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Subject: PS options...

Posted by [PakProtector](#) on Fri, 14 Jan 2005 16:42:36 GMT

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Hey-Hey!!!, There are a few improvements. a V-0-V power TX with V in the neighborhood of 250 volts is going to make using a valve rectifier easy. Custom Iron is going to come in under the \$100 point quite easily. A V3-V2-V1-0-V1-V2-V3 item with appropriate rectifier filament windings ( like 3A each of 6.3 and 5V ) and V3 as high as 400 is not a real trouble. Say current rating for the HV as 100 mA and we have a \*VERY\* useful and \*RE\*usable linestage power TX. I'll bet Heyboer could come in comfortably under the \$100 limit for such an item. Say 400-325-250-0-250-325-400 @100 mA and 3A each of 6.3 and 5? You could build damn near anything with that. B+ from 200 to 600 depending on connection and filter type. The PS cap I suggested is a 370VAC rated item, good for use at more than 600V( I have factory labeled 330VAC-rated ASC with 600VDC tags on them ). At ~\$10 each, I suggest buying a few. They are quite good. On the chassis, Lowe's has cut 1x4 hardwood for my last base quite cheaply. Glue, a Square and some weights( or proper clamps ) make assembly easy. Look at sheet metal shops for the plate. a 13.5 x 18 inch piece of .125 plate cost me \$22. You should consider paying a bit extra for a clean, unscratched piece, or plan to spend extra time fixing some of the nicks... ON parts, from Mouser: switch, 633-S331T @ \$6.60 IEC socket 161-3516 @ \$1.41 Filament DC capacitors 10,000 uF/16V Low ESR 647-UHE1C103MHD @ \$2.45 each. It would probably be best to use 25V-rated and go smaller in capacitance... Filament diodes, 512-SB5100, 5A/100 PIV Schottky diodes Filament TX, mouser has lots of Hammond. If you want more than the cheapest, and simplest, the first and most important upgrade is the active loads. Use the cascode circuit. It is the easiest, most cost effective( additional gate stopper and \$2 DN2540N5 mosfet ) improvement to this design. Don't plan on neglecting this one when you find out how good the simpler method works, rest assured, there is still some performance 'left on the table' and it is \*EASY\* to pick it up. more later, and as requested... regards, Douglas!

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