Subject: Akhilesh's Tru-Sonic System
Posted by Wayne Parham on Thu, 06 May 2004 23:00:19 GMT
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I went to Akhilesh's house today because he finished building his Trusonic-based loudspeakers. What a pleasant sounding speaker system they are too! It's a real treat to hear these speakers.Actually, the cabinet was finished a few months back, and it housed a single Stephens 8" driver in a vented cabinet of about 3.53. The speaker sounded very good in the bass and midbass, but just couldn't quite hit the top-octave. And really, somewhere between the upper fundamental vocals and the lower overtone region, the Trusonics sound like they exhibit some peaking, most likely from cone flex. So that made them sound a little bit nasal on certain passages.What I heard today removed all traces of that. This is what folks running super-tweeter-augmented wide-range drivers dream for. The sound was clean and pure. Simple. I really enjoyed listening to his system, a Decware Zen Select amp driving his Trusonics with Vifa soft-dome tweeters taking over above 10kHz.Akhilesh added a series coil shunted by some bypass resistance to the main drivers. This attenuated just a hint of the midrange, which really smoothed the Trusonics vocal range. Because of the added Vifa soft-dome tweeter, cymbals and brushes on the high-hat, not present before, really came through with subtle clarity. Akhilesh chose a simple single-capacitor crossover to switch on the tweeter.When you are sitting right on-axis, the sound was most impressive. I mean, it was really, really nice. But don't move. As I listened, something occured to me. What occured to me was this: Guys that like using first-order crossovers define a narrow "sweet spot" because that's where there are no nulls.In this case, the Tru-Sonics are also used fairly high so they become quite directional, like a horn. The tweeter is not very directional at all, but because it uses a first-order crossover, it overlaps with the main driver quite a bit in the 8kHz to 16kHz octave. That's where cymbals and other HF events "live." So as long as we're equidistant from the tweeter and the main driver, the two sound sources are phased and there are no nulls. But move 3/4" of an inch further from one than the other and you're in a cancellation node. Another 3/4" and you're on the next cycle. You most certainly can hear this when you move off-axis in any direction.The net result of all this is that the "sweet spot" becomes very important. You really need to be sitting on-axis to appreciate a system like this. When you're there, it's wonderful. You gotta sit in the sweet spot. When you're there, everything "clicks." You're "dialed in" and the "imaging" is perfect. The system really does sound good.Akhilesh has a real winner. It pulls you in, and you just want to sit there and listen. It's mesmerizing, so don't even turn on the stereo if you have other things to do. You won't get them done. The low-distortion of the alnico-motored Trusonics and the addition of his super-tweeter and midrange compensation circuit make Akhilesh's speakers top-notch in my book. If you've got a pair of Trusonics, you might consider building a pair just like these. They're really nice.

Subject: Gee thanx Wayne!
Posted by akhilesh on Fri, 07 May 2004 12:44:14 GMT
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Glad you liked the speakers. All thanx to this forum, and posts from Folks like you, MArtin and HurdyGurdyMan...folks with mor experience who are free with their advice. thanx-akhilesh

Subject: More extended experiences with Stephens trusonic 80FR
Posted by akhilesh on Tue, 22 Jun 2004 13:12:34 GMT
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PLease check this post
out:http://www.audioroundtable.com/SingleDriverSpeakers/messages/520.htmlthanx-akhilesh
Thoughts & experiences with Stephens Trusonic 80FR