Subject: More thoughts on slot vs. hole for mounting array drivers Posted by Ion on Mon, 13 Sep 2004 05:19:54 GMT View Forum Message <> Reply to Message

The suggestion was brought up-- in the Craftsmen discussion here-- about using a slot cut out rather thanindividual boring with a hole saw. I think there's merit in this after I've seen how smallvariations in vertical line arrays can be visually apparent. If the goal is to get the drivers as close together as possible, the slot system has merit. The mounting surface could be made in a frame of 4sides and I think that at least dimensioning could be moreaccurate (eg. driver widths not matching hole saw cutoutsexactly and thus making the screw mountings problematic. Only drawback that occurs to me right now is the shapeof the face frame of the driver. This would ideally be assquare as possible. Are there any further thoughts on this?

Subject: Re: More thoughts on slot vs. hole for mounting array drivers Posted by Norton on Mon, 13 Sep 2004 15:23:17 GMT View Forum Message <> Reply to Message

How would you manifold down each driver to the slot? How do you make an array of say 4" drivers work going out to 2" slots placed near to one another? Norton

Subject: Re: More thoughts on slot vs. hole for mounting array drivers Posted by taylor on Mon, 13 Sep 2004 20:17:42 GMT View Forum Message <> Reply to Message

Ive been thinking of how to slot mount my square frame 4" drivers and have come up with the following. Im going to cut a half baffle which will have 16 semi-circles cut in one long pass with a bandsaw (snake shaped) The cut will be larger than half a 4" hole to allow for a router guide. I will then router out 4 pieces of ply, using the template I just made to create 2 complete baffles. Two pieces will be big enough for tweeter mounting. I will glue and screw cross braces every few drivers, to mechanically connect the two baffles. The frames of the drivers should also provide a good connection. This will allow frame to frame mounting. The other option is to cut the holes with a hole saw. The holes will be linked so the bracing is still needed. Two baffles can be cut at once if you fasten them to a sacrifical board with nails. I also shoot brads into the inside of the holes, and not have to remove the plugs. If set up on a drill press, this is a fairly fast process. I use compressed air to clean the holes while cutting to lessen the chances of binding. Hopefully, I will start this project next week!taylor

I think you're envisioning having the drivers on the rear of the baffle; that would create untenable diffraction effects unless the drivers were low passed very low, say 1kHz. Other wise the drivers have to be mounted to the baffle front. Mounting in a slot is easy- it's making the interface airtight that's the trick.

Subject: Re: More thoughts on slot vs. hole for mounting array drivers Posted by taylor on Tue, 14 Sep 2004 01:46:10 GMT View Forum Message <> Reply to Message

You are right about the mounting. Im going to mount them on the front of the two halve baffles and once the frames are butted together, you wouldnt be able to tell that holes werent used. I was thinking of sealing the gap between the baffles and the butted drivers with silicone or maybe a thick adhesive material like the sound deadening stuff autosound guys use. If used dipole, the sealing isnt as critical but Im going seal box so it definately needs close attention.taylor