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Subject: Re: Flanking Subs vs Helper Woofers

Posted by [Wayne Parham](#) on Sat, 29 Dec 2012 15:09:57 GMT

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zheka wrote on Fri, 28 December 2012 20:27 I can see how this works with stereo. But it's not as clear to me when it comes to multi channel audio where the LF content from at least 3 more discrete channels and LFE are all summed in the subwoofer signal.

You can use flanking subs on every main speaker you have, for every channel. But I think the most important channels are the L/R mains, because they are so important to the presentation. Still, you could run flanking subs on every channel. That would certainly be ideal.

Flanking subs are primarily there to smooth the self-interference notches, so they have to be placed relatively near the speaker they are flanking, and they need to be low-passed in the low midrange. They are used in conjunction with distributed multisubs for best results.

What I don't understand, is how anyone can use distributed multisubs and not include flanking subs. It's like getting your car's wheels aligned but then running underinflated tires. The biggest problem is still there.

Distributed multisubs are becoming increasingly popular, and yet most discussions describe a process that only works to 100Hz. But the 100Hz to 200Hz range cannot be smoothed with distributed subs, that requires flanking subs. Room treatments cannot help in this range, only placement. So flanking subs are at least as important as distributed subs. I think the stereo pair are most important, but all speakers used indoors can benefit from a blended helper woofer to smooth the midbass and lower midrange.