Subject: Bill Fitzmaurice - Questions
Posted by Ralph on Mon, 20 Sep 2004 20:31:51 GMT
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Thanks for sending measurements for the DR200.I have a few questions.1. What is the port frequency? There was more output below 125Hz so I assume it was 60Hz or thereabouts?2. How do you decide what frequency to port? Is it mathematical using T/S parameters or is it empirical cut and try? If mathematical, how do you determine how much parameter offset from horn interaction? What I mean is the T/S specs will shift and Fs will drop when installed in the horn, so shouldn't calculations use the shifted T/S values?3. What measurement system do you use? What software do you use to make your response charts?Thanks,Ralph

Subject: Re: Bill Fitzmaurice - Questions
Posted by Bill Fitzmaurice on Tue, 21 Sep 2004 16:17:55 GMT
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The Fb was tuned to 80 Hz. I could have gone lower but for PA vocals there's no need for response below 80 Hz.To tune a horn/reflex comination first you measure for the Fs(h), with the driver in place but the rear chamber open to air. That Fs(h) is the lowest frequency you can tune the Fb to, and doing so gives you the lowest extension but also the least sensitivity at the horn Fc. To gain more sensitivity at Fc you can tune higher than Fs(h), with a loss of low end extension; where to go depends on what you want to get. I wanted 80 Hz so that's where I tuned to with DR200. There comes a point where you can't tune any higher, so then you just go sealed. If that gives an Fb that's still unacceptably lower than the Fc then you have to reactance annul by making the sealed box smaller.I measure with a sine wave generator as a source and a Phonic PAA2 doing the measuring; it is accurate and has an unweighted mic setting. I don't have software for my charts, I make them up in a Works spreadsheet.

Subject: Thank you
Posted by Ralph on Tue, 21 Sep 2004 21:54:04 GMT
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Thank you very much. Your response is most helpful.Ralph