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Subject: Re: PS Transformers

Posted by [Damir](#) on Fri, 28 Jul 2006 22:05:39 GMT

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"I have a couple PT's on hand; but not the ability to test each one for it's parameters."What you need more? You can measure primary and secondary DCR, and with formula  $R_t = R_s + (N_s/N_p)^2 * R_p$  you can find the "equivalent" PT resistance, where  $R_s$  is a DCR from CT to the one end of the secondary (from 0-350V). For example - you measured  $R_p=5$  Ohms,  $R_s=20$  Ohms. Then you can measure unloaded sec. voltage, say 350-0-350 V. $N_s/N_p$  is PT turns ratio, equal to voltage ratio (sec/prim.), say  $350/117 = 3$ . Then our  $R_t = 20 + 3^2 * 5 = 65$  Ohms. This  $R_t$  rectifier tube on the secondary "sees". If you don't know current rating of your PT, then you can guess by its size, and if it is salvaged from some equipment (preamp/power amp).You now have all you need for PSUDII -  $R_t$ , Utr - choose your rectifier and a first filter (LC or CLC), put the CCS as a load (estimated current of your amp) - and start playing with the program with various values, rectifiers, etc. For example, you need 375V/100mA DC and you tried  $10\mu/10H-100R/100\mu$  with 5R4GYB rectifier you have in your junkbox...yes, that's about it!Breadboarding proves that you are quite close, and you liked the sound - happy end...

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