
Subject: Re: double bass in stage series

Posted by [Adam](#) on Thu, 04 Jul 2002 00:39:41 GMT

[View Forum Message](#) <> [Reply to Message](#)

Just run a 2.5 way system. Run the second woofer with a first order crossover at a frequency around half the wavelength of the front of your cabinet. So if they are 24" wide for example: $13560/24 = 565/2 = 280$ Hz (roughly) So run a 6db/octave low pass at 300 Hz and this will accomplish exactly what you want. In the bands above roughly 500 Hz, you will only have the single Kilomax or the psd2002 delivering frequencies. However, if you dip below that crossover point into the midbass/bass region, you will have two woofers delivering that output at half the impedance, resulting in a 6db gain in output. This will also compensate for baffle step, which causes a loss of low frequency energy in a half space environment because it has to propagate in all directions, while higher frequencies are only radiating in half space. Where signal driver, unequalised designs will give you weaker midbass and bass output in a half space environment, a design like this will give you relatively flat response over the whole frequency range. One thing I should note that putting a speaker like this against a wall as well will result in an artificial enhancement of the midbass and bass, which might make the unit sound kind of bloated. So it depends on your application. The other option is, of course, to simply low pass the lower woofer at around 80 Hz or something like that, ideally bi-amping the whole thing. This will give you that augmentation in the lowest octaves only. Adam
