
Subject: PSUDii tips

Posted by [PakProtector](#) on Mon, 31 Jan 2005 21:56:57 GMT

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Hey-Hey!!!,I just got the output voltage tuning done for the filament supplies on my new linestage design. L-C and L-C-R-C. They matched PSUDii sim predictions to a few percent.Critical stuff is the input voltage and component DC resistance. The input voltage should be the unloaded voltage measured when line voltage is applied and the winding in question is otherwise unloaded.DC resistances of just the secondary have been acceptable. With the step-down ratios encountered with filament supplies, the small primary resistance appears even smaller.The ESR of the capacitors seems to make very little difference. The data is either available from the manufacturer or guess. Tens of mOhms to a tenth of an Ohm seems to be a reasonable bet for a 'lytic. Go for the minimum allowable for good film caps. regards,Douglas

Subject: Re: PSUDii tips

Posted by [Manualblock](#) on Mon, 31 Jan 2005 22:28:25 GMT

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I am confused again. Reading the Radiotron 3rd ed. It appears to say input voltage rating of power transformers should be made with the secondary fully loaded. What am I doing wrong if I may ask.Regarding Guenievere; I have printed out three different filament schematics. We are using the filament windings on the power trans; not the radio shack 12v trans is that correct?And I thought Golf was hard.

Subject: Re: PSUDii tips

Posted by [PakProtector](#) on Mon, 31 Jan 2005 22:55:17 GMT

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Hey-Hey!!!,I suppose it depends on how the model works. I have no details about the numeric methods PSUD uses. The best results come out when I put in the numbers from the measurements I described. On Guinevere, I had planned on using the RS trans for a seperate DC supply. Not too expensive and keeps things a bit seperate. The charging current spikes from a cap input filter tend to spread around and infect things. Some small resistive/capacitive filtering on the primary side of the filament TX ought to keep the B+ quite clean.If I try Golf sometime, and after hitting that ball, ever find it again, I'll put it back in my pocket, consider myself lucky and call it a day.regards,Douglas

Subject: Link to heater info request
Posted by [colinhester](#) on Mon, 31 Jan 2005 23:17:09 GMT
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Follow thread. I hope this helps.....Colin
<http://audioroundtable.com/GroupBuild/messages/252.html>

Subject: Re: PSUDii tips
Posted by [Manualblock](#) on Mon, 31 Jan 2005 23:24:45 GMT
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I see you have the game of Golf down pretty accurately. Thats what I should have done. Please; so we are using the RS; LM 317 set-up for the filament supply on the Rec tube, is that correct? I really have three diff. schematics in three diff. styles. I am trying to get this down before the trans arrives. The PSUD response; verrry cryptic. I will try to decipher. I am stuck on the model and the method. Your posts are really geared towards one who knows. That ain't me. Thats why I am trying to follow in the textbooks but we come to a logjam occasionally. Still thanks for responding so quickly, that is very kind.

Subject: Re: Link to heater info request
Posted by [Manualblock](#) on Tue, 01 Feb 2005 00:24:47 GMT
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Colin; are you using the seperate filament trans or going with the winding on the power trans?

Subject: Re: Link to heater info request
Posted by [colinhester](#) on Tue, 01 Feb 2005 01:11:12 GMT
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I'm going with the separate trans.....Colin
