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Subject: Re: Backhorns

Posted by [roncla](#) on Fri, 07 May 2004 14:37:33 GMT

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Well a back horn works on several principals. The first being the changing of pressure to amplitude ,which a TL dosent do.A backhorn is , in essence, a 1/2 wave resonator that has to be 1/4 wave minimum length.The higher efficency comes back from the flare rate , a very tight flare, ex. hyperbolic, can have up to a 70% conversion from electrical energy to mechanical. A conical will be quite a bit lower.However the tighter flare will increase distortion.The main factor in a horn is its ability to cover 3-4 octaves in gain, where a BR would cover around 1/2 octave, as well as the perception of "speed".You add to this the TL action and you get superior (in some designs) results. Its all in what you really want.I switched from TLs and TQWT (kinda TL,BR,horn action)simply due to the extreem dynamics and reality of the sound.ron

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