

## Ladyday 300B WE91 Review

Thanks to Ralph B for the following review <David>

### Why a LD91?

Several years ago I said goodbye to consumer hifi and turned to professional gear. It has no unnecessary gimmicks and is very reliable. You turn on the system and it works. A pro neither has the time for all the adjustments a hifi freak makes to get his personal kind of sound nor is he willing to invest big money in all the voodoo often found in consumer's high end. At the end my system consisted of an EMT 950 turntable, a Denon DN 951 broadcast CD-player, a studio standard preamp/routing system made by a small German company called Funk and a pair of all active Sendor broadcast monitors.

Then I listened to an old monitor as used by German radio and television in the 60's: An Altec 604 in a 620 cabinet equipped with a Telefunken V81 amp and was fascinated. There were dynamics and presence I never even dreamed of with my Sendors. I was infected with the bacillus of high efficiency speakers and started to search for alternatives. I ended up with a Triangle TQWT loudspeaker as presented in l'Audiophile no. 38 in the mid 80's powered by a 4 watt TAB/Telefunken V73. The speaker is a DIY concept and has got a sensitivity of about 96 db 1w/m. Therefore it's a good partner for a small tube amp. However, I was back in consumer's hifi again.

Last year a friend came along with a Sun Audio 300B amp. At first I didn't want to hook it up at all. Unbalanced inputs and much too sensitive for the output levels of my preamp – how shall it work in my system? He convinced me to try it anyway. So I made it work and was fascinated again. This amp has all the pros and cons commonly associated with a 300B tube amp: Sound is very present with a beautiful midrange, some weaknesses at the frequency ends and hum. And again I started to search for an alternative. The next step back into consumer's hifi.

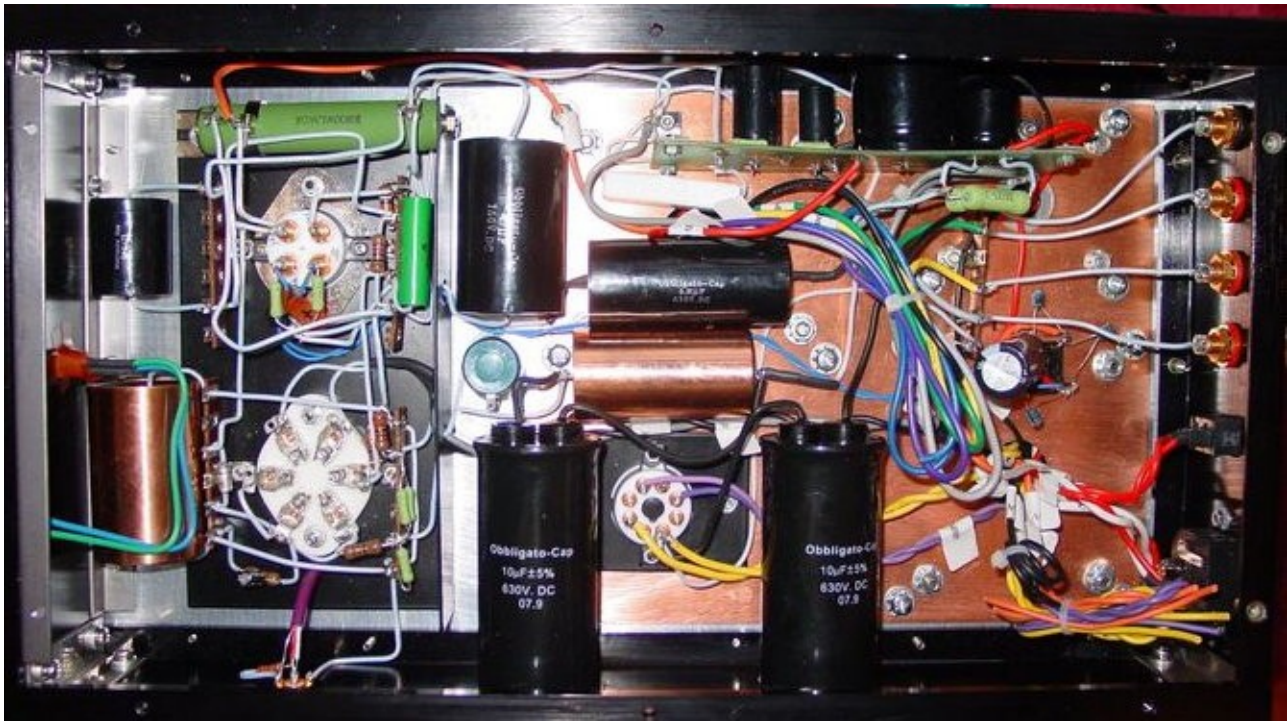
I decided for the LD91 due to three reasons. First I had no fun in making the tour through a number of hifi studios listening to various amps and investing a few grand in a chrome plated tank full of voodoo. Instead I searched the web and all comments about the Ladyday sounded promising. Second with the WE91 circuit I still use a pro's concept since it's an old cinema's amp design. I still do believe professional users know what they're doing – today and in the past. And third I hope the LD91 is good value for money. For some 230 US\$ extra you get an excellent driver stage with tubes included. Prices for Russian WE310A substitutes vary considerably. I found offers ranging from 50 to 180 US\$ per pair. If the truth lies somewhere in between the additional price asked for the LD91 doesn't seem to be too much to me. And to be honest there might have

been a fourth reason: If I hadn't liked the amp - I never had the chance for a listening and relied completely on my readings - it would have been easier to resell a LD91. 300B's are legion but WE91 circuits are few.

### **Assembling the kit**

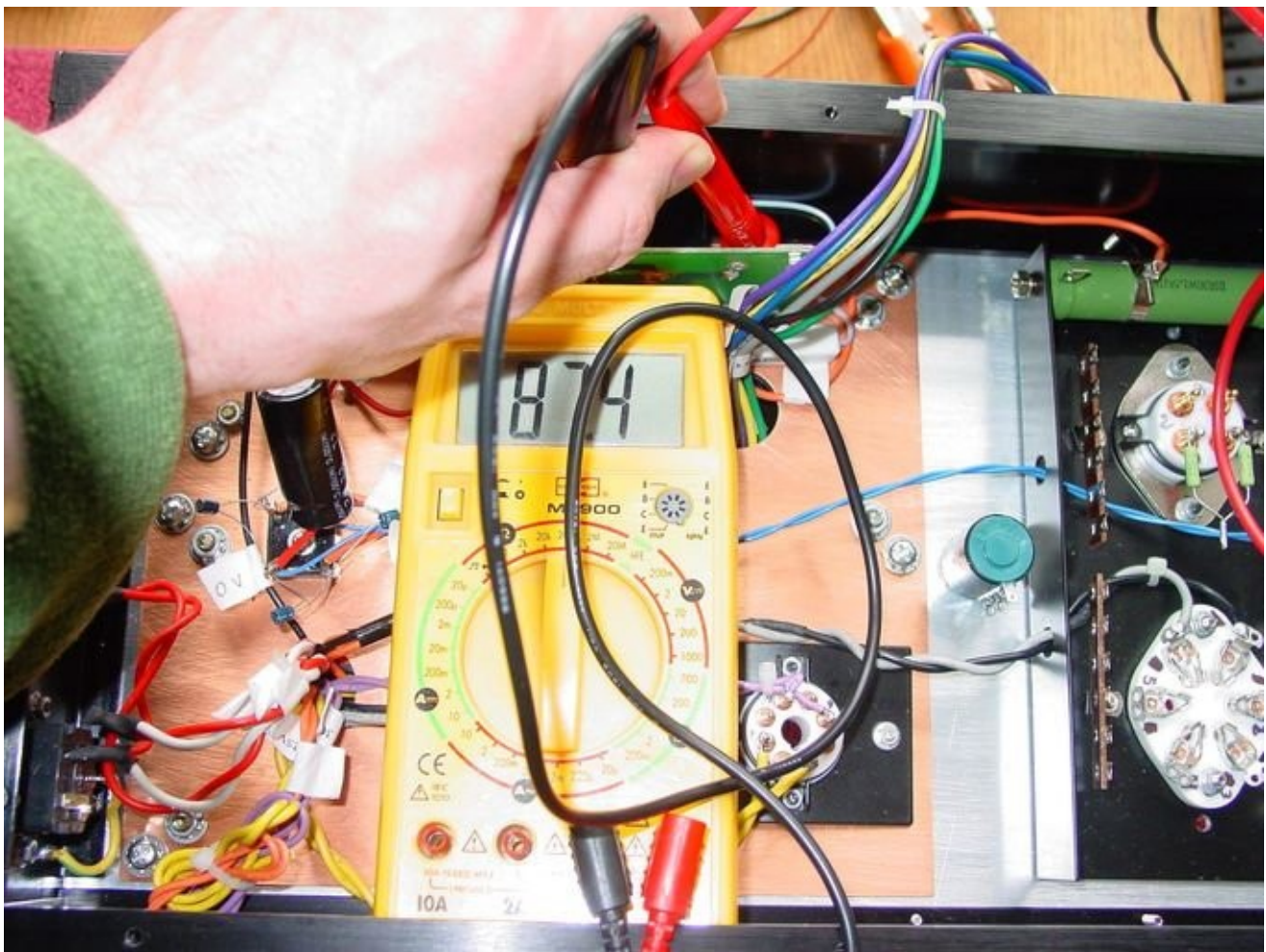
Ordering was easy but getting the amps out of the customs was a hard job. Each monoblock was shipped separately and one came to Germany via Hamburg and the other via Berlin. And both customs offices wanted the full amount of import duties. I had to talk a lot. At least I convinced the clerks that both parcels belong together. However, keep in mind you have to add a few hundred Euros or Dollars to get the kit in your very hands. Packing is solid so both amps arrived well. The finish could be improved but there is nothing serious to complain about. And after some mails I received the few parts which were missing or wrong values. I don't want to talk about the parts, the tubes or the circuit any further. It's all described well elsewhere. Now the adventure was ready to commence. That means: I was an absolute beginner. I'm not a technician and neither assembled a kit before nor did I do any repairs at my gear by myself. I fully relied on the promise of a good manual and maybe the help of a friend if I had gone lost.

Before I started I bought some additional solder. I'd never have made it with the amount supplied with the kit. Maybe someone with higher soldering skills could but I was sure I won't. And I was right. Wire and insulation there was plenty but solder was not. So every DIY'er should consider his skills and maybe go for some additional silver solder if interruptions are unwanted. And be sure to have a real powerful soldering iron at hand. Otherwise it's impossible to connect the speaker output terminals. They're massive! My normal iron I soldered the electric parts with (using silver solder) gave the binding posts a little warming but was much too weak to produce a proper soldering that doesn't come loose - even when unmounting the terminals as recommended in the manual. You better use some of the silver wire and an additional tagboard instead of connecting the binding posts directly to the output transformer. The transformer offers 5 different output impedances of which three can be connected. Changing the impedances maybe for a new speaker someday in the future becomes much easier if you've only got to make new connections at the tagboard. The space in the Ladyday chassis is a great advantage for this.



The rest is quite easy when working carefully. The manual provides a good description of what to do and when. Just the connection between pins 4 and 5 of the 310A socket is not mentioned in the text. But it can easily be recognized on the pic. Of course the second amp goes much better and you can change the sequence of the parts a bit according to your preferences.

But I don't want to conceal a big mistake I made due to my beginner's state. The Ladyday WE91 comes with a large 1.5 kohm adjustable cathode resistor. Adjustment is made by a metal ring that can be moved along the body of the resistor. It doesn't need to be moved since it should be fixed to give the correct value. But the ring has an extension with a hole inside on the top and in my naivety I first considered it as an additional soldering point – a kind of nice add on. In consequence I created a low ohm short to ground. David at Triode Systems was very helpful. He helped me trace the short in the power supply. When I assembled the second amp I measured for a short from B+ to ground after every step and as a result I found out what I did wrong with the first one.



When assembly is finished the amp should be switched on carefully according to the advice in the manual. And if everything is fine without tubes inserted – so it was when I had the short – it doesn't mean it's the same with tubes. Always watch what happens after switching on for the first time and switch off fast if something's wrong! Fortunately resistors can get very hot and even may emit a bit of smoke without dying a sudden death. So I got away with it and the Ladyday is playing music.

### **A first listening**

And how she does play! For output tubes I chose a pair of Sophia Electric mesh plate globe shaped 300B's I already had in stock. The rest of the system is the same as described above: The EMT, the Denon CD Player plus a DA converter, the Funk preamp and the Triangle TQWT. With the LD91 it's an amazing system. Obviously it has to be because I assembled the amp by myself. But even without this issue making my judgement very subjective I do believe I've got something outstanding. First there is no hum at all! The Ladyday is silent due to DC heating. But she can become very loud too. I don't know about the maximum volume; it's above what I and my neighbours could

stand. The sound is very dynamic and I like the tone.



I'd like to mention two specific issues: Compared to the Sun Audio bass is much more present. O.k. - double bass is still not a real double bass but that's due to limitations of the speaker. And heights are much more pleasant. In my speaker the tweeter needs to be dampened by 5 db. With the Sun Audio I added 0.5 db more. Ladyday doesn't need that and I returned to the initial concept of the speaker. I don't want to talk about any more details because that's not my way of listening. I don't listen to music to distinguish a tiny detail out of a big orchestra. If the music catches my attention gives me a live feeling and makes me foot stomping without being harsh or unbalanced all is fine. And so is my system now.



You're asking whether I keep the amp? Definitely! Whether I'd buy it again? Yes! Whether I'd buy the kit again? Not for sure. I passed the challenge of the assembly but it took me quite a lot of time. And now I know I prefer by far listening to music instead of constructing hifi gear. I don't have any intentions to modify the amp by trying various parts for their sonic impact. When comparing the time I spent with the 290 US\$ extra for a fully assembled and tested amp the plug & play offer becomes very attractive to me. But don't let me be misunderstood: There's nothing wrong with the kit. And a more experienced kit builder may decide differently.



So nothing to complain about? Oh yes! The input sensitivity of the LD91 circuit is much too high. While the standard Ladyday needs 1.5 V for full power the LD91 needs only 0.5. And my preamp is calibrated for an output level of 1.55V for full power. Therefore I can only use the first quarter of my volume control. Hence the standard version fits much better into a modern system. An exception might be the use of a passive pre. I don't do so and in consequence I'm searching for input transformers dampening Ladyday's sensitivity and enabling me to use my balanced connections again. The space in the chassis gives enough room for this. This will be the only modification. It's listening time. <Ralph>