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Subject: Re: High-pass on the 4pi?

Posted by [Wayne Parham](#) on Thu, 01 Mar 2012 20:33:06 GMT

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I prefer second-order for flanking subs, low-passed between 80Hz and 120Hz. This assumes the subs will be within a few feet from the mains, as described in the [Speaker placement and wavefront launch and room modes, multisubs and flanking subs threads](#).

I like a little bit higher slope, usually third or fourth order for more distant subs, usually low-passed below 80Hz, often below 60Hz. The further away the subs are, generally, the lower you want to cross them.

Speakers that have "built-in" helper-woofers, like 2.5-way speakers and constant directivity cornerhorns usually respond better with a first-order filter - just a single coil - allowing the helper woofer to blend with the midwoofer (or midrange) all the way up to 200Hz, sometimes as high as 300Hz. I find it useful to blend fully in the 100Hz to 200Hz range, but there is usually little or no benefit going higher than that. But with a single coil, it is inevitable that some higher-frequency energy will get through.