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Subject: Re: Horns, transmission lines and reflex cabinets

Posted by [Wayne Parham](#) on Thu, 11 Aug 2005 15:05:41 GMT

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I think your assessment is correct. But I also think it's important to look closely at this, because small basshorns are the same thing as tapered pipes in all but name. Bass-reflex speakers provide augmented bass output too. So to talk about the differences, one must first look at the similarities. There's a huge amount of overlap in each of these designs. Each will have Helmholtz resonance, determined by the dimensions of the exit hole and the volume of the cabinet. Helmholtz resonance is normally associated with bass-reflex speakers, but it is just a physical property that happens when you have a chamber with a hole in it. There will also be standing wave modes, determined by cabinet dimensions, component placement and geometry. And there may be some horn action, depending on flare rate and environment, like corner loading. So there will be each of these properties, whether the speaker is called a reflex system, horn or transmission line. The overlap of each of these makes them more similar than different.

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