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**Vitus Audio Signature
Series SL-103
Linestage Preamplifier
and SM-103 MK.II
Monoblock Power
Amplifiers**

15 Pages of Music Reviews

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Class A+



Vitus Audio Signature Series SL-103 Linestage Preamplifier and SM-103 MK.II Monoblock Power Amplifiers



Jonathan Valin

PHOTOS BY WRIGHTSTEEL

This must be my lucky year for electronics.

After swooning over the world-class HQS 7001 monoblocks and PRS 1.5 lineage from France's JMF Audio and the standard-setting 727 lineage/full-function preamp and 757 analog deemphasis unit from Switzerland's Soudation, I've now come face-to-face (or ear-to-gear) with the handsome-looking Signature Series SM-103 MK.II monoblock amplifiers and the SL-103 lineage from Denmark's Vitus Audio, which, as fate would have it, turn out to be the most gorgeous- and lifelike-sounding Class A solid-state amplifiers and preamplifier I've yet heard in my system.

Of course, the fully balanced, ultra-high-bandwidth (+800kHz) monoblocks aren't just 100W Class A units. With a push of a front panel button, they can also be switched into Class AB mode. In addition, their voicing can be changed in either mode from "classic" to "rock." (Though detail freaks may prefer the "rock" setting, I do not, and all my comments are based on listening to the SM-103 MK.II set to "classic" Class A.)

Let's talk a bit about Class A. As most of you already know, the power transistors in a Class A amp are always biased "on," so they can reproduce one complete cycle of the input-signal waveform with minimal distortion and maximum amplitude. The very first amplifiers were Class A (tube, of course).

In contrast, today's more common Class AB or push-pull solid-state amplifiers divide the input signal in half, with one power transistor (typically an NPN type) biased on for the positive phase of the waveform cycle (180 degrees) and the other (typically a PNP type) for the negative phase (the remaining 180 degrees), with the two halves being joined together at the output terminal.

Class AB amplifiers are much more efficient than Class A amps, with far less power being dissipated as heat. Nevertheless, they have a problem that Class A amps don't: crossover distortion. What this means is that at the zero-voltage

"crossover point," where one of the two complementary power transistors is "off" and the other is "on," the timing of their shut-down and turn-on is imprecise. There is a small delay, a zero-voltage "flat spot," at the crossover point between the pair of transistors, where both are switched off (or non-conducting) at the same instant. This crossover-point distortion can be ameliorated by applying a "pre-biasing" voltage to the transistors (commonly via power diodes), which allows each transistor to remain active for slightly more than half (>180 degrees) of its cycle, greatly reducing (but not eliminating) crossover distortion.

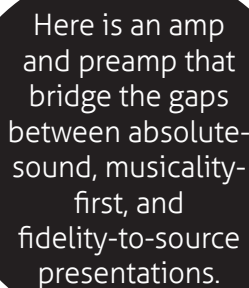
Since I've liked the sound of several select Class AB solid-state amplifiers enough to make them long-term references—the Soudation 711, the JMF HQS 7001, and the MBL 9008/9011—the issue becomes: "Is the absence of crossover distortion audible in a Class A amplifier?" In the case of the Vitus SM-103 MK.II, I can best answer this question by commenting on what it offers that these Class AB amps do not, at least to quite the same extent. And that is a grainless fluidity that make the Class AB competition (or the competition I've heard) sound just the *slightest* bit more mechanical, less top-to-bottom dense and continuous in tone, texture, and dynamic, less solid and dimensional in imaging, less sonically of a piece.

The difference I hear is rather like the sound of a great full-range planar, electrostat, or omni compared with the slightly boxy, faintly divided-into-pieces sound of multiple cones in a cabinet.

Here is an amp and preamp that will reproduce that magical blend of tones and textures that gives large ensembles like Count Basie's big band on the new Acoustic Sounds reissue of the original Pablo LP *88 Basie Street* or the Vienna Philharmonic under Solti on the Decca LP boxset of *Elektra* their unique timbre—a timbre that combines all the individual players' tones and textures but is distinctly different from each of them—and will do so with the pillar-of-ebony solidity one hears in life.

And they will also do this with the staggering dynamic impact that only a big band or a symphony orchestra is capable of generating.


At the same time, the Vituses reproduce a duet such as Duke Ellington's piano and Ray Brown's double bass on "Do Nothing Till You Hear from Me" from *This One's for Blanton!* [Pablo/Acoustic Sounds] with such lifelike color and expressive detail that you can literally map the youthful creativity with which the 74-year-old Ellington is



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The curious thing is that aside from its typically Class A tonal balance—which, as I just noted, is somewhat richer, more three-dimensional, and darker-sounding in the bass and midrange and more euphonic and grainless (though no less energetic) in the treble than that of its (also bottom-up-sounding) Class AB competition—the Vitus amp and preamp minimize the other “problems” that almost always come with the territory of Class A electronics. To wit, the amps never get so hot that you have to wear an oven mitt to touch them. In fact, they don’t even get as warm as the Soudation 711 or MBL 9008. I don’t know why this is the case, and Vitus, which is very chary when it comes to releasing information about its proprietary devices, configurations, and biasing circuits, ain’t sayin’ (see the sidebar below). One thing I know for sure is that the SM-103 MK.II use *zero* global feedback, which, as I noted when I reviewed the feedback-adjustable CH Precision monoblocks, is to my ear far superior to the sound when anything more than the tiniest amounts of global feedback are added.

Another issue with Class A amplification is limited power delivery, especially with speakers that are difficult to drive (see my pal Robert’s review of the fabulous Berning/Hi-Fi One Reference SET in Issue 352). Though the SM-103 MK.IIs generate 100 Class A watts into 8 ohms (200W into 4 ohms and, presumably 400W into 2 ohms), they are not 1000W powerhouses.

Nonetheless, I am using them to drive the MBL 101 X-Treme MK.IIs, one of the most difficult loads in hi-fi, with absolutely *no* audible issues—indeed, with some of the highest fidelity I’ve gotten from these fabulous-sounding but extremely low-sensitivity/low-impedance loudspeakers, at levels ranging from softish to disco. All my commentary on the Vituses’ sonics is based on what I’m hearing with them driving the MBLs.

A third issue with Class A amplifiers is the resolution of inner musical, performance, soundstage, and engineering detail, which can sometimes play second fiddle to (or be obscured by) Class A’s unrivaled density of tone color. This is not the case with the Vitus SM-103 MK.IIs. Al-

playing his concert grand (moving, as Robert Christgau once noted, from “the severe understatement of a Basie or Monk to the rather juicy extravagance of a Tatum or Garner in successive phrases” [robertchristgau.com/xg/cg/cgv2-76.php]), and the equally imaginative performance of 47-year-old Ray Brown, whose prismatic bass playing has all the musical inventiveness of a virtuoso without any of the “show-off” bravado.

Here is an amp and preamp that bridge the gaps between absolute-sound, musicality-first, and fidelity-to-source presentations in ways that only Soudation, JMF, and MBL have done in the past—and slightly exceeds that distinguished trio in the more complete and continuous way it reproduces the harmonic series, making Ellington’s colorful use of the sustain pedal as audible as his spare, bright, transient-like keyboard jabs and Ray Brown’s ineffable touch, swinging style, and famously accurate intonation produce tear-drop-shaped quarter notes in the bottom octaves so dark, rich, and three-dimensionally rounded you could pluck them from the air like plums from a tree branch.

It should be obvious that the Vitus Signature Series SL-103 linestage and SM-103 MK.II amps get my highest recommendation.





though these amplifiers don't spotlight detail, it is there to be heard. For instance, if you pay attention, you can hear the silken "sssh" of Ray Brown's fingers gliding down the strings of his double-bass on certain notes from *This One's for Blanton!* However, these finger noises don't come across as pronounced and separable sonic elements that seemingly exist on their own, as they do with so many Class AB amps that accentuate instrumental attack. Instead, such transients, textures, and performance minutiae are presented as part of a continuous *process*. Starting transients are seamlessly followed by and linked to steady-state tone and decay, just as they are in life. This is part and parcel of the Vituses' liquidity. Coupled with their exceptionally dark, dense tone color and terrific dynamic clout, such durational continuousness and holism make for an uncannily beautiful and realistic presentation. This said (and it is saying a lot), the best Class AB competition may have slightly higher audible resolution, though it comes at the price of that Class A continuousness, which makes the Vituses' reproduction of the dynamic/harmonic envelope sound so liquid and complete.

The final difference (I won't call it an issue) is what I've called "action" or bloom—the way vocal and instrumental images and the air around them seem to expand and contract with changes in pitch and intensity, as they do in life. Traditional user-biased Class AB tube amps and highly select transistor amplifiers (Soulution, *par excellence*) are particularly good at reproducing this. Auto-biased Class

AB tube amps and Class A tube and solid-state amplifiers are less so, which has sometimes made me wonder whether "action," though realistic-sounding, may actually be a salubrious side effect of crossover distortion, caused or augmented by the imprecise biasing of tube/transistor pairs.

However this may be, in Class A the SM-103 MK.IIs do not have the bloom of my Class AB references (in Class AB, the Vituses have more of it). What they have instead is a rootedness in space and a statuesque solidity that makes Class AB imaging sound just a bit vaporous or insubstantial. I've never heard amps that make centered instrumentalists and singers, such as Birgit Nilsson in the "Agamemnon" aria from Decca's fabulous *Elektra*, sound more three-dimensionally "there." Though Nilsson's high tessitura is still searing, through the Vituses it's as if a layer of white frost has been chipped away, as in ice sculpture, leaving a translucent statue of Elektra at centerstage. And the ensemble on that stage, filled from behind Nilsson to the backwalls with the extremely large Straussian orchestra, is vast, uniformly dense in timbre and texture, and continuous in imaging, with those famously exultant brasses and winds at the finish of Elektra's aria leaping forth like tongues of fire.

I suppose I could continue going through the usual checklist of sonic virtues—e.g., octave-by-octave tonality, dynamics, durations, pitch accuracy, soundstaging, etc.—but the result would be a list of superlatives. As I've already indicated, these are superb electronics, capable of making instruments and vocalists sound more beautiful *and* realistic *and* expressive, more fully present and nearly visible than anything else I've had in my system thus far. And they're doing this with a challenging loudspeaker system and with non-Vitus source components.

It should be obvious that the Vitus Signature Series SL-103 linestage and SM-103 MK.II monoblocks get my highest recommendation. What's more than a little scary is that Vitus' Signature Series isn't the company's top-of-the-line offering. That would be its very expensive multi-chassis Masterpiece Series, which, I'm told, produce a sound that is even more luscious, detailed, and lifelike. Until I hear them or until Soulution's forthcoming 717 amplifier and JMF's top-of-the-line HQS-9001 monoblocks prove they're superior, the Vitus SM-103 MK.II monoblocks and the SL-103 linestage (along with Soulution's standard-setting 727 linestage/full-function preamp and 757 deemphasis unit) will remain my top picks. The Vitus electronics are, as I said at the start of this review, the best Class A solid-state gear I've heard in my system, and at \$40,000 for the preamp and \$75,000-the-pair for the monoblock amplifiers, extraordinary bargains in the cost-unlimited world of ultra-high-end electronics.

Build and Use

Vitus' Signature Series monoblocks and preamp are beautifully built components, with striking good looks. (They can be had in a variety of colors—Pure White, Jet Black, Warm Silver, Titanium Orange, Dark Champagne, Midnight Blue, Titanium Grey, and even bespoke finishes. Mine came with front, top, and bottom panels of Pure White, a very attractive departure from the typical black box.) Their chassis are all aluminum with heatsinks running the length of both the sides and tops of the amplifiers. (The preamps have no external sinks.) Two sets of three small buttons, arranged vertically, are inset on the lower third of the amps' faceplates, flanking a narrow, recessed glossy black panel with a tiny power-on light situated below a small LED readout screen. On the amplifiers, the buttons to the left are labeled A/AB, Menu, and Standby; to the right are a directional arrow facing up, a mute button, and an arrow facing down. (The arrows are for steering your way through Menu options.) On the preamp, the dual-function buttons to the left are labeled Input, Menu, and Standby with a second set of labels (an upward arrow, Select, and a downward arrow), whose functions allow you to navigate through options and choose the ones you want after you press the Menu button. Among many other features, the Menu button on the preamp allows you to label inputs (e.g., Phono, DAC, Tape Deck, etc.), making for easy selection of sources. To the right on the preamp, the three buttons are an upward-facing arrow, Mute, and a downward-facing arrow, which can be used to select characters when naming inputs in the Menu.

Pressing the Standby button on either unit turns it on (or off). Vitus recommends that the amps and preamp be put in Standby mode when you're not actively listening. (It takes about an hour of warmup for them to reach optimal performance, though, in my experience, they sound pretty damn wonderful from the moment you turn them on.) You can also automatically put either unit into standby after a user-selectable number of minutes/hours by selecting AutoStb (Auto Standby) in the Menu and entering a period of on-time before the amp and preamp shut themselves down. Vitus also (wisely) recommends the order in which components should be turned on and off. With turn-on, that order is source, preamp, amp; with shutdown, the order is reversed—amp, preamp, and source.

The SL-103's highly sophisticated volume control has been imported from Vitus' Masterpiece Series linstage. It uses a relay-controlled fixed-resistor network with

shunt resistors to prevent pops when you raise or lower volume. (The use of shunt resistors causes a small drop in level before the resistor is removed at the new volume step.) The granularity of the VC is 0.5dB per step, with the volume ranging from -90dB to +18dB.

The rear panel of the preamp is loaded with connectors, with five inputs (3 XLR and 2 RCA) and three outputs (2 XLR and 1 RCA bypass [for use with gear that has its own volume control]) on the left side and the same number and configuration of inputs/outputs on the right. The outputs are selectable between XLR and RCA. In between the left/right banks of connectors is a power on/off switch and an IEC input for your power cord.

The rear panel of each SM-103 monoblock has two sets of output terminals (equipped to take spades or bananas) to allow bi-wiring of your speaker (a necessity with the MBL 101 X-Treme MKIIs). Toward the bottom left of the rear panel are one RCA and one XLR input, with an IEC connector to their right for your power cord.

There are a couple of peculiarities you should be aware of when operating the SL-103 and the SM-103 MK.II monoblocks, though, as I've noted, excessive heat isn't one of them. First, upon turn-on the amps default to Class AB mode. To switch them to Class A, just press the A/AB button on the amps' front panels (the LED readout will read Class A in confirmation). It's that simple. Second, the outputs default to whatever volume level you've set in the menu for startup. That level may be too low for some sources (e.g., phonostages), so you may have to turn the volume up quite a bit before you start hearing sound. These things aside, the Vitus gear is more or less idiot-proof (and I should know).

As an added bonus, the SL-103 and SM-103 MK.II come with a rechargeable, LED-readout-screen-equipped RC-010 remote control, which allows you via the push of a button to change inputs, control volume, switch from Class AB to Class A (and vice versa), activate/deactivate Standby, choose which product to control, as well as enter the menu to enable or disable options.



What Vitus Audio Is Willing to Say About its Circuitry

● The SM-103 features six pairs (12 each) of Sanken MT-200 BJTs (bipolar junction transistors) in what importer Aldo Filippelli tells me is a push-pull configuration. The amplifier is switchable between Class A and high-biased Class AB. The SM-103 utilizes a zero-global-feedback design, complemented by a high-bandwidth DC servo that avoids adding any coloration to the sound. This design philosophy is claimed to ensure the preservation of a natural sound profile, intricate details, and musical transients.

The heart of every Vitus Audio power amplifier is the Power Module, and the heart of every Vitus Audio preamplifier is

the Gain Module. These modules, as well as the SMs and SL as wholes, are fully balanced, discrete, and built of specific circuitry that has been designed to bring tube-like mids and highs while maintaining the qualities of solid-state amplifiers in the low end.

These modules are backed up in the SMs by a huge 2.2kVA transformer in each of the SM chassis. The transformer has been worked on for many years and are designed to be able to deliver power into very hard-to-drive loads with as low a voltage drop as possible and the highest noise suppression possible. This transformer, together with the roughly 500,000uF of capacitance in each of the chassis, ensures that power can always be delivered to the speakers.

The two different output modes (Rock and Classic) completely reconfigure the output stage of the SMs. This does not introduce any form of filtering that will negatively impact the sound quality. Rather, it alters the coupling of everything inside the SMs to allow for different sound profiles to be presented to the listener, based on preference, room acoustics, other equipment in the system, etc.

All components are sourced from Danish importers who only deal with ROHS-certified parts, and most are from older industry contacts. That gives Vitus Audio a direct line to the manufacturers and designers of specific components and therefore access to know-how that is not typically available.





Hans-Ole Vitus

Hans-Ole Vitus, the founder of Vitus Audio, was a musician (a rock drummer and sometime guitarist/bassist) before he became an audio manufacturer. As a musician, he was naturally attracted to recorded music, but when he got his first stereo as a kid and took the top plate off to look inside, he was bewildered by what he saw. Not being able to understand anything about the circuitry in his stereo gear set him on the path of studying electronics. Eventually, he became a "DIY guy," building his own components, sharing them with audiophile friends, and testing them against the Mark Levinson and Krell equipment they owned. Once he realized that what he was building "didn't sound too bad" compared to his friends' expensive gear, he started his own electronics company in the 1990s.

As a musician, particularly as an occasional guitarist and bass player, Vitus was initially attracted to the "groovy sound" of tubes (which were in his guitar amplifiers). But he was too young and inexperienced to make tube circuits sound the way he wanted them to sound. So, he designed with solid-state. He still loved tubes, particularly in the midband and treble, where they had a "fluent, organic" presentation. In the bass, however, he preferred solid-state to the "weaker, less controlled, less refined" sound of glass bottles. From the start, it was his goal to merge these two different sonic topologies. To achieve this, he ruled out the use of global negative feedback, parallel transistors, and any devices that add grain to the midrange (which is the opposite of what tubes sound like). It took him eight years to get the right blend of parts and the sound that he wanted. He started working in 1995 but didn't finish (or release any gear) until 2003, showing his initial offerings at CES 2004. Today, Hans-Ole continues to work as the chief designer at Vitus Audio, while his son, Alex, handles the business side. **tas**

Specs & Pricing

SL-103 Linestage Preamplifier

Inputs: 3 XLR (L+R), 2 RCA (L+R)

Input sensitivity: 2/4/8V RMS (XLR and RCA)

Input impedance: 10k ohms (XLR and RCA)

Outputs: 3 total, two selectable between XLR (L+R) and RCA (L+R). 1 tape out (L+R)

Output impedance: 80 ohms (XLR and RCA), 75 ohms (tape)

Frequency response: +800kHz (XLR and RCA)

Signal to noise ratio:

>110dB@1kHz (XLR and RCA)

THD + noise: <0.01% (XLR and RCA)

Volume control: -90dB to +18dB (relay-controlled fixed-resistor network)

Dimensions: 435mm x 135mm x 428mm

Weight: 25kg

Price: \$40,000

SM-103 MK.II Power Amplifier

Inputs: 1 XLR, 1 RCA

Outputs: 2 sets for biwiring

Input sensitivity: 2V RMS

Input impedance: 10k ohms

Output impedance: 0.075 ohms

Power: 100W RMS into 8 ohms, 200W RMS into 4 ohms

Frequency response: +800kHz

Signal-to-noise ratio:

>100dB@1kHz

THD + noise: <0.01%

Dimensions: 435mm x 310mm x 601mm

Weight: 75kg

Price: \$75,000/pr.

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JV's Reference System

Loudspeakers: MBL 101

X-Treme MKII, Magico S3 2023,

Magnepan 1.7 and 30.7

Subwoofers: JL Audio Gotham

(pair), Magico S Sub (pair)

Linestage preamps: Soudation

727, MBL 6010 D, Siltech SAGA

System C1, JMF Audio PRS 1.5

Phonostage preamps: Soudation

757, DS Audio Grand Master EQ

Power amplifiers: Soudation

711, MBL 9008 A, Siltech SAGA

System V1/P1, JMF Audio HQS

7001, Odyssey Audio Stratos

Analog source: Clearaudio

Master Innovation, Acoustic

Signature Invictus Neo/T-9000

Neo, TW Acoustic Black Knight/

TW Raven 10.5

Tape deck: United Home Audio

Ultima Apollo, Metaxas & Sins

Tourbillon, Analog Audio Design

TP-1000

Phono cartridges: DS Audio

Grand Master EX, DS Audio

Grand Master, DS Audio DS-

W3, Clearaudio Goldfinger

Statement v2.1, Air Tight Opus

1, Ortofon MC Anna, Ortofon

MC A90

Digital source: Kalista

DreamPlay XC, MSB Reference

DAC, Soudation 760, Berkeley

Alpha DAC 2

Cable and interconnect:

Synergistic Research Galileo

SRX (2023), Crystal Cable Art

Series da Vinci, Crystal Cable

Ultimate Dream

Power cords: Crystal Cable

Infinity, Crystal Cable Art Series

da Vinci, Crystal Cable Ultimate

Dream, Synergistic Research

Galileo SRX 2023

Power conditioner: AudioQuest

Niagara 5000 (two), Synergistic

Research Galileo SX

Support systems: Critical Mass

Systems MAXXUM and QXK

equipment racks and amp

stands

Room Treatments: Synergistic

Research Vibratron SX, Stein

Music H2 Harmonizer system,

Synergistic Research UEF

Acoustic Panels/Atmosphere

XL4/UEF Acoustic Dot system,

Shakti Hallographs (6), Zanden

Acoustic panels, A/V Room

Services Metu acoustic panels

and traps, ASC Tube Traps

Accessories: DS Audio ES-001,

DS Audio ION-001, SteinMusic

Pi Carbon Signature record

mat, Symposium Isis and

Ultra equipment platforms,

Symposium Rollerblocks and

Fat Padz, Clearaudio Double

Matrix Professional Sonic record

cleaner