Subject: plan request & pi alignment Q
Posted by the_reflex on Sun, 23 Sep 2007 09:36:42 GMT
View Forum Message <> Reply to Message

Hello Wayne,first of all congratulations for the original designs.May I have the plans for the theater 3 an 4 please? I want to build a 3 way system with lateral woofer, 12" midrange and horn tweeter and I'm interested to test your pi alignment theory.I have a few more question:1. how much influence have the proportions of H/W/D for the final result of the bass? 2. If I don't have so much space can I made a front baffle a little bit narrow? If so, how much is the tollerance (10-20%) ?3. I have noticed that you use speakers with higher Qts that usually (or in theory) are not suitable for the reflex application - especially the eminence. Is this the "secret" to obtain a deep bass and high efficiency from a PA speaker?Thank You in advance!A.

Subject: Re: plan request & pi alignment Q
Posted by Wayne Parham on Mon, 24 Sep 2007 13:19:12 GMT
View Forum Message <> Reply to Message

The internal dimensions of the cabinet have very little to do with response in most models, as they are bass reflex speakers. The tuning mechanism is Helmholtz resonation. An exception is the

The position of the drivers and port are important in this model, as is the position of damping material inside. These prevent standing wave nodes from causing response anomalies.As for motor Q, most of the smaller cabinets have woofers with low Q. Models with relatively high Q drivers need larger boxes for proper damping.