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Subject: Re: Horn mouth vs. front baffle or "speaker cone"

Posted by [Wayne Parham](#) on Mon, 03 Sep 2018 18:31:02 GMT

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I think what you're talking about when you say "fore and aft" is the acoustic center. It's the position of the sound source - The point in space where sound originates.

This is most important when phasing with other sound sources for proper summing. It's also relevant when determining the SPL and falloff via inverse-square calculations.

The acoustic center is not obvious. Some people simplify it as being the location where the voice coil is. Some simplify it as being where the diaphragm is for direct radiators or the mouth for horns. But none of these is correct. The acoustic impedance has an influence on the position, because impedance has a reactive component. If the impedance were purely resistive the position would be a little more obvious, but being reactive and changing with frequency means it moves.

Do a search here for "acoustic center." There is a lot of material online that describes it in more detail.

Acoustic Center

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