



Parallel Single Ended 211 Amplifier  
My first design  
ERV. April 2005.

**Power Supplies details:**

The 277 VDC and 1006 VDC supplies were designed to have hum reduced by around 116 dB (58 dB per LC filter)

**Input stage details:**

417A operating point:  
Vg: -1.5 V  
Vp: 154 V  
Ip: 27.72 mA  
ra: 1674 Ohm  
Av: 30.67  
Loadline: 4467 Ohm  
Grid swing: 3 V Peak-to-Peak  
Plate swing: 94 V Peak-to-Peak  
THD: 1.745%  
2ndHD: 1.745%  
3rdHD: 0.047%  
4thHD: 0.096%

**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