WR Amplification – History

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The story behind the Goliath, Alioth and Gnome products

by Lars Lehmann

1991 - Inspiration:

My first experiences with EEC86-type vacuum tubes were in the 1990s. I found it fascinating that this type of tube ran on only 12 volts! Until then, I had believed that "real" tubes had to run on 100 volts or more - but the ECC86 showed me that this was not true.

2012 - Goliath is born:

One day, my good friend Jacques Ruppert (co-founder of Ruppert Musical Instruments) asked me if it was possible to construct a low-voltage tube amp for bass guitars, which would work both as a standalone unit and as part of a pedal board. He had hardly finished his question before the ECC86 tube came to mind. The very next day I had constructed a prototype model based on this tube.

I found out that tubes like the ECC86 or the 6GM8 (double triode), with their operating voltage range of 6 to 28 volts, were a perfect fit for this project: not only because the voltage range is much lower (and therefore safer) than the standard tubes but also for their great sound quality. These tubes were designed and produced mainly for car radios, during the period when transistors were still in their early stages. This type of tube is has not been produced for many years, but fortunately it is possible to buy them from remainders of stock (via Ebay for example), and I have been able to source enough tubes to keep my project alive.

Most of the tubes I use in the Goliath, Alioth and Gnome devices are from the well-known company Telefunken, with its respected and long history. Their type of tube ECC86 is similar in design to the probably better-known ECC83, but the ECC86 works with the lower voltage range I prefer, and is consequently perfect for my goals.

Other key aims in realising my "dream":

- a.) "point to point connections"
- b.) using only premium-quality parts
- c.) creating an attractive design

2013 - Test phase:

In mid-2013 I gave Jacques Ruppert of RMI a prototype of the Goliath for in-depth testing. He was very positive and urged me to develop the project further.

By the way, Jacques originally suggested integrating the Goliath into his range of RMI products. This was not possible for several reasons: firstly, the ECC86 type tubes are no longer in production (as mentioned above) so supply could not be guaranteed; secondly, each tube has to be customized individually before use; finally but perhaps most importantly, I wanted to assemble everything by hand in my own workshop to ensure my standards of quality, so only a comparatively small number of units could be produced. Consequently, Jacques developed his "Basswitch Sonic Spark" unit. However, he always acknowledges the Goliath as the forerunner "Sonic Spark" as far as sound is concerned, which I consider a great compliment!

Since Jacques now was busy developing his "Sonic Spark", Paul Lebrun (who unfortunately died much too early in 2014) took over the subsequent testing of the Goliath. He too was excited by the device and advised me to demonstrate it to a larger group of bass players. While I really believed in the product, I was very surpised by the overwhelmingly positive feedback from Jacques and Paul!

At the end of 2013 the name <u>WR Goliath Tube Bass Pre-Amp</u> was chosen, and the first review appeared in the professional journal "Bass Professor", presenting the pre-amp to the public. The test report (edition 3/2014, page 44) was extremely positive and therefore very encouraging for me.

2014 - Small modifications:

In mid-2014 some small alterations were made: toggle switches were replaced with rocker switches, also I used different light-emitting diodes (LEDs) from then on. The name <u>WR Goliath Tube Bass Emphasizer</u> was changed to "WR Goliath Tube Bass Emphasizer". As for the sound, the concept remained the same.

At the end of 2014, after being requested by many bass players, the <u>WR Goliath Tube Bass Emphasizer "DI"</u> featuring a high-quality **DI-out** was made available as a second model. The DI-out allows the Goliath to be used in both live and studio set-ups.

2014 - Alioth, the (unofficial) clean tube booster for guitar:

Although the concept of my <u>Alioth</u> tube booster was developed before the Gnome (see below) and had been tested successfully, the pedal has not been officially released yet. The simple reason: lack of time! A week has only seven days, and making good products requires care for each one, without being stressed. Since the Gnome DI had priority, I decided with a heavy heart to put the Alioth project on hold for the time being.

Still, I would like to say some things about the Alioth, because I might still introduce it to the market officially someday - you never know. The Alioth is a tube pedal for guitar, a so-called clean booster. The concept behind it is both simple and effective: emphasizing the sound of the original signal. The sound is broadened, spatially enhanced and gets more transparent both in highs and lows. The icing on the cake is a pleasant slight compression by the tube and a noticeable gain of output power. It comprises three controls for gain (boost), tone and volume. Of course, the tube used in the Alioth is again the ECC86. So far I have only built a few samples for friends, who are using the unit with great pleasure and enthusiasm.

2015 - Idea for and genesis of the Tube DI Box:

Meanwhile, I had the idea of a pure tube DI box, without equalizer and in the smallest casing possible, featuring only an input jack, XLR-out and volume control.

By mid-2015 the first prototype was completed. Again, extensive testing was done, with encouraging results. I chose the name **Gnome DI** for the device, due to its small size.

At the end of 2015, the first Gnome was completed, including the 3D-printed elements. I changed some of the components in the circuitry and the appliance was now equipped with input and direct output, which could be driven with or without the tube. Further, a high-quality XLR-out was added. Sensitivity and presence switches, and a volume control completed the concept.

2017 - Minor modifications:

In 2017, I replaced the sensitivity switch both on Goliath and Gnome; now the input level can be continuously varied to allow it to be adjusted to the different output power of diverse instruments. Internally, I set the voltage to 24 volts to gain more headroom. As a consequence, you have more increase in output volume of the devices, if it is required.

Worth knowing about my products:

- All products are made in small numbers only, and will never be mass produced. Each unit is painstakingly hand-assembled and extensively tested by me.
- The low price compared to other products on the market is due to the fact that monetary aspects are never a driving force in my projects. The assembly and testing process is very time-consuming, and as a matter of fact, half the final price of a Goliath consists of material costs!
- Professional sales and marketing are too costly for me; also this would increase the prices by at least 30%.
- All surfaces (faceplate, backplate, sideplate) of my devices are 3D-printed. I would like to mention my dear "Roger Pearce", who has designed all 3D models for my prints with great diligence.

- Wiper scratch: while turning the potentiometers you may occasionally notice some scratching noises. This is neither a fabrication defect nor evidence of parts of minor quality, but is instead due to the high sensitivity of the unit. Also, I have made a point of omitting all components which are not absolutely necessary, to leave the sound of the bass as authentic and pure as possible.
- My products can be ordered exclusively via my website https://www.wra.lu/, with pre-payment required before delivery.
- On my <u>homepage</u>, you can listen to different sound examples of my pedals. Follow the "**feedback**" link to find testimonials from existing owners of my products.

Reviews:

Goliath:

- Video test done by "BassTheWorld.com" Goliath Tube Bass Emphasizer & Goliath Tube Bass Emphasizer DI 2021
- Video test done by "BassTheWorld.com" Goliath Tube Bass Emphasizer & Goliath Tube Bass Emphasizer DI 2015
- Test von "BASSQUARTERLY" WR Goliath Tube Emphasizer DI" and "WR Goliath Tube Emphasizer Standard"
- Test von "GITARRE & BASS" WR Goliath Tube Emphasizer DI" and "WR Goliath Tube Emphasizer Standard"
- Test von "BASSPROFESSOR" "WR Goliath Tube Bass Pre-Amplifier"

Gnome:

- Test by "bonedo" Gnome Tube DI (german)

Retail prices as of Avril 2023: see how to order"

Yours sincerely,
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