Subject: Re: One of my favorite little two-way speakers
Posted by Wayne Parham on Thu, 20 Nov 2003 21:14:38 GMT
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I've rather enjoyed your comments here, and certainly didn't consider them to be negative, either about the loudspeaker system or the components that made it up, including the tweeter. I just wanted to mention my observations about tweeters in this price range, and of the Motorola (now CTS) piezoelectric product offerings in particular.About attenuation of the KSN 1038, this was required for matching with the JBL 2115 because the JBL part wasn't nearly as loud as the Eminence Alpha 8 or Alpha 10. The situation is reversed with the Eminence midwoofers though,

Eminence Alpha 8 or 10, you'll see that the tweeter isn't as loud as the midwoofer. There is a slight shelf, caused by the tweeter's output being less loud than the midwoofer. This is followed by a rise in output from the Alpha's, which is subdued by the coil. But the point is that the tweeter is already generating less output than the midwoofer, and adding series capacitance attenuates it further.If your room is a bit bright or you simply prefer relaxed tone, then additional attenuation of the tweeter may be perfectly suited to your tastes. But the area that is hottest in the current model is actually the 1kHz to 4kHz vocal overtone range, which is covered by the midwoofer and not the tweeter. That's what the series coil is installed to subdue.In regards to addition of a 22 ohm shunt resistor across the speaker terminals, there is absolutely no harm and I still like the idea. My

capacitive load at high frequencies, this may cause come amplifiers a problem, and some might even oscillate.Some SET amps are known to be pretty sensitive to their loads, and I expected that perhaps the output transformer might interact with tweeter capacitance in a peculiar way, again, possibly even setting up an oscillation. So the 22 ohm swamping resistor was suggested to damp the circuit, just in case. There certainly is no harm in doing so.I haven't found a single case where it was needed though, and I personally cannot hear the difference on any amplifier I ever used

would be the first thing I would suggest, if one were to find high-frequency oscillations in the circuit.