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Subject: OS Waveguides to match 12"

Posted by [Martin Goedeke](#) on Wed, 28 Sep 2005 20:28:14 GMT

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So I am in the process of finalizing my OS project to have turned out of solid hardwood (probably Jackaranda) by a fortunate acquaintance and a couple of questions remain unanswered. I am planning on a 90 degree waveguide to match my 12" P.Audio Winner 12S with an intended (active) crossover of 1.2-1.3kHz (a mini Summa without all the sci-fi box-building capabilities of the good doctor Geddes). I am thinking of making the throat separately from the rest of the horn to allow me to play around a little if need be. How big to I make the terminus (assuming a 2" radius round over)? Do I make the waveguide mouth before the round-over the same size of the effective diameter of the 12 (around 10-11") or does the waveguide have to be a little larger? I recon a near match is a big improvement over the RCF H100 horn atm but I might just as well hit the nail on the head first time, though I cannot go much bigger due to limits of the lathe this thing will be tuned on. Any takers?

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