

Flush Mounting an Irregular Face Plates

https://www.reddit.com/r/diyaudio/comments/4ysmms/tutorial_how_to_flushmount_irregular_shaped/

Cutting circular rebates to mount drivers with circular faceplates is not too difficult, especially with a circle cutting jig, like the Jasper Jig. But what do you do when a driver has an odd-shaped faceplate?

In this tutorial, James Yeung outlines three simple steps required to cut perfect rebates for these odd-shaped faceplates.

3 simple steps:

Tools required: Router, 1/4" spiral upcut bit, and 3/4" template collar bushing:

1. Pass router around driver's plate using a 1/4" spiral upcut bit to make Template 1.
2. Pass router inside Template 1 using 1/4" bit to create Template 2.
3. Attach 3/4" bushing and pass router inside Template 2. You end up with a perfect recessed hole.

Picture: Template 1 (below, left), Template 2 and the final recessed baffle (below, right)



Step 1: Template 1

Making Template 1 is the most critical part. Everything else that follows will be a breeze.

Screw down driver plate onto scrap MDF large enough for the router base to go around the perimeter of the driver plate. This will be Template 1.

Place an extra scrap piece of wood under Template 1 to prevent unwanted table top damage.

Firmly clamp everything onto the work bench. With 1/4" spiral upcut bit, hold the router base firmly against the driver plate. Make a few passes until it completely cuts through the MDF.

Always keep the router base firmly pressed against the driver plate until it completely cuts through Template 1. If your router has an asymmetrical base plate, always keep it in the same orientation.



Step 2: Use Template 1 to make Template 2.

Using a $\frac{1}{4}$ " spiral upcut bit, pass the router several times around the inside of Template 1 until it completely cuts through Template 2. Keep the router's base firmly against the inside of Template 1's hole. Save Template 2 as you can use it over and over, as needed.



Step 3: Use Template 2 to cut the recess on the front baffle.

As you can see, Template 2 is exactly $\frac{1}{4}$ " larger around than the perimeter of the driver plate (below left).

Attach the $\frac{3}{4}$ " bushing to the router, and use Template 2 to create the actual recessed cutout on the baffle (below right).



Align Template 2 onto the actual speaker baffle. Remember that Template 2 is ¼" wider than the perimeter of the driver plate. To make sure everything is aligned, properly pencil in the perimeter of Template 2 on the actual speaker baffle.

Once aligned, clamp Template 2 in place. Route the recess while keeping the bushing collar pressed against the inside of Template 2.



That's it!

There you have it. This method can be applied to basically any flush mounting application imaginable including circular speaker drivers for those who do not wish to fork out for a Jasper Jig.

Visit my web site at www.exquisiteaudio.ca. If you have any questions or comments feel free to email me at j.yeung8364@rogers.com