Subject: Re: Another Sub woofer Q&A
Posted by Wayne Parham on Sun, 29 Jan 2012 23:22:15 GMT
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There are lots of good subwoofer drivers on the market. I use an OEM driver that is very similar to the LAB12, machined to fit my cooling plug. So naturally that's the best driver for me to use. But it could almost be considered a commodity part. Direct radiating subs aren't nearly as tricky to design as constant directivity mains are.

Find a woofer that is in your price range and use a T/S modeling program to find the box and port size. You can pretty much just hit the "align" button to optimize. For subs, that's pretty much all there is to it. I generally like to tune slightly lower in frequency than an auto-optimized max-flat alignment, but that's easy to do. Just make the port slightly longer than it says; Adjust the parameters to tune the box 10% lower, e.g. 27Hz if auto-align suggests 30Hz. That will make the system slightly overdamped, which is more tolerant of parameter shifts and a little more "room friendly" too. Subs made this way won't get peaky when pushed too hard or when used in rooms with unusually bad acoustics.