

2¹/₄-hp Router Combo Kits

Get double duty when you combine an interchangeable motor with both fixed and plunge bases

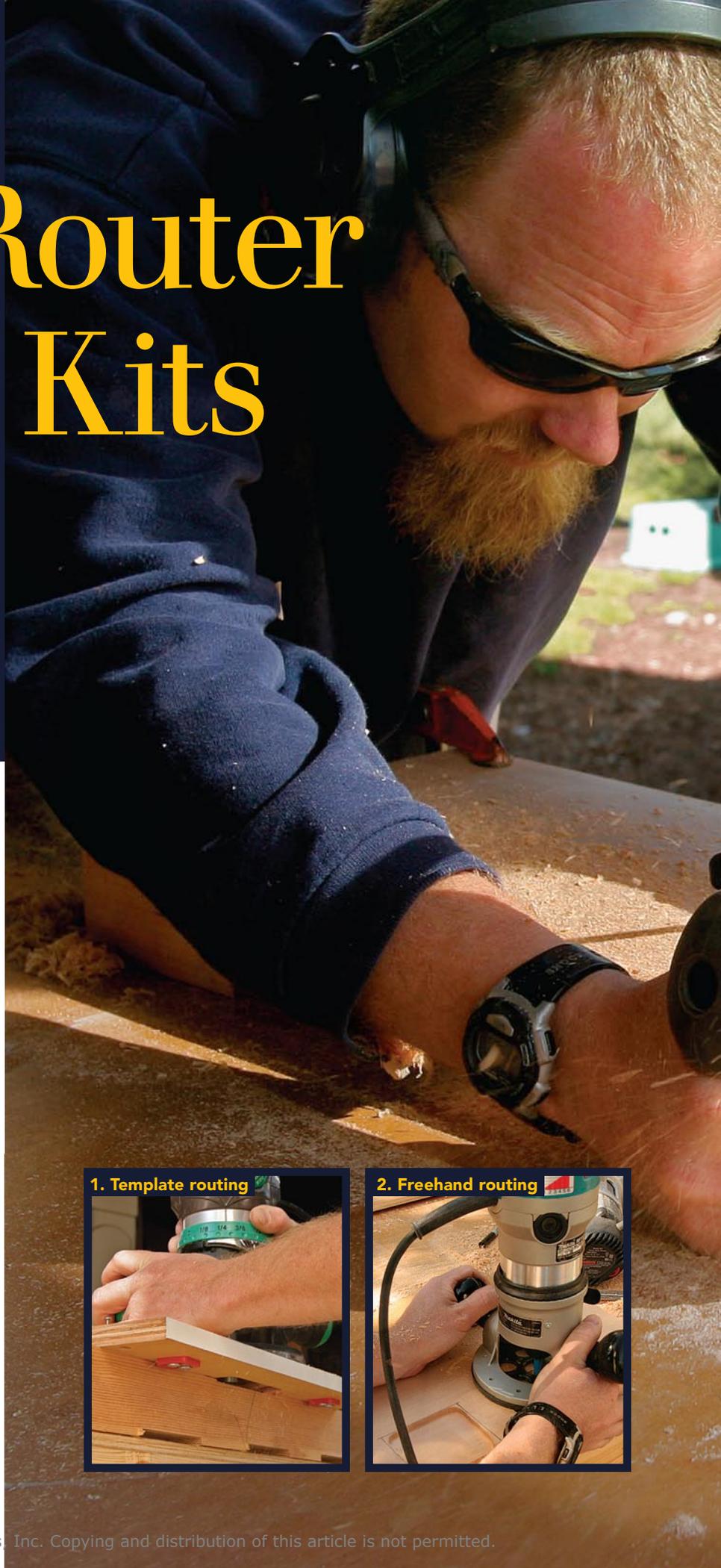
BY KIT CAMP

Most finish carpenters I know have at least a couple of routers in their trucks; cabinetmakers have double or triple that number in their shops. Even framing crews use routers to fabricate curved parts and to cut out window and door openings in sheathing. I have eight routers, and I can think of at least three I'd like to add to my collection.

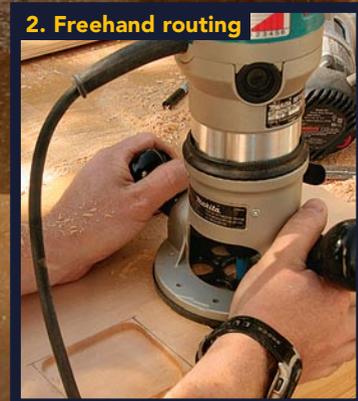
Why have so many routers? Because different routers excel at different tasks. For most woodworkers and carpenters, midsize routers (1¹/₄ hp to 2¹/₄ hp) are the everyday choice. A fixed-base model is useful for cutting rabbets, hinge-mortising, flush-trimming, doing pattern work, performing joinery tasks, and taking on many router-table jobs. A plunge router does mortise-and-tenon work, deep excavations, and cuts that aren't accessible from the edge of the stock.

For the best of both worlds, consider a combo kit, which includes a single motor with interchangeable fixed and plunge bases. (Some kits also include a D-handle base; more on that later.) Combo kits are less expensive than fixed-base and plunge-base routers purchased separately; they also allow you to keep both tools in one storage case. With one of these kits in hand, there aren't many router tasks you can't handle.

Combo kits are available in a variety of motor sizes, so to keep things fair, I limited my test to eight kits



1. Template routing



2. Freehand routing

SHOP TESTS MIMIC COMMON ROUTER TASKS

I spoiled myself for a couple of months by using these eight routers to do my normal woodworking and finish-carpentry tasks both in the shop and on job sites. I kept careful notes about each tool and paid attention to see which models I found myself wanting to use. But with eight kits and innumerable applications for the two bases included in each kit, the only fair way to compare the tools was through a series of standardized tests.

My first tests focused solely on the fixed-base setups for each model. To test for power, I chucked a brand-new $\frac{5}{8}$ -in. bit into each motor and plowed torturous $\frac{3}{4}$ -in.-deep grooves into a piece of hardwood (photo left). I'm pleased to report that even with this heavy cut, none of the routers bogged down excessively.

I then outfitted each fixed base with a collar guide and teamed them with my Templaco template (www.templaco.com) to rout hinge mortises (1). This allowed me to look at the overall stability of each tool and to assess the ease of installing and removing collar guides. After working with the template, I freehanded a few mortises to assess the sightlines of the bit and fixed base in use (2).

Finally, I set a series of depth measurements using only the adjustment mechanism on each router—no rulers allowed. Starting with the bit set flush to the bottom of the baseplate, I zeroed the depth scale, then adjusted the depth down to $\frac{5}{8}$ in., up to $\frac{5}{16}$ in., back down to $1\frac{3}{32}$ in., then up to $1\frac{5}{64}$ in. After each step, I checked the accuracy of the projection (3). Most of the routers performed admirably.

After completing fixed-base tests, I switched the motors to the plunge bases. I began with a shelf-pin test, which helped me to get a feel for template-guide accessibility, plunge action, and amount of play in each plunge base (4). Ideally, the shelf pins should fit tightly in the holes, but I was a bit surprised by the amount of play in most of the routers. Only the DeWalt and the Bosch made perfect holes with absolutely no wiggle. I also hooked each router to my shop vacuum and

plunged a series of deep mortises into 3-in.-thick hardwood. This test shed some light on the tools' dust-collection abilities in an extreme situation and assessed each router's vibration and ease of control during a deep plunge cut (5).



3. Bit depth adjustment



4. Plunge action



5. Dust control



that all have a variable-speed, soft-start 2¼-hp motor. Each model accepts both ¼-in. and ½-in. shank bits, and the proprietary Bosch guide system aside, each base accepts standard Porter-Cable-style template guides. (An adapter is available for the Bosch.) Except for the Ridgid kit, which is stored in a soft-sided bag, all the kits come in plastic cases ranging in size from large to ridiculously huge.

Curious about relative noise levels, I used a decibel meter to measure how loud each tool was at idle and during heavy use. While I found some minor variation, the volume test ended up being a moot point because all the tools were far too loud to be used without hearing protection.

What I found most intriguing about this group of tools was the relatively narrow price range. In many tool reviews, the best of the bunch costs twice as much as the average model. But with six of the eight routers in this review priced within \$30 of each other, it felt like a competition where each manufacturer was given \$200 and asked to produce the best model it could.

Fessing up to some personal preferences

Not surprisingly, I didn't find any true dogs in this review; each router kit performed admirably. In the end, especially with such a tight price range, it came down to the little things on each tool that added up to make my work easier, and those little things will be different for each user. I hope the standardized tests help to cancel out any of my personal biases so that you can make an informed choice, but I still want to come clean on what I like and dislike about these routers in general.

First, I don't like single-wrench/spindle-lock collet sys-

Ridgid R2930 www.ridgid.com \$200

I found switching the Ridgid's motor from base to base much more difficult and awkward than on the other tools because the spindle-lock button needs to be engaged. The motor is also much taller than others, which made it less stable when cutting



Little lights. LEDs mounted to the underside of the motor are a surprisingly nice feature.

along the edges of stock. The power switch on the motor was hard to slide on and off, but the wrenches for blade changes

were nice. Although the plunge base features comfy handles and smooth action, it had too much play for my taste. On the plus side, the Ridgid is the only tool that uses a fabric carrying case, which I like a lot. The Ridgid can be adjusted from above when mounted in a table, and it includes LED lights on the underside of the motor, a worthwhile feature. This is a nice router that has only a couple of minor problems.



Makita RF1101KIT2 www.makita.com \$205

I had only a few quibbles with the Makita kit, which is basically a nice set. The squat motor is compact and well balanced, and the power switch is just that, a traditional metal toggle switch. The older-style black baseplate reduces visibility compared with most other models. The ring-type depth adjustment on the fixed base is accurate, but the black-on-black graduations are too hard to see. I also



couldn't fit my hand inside the fixed base to install the template guides.

The plunge base is a no-frills operation with stiff but smooth action; the auto-lock mechanism is a bit difficult to hold. This is the only tool I tested that requires tightening a screw to hold the motor in the base.



D-handle option. These bases allow the tool to be triggered without moving your hands.

Milwaukee 5616-24 www.milwaukeetool.com \$230

Some things on this router were great. The BodyGrip base was comfortable and provided a high level of control, and the depth adjustment allowed for easy fine-tuning (though I think the graduated wheel was slightly out of calibration because I had trouble hitting target measurements during depth-testing). Also, the kit includes two large, beautifully forged wrenches. Unfortunately, the plunge mechanism was sloppy, the spring on the auto-lock knob was



Get a grip. An overmold rubber hand grip with adjustable strap provides excellent control.

way too stiff, and the locking knob on the depth rod was tiny and slippery. I tested a second plunge base to rule out a random lemon, but the problems remained. Finally, the carrying case is enormous.



Craftsman 28084 www.craftsman.com \$220

This kit is another fairly solid entry that performed most tasks adequately, but none spectacularly. My favorite thing about this tool is the three LED lights mounted to the bottom of the motor. The plunge base worked smoothly, had only a tiny bit of play, and did not auto-lock. The fixed base, on the other hand, had some issues. Two of my three sets of template guides didn't fit in the provided baseplate; the hole in the baseplate



Adjust from above. Hex-wrench baseplate allows for quick table-mounted depth adjustment.

is just a little too small. Also, the depth adjustment has two full turns of slop in it, making accurate adjustments difficult. The Craftsman is also the only tool with a collet that does not allow for the use of two wrenches, which is a serious oversight.



Porter-Cable 894PK www.portercable.com \$280

The Porter-Cable kit that I tested features the GripVac base, an excellent design certainly worth an extra \$20, but the router is also available with a standard, two-handle fixed base (\$260). The Porter-Cable's motor features an innovative switch next to the left-hand handle that's also accessible from the top of the motor.

This way, flipping over the router and placing it on the top of the motor shuts off the tool; the switch cannot be flipped on accidentally while it is in this position, common for changing bits. The motor has a spindle lock and includes only one wrench, but the collets are easily used with two wrenches (if you have an extra).



2-in-1 switch. Reached easily at the base, this switch also projects from the top for safety.

Hitachi KM12VC www.hitachipowertools.com \$150

This is a no-frills, basic entry that did fine in my testing. The fixed base shares the same ring-type depth adjustment as the DeWalt and has comfy rubber-coated knobs, but there was play between the motor and base, making depth-setting hit-and-miss. The plunge base had some play and made a grinding noise on the way up, and I didn't have confidence in the stability of the depth turret during a heavy cut. Although the router has an auto-lock plunge mechanism, the spring was gentle enough to hold the lever back easily. The price range for these kits is pretty tight, but if you are looking to save as much as possible, this router offers good value.



Simpler centering. Adjustable template adapter and centering gauge make setup a breeze.

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tems. I've never felt as if I have the same sense of the tightness of the collet with only one wrench. Besides, it's difficult to change bits on quite a few of the routers with the motor installed in the base, which means you are trying to hold a cylindrical motor and depress a collet-lock button with one hand while working the wrench with the other. Even though I have strong, decent-size hands, I found this task to be frustrating at best. I prefer to change bits with the help of two wrenches. The good news is that most of the routers have a flat spot milled on the motor shaft to accommodate a second wrench. The bad news is that not all manufacturers include a second wrench.

I want to have as many fingers as possible on the knobs during operation, so I favor routers that don't require me to hold down a lever to make plunges. A few plunge bases I tested also had stiff springs, which made it tiring to hold the lever back to make repeated plunges. I'd rather lock the tool when I need to and have it unlocked when I don't.

All the routers have some provision for vacuum-powered dust collection. Consisting largely of various plastic parts that screw or snap into the bases to surround the bits, most felt like afterthoughts. They all provided decent dust collection when cutting dadoes or mortises, but none performed adequately on edge cuts.

The problem with all these shields and covers is that when dust collection isn't being used, the shield instantly becomes coated with dust and reduces visibility to nothing. Plus, on delicately balanced edge cuts, the vacuum hose can make it much more difficult to control the router. The exceptions to this category are the plunge bases from Porter-Cable and DeWalt, and Porter-Cable's D-handle base. These tools have dust-collection capa-

THE FAVORITES

TWO CLOSE TO CALL



AUTHOR'S
BEST OVERALL
CHOICE



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BEST OVERALL
CHOICE

DeWalt DW618PK www.dewalt.com \$215

Compact size A squat motor makes this router hug the worksurface, a bonus for edge-profiling and hinge-mortising.

Plunge action As recorded in my field notes, the plunge action was “gorgeous,” had no side-to-side play, and did not auto-lock.

Dust collection The dust extraction on this tool was top of the heap.

Extras This kit is also available with a D-handle base, which includes a lock-on trigger and a twist-lock detachable power cord (\$265). Although I found I wasn’t a fan of the D-handle for everyday routing, it occurs to me that it could still be used in a router-table setup,

which would leave me with plunge and fixed bases.

Depth adjustment The fixed base on this model has an old-school, rotating ring to adjust motor depth that worked very well and was easy to read.

Bottom line I like everything about this tool except the lack of a second wrench and the fact that the giant case requires too much fussing to get everything oriented correctly.

Bosch 1617EVSPK www.boschtools.com \$215

Guides The Bosch kit comes packaged with a nice edge guide and a starter set of three proprietary template guides (a Porter-Cable-style adapter is sold separately). These guides click into place without the tedious screwing necessary with traditional systems.

Ergonomics The distinctive wooden handles on the fixed base are comfortable, but they are large and a bit slippery. Users with small or arthritic hands could have trouble.

Depth adjustment The depth adjustment on the fixed base is excellent, and the plunge base has a well-engineered microadjustment on the depth rod. Although the plunge base has an auto-lock mechanism, it is easy to hold the lever back while plunging the tool.

Router-table compatible Bosch is one of three manufacturers whose router can be adjusted from above when mounted in a router table.

They make a good case The carrying case is reasonably sized—not too big, not too small.

Bottom line The Bosch is a time-tested, top-flight tool.



bilities engineered into them, extracting dust through plunge tubes without compromising control and visibility.

Most of the routers come with clear polycarbonate baseplates, a change from the black plates that were standard for many years. The new plates are flat and provide great visibility. They are not as slippery as the black bases, though, so I gave them an occasional coat of paste wax.

DeWalt, Craftsman, and Porter-Cable offer kits with an optional D-handle base. I was eager to try them because I’ve never owned one. Although I liked being able to trigger the tool while keeping a firm grip on the handle, I still favored the balance and close-quarters grip of the standard bases. I appreciated the fact that this third base could be mounted in a router table, leaving me with plunge and fixed bases, a nice perk for the router-deprived.

Tie game

During the course of my shop and job-site testing, I gravitated toward the Bosch, the Porter-Cable, and the DeWalt routers. I really like the Bosch’s innovative click-in template guides and the DeWalt’s squat, stable motor and easy depth adjustment. The Porter-Cable’s fixed base is the best of the bunch. It’s a tough call, but I have to give an edge to the Bosch and the DeWalt models for their silky-smooth plunge mechanisms and perfect results in the shelf-pin test. With no price difference between these models and each including cool features that set them apart from the crowd, I decided to rate both kits best overall. □

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