



Original modification details posted by Logistic on head-fi and incorporated into this diagram:

...you have to make some small changes [by substituting the following resistors] -

R1/R7 - 44k
R5/R11 - 4k
R2/R8 - 330K
R4/R10 - 180K

You will have to use an octal socket, and here are the conversions from the seven pin socket in the original circuit diagram:

1,2 -> 6
5,6 -> 2
3,4 -> 7,8
7 -> 3

You will also have to ground pin 1 which is for the metal casing. It is probably a good idea to ground pin 1 with a separate path to ground from the heaters (pins 7,8). That way if the ground connection for the heaters breaks for whatever reason you don't see that voltage on the tubes.

Using 2" heatsinks is also recommended since the heaters are running at 12V instead of 19V.

-- <https://www.head-fi.org/threads/millett-starving-student-hybrid-amp.319231/post-5584511>

Tubes/valves that fit this design include:

- * 12SR7 - metal encased tube (cannot see heater)
- * 12SW7 - metal encased tube (cannot see heater)
- * 12SR7GT - glass encased tube

Original circuit design: Pete Millett - <http://pmillett.com/starving.htm>

IRF510 FETs must be mounted on heatsinks (recommend 2")

All resistors are 0.25W (1/4W) metal or carbon film

All capacitors are 63V minimum

Modified for 12S_7 valves by Logistic on head-fi - Drafted by Simon Holywell

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