

Enjoying the Tube-journey

Searching for the purest sound

During my Tube journey I have learned to listen to music. I have changed my setup six years ago for Full range speakers and a Tube amplifier. When I heard this MiniWatt Tube amplifier, with 2x2W I was blown away. I had never heard a soundstage like this and it got me at that point. Low power Single Ended Tube amplifiers just surprise you.

After sometime the longing began, I wanted to build my own Tube Amplifier. Building and learning. Combining other schematics and recreating my own. During listening sessions I realized, when I used one more tube in the pre-stage, the sound image started to grow and my impression is that it's more musical. Also without the extra Tube I had the impression that I didn't have access to all of the power.

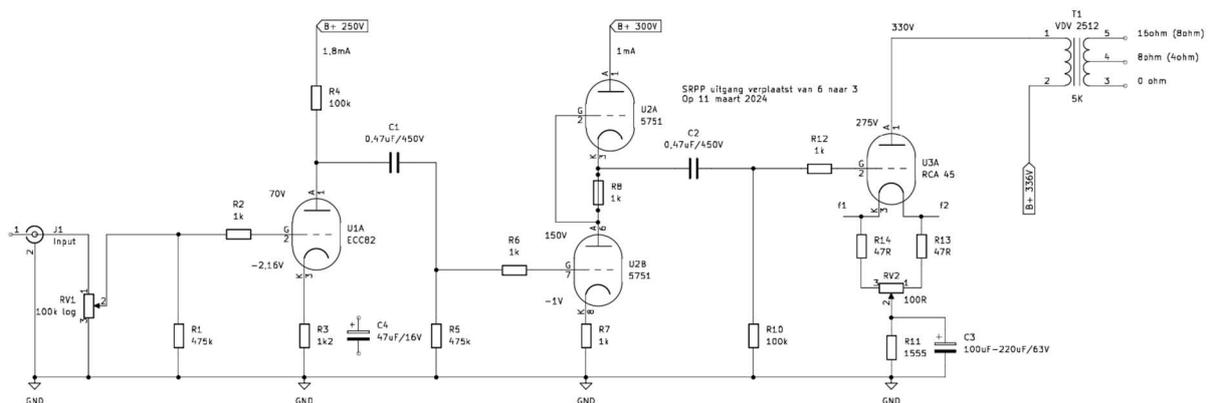
Triode power stages just makes me buzz, the sound is so pure. After building a 2A3 SET the urge began to create a Tube Amplifier with the mother of Triode



RCA 45 Tube

HIFI tube the RCA 45.

So in this design I have used a quiet simple schematic for the pre-stage which is designed and calculated by Matt (Cascade Tubes). On his website you will find "The Universal" pre-amp. As second stage I have used the SRPP to drive the 45 end stage tube. There is no feed-back in this schematic.



Schematic

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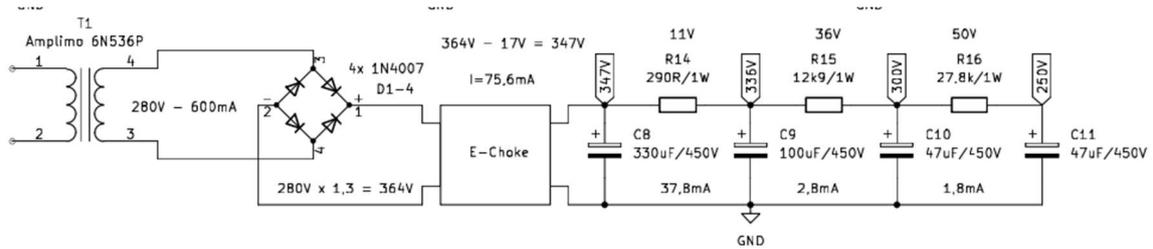
The chassis I have designed to have enough space to work and mount the components. A top plate will cover all. This amplifier has three inputs and an



Closed chassis with ECC82 in the middle as a pre-stage, left and right second stage 5751 tubes and end stage RCA 45. And for this occasion Jantzen superior Z-cap coupling caps.

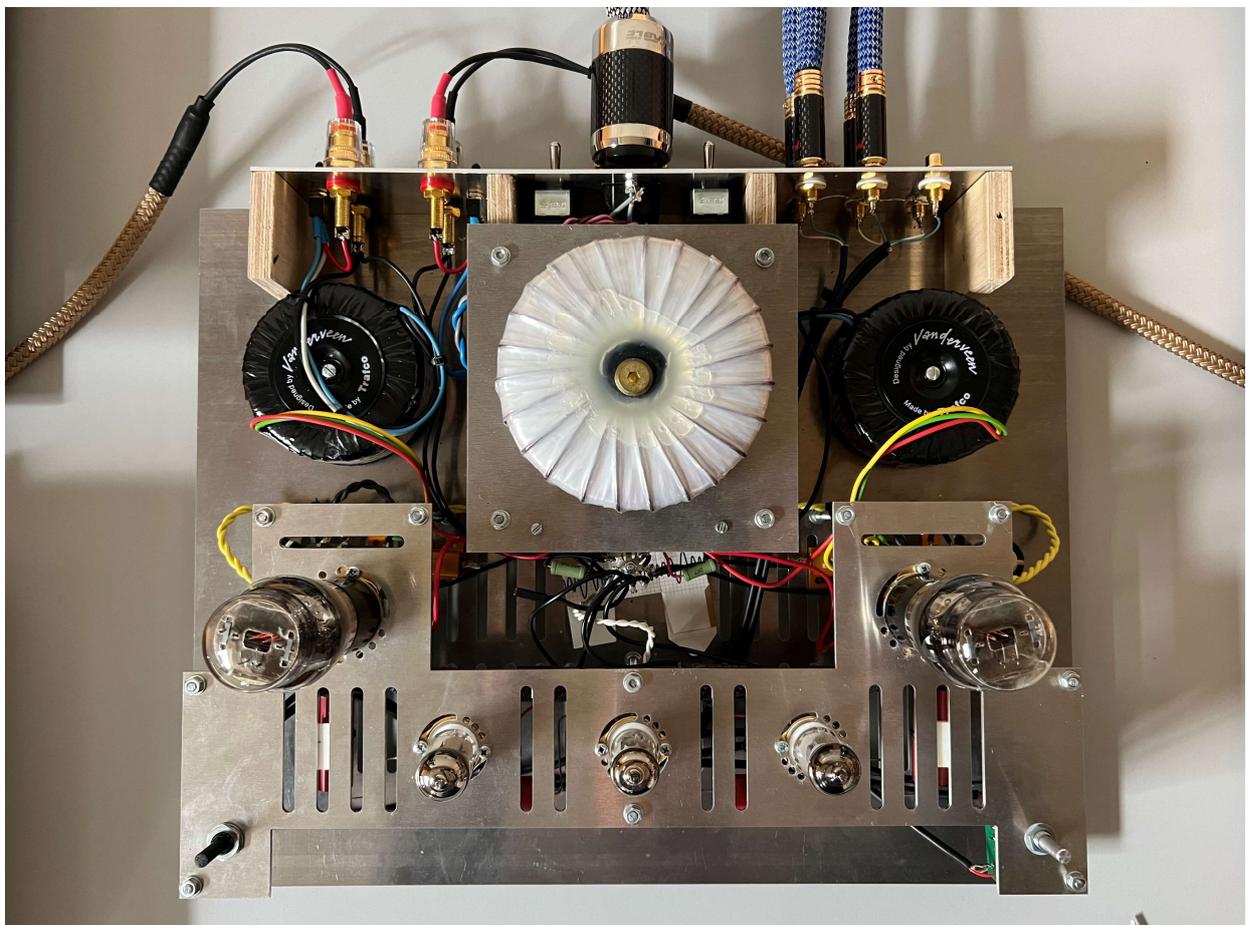
Alps 100K log potentiometer for volume adjustments.

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Simple rectifier setup and an E-choke

Powersupply build up with an Amplimo 6N536P transformer, a simple 1N4007



Open chassis without top-plate. Tubesocket adjustment and airsloths.

rectifier setup and E-choke.

This time I have used Jantzen Superior Z-caps as coupling caps. Output transformers are from Menno van der Veen type VDV2512.

End of the journey?

The combination of this tubes, the pré-stages and 45 tube provides an open, pure, warm and musical sound. With 2 x 1,77W per channel this Single Ended Triode blows me away. How is it possible that this sounds so impressive in all its simplicity.

Bare in mind that this is not the end of the journey. No way it always triggers me to think of something new 2A3 in parallel but with the possibility to play with half the power. Just take two tube out and change the loudspeaker connection from 8 to 4 ohm the have the right impedance.

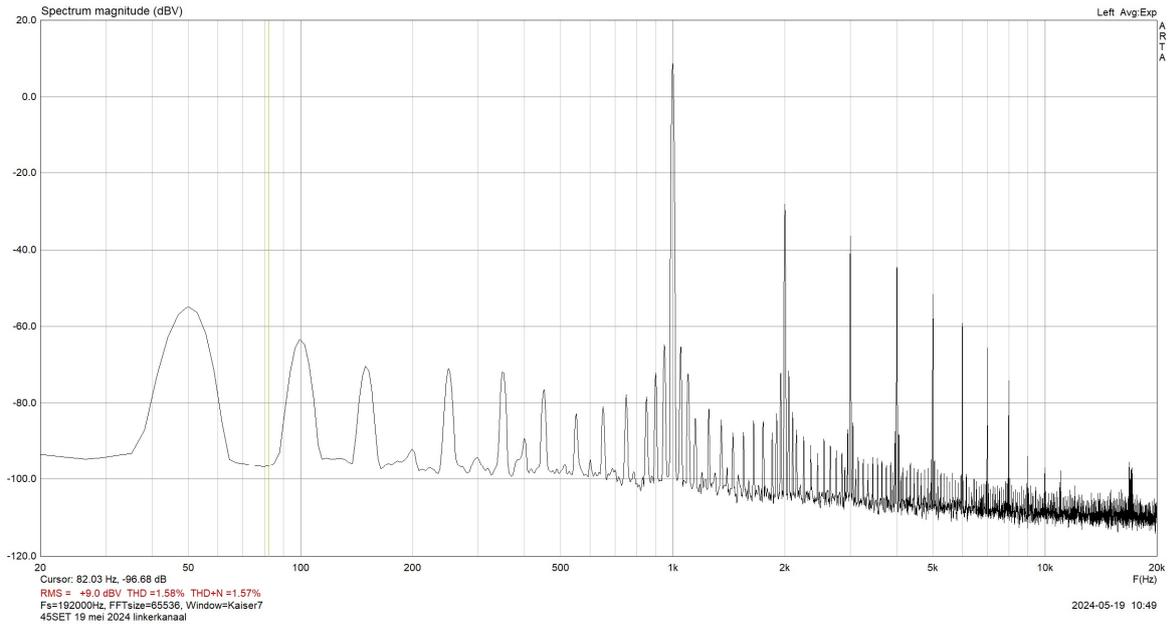
Maybe you just can have enough Tube Amplifiers.

Measurements

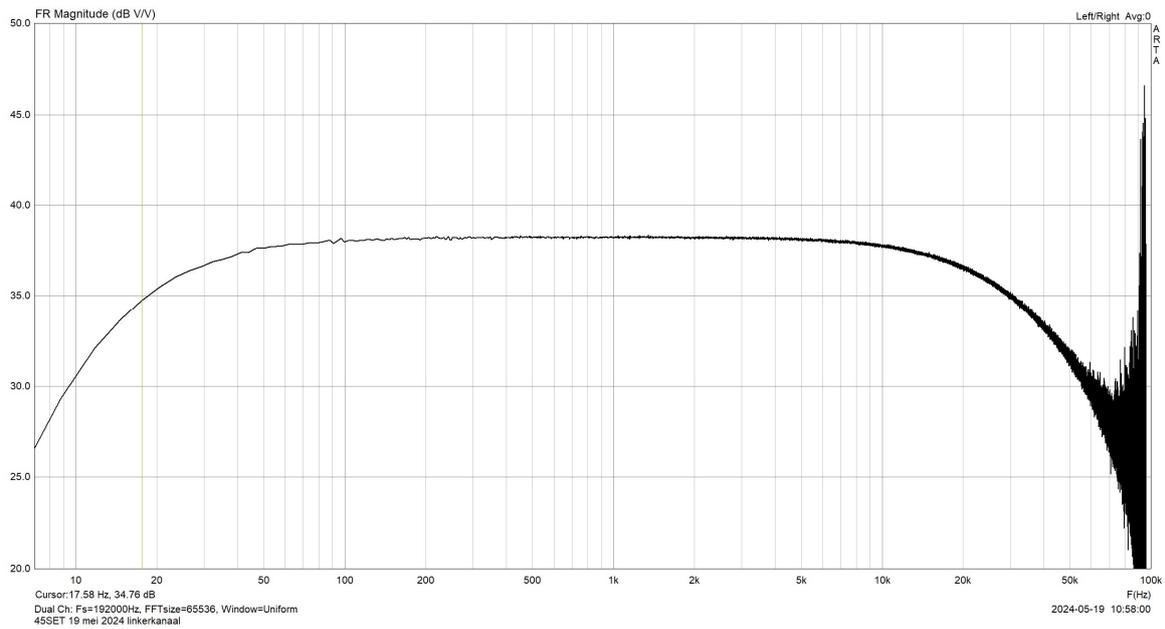
All measurements made in Arta

1. THD-N
2. Frequency Response
3. Burst decay
4. FR Phase
5. Distortion

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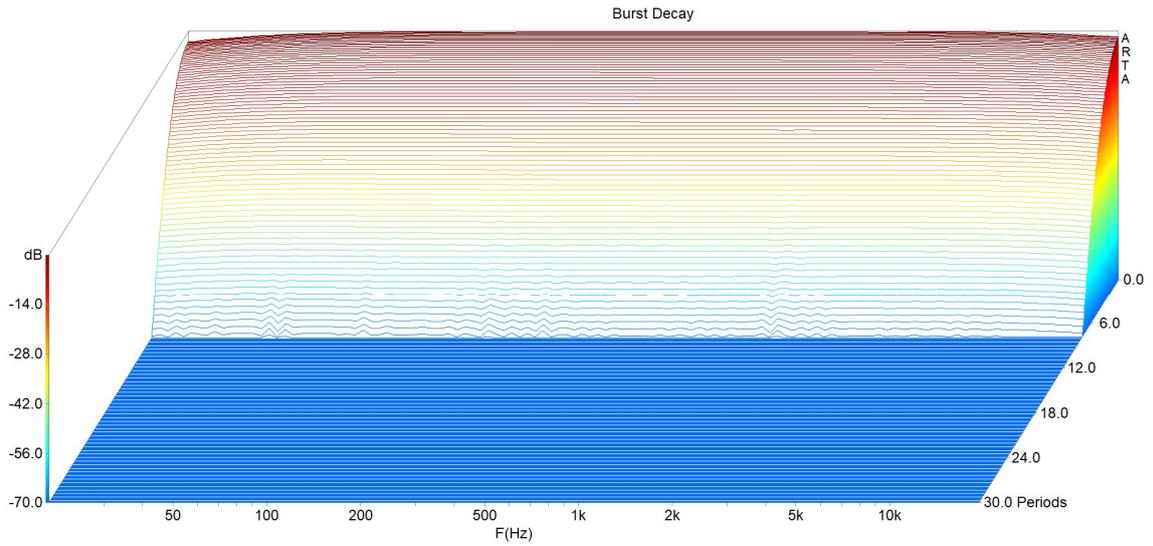


THD

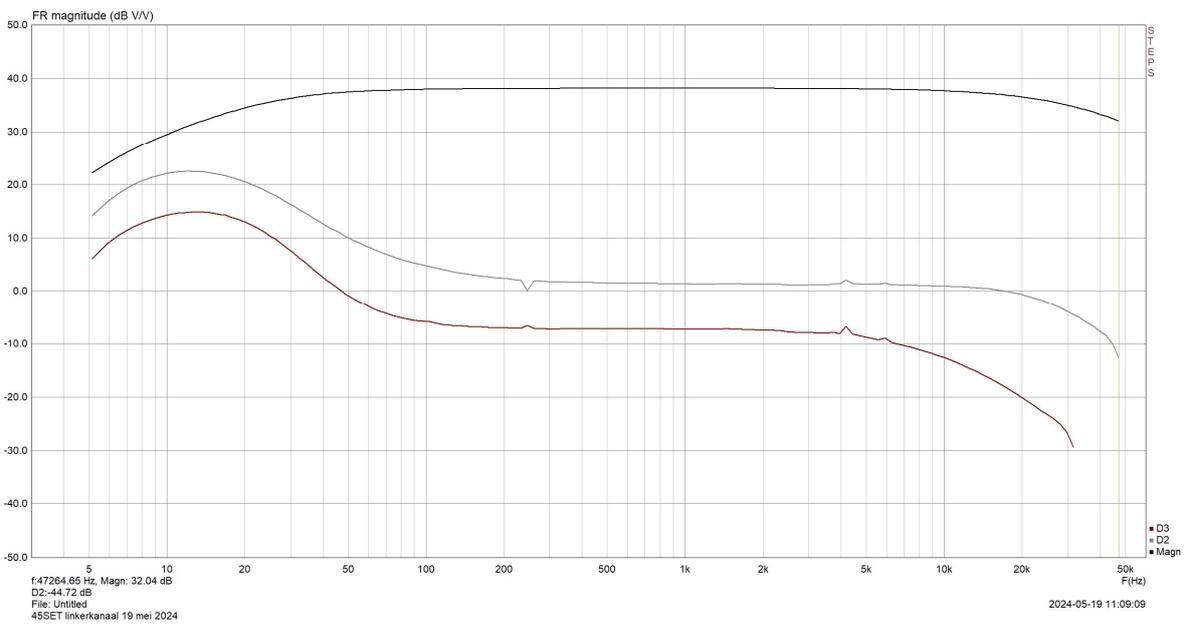


Frequency Response

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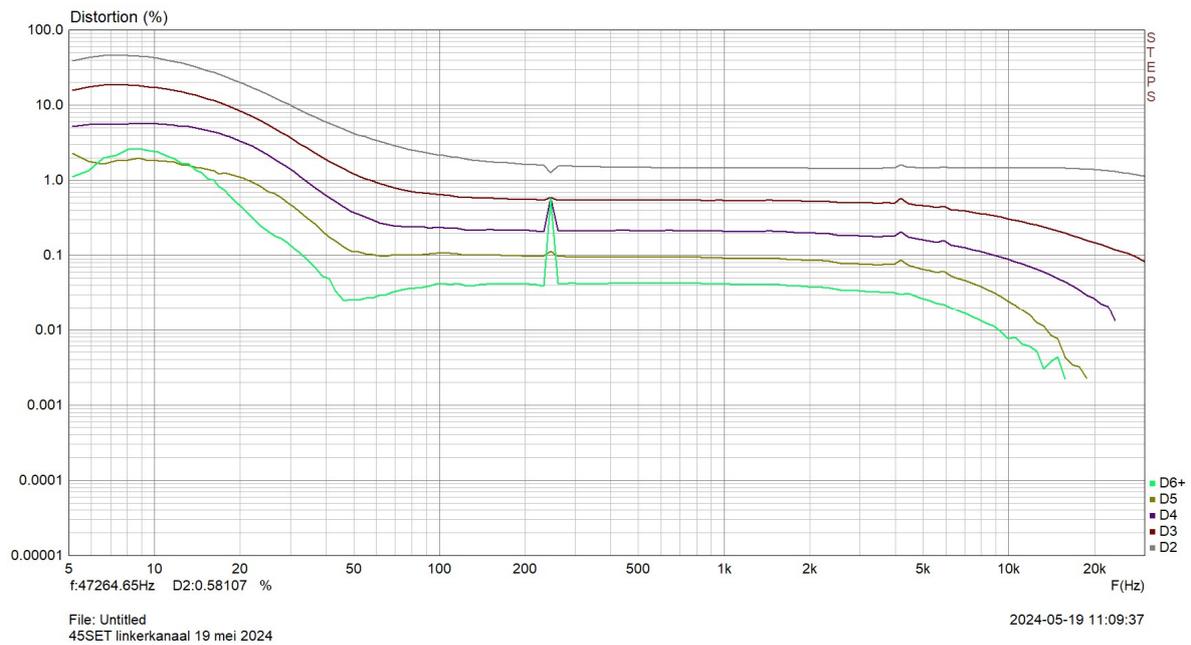


Burst Decay



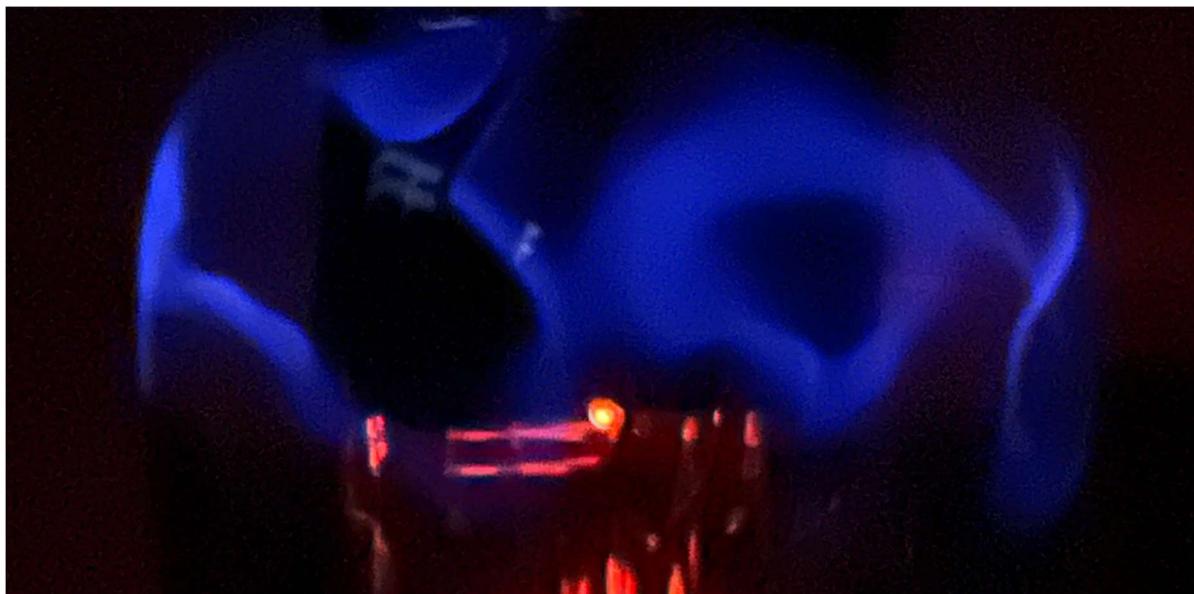
FR phase

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Distortion

Conclusion?



Searching for the ultimate sound and building it yourself. That's amazing.

Thank you so much, Menno Van der Veen to inspire and teach. I have really learned a lot and I will walk further on this musical journey.