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Subject: Re: THE TWEAKER

Posted by [Earle](#) on Tue, 05 Jul 2005 08:47:32 GMT

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Hi Howard. Hope your amps are coming along well. I lashed out and bought myself a HP8903a audio analyzer. Best money I have ever spent. Some test results from my own Tweaker Mk4 are as follows;KT88 in triode mode, @1 watt with 1k 0db ref. -3db 15hz to 37khz. -6db 11hz to 57khz. Distortion @ 1watt 0.29% (4.7% at 1/2 pwr) Maximum output 10watts. Hum level 1mv. Signal to noise 103db hum removed. KT88 in Ultralinear mode -3db 22hz to 45khz. -6db 15hz to 67khz. Maximum power 16 watts. Hum 1.2mv. S/N 102db hum removed.The signal to noise is very dependent upon driver valve choice. The best result was from a NOS Sylvania Angle plate 6sn7. A Chinese no name 6sn7 returned similar S/N but frequency was down -3db at 13khz.One of my favorite valves, a Sylvania 6SL7WGT was quite noisy with a S/N of 67db, go figure.EL34 triode mode -3db 15hz to 41khz and -6db 11.5hz to 62khz.EL34 UL mode -3db 23hz to 52khz and -6db 16hz to 76khz.The installed valves were Valve Art 5AR4, Sylvania 6SN7 angle plate and new Valve art outputs.I've been working on a (shock horror) push-pull amp. The transformers I have wound using the same technique I developed for the SE iron. They test very impressive out of circuit. -3db 7hz to 58khz. In circuit they should perform similar as the bias current is self cancelled. The top end may go a bit higher due to the ul taps.The attenuator xformers are coming along as well. I'm happy with the test results and will now work with taps. I plan to have only 12 taps with a +3db boost tap to add a bit of gain to a passive pre.Cheers. Earle.

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