Subject: Re: Three Pi and Three Pi Sub Plans
Posted by Wayne Parham on Mon, 17 Feb 2020 21:13:51 GMT
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OutOfSpace wrote on Mon, 17 February 2020 14:25"If you can hear noticeably louder bass or midbass with the subs on, then they're set too loud. Thus is true no matter if they're set as multisubs, flanking subs or traditional subs"

I guess most car 'audio' guys that didn't get the memo.  Some of them are seriously rude about it, too.

timothyeyster wrote on Mon, 17 February 2020 14:22With all of that in mind, I may try implementing the flanking subs again when I install the center channel. If I do, could I check for proper integration using a measurement with REW from the main listening position? Sounds like I'd be looking for a relatively flat response at 100hz, and fewer peaks and nulls below that compared to the 3Pi on its own- correct?

That's right, exactly.  Set the SPL so that 100Hz is the same level as 200Hz and 300Hz.  What you'll also get is a reduction in the amplitude of the dip that results from self-interference from the wall behind the speakers and also  reduction of the dip from the interference from the sidewall nearest to the speaker.  The subs will provide extension as well.

You won't get much modal smoothing below 80Hz though.  To smooth the lowest frequencies, you need one or two multisubs placed far from the mains.  They might be placed at the opposite end of the room.

timothyeyster wrote on Mon, 17 February 2020 14:22I also had a thought: I'm using a miniDSP for the sub crossover and volume, and could easily implement a delay with respect to the main speakers- could that be used to approximate moving the subs back and beside the mains, or does that just open another can of worms?

That's actually an excellent suggestion for your room, since you're kind of limited in fore-aft placement.  You could delay the subwoofer signal a smidge to make it act similarly to the fore-aft displacement required by flanking subs.  That's what we're looking for - We want the phase difference to not be 180° in the 80Hz to 120Hz region where we normally find it.

The reflection from the wall behind the speakers is usually 180° from the main speaker's direct sound somewhere between 80Hz to 120Hz, depending on the speaker's distance from the wall. Having the flanking sub a different distance makes it not have this same null.  So the null is partially filled in.