Integrated tube amplifier. Rated at 20W/8ohm
Made by: Trafomatic Ltd, Serbia
Supplied by: Absolute Sounds Ltd
Telephone: 0208 971 3909
Web: www.trafomaticaudio.com; www.absolutesounds.com
Price: £19,998

AUDIO FILE

hi-fi news OUTSTANDING PRODUCT

Trafomatic Rhapsody

The latest addition to Absolute Sounds' boutique 'Ten' range – the Trafomatic Rhapsody from Serbia – is a single-ended, 300B-based triode tube amp rated at a mighty 20W
Review: **Ken Kessler** Lab: **Paul Miller**

As far-fetched as this may seem, given that most post-Millennials have yet to embrace hi-fi, we are living in another audio 'Golden Age'. This isn't the place to rattle off a list of gems that have crossed my path just since the Covid moratorium ended, but the Western Electric WE-91B [*HFN* Feb '23], a trio of DeVore speakers [*HFN* Apr '21, Mar & Aug '23], and family of DS Audio optical cartridges [*HFN* Oct '21 & Oct '23] are among the many that beg my repeating of the homily, 'You've never had it so good'. Trafomatic's Rhapsody (M2-15 Anniversary stereo PSE 300B tube) integrated amplifier joins them, and emphatically so.

Even the £19,998 price surprises: I really thought it would be more. Its physical presence, a brace of 300Bs per channel, a thought-provoking weight of 32kgs, sexy meters, myriad oddly labelled knobs and switches – this is the stuff to make even a jaded audiophile's heart skip a beat. And with it coming from Serbia, I had no idea what it would sound like, despite having seen Trafomatic at numerous shows [see p35] over the past decade-and-a-half.

VARIETY SHOW

The Rhapsody is part of a massive range which includes six power amps, three preamps and two phono stages, eight integrated models of varying topologies including single-ended and push-pull designs, three headphone amps, and a handful of accessories. The variety shows that Trafomatic isn't locked into a single amplifier type, the Rhapsody being a line-level-only 'Parallel Single-Ended' design. Aside from the need to add a phono section if you play vinyl, it's comprehensive by most standards, even including a remote control [see p61] for playback levels.

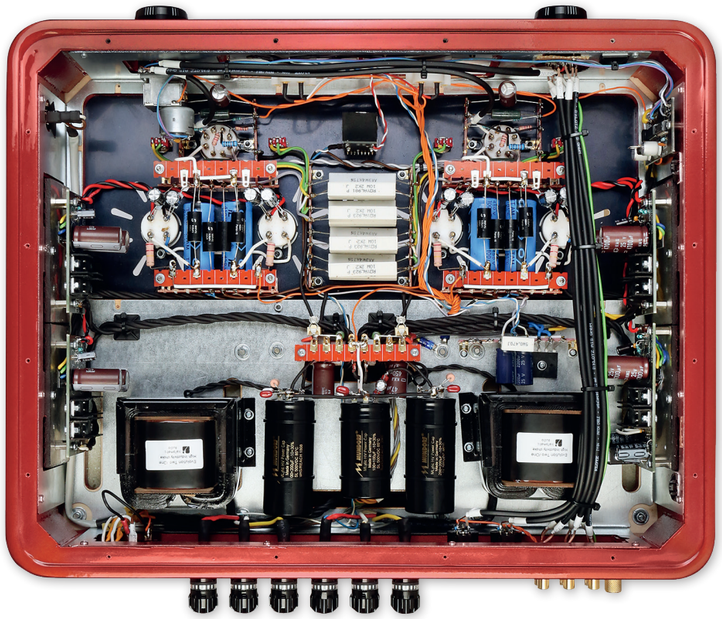
Set-up was a no-brainer, aside from one set of toggle switches, which I will get to in due course. Starting at the back [see p61], you'll see why, as everything is instinctive. From left to right, there is an earthing post, three pairs of phono sockets (charmingly labelled RCA 1, 2 and 3) and a pair of XLR inputs for a balanced source. The rather fine multi-way binding posts provide for both 4 and 8ohm loads [see PM's boxout, p57], while to the far right are an IEC socket and a voltage selector. Both sides of the beautifully-finished, metallic vermillion-coloured chassis are louvred, the left side also containing the on/off rocker.

> 'This is the stuff that makes an audiophile's heart skip a beat'

ADMIRING THE VU

Seen from the front, the fascia sports a massive, scalloped rotary knob for volume, which is motorised for the remote. Next are two large, illuminated VU meters. Mirroring the volume control is another black rotary to choose from the three RCA inputs or the one balanced XLR input.

It's the top view that will tickle those who want more than the minimum. Across the back of the Rhapsody are three massive transformers, which – unlike too many – are housed in superbly anodised cases. Next comes the row of four Electro-Harmonix 300B power triodes, one parallel pair per channel, in front of which are two 6SN7s. Inbetween the 6SN7s is a handy knob to adjust the VU meters' sensitivity, which will be useful if you change loudspeakers from say, super-efficient to substantially hungrier and the VU meter readings are either too low, or



RIGHT: Inside the Rhapsody revealing the point-to-point wiring, partly with vdH cable, custom output transformers [bottom, left/right], Mundorf MLytic PSU capacitors [bottom] and separate L/R PSU regulation [far left/right]

LEFT: Rotaries for (motorised) volume [left] and input selection [right] flank two illuminated 'VU' meters. Up top, selected 6SN7 double-triodes drive parallel pairs of 300B power triodes configured in SE/Class A

are continually smacking the end stops at the far right 'red end' of the scales.

What needs further explanation are the four toggles – one per 300B – marked 'Mesh' and 'Solid'. This refers to the type of 300B you are using. As the Rhapsody features auto-biasing, that's not an issue should you wish to change valves. Mesh-vs-Solid is another matter entirely, referring to the type of anode. Mesh anodes handle less power than solid, so a mesh anode valve will be damaged if the switch is set to solid, as for the Electro-Harmonix 300Bs.

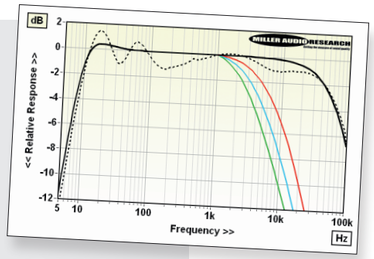
READY TO ROLL

There's another reason why this valve-swapping facility will endear the Trafomatic to those of a tweaky nature. As you will discover, the Rhapsody does not pray to the 300B SET hymn sheet in every parameter. Yes, it's sweet and warm, but equally it tends toward the more precise and analytical. Look elsewhere for the fat, soft sound used to tame certain horn speakers. Having heard the differences between assorted makes of 300Bs, and as the Rhapsody has no awkward cage to remove, enthusiasts might like to try vintage new-old-stock valves, or splash out on some of the more premium examples available today.

One more thing. Aside from the usual instructions about warm-up, of which a minimum of 15 minutes is recommended, and the owner's manual warning against haste when changing valves, there is another nice touch with safety in mind. Supplied with the unit is a Perspex panel that slots into the front, the two apertures positioned just above each knob on the fascia. This will prevent accidentally bumping into the hot-running tubes. As for space considerations, the footprint is 470x370mm (wd) and it's 260mm tall but the latter is incidental: you will not want anything directly above it.

300B triode amps will never be uber-powerful – the Rhapsody is rated at 2x20W, though PM suggested a much lower real-world figure for mating to speakers [see Lab Report, p61]. Sensitive speakers like the DeVore O/93s [*HFN* Mar '23] immediately spring to mind, and these were used for most of my listening, but I did enjoy near-miraculous pairings with my legacy Quad ESL57s, and the far newer PMC prodigy1 [*HFN* Nov '23] which seemed happy enough in my 12x18ft room.

TAP DANCING



In common with most tube amps – triode or pentode – the Rhapsody offers two sets of transformer taps to step-down the high voltage/high impedance output of its 300B power tubes to better match the lower impedance and higher current demand of the attached loudspeaker. Specifically, the Rhapsody has 4mm outputs [see p61] conceived to 'match' nominal 8ohm and 4ohm loads, even though, in practice, very few speakers provide this linear impedance. Instead the amplifier 'sees' a load that swings up and down with frequency as the various reactive components of crossover and drivers come into play, causing the system response to rise with increasing speaker impedance and fall with decreasing speaker impedance.

The severity of these response variations is determined by the magnitude of the swings in speaker impedance vs. the source impedance of the amplifier (~2ohm from 20Hz-20kHz for the Rhapsody). As the Rhapsody's treble response drops away quite markedly via its 4ohm tap into 4, 2 and 1ohm loads [red, blue and green traces, inset Graph] it is crucial to match it with speakers offering a 'bright' response, high sensitivity and a high, or increasing, HF load impedance.

For Ken's listening we chose the DeVore O/93s [*HFN* Mar '23] – these offer a useful 90dB sensitivity coupled with a load impedance that's broadly >7ohm (20Hz-20kHz), has acceptable swings in phase angle of +54°/–60° through the bass and a thoroughly 'driveable' worse-case 3.1ohm/99Hz EPDR. The black trace [inset Graph] shows the Rhapsody's extended HF response via its 8ohm tap into a non-reactive 8ohm load while the dashed trace shows the response via the same 8ohm tap into the DeVore O/93. These relatively modest ±1.8dB response variations, in the bass, will not be disruptive but the Rhapsody driving a tougher speaker via its 4ohm tap might look, and sound, very different indeed. PM

RHAPSODY IN RED

For a forthcoming round-up of audiophile LPs, I have secured a copy of *Hit The Bongo! The Latin Soul Of Tico Records* [Craft Recordings CR00660], a 2LP set ⇨

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RIGHT: The Rhapsody's 'Solid/Mesh' toggles can just be seen on the top plate from this angle. These set the anode dissipation for the 300B triodes – 'Solid' mode is for 300Bs that run at higher power

with both mono and stereo tracks. I realise many of you might never bother with mono, but it proves useful when assessing any component, especially if you don't have a mono cartridge or a mono setting on your amp or preamp. You want a rock-solid central image regardless, which the Rhapsody provided. More surprising, however, was the way it handled these incredible, Latin soul and jazz mono tracks, because one soon stopped thinking about the single-channel playback.

But that wasn't the main reason this 'various artists' compilation proved to be so revealing. The percussion which dominates much of the music from Tito Puente, Ray Barretto and others of that calibre has as much character as Kodo drumming, and it impressed upon me more than the clean extreme treble how the Rhapsody avoids clichés about SET amplifiers – even if they may by now be rather outmoded. The sound here was deep, massive and of the sort which seems to roll across the floor like the mists in a Hammer flick.

YOUNG AT HEART

As this initial impression was so favourable, and I didn't want to think I was that easily charmed, I dug out one of the worst LPs I have ever heard. What's so heart-breaking about the soundtrack to *Dead Man* [Vapor Records 9362-46171-1] is that the horrible screech was made by Neil Young, whom I adore. What I wanted to test here was something I've done for most of my time as a reviewer: is the sound enticing enough to keep me listening, even if the music is so bad that I've lost the will to live?

Thanks to the Rhapsody's seamless, seductive presentation, I duly sat through all four sides. Here, perhaps, I was transposing onto the designer [see interview sidebar with Saša Čokić, right] a possible leaning toward thrash, grunge or some other dissonant genre, as this was recorded in 1996 when Young was hanging around with Pearl Jam. And yet this droning racket proved involving and hard to resist, like a train wreck.

Turning to something less likely to require paracetamol, I have always adored the recently departed Loretta Lynn, and consider myself blessed – no pun intended – to own a copy of *Hymns* on pristine open-reel tape [Decca ST74-4695]. Given that there is a level of hell awaiting hi-fi reviewers, I approached it in a secular mood, as it is, content aside, pure country music. Its star qualities are her crystalline vocals, almost a template for distaff C&W warbling, and the metallic attack of a banjo.

> 'I wallowed in the sound of a full-blown, room-filling orchestra'

CONSISTENTLY CONVINCING

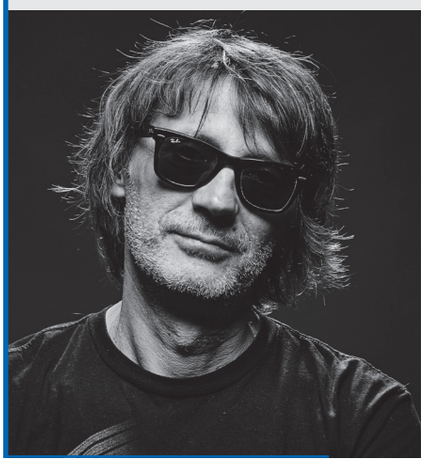
While these were anticipated, and the Rhapsody proved as adroit with female vocals as with Latin percussion, I was unprepared for the speed of the transients, the crispness of the plucking or the sound of the banjo's vellum head. It was so truly, convincingly authentic that I had to hear it through speakers as sonically far apart as the Quad '57 and PMC prodigy1, and it remained consistently 'real' from speaker to speaker. I would add here that I played the tapes through the amplifier's XLR input ⇨

SAŠA COKIC

Trafomatic's founder, Saša Čokić, looks like he was in a Balkan heavy metal band in the 1980s, and not just because of the Hard Rock Cafe t-shirt and the shades. There's a cool genotype in Eastern Europe – in this case, Serbia – which suggests a hardy nature, as if they had to smuggle LPs from the West to hear rock music. All this reinforces my belief that hi-fi designers' personalities are often reflected in their equipment. So the Rhapsody rocks, unlike your typical 300B-powered SET.

Čokić explained that while Trafomatic was established in 1997, the manufacture of Trafomatic *electronics* did not start until 2007, under the name Trafomatic Audio. He says, 'I didn't work for other [audio] companies, but Trafomatic made output and power transformers for other hi-fi brands. Although I started making amplifiers officially only in 2007, the first amp I ever made, aged 13 years, was a guitar tube amp from parts I found in old radio sets'.

Serbia has a strong hi-fi scene, Čokić citing, 'successful brands like Karan Acoustics, Auris Audio, RAAL Requisite, NAT Audio, Acoustic Invader, Velikinac Audio Lab, Way Cables and probably more'. How much of the iconoclastic nature of Trafomatic and its homeland brands is due to Serbia's previous detachment from hi-fi's mainstream is hard to say, but Čokić says, 'I don't look for inspiration in other brands. Inspiration comes to me from within – I can't explain it'. What Trafomatic practices, though, is a dedication to music. Like I said, the brand/the man even looks like a rocker!



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ABOVE: Four line inputs (three on RCAs and one balanced pair on XLRs) are joined by pairs of 4mm speaker terminals connected to 8 and 4ohm output transformer taps

– easily worth the effort for added impact in the low registers and quieter background silences.

Loretta is joined by a chorus on 'How Great Thou Art' and a few other tracks. The multiple voices enjoyed some of the most convincing grouping one could hope to hear, such that I wished the tape came with a road map or floor plan. Whatever their actual location, they were arrayed across the soundstage without that Viewmaster 3D flatness which compromises stage depth.

MAGICAL AMP

Having sampled the sacred via Nashville, I craved more spiritual but orchestral music. With Christmas approaching, I turned to two open-reel tapes rife with choruses: the Columbia Musical Treasuries Orchestra's *The Magic Of Christmas* [Columbia D2T 5250] and Arthur Fiedler and the Boston Pops Orchestra's *Pops Christmas Party* [RCA Victor FTC-2022]. Even if you don't celebrate the pleasures of Noel, I gotta tell ya: these tapes are of hi-fi show demo quality.

Trafomatic's Rhapsody ensured that I wallowed in the room-filling, full-blown orchestral readings of 'White Christmas', 'Sleigh Ride' and 'Santa Claus Is Coming To Town', some wholly (or holy) instrumental, others with multiple voices to the fore. What was not compromised, despite the Rhapsody amplifier eschewing lushness for the sake of it, was that silky sheen which endears SET designs to the faithful. The best way to describe it is an inherent antidote to listener fatigue.

If there is any limit to this amplifier's sheer command, it might prove to be the wattage, but that only affects your choice of loudspeaker. When paired with high-sensitivity models, the Trafomatic Rhapsody earns the most glowing testimony I can bestow on a product by simply stating one fact: my first listening session ran for seven uninterrupted hours. Yes, *seven*. The only downside? Looking at the smart meter in my listening room.

LEFT: The red lacquer applied to Trafomatic's simple, alloy remote control matches the unit's chassis. Up/down volume buttons govern the motorised control on the amp

HI-FI NEWS VERDICT

At the risk of seeming a soft touch, I found my time with the Trafomatic Rhapsody almost too rewarding. While its performance belies its power rating, that might still preclude hungrier speakers. Its operation was faultless, the facilities and ergonomics textbook perfect. Thus I must acknowledge Saša Čokić's mission statement: this amplifier is all about – and only about – the music. It is truly a *tour de force*.

Sound Quality: 88%

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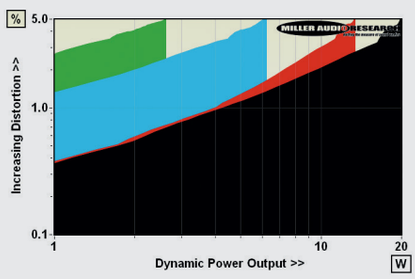
LAB REPORT

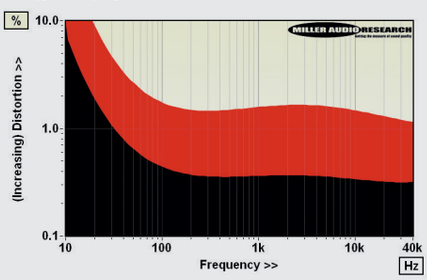
TRAFOMATIC RHAPSODY

With the 'Anode Dissipation' mode set to 'Solid' the Rhapsody succeeds in achieving its 2x20W rated output into 8ohm, albeit at 7% THD. The relationship of distortion versus power output is fairly linear in this instance, the amplifier offering 8.3W, 12.0W and 16.8W into 8ohm at 2%, 3% and 5% THD, respectively, and 7.5W, 11.0W and 16.0W into 4ohm (via the 4ohm tap) also at 2%, 3% and 5% THD, respectively. There's a little extra output available under dynamic conditions, to the tune of 20W/8ohm and 13.5W, 6.5W and 8.5W into 4, 2 and 1ohm, respectively, via the 4ohm tap [all up to 5% distortion, see Graph 1 below]. Sensitive loudspeakers, like the DeVore models from Absolute Sounds' Ten range, are ideal partners although the amplifier's modest 83.5dB A-wtd S/N (re. 0dBW) and –63dBV residual noise suggests some mild background hiss may still be audible.

The Rhapsody's 'colour' extends well beyond its gorgeous metallic red chassis, particularly at bass frequencies where THD is ~2% at 20Hz/1W before falling away to a steady ~0.35% through mid and high frequencies. At just 5W output into 8ohm, distortion hits ~9%/20Hz – presumably through transformer core saturation – and falls to a minimum of 1.3-1.5% through mid and treble [see Graph 2, below]. This is significantly higher than we typically measure from today's loudspeakers at 90dB SPL/1m, for example. Additional colour is introduced from the Rhapsody's interaction with the attached loudspeaker's impedance trend [see boxout, p57] but is already reflected in a response which shifts from a 'flat' +0.4dB to –0.6dB into 8ohm down to +1.0dB to –20.3dB into 1ohm (all 20Hz-20kHz). Reviews of the Rhapsody should be judged as very specific amplifier/speaker combos. **PM**



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 2.9A



ABOVE: Distortion versus frequency versus power output (1W/8ohm, black and 5W/8ohm, red)

HI-FI NEWS SPECIFICATIONS

Power output (<3% THD, 8/4ohm)	12W (8ohm tap) / 11W (4ohm)
Dynamic power (<5% THD, 8/4/2/1ohm)	20W / 13.5W / 6.5W / 8.5W
Output imp. (20Hz–20kHz/100kHz)	1.9-2.3ohm / 2.6ohm
Freq. resp. (20Hz–20kHz/100kHz)	+0.4dB to –0.6dB / –6.8dB
Input sensitivity (for 0dBW/20W)	125mV / 660mV
A-wtd S/N ratio (re. 0dBW/20W)	83.5dB / 96.5dB
Distortion (20Hz-20kHz, 1W/8ohm)	1.8-0.35%
Power consumption (Idle/Rated o/p)	240W / 243W
Dimensions (WHD) / **Weight**	470x260x370mm / 32kg

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