Subject: Re: Horn phase
Posted by Adrian Mack on Mon, 15 Sep 2003 11:32:12 GMT
View Forum Message <> Reply to Message

Could we liken it to a simplification as well; As the acoustical impedence gets higher (by means of compression chamber in horn, for example), then efficiency is greater and maximum output is therefore increased. And as the acoustical impedence gets higher, excursion is reduced. This seems to be what happens in a horn, and ones with higher acoustical impedance reduce excursion more and increase efficiency and therefore total output. I guess it happens sort of in a vented system too, but to a much smaller degree. Technically speaking its +3db in efficiency over a same-sized sealed cabinet. So it has a slightly higher acoustical impedence, and also means excursion is reduced. Generally horns have more response ripple than direct radiating cabinets. The acoustical impedence you shown in your graphs have lots of ripples, which show up in the frequency response. Maybe some horns don't do this, but it looks like most do.Adrian