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Subject: Re: Not so fast there, excursion breath...

Posted by [Wayne Parham](#) on Sat, 17 Sep 2005 07:32:24 GMT

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No offense there Bill, I'm sure the small T18 does a good job above 50Hz. But as your graph shows, excursion rises rapidly under 50Hz. So what that means is that the box is essentially a direct radiator below 50Hz. My point is there are better ways to optimize a system for operation below 50Hz than a 3ft3 horn. The best 3 cubic foot subwoofer implementation, in my opinion, is to use the entire cabinet volume to provide an alignment that's optimized for the low frequency range, not 50Hz and up. One can then use a driver with greater displacement too, one with more radiating surface area and greater excursion capability. With a horn cabinet, much of the box is used to provide space for the flare, and the rear chamber is then necessarily pretty small. That's what is doing the work here under 50Hz - The sealed box of the rear chamber. So the alignment is not optimized for subwoofer operation, at least not under 50Hz.

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