Subject: i wanna feel the bass! Posted by replay on Mon, 15 Jul 2002 17:17:50 GMT View Forum Message <> Reply to Message

hi gang, still toying with a woofer to use with my jbl 4655's. i spoke to the cdn eminence distributor today and they recommended a kilomax 18 in a 4.7 cf sealed box. response is 3db down at 47hz. is this low enough? will this provide gut wrenching bass in a 25x10 room. i'd use a pair with the jbl's stacked on top. thanking you in advance for your input.cheers,george

Subject: Re: i wanna feel the bass! Posted by Adam on Mon, 15 Jul 2002 17:49:43 GMT View Forum Message <> Reply to Message

I would port the Kilomax 18 totally... It'll run sealed, but I think you will be much happier ported.Adam

Subject: You've got mail! Posted by Wayne Parham on Mon, 15 Jul 2002 20:19:33 GMT View Forum Message <> Reply to Message

Kilomax 18. The design generates output to 20Hz; Its -3dB point is 40Hz and -10dB is at 20Hz.That'll do it.

Subject: Re: You've got mail! Posted by mikebake on Mon, 15 Jul 2002 20:24:36 GMT View Forum Message <> Reply to Message

What's the volume of this box, Wayne?

It's 9 cubic feet, tuned to 20Hz.

Subject: Re: You've got mail! Posted by replay on Mon, 15 Jul 2002 21:11:06 GMT View Forum Message <> Reply to Message

hi wayne, i will follow your advice and thank-you very much. after my initial post i spoke to tech support at eminence usa and he recommended a 4.78 cu ft vented box with a 4.14" square port 1" deep. he also recommended insulating the top and back of the cabinet only. he stated this box had an f3 of 37hz. why does the eminence program recommend a much smaller box? anyways i'll be building yours.cheers,geroge

Subject: Re: You've got mail! Posted by Adam on Mon, 15 Jul 2002 21:43:51 GMT View Forum Message <> Reply to Message

Wayne's box is an EBS (extended bass shelf) alignment. The response exhibits a shallow rolloff (3-6 db/octave) from a certain point, in this case 40 hz, down to the tuning frequency. The F3 is a little higher and actual frequency response isn't as flat, but if you combine this with room gain, an EBS will go usually go lower and flatter.the 4.78 cuft box will be completely flat to 37 Hz, but will rolloff quickly below that frequency. Not nearly as good for subwoofer duty.Neither box design is superior IMO, just good for different applications. If you choose the right woofer, you can get flat response to 20 Hz without even doing an EBS alignment.Adam

Subject: Re: how big is the box Posted by bmar on Mon, 15 Jul 2002 22:21:45 GMT View Forum Message <> Reply to Message

Flat to 20? which woofer? Ive been lõõkin Bill

Adire

Tempesthttp://www.adireaudio.com/car_audio/subwoofers/tempest.htmShivahttp://www.adireaudi o.com/car_audio/subwoofers/shiva.htmbrahmashttp://www.adireaudio.com/car_audio/subwoofers/ brahma_series.htmSome Blueprint subshttp://www.blueprintdrivers.com/ (their site is currently down)Stryke HE 15, as well as several of the Lambda offeringshttp://www.stryke.com/ (the slight shelving is caused by the low Q motor)Ground Zero

plutoniumhttp://www.magma-audio.de/english/gz_plutonium.htm (shelving is caused by the low Q motor)I believe the Peerless XLS drivers will do ithttp://www.d-s-t.com/main/index.htmThese are some... Some of these I have tried ported, some of these have not.The best woofers for a flat to 20 Hz box will have a super low Fs and usually a fairly high Qts. Don't let high Qts discourage you from porting, they can still sound excellent.Adam

Subject: Re: how big is the box Posted by bmar on Mon, 15 Jul 2002 23:57:03 GMT View Forum Message <> Reply to Message

Thanks,I'll check them out. those adires are some strokers that's for sure.distortion spec looks livable. just hate to match up a nice compression driver to 90db woofer.something like this would be good for a different type of system for HT though.thanks,bill

Subject: Re: i wanna feel the bass! Posted by BillEpstein on Tue, 16 Jul 2002 00:31:02 GMT View Forum Message <> Reply to Message

If you search the archives for Titanic you can read the several posts between Wayne, Adam and myself re: the Titanic 12. The spec I finally used as recommended by Wayne:PiAlign parameters then, are 9.89 cu. ft., 16Hz and 2.45. The cabinet PiAlign recommends is 4.0 cubic feet tuned to 15Hz with a 3.3" long x 1.6" dia cylindrical port or a 3" x 1.8" x 3.3" long rectangular port. This makes a nice flat response curve with -3dB at 25Hz, -6dB at 20Hz and -12dB at 15Hz.You do really feel the bass and a candle held in front of the speaker or the port will blow out. (Okay, I was bored) But it's also musical, never calling attention to itself but really filling out the tracks on the Diana Krall "Live" DVD.WTFDIK

Subject: Re: You've got mail! Posted by Wayne Parham on Tue, 16 Jul 2002 03:15:13 GMT View Forum Message <> Reply to Message

PiAlign recommends this small box too. It provides excellent performance, but deeper bass response can be obtained using a larger box and different alignment. There are a handful of systems I've done this way; We recently discussed this on the post called "Omega Pro 18, Box Volume". Basically, all of my bass reflex speakers containg 18" woofers are designs to maximize extension, because I expect they will be used as subs and where deep bass response is top priority.

Subject: Re: how big is the box Posted by Adam on Tue, 16 Jul 2002 11:02:53 GMT View Forum Message <> Reply to Message

Ohh.... You can't do that for those woofers. They don't have the frequency response. These are for sub duty only. Sorry, but it's nearly impossible to get good frequency response from 20-1.5 kHz from one driver :(. Very very difficut. Adam

Subject: Re: how big is the box Posted by Jerry Parker on Tue, 16 Jul 2002 20:16:58 GMT View Forum Message <> Reply to Message

I personally have a Blueprint driver, the 1803. Their new website is www.missiondigital.net Yesterday I got its excursion up to around 3" peak to peak. It was WELL below tuning, 12hz, which I believe is the resonant frequency of the human body, otherwise with the low power I am giving it, I would never been able to make it excur so much.Anyways, its really low efficiency. 93dB 1w/1m and has the cone area of a 15" speaker, yet the frame is for an 18" the surround is so large. It would match up well with a pair of Pi speakers, but only if you had 1kW or more going to the 1803.