
Subject: The importance of the size of the room
Posted by [Miranda Starr](#) on Tue, 07 Feb 2012 05:08:56 GMT
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I've heard that larger rooms usually have more desirable acoustics than smaller rooms. Is this always true? How large should a room be in order to be suitable acoustically?

Subject: Re: The importance of the size of the room
Posted by [Wayne Parham](#) on Tue, 07 Feb 2012 06:55:10 GMT
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Study the topics of the reverberant field, late versus early reflections and room modes. Room modes come into play at low frequencies, and the reverberant field describes sound behaviour at higher frequencies. Both sound ranges are improved in larger rooms, or better yet, outdoors. Indoors, you have to deal with what you have, and the best approaches use loudspeaker directivity, source placement and room damping treatments to reduce the anomalies caused by boundary reflections and internal standing waves.

Subject: Re: The importance of the size of the room
Posted by [FloydV](#) on Tue, 21 Feb 2012 00:24:35 GMT
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I agree with larger is better. I've heard that a rectangular room is better, and in my experience it is true.

I'm currently hunting a new house, and I am looking for a room that is 17' x 14', approximately.

I usually sit about 11 feet from the front speakers and TV which are on the shorter wall. So, I'm not sitting at the back of a long room. The sound just seems worse in a square room no matter where you sit.

I think Wayne P. said that sheet rock with insulation behind it is desirable for its wave cancellation properties. I think in my new house I will fill non-insulated walls with foam insulation. The most insulated walls in a typical room will be two. Those will be outside walls of the house.

Floyd

Subject: Re: The importance of the size of the room
Posted by [Miami](#) on Thu, 19 Apr 2012 21:36:13 GMT
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I would think that it depends on the size of the speakers as well. You would want the size of your speakers to compliment the size of your room and vice versa.

I know that's kind of a generic answer but it's a good starting point at least.

Subject: Re: The importance of the size of the room
Posted by [FloydV](#) on Fri, 20 Apr 2012 07:46:28 GMT
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I've settled on a new house with a 14 x 20 foot theater. No windows, and all walls insulated. One entry door. A perfectly symmetrical rectangle with no anomalies. Heavy carpet also.

Eventually this will accommodate a 100" screen. My current Mits DLP is 73". I calculate that I will run 180 feet of 14 gauge wire for seven channels, and two 35 foot coax cables with RCA ends for two rear subs.

Fortunately, before the insulation and dry wall go up, I will have a chance to run the wiring and boxes.

I've decided to go with wall sconces for normal lighting, and 4 eyeball cans for viewing. After trying several light types, I've decided to go with a blue that slightly extends into the UV.

Red is too difficult to see by, and green shows up more on the screen.

Floyd
