
Subject: Re: Valve Phono Preamp

Posted by [FL152](#) on Sat, 02 Jul 2011 20:49:11 GMT

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Hi, Bruce - I saw your preamp, and I must say that it is in some ways similar to mine. Interesting, it is also similar to RIAA preamp from Vanderveen`s book I wrote about. He used 12AU7/12AT7 tubes, both in SRPP with passive RC filter between stages. He wanted low Cin, and used low-mu first tube...but resultant amplification is also lower. He used anode out (not low-imp. out) in the first stage, similar to my approach.

Back to your preamp - you stated amplification like „60 dBv", and this is probably a mistake. We can expect maybe A~50 from 12AX7 SRPP stage, and about 10x attenuation after 1st stage through RC filter on 1 kHz. Then, total amplification can be about $A \sim 5 \times 50 = 250$ times, or 48 dB maximum on 1 kHz. Still respectable.

What seems strange to me is a large value of series RIAA resistor, 113 k. Theoretically, relation between two RIAA resistors is 6.877, and that means value for 113k resistor about 75k, rough calculation without series Rout from SRPP and parallel 1 Meg resistor (about cancelled each other). Is 113 k value empirically found?

About noise - it is hard to do better without high-S tubes...an economical alternative can be EF184, but then we need four tubes/sockets and more current, plus two heater supplies, probably.

I like your shielding ideas.

P.S. speaking of „tube books" did you see this „ultimate" book about RIAA preamps and noise? Based on free sample pages, serious book but, the price is more than serious, too.
http://www.amazon.com/Sound-Silence-Lowest-Noise-Phono-Amps-Designers/dp/3540768831/ref=sr_1_14?ie=UTF8&qid=1309638744&sr=8-14
