Subject: Re: Answers on Array Wiring
Posted by Jim Griffin on Wed, 18 Aug 2004 01:50:39 GMT
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Ralph,I don't think I mentioned anywhere that the laws of physics (or acoustics at least) are in danger of being validated with this line array stuff. Rather I point out that it is likely that you will not achieve those ideal efficiencies as you take it to their limits.Now first consider an ideal example. Let's say you mounted 100 of those little tweeters that were proposed early in this thread (remember they are individually 87 dB SPL. Even that number of tweeters would only yield a theoretical array gain of improvement of 20 dB or an array sensitivity of 107 dB SPL if ideally coupled. In practice the radiation patterns would not overlap for those 100 drivers so the ideal array sensitivity would be less than perfect. Now measure that array and you'll observe that you have lost some of that near perfect efficiency. (The best solution is to measure the array's performance or have exceptional good modeling software to determine the overall response).Now higher sensitivity drivers can be arrayed but watch out how those high sensitivities are achieved. If their horizontal and vertical radiations are restricted to attain those higher efficiencies, then you'll observe less than ideal efficiency performance for the array.Bottom line is that the laws of acoustics still apply so don't expect miracles.Jim