Subject: More on subs
Posted by Barryso on Fri, 04 Jan 2019 17:35:41 GMT
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A friend has a really troublesome room. Nice gear but tough room.

We've implemented multiple subs in three steps in the past year or so. I'll spare you the details of why it took so long to bring it all together as there were a few technical obstacles to overcome with his big sub. But the wait has paid off nicely.

1 - Added a couple of small subs towards the rear of the room. He had a big sub (that goes really low) towards the front already. The additional subs were a big improvement. Yet moving around the room you could still hear the bass go in and out. The bass also didn't have the right texture and nuance yet but he was pleased enough with the changes to want to keep making improvements.

It was also enough of an improvement to motivate two others in the group to start using multiple subs.

2 - The next step was moving the smaller subs to the front and using them as stereo flanking subs. It didn't fix the suck outs in the room but did help the presentation of the speakers. It got rid of the floor and back wall bounce. Used fmods for a 2nd order low pass at 100hz. The speakers sounded better yet the room was still having all sorts of issues. It stayed this way for a bit as his big woofer has an odd computer crossover control that refused to behave.

3 - Fixed the crossover in the big sub and put it in the back of the room crossed over at about 60 hz with a 4th order crossover. You can still hear some bass mode shifts as you move around but they are far less dramatic than before. At this point the bass is clean, plentiful and has really nice texture. The bass in his room never used to have the right texture and often didn't have any texture.

The big sub in the rear of the room with the two smaller subs used as flanking subs works much better than the big sub up front and the two smaller subs in the rear.

He just got a new preamp but the subs made a far more significant change to the system. Additionally, the sub changes cost a tiny fraction of the preamp.

He may add another sub to the mix but as it stands right now the system is up two or three levels from where it started when it only had one sub. Quite an amazing improvement.

Subject: Re: More on subs
Posted by Wayne Parham on Fri, 04 Jan 2019 18:58:57 GMT
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Very good experimentation, and useful information. Thanks for the feedback.

I have almost always found that flanking subs are a first priority, and one or two distributed subs are next in priority. But sometimes the priorities switch - Rooms that have very stark deep bass modes in the 40-80Hz range might benefit more from distributed multisubs than from flanking subs. But you really need three or four subs to provide multisub smoothing anyway, so two of them might as well be flaking subs. Flanking subs always double as two of the bass sources of a three or four sub multisub arrangement.
