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Subject: Re: 1pi or 2pi for surrounds?

Posted by [Wayne Parham](#) on Thu, 15 Sep 2011 15:25:21 GMT

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What I mean is this - Run mains (and surrounds) full range. Flanking subs placed near right/left front mains should be low-passed between 90Hz and 120Hz or so. I prefer a second-order slope for flanking subs, third-order max. Don't use fourth-order if you can help it. The greater the slope, the higher the low-pass cutoff frequency should be. We want a seamless blend. More distant subs should be crossed lower to prevent localization cues, usually around 50Hz or 60Hz works well.

When I talk about flanking subs, I'm always talking about subs that flank the front mains. They smooth the midbass and midrange modes for stereo content. Surrounds generally don't have their own flanking subs. I mean, it wouldn't hurt to have them but I don't see them providing a lot of benefit either. Bass isn't directional, so the subs that are there will provide the foundation. Flanking subs are mostly for modal smoothing and the mere fact that there are so many sound sources in a multichannel system tends to do this anyway.