

Precision Circle Cutter Instructions

What's included:

- Precision Circle Cutter base
- 1/4" steel pin

Features:

- Solid aluminum components
- Precision ground steel rails
- Acme lead screw
- Micrometer adjustment knob

Compatibility:

- Compact plunge routers by
 - Bosch
 - Dewalt
 - Porter Cable
 - Makita

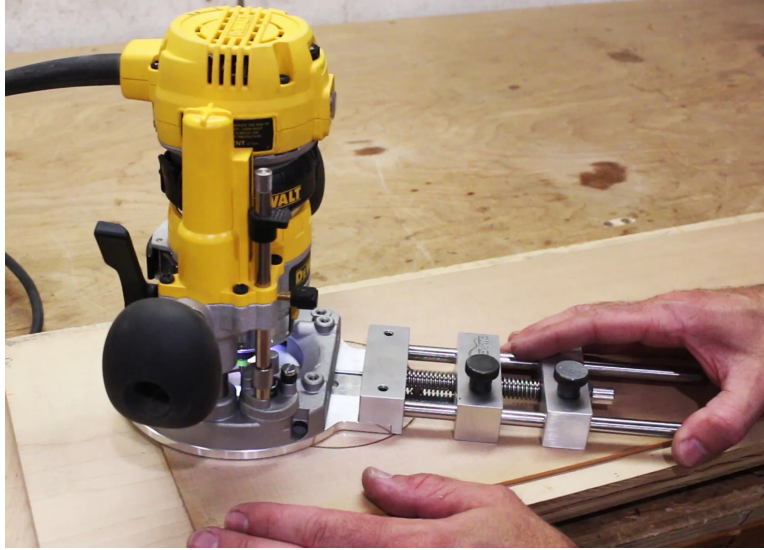
How to use:

The Precision Circle Cutter is designed to work with compact plunge routers from bosch, dewalt, porter cable, and makita. The router plate is labeled for easy assembly.

The middle section of the Precision Circle Cutter has a tongue that accepts a 1/4" pin. There are three holes spaced 1" apart. This makes it easy to quickly move short distances.

The tongue extends into the router base for small diameter circle cutting. The middle and back section can also be pulled off the rails and flipped around for large circle cutting. This means you can cut everything from small inlays to rosettes and large radius dish blanks.

To inlay a rosette, first drill your work piece and a backer board to accept a 1/4" pin. If the pin is longer than your backer board, you can prop it up with another piece of wood. The pin only needs to stick out from your work piece by the thickness of the jig's tongue. If it's too high, it may interfere with the router. With the pin installed, mount the Precision Circle Cutter. When adjusting the tool, you can make large moves easily by loosening both lock knobs and sliding the adjustment assembly close to the desired position. Then lock the back and use the micrometer knob to fine adjust the middle section to the final location. Set your desired depth with the controls on your router's plunge base. Now it's time to make the first cut.



Let's look at an example: The purfling I'm inlaying is .097" and my cutter is .062". The difference is .035". I made my first cut and now I need to widen the channel. I'll use the micrometer knob to adjust my cut to account for the difference between my cutter and my purfling. I like to add a few thousandths to that amount for wood swelling that occurs when adding glue so I'm going to move my bit .038". Once the jig is moved and the setting locked in place, the second cut is ready to be made and the fit verified.

When adjusting the jig, it's helpful to support the weight of the router by lifting it slightly while turning the micrometer knob. This reduces the friction between the heavy jig and the wooden work piece.

By utilizing a plunge router with the Precision Circle Cutter, you can easily pull off segmented rosettes and interrupted cuts. But even if you prefer traditional style rosettes, using a plunge system means you can cut your inlays while avoiding grain tearout by only cutting downhill on the grain. While not necessary, it's a nice option should you be working with a piece of wood that is prone to tear out.

***More of a visual learner? Check out the video tutorial on the [ELEVATE](http://ElevateLutherie.com) site.
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