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Subject: Re: Foldes Bass Horn plans: Karlson design - heres radial slot calculator  
Posted by [freddy](#) on Sat, 23 Mar 2002 12:04:30 GMT

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Dear Shekhar -you're doing better than me - messed-up (from virus) computer can't access the Karlson site the enclosure is such an oddball - main changes were to tack wood strips on port and shelf gaps - wouldn't have to be glued to try - think this moves Z min from 50Hz to 48Hz or so - also 1st specs had a bit more taper gap despite exponential slot claim - I think Karlson used radial: Compute the radius r as follows:  $r = (h^2 + w^2 - w*t + t^2) / 2*(w - t)$  For Karlson 15, h = 30.19, w = 10.17, t = .23, r = 51 For Karlson 12, h = 23.5, w = 7.38, t = .25, r = 42.5

-----RADIAL SLOT CALCULATOR:5 CLS10 Print "This Routine  
Calculates a Karlson Radial slot"20 Input "Enter height of slot";H30 Input "Enter t=1/2 width at

$(H^2+W^2-W*T^2)/(2*(W-T))$ 60 Print "Radius for this slot ="; Rat frequencies below tuning the Karlson will pretty much measure with warble and sine like a 100l reflex tuned similar - above tuning, things are different - do suspect distribution of power is pretty much affected by system tuning as tuning to 28hz gave what you'd expect from a reflex plus lost a bit of upper bass - sounded very good - for some reason sounded better than measurements indicated - this was exemplar guys's sub for Altec A-7 - used a 30Hz bandpass on lo-tuned Karlson and 30Hz hi-pass on A7 will try to meet you on Karlson forum or High Efficiency forum so we won't eat so much of Wayne's bandwidth probably just have to build and try some drivers you have - if you use a high crossover point then look for a driver which has riding on-axis response - EV15L was ok - liked Altec 421 better - had a big sound with 511 horn with Eminence 1" on top ~1.2Khz crossover Freddy