

---

Subject: Re: Reactance annulling

Posted by [Bill Fitzmaurice](#) on Tue, 05 Oct 2004 12:02:24 GMT

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

---

Exactly- though the mathematical terminology used is far more complicated than the physical processes involved; perhaps mathematicians, like lawyers and politicians, enjoy cloaking simple concepts within complex jargon to make their importance in the overall scheme of things seem more significant than it really is. The simple explanation is that a horn is most efficient to  $F_c$  if the system resonance is close to the  $F_c$ . When system resonance is below  $F_c$  you push it up higher by making the compression chamber smaller. This ties in with why you don't want to start with a driver  $F_s$  below  $F_c$ , because the acoustic impedance load of the horn and the front chamber push the effective  $F_s$  down, and can make the size chamber required to get system resonance back up near  $F_c$  impractical or even impossible.

---