Subject: Re: Doppler distortion
Posted by Bill Fitzmaurice on Wed, 08 Sep 2004 18:18:38 GMT
View Forum Message <> Reply to Message

There of course is a point at which excursion induced distortion makes a smaller Sd impractical, but on the other hand driver sourced distortion is so much less in a horn than in other speaker types that it's a rather moot point. When you consider that a driver in a horn running at 12dB higher sensitivity than in a direct radiator is going to have 1/16th the excursion demand for the same SPL the Doppler factor doesn't seem such a big deal. In very high excursion situations you're also probably talking about a subwoofer, and in that case the 140 Hz scenario is also moot, since you're not likely to be crossing over at higher than 100 Hz, preferably no higher than 80 Hz, anyway. Doppler can be quite a significant factor in the higher frequencies, but like many other factors once you get below the directional frequencies it is generally insignificant.