2A3 SE amplifier

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The circuit:

For the preamp I've chosen the cascode. For the cascode I used a E88CC tube from Tesla. A cascode is good, but I have changed two things to make it better. First I use R14 to decrease the second harmonic and second I do not add a capacitor over resistor R5. This gives a little less hum on the output of the preamp.

The 2A3 is configured with a fixed bias with a current of 60mA. This should give a 0,6 V over resistor R2. The current is set by R12 and R16 prevents that the grid of the 2A3 will not be positive when R12 is defective.

For the power supply I use 2 Maida regulators with the LT3080 for B+. One for the 2A3 and the second for the cascode. The filament is created with a LT3080 with two 10.000uf capacitors. For the heater I use two separated 6.3 V ac windings on the power transformer, to prevent distortions between the two channels.

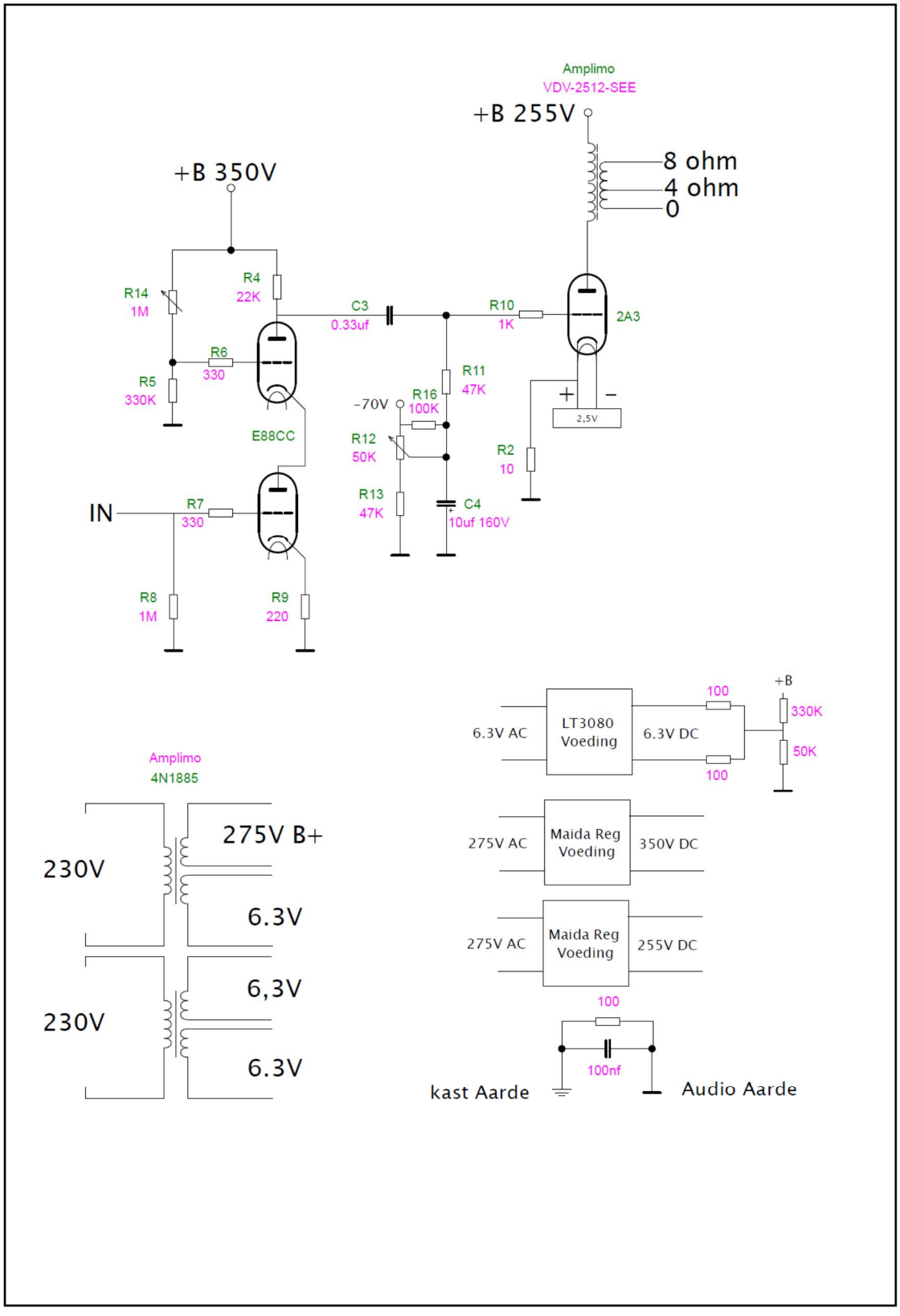
Components:

E88CC from Tesla
2A3 from Shuguang
2,5V Tentlab powersupply for the 2A3
LT3080 6,3 V filament supply
2x Maida B+ regulators

Specifications:

Frequency response	12 – 45 Khz
Amplification	6x
Distortion @ 1 kHz	0,049% THD @ 1 Watt in 8 Ohm load

The schematic:



Measurements: