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Subject: Re: Subwoofers vs budget... where do you draw the line?

Posted by [gofar99](#) on Fri, 18 Jan 2013 20:40:29 GMT

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Hi, the problems I ran into were routed in the room dimensions and the spacing of the subs. Wayne is the expert here, but the wave length of sound in frequencies below say 200HZ is fairly long and in many cases a multiple of a room dimension. It is real easy to cause nulls and peaks with subs. The spacing between any two can (will) cause nulls and peaks as well. So when you try to marry up all the nulls and peaks into a unified sound it quickly gets out of hand. Move one sub and cause problems with two more and so on. Even with good test gear it can quickly become an effort in frustration. I ended up with the two I have side by side next to my listening chair. It was the right distance from the mains to plus up the sub 100 range without interfering much with the sound above 100 (there will always be some interactions). Mine are set for an F3 of 45 HZ. The mains are rated to 35 HZ and drop fast below that. The room is 12 X 17(long)X 9.5 high. The room testing program says the worst peaks are at about 335 and its multiples to 1200 ish. Worst nulls at the listening position are at 65 and 179 HZ. The placement of the subs next to me pretty much fixed the 65, but the 179 is still there. Placing my mains (Martin Logan Electrostatics) where ML said to cut down on the peaks quite a bit even if the speakers are further into the room than I would like. BTW they have a math formula on where to put them - likely only works for the particular speakers though. All in all no free lunch. I tried many combinations and locations on the subs, rather tedious doing all the measurements. Out of frustration I nearly converted the fireplace to a dual 15 inch sub cabinet. The number crunching said it would work.... spouse said some unprintable things so I guess you know what didn't get done.

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