Subject: how to make a rectangular port
Posted by EZ_Angus on Sun, 11 Jul 2004 00:16:05 GMT
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I am building a 8.5 cf ported box to house altec 416's. its supposed to have a 6" x 10" by 14" long rectangular port. How in the world to you build this? can you buy such big ports pre-fab? I notice partsexpress only has small circular ones.second question. is there anything wrong with cutting out the driver opening using a jigsaw? I know people use routers with circle cutting jigs, but if I'm flush mounting the drivers, wouldn't free hand jigsawing work ok?thanks in advance for any advice or suggestions, Kevin Grier

Subject: Re: how to make a rectangular port
Posted by wunhuanglo on Sun, 11 Jul 2004 02:15:33 GMT
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Two ways to make the port that I can think of offhand. 6 X 10 is the same as 3 X 20 (more or less, acoustically) so if your front baffle is 20" wide, make it 3" short of the bottom. That will give you the opening. Then, from the rear top of the opening, place a shelf 14" deep extending from side to side to form the "tunnel".Another way would be to cut out one corner of your baffle 7-3/4" X 7-3/4". Then form two sides with two 14" pieces making kind of an "angle iron" and using the inside corner of the box to form the other two side of the tunnel.The pieces you use inside should be [14"- the baffle thickness] because it all counts. Also, make sure the tunnel ends about 5" in front of the box back wall, so the inlet is unobstructed.You could also use two 6" round vents or three 5" round vents, either 14" deep.You can use a jigsaw to cut driver openings - I'll bet $1 that more people DIY speakers without a router than those who do use one. I assume from the way you phrased it you mean you're going to surface mount the drivers, not flush mount them, as in rebate them into the baffle.If you intend to rebate them (flush mount) you're going to have to cut a rabbet around the jig saw hole with a piloted router bit anyway, so you ought to use a router to cut the hole in the first place. Otherwise, the irregular jig saw hole will cause the rabbeting bit to make an irregular recess, which will be kind of messy.

Subject: Re: how to make a rectangular port
Posted by Wayne Parham on Sun, 11 Jul 2004 04:57:52 GMT
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I wish you had been able to make the trip to Tulsa for today's audio club meeting. Lots of fine folks were here and a nice time was had by all. I'll post photos tomorrow, and hopefully you can make the trek one of these times for an audio gathering. Or maybe we'll have one in OKC sometime.One of the things we did was to check out the little Stoetkit amp that FSAudio is making available to AudioRoundTable.com participants. Frank is letting anyone who asks try out the amp

for a couple weeks, and it's a pretty good amp. He asks only that you give him your honest opinion about the amp, so it's really been cool how he went about this introduction. You might want to get on the list and check it out.The unanimous opinion here so far has been that it's one of the best little entry level kits in its price range. We've had Zen lovers and Paramour owners and various and sundry others to compare with. All of these are nice amps in the under $1000 price range. This little Stoetkit joins the ranks, and is a fine contender. It's the best looking one of the bunch, in my opinion, and many of us thought it was the best sounding too, so that's saying

made by Chuck Adamson of AllAboutTulsa.com. That was a real treat! And of course, I think my favorite thing is just hanging out and visiting with everyone. This Oklahoma club is really a bunch of fine folks!OK, sorry I rambled on about so much other stuff. About the rectangular port, I'm not a woodworker and I see that Charlie has given some good suggestions already. But I wanted to say I always thought rectangular ports were easier when weird vent areas were required. It's not too hard to get certain size ports, but very hard to get others. A rectangular port is one that you can make sized to fit.I understand that the most difficult part is cutting the rectangular hole in the baffle. The walls of the port are actually pretty simple, being just small pieces of wood, usually small panels of the same board used to make the cabinet sides and baffle. You're just making a little box with the ends open and glueing it flush with the baffle port hole cutout.

Subject: Re: how to make a rectangular port
Posted by EZ_Angus on Sun, 11 Jul 2004 13:04:47 GMT
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Hi Wayne: I can't believe you think that stoet amp is cuter than a paramour. I really must dissent from that viewpoint 8^)thanks for your message. we are a one car family so its not real easy for me to take the car for the day if Robin has stuff going on as well, but I'd love to meet the guys and hear some of your speakers.What would you say to using multiple round ports as suggested by Charlie? its ok or should i manufacture an exact rectangular one. I can't believe I am finally making these speakers. I'm pretty excited. I'm now using a 311-60 horn to avoid the ringing of the 511b. I also have the pc boards stuffed and the chassis punched and all parts in hand to build the tube crossover, just stymied right now on how to implement a good grounding scheme :^(

Subject: Re: how to make a rectangular port
Posted by EZ_Angus on Sun, 11 Jul 2004 13:05:47 GMT
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Wow: thanks very much for an informative and helpful response. I'll post pics here when project is done. thanks again, Kevin

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Subject: Re: how to make a rectangular port
Posted by James W. Johnson on Sun, 11 Jul 2004 14:08:51 GMT
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I'll bet $1 that more people DIY speakers without a router than those who do use one>>>>>>>>>>>>>>>>>> I am one of them...instead of buying a cheap jigsaw and a cheap router (not that I have not already been thru a few of each though)I invested in a good Bosch jigsaw and it does everything I needalthough I probably will have to buy another router this time.If I ever had any advice for a DIYer its invest in good tools right off the bat.

Subject: Re: how to make a rectangular port
Posted by Wayne Parham on Sun, 11 Jul 2004 19:32:14 GMT
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Your Paramour looks great! I still have Paramours, a Foreplay and a Seduction too. But I think I'm gonna get a Stoetkit.About the ports, sure thing, you can go with multiple ports. If the port area is sufficently large and tuning is right, it becomes largely a matter of aesthetics.