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Subject: Re: Fitting corner horns into a multi-use room  
Posted by [Wayne Parham](#) on Sat, 14 Apr 2007 14:53:01 GMT  
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don't contribute a sound of their own (buzzing or resonating). Also note that the strings and sounding board of the piano will produce sympathetic vibrations, which may or may not be distracting to you. If you already had speakers in that room, you should already know whether it was a problem or not. The cornerhorn arrangement is about sound quality as much as about efficiency. By placing a horn into a corner, sound radiates into eight-space. This increases the effective mouth area of the horn and smoothes its response. It also increases SPL by focusing the sound in a smaller area, and enforces a 90° radiating angle, set by the walls. When all horns (bass, midrange and treble) have the same 90° dispersion angle, the sound field is uniform through the room. You can walk anywhere in the room and hear the same tonal balance, not just in the "sweet spot." Since sounds are reflected within the room, off-axis tonal balance is important, making a uniform reverberent field. So the cornerhorn arrangement improves quality of sound by providing a better acoustic load for the horns and by generating a uniform reverberent field, in addition to increasing efficiency, dynamic range and SPL.

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