

An Unusal Router Accessory

By Bill Hylton

Tired of humdrum and run-of-the-mill router add-ons? Here's an accessory that is anything but ordinary.

Every router user has some favorite gizmo or doodad that, for them, expands the utility of the woodshop's most versatile power tool. And every router user is on constant alert for seductive new router gadgets.

I've got shelves creaking under the weight of router jigs, fixtures and accessories. Some I built myself; others I bought. A few I use on a regular basis, while others are primarily supplements to my shop-wide, low-tech dust collection system.

Most router gizmos are modest. In size, if not in cost, devices like edge guides are small, though they have a myriad of applications.

Every now and then, some router-oriented Godzilla crashes down the

shop door. Look at me, look at me! I'm big and flashy. I break down barriers. I cost a lot and do a lot. Pay me some attention.

Three of these rout-a-zillas forced their way into my shop recently, taking up space, making noise and sawdust, demanding my attention. All were intimidating at first, but once I got to know them, each turned out to be a top-flight helper in the shop.

WoodRat

The next of my shop's invaders turned out, once I got used to it hanging on the wall, to be a very practical joinery cutter.

Woodworkers are always on the lookout for easier, faster, more

accurate — and, yes, more foolproof — means of cutting joints. The router is a great tool for this work, but each joint usually requires a different setup, a different jig — router table, dovetail jig, mortise and tenon jigs and on and on.

Though fairly expensive (about \$700) exclusive of the router and bits, the WoodRat might be what you're looking for. It cuts dadoes and rabbets, sliding dovetails, mortises and tenons, laps, through and half-blind dovetails and box joints.

But what is it? you ask. It's a mounting for a plunge router that gives you a range of movement in three axes.

As much as 40" of side-to-side movement is provided by an extruded aluminum beam assembly that's hung on the wall. The main channel fixes the unit, providing a reference point for all the movement. Nested into the face

WoodRat



of the channel is the sliding bar. Two parallel vertical fences, each opposed by an adjustable cam clamp, enable you to secure work to the sliding bar, and a crank and cable mechanism allows you to move the sliding bar left and right, taking the work with it. This is the first axis of movement.

The router itself is mounted on a plate that's attached to the top of the channel and cantilevers over its face and the sliding bar. This complex mounting can be shifted in and out and raised slightly (using shims), and it can be twisted left and right. The router can be immobilized or allowed to slide fore and aft. This is the second axis of movement. The router's plunge gives you a little vertical movement, the third axis.

How does all this go to work for the woodworker? Depends on the operation.

Notable is the 'Rat's function as a duplicating machine, used in cutting dovetails and box joints. What this means is that you use the WoodRat's controlled side-to-side movement to "follow" a pattern and duplicate it.

Trace a sample cut made with the bit in use directly on the beam; this tracing is "The Mark." Then you clamp a pattern — marked for the cuts you want — in the cam clamp below it. When you move the sliding bar to align individual cuts on the pattern with The Mark, you are, at the same time, also moving the workpiece secured in the cam clamp just below the router.

Once the pattern mark is aligned, pull the router to cut the workpiece. This makes repeated cuts — like those box joints — easy. More than that, it enables you to vary the cut width and cut spacing. An asymmetrical or completely random layout is easily duplicated.

Blend in the ability to angle the router, and you can produce dovetail pins of any size or taper. To enhance this capability, use the WoodRat

narrow-neck high-speed steel dovetail bits. The joints you cut with them come closer to a hand-cut look than any other setup I've used.

The 'Rat doesn't stop at that, of course. For routing grooves or profiling edges, the 'Rat simply immobilizes the router and serves

“Woodworkers are always on the lookout for easier, faster, more accurate — and, yes, more foolproof — means of cutting joints.”

— Bill Hylton

as a guide. You position the work against the beam, tight against the underside of the base plate, and you feed the workpiece through the cut. It's like an upside-down (and thus somewhat inconvenient) router table.

Alternatively, you can power-feed through such a cut, provided the workpiece is under 30" long. Capture a carrier bearing the workpiece in the two cam clamps, then crank the sliding bar through its range of travel. Using this approach you can mortise and groove stiles and groove rails for doors and other frame-and-panel assemblies.

Enlist that same power-feed capability to rout tenons, tails for sliding dovetails and half-laps.

For routing dadoses and sliding dovetails in workpieces up to 9" wide, you clamp the board to the underside of the base plate, then pull the router through the

cut. Aligning the cut is a cinch with a centering gauge, and you can see the cut being made.

Regardless of the operation, the WoodRat approach is just a little bit different. If you have ways of cutting specific joints, or doing specific operations, you may have to revamp your mindset to thrive with the WoodRat.

This gizmo is well-made, versatile, and reasonably easy to master. Just don't start with dovetails.

I had two problems with the 'Rat: the documentation and bit changing.

The manual is written in British English (it's a British product), and I just didn't understand some of it. Too many salient details are glossed over. The DVD demo is nice, but too often it shows the bit cutting rather than what the operator is doing to direct the cut. The U.S. distributor, The Craftsman Gallery, has improved instructions posted on its web site

(www.thecraftsmangallery.com), and according to Lewis Stepp of the Gallery, a new manual should be available when you read this.

With the router positioned on the 'Rat, changing bits takes three hands — one to keep the bit from dropping out of the collet onto the floor, and two to work the wrenches and/or spindle lock. I ended up pulling the router off the WoodRat and making the swaps on the benchtop.

A better solution would have been to use a Porter-Cable router fitted with an RC Eliminator chuck (the sort favored by the Legacy folks). Too bad this excellent accessory isn't available for other router brands.

Surrender or Fight?

Is the FMT worth the big (about 800) bucks? How about the WoodRat? Or a Legacy mill?

That depends upon how deep your pockets are, and how badly

you want to do the sorts of work these machines are designed for. All are well designed, and well-made. Support from the manufacturers is good; when you call for help, you get an experienced user of the contraption to help you solve your problem.

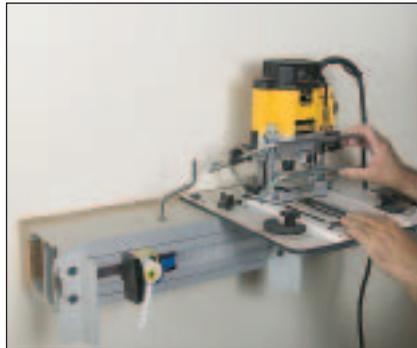
The Legacy is the only one of these rout-a-zillas that does unique work — those spiral turnings. But it is versatile and stretches your imagination.

The FMT does only one job, and it does it extremely well. But there are other ways to do that job. You have to decide whether you'll use mortises and tenons enough to make the FMT a good buy.

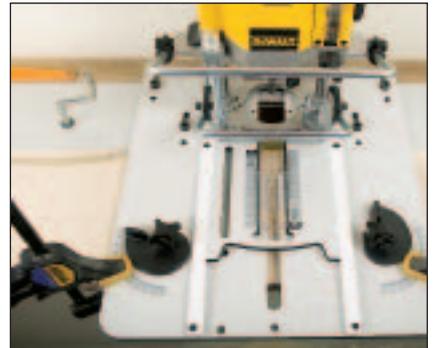
The WoodRat does few things that can't be done in other ways. Initially, the approaches seem contrary. But with practice, you can master the WoodRat, and it grows on you. It's actually the least costly of these rout-a-zillas.



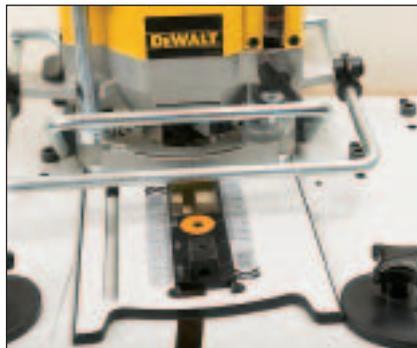
Bill Hylton is a regular contributor to the Journal and author of Woodworking with the Router from Reader's Digest.



The plunge router, mounted on the router plate and equipped with the PlungeBar accessory, sits on the base plate. It can slide fore and aft, pivot or be locked down.



To dado with the 'Rat, you tuck the workpiece up under the mounting plate and use "the brush" to hold it. Once the piece is aligned for the cut, apply a clamp to secure it to the plate.

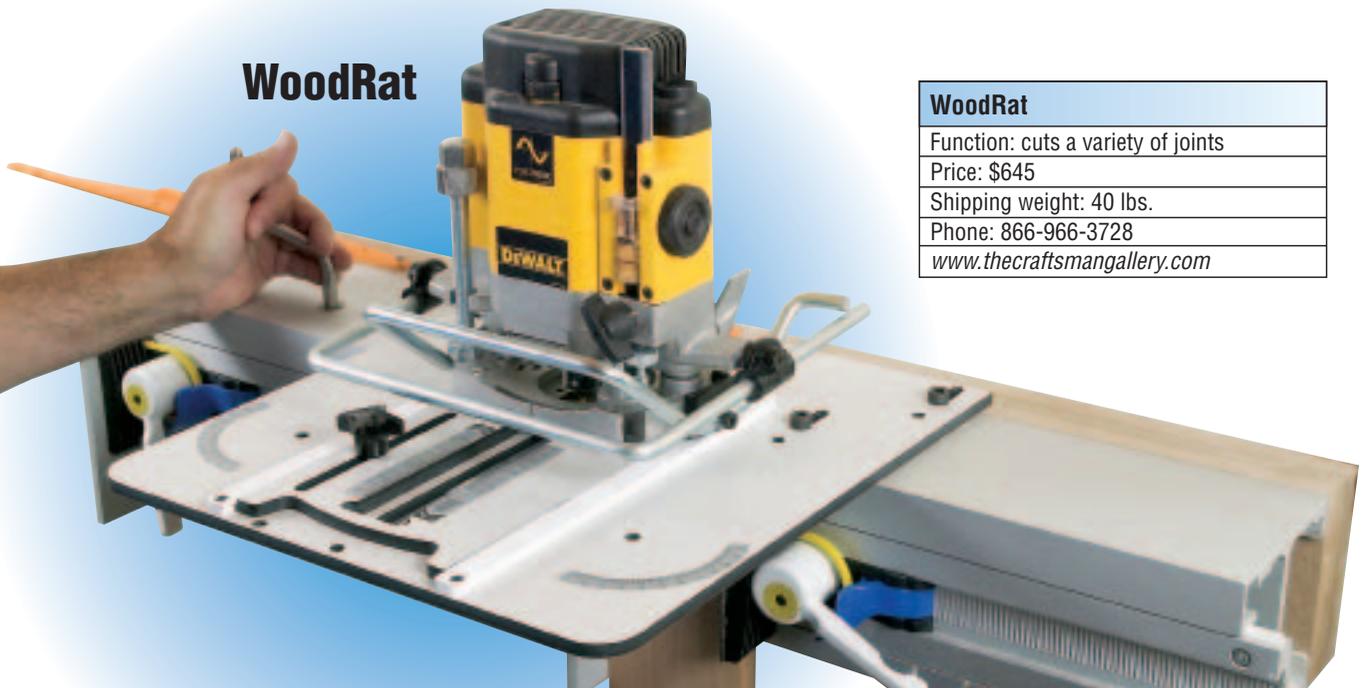


The spirals flanking the router plate control the angle. Twist the router against the spiral and slide it forward, then back to make a cut.



The PlungeBar accessory, available for most plunge routers, enables you to plunge the router with one hand.

WoodRat



WoodRat
Function: cuts a variety of joints
Price: \$645
Shipping weight: 40 lbs.
Phone: 866-966-3728
www.thecraftsmangallery.com