Subject: MORE ON MIDRANGE IMPORTANCE
Posted by Marlboro on Mon, 31 Dec 2007 22:56:34 GMT
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Sunny,Along with the midrange discussion I had above, I also found it very important to give each midrange speaker its own completely separate enclosure. And when I say separate, I mean separate---not just a space in a part of a bigger box, but a completely "1/2 inch air space separated from its peers" enclosure. This completely eliminates any coloration caused by the other midrange speakers. Additionally each enclosure is a 23.5 inch pvc tube stuffed with dense 4 lb/cu foot fiberglass, wrapped in fiberfill battens. The tube forces the back wave through the tube and completely through 47 inches of fiberglass before it has to get back to the front of the speaker. The harmonics in the tube peak at add odd fundamentals. There is no even ordered harmonics in a tube. Why this is good is this: when tube amplifiers overload they tend to produce lots of less objectionable but soft mushy sounding even ordered harmonic distortion. Odd ordered harmonics and distortion are the part of the sound which is clarifying, but in large quantities it sounds screeching. Since my midranges have to have their back sound go through 47 inches of fiberglass, and each one only has to handle 6.25% of the total sound volume, not much comes back through. But the part that does tends to give the speaker a more DEFINED CLARIFIED SOUND. This is essential with the mid range. And since the distortion levels are low because of the percentage of the total bandwidth, and low because no woofer sounds or tweeters sounds are dragging it into clipping distortion, my midrange is very exceptionally super.My opinion of course, but if one has not heard a midrange in this way,on has no idea how important the midrange can be to the music, particularly those who have designed systems around ways which by their nature tend to compromise the whole midrange of the music---where all the fundamental tones of everything "I" listen to exist. Others who listen to lots of home theater with gun shots and explosions may not notice.Marlboro