Subject: Need an educated guess from someone more knowledgable: Posted by Garland on Tue, 03 Jun 2003 15:36:42 GMT View Forum Message <> Reply to Message

I've got a pair of PSB mini bookshelfs which sounds ok but has a too rich bass hump. I was thinking of building a larger cabinet for the drivers to see if I can tame and extend the bass. These have an internal volume of approx. .38 cu. ft. and a port 2" dia and 4.5" long. Any ideas about sizing the cabinet or taming the overly rich bass?Thanks.Garland

Subject: Tiny speakers Posted by Wayne Parham on Tue, 03 Jun 2003 17:30:34 GMT View Forum Message <> Reply to Message

It would be great if we knew the specs of the midwoofer used in your PSB speakers. That way we could know if the midbass peak was a result of cabinet tuning, the crossover or a combination of them both. Some of the little-bitty speakers made in the last couple decades or so have no bass below 100Hz, so they've boosted the 100Hz region as much as possible to try and give 'em some bass. Sounds really bloated and cheap, in my opinion. You might be able to put the speakers in a larger box - perhaps in an EBS alignment - but it would be best to run the numbers and see.A long time ago, we discussed an excellent application for a cabinet that size using a Seas W18EX001 midwoofer. You might find that thread interesting, and I think the issues discussed are relevent here.Let me know if you can find the specs for the PSB midwoofer, and we'll look at it in detail.

Subject: Re: Tiny speakers Posted by Garland on Tue, 03 Jun 2003 21:30:43 GMT View Forum Message <> Reply to Message

Well, I pulled the "bass" driver and all it said on the label was a series of numbers. I entered them into a google search and matched the number 6FCSR with a Bravox 6FCSR 16.5cm driver complete with specifications/photo. The basket looks identical but the specs for the Bravox calls out a paper cone with an 8 ohm impedance, where as mine are poly/kevlar? with a label-specified 4ohm imp. So. your guess is as good as mine what the specs are. What appears to be a manufacturing code might say the cabinets were assembled in 1981. I may try to contact PSB, but then I might not! Might not be worth all the effort though they do sound pretty good for what they are and esp. since they came out of the neighbor's trash!G.

Your efforts would be better rewarded building a net new set of Pi speakers rather than trying to optimize an older pair of speakers. good luck,Brian

Subject: Re: Tiny speakers Posted by DRC on Wed, 04 Jun 2003 16:48:34 GMT View Forum Message <> Reply to Message

You've reminded me that I've got a pair of Radio Shack LX-5 Pros in the closet at home. They have the Linaeum tweeter up top and a piece of trash midwoof which I replaced with a Seas driver (which is a drop in and bolt down replacement.) It wanted a very small sealed box, so I stuffed wine corks in the twin ports and have interesting sounding (low eff) speaks with nothin' going on below 100 (probably higher.)(You know where this is goin', right? ;-) I'm very tempted use my dbx xo, sum bass below 100 and send it to one of the TAD cabinets, with all else running stereo to the mutated Rat Shacks.That's assuming I survive my daughter's Bat Matvah this Saturday . . . . . . . . . . . . . . Sorry Wayne! I know this isn't Pi-ish, but it IS wacky speaker doings involving at least one cabinet with the mighty Pi symbol on it. ;-)

Subject: Great, now I'm talking to myself ..... Posted by DRC on Wed, 04 Jun 2003 17:41:24 GMT View Forum Message <> Reply to Message

and my fevered imagination is running amok. Again.So, if I wanted to do a single sub using a TAD 1602 and taking advantage of its f0 of 21hz, (he hee heeee), but not worrying a lot about efficiency, (possible plate amp), how many cubic ft should the cab ideally be?The present cabs are 4 cu ft tuned to 38hz or so. A 19" cube would get me those same 4 cu ft, while a 24" cube would be 8 cu ft. (Sometimes I wish I had a PC so I could run Boxplot . . . Did I say that out loud?) Keep your ears and your mind open.

Posted by Wayne Parham on Wed, 04 Jun 2003 19:45:44 GMT View Forum Message <> Reply to Message If you go any bigger than 4ft3 with the TAD 1602, you'll need to make an EBS alignment. That's a good option - especially for a subwoofer - but it does mean your output below 100Hz is generated at reduced levels, in a reduced "shelf." That's why the alignment has the name - the response is

prodigious bass using a motor chamber of 3.85ft3 tuned to 38Hz.

Subject: Dave, you still at the AOL or back at triode? nt Posted by Garland on Wed, 04 Jun 2003 21:00:18 GMT View Forum Message <> Reply to Message

nt

Subject: Mazal tov Posted by RJeff on Thu, 05 Jun 2003 15:14:54 GMT View Forum Message <> Reply to Message

...on your daughter's bat mitzvah.Jeff

Subject: Back at Triode (n/t) Posted by DRC on Thu, 05 Jun 2003 16:42:51 GMT View Forum Message <> Reply to Message

nt

Keep your ears and your mind open.