Subject: Re: More on time alignment. Wayne?
Posted by Wayne Parham on Thu, 31 Aug 2006 22:47:50 GMT
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The thing is, the companies that boast loudly about "time alignment" usually use it as a way to set themselves apart and I think that's disingenuous. It has always appeared like sales rhetoric to me, since the companies that make an issue of it are doing nothing different than others

perhaps but certainly not a true zero phase alignment. So to use the term to set themselves apart smacks of marketing mumbo-jumbo to me. For decades, most every loudspeaker manufacturer has taken steps to match the subsystems for proper summing. Altec recommended a simple procedure to match the HF and LF drivers in the crossover region back in the 1960's and then revisited it with an application note (link below) in the 1980's. This phase matching is done for summing, to reduce the amount of destructive interference. The idea is to prevent two adjacent drivers from cancelling each other through their band of overlap, causing a spiked dip in response. A frequency response anomaly is what you'll hear if there is a problem with summing, not the time offset.
Altec Application Note AN-9