Source: Esoteric X03SE

Analog source: Acoustic Solid Classic Wood with RB300, Grado Reference Sonata 1, Clearaudio Nano

Preamplifiers: Esoteric C03 [on loan], Accustic Arts Preamp I Mk3 [on loan]

Amplifier: McIntosh MA2275, Genesis GR360 & MDHR

Speakers: FJ OMs, Zu Essence, Genesis G7.1f

Headphone: Musical Fidelity Xcanv3, AKG K701

Cables: Zu Varial, Zu Libtec, Slinkylinks RCA copper, Esoteric Mexcel balanced interconnects [on loan], Accustic Arts Silverline balanced [on loan]

Power Cords: Zu Mother, NAT AC coupler black [on loan], NAT AC coupler gray [on loan], Accustic Arts Ferrite 2 [on loan]

Powerline conditioning: Monster Power HTS5100mkII, Isotek Titan [on loan], Isotek Nova [in for review]

Sundry accessories: Isolpads under electronics and good ol' wooden chest

Room size: 12' x 13.5' x 8'

Review component retail: \$7600



How much would you expect to pay for a fully balanced preamplifier, using tubes from its power-supply regulation all the way to the output stages and with Russian NOS tubes to boot? How much should it cost if not made in China but using custom-wound transformers in a fully dual-mono configuration? How much would you pay if it had a relay-activated volume control using tightly matched discreet resistors to provide the exact same level of attenuation in the left and right channels but even more importantly, in the normal and inverted legs of each dual-differential path?

If said preamplifier bore a name like Conrad-Johnson, McIntosh or Audio Research, far more than \$7600 I can assure you. Yet because the Symmetrical is made in Serbia, many audiophiles won't consider it worthy their attention. Their loss. Since you are reading this, it won't be yours. I'll state upfront that the NAT Symmetrical is one tremendously enjoyable

musical machine. If you have followed developments in Casa Beudot over the past few months, you already know that the competing preamplifier references included the SMC VRE-1, Esoteric C03 and Accoustic Arts Preamp I Mk3, none of them chopped liver and two actually earning Blue Moon awards for their absolute transparency to and respect for the recorded even (SMC and Esoteric). During that same period, a friend's McIntosh C500T and an Audio Research Ref 3 also made brief appearances. The NAT Symmetrical proved superior to most and equal to the Esoteric C03 in enjoyment delivered (albeit not in the same systems).



The NAT has small operational challenges but if you care for music over ultimate convenience, the NAT Symmetrical is one of the hottest deals in town. As you may already know, I am not particularly technically inclined yet the NAT Symmetrical seems to offer a convergence of many design traits desirable in a preamplifier. The true dual-mono circuit starts with two custom-made transformers (and a third transformer to power components outside of the signal path) and continues with a fully balanced design using six NOS tubes per side which are hand selected and matched by designer Dejan Nikic (my review sample came with each tube individually labeled to be set in one and only one of the twelve receptacles for best performance and balance). This is how all NAT Audio preamps ship. After burn-in and testing, the accompanying tube set gets labeled valve by valve so that the user places them back exactly where intended.



Speaking of the company and its founder for a minute, NAT (Nikic Audio Team) was established in 1993 with a mission to produce high-end audio components, primarily amplifiers based on vacuum tubes. Dejan Nikic produced his first power amplifier in 1988 while still in the army and retained his love for certain NOS Russian triodes that can be found throughout his designs today. At the beginning NAT produced power amplifiers based on the VT-4-C direct-heated triode (still found in the Se3se monoblocks) and line stages with zero feedback. Since then they have diversified into very interesting electronics like a battery powered phono stage I should review later this year; and the Magma amplifier, still the most powerful single-ended tube amplifier in the world using a single TH450 to produce 160 watts in pure class A [below].



More conventional in theory only is the Se1, a 211-based single-ended mono but you'll probably be surprised by its claim of 35 watt into 8 ohms thanks to the 6N30P-DR driver. NAT also offers a push-pull amplifier utilizing two G811 triodes per side for 170 watts into 8 ohms. When NAT talks triodes, they don't think puny single-digit power. They think big and bold. Hopefully I'll have a chance to give some of those unorthodox designs a listen one day. If they sing as well as the Symmetrical, I could be in for a treat.

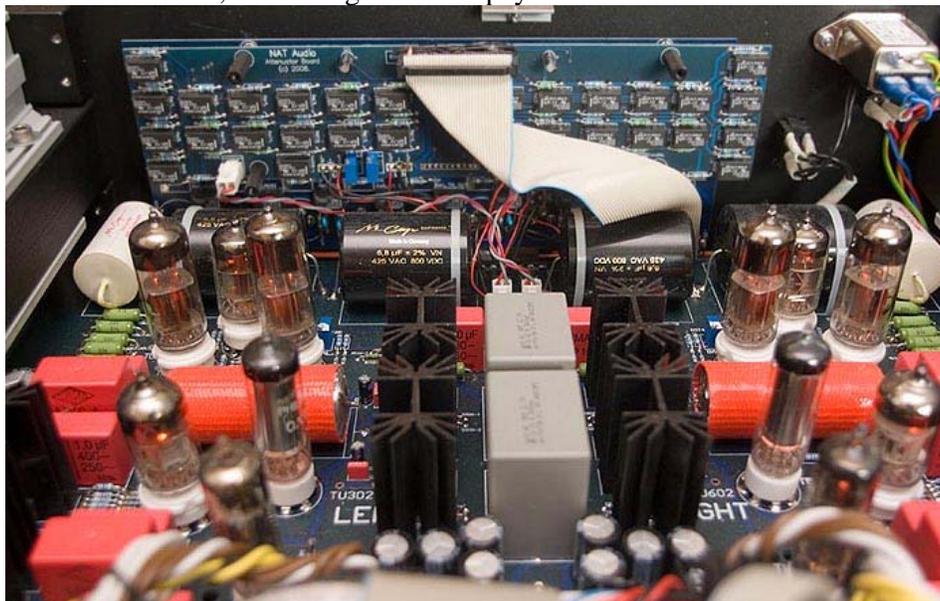
Returning to the NAT Symmetrical, it offers six inputs each, all of which accept balanced or single-ended feeds. Just remember to change the right front panel XLR/RCA switch depending on what input connection you wish to use. If you have the switch in the wrong position (say on XLR when listening to a single-ended source), signal will pass but the sound quality will be degraded. I tried it both on purpose and by mistake and you'll notice. Imaging, bass control, tonal density - everything will be askew. This is the smartest and most convenient solution I have seen so far to provide such large input flexibility (the input adaptors of the SMC VRE-1 were pretty smart and convenient too but come at an additional cost). The only downside -- but it is minuscule -- is that when you change the position on the XLR/RCA switch, the machine undergoes a 30-second reconfiguration cycle. Unless you are a very impatient audiophile, you won't notice. But then impatient audiophiles would probably not even consider tube electronics in the first place.

A similar but longer 1-minute soft-start cycle happens when the Symmetrical is first turned on. You should wait another fifteen to twenty minutes before any critical listening to let the

tubes warm up and settle. The NAT already sounds very good after the first five minutes but it does not reach stellar until a little later. It would be a mistake to judge it too soon.



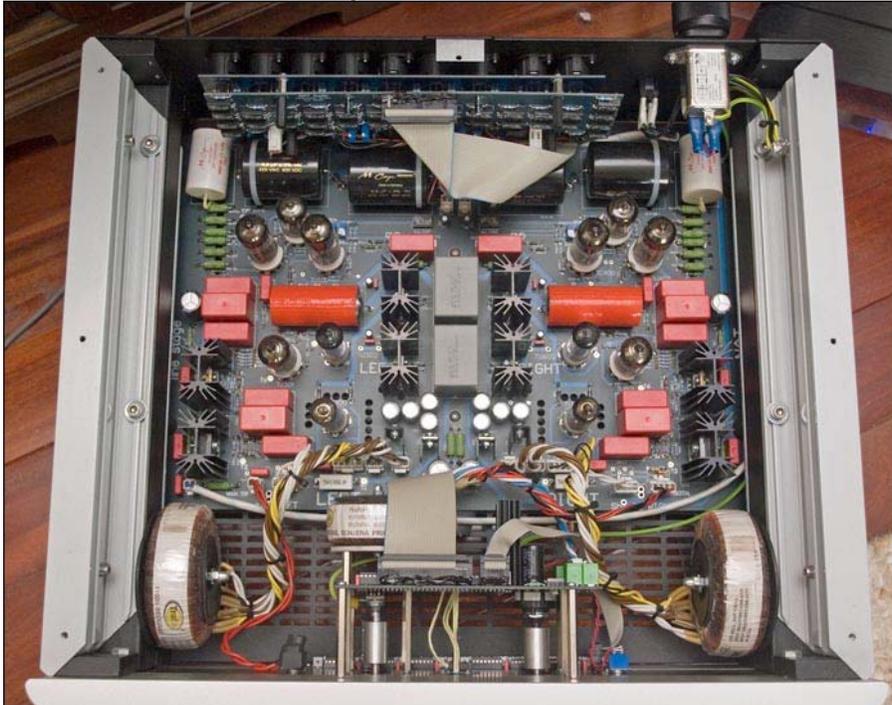
I already mentioned the volume control system but it deserves a few more lines. Typically superior balanced preamplifiers use stepped attenuators as the only efficient way to closely match the attenuation level between the two phase legs of each channel. The obvious problem with stepped attenuators is that they are stepped. If the steps are too big or insufficient, it can be hard to find the proper listening level. The NAT Symmetrical differs. Its volume control is composed of a series of relay-activated matched resistors. The volume knob only acts as an indicator while a logic circuit switches resistors in and out of the signal path to provide the desired attenuation degree. This offers far more steps than conventional stepped attenuators but with the same precision. The only downside is that each time you change volume, you'll hear relays click and the sound coming in and out as the relays close the circuit again (a very fast phenomenon but the sound goes away for a split second before coming back at the revised level). More than an inconvenience, it is something that takes a little time to get used to. At first it bothered me, then I forgot to even pay attention.



There are however a few 'features' that need to be reiterated as they could be deal breakers depending on your desires and sensibilities. Pretty low on the itching powder list is the fact that this design uses twelve tubes and does heat up quite a bit. That's no big deal in winter and

then actually fairly welcome but when temps rose to 80° last week inside, I was not unhappy to switch back to a transistor preamplifier - until I played the first disc of vocal music that is. It instantly reminded me why I love the NAT so much.

Slightly more annoying is the rarity of some of those twelve Russian tubes (4 x 6N6P, 2 x 6X4, 2 x 6N2P-EV, 2 x OA2, 2 x 6N1P-EV) and the fact that you can't retube this beast at any one US tube dealer - nor using two or three. I searched the online inventories of all the major hifi tube vendors in the US. Between all of them, I could not scare up a full set of tubes for the NAT Symmetrical. That leaves retubing through NAT and their US distributor as the only viable option which they also favor for reliability and consistency. Since NAT has been operational for sixteen years, it probably is not too risky a proposition but I like freedom of choice better still. That's a French thing.



Most annoying is the phenomenal (and I mean it) thump this preamplifier makes at power down. It is so loud and violent that I feared I'd blown up one or both speakers the first time it happened. You can avoid this by muting the Symmetrical before turning it off but it is also easy to forget after a late night listening session and the reminder is far from pleasant. If I had only one thing to change in the Symmetrical, it would be the inclusion of an auto-mute turn-off. My 86dB sensitive FJ OMs survived the shocker but I wonder how more fragile high-efficiency drivers would react.

Initially the NAT Symmetrical also developed a serious case of hum and buzz in single-ended mode but a little trouble shooting revealed it innocent. It merely was the recipient of a ground loop between the Esoteric X03SE source and the Hypex bass amplifiers in the Genesis G7.1f speakers. A pair of Isotek power conditioners took care of this very elegantly (a Titan for the G7.1f woofer amps and the superb Nova for source and preamplifier - I intend to follow up on these devices shortly) by breaking the ground loop and improving overall operational silence and stage depth.

While on power requirements, I tested the NAT with four different power cords - Zu Mother, Accustic Arts Ferrite II, NAT AC Coupler Black (normally dedicated to power amplifiers or other high voltage components) and NAT AC Gray (recommended for preamplifiers and other low consumption components). It won't come as a surprise that the NAT AC Coupler Gray was the best match for the NAT Symmetrical. It opened up the treble and increased resolution while maintaining a tight and articulated bass. The NAT AC Coupler Black was more similar than different but its treble-enhancing power went further still to get excessive on certain records. The Gray hit the right balance for me. The AA Ferrite II was warmer and more 'tubey', not a bad match but this type of midrange reinforcement was unnecessary with the NAT yet worked wonders with the Esoteric C03. As experienced with the AA preamp and the C03, my previous Zu Mother reference proved the dynamically most limited by not allowing the full potential of the gear to express itself.

To conclude introductions, the NAT Symmetrical is delivered in a solid wooden crate, offers 15dB of gain (a little high for my taste and I would have preferred 6 or 8dB for easier integration in a system with high sensitivity speakers), two outputs which can be used either balanced or single-ended, a fixed output, a simple but heavy remote and a back-panel switch to change the grounding from earth to chassis. Shy of input naming, HT bypass and variable gain, the NAT offers a compelling feature package. It's not quite on par with the overachieving Esoteric C03 but very few preamps are. Aesthetically, the Spartan look isn't my cup of tea but your mileage may vary. Seriously, its sound is so good that the Symmetrical could come in a shoe box and I would not care. And since I moved to a dedicated music room, my wife does not either! Ah, the joys of a man cave.

With proper introduction rendered, on to the music. Not sound, bass or treble but plain good ol' music. That's what the NAT has been created for, that's what it does best. Where to start if not with tone density and lushness of timbre? On first listen this will probably be the most striking trait of the NAT especially if you favor vocal music and period instruments. Both are remarkably well served. Don't mistake lush with warmth, truncation or imprecise timing. The NAT has none of that. It's not about the softening that can arise from lack of transparency or timing deficiencies. It's about a tonal enhancement of rich and dense harmonics, finely revealed instrumental textures or voice grain as only the best tube gear achieves.

When you switch back and forth between the NAT and Esoteric C03 as I have over the past few months, the C03 always comes across as precise, tremendously transparent and faithful. The NAT on the other hand always seems bigger and more exuberant, adding a sparkle and touch of spice. Envision the difference between Italian and French cuisine. Italians use the freshest ingredients they can find and typically mix them to reinforce and reveal each other but except for a few herbs they don't necessarily build complex dishes nor practice much enhancement of the initial ingredients. I am terribly over-simplifying for effect of course but overall in Italian cuisine, the self taste of the ingredient, be it fruit, vegetable, sea food or meat, is king. That's the Esoteric C03. By contrast, French cuisine is a world of greater complexity where you can expect a lot of contrasting tastes and textures. It's a world of sauces and gravies where cream, butter, milk, eggs or wine will be called upon to enhance the taste of the start-out ingredients. That's the NAT. As things have it, I enjoy both cuisines at different times. The same happened for these preamps.

Unlike Gary Koh's analogy of the chili/oyster omelet during my review of his Genesis GR360 amplifier (where the chili and eggs are used to hide the taste of an oyster that is no longer in

its prime), the NAT goes about its task in a very controlled and refined manner. There's no heavy-handed second-order harmonic distortion, no top-end shelving nor excessively boomy bass. The NAT Symmetrical is for all intents and purposes a modern sounding tube preamplifier with all that implies in terms of timing excellence, precision, control, imaging and dynamics - but with a generous helping of flavor on top.

I truly noticed it for the first time while I reviewed the bassoon dances and songs by Selma y Salaverde. The dark and deep sonority of the recreated fagotto used in this recording was further enhanced and revealed in all its splendor yet the instrument lost none of its resolution and microdynamics versus the C03. This was truly revealing and I started paying attention to the other period instruments on this recording to notice the same phenomenon. Texture, tone and micro dynamics all seemed revealed in greater detail, bringing forth a sense of presence and extreme physicality to the instruments. If you ever thought period instruments sound dry and lifeless, you need to hear them through the NAT. They take on a new timbral dimension I'd only experienced in concerts thus far.

So I continued digging in this direction. With Nicola Fiorenza's concerti grossi, I again came to the same conclusion. The instruments were easily identified and delineated but also had a depth and harmonic complexity that seemed to have escaped the C03 - or more precisely, the C03 conveyed the instruments exactly as recorded whereas the NAT focused more of their inner textures and hues even if it meant pushing the saturation dial beyond what the recording commanded. Depending on which speakers I used and which disc I spun, I preferred one presentation over the other but regardless, the NAT sounded nothing short of superb. The subtle differences belonged in the realm of preferences and synergies with a given record. If the music had a vocal component, I always gravitated towards the NAT. If it was more orchestral or modern in nature, the C03 typically had my vote.

Switching to heavier orchestral ensembles revealed some of the minor weaknesses of the NAT. Primarily its bass control and depth did not match what the C03 is capable of. In this realm, solid state remains king. That was obvious on both Beethoven's Overtures conducted by Colin Davis where the double basses did not have the same weight; or on Saint-Saens' 3rd 'Organ' Symphony under Munch where the 16Hz organ pedals almost disappeared out of the mix. It also showed that the NAT did not stage as deeply and broadly as the C03. While not far off, it was not quite as impressive. Although the NAT images very naturally, it won't differentiate layers of musicians as efficiently.

This latter point needs some context because when you sit in a concert hall listening to a symphonic orchestra and you close your eyes, instruments do tend to blend into each other. Boundaries get just a little fuzzy and overlap happens. That's also what the NAT does for imaging. Imagine yourself now still in that concert hall. You open your eyes and with that visual aid, each instrument occupies a very precise and defined position and so does the sound. Any sense of overlap vanishes because your brain combines vision and sound to locate the musicians precisely. That's the feeling the C03 conveys. It's a greater precision in the location and boundaries of instruments and musicians. If you enjoy closing your eyes in a concert hall as I do, you will feel very much at home with the NAT's presentation but if you favor higher precision and order, the C03 will delight you.

Then I switched to piano music. You'll read reviewers over and over stating that no other instrument will tell you as much about components as piano. It is at once highly percussive

yet resonant with complex harmonics from paralleled strings and the wooden body to reveal a lot about the transparency and dynamic prowess of a system. Putting Couperin's Tic Toc Choc [HMC 901956] in the player proved that the NAT could almost resolve the same level of detail and complex harmonics as the C03 (amazing for a tube preamplifier compared to one of the most transparent members of the transistor breed) but stood just behind it when it

came to the sharpness of the first impact and the initial dynamic rise of the note. It also showed that the Symmetrical could match the Esoteric's decay and sustain, a characteristic I had found absolutely phenomenal with the Japanese preamp. Seeing that a tube amplifier could equal it was a revelation.

Switching to Richter's monumental Appassionata piano sonata [RCA 82876-59421-2] proved that with huge and unrestrained dynamic macro swings, the NAT knew how to get brutal when necessary. The very first transient burst may have been behind the C03 but the macrodynamic envelope of the NAT was nothing short of phenomenal not just for a tube preamplifier. It is huge, period. In both cases, the NAT edged out the Esoteric in how it rendered complex wooden harmonics from the piano's body especially when using the Genesis G7.1f metallic-driver speakers with ribbon tweeters. The C03 was more string and less wood than the Symmetrical. The Serbian better maintained the rich and complex harmonic signature of the instrument.

It was the arrival of the Genesis G7.1f review loaners which underscored two of the most desirable traits of the NAT Symmetrical. The G7.1f ribbon tweeters are noise sniffers of the highest order. Although the NAT Symmetrical displays a low level of tube hiss when cold, this hiss fades away after an hour of use. It does not completely disappear if you get close to the speakers but gets low enough that even with those circular ribbons, it wasn't an issue from the listening seat (and the hiss could not be heard over the FJ OMs at all). That certainly helped explain how the NAT Symmetrical could remain so resolved while offering such a dense and rich tonal palette. To be noted in this context is that the initial set of tubes delivered with the preamplifier was significantly noisier than the later replacement set. Don't hesitate to ask for other tubes if your preamplifier hisses more than desirable. It can be the price to pay with NOS tubes.

The second and most meaningful trait I discovered thanks to the G7.1f is the NAT's ability to return deeper relief and life to otherwise bland and bleached recordings. In many ways the Genesis speaker is a very nice performer but it offers absolutely no tonal reinforcement whatsoever in the midrange which is actually slightly recessed and pastel-like rather than dense and meaty. Except for a few rare recordings of superior quality, the G7.1f and C03 just did not get along. The C03 showed what was on the disc good or bad and the G7.1f reinforced that with an even brighter spot light. What the NAT did in the same context was to inject colors particularly on voices. The NAT simply adores vocals. If you enjoy voices, you will love the Symmetrical.

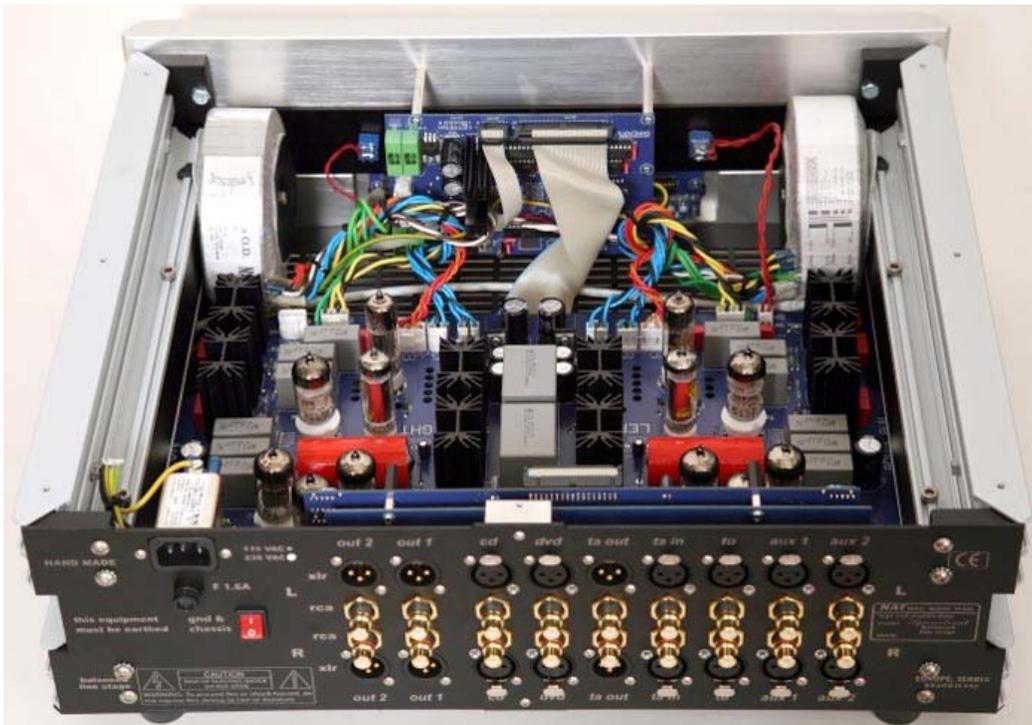


Similar to what I wrote about Selma's bassoon but more exaggerated, male voices took on a deep and rich timbre, female and children's voices opened up and gained texture at

the same time. Where the C03 and G7.1f association often sounded flat, the NAT brought life and relief and pleasure. One sounded like a monotonous litany, the other like a professional singer in control of the entire gamut of expressive scope. As I wrote in the C03's review, it was the association that didn't work, not an issue with the C03. Mate the Japanese with the FJ OMs or even better the Zu Essence and there won't be any sense of bleached vocals or flattened interpretations. I listened to a lot of vocals during the NAT's stay, from Händel's Acis and Galatea to Islandsmoen's intensely emotional Requiem [2L SACD 36], from Tone Wik in Belleza Crudel [2L SACD 56] to Joyce DiDonato's Furore. All sounded phenomenal - not just good but fundamentally better, with more presence and greater inner nuance. More humanity.

Trying to push my luck, I switched styles and pulled some vinyl. First up was Johnny Cash's tremendously emotional American IV: The Man Comes Around [American Recordings 440 063 336-1]. It reconfirmed just how good the NAT is with voices. Even Cash's raucous and tired songs managed to gain yet more intensity and emotion. What a disc by the way! Loaded, atypical but so intense, a must own whether you love Cash or not. Then the Gorillaz' Demon Days reminded me that if the NAT has one weakness, it's the very deep bass. It just won't reach as far down nor with the same control as the C03. But what the NAT passes on, it does with strength and conviction.

Finally U2's latest album No line on the horizon showed a limit to the good-natured NAT. Poor recording quality remains poor. Enhancement magic only goes so far. I had clearly hoped for a miracle but even the NAT could not resurrect this badly compressed recording (and I mean the double LP - I can only imagine how bad the MP3 will sound). More importantly, somehow the NAT managed to extract a little more perceived dynamics than the C03 - not much but on this disc, even a little more is welcome. It is meaningful in the sense that the Symmetrical will operate as an enhancer for poorly recorded discs, making more (but not all) of your collection fully enjoyable. That's the real power of a tube preamplifier of this stature.



I already mentioned the Zu Essence which arrived a few days before the conclusion of this review. It became the final challenge to be thrown at the NAT Symmetrical. If there was anything inferior to be heard, the 97dB sensitive Essence and their ribbon tweeters should flag it. The exact opposite occurred. To my amazement the association was phenomenal save for one practical aspect. 97dB speakers, 32dB gain amplifier, 15dB gain preamplifier and 2.5V RMS source - this was no winning recipe in a 180 square-foot room. The NAT was forced to operate within the first few clicks of its range, with very limited ability for fine adjustments, clearly not a long-term solution. I feared that the association of a tonally dense preamplifier with a tonally dense speaker would be excessive - and for people not obsessed with the midrange and vocal performance, it might be. For me though, it was simply perfect. Gill Manly was standing in my room and so were Joyce and Patricia. The association did a lot of other things right but voices were positively surreal and materialized and fleshed out in a fashion I'd heard only a handful of times before. It was mesmerizing, intense and beautiful. Completely impractical too. One click higher was too loud, one click lower and the magic went away. But on that lone click, the association of NAT Symmetrical, Genesis Reference GR360 and Zu Essence became my Mount Everest of musicality. Breathtaking.

In conclusion, the time I spent with the NAT Symmetrical was absolutely delightful. Being lush and rich while fast, dynamic and detailed, it hit all my pleasure buttons. The fact that its high gain won't ultimately work with my Zu Essence unless used with a significantly lower-gain amp than mine takes nothing away from its tremendous musical virtues. The Symmetrical does have a few operational idiosyncrasies you need to assess for yourself. But if you are about to write a five-figure check for a tube preamplifier from one of the big names, you owe it to yourself to find a NAT dealer and give the Symmetrical or its cheaper single-ended Plasma R brother a listen. I predict you'll leave impressed and happy - and possibly a few thousand richer if you walk away with the Serbian. I hope that in the near future, there will be a Symmetrical 2 with a gentler turn-off function and a switch to select between 3, 9 or 15dB of gain while maintaining the same incredible musicality. Now that machine would be completely unstoppable.

Frederic Beudot

Quality of packing: Component is delivered in a wood crate with serious foam inserts.

Reusability of packing: Crate seems to be made to last forever.

Ease of unpacking/repacking: Screw driver needed to open crate, otherwise straight forward.

Condition of component received: Perfect.

Completeness of delivery: No issue.

Website comments: Functional and informative.

Human interactions: Always very responsive and helpful.

Pricing: Superb value.

Final comments & suggestions: Put the savings into the NAT AC Coupler Gray power cord, you will be amply rewarded. And perhaps stock up on a spare set of those rare NOS tubes just in case...