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Subject: Re: Omni-Pi

Posted by [Wayne Parham](#) on Fri, 16 Jan 2009 23:56:38 GMT

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I wouldn't build an omnidirectional speaker because I don't want omnidirectional radiation. In fact, I've spent 30 years working on designs that are directional. The key thing for me is being uniformly directional. The goal is a wide pattern that covers the listening area, but limited in directions where we don't want the sound. I prefer a fairly limited vertical pattern to reduce ceiling slap and horizontal at 90° because it fits the traditional rectangular listening room. An omnidirectional speaker with uniform spectral balance at all angles would sound great outdoors. It would still be wasting sound energy on directions that weren't useful though. If it were in a room, the sound directed towards rear walls would make ugly interference patterns in the room. So I would snug such a speaker tightly into a corner, forcing radiation into a 90° wedge directed into with uniform spectral balance.

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