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DECEMBER 2009

This is the ninth in a series of reviews dedicated to the concept of 32Ohm Audio as embodied by the store of that name in downtown Portland/Oregon and described here - *Ed*.

Reviewer: Srajan Ebaen
Financial Interests: click here
Source: Esoteric UX-1, Yamamoto YDA-0, Raysonic Audio CD228, Apple iPod Classic 160GB, *Wadia i170 transport* [on review]
Preamp/Integrated: Esoteric C-03, ModWright DM36.5, Yamamoto HA-02, Woo Audio Model 5, KingRex Headquarters, *Red Wine Audio Isabellina HPA w. Wadia DC feed* [on review], *ALO Audio Rx* [on review]
Amplifier: FirstWatt J2, *WLM Acoustics Minueta* [on review]
Speakers: Acoustic System Int. Tango R, *Yamamoto YS-500* [on review]
Headphones: Sennheiser HD800 w. ALO Audio wiring, AudioTechnica ATH-W5000, BeyerDynamic DT880, Grado PS-1000, AKG K702 with ALO Audio wiring
Cables: Complete ASI Liveline loom
Stands: Acoustic System Int. HeartSong
Powerline conditioning: 2 x Walker Audio Velocitor S
Sundry accessories: Furutech RD-2 CD demagnetizer; Nanotech Nespa Pro; extensive use of Acoustic System Resonators, noise filters and phase inverters, Advanced Acoustics Orbis wall and corner traps
Room size: The sound platform is 3 x 4.5m with a 2-story slanted ceiling above; four steps below continue into an 8m long combined open kitchen, dining room and office, an area which widens to 5.2m with a 2.8m ceiling; the sound platform space is open to a 2nd story landing and, via spiral stair case, to a 3rd-floor studio; concrete floor, concrete and brick walls from a converted barn with no parallel walls; short-wall setup against 8-meter expanse and 2nd-story landing.
Review Component Retail: €1,190

The man with the new tools

Like 007's nemesis with the golden gun, Sasa Cokic of Trafomatic Audio in Serbia's Mladenovac has grown more dangerous. Not to himself but to competitors. With his own valve gear, he always knew how to make good sound without asking a fortune.

He's a true transformer expert who rolls his own for each application.

The kind of fit 'n' finish he could achieve was simply handicapped. He still lacked a certain kind of specialty experience. And *tools*. His ascent to WLM Acoustics' chief engineer at large —Sasa designs the circuits and builds all sub assemblies and transformers—created a small infusion of working capital.

Sasa immediately invested that into a new dedicated assembly facility, hiring more personnel and acquiring his own CNC router.

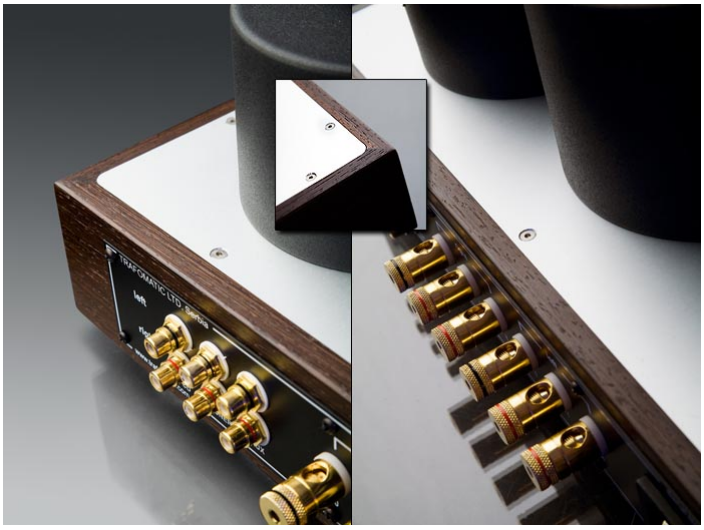
The Austrian connection with wood-work champ Hannes Frick & Co. rubbed off further. During a grueling 3-day training course at the WLM facility in Sülz, Sasa and two of his key men were shown certain expert tricks on how to achieve the immaculate finish level WLM demanded for its new brand of WLM Acoustics tube electronics.

Once the WLM project had aced the proof-of-concept hurdle (sound) and the bigger Austrian standards challenge (these designs can be built to cosmetic spec in Serbia), the formal roll-out of an ambitious number of brand-new WLM models occurred at the HighEnd 2009 in Munich [below].

Ever restless, Sasa Cokic immediately applied his new tools and skills to face lift his own Trafomatic Audio models well before he set off for his first-ever German hifi show. That showing led to our first-ever **Harvest Moon Award** for personal achievement.

To document the progress for his own brand, Sasa next submitted these images of his existing but revamped *Experience*line. Credit for these photos goes to his Serbian friend Miodrag Jovic (e-mail credit on the enlargements of the Head One photos farther down the page).

The visual tie-in with the WLM Acoustics models was deliberate. "*For Hannes, I designed push-pull circuits around EL84s and EL34s exclusively to meet the criteria of his speaker models and tastes. At Trafomatic Audio, I already had 2A3 and 300B single-ended integrateds, 2A3 and parallel 300B monos, a headphone amp/preamp and transformer-coupled power filters. Adopting the same cosmetics we developed with Hannes made sense for those WLM clients, dealers and distributors who might prefer SET circuits and triodes. We do have one 6550 push/pull model called the Experience Elegance under our Trafomatic brand and we're currently working on a remote-controlled 45wpc integrated version for €3.300, €180 for the remote.*



Yet for the Experience Elegance amplifier, I retained the original front panel dress plate as you can see below. So there's zero overlap or competition with WLM. Rather, we have a nice strategic dovetailing to cover many different bases without doubling up."

Those whose only hesitation with Trafomatic Audio in the past had to do with appearance no longer need to restrain themselves. In their price range, these models are now as bling and gussied up as good conservative taste would want.

Naturally, looks aren't everything. The time had come to take another - um, *look* at the Experience line and report on sonics. As a headphone listener, I was curious about Trafomatic's Experience Head One. That's an unusually flexible tube-rectified design with multiple impedance taps for the ear speakers.

It also runs a pair of 6S45P triodes with 1.8dB of negative feedback on the outputs while one EZ80(81) becomes the indirectly heated rectifier. Two inputs switched via rear-mounted toggle and twinned pre-outs for biamping or subwoofing* turn this piece into a bona fide small preamp as well. The right four-pole control on the front selects from 30, 100 and 300-ohm loading for the headphone output or preamp duty in its last position. Max output power on the 1/4" socket is 300mW while preamp gain on the pre-outs is 18dB with a max voltage swing of +/-9V. Beyond the expected Trafomatic trannies and choke, parts include Rubicon electrolytics, an Alps potentiometer and metal-film resistors.

** The subwoofer output isn't of the same quality as the main output and thus not to be used as a pre-out into a speaker amplifier. It was particularly designed for low frequencies.*

Sasa's headphones of choice are the same AudioTechnica ATH-W1000s I owned before acquiring their W5000 cousins.

The noise floor of the new and revised Head One was optimized for high-sensitivity ear speakers of this caliber over the amp's first iteration when Sasa still listened to lesser headphones of lower sensitivity.

My favorite in-the-head amp of course is Shigeki-San's Yamamoto SoundCraft HA-02. Fairly or not, that's what the Serbian would have to compete with. But the KingRex HQ-1 Headquarters was in for review as were Vinnie Rossi's Isabellina HPA and Ken Ball's stunning ALO Audio Rx, both battery-powered, the latter portable. And I had my Woo Audio Model 5 with EAT 300Bs and twin 5U4G rectifiers.

The cards were quite stacked against the Serbian, particularly since I'd also acquired pairs of Sennheiser HD800s, Grado PS-1000s and AKG K702s to take the full measure on future headphone/amp assignments.

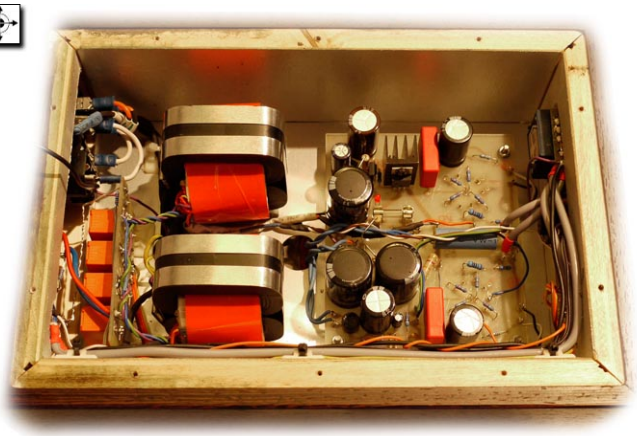
Reader Mutjaba Hussain whom I would meet during my **RoadTour Bergen** then checked in: "It is a pleasure to see the Trafomatic Experience Head One being reviewed at 6moons. It is one of my favorite products in the lineup. Recent developments in Norway have been beneficial for Sasa and Trafomatic Audio.

Renaissance Audio has been appointed the official retailer of Trafomatic Audio products in Bergen. The company is led by Mr. Roald Mikkelsen who has in the last 20 years produced the finest high-End audiophile cables in Norway.

Renaissance Audio is also the official distributor of Von Schweikert speakers and Kora Electronic Concept (France) in Norway. This picture was taken during a listening session at Renaissance Audio where the Head One was used as preamp driving a pair of Kora monoblocks.

Attendees were impressed by its transparent yet euphoric sound."

This bit of unsolicited feedback presaged what I would discover. The Head One is one very fine valve preamplifier in the big rig. Small size and price might suggest otherwise but only fools pay extra just to brag that they have. Mutjaba's photo also shows what the cosmetics were prior to the makeover.



The review context for headphone listening was as follows:

• Raysonic Audio CD228 or Esoteric UX1/Yamamoto YDA-01; Windows XP or April Music Stello CDT100 into April Music Stello AI500's USB input, then out via its record outputs on the desk top; Apple iPod Classic 160B into Wadia iDock into RWA Isabellina HPA as fixed-output converter or Meier Audio Corda Stage DAC
• KingRex Headquarters, Woo Audio Model 5, Yamamoto SoundCraft HA-02, Red Wine Audio Isabellina HPA, Trafomatic Experience Head One
• Sennheiser HD800 w. ALO Audio wiring, AudioTechnica ATH-W5000, Grado PS-1000, AKG K702 w. ALO Audio wiring
• ASI HeartSong rack and amp stand or desk top
• ASI LiveLine interconnect and power cords or Crystal Cable Ultra loom
• Walker Audio Velocitor S passive power bar or Furutech RTP-6

Incidentally and despite forum posts to the contrary, the Western Electric 437 is only similar to the 6S45P but not the same. As Sasa explained, it has a different socket and pin out and "an exact equivalent does not exist. The Telefunken EC8020 *is* very similar but also very expensive—$100 - $150/ea.—so I haven't tried it. The whole concept of the Experience Head One was a high price/performance ratio."

A few final comments on the new cosmetics. The two frontal controls look very similar to but are somewhat smaller than the classy Goldpoint units on Red Wine Audio's gear. The top deck is nicely grained aluminum with counter-sunk hex screws and engraved tube markers. The paint on the transformer can is a very attractive textured black. Unlike WLM's preferred glossy equivalent, it shows no finger prints or dust to be more practical but just as handsome.

The wood veneer application is *superb* and from the aesthetic angle, the total package is now completely beyond reproach. One no longer credits a handicap for the country of origin - except for the final sell price which assuredly would be higher were this amplifier made in Western Europe or the United States.

To put the Head One's preamp performance into perspective, I assembled a system around a low-powered valve amp of the kind Trafomatic makes—here Yamamoto's A-08S with Emission Labs 45s, then Sasa's Minueta for WLM—and a pair of properly matched loudspeakers, the same Rethms Sasa owns.

My Zu Essence swapped in later to confirm bass performance (the Rethms use self-amplified woofers). After the valve amps, FirstWatt's J2 slipped in to account for customers with transistor amps who desire deliberate valve seasoning. The Head One's volume taper plus its overall gain left very little room before things got too loud on the Rethms and Zus regardless of amp used. At first, I ran into *serious* ground loop issues even when the Head One had no AC connection. As soon as the incoming and outgoing signal cables looped through the machine, there was unacceptable hum.

Various cheater plug experiments on the amplifiers or preamp made no dent. Ditto whether the preamp's mains was tapped from the Walker Audio Velocitor S power block which fed the source components or the other one on the amplifiers. Once my customary Esoteric C-03 replaced the Trafomatic preamp, I was instantly noise free again. The culprit turned out to be my Yamamoto YDA-01 DAC. Once I replaced it with the Abbingdon Music Research CD-777 under review, the *verkackte* ground loop broke - with the tube amps but not the FirstWatt. Reintroducing the cheater plug on either the Pass amp, preamp or source power connection made no difference. Nor did floating the Saadhanas' bass amps which is my default mode.

Sasa had both explanation and solution: "*When you don't connect the power cord, the relay is not switched on (RCA out connectors are not connected to the transformer) and your cables to the amp aren't coupled to the output transformers. The hum then derives from an open cable from the preamp. Ground loop effects are always possible so for the next production, I will add a ground post and perhaps even switch to float the power cord when the Head One is used as preamp.*"

I still had gain up the Yangtze even on my Yamamoto's 2-watt micro-power terminals. But no noise. I do strongly suggest however that Trafomatic adopt a shallower volume taper. This will expand the useful range for preamp applications. That covered, sonics were really quite spectacular. Even the EL84 integrated with its passive attenuator did audibly respond with slinkier elasticity, richer tone, greater presence and more articulated staging precision.

The *slightly* hallucinatory 45 amp with its 'perfect' balance of attributes usually runs off my Esoteric transistor preamp in passive mode—really a misnomer since even in zero gain, it runs off high-voltage rails—to not dilute its lit-uppity speed and energy with its

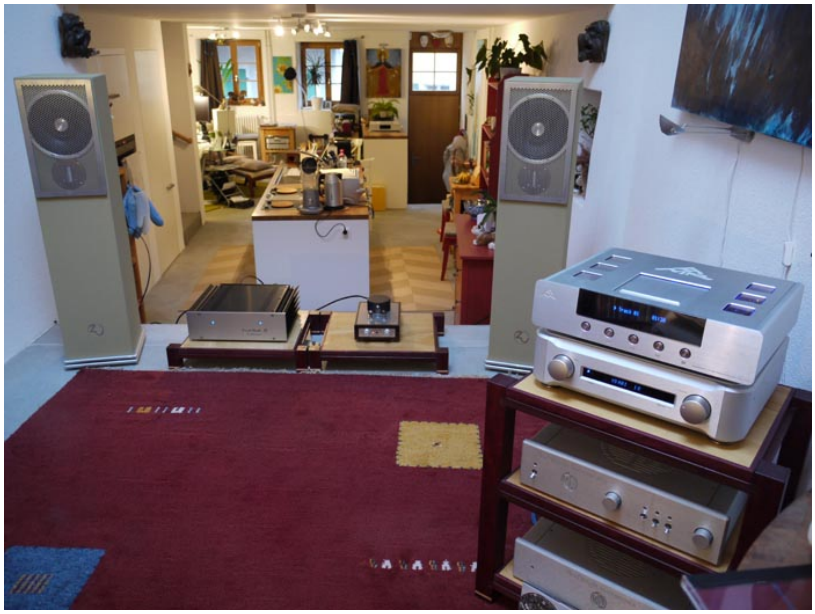
simultaneously smooth textures. Active preamp insertion under such conditions tends to put the foot on the brake, fattens up girth and rounds over leading edges. The take on the tunes becomes cuddlier, warmer, less precise and less unputdownable for my tastes. That general direction *could* be desirable with certain amplifiers but I prefer Yamamoto's special 45 magic uncut. Even so, the Head One excelled. It contributed far more than it gently diminished. While the overall gestalt did mellow, the modest fill action was super benign and above all, linear. It didn't focus around the midrange waist in love handles but applied itself evenly top to bottom like an atomized drop of oil.

The impression of inner pressurization or color intensity increased and dynamics didn't suffer. While ultimate see-*thru*-ness did congeal a tad, the dimensionality of virtual bodies focused better.

Particularly at low volumes, this added fleshiness was not only attractive but more intelligible. I particularly appreciated how this did not muck up the crystalline yet suave treble I so admire with the 45s. It's here where you expect the greatest losses from additive meddling but this unprepossessing small preamp acquitted itself very well indeed.

While not as ballsy and resolved as the big two-chassis ModWright with its dual-mono external power supply, I'd give the Serbian the sonic—though clearly not functional—edge over Dan Wright's smaller SWL9.0SE.

It performs more subtle texturizing than the latter's drier 5687s.



This becomes relevant for those who'd call the FirstWatt F5 or J2 texturally too matter of fact. These are finely honed machines. They walk the path of neutrality with elegance rather than blandness. Valve hounds might want more tonal billowing however. In such cases, the Head One contributes the perfect dose. It relegates my usual Esoteric machine into second place. In short, once the ground lift switch and post have been added—I *very* rarely encounter ground loops to believe that the Head One is unusually susceptible to really need those facilities—and the volume control is converted to ramp up shallower and pass well beyond 9:30 where I maxed out, this headphone amplifier doubles astonishingly well as a serious though minimalist preamp.

It in fact has me curious what Mr. Cokic would do for a maxed-out preamp that ran the same Reflektor 6S45P high-mu triodes which once flew in the MIG-25 Interceptor's *Smerch* radar system and can output 2 solid watts of speaker-level power. These babies are crisp, accurate and linear like transistors but add that tubular *cantabile*.

As a headphone amplifier, the Head One is in a class by itself. More linear than the midrange-centric WE 408A Yamamoto which by comparison is clearly sculpted; faster than it and the mighty 300B Woo; texturally and harmonically richer than the transistors of the ALO Audio, KingRex and Red Wine Audio pieces; this Serbian makes a most compelling case to go tubes for low-level circuits. I'm clearly no longer exclusively dedicated to valves—both FirstWatt and ModWright make convincing arguments to the contrary—but for headphones, I continue to prefer them for the 'textural binder' which the absence of ambient room interactions minimizes. Harmonic leanness becomes even more objectionable when the transducers are close to hard-wired to the brain. Then I rather err on the side of 'caution', i.e. some extra padding.

To explain this better, power-line filtering can increase perceived silence for nearly stark blackgrounds. Similarly, transistors on headphones can lead to degrees of starkness which tubes—perhaps by virtue of subliminal noise dither—don't produce.

Where powerline filtration can create overdamping like stuffed speakers which sound too stiff and unyielding, headphones react similarly when in spite of otherwise appealing grippiness and slam, the tunes seem military in their bearing.

If noise has been banished to create no background surf at the usual listening levels, tubes can have the advantage here. That's not necessarily a sonic trait as much as one of *gestalt*. Regardless of how caused exactly, valves for headphone applications really excel here and the linear quiet Trafomatic is a prime example.

Transistor-attuned listeners might complain for example how Yamamoto's Western Electrics cause an uneven distribution of lighting or emphasis. This veers into the direction of 'deep triode' - deeply pretty but ultimately a fixed focal lens.

Big Woo was more evenly lit but against the small 6S45P triodes, even modern 300Bs by EAT were more voluptuous and 'girthy' at such millivolt levels. The Woo was thus subjectively slower and less incisive on the kind of blistering attacks Vicente Amigo's *Paseo de Gracia* is filled with. That relates very directly to the amount of excitement, inner tension and beat hipness which complex rhythmic fare thrives on. The Head One is a member of the PRaT Pack.

Just as the Rethms and Zus suggested already, treble extension was excellent. New Senn HD-800s displayed all their initial bite uncensored. This mellows over time but a superior aftermarket harness like ALO's 18-gauge proves how Sennheiser's own 36 job is really compromised.

With it, some hardness on top and a clear lack of weight and impact in the bass remain. Audio-Technica's 'Raffinato' W5000s proved to be deliberately voiced around the midrange which adored classical and voices but was somewhat less *hip* on modern fare. Despite their open backs, Grado's very pricey PS-1000s majored in slam beats and infrasonic wallop to show the close-backed Japanese a clean set of heels. After their quite endless break-in needs and despite their far lower price, the AKG K-702 with AOL harness hung in with the big boys but opted out sooner on wear comfort. On soundstaging, the HD-800 took the crown

Details about these various headphones remain reserved for their respective feature reviews. Let it suffice here to say that the Head One drove all of them with aplomb to become first amongst equals—and not so equals—from what I had on hand. As such, the Serbian dethroned my long-running Yamamoto HA-02 champ, out-sophisticated the excellent battery-power Red Wine Audio Isabellina HPA (whose integral NOS DAC becomes part of its sonics) and demonstrated by way of the two-box KingRex unit how premium triodes harnessed at micro-volt levels into 30-ohm plus loads still have an advantage over transistors that seems hard to bridge.

The rarely encountered Soviet 6S45P is a *premium* audio valve on par with the Russian military 6BQ5 equivalent. Its virtues are 70% transistor which dominate on extension and

linearity, accuracy and cleanliness. Tubular contributions are limited to fine textures, more vibrant colors and nubility. Such a crafty balance of qualities should make friends on either side of the great divide. So make no mistake, this Head One is a masterpiece - small but *Oho!*

PS: 3.13MB owner's manual PDF **here**.

PS II: After encountering the Head One and its WLM Acoustic Minueta relative in the wake of prior reviews, I finally **commissioned** a pair of no-holds-barred 6P14P-EV monoblocks from this Serbian designer. This might underscore what I think of his abilities.

Srajan Ebaen

Quality of packing: Good.
Reusability of packing: A few times.
Ease of unpacking/repacking: No issue.
Condition of component received: Flawless.
Completeness of delivery: Perfect and remarkable for the quality of ancillaries.
Website comments: Recently revised and now perfectly informative.
Human interactions: Always timely and friendly.
Pricing: Fair value.
Final comments & suggestions: As a preamp, the Head One is highly susceptible to ground loops. Trafomatic has already affirmed a decision to install a relay which will automatically lift the ground as soon as the pre-out is selected with the front-panel switch. This removes the one potential reservation I harbored and is even more elegant than a separate ground-lift switch on the back would be.

Trafomatic Audio **website**