Subject: port dimensions - pro pi7
Posted by jazzbo on Mon, 17 Sep 2001 12:40:37 GMT
View Forum Message <> Reply to Message

Hi Wayne-Sorry to bother you with another question, but better safe than sorry when it comes contruction. If you don't mind could you please clarify the 15 1/8" dimensionon the pro pi7 plans. I am thinking that it is the distantce from the outside of the cabinet to either the inside or outside of the port (the piece of plwd that defines the length of the port). If this is the case, I was trying to determine how this configuration would result in a port length of 12" as determined in the pialign program. I noticed there is an adjustment of lenght due to area, but I could not find a formula for calculating this adjustment. Also, for a port that "turns corners" like the one for the pi7, is the adjusted port length then measured along the centerline of travel through the port?Thanks again for your patient answers.

Subject: Re: port dimensions - pro pi7
Posted by Wayne Parham on Tue, 18 Sep 2001 03:00:05 GMT
View Forum Message <> Reply to Message

The port is 15 1/8" long and shares a wall with the cabinet. It sort of looks like a periscope. It can't be described very well with the Helmholtz formula because of its unusual shape. But I've tested it to make sure it's right.

Subject: Re: port dimensions - pro pi7
Posted by jazzbo on Tue, 18 Sep 2001 12:33:37 GMT
View Forum Message <> Reply to Message

Thanks Wayne-I can see that the physics of speaker design can become quite complex!Just a couple of short follow-ups:Is the 15 1/8" dimension (shown on the pro pi7 plan), the inside measurement of the port, or from the outside of the cabinet to the inside of the port?If one wanted to stay with a straight port, could it simple exit the side? I know this may not look the best, but I was wondering if it would be worth considering.Thanks Wayne

Subject: Re: port dimensions - pro pi7
Posted by Wayne Parham on Tue, 18 Sep 2001 21:02:44 GMT

15 1/8" is an inside dimension. The port shape can be anything, but the Helmholtz formula is a simplification that only describes straight ports. That doesn't mean a curved or bent port is a problem, it's just that you want to measure impedance of the finished cabinet to confirm the resonant frequency is right.