Basic Mods

Change R6 and R7 to 100K
Raise R7 and lower R6 to increase gain. Lowering R6 increases brightness.

B3

R3 100k

R6 100K

C1 .022uf/400V

R2 68k

1 2 3

12AX7

R7 100K

VR1 1M

Move R1 across the input.

R1 1M

R8 1.5k

C4 22uf/50V

B3

R4 100k

C2 .022uf/400V

6 7 8

12AX7

R5 220K

R9 1.5k

C3 22uf/50V

Lower C4&C3 to tighten bass
1uf for humbuckers
2.2uf for single coils

Add Screen 1K/1W
This protects the tube

B2

B1

If your OT does not have a 5K primary (version 1 and 2) then change OT.

Raise to decrease presence

R15 1.5k-10k

2 9 7 3

EL84

4&5 heaters

5K primary

C5 1000uf

1000uf provides better bass and is closer to fix bias

R14 220-270Ω/2W

Adjust R14 to bias the tube no more than 12W

Tweek R10 till you get 300V between pin 7 and 3 on EL84 R10 220-1.5k/2W

B1

R12 4.7k/3W

B2

R13 10k

B3

B3

120V mains

260vac

R11 220K

C6 22uf/450V

C9 22uf/450V

C7 22uf/450V

C8 22uf/450V

C11 .1uf/450V

6.3vac

filaments

C12 4700uf