
Subject: Grounded grid

Posted by [Thrint](#) on Sun, 04 Sep 2005 14:41:43 GMT

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Hey-Hey!!!,I have been considering a cathode drive power stage for the next amp. Seems a bit foolish to jump into a project well up the power ladder. So, this leaves the starting point of the linestage. Just to start with, PS parts are a bit easier to carry(let alone purchase).Input Z of the grounded grid's cathode is Plate Z over $\mu+1$. This is not typically a large value. For the 12B4, a plate Z of 1k5 at a reasonable OP is leaving a cathode Z of ~230R. It is a reasonable place to start.A pentode's cathode Z is $1/g_m$, and with a high g_m example(36 mA/V), a 30R value is the result. This gets near the 1:10 ratio output Z to load...The pentode's g_2 can be done with a simple dropping R and bypass C. Good quality C is likely to be worth paying for. A 1-2 uF and 30k should do quite well.Using a triode as the CF/input stage also provides a means to adjust gain. Put a plate resistor in of equal value to the amplifier plate load, and gain gets cut by half(looks like a phase splitter, NO?).Cathode load can be a CCS, or resistor to ground(going to be small) or to a negative rail. Going to ground will put a small resistor in parallel with the cathode load, and this will make the load applied to the CF a whole lot bigger(maybe it will contribute to sound in a positive way?). The negative rail will make that part of the load large in comparison to the cathode of the amplifier.I am going to build *Something* new quite soon, just a matter of what....cheers,Douglas

Subject: Re: Grounded grid

Posted by [Damir](#) on Mon, 05 Sep 2005 16:40:10 GMT

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Hi, Doug - although I think that I follow you enough, one hand-drawn schematic hosted by "Image Shack" would be of great help!

Subject: man....

Posted by [Thrint](#) on Mon, 05 Sep 2005 20:07:09 GMT

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still no imaging scanner. Must get one of those for sure. Make things a lot easier... I will see what I can do.cheers.Douglas

Subject: Re: man....

Posted by [Damir](#) on Tue, 06 Sep 2005 04:46:04 GMT

I don't have one also But, I simply use digital camera in "macro" mode, shoot the schematic from close distance (good light is necessary), add brightness and contrast, reduce the photo and host it by "Image Shack"... Pretty easy:-)
