

---

Subject: Sowy for budging in again

Posted by [mollecon](#) on Sun, 14 Sep 2003 21:39:49 GMT

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

---

Adrian, ELECTRIC impedance & ACOUSTIC impedance isn't the same! When you look at the frequency/impedance curves from drivers, you're seeing the ELECTRIC impedance - not the acoustic one...Actually, the reason why horns are working so well is that they work as impedance transformers - on the acoustic side! A driver is 'born' with a natural high acoustic impedance (speaking in popular terms, we have a rather heavy diaphragm trying to move some light air), & the air's acoustic impedance is low. So the horn offers a high acoustic impedance at the throat (for the benefit of the driver), & through the length of the horn this is converted to a low acoustic impedance, at the mouth. Closed & reflex boxes aren't very good at this transformation, sad to say, they stink - so the efficiency for them is max ~5%. But they are MUCH easier to handle when it comes to size in the bass area. The pay (again!) - bigger amps. Btw., the LAB 12 offers very good performance in reasonably sized boxes - too bad they are not easy to get a hold on in my country.

---