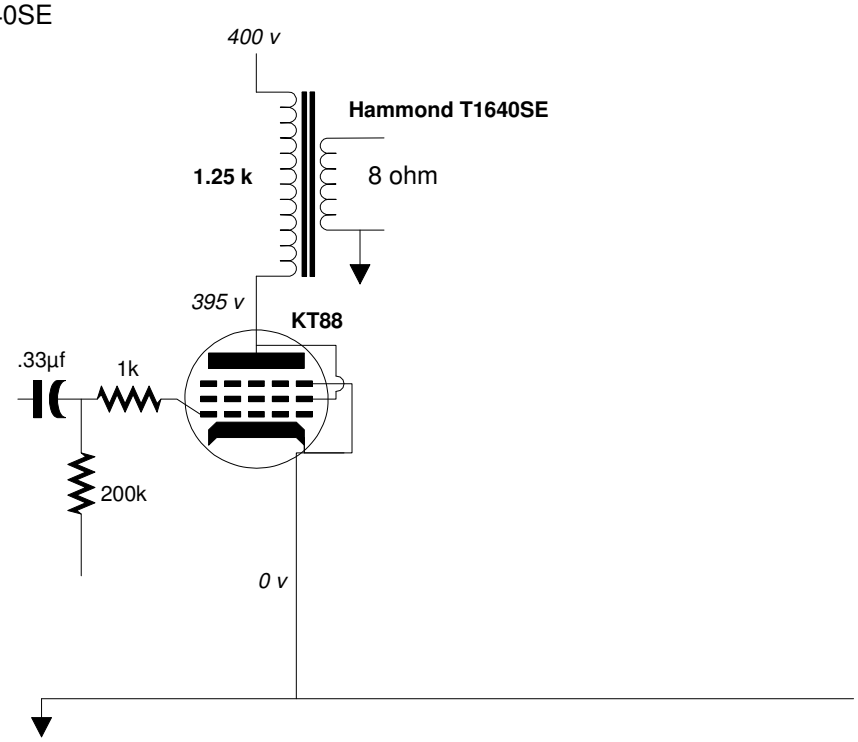
Circuit Setup

Output Tube Type	KT88 X 2
Output Transformer	Hammond T1640SE
Bias Method	Fixed
Plate Load Resistance	1.28 k
Plate Idle Current	80 mA
B+ Voltage	400 v
Peak Input Voltage	40 v
Tran. Primary Resistance	31 ohm



Tube Data

Amplification Factor (µ)	6.99
Transconductance (Gp)	1.87 mA/v
Transconductance (Gm)	13 mA/v
Plate Resistance (rp)	536 ohm
Max Plate Voltage	450 v
Max Plate Current	175 mA
Max Plate Dissipation	40.0 W

Transformer Data

Heat Dissipation	948 mW
Winding Ratio	12.7 : 1
Winding RatioI	160.13
Primary Inductance	6.63 H
Efficiency	91.9%

Output Stage

Plate Dissipation @ Idle	34.5 W
Average Plate Dissipation	26.5 W
Max Plate Dissipation Ratio	86%
Output Impedance	378 ohm
Gain	5.11
PSRR	-3 dB
Rectification	94.9 mA
Slew Rate of Input	5.02 v/µs
Plate Efficiency	23%
Stage Efficiency	23%

Output Into Load

Power (RMS)	15.9 W
Voltage (RMS)	11.3 v
Current (RMS)	1.41 A
Output Impedance	2.86 ohm
Damping Factor	2.8
Distortion 2nd	7.8 %
2nd Harmonic In -Db	-22.2 dB
Distortion 3rd	0.1 %
3rd Harmonic In -Db	-56.6 dB

IV Dynamics: Rectification Effect Included

Vp Max	= 567 v	Vg Max	= -80 v	Ip Min	= 40.2 mA
Delta	= 173 v	Delta	= 40 v	Delta	= 135 mA
Vp Avg	= 395 v	Vg Avg	= -40 v	Ip Avg	= 175 mA
Delta	= 236 v	Delta	= 40 v	Delta	= 184 mA
Vp Min	= 158 v	Vg Min	= -40 mv	Ip Max	= 359 mA