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Subject: Basshorn or Transmission Line

Posted by [Wayne Parham](#) on Thu, 26 May 2005 20:10:16 GMT

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Are basshorns really horns or are they tuned pipes?

I've always considered bass horns to be resonant devices because of their size. Devices that are small enough to be portable resemble tuned pipes more than horns, in my opinion. A resonator is purely resistive at resonance. So is a horn in its passband, but over a greater bandwidth and for a different set of reasons.

I'm not sure it matters, since basshorns are usually only used for an octave or an octave and a half. But I wonder whether it is more appropriate to consider basshorns to be transmission lines or tuned pipes.

Typical basshorn acoustic impedance and response

Below 100Hz, impedance shown above is highly reactive. It acts very much like a tuned pipe.

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