Subject: It seems I am unable to drive my amps into clipping while pushing my Stage 4 Pis.
Posted by James W. Johnson on Sun, 29 Aug 2004 15:09:42 GMT
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I started a thead at HTF on this so perhaps reading it first would be helpful.Anyways is it possible that the Stage 4 Pis are such an easy load that my pre-amp does not have enough gain to be able to push my amps to clipping?

http://www.hometheaterforum.com/htforum/showthread.php?s=&postid=2357285&t=3734#post2357285

Subject: no clipping?
Posted by ToFo on Sun, 29 Aug 2004 16:38:42 GMT
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Can't help a lot, but I can't see how its the speakers. Even if you could load your amp in a way that it wouldn't clip, you should still be able to overdrive the amps first gain stage and create distortion with modern separates like these. They tend to have high output and sensitive input so that half to 3/4 on the knob will clip or overdrive on loud passages. My speakers are basically the same sensitivity and 125 w/c will literally unlatch doors and make stuff dance around on the countertops, you will know when your getting 200+ watts.Since your amps have input level pots, hook a cd player direct, and turn them up with the trim pots. I ran a no preamp system for years, and have never seen an amp that a good player can't overdrive. That will atleast tell you if it's the amp or the pre.Thomas

Subject: Re: It seems I am unable to drive my amps into clipping while pushing my Stage 4 Pis.
Posted by Wayne Parham on Sun, 29 Aug 2004 22:26:11 GMT
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Hi James,I have a Crown Microtech 2400 and it has an input selector, where you can choose between 0.775v and 1.4v input. The Crown is easy to drive into clipping on the 0.775 input with standard hi-fi preamps but the 1.4v input isn't.Anyway, I like to have the levels set so that the preamp volume knob reaches clipping when it is at about 95% rotation, if the source level is 100%. I like to be able to push the amp just up to its clipping level, but not beyond it. Most systems allow going well past clipping, and that way if the input is very low, you have the gain to turn it up. But I have so much power and overall gain that I don't need that. I just like setting it so it can't reach clipping, but gets almost there. That gets me all the amp can muster, but no more and no one can twist the knob so far to get it there, no matter what source material is used. That's

just how I like my system set.
Wayne

Subject: Re: It seems I am unable to drive my amps into clipping while pushing my Stage 4 Pis.
Posted by Larry Acklin on Mon, 30 Aug 2004 11:43:42 GMT
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Put a piezo tweeter across the output of the CD player. Use a 400hz or so test signal (test cd), and turn up until you hear a buzz. This is the harmonic you hear caused by clipping. Turn down until you don't hear it (just below clipping), then hook up to the next stage. Turn up input sensitivity (gain trims) until the onset of clipping then turn the trims down until no clipping. Move up through each stage, using the 400 Hz signal, leaving each gain stage set at just below clipping as you move up. What you are doing is setting the gain structure of the system- best noise floor and most headroom is achieved when you have the whole signal chain going into clip at about the same point. You can also use the tweeter at the output of the power amp, but I like to use a dummy load resistor to load up the output at design impedence. The piezo presents a capacitive load at the amp output, and a tube amp isn't going to like that at all.If you set the input sensitivity of the final stage (power amp) for "maximum stupid loud- I never wanna get louder than this" at whatever volume setting of the preamp knob, then you can be assured that you will never be in clip during normal listening.There is a commercial version of this concept, but a $2.00 piezo tweeter works just fine.This technique was invented by Pat Brown of Syn-Aud-Con, a professional audio training and knowledge organisation.Larry Acklin

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