
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 combination first you measure for the $F_s(h)$, with the driver in place but the rear chamber open to air. That $F_s(h)$ 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 F_c . To gain more sensitivity at F_c you can tune higher than $F_s(h)$, 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 F_c 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.
