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Subject: Re: Here I'm again

Posted by [Wayne Parham](#) on Tue, 01 Feb 2011 19:38:58 GMT

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I'd be happy to send plans - on their way now - check your mail.

On the subs, no, don't high-pass the mains. This is a different strategy than what is traditionally done.

Prosound installations usually high-pass the mains and low-pass the subs with a traditional crossover. This is done to take some of the load off the mains and to reduce distortion at high power levels. This is done outdoors or in very large rooms where there is no modal problem and

The multisub configuration achieves a very different purpose. Indoors, it isn't possible for

This causes peaks and valleys in the response curve, and they are different at different places in the room. So the goal of the multisub arrangement is to smooth room modes by adding even more sources. Where a null might form from one bass sound source and its reflection, a second sound source in a different position can fill in the hole. By using several sources, the sound field is made more uniform.

Because the multisub configuration works by using several bass sound sources, you want as many as possible. Actually, you don't really need more than four, but still, having the mains generate some of the bass helps because it adds bass node positions. If the mains can't handle the power, then it might make sense to high-pass them and use more subs. But if the mains can handle the power, then it makes sense to use them. Your speakers definitely can handle the power. Low-pass the subs, but run the mains wide open. Read the last five or six pages of that "High-Fidelity Uniform-Directivity" paper linked above.