Subject: Open Space in a ported cabinet
Posted by Eric J on Tue, 27 Sep 2005 02:21:45 GMT
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Assuming that you need an open space leading to the port in a ported cabinet, are there any calculations that define the volume of the required open space?I'm using a ported design for the tubular midranges in my array. The mids are the 3 inch Sammi's that used to be available from PE, and they are placed in a 4 inch PVC tube about 22 inches long. The tube has a volume of 287 cu inches, and the port is tuned to 66hz, which is 1 inches in diameter and 2.13 inches in length. I have no intention of asking the Sammi's to produce sound much below about 100hz, since they cross to the sub at about 125hz with a 24 db/octave active slope.In fact, the only reason I'm using the ported enclosure is because the modeling shows them to be essentially flat to the 66hz turn of the port. If I arrange to have an interior tube of about the same diameter of the port tube but using chicken wire or perforated plastic running from the speaker to the port to keep the internal fiberglass in place, would that work? Or would that be too much fiberglass in the cabinet?eric j.

Subject: Re: Open Space in a ported cabinet
Posted by Eric J on Tue, 27 Sep 2005 17:45:03 GMT
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I see no response here.However I have received some elsewhere. It was concluded that a closed tube would be best. Opening the tube at the back would accentuate the the pressure node right where the port is. Making the port bigger would simply turn it into a transmission line speaker, and then 23 inches would prably not be long enough.However I am planning on testing a model with an open back stuffed very tightly with fiberglas, and comparing it to one with a closed back stuffed tightly with fiberglass.eric j.

Subject: Re: Open Space in a ported cabinet
Posted by Wayne Parham on Tue, 27 Sep 2005 19:10:46 GMT
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Pipes, tapered pipes and Helmholtz resonators