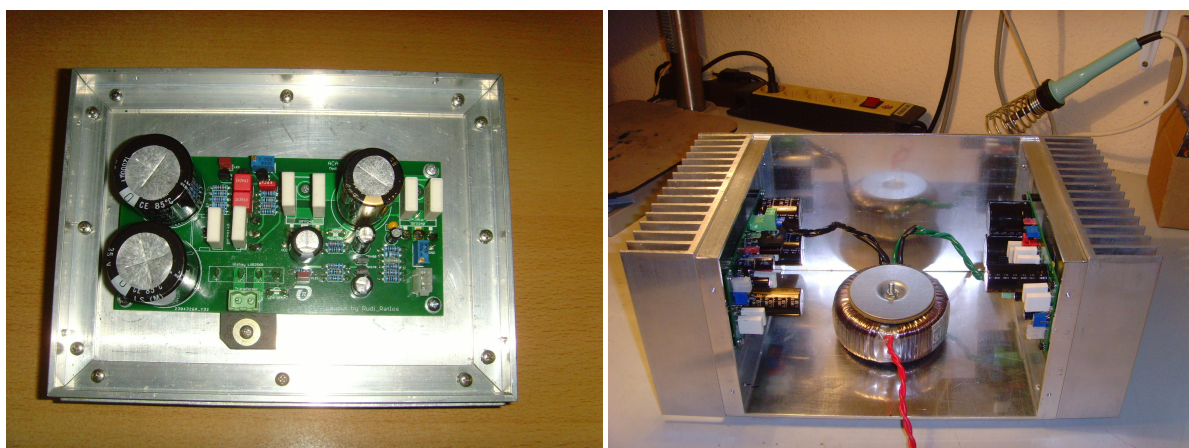


This documentation tells you, how to build the „PremiumParts ACA“.



The pictures above are showing „My PremiumACA“.

The Premium ACA is working absolutely flawlessly and its sound is: „amazingly beautiful“.
As speakers I use a pair of 8 Ohm KEF Q1.

My case for the ACA: is „ugly“ – I know – and I will definitely build a nicer one!

The first ACA that I have built, was the original „AMP CAMP Amplifier“, presented by Nelson Pass in June 2012, being powered by a Samsung 19VDC Laptop PSU.

This ACA is still active on my desktop and is connected to my PCs Soundblaster-soundcard.
In the meanwhile I own another PC and am looking desperately for a good-sounding soundcard.



I then tried to improve the ACAs PSU by upgrading it to a 24VDC regulated PSU (driven by a LM1084 in a TO220 – case), but the LM1084 became too hot after a while. I then read what Rod Elliott wrote about how to power a ClassA amplifier (<https://sound-au.com/project15.htm>), met Jason Kuetemann and Tungsten Audio in the forum and ended up in the current ACA - offer for you.

My offer includes:

- 1) The „PremiumParts – ACA“ with modifications proposed by TungstenAUDIO
- 2) The ACA is driven by a „CAPMx“ – PSU, designed by Jkuetemann
- 3) A LT4320 based rectifier (on a separate PCB) that can be used instead of the onboard
- 4) VISHAY full-bridge rectifier (although this is overkill in my eyes – but who knows?)

I myself am using a 2x19VAC / 160VA INDEL toroid transformer to power the ACA; each secondary is providing 4.21A of current.

I have included the BoM for a single PCB, the schematic of Jasons CapMx and TungstenAudios ACA, ...

If there is anything missing to document so that your build will be a success: please tell me.

Best regards – Rudi

P.S.: TungstenAudio recommends to use 0.68 Ohm (as R3 and R4) and add another 2 Ohm in parallel. I recommend to use 2 x 0.56 Ohm. Please take 10% inaccuracy in account!