
Subject: Re: LAB12

Posted by [Wayne Parham](#) on Mon, 10 Oct 2011 17:52:29 GMT

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The crossover to the sub depends almost entirely on the distance from the main speaker(s). The further away, the lower crossover needs to be made. I think a good rule of thumb for indoors use

To know what frequency that is, use this simple formula, where x is distance between main speaker and sub: $f = 376/x$

no need to go any lower in low-pass frequency. Don't low-pass below 50Hz or 60Hz, even for distant subs.

For indoors use, what's more important than distance between mains and subs is distance to boundaries. If the mains are soffit mounted, baffle flush with the wall, then this distance is zero and that solves a lot of problems. But if it's not, then it's best if the distance from sub and listener is different than the distance between main speaker and listener. Ideally, this difference will be at least half the distance between the main speaker and the wall behind it. The goal is to stagger the frequencies where there is self-interference from boundaries.