Subject: Re: Making speakers "disappear"
Posted by Randy Bey on Tue, 10 Apr 2001 12:27:03 GMT
View Forum Message <> Reply to Message

My Klipschorns have a fairly unique quality that I have attributed to their "set in stone" placement. This is that when you close your eyes, the whole room falls away and there is nothing left but music. The K's point directly inward, and definitely have a "sweet spot" where even a foot one side or the other makes a big difference.When I listen to other more conventional hifi, with direct radiators facing straight ahead, I get the sensation, eyes closed or not, of speakers reproducing music. Maybe if I squint my "ears" I can grasp some sensation of soundstage, but the soundstage is weenie, and transient.I think it is true that Klipschorns "beam" a lot, and this contributes both to their sweet spot and a reduction (opposite of what one would think) of room reflections. The direst room reflections being the ones closest to the listener, as the ones that are nearest in time to the "real" signal cause the most grief. The beaming effect sends 90% of the audio energy straight to the rear wall, where time effects reduce (but not eliminate!) it's effect.To address this beaming I have put acoustic panels (ala Jon Risch) on the rear walls exactly where a flashlight, sitting on my K's and aimed the same direction, hits the wall. A third directly between them on the forward wall. (Oh, and a pair of bass traps in the last remaining corner, floor to ceiling).But, let's talk about time and phase. I have heard "time coherent" speakers, Vandersteens, and have been unimpressed. The Ks, with their baffle mount tweeters and squawkers, not to mention the W folded horn, don't even pay lip service to time coherence, and blow the Vs away. However, I have an open mind and believe the concept of time coherence, and if you buy that, then phase coherence is the table you set it on.I don't know enough about impedance and capacitence and inductance other than remembering that signal phase undergoes 90 degree shifts one way or another depending on what characteristic is predominate. A good engineer can account for that stuff, but what happens to absolute phase? Isn't absolute phase a necessary corrolary of phase coherence?A signal with both high and low components to it gets split by a crossover (and it's caps and inductors) and gets generated by motors (with their own impedance). The absolute beginning of the sound, as it appears to both motors, may not be at the same moment in time, but at least in "phase" where a positive transition occurs at the same time on both motors.I've seen decay plots of speakers that look like hell, a square wave going in, and this ringing mess coming out. Interestingly enough, I imagine that many "good" speakers would have this ringing mess come out, but the results while playing music are still palatable.Wayne, I respect your experience and knowledge on this topic. Can you speak to these concepts of phase and time, and how they relate to soundstage or imaging?