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Subject: Re: Foldes Bass Horn plans: Karlson design

Posted by [freddy](#) on Fri, 22 Mar 2002 14:50:50 GMT

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Hi Shekhar, Karlson box is an odd thing - look under 'articles' on Job Ulfmna's Karlson page the 'coupler' consists of a 65 liter tapered cross-section pipe with radial slot cut in side - the slot broadbands the front pipe resonance - original 1951-54 design has a 'shelf' board - think it acts as a short waveguide and possibly sets up a hybrid condition between rear chamber's port and 1/4 wave action - I'm currently running a variation without any shelf board - just tuned to ~39Hz Z min between first two peaks - need to tweak a bit - am getting ~2.5db over similar reflex with same driver @32hz and 3dB in upper bass in typical 15" size Karlson, there's a 3rd Z max occurring around 160hz initially years ago, I considered it a non-sensical design but after using find subjectively that they can outpoint a reflex on heavy transients - they tend to have some gain above 50Hz - it sounds "faster" than folded horn by 1965 Karlson had decided ellipse based reflectors could improve the design - maybe so depending upon whether used high to reach horn or used as sub bewo 125Hz Karlson is worth building to hear - think they do best with lower mass 15" having a good force factor - Altec 421 do well in 1954 specs amazing you're assembling drivers to get what you need! - are there a couple of manufacturers in India who build high-end pro woofers, along lines of US Digital Designs' "Beast"? Very Best! Freddy ps - hope this link is correct - couldn't load Karlson page to directly copy and paste

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