

REX 100 OTL MONO TUBE AMPLIFIER (translation from review published in audio magazine – *"Hi-Fi"/Spring 1999-issue*)

Let's Buy the Croatian !

Many years have passed since the OAKLEY tube preamplifier received the raves in foreign audio press; now is the time for a new Croatian product coming from the company called "VDN Elektronika".

Few months ago, when I heard the rumours about a new high end product being prepared in Croatia, I must admit I was a little skeptic.

Similar news were heard at least 10 times within the last few years, but except some drawings on a piece of paper, nothing really happened. For that reason I became curious when I also heard that VDN delivered the couple samples to the world famous electrostatic speakers manufacturer-SOUND LAB; SL's confirmed that these amplifiers matched their speakers excellently.

But "who" is VDN Elektronika ? The company was established in 1992 by two electric engineers, Mr.Zlatko Doresic and Mr.Ivo Vodanovic who had gained their valuable working experience doing R&D at KONCAR and RIZ. From its beginning VDN's primary activity was R&D of professional electronic assemblies, as it is today, too. The development of an OTL amplifier started in 1997 by pushing one of the engineers' friends and a true audiophile and the designers welcomed the idea only after they realized for the themselves the sound supremacy of tubes over solid state electronics. It took 2 years of countless lab measurings and auditioning before the amp was ready for the production. There is only the remote control missing, but we here that the design is already done.

Technical Description

REX 100 is a mono-block, meaning that inside there is a 1-channel power amplifier. But, this isn't an ordinary mono-block, since through its high sensitivity (0.5 V at full power) it is fully functional without the preamplifier. The designers went for a unique approach; each block

Has on its rear side the selector switch, three gold-plated line input jacks and the speaker terminals.

The front plate is made of natural black-gray-blue flaked granite and carries the volume control.

It is a little impractical situation where you must separately adjust the volume on each block/channel but the remote control should solve it. The rear side's assembly carries the high quality connectors, the switch knob-selector, mains switch and the mains euroconnector.

The choice of connectors couldn't have been better – the super quality WBT. The housing itself is made of punched steel sheets assuring good ventilation for the purpose of tubes' natural cooling. The shape is a little unusual, as well, because the height is much larger than the width so that in the first moment you get the impression that the amplifier is being stood sideways.

The electronics is placed on "2 floors"; where the upper one carries the output tubes – the PL519 pentodes by SIEMENS. On the "1st floor" there are the small tubes, type ECC83 and EC88C plus the massive power supply; there's also the infra-red receiver assembly and the volume control itself already has the Blue Valve motor by ALPS. The electronics assembly is symmetric and the pentodes are wired for triode operation. Up to 10 W the block operates in pure class A and because of that the heat dissipation is corresponding. The negative feedback is very little; according to the designers - the amp can safely operate with 0 n. feedback, but using it the output impedance is significantly reduced.

All el. Components are of first quality and are placed on a professionally made circuit boards.

The Sound

Though each auditioning test should be without any prejudices, expectations or similar subjective influences, in practice it is impossible to achieve by any reviewer no matter how hard he might be claiming to "be as objective as the State Statistical Institution". When you sit into a FIAT Cinquecento you don't expect it to run as Maranello, even though it even somehow might so.

What to expect from a Croatian high end audio product ? This is a very demanding design (OTL), it delivers relatively modest power (100 W), has a very good craft quality and for the price being asked it should play very, very well.

The output impedance is less than 0.5 ohms which also means that the choice of speakers shouldn't be hard; with the speakers having rather "soft" impedance curve this OTL should work fine.

For the beginning, I hooked it to a pair of RUARK Talisman Iis, more due to fact that they were already properly placed from before, rather than for other reason. Later on, I also used the ProAC Response One SC and the MANAPLANAR MG 12s. Since REX is pair of mono integrated amps, the sound source component was hooked directly to the blocks' line inputs. The source components were the CD players – HELIOS 2 and CYMBOL CDP12. For interconnection I used KIMBER Hero and TaraLabs RSC cables; the speaker cables were KIMBER's 4TC and XLO 0.4. The amp(s) were already burnt-in so the only thing left was a pure auditioning. My first impression was that the amplifier was extremely airy and musical and that the sound picture was rich and well focused. Regardless of the speakers working with, REX was doing the excellent job, even by the high standards set because of its price. In fact, I think that (comparing to the world's prices of similar equipment) this OTL represents a "Best Buy", in a way.

The variety of speakers showed no problems to amp whatsoever, because its 100 W proved to be way enough to overcome even the most complicated and loudest passages. Of course, don't plan to use this amplifier for your local rave party; but for home listening with majority of speakers this is absolutely enough. Even the bass reproduction, a major lack of all tube designs, did not show the loss of control regardless of the actual demand in music.

To me, the most impressive characteristic of these elegant "mono-integrateds" was their musicality. With all the speakers being used, the music sounded free of any strains and fluttery. There was an excellent focus in space, so that the individual instruments and the singers' voices kept the volume – either listening at low or high levels.

Besides, all interpreters were on stage with lots of air so in live recordings it was no problem to pinpoint each of them.

Whenever the recording allowed, the space recreation was excellent. Everything was "placed" widely and deeply, and I could easily "walk over" the imaginery stage and "listen" to the each interpreter, separately. I especially liked the amp's preciseness and cleanness but without a trace of being analytical or/and steryl. In my experience, I was already able to face such character by the components which designers used the "oldfashioned" approach to the solid state electronics; "highly over-dimensioned" power supplies + great amount of negative feedback. However, such units besides cleanness, tight bass reproduction and excellent measured figures simply "kill" the music and sound steryl, dry and boring. This definitely wasn't the case with VDN's amplifier. Perhaps, the simple concept and a very little neg.feedback made the sonic performance so good, but let's not be naïve: to design an amplifier (like REX 100) which can operate without neg. feedback and with only 3 stages of amplifying the signal, at the same time having the top-performance electrical measurings demands big brains, maybe a few tricks obtained from work experience and (maybe ?) a little luck. So, let me proceed with the discription of the Croatian OTL's sound. After listening of some 20 CDs, I can quite surely say – REX 100 shouldn't be afraid of its world's competition costing twice as much. I really am not sure if I ever heard such clean and beautiful mid and high sound spectrum. Being perfectly smooth, gentle and warm this sound spectrum was absolutely natural, thanks to top quality dynamics and speed – no even minimal damping of transients or the airness loss. If I had to explain to someone why so many audiophiles prefer the tube sound, I think for a good example I would mention REX 100. Bass was perfectly following the a.m. spetrum with its preciseness and definition, yet sometimes I got the impression that it missed a little volume. It was noticed while playing the R&B music; the bass which was supposed to sound "pumped-up", very deep and voluminous, showed to be thinner and unfortunately "less amusing" then with PASS' X-350. Nevertheless, I think that the buyers of amplifier like REX, rarely or never put Busta Rhymes' or Jay-z's CD into their players. It is more likely that such amplifier will be used for classical, jazz and other sorts of music where there's no syntetic bass and that is excatly where REX 100 will fit perfectly.

Conclusion

REX 100 for sure isn't the best amplifier in the world but in direct comparison with the best known, often would come out as a winner. Really, the man shouldn't be a great patriot to decide to buy this amplifier; before the decision it is enough just to listen to it for a few hours.

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