Howdy,

'Been doin' some power searchin'.

I intend for this thread to be a little helper thread for some odds and ends about flush-mounting the 4 Pi speakers for newbies like myself. 'Hope ya'll don't mind.

4 Pi Flush Mounting Information (2016)

 H290C HORN

Inside cutout dimensions: Height = 5" Width = 10 and 1/2" (per plans)
Depth of recess: 1/4"
Outside cutout dimensions: Height = 6 and 9/16"   Width = 11 and 5/8" Corners = 90* of 1.6" diameter

 JBL 2226H CONE

Inside cutout dimensions: Diameter = 13 and 15/16" (per plans)
Depth of recess: 5/8"
Outside cutout dimensions: Diameter = 15 and 17/64" (388 mm) (per JBL document)

 QUESTIONS (For Wayne and all other experienced people):

 BINDING POST PLATE

Cutout dimensions: Height = 2 and 1/8" Width = 2 and 7/8" (Is this correct or backwards?)
Not that it matters much, but how high up from the bottom edge do you cut this hole?

 GASKETS FOR HORN AND WOOFER

Do you still make gaskets with the shower pan PVC plastic?
(insert link for gaskets here)

     DEPTH THICKNESS

Does the thickness of veneer or the thickness of gaskets affect the routed depth thickness above?

 SUPPORT RINGS BEHIND THE CUTOUT PARTS

Made of scrap wood, glued behind routed cutouts with T-nuts or threaded inserts in it.
What do you recommend for the dimensions of this support ring?
(insert link for mounting screws and T-nuts here)

 AUDIBLE DIFFERENCE

Does flush mounting make any audible difference with the 4 Pi speaker, or is it cosmetic only?

If any of the above information is wrong, please feel free to correct it. Thanks!!!

Subject: Re: 4 Pi Flush Mounting Information (2016)
Posted by Wayne Parham on Wed, 04 May 2016 16:07:30 GMT
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This is a very useful thread, thank you!

My 2¢:

Flush mounting does nothing for the acoustics, but it's great for aesthetics, at least in my opinion.
I really like the look.

I use gaskets under the waveguide, the crossover board and under any other part or panel that
might buzz or leak. Midwoofers too, but they usually have a gasket built-in. The 2226 is an
exception - I don't use the O-Ring supplied and use a PVC gasket instead.

The PVC gasket material is 40 mils thick.

As for scrap wood behind the mounting holes, when I have cabinets routed for flush mounting, the
remaining wood thickness is small. So like you mentoned, I add a panel of wood behind it to
make it thicker in that local area. I sometimes use a ring, sometimes just a square piece of wood.
Occasionally I'll have the whole baffle made double thick. It's all pretty low-tech, and no reason to
overthink the process.

The binding post plate can be mounted anywhere. I like to put it near the bottom, about two or
three inches up and centered.

Subject: Re: 4 Pi Flush Mounting Information (2016)
Posted by j0nnyfive on Thu, 05 May 2016 00:14:45 GMT

Thanks for the information!

I'm almost ready to get the boxes built. I think I'm going to skip the flush mounting for now just to reduce the odds of $um Ting Wong!

I found some old pictures online of earlier 4 Pi speakers with the parts mounted directly on the baffle, and I think they look good too! Sort of an old school rugged look. Flush mounted looks awesome as well. As long as it doesn't affect the sound either way, I'm good with it.

One last thing, did I correctly understand the width and height of the binding post plate cutout, or did I get it backwards?

Thanks again!

Subject: Re: 4 Pi Flush Mounting Information (2016)
Posted by Wayne Parham on Thu, 05 May 2016 15:31:38 GMT

The plate is wider than tall, if you like the binding posts side-by-side:

Subject: Re: 4 Pi Flush Mounting Information (2016)
Posted by j0nnyfive on Fri, 06 May 2016 03:43:53 GMT

Great. Thanks!

I may have been just kidding about not flush mounting... I'm in communication with a guy here about this build. Will ask about this. Stay tuned.

When I get them built, I will post pics!!

Subject: Re: 4 Pi Flush Mounting Information (2016)
Posted by Wayne Parham on Fri, 06 May 2016 15:36:21 GMT

Please do!