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Subject: Amazing new bass contour control

Posted by [BillEpstein](#) on Wed, 06 Aug 2003 19:01:15 GMT

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Remember the 2 Delta 15's in 4648 thing I did last month? Well I had some more precious time to waste so....I took it away from the Home Theatre and wired the outputs of Ella to the cheapass 100 watt P.E. plate amp an then on to the speakers. You know, high level in-high level out.I learned 2 things:1. Having the plate amp with it's crossover 'tween a good source and good speakers creates a very audible difference in sound. Most, but not all of which I liked.2. Increasing the level of bass below 60 Hz while taking the load off the main amp and speakers is really, well, fascinating. JBL 2226's augmented by the 2 Deltas may not go below 40 Hz flat but, as Linda Fiorentino said in MenInBlack -"there is something going on down there."Such an amazing change in character to a system I listen to daily creates a strong argument for the old Julian Hirsch school of audio: frequency response is everything. That begs the question: is my next big "improvement" another set of Deltas in a second 4648 box or a \$49 equaliser?

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Subject: Re: Amazing new bass contour control

Posted by [Wayne Parham](#) on Wed, 06 Aug 2003 21:16:49 GMT

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I agree with you that frequency response is the most important feature in the reproduction of the illusion of accuracy. I think it's closely followed by distortion and the other issues follow those two. Frequency response is where things like overdamped and underdamped filters will show up. Distortion - particularly in the midbass through the midrange - makes the sound fatiguing and less clear. Other reproduction imperfections are worth making an effort to improve, but the "must have" considerations are flat response and low distortion.Both of these are things that can be improved by techniques like you've described. The octave below 40Hz is a challenge for high-efficiency speakers. Basshorns tuned for use below 40Hz are very large. Direct-radiators tuned for high-efficiency either lack extension or they're large too. That means you usually have to throw power at the problem. You can bump up the EQ or add subsystems or both. You can tune a cabinet so performance in the bottom octave is optimized, which is really an acoustic EQ. All of these are ways to get more power available for the bottom octave.