
Subject: 12Pi drawing clarifications

Posted by [cred_audio](#) on Wed, 29 Nov 2006 18:22:27 GMT

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Wayne, Having got to the point of building the 12Pi horns and even cutting the side panels of 45"x45", my brother began to draw out the side panel layout on a cardboard to exact scale, from the old drawings that you had sent me. After beginning to draw the motor chamber, starting from the top edge of the side panel at $8 \frac{17}{32}$ ", all other distances of the motor chamber/horn foldings fall short by $\frac{3}{4}$ " compared to published drawings. Added to this is the fact that the top panel (and in fact all other panels) mount inside the side panels and not outside of them. This would bring the whole internal assembly upwards by $1 \frac{1}{2}$ ". This could make my construction anything but a 12Pi. The worry is compounded by the fact that correspondingly the bottom corners/edges of the motor chamber measured from the bottom end of the side panels measure an excess of $\frac{3}{4}$ " compared to published drawings ie., $22 \frac{3}{4}$ " instead of 22". Further the inner folds of the horn near the top front don't seem to add correctly ie., the measurements shown as $5 \frac{17}{32}$ " and $5 \frac{23}{32}$ ". Is there some help I can expect from Wayne or any of the other Pi builders. Thanks.

Subject: Re: 12Pi drawing clarifications

Posted by [Wayne Parham](#) on Wed, 29 Nov 2006 18:54:16 GMT

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I am having trouble visualizing what dimensions you are saying don't add up. Could you maybe mark up the drawing I sent you and mail it to me? If your comments are shown in red, that would be helpful to identify them. That would make it easier for me to see what you are talking about. The CAD drawing is the one that is most accurate. The trouble with it is that this version of the design has routed panels, and the slot depth makes each panel need to be longer than it would be if assembly was done using butt joints. The drawing that was done by hand may have some errors, although we were able to build a prototype with it successfully. My original design came from a Hornresp model having several segments. I tried different folding patterns from

because everything fit nicely and it allowed me to put the cooling plugs and plates on each side, making them compatible with the LABhorn. The whole package is similar. You are doing the right thing, to draw out a full scale version first. I made the original drawing in half-scale, which was easy to use because all dimensions could be easily doubled as opposed to having some weird conversion factor (like 5.7-to-1 if the drawing is done on an 8.5"x11" paper). But I tended to cut corners when calculating wood thickness, partly because it doesn't matter very much to a horn this size and partly out of indolence. When I made the original drawing, I knew that I would be doing an AutoCAD version soon afterward, which would have perfect dimensions. So there was little need to hand-calculate each dimension perfectly, except for those in the tight-fitting motor chambers. After I get a copy of the drawing with your comments, we can discuss this further. Perhaps some of the dimensions have typos or are just hard to read. They can be double-checked with the Hornresp model, but it is probably easier for me to just look over your notes and compare dimensions with the drawings I have here.

Subject: Re: 12Pi drawing clarifications
Posted by [sam](#) on Fri, 01 Dec 2006 04:16:29 GMT
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Wayne, I have no clue as to how to include images in these postings. Hence, I am sending you the GIF indicating my concerns.

Subject: Re: 12Pi drawing clarifications
Posted by [sam](#) on Fri, 01 Dec 2006 04:18:11 GMT
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I am sending my drawing with comments to your email ID.

Subject: Re: 12Pi drawing clarifications
Posted by [Wayne Parham](#) on Fri, 01 Dec 2006 06:58:36 GMT
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Very good. I'll look at your comments this weekend and get back to you.

Subject: Re: 12Pi drawing clarifications
Posted by [Wayne Parham](#) on Fri, 01 Dec 2006 07:02:52 GMT
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E-Mail is fine for something like this. To post images, first upload them to a web server. There are free image hosts if you don't have web space included with your internet account. After that, you can post single images by including the URL in the "Optional Image URL" field. That will allow you to display a single image, and it will be shown at the top of the page. If you want to embed your pictures in a post, you will want to use the "img src" HTML tag. You might also surround it with "center" tags. A description of the process is shown here. A smiley face cartoon is shown below, and the exact HTML text you should type into the post to display it is typed in very small print under the cartoon image. You can copy-and-paste this into your post, and substitute your image file URL in the "img src" tag.

```
src="http://www.audioroundtable.com/images/big_grin.gif"></center>
```
