Subject: The Ouija board says...
Posted by Wayne Parham on Sat, 24 May 2003 03:21:33 GMT
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There's no way to know without modeling and/or empirical testing. The proper implementation of subwoofer crossover depends more on the environment than anything else.Outdoors, you want the subs close together and close to the mains, if possible. The idea is to keep the sound sources

happen.Indoors, it's a whole different ball game. The reflections from walls make lots of virtual

and cold zones in the room at various bass frequencies. The best thing to do it to distribute sound sources to form dense interference, averaging the sound field in the room.You don't want to crossover the subs as much as you want to blend them, the more you have the better it will be. You'll want to place the subs fairly far apart and provide as much bass overlap as possible, up to 300Hz. The trade-off is sound can be localized above about 100Hz, so you don't want a subwoofer placed far away from the mains that is running all the way up to 200Hz or 300Hz. This is a situation of competing priorities. Move the subs further from the mains and run them higher in frequency to smooth room modes, closer and lower to reduce localization problems. You'll have to do some experimentation to find the best combination of subwoofer positions and low-pass frequency and slope.