Subject: Horn phase and time alignment
Posted by dwkurfma on Fri, 03 Oct 2003 03:40:29 GMT

Hi Wayne,Waiting for a new software release to drop into production so I'm sitting here with a few spare minutes on my hands. Thought I'd get back to you with a pragmatic response to your question on the HE forum. It has been several years since I last heard a JBL 4430 monitor, but it always struck me as having something very "right". It may have been the matching of directivity between the lf driver and the hf horn at the crossover point; it may have been the overall design of the individual components, expecially the 2344 horn; it may have been the low group delay; it may be that these animals really could do a credible job of passing a square wave. Don't know. Just wanted to pass along that in my opinion, this is an example of a design that works well. (Don't know what the actual phase response characteristics were/are. Some interesting details are provided in the following two technical/user documents, particularly in the Time Domain Response section of the Tech Paper. This was first time I had seen the formula for calculating off axis nulls.)http://www.jblpro.com/pub/technote/tn_v3n01.pdfhttp://www.jblpro.com/pub/obsolete/443035.pdfBest regards,Dan