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Subject: Re: Amp for 4pi speakers

Posted by [Wayne Parham](#) on Tue, 27 Nov 2018 22:47:16 GMT

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In my experience, 200Hz is about the limit of the flanking sub (helper woofer) approach. But I've blended the woofer with the mid(woofer) to ~250Hz in some loudspeakers and it has worked well.

Some specialized cases, like the constant directivity cornerhorns, allow for a wide overlap band. Many 2.5-ways are designed this way too. The midwoofer and helper-woofer are in fairly close proximity, so they can overlap to fairly high frequency.

But when I've run subwoofers as "helper woofers" - in the configuration I call "flanking subs" - I generally don't run them that high. They are localizable if the rolloff is made too high. I generally use low-pass between 90-120Hz second-order, which provides quite a bit of output in the 100Hz to 200Hz region because rolloff is so gradual.

You could try 150Hz second-order, which would definitely provide output up to 200Hz and beyond. But it might start to sound unnatural when run that high.

As for the modal smoothing below 100Hz, please do a search here for multisub setups. There are a few approaches, but most agree that if you have four subs (or more) it almost doesn't matter where you put them. Just don't cluster them together - Place them around the room.

Multisubs and Flanking Subs

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