

# Getting Started with a Router

## Develop Your Shop Skills

For versatility, you can't beat a router. Decorative edging, joinery, trimming, and much more fall within the router's capability. You can build many projects with just a table-saw and a router. Here's some advice to help you start enjoying this essential tool today.

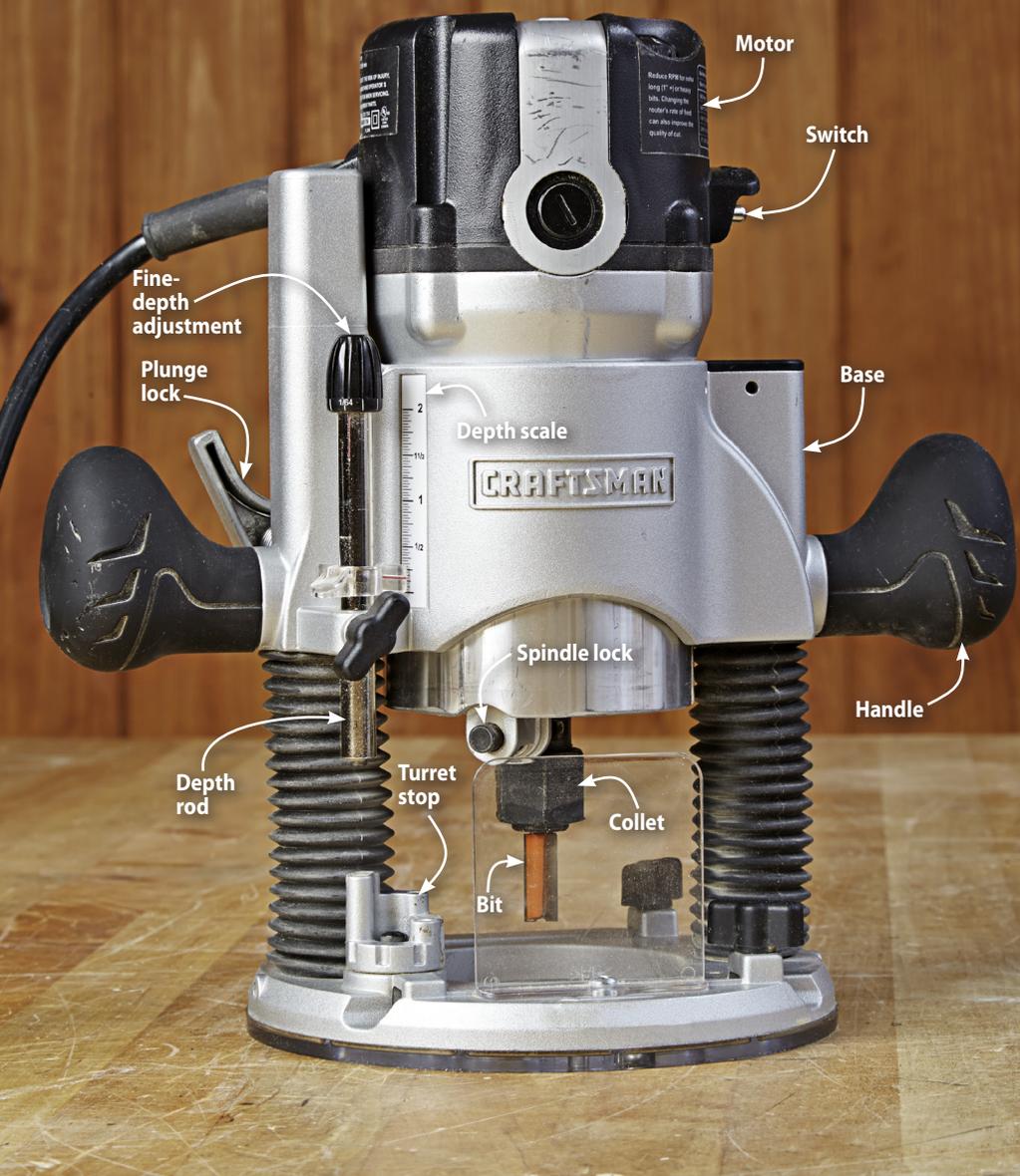
### Take the plunge

Buying your first router? Consider one with a plunge base, left. A plunge router does anything a fixed-base router can, and makes many tasks, such as cutting stopped grooves and dados, easier and safer because you can keep the base solidly on the workpiece throughout the operation. With the router in position, you start the motor running. Then, you push the plunge router down to start your cut and raise it to end the cut. Some router kits include both fixed and plunge bases—an ideal way to equip your shop.

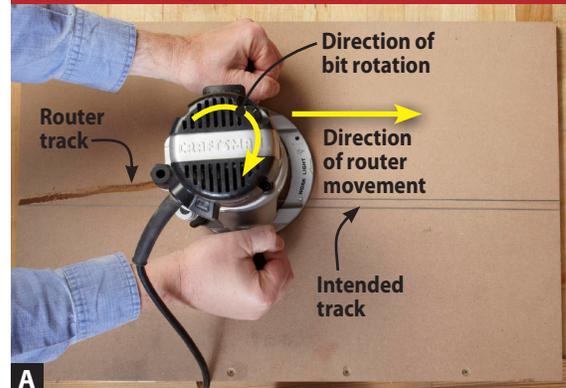
### Head in the right direction

The router bit rotates clockwise, as viewed from the top of the router. Always cut against the bit's rotation by moving the router from left to right with the bit cutting on its left side (viewed from behind the router).

Rout *counterclockwise* around the ends and edges of a workpiece. Move the router *clockwise* around the inside edge of a frame or cutout.



### A ROUTER GOES ITS OWN WAY



Cutting forces and torque reaction cause a router to veer to the left when you attempt to rout along a straight path without using a guide. In addition to damaging your workpiece, this can cause injury.

## Begin with these 6 basic steps

- 1 Read the owner's manual for your router.
- 2 Secure the desired bit in the collet.
- 3 Adjust and lock the cutting depth.
- 4 Set up a fence or edge guide if you aren't routing with a piloted bit.
- 5 Put on your safety glasses and hearing protection. Then, place the router base on the workpiece with the bit clear of the wood.
- 6 Hold the router firmly, start the motor, and feed the bit into the work. To rout all around a workpiece, rout the end grain before the edges to minimize tear-out.

## Stay on course with a guide

Attempts to rout freehand generally prove unsuccessful [Photo A]. Instead, rely on one of these three proven methods to maintain control of your router: a straightedge guide attached to the workpiece [Photo B], a router-base edge guide [Photo C], or a piloted or bearing-guided bit [Photo D].

A straightedge fence sits to the left of the router base, while an edge guide and piloted bit ride along the right edge of the workpiece (as seen from behind the router) to keep the router on course.

## Big jobs call for big bit shanks

You'll find bits with  $\frac{1}{4}$ " and  $\frac{1}{2}$ " shank diameters, and many routers accept both sizes. Smaller-shank bits usually cost less and handle light- to medium-duty routing, such as  $\frac{1}{8}$ " or  $\frac{1}{4}$ " roundovers and ogee edges. For heavy cutting—a  $\frac{3}{4}$ " dado in hardwood, for example—opt for a bit with a  $\frac{1}{2}$ " shank if it fits your router.

Buy bits as you need them rather than buying sets and winding up with bits you never use. (Projects in *WOOD*® magazine specify bits needed.)

## Don't go beyond your depth

Check your router's instructions to see how to adjust and lock the cutting depth. A metal-rule depth gauge [Source] enables you to make accurate adjustments easily [Photo E]. Dealers also sell digital gauges. Make deep cuts in several shallow ( $\frac{1}{16}$ "– $\frac{1}{8}$ " steps). 🌲

### Source

Depth gauge: Item no. 37429, Rockler, 800-279-4441, rockler.com.

## More Resources

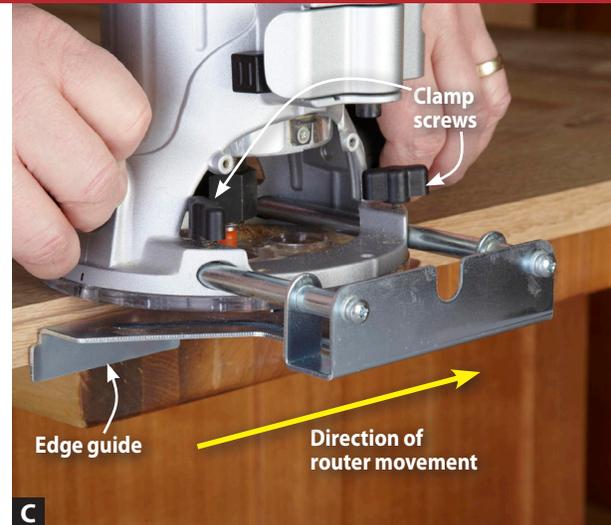
- ▶ Find out more about routers and routing with dozens of free videos and ideas at [woodmagazine.com/routing](http://woodmagazine.com/routing).
- ▶ Compare router features and read editors' and users' router reviews at Review-A-Tool: [woodmagazine.com/routerreviews](http://woodmagazine.com/routerreviews)
- ▶ Build a bit-setting gauge that uses a stainless steel shop rule for accuracy by following the easy instructions at [woodmagazine.com/heightgauge](http://woodmagazine.com/heightgauge).

## KEEP YOUR CUTS ON TRACK



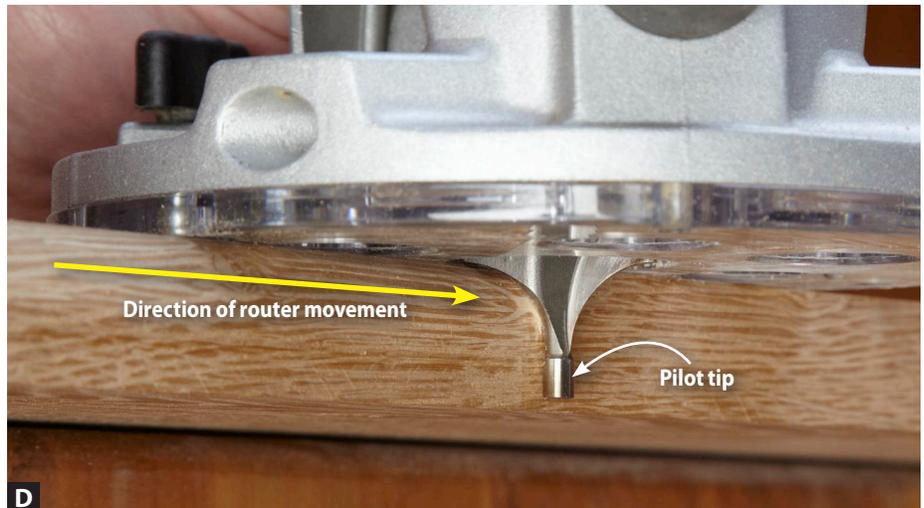
B

A clamp-on guide provides positive control for edge cuts, dadoes, and grooves. A board or straightedge and some clamps work, too.



C

A base-mounted edge guide also works well for straight edges. Attach the guide so it bears against the right edge of the workpiece in relation to direction of travel.



D

A piloted bit follows straight or curved edges. A plain pilot tip, as on this bit, can burn or mar the workpiece. For best results, choose piloted bits with ball-bearing tips.

## SET BIT DEPTH ACCURATELY



E

Measure from the router base to the end of the cutter on the bit to set the cutting depth. Make a test cut in scrapwood to verify the setup before you rout your workpiece.