

# Trim Routers

New breed  
of compact routers  
is a big win for  
furniture makers

BY GREGORY PAOLINI

The last time *Fine Woodworking* reviewed trim routers (“Laminate Trimmers,” *FWW* #171), they were tools designed for a single carpentry task: trimming countertop laminate. But they were the only small routers out there, so we worked around their deficits.

Recently, however, manufacturers have responded to user feedback with features that make these tools more versatile and easier to use. The best routers in this new crop are perfectly suited to a variety of furniture-making tasks: rounding over and chamfering edges, routing hinge mortises, flush-trimming veneer and edge-banding, routing cavities for inlay, and more. Their small size and light weight makes them agile, so they are easy to move around corners and along curves, and to balance on edges and narrow parts like legs. And they can be used one-handed, which means you can fly around a workpiece, holding the router and easing the edges with one hand while holding and repositioning the workpiece with the other.

There are a lot of new models on the market, and choosing one is difficult if you can't get them all in the shop and try them out. But I've done just that, so you

don't have to. I gathered 12 compact routers in my shop and used them daily as I made furniture. Over the course of several months, clear winners emerged.

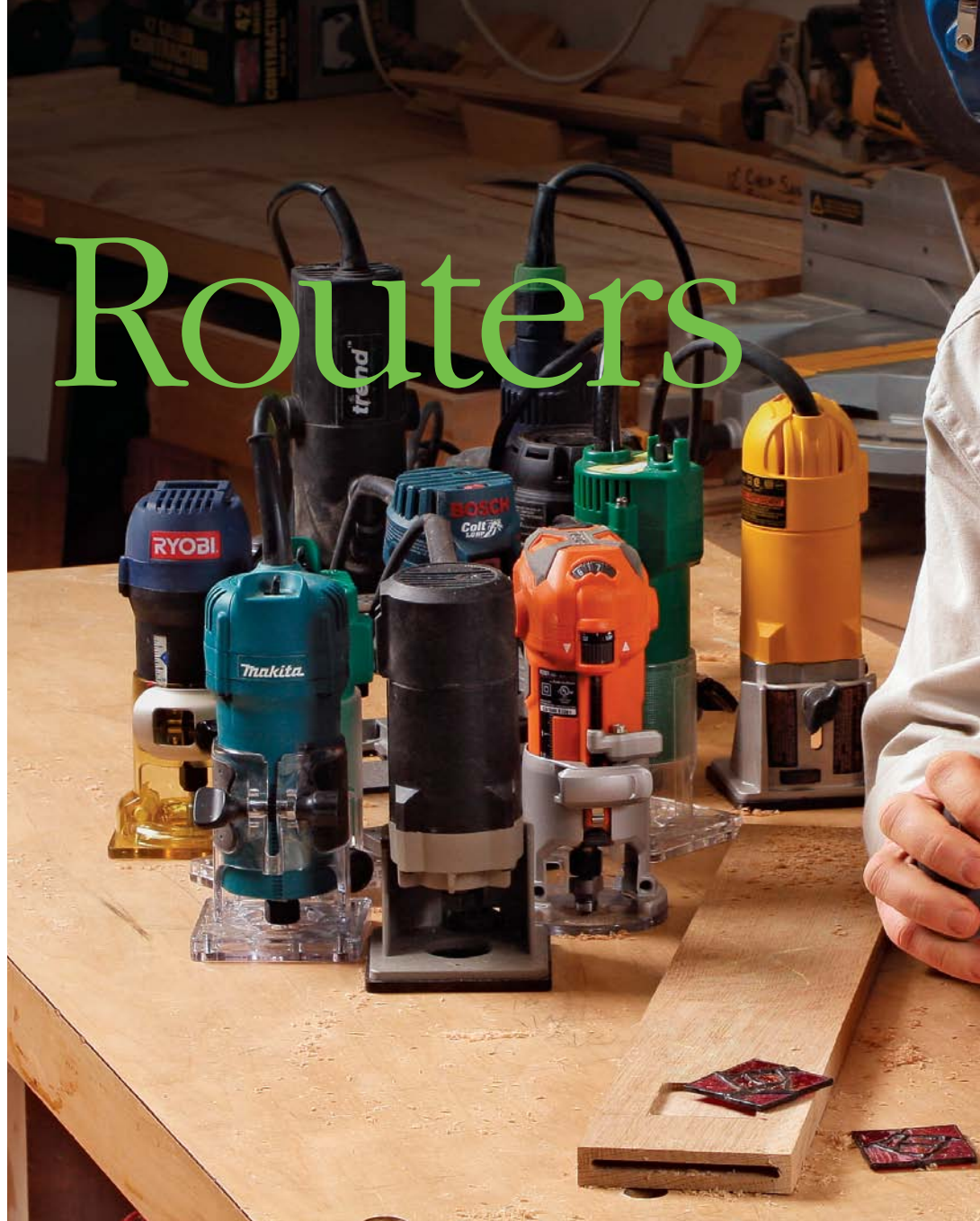
## Put to the furniture-maker's test

There are a lot of empirical measurements—such as spindle runout—that can be taken when testing a router. But what ultimately matters is power, cut quality, how easy the router is to use, and how comfortable it is to hold while you're using it.

So I skipped the measurements, took the routers out to the shop, and used them the way a furniture maker would. To gauge cut quality, I rounded over and chamfered

## MUCH MORE THAN A LAMINATE TRIMMER

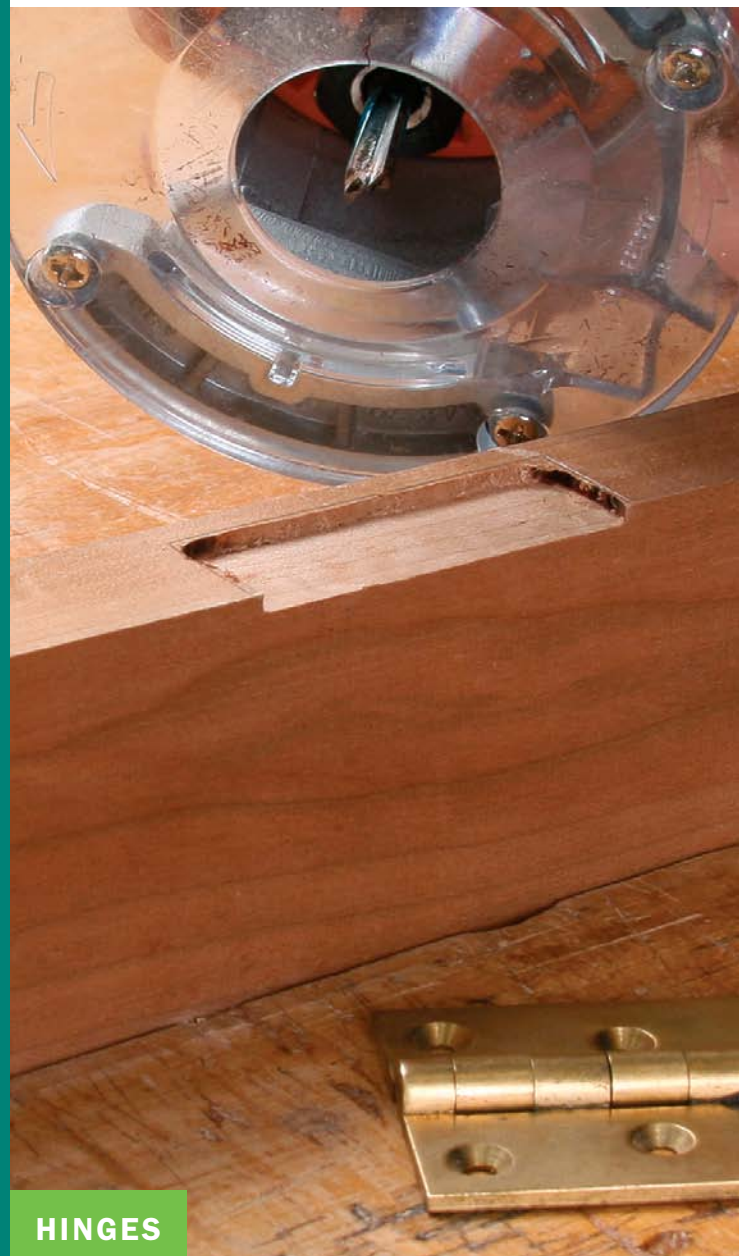
No longer just a countertop installer's tool, today's trim routers excel at a variety of woodworking tasks. From routing mortises for hinges and inlay to rounding over edges and trimming edge-banding flush, the best new routers offer the perfect combination of power, precision, and control.







INLAY



HINGES



BANDING



EDGES



## BIT HEIGHT SHOULD BE EASY TO ADJUST

Trim routers are used for small work, where a bit that is a few thousandths of an inch too deep can spell disaster. Bit-height changes should be uncomplicated and accurate.

**Best system.** A thumb-wheel on the Ridgid makes minute changes to bit height a snap. Depress a thumb lever (just above the locking lever on the base), and the lead screw disengages, so big, quick moves are easy, too.

**Simpler design gets the job done.** The lead screw on the Makita (right) and Grizzly H7791 controls all bit-height adjustments.

**The twist is good, too.** When using the fixed base on the Porter-Cable 450PK (below) and its close relative, the DeWalt 611PK, all height adjustments are made by releasing a locking lever and then turning the motor in the base, another system that works very well.



furniture edges. Then I routed hinge mortises and cavities for inlay. After the formal tests, I used all of them as I went about my daily work. As I used them, I took note of whether they ever bogged down due to a lack of power.

To keep a level playing field, I equipped each router with new Whiteside router bits, chosen because they have performed well in previous *FWW* tests. However, for flush-trimming edge-banding, the Festool needed a proprietary bit, which the manufacturer provided. But this had no effect on my overall impression of the router.

Here's what I discovered. Power is not a problem and neither is cut quality. All of these routers did everything I asked of them without a problem and left a clean, chatter-free surface.

But there was a difference when it came to usability and comfort. The DeWalt DWP-611PK was the easiest to use and the most versatile, so it is my pick for best overall. For best value, I picked two routers. The



**Two that are less precise.** Bit adjustments on the Ryobi (above) and Grizzly H7790 are similar. Release the lock and then push and pull the motor until you get the height you want. That's OK for coarse adjustments, but it's a struggle for fine changes.





## A CLEAR VIEW MAKES FOR EASIER ROUTING

When routing mortises for inlay or hinges, you need to stay within the layout lines, so visibility is key. A base with a large cutout and clear sub-base creates the perfect window, letting you see exactly what you're routing.



**A perfect view.** The DeWalt's fixed base has a huge opening cut into it and a clear base. And the motor housing has built-in LED lights, so you'll never have trouble watching your work.

**Tunnel vision.** The base on the Porter-Cable 7301 offers a great view of the bit up high, but the sub-base is opaque and has a small opening, so it is very difficult to see what the bit is routing.

Ridgid R2401 has fast, precise height adjustments, an LED light for improved visibility, and is great for one-handed use. Because of its low cost, the Grizzly H7791 is the perfect choice for a router that you leave set up for one task. □

*Gregory Paolini is a furniture maker near Asheville, N.C. In the past, he has reviewed tools for Festool, but he has not received compensation of any sort from the company.*

## Unique features to consider



**A new angle on flush-trimming.** Festool's horizontal base turns the motor 90° and provides a stable platform for trimming edge-banding—a huge improvement over balancing a router on the thin edge.



## Online Extra

To learn more about the features that make a great trim router, watch the video at [FineWoodworking.com/extras](http://FineWoodworking.com/extras).

**Plunge bases are perfect for inlay.** Tipping a fixed base into a mortise can be tricky, so if you do a lot of inlay work, consider the Trend T4 (a dedicated plunge router), the DeWalt 611PK, and the Porter-Cable 450PK.



# Trim routers head to head

## DeWalt 611PK



dewalt.com

**Street price:** \$200

**Amps:** 7; **Weight:** 4 lb. (fixed); 6.6 lb. (plunge)

This revolutionary new tool is a smaller version of the popular two-base router kits. It's compact like a trim router, but more powerful. Both bases are well-designed. The fixed base has excellent height adjustments, is comfortable for one-handed use, and has a rough exterior that provides a solid but comfortable grip. An elongated, square sub-base

improves the router's balance on narrow parts and rides easily against a straight edge. The plunge base is just as good. Its small size is ideal for inlay work. Both bases offer great visibility, too. And there is an LED light built into the motor housing that makes more precise work much easier.



## Bosch Colt

boschtools.com

**Street price:** \$117

**Amps:** 5.6

**Weight:** 3.8 lb.

The Bosch is comfortable to hold. It also is bottom-heavy, so it was well-balanced and stable in use. The square base works well with a straightedge, and bit-height adjustments are quick and easy. But it does lack LED lighting, and the black sub-base limits visibility.



## Grizzly H7791

grizzly.com

**Street price:** \$46

**Amps:** 1.7

**Weight:** 3.6 lb.

The Grizzly lacks LED lighting and variable speed, and height adjustments are more difficult than on the DeWalt 611PK and Ridgid R2401. Also, it is not as comfortable as those two routers, but at \$46 it is a great choice for a router dedicated to one job, like rounding over edges. Then you can lock it in place and leave it alone. Always at the ready, this router will save you time and effort. It is also light and easy to hold, perfect for one-handed use as you race around the edge of a tabletop. I am tempted to buy two or three, setting up each one for a different task.



## Ridgid R2401

ridgid.com

**Street price:** \$100

**Amps:** 5.5

**Weight:** 3.8 lb.



I loved using this elegantly simple trim router, because bit-height adjustments are quick and accurate. There is a lead screw for micro-adjustments, but a push of your thumb disengages the mechanism so that rough adjustments can

be made. It also is comfortable to hold, making it a favorite when it came time to round edges. There's a large opening in the base, a clear sub-base, and an LED light, all of which add up to great visibility. Bit changes are a snap. There also is a second, square sub-base, which is just what you need to guide the router with a straightedge, and an edge guide. It can't match the DeWalt's versatility, but it is easier to handle for light routing, and much less expensive.





## DeWalt 26670

dewalt.com

**Street price:** \$95

**Amps:** 5.6

**Weight:** 3.6 lb.

I've done a lot of laminate work, and this router would be a workhorse for trimming laminate flush to countertops and profiling edges. However, the sub-base is opaque and limits visibility, so tasks like mortising for hinges and removing material for inlays—two important and frequent tasks in furniture making—are difficult at best.



## Festool MFK 700

festoolusa.com

**Street price:** \$535

**Amps:** 6

**Weight:** 5.2 lb.

I tested this router with two bases. One held it vertically, but in that configuration, the bit is completely hidden by the base and it was not easy to hold in one hand. Those are serious problems for a furniture maker. The second base holds it horizontally, which turned it into the best tool I have ever used for trimming edge-banding flush.



## Grizzly H7790

grizzly.com

**Street price:** \$42

**Amps:** 2.1

**Weight:** 3.8 lb.

This router has a clear plastic base and sub-base, so visibility was great. However, the motor is both heavy and top-heavy, so the balance wasn't good. And adjusting the bit height is somewhat tricky. After the locking lever is released, the motor rotates and slides in and out freely. Setting the height involves a fair amount of trial and error.



## Makita 3709

makita.com

**Street price:** \$110

**Amps:** 4

**Weight:** 3.6 lb.

A rack-and-pinion system makes fine and coarse adjustments easy. The power cord comes out of the top, improving the balance. But this wasn't a comfortable router: the housing didn't fit my hand well, and the edge-guide locking knob was often in the way.



## Porter-Cable 450PK

portercable.com

**Street price:** \$185

**Amps:** 7; **Weight:** 4 lb. (fixed)

6.6 lb. (plunge)

The Porter-Cable 450 is almost identical to the DeWalt 611PK. But the differences are where it falls short. There are no LED lights, so visibility isn't as good. Also, the body of the fixed base has painted ridges running parallel to your fingers, resulting in a slick surface. And the sub-base is round, so it's not as good for use with a straightedge.



## Porter-Cable 7310

portercable.com

**Street price:** \$100

**Amps:** 5.6

**Weight:** 3.8 lb.

This Porter-Cable is practically a twin of the DeWalt 26670. Other than a few cosmetic differences, they differ only in that the Porter-Cable's adjustment knob is not as nice as the DeWalt's and the Porter-Cable is flat on top, rather than domed. In terms of performance, they are practically identical.



## Ryobi TR45K

ryobitools.com

**Street price:** \$80

**Amps:** 4.5

**Weight:** 6 lb.

The Ryobi fit well in my hand and was comfortable to use for extended periods of edge-chamfering. However, it was difficult to set the bit height, because the motor slides freely in the base. Height is adjusted by pushing the motor in or pulling it out, an approach that works for coarse changes but makes fine adjustments difficult.



## Trend T4

trend-uk.com

**Street price:** \$120

**Amps:** 6.6

**Weight:** 6 lb.

This is a dedicated plunge router. It worked great for inlay work and routing hinge mortises. However, it is just as large as my mid-size plunge routers. That means it isn't well-suited for one-handed work like rounding over or chamfering edges. Also, the fit and finish were a bit rough, with a few burrs here and there.