

---

Subject: Re: Bass in groups

Posted by [GraemeG](#) on Thu, 02 Sep 2004 07:21:00 GMT

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

---

As Bill pointed out, just one of the factors is mouth area. A small bass horn can have a mouth area 1/10 of optimum size and therefore will have very low efficiency at the low end. The more of these horns you put together, the closer to ideal the mouth area becomes, and the more efficient the box becomes at the low end. However, just as there is an ideal mouth size, there is a minimum horn length for a given frequency. A short horn will not behave as a horn where the length is less than 1/4 wavelength. If you have a horn with say 1m path length, then even with a large mouth area the response will drop off below 80Hz. Increasing the length to 2m can get you to near 40Hz. Therefore, if you want to make small horns to be used in groups, make them small by reducing mouth area without sacrificing horn length. This is most easily achieved using small drivers (hence small throat to start with) such as 10". Cheers Graeme

---