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Subject: Re: Folded horns with curves, about 60 – 500 Hz  
Posted by [Wayne Parham](#) on Mon, 21 Nov 2005 15:38:36 GMT  
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I've built horns that do this, and I can tell you that there are several suitable designs. A straight horn will do it, and so will a folded horn if the bends are arranged so the higher frequencies propagate out. The thing is that there's a bit of a balancing act, in fact, several. The most obvious is wavelength related. The horn must be large enough that the diaphragm is loaded at low frequencies, but that means the dimensions will be several wavelengths at higher frequencies. So not only do you have issues of wavefront propagation and reflections but also standing wave modes and propagation time. Folding, bends, reflectors, etc. Simulation

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