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Subject: Re: 4 Pi Cabinet

Posted by [GarMan](#) on Fri, 14 Jul 2006 13:59:40 GMT

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Hi Norbert, Even with a Rotozip, you can still cut a perfect circle. I'm not familiar with what the base of the Rotozip looks like, but I'm sure with a bit of creativity, you can attach a homemade circle jig to it. The jig can be nothing for than a 12"x3" piece of 1/4" scrap wood. Once attached to the Rotozip, you can nail down the other end to your baffle and swing it around like a compass. It'll also let you take multiple passes of shallow cuts instead of trying to cut through 3/4" of material at once, resulting in a cleaner cut. (I use a big heavy duty router with high quality spiral bits and even though I can cut 3/4" of material at once, I still choose to take multiple passes.) The typical way to flushmount a woofer is to cut a clean "perfect" circle and then run a rabbeting bit on a router around the edge to cut the recess. This works well with most woofers because the lip of most woofers (the difference between cutout and total radius) is 1/2" or less. The difference between cutout and total radius on your 15" pro driver is almost 5/8" (overall dia = 15.21", cutout dia = 14"). Once you cut the 14" baffle hole out, you will not find a rabbeting bit wide enough to cut the 5/8" rabbet needed to flushmount the woofer. Two ways around this. 1) Forget about the 14" and cut the baffle hole exactly 1" less in diameter than total diameter. Then use an 1/2" rabbeting bit to cut the recess. You do lose some support behind the driver and some of the flanges of the t-nuts may hang out. 2) Cut the recess for flushmount first using total dia, then cut the baffle hole using cutout dia. This is what I did for my JBL 15" (see pix 25 of link below). The outer ring is a 3/8" deep recess for flushmount, and the inner ring is the cutout. You're left with a thin ring of material that you can easily peel off. Another thing to consider if you flushmount is baffle thickness. Once you cut the 3/8" to 1/2" recess, you're not left with much material. Most guys double up their front baffle, but at the very least, double up the area behind the woofer. (see pix 33). If final note: If you chose not to flushmount, you don't need a perfect circle. Use a jigsaw instead of the Rotozip to cut the hole. It requires a lot less effort. When using a jigsaw: GOOD SIDE DOWN, BAD SIDE UP. Gar.

Mounting 15"