



Parallel Single Ended 211 Amplifier  
 My first design  
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**Power Supplies details:**

The 308 VDC and 1006 VDC supplies were designed to have hum reduced by around 116 dB (58 dB per LC filter). The last capacitor taus are 108 and 12 ms respectively.

**Input stage details:**

417A operating point:  
 Vg: -1.5 V  
 Vp: 153 V  
 Ip: 27.35 mA  
 ra: 1671 Ohm  
 Av: 32.43  
 Loadline: 5600 Ohm  
 Grid swing: 3 V Peak-to-Peak  
 Plate swing: 99 V Peak-to-Peak  
 THD: 0.64%  
 2ndHD: 0.59%  
 3rdHD: 0.26%  
 4thHD: 0.07%

**Output stage details:**

211 operating point (each tube):  
 Vg: -50.05 V  
 Vp: 941 V  
 Ip: 58.42 mA  
 ra: 3771 Ohm  
 Av: 9.45  
 Loadline: 14 KOhm  
 Grid swing: 100 V Peak-to-Peak  
 Plate swing: 941 V Peak-to-Peak  
 Power: 7.9 Wrms  
 Damping factor into 8 Ohms: 3.71  
 THD: 0.98% -40.1 dB  
 2ndHD: 0.95% -40.5 dB  
 3rdHD: 0.26% -51.5 dB  
 4thHD: 0.15% -56.7 dB