Subject: Re: Sound characteristics of different horn flares and materials
Posted by str8aro on Tue, 28 May 2002 01:05:12 GMT
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Hi pk,For a clear sound, my choice would be a constant directivity horn - that is, one with straight sides. No nasty narrow throats with parallel walls, though - just a horn that looks like a pyramid. As Wayne noted, this kind of horn will be all midrange and no treble. This is because the response will be identical to the compression driver's power response. The solution is to eq the horn to get a flat response. On my current horn, I get fairly flat response with a 1st order Butterworth highpass at around 6khz, but every driver and horn combination would be a bit different. I do this with an active filter, btw.I personally like the controlled directivity a horn like this offers. In my room, a 40x40 horn covers an area much larger than my listening position, but substantially reduces room interactions. This might be one reason it sounds clear to me. The other is probably that this type of horn has the lowest throat distortion due to its more rapid expansion near the throat.John