Subject: Re: Valve Phono Preamp

Posted by gofar99 on Sun, 17 Jul 2011 01:35:14 GMT

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Hi vinyl lovers, I had a diver from overseas (thanks Vladislav) come up with some interesting comments and I wanted to share them with you. One thing that can be done with the preamp is increase the gain. This is mentioned on the schematic, but not explained in the text. If you bypass the cathode resistors on the SRPP (lower triode section only) you can increase the gain by about 3 db for each stage (a total of nearly 6 db). There is a penalty in the S/N area of abut 2 db in doing so and since there is approximately 45 db of gain already I suggest it not be done unless there is some good reason. It will not be enough to allow use of a low output MC pickup. The more interesting comment was that bypassing the first stage will slightly upset the RIAA equalization. This is because the network is designed around specified time constants and takes into account the impedance of the tube and the loading of the following stage. With the indicated 68K resistor in place the value would appear incorrect, but with the JJ ECC83 tubes I used in the SRPPs and the JJ ECC81 in the cathode follower. It measured fine. The calculated value would be just about 51K for the un-bypassed application and actually close to 65K for the one with the cathode bypassed. The actual changes were small - in the order of 1db (mostly above 10K HZ), but can be audible. Tube brand and type (like NOS 12AT7 vs ECC83 / EEC803 etc) All this is a bit techie, but the message is that you can fiddle with the resistor a bit if you need to. Without a good signal generator and scope/meter it will be difficult to verify performance though.