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Subject: I' m too cheap

Posted by [Leland Crooks](#) on Tue, 13 Dec 2005 11:33:19 GMT

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to buy a clipcop or a rane gain, I'm going to use my PC for a 440 sine wave into the PA. If you're not familiar with them, they generate a 440hz tone and you plug a pizeo into the output. Turn up gain until it distorts, voila, max gain. They put out at 0dbu, which I understand is 1.23v pro level. Through the di box I don't think my pc will give that much gain. I do now have a meter with a db scale. What's the formula say, if I can give -10db signal, that I can use to mathematically find the 0db level. Then I can adjust my trim knobs and turn down accordingly I figure I'll only need to do this once, which is why I don't really want to buy one.

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Subject: Re: I' m too cheap

Posted by [Wayne Parham](#) on Tue, 13 Dec 2005 14:50:36 GMT

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I've heard of folks doing that. You might want to get a scope sometime too, 'cause they aren't that expensive anymore.

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Subject: Re: I' m too cheap

Posted by [Leland Crooks](#) on Thu, 15 Dec 2005 18:31:14 GMT

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This worked great. All my meters on board, comps, xover and amps all clip at the same time. I figure I gained about 8-10db of headroom. It made big changes to my guess derived settings. Now on to the rta function.

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Subject: Re: I' m too cheap

Posted by [telegraph.hill](#) on Mon, 07 Aug 2006 14:40:02 GMT

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By pizeo do you mean a piezoelectric crystal?

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Subject: Re: I' m too cheap

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Posted by [Wayne Parham](#) on Mon, 21 Aug 2006 22:02:40 GMT

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Leland is talking about using piezoelectric tweeters. The way he's using them is to listen for HF created by the leading and trailing edge of a clipped signal. If you put a low frequency sine wave into an amplifier, the output signal will also be a low frequency sine wave that can't be heard from a piezo tweeter. But once the amp starts to clip, the sharp edges generated are high frequency so they can be heard with a piezo. That's how Leland plans to use piezos to tell when his amps begin to clip.

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Subject: Re: I' m too cheap

Posted by [telegraph.hill](#) on Fri, 08 Sep 2006 18:35:26 GMT

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Thanks for explaining that. But what does "clip" mean in this context?

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Subject: Re: I' m too cheap

Posted by [Wayne Parham](#) on Sat, 09 Sep 2006 04:26:56 GMT

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It's when an amplifier is pushed hard enough that the output signal rises to the maximum. It cannot go any further, so the output is "clipped".

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Subject: Re: I' m too cheap

Posted by [telegraph.hill](#) on Mon, 18 Sep 2006 09:10:09 GMT

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OK, thanks for explaining.

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