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Subject: 4-Pi Phase shift???

Posted by [Wayne-o](#) on Sat, 19 Jul 2008 18:35:22 GMT

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Does the 4-Pi have any Phase shift in the 40-120 bass region ? if so how about the 1-Pi ? Need to know if using the 4-PI with the 1-Pi's will have any canceling effects on the bass. Thanks -

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Subject: Re: 4-Pi Phase shift???

Posted by [Wayne Parham](#) on Sat, 19 Jul 2008 21:36:38 GMT

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The room has much more effect in the modal region than the phase of a single sound source. Summing is pretty complex of the direct sound from woofers in different locations in the room and all the reflected energies from the walls, ceiling and floor. So in a small room, acoustic phase of a single bass sound source measured in an anechoic environment doesn't mean very much. Generally speaking, the more woofers you put in your room, the better. They'll smooth the sound field by averaging, with peaks from one speaker or reflection countering the nulls from another. Above the modal region, phase of a single sound source becomes more relevant. But it's still really a matter of summing between sound sources that you really care about, because you can't hear phase directly. What you hear is the anomalies in amplitude response that result from below.

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