

---

Subject: Re: Martin King Fostex speaks

Posted by [Wayne Parham](#) on Tue, 06 Apr 2004 03:08:20 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

I'd rather let Martin speak for his designs. But he is quick to point out that the amplifier chosen affects the values required for the filter he recommends for baffle-step correction. He suggests that some amplifiers with higher output impedance might benefit from having BSC components installed, but using reduced values. An extension of this reasoning is that there are some conditions that would make those values be zero, so that means some amps would require no additional components, essentially having a built-in filter that acts like a baffle step correction circuit would. In my comments, I essentially suggested the same thing. Amplifier output impedance interacts with the rest of the components in the output circuit. Not only does it act as a voltage divider but reactive properties in the system are modified. The electro-mechanical properties of the motor/drive interface are shifted, so the speaker acts like it has higher Q. Also, the behavior of the crossover and any other electrical components are shifted. One thing that you couldn't help but notice was that the sound from the speaker was pretty strong in the bottom octave when connected to a Paramour amplifier. That led me to speculate that the Paramours are somewhere close to being in that condition where BSC values equal zero. It sounded much like what you'd expect from the same speaker and cabinet driven by an amp with low output impedance and BSC with 6-12 ohms series resistance and maybe a couple millihenries inductance. That's not very scientific 'cause there were no measurements, but you could hear about 6dB more below 100Hz with the Paramours. Certainly enough to be noticeable.

---