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Subject: Re: Shorting rings - Improve something else besides 2HD and Le?

Posted by [Earl Geddes](#) on Fri, 17 Feb 2006 21:00:55 GMT

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Hi Wayne There are lots of considerations here. First they do more than just reduce 2nd order HD, they in fact linearize the inductance for all orders. If it were just second order then they wouldn't be worth doing. Yes they are ineffective at LF, but the problems aren't at LF, they are at the frequencies where the inductance is significant. There is no flux modulation at LF. At LF the concern is for cone displacement linearity not for current linearity. Which makes my next point. For any driver only operated low in its pass band, like a subwoofer, they are of no use. But for a speaker like mine where I take the 4" VC woofer up to 900 Hz they are critical and I wouldn't consider a speaker without one. They are also quite beneficial on compression drivers for not only linearizing the inductance but minimizing it for a better HF response. So in general if I had to either have them or not have them I'd definitely rather have them. But, there are situations where they don't do much.

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