Subject: Re: stuffing a horn?
Posted by Martin on Tue, 06 Jul 2004 11:52:45 GMT
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Adam,You wrote :"Transmission lines are 1/4 or 1/2 based enclosures (like horns) and use polyfill to slow the speed of sound, and thus shorten the transmission length. A 30 Hz, 1/4 wave transmission line has a length of about 9.4 feet. If stuffing is used in the line, it reduces the length required to around 3-4 feet. This his a huge advantage."First, a transmission line is a 1/4 wave device just like a horn. There are no 1/2 wave action in either, that would violate the laws of physics for an open ended geometry. Second, the fiber does not slow the speed of sound very much. Fiber only attenuates the higher frequencies and will not result in a drmatically shorter line length. The speed of sound is slowed less than 10% with very heavy stuffing.Hope that helps,Martin