Subject: new amplifier methodology pdf(found it)
Posted by Mike.e on Sun, 11 Jul 2004 05:47:13 GMT
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hi all.Incase you missed it. i read this one then formatted my pc and forgot where it was.a yahoo search with PDF fILES only revealed it.Cheers!A NEW METHODOLOGY FOR AUDIO FREQUENCYPOWER AMPLIFIER TESTING BASED ON PSYCHOACOUSTICDATA THAT BETTER CORRELATES WITH SOUND QUALITYBYDaniel H. CheeverII. A new audio test philosophy…….. 341. Harmonic consonance…….. 352. The sound pressure level dependence of the aural

494. Pre-transient noise bursts…….. 515. The fallacy of negative feedback as a cure-all……... 52III. Measurement protocol of the Total Aural Disconsonance figure of merit……..641. Device measurements…….. 642. A measurement protocol for the Total Aural Disconsonance figure ofmerit……..68
A NEW METHODOLOGY FOR AUDIO

Subject: but it isnt without its critics
Posted by Mike.e on Sun, 11 Jul 2004 06:40:57 GMT
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the Cheever thesis is an embarrassment to the issuing institution and a parody of the scientific method - the list of true statements about feedback and solid state amplifiers is much shorter than the list of howling errors, Cheever can’t even identify the dominant pole cap in the Hafler amp he usesI keep trying but few seem to really be willing to look at real references rather than pass around superficially impressive looking papers that just happen to be on the weband the AA responsehttp://www.audioasylum.com/forums/prophead/messages/2816.htmlquote: I'm afraid I haven't got the time to read right now. Don't bother, it was a terrible piece of work. Amazing he got that thesis passed.
diyaudio guys opinion

Subject: Re: but it isnt without its critics
Posted by Wayne Parham on Sun, 11 Jul 2004 20:04:12 GMT
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Hi Mike,I'll read that. Seems like I remember the fuss, but disregared it as noise. The fuss I

mean, not the thesis. The thesis was written for a purpose, so regardless of its conclusions, it had a reason for being. But anyway, I never took the time to read it, got busy and forgot. I'll try to remember this time to check it out and see what Cheever says. What were your thoughts?Wayne

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Subject: my view.
Posted by Mike.e on Mon, 12 Jul 2004 04:42:08 GMT
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Well it certainly is a step up from the subjectivism you find thesedays.some one on diyaudio noted that his evaluation scheme gives his amplifier a better score, and a perfect amplifier will actualy still have a bad score...or something!!This guy seems a little low on proof after making a statement.Personally i prefer Douglas self,he seems more facts basedat the moment im scrolling through his amplifier design book,im just starting the part on the 8 distortions of amplifiers...then im getn into the input differential pairs, vas stage and outputs,its SO IN DEPTH ! :-)I know that the thesis should be read in a way that it was intended for...as a thesis,not as an AES publication ;-)I would actualy like to make a little 2x20w BJT with a 'warmness' knob on it!! apparently unmatched differential pairs cancel 2nd harmonics quite well when designed well,il look into it :-)but those cost $$!I like having facts not subjectivism in audio. Its always down the the experience ofcourse..but the facts keep you firmly rooted in the swirling storm-market of audio!

Subject: Correction
Posted by Mike.e on Mon, 12 Jul 2004 04:43:33 GMT
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I would actualy like to make a little 2x20w BJT with a 'warmness' knob on it!! apparently unmatched differential pairs cancel 2nd harmonics quite well when designed well,il look into it :-)oops i contradicted myself..MATCHED differential input pairs CANCEL 2nd harmonics well!

Subject: Re: Correction
Posted by Wayne Parham on Mon, 12 Jul 2004 04:50:56 GMT
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Yep, the "symmetry" part of the complementary-symmetry configuration is as important as the "complementary" part. So you'll need matched complementary pairs in your differential circuit.

Subject: 0.0001% THD
Posted by Mike.e on Tue, 13 Jul 2004 05:08:09 GMT
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Its amazing the improvements that can be made with methodical attack!Im up to output stages nowThe THD+N numbers hes stating for his spice models are so low the noisefloor makes it hard to see the distortions.THe more i read the more i understand.its great stuff!now reading how,4ohm loads always distort more :-) (think of the car audio guys running 0.5ohm loads with quad coil 15"s!)Also ..how he prefers class A or class B rather than class a/b.He seems very intimate with his spectrum analyser also! its like his best bud! trusty FFT providing a basis of proof of improvement.Cheers