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Subject: Re: 3 PI build

Posted by [BFP](#) on Sun, 19 Jan 2014 22:27:30 GMT

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There are many ways to build a speaker box. A lot depends on what tools you have at hand and what methods you prefer. I will be starting with a laminated baffle. The outside is 3/4" MDF backed up by 3/4" Baltic Birch. The inner baffle is inset so it will form a ledge for the front of the walls and top/bottom. The top/bottom are inset leaving no MDF joints visible on the sides. The back will be inset. I will be adding a cap to the top, making it 2 layers thick. I'm thinking of doing a black lacquer on the top. The rest of the box will probably be flat black covered with satin water based poly urethane. I plan on making a base to bolt to the bottom and a grill to keep dust off the drivers.

Heres some pictures of the inner baffle. I cut the horn through hole before laminating the 2 layers. I used a jig saw. The one I have is a Dewalt which I just got recently. A good jig saw is a great tool to have around. This one is capable of fast, accurate cuts without a lot of noise and vibration.

Laminating the panels. You need lots of glue and clamps. You need to use a glue with a long open time. I'm using Lee Valley GF2002 which I have found to work well. Tite Bond 3 is quite similar.

I also used drywall screws and brads in the centre section.

Do yourself a favour and tape off both ends of one of the horn flares to prevent dust from getting in there. The static charge on the plastic attracts dust like crazy.

Next job was to mark out the position of the port and woofer holes. The port I'm using requires a large hole at the front where the flare is. I decided to reduce the diameter of the hole in the inner baffle so I could seal and support the port with a snug fit in the baffle and some silicone.

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## File Attachments

- 1) [DSCF9547.jpg](#), downloaded 8902 times
- 2) [DSCF9551.jpg](#), downloaded 8957 times

- 3) [DSCF9550.jpg](#), downloaded 8960 times
  - 4) [DSCF9553.jpg](#), downloaded 8871 times
  - 5) [DSCF9568.jpg](#), downloaded 8801 times
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