Subject: Re: Cornerhorn too much?
Posted by Wayne Parham on Tue, 04 Sep 2007 15:19:50 GMT
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The thing I find most troublesome is the hardwood floors. If the floors are laid upon concrete foundation, then they're fine. But if what you have is a crawlspace underneath a raised hardwood floor, that's probably going to cause trouble no matter what kind of speakers are used. It tends to make the bass sound boomy.Raised hardwood floors and room treatmentsOn a budget, you

nice speaker, and it has the advantage of horn loading. If your budget is higher, the Professional

rooms, from large to small, with good results. The only time I don't like them is in extremely small rooms, under 10' in length. They're too much speaker for a room that size. But when the room is bigger than about 15', the cornerhorns work well. Your room is 17' x 11', so they'll sound pretty good there. If possible, put them in your corners with 11' wall between them.About the tweeters, I find that output up to 16kHz gives plenty of sparkle. Cymbols and chimes sound right, and it doesn't sound muffled, like there is a lack of treble. But I won't kid you. You can hear a little extra "air" in that region between 16kHz and 20kHz from a tweeter that goes up that high. You can tell the difference between a ribbon or dome tweeter with response up beyond 20kHz and a compression horn that goes only up to 16kHz. It's subtle, and you don't miss much. The compression horn gives you all the sparkle and doesn't sound like it's missing anything but a whisper of "hiss" or "air".There are a few compression horn tweeters with beryllium diaphragms that can reach 20kHz. That's an excellent way to get that last few kilohertz of audible sound. But they're expensive. Another option is to add a super-tweeter, but I'm not as thrilled with this

at this high frequency, so summing is a problem. Super-tweeters crossed over above 5kHz sound "phasey" to me so I don't use them. One of the strengths of the cornerhorn is its uniformity of response throughout the listening room. When a super-tweeter is added, this is lost. That's the reason I use a compression horn tweeter as the highest frequency device.Here's the thing that makes compression horn tweeters so good. Let's say you're playing some music with the low passages around 95dB/M or 100dB/M. That's not terribly loud, particularly if you're sitting five or ten feet back and the low passages are the average level. Lots of music is this way, particularly classical and some rock, like art rock. When the music rises to a crescendo, or hits a loud peak, it's at least 15dB to 20dB louder. That's not uncommon, just a 15dB to 20dB dynamic range, not unexpected. What you have here though is a 120dB peak, and that's something the dome or ribbon just won't do. You'll send the dome flying out into the room at that level. But the compression horn tweeter has no problem with sound at those levels. It's designed for that.Compression horns do a few things very well, better than any other kind of tweeter. They're designed to reach 120dB/M and more. They don't need a lot of power to reach these levels either, they're just cruising and distortion is very low. Another thing is their controlled directivity. Horns put the sound where you want it, and they can be used to uniformly cover the listening area. A good horn tweeter will put the splash of the cymbols throughout the room, not just striaght out on-axis. Their controlled directivity, low-distortion and wide dynamic range are the strengths of compression horn tweeters, and that's why I tend to prefer them over other tweeters.