

Review of Angström ZPR22
by Christian Bayer, 11/2023 on :

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Angstrom ZPR22 tube preamplifier

In the eye of the tube



In September 2022 I took a trip to northern Italy with Audio Offensive sales manager Uwe Heile, which primarily introduced us to the products and the people behind Angstrom Audiolab. A year after the exciting meeting, an Angstrom amplifier now stands in front of me and makes great music.

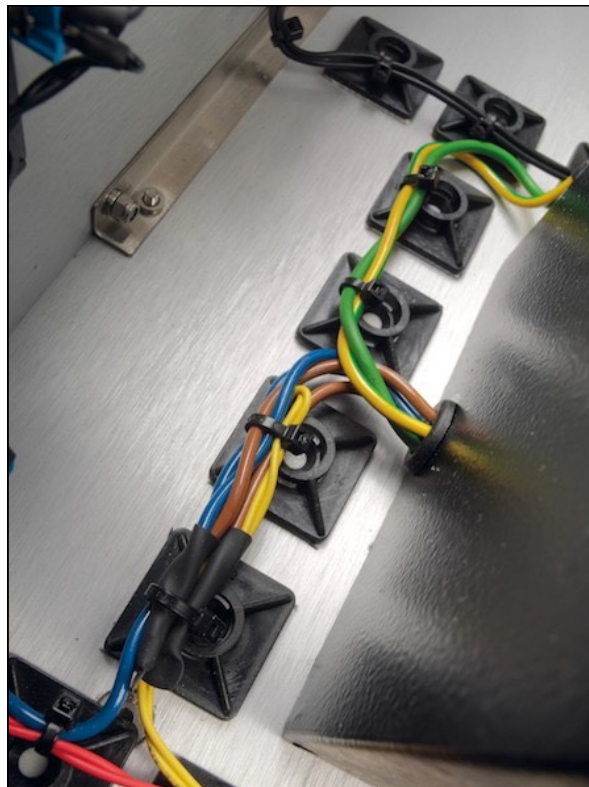
A doer.

Angstrom Audiolab was founded by Roberto Garlaschi a good 20 years ago. Garlaschi is a positively crazy person whose creations have repeatedly caught the eye of my colleagues Holger Barske and Thomas Schmidt at trade fairs.

This was mainly due to the fact that Garlaschi seems to know little or no compromises, as he builds visually unusual and technically sophisticated devices. Roberto Garlaschi is, so to speak, world-famous in Italy; practically no one who is interested in historical tube or transistor amplifiers can ignore his expertise.



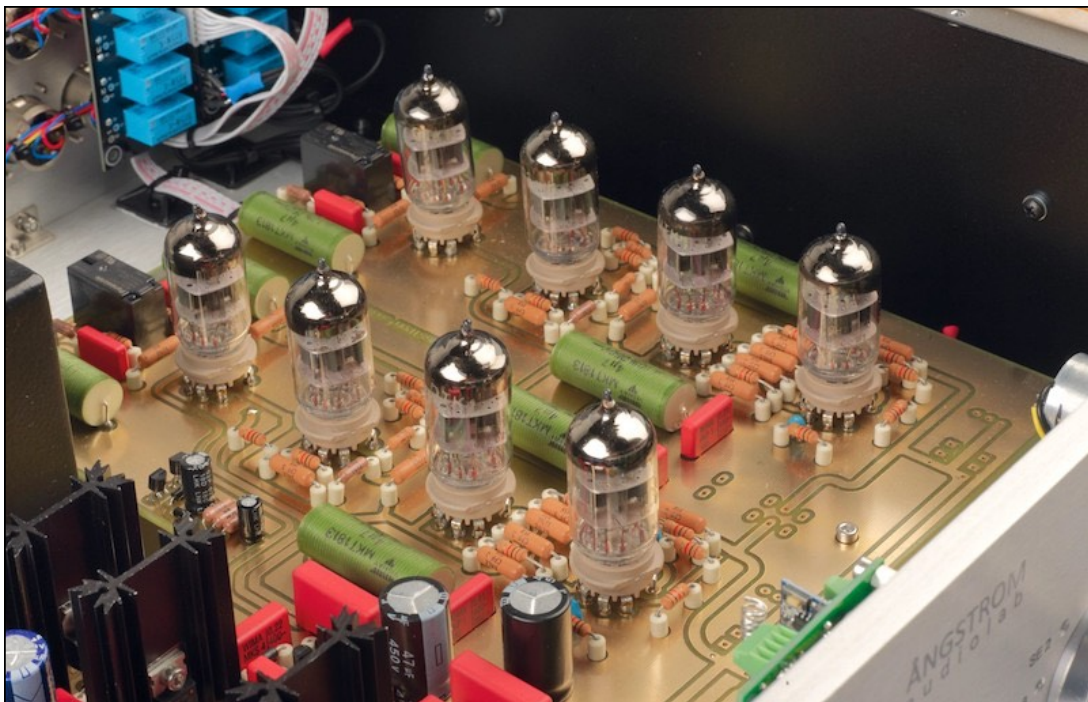
The ZPR22 looks as if it is on the move and cuts a very good figure with its real wood side panels



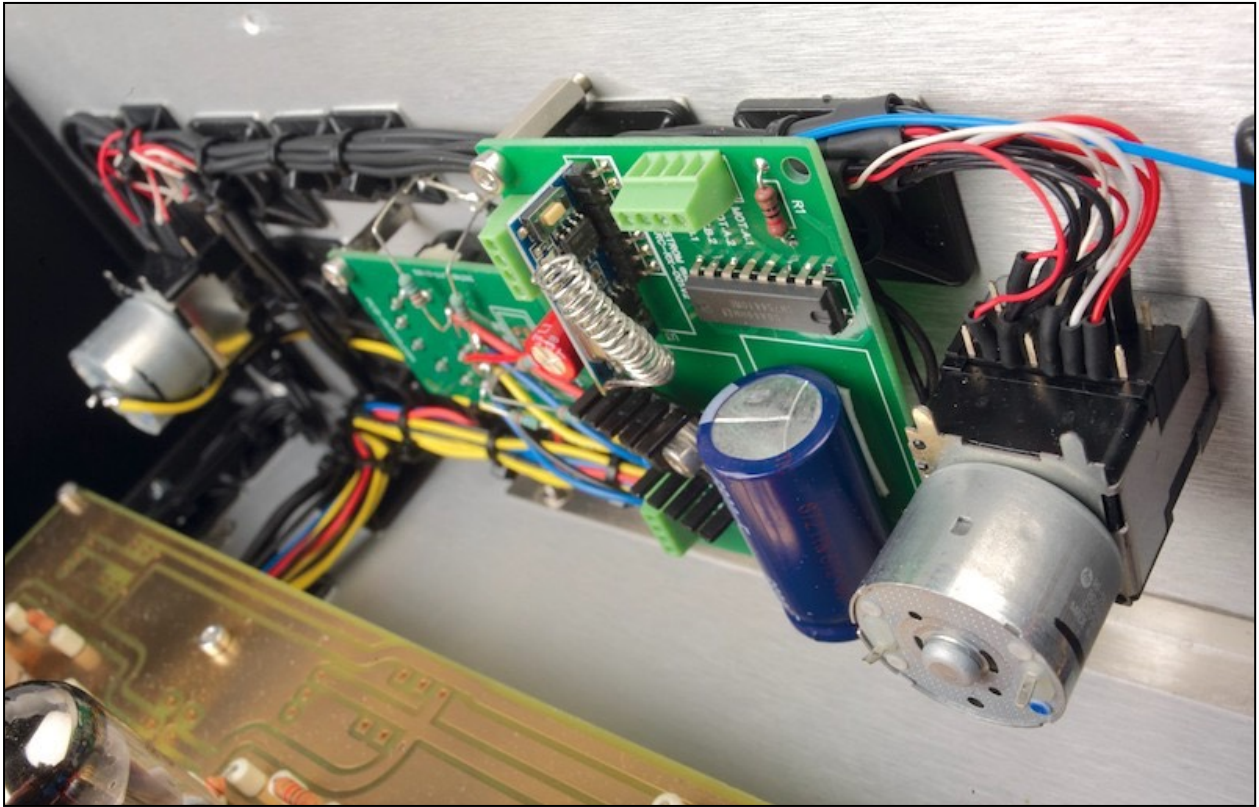
You rarely see this, but it makes sense: tidy cable routing à la Angstrom



With the best will in the world, nothing more would have been possible in the not exactly small housing. But real symmetry needs its place



This is what the fully symmetrical circuit looks like with its 8 double triodes. Take a look at the pretty conductor tracks.



This is classic modernism. The Angstrom not only relies on tubes, it can also be very conveniently controlled remotely

The man not only knows all the circuits, he is also able to make practically all of these devices operational again. Before he was 20, he had turned his childhood enthusiasm for electronics into a career as a repairman for various hi-fi shops in the greater Milan area. That and his further training in electrical engineering at the University of Milan ultimately led to this special concentrate called Angstrom Audiolab, named after the Swedish physicist Anders Jonas Angstrom. At the beginning of his career, Garlaschi conducted endless experiments to ultimately verify tubes as ideal amplification elements on the way to credibly reproduced music. However, he has no reservations about transistor circuits; on the contrary, he uses them where they make sense or where the expense of tubes is too great for the desired sales price.

New ways

In 2016 there was a far-reaching encounter. Manuel Finotto, a marketing manager with degrees in computer science and electrical engineering - there couldn't be a better mix for a future salesman - got to know Roberto and his Stella series. At this point, Finotto was privately running a facility peppered with big brand names. But when he heard the Stella amplifiers, the luxury brands were over, which was ultimately the starting signal for a career change. Finotto worked as a sales and marketing manager for a major American corporation and was completely fed up with it. He longed for a job that he truly cared about. And his technical understanding told him that Roberto Garlaschi built extraordinary devices, his economic understanding that Angstrom Audiolab could, indeed should, be set up differently and that this was not possible for Roberto alone. So he agreed with him, left his highly paid job in 2017 and opened his showroom in Brescia in 2018. This resulted in a fine sales company called Distretto Audio, including a structure for the manufacturing work of Angstrom and five other noble Italian small manufacturers. Since then, Angstrom has been growing organically, because manufacturing remains manufacturing, the man can never produce a hundred devices a month and that's a good thing. Anything that works.

Incidentally, it is important for Roberto Garlaschi to emphasize that although he has a clear inclination for tubes, he also uses transistor and hybrid circuits. And that makes sense, because any technology, if used well, can produce excellent results. Despite my preference for tubes, I ultimately don't care what's in the devices; what matters is how they can reproduce music. Angstrom also wants to stay out of all better-worse and higher-further discussions and let its devices speak for themselves. That's what they do. Their workmanship quality is excellent, aluminum, steel, real wood side panels as well as the best paint and paint quality speak for it. Nevertheless, when you look at the various Angstrom devices, it becomes clear that the man has looked very deeply into the world of tubes and lives in the eye of the tube. For example, there is a phono with an exorbitant 23 tubes...

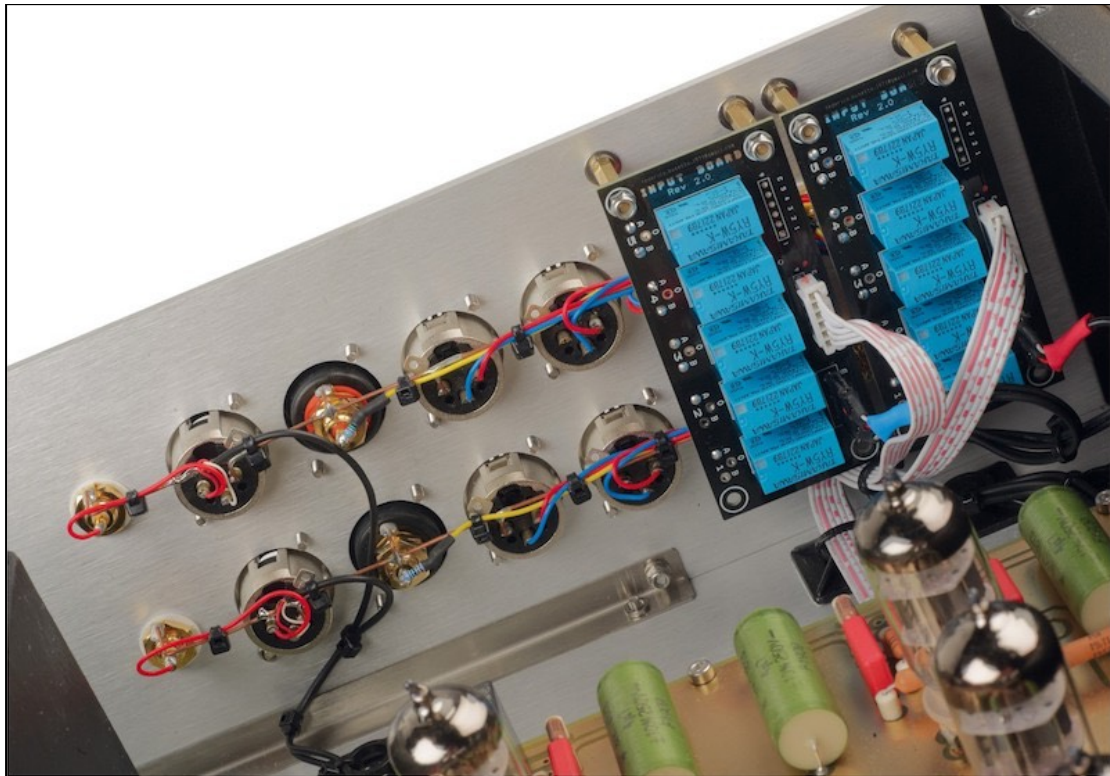
Getting started, really now?

The Zenith is the entry into the Angstrom world, but could also be the exit from the search for an all-round competent tube preamplifier. While the Stella and Masterpiece devices are freely wired, Angstrom uses circuit boards in the Zenith series. But not just any. They are designed in Italy and produced in China by a genuine specialist company. And without the solder mask that is frowned upon by serious sound-oriented manufacturers. They do it themselves in Italy, by hand and in their own way. The rounded corners of the thick conductor tracks are striking. You may have encountered this before, but certainly only where mass production is very far away. The reason for this is physical: at the usual right-angled branches of the conductor tracks there can be a kind of electron jam that you want to counteract. The aim is to counteract discharges of higher voltages between the solder tracks. They may be the exception, but the Italians have verified the whole thing using audio technology. In addition, to my eyes, these solder tracks look “more beautiful”, more organic, more correct. In addition, the boards are ENIG certified and therefore have a massive surface finish. To do this, they are first electrolessly nickel-plated and then coated with a thin layer of immersion gold. This gives them a much longer lifespan, better conductivity and significantly greater resistance to oxidation. The selection of components is really tasty, especially where they have an influence on the sound. Even if individual components come from the Far East, the term “Made in Italy”, or better “Handmade in Italy”, really applies here.

Manual transmission

The circuit is in two stages: in the first the signal is increased by 6 dB, after the second we end up at 22 dB (symmetrical) or 15db (unbalanced).

The fully symmetrical, double cascade circuit with a total of eight ECC 88 double triodes is no longer seen as often as in the 80s and 90s. The output circuit is equipped with a double buffer stage for low distortion and maximum driving force and is also current rather than voltage amplified. The negative feedback is minimal and is only used locally. Finotto said it was basically an “open loop circuit” through which the main aim was to maintain the harmonic connections in the music.



Finest construction with meticulously kept cabling. The inputs are switched cleanly via relays.

Transformers or, as in the case of the ZPR22 preliminary stage, the mains transformer are manufactured for angstrom and cast in sand and eco-resin - goodbye to vibrations. Their size and electrical overdrive values are more than ample. Not only the circuit, but also the power supply is designed symmetrically, which is complex and expensive, but ensures an excellent noise-to-noise ratio. Only the tubes are the limiting factor, because their quality must be appropriate to these requirements. I don't want to say that you have to use old goods, but simple Russian or Chinese material is not enough here, because they increase the noise unnecessarily.

Setting matter

Well then let's hear what the ZPR22 sounds like. But first, there is one special feature that needs to be mentioned: its separate gain and volume controls, which can be used to set the sweet spot for the entire system and adapt it to the different volume levels of the connected sources.



Everything you need: enough connections for balanced and unbalanced players and power amplifiers plus ground lift.

Gain determines the overall amplification, even in relation to sources of different volumes, while Volume ultimately changes the overall volume. The way the circuit is designed, the volume control also changes the output impedance. You can want that, but you have to know it. So be careful with the settings and please do not run long cables to the power amplifier, otherwise you will lose the high-frequency reproduction. You can also fine-tune the tube noise with the two controls - until you have better tubes at the start. Once optimally set, you can work with volume potentiometers in a range from around 10 o'clock, where optimal synchronization can be expected. This may be annoying or unusual at first, but you learn to appreciate the system and you don't have to constantly turn the gain control - if you're not a hi-fi journalist. The adjustable feet are from an exciting company called Ariamateria, which, not coincidentally, is also sold by Distretto Audio. The items are made with a lot of love and expertise from a mix of natural stone particles (brown porphyry or black basalt from the Alto Adige area in Trentino) with a proportion of two-component natural resin.

Can you hear it?

Why, surely. In terms of sound, the preamplifier is a powerhouse: it plays with authority and finesse, depending on the power amplifier connected and the music being played.

And this is where the big advantage of gain control comes into play: firstly, as discussed, you can use it to adjust sources to a sensible volume level and secondly, you can also pair downstream power amplifiers perfectly with it. Once this is done, in my case with my Air Tight ATM-4, you can listen to music at an excellent level. A level that can only be surpassed if you compare carefully and spend significantly more money. I love Bill Evans and I almost have the impression Roberto Garlaschi does too. The way ZPR puts itself at the service of Evans' melodic song, presenting him with the entire magical sound stage, draws me right into the heart of this genius's ever-fresh inventions. And just like that, another pianist of the century appears: Glenn Gould with his late recording of the Goldberg Variations. A rogue who thinks of "The Silence of the Lambs". This music always brings me to other people, to special thoughts, but only if the system allows it. With the Angstrom preamplifier at the center of a music playback chain, this works extremely well, as I can follow all the details that are deeply embedded in the overall event. So fine is possible, but is also rough? Oh yes, with the records that finally introduced me to Black Sabbath after decades: The End. This dark board, these gloomy chords break over me like there is no tomorrow. I enjoy it and get goosebumps and that is clearly motivated by the Angstrom ZPR22.

Conclusion

Even though we love a certain amount of crazy about this device, don't be fooled: the Angstrom ZPR22 tube preamplifier is a highly serious device with a lot of fine technology and even more good sound.

