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Subject: Re: Integrating full-range as wide-range  
Posted by [akhilesh](#) on Fri, 09 Jun 2006 02:39:54 GMT  
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I applied a highpass on the full range. 24db. That's what the active does. If you want the fullrange to die out naturally, as you know, there are 2 issues at least: 1. WE need to calculate the slope of die out and then calculate the low pass slope on the sub so the summing is zero or whatever we want. 2. We don't reduce the IM distortion: in my opinion the main advantage to the use of a sub. For example, my trusonic can do 45 hz in its BR box. So if it is let it die naturally it'd probably be crossing it at 24 db at around 40 db. But the IM distortion would be the same as without a sub. Crossing it actively at 90 hz takes care of that. It actually sounds significantly better: the results of IM distortion are not the phantom metrics that plague the dreams of many "speaker designers", it's very clearly audible. Hoep this helps-akhilesh

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