Toolbox

Panasonic Lithium-Ion Cordless Drivers

by Andy Beasley

ot long after I finished last month's review of lithium-ion combo kits ("Lithium-Ion Cordless Kits"), my editor sent two brand-new lithium-ion tools from Panasonic (800/405-0652, www.panasonic.com/business) for me to try.

Compared with the cordless behemoths from Bosch, DeWalt, and Milwaukee, the EY7440 drill driver and EY7540 impact driver look like toys. Each is powered by a lightweight 14.4-volt 3.0–amp-hour lithium-ion battery pack that's not much bigger than a can of sardines. The impact driver, which measures $6^{1}/2$ inches from nose to tail, weighs all of 3.1 pounds with the battery. The slightly larger drill — $7^{1}/2$ inches in length — tips the scales at 3.5 pounds.

The charger has all the diagnostic messages we've come to expect with cordless tools, and will restore a fully discharged pack in 50 minutes. It has two ports: a shallow recess for recharging lithium-ion packs and the traditional black hole for Panasonic nicad and niMH batteries. According to the company, the electrical contacts in the nicad hole are disabled when the unit is charging a lithium-ion pack. However, I was unwilling to test that



Panasonic's compact new 14.4-volt lithium-ion drill driver (left) and impact driver (right) offer power and runtime rivaling those of many 18-volt cordless tools.



particular safety feature; I kept my fingers well clear of the nicad port whenever the charger was plugged in.

Panasonic offers the drill and impact driver in separate kits containing one tool, a charger, two batteries, and a hard-shell case. The impact-driver kit costs about \$340, the drill driver about \$320. I was surprised to find that you can get both tools in a combo kit (EYC140B11) for only a few dollars more (\$400 at Amazon.com).

Ergonomics

When I first picked up these drivers, I thought Panasonic had somehow taken an impression of my hand and made them to fit. They're extremely well-balanced and the rubberized grips are perfectly contoured. If you have paws like a bear, the handles may feel snug. But if you're a southpaw, you'll appreciate how the belt hook attaches to either side of the tools.

Like many other lithium-ion tools, each driver has a control panel on its base with a low-battery indicator and a bright LED work light. Panasonic's control panel includes a light that illuminates when either the battery or the tool motor becomes overheated; if you ignore this warning, the control panel assumes you're not to be trusted and kills the power.

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Impact Driver

There's an additional feature on the impact driver's control panel: a push button that gives users a choice of three impact modes — soft, medium, or hard. Switching to a higher mode pulls out the stops on speed and torque, as well as impacts per minute.

Because the impact driver was so small, I expected to have to supply a lot of my own muscle to set large fasteners. Not so. With a square drive bit inserted, the tool easily drove 7-inch gutter screws full-depth into a stack of framing lumber. I attached a socket driver and drove \(^1/4\)-inch lag screws in predrilled holes: a piece of cake. When I skipped the pre-drilling, the difference was imperceptible.

But I still hoped to put a hurting on the little driver, so I pulled out the 6-inchlong ³/₈-inch lags. Despite its lack of mass, the tool drove the big lags all the way home while transmitting little torque to my wrist.

Drill Driver

Although the drill, too, is small, its performance is anything but. It features a ¹/₂-inch chuck, 18 clutch settings, and two speed ranges that max out at 1,350 rpm. Not surprisingly, I found this tool extremely useful in tight quarters and awkward positions.

To measure the drill's runtime, I tossed a soaking-wet pressure-treated 4x8 beam over a pair of sawhorses and emptied a box of $2^{1/2}$ -inch #8 screws on the surface. After I had sunk 261 screws, the low-battery warning light came on and I



Both of Panasonic's drivers have control panels with switched work lights and warning lights that indicate overheating and low battery power. The impact driver (on the right) also features a push button to adjust the impact mode from soft to hard.

called it quits — even though the drill wasn't even breathing hard. I've used 18-volt nicad drills that couldn't match that performance.

To inflict further stress, I duplicated a test I'd performed on the drills in the lithium-ion combo kits. With a 1-inch auger bit and a 2-by fir plank for a target, the Panasonic bored 94 holes, a better showing than two of the 18-volt lithiumion competitors were able to manage.

Nitpicking

I was slightly disappointed to discover that neither driver included a bit holder. I also found the work light on the impact driver most annoying because it tended to shine in my eyes; the one on the drill is surrounded by a clear plastic lens that focuses the beam straight ahead.

Apart from those minor annoyances, I really liked Panasonic's new drivers. In sheer power, they don't rival high-voltage lithium-ion tools, but they're serious machines that can tackle a surprising number of jobs. If you want 18-volt per-



Owners of older Panasonic cordless tools will appreciate the charger's ability to refresh nicad and niMH batteries as well as lithium ion.

formance in a tool that can hang on your belt all day long, either of these tools would be an excellent choice.

Andy Beasley is a veteran woodworker in Monmouth, Ore.

Toolbox

Festool TS 75 EQ

by Kreg McMahon

n my work as a professional handyman, I'm called upon to do a wide variety of finish carpentry tasks. Many of them are made easier by Festool's TS 55 plunge-cut saw, which I've owned for a year now. Recently, I had the chance to try Festool's newest plunge-cut saw, the TS 75 EQ. It's similar to the TS 55 except it has an 8½-4-inch blade that allows it to cut 2¾-4 inches at 90 degrees and 2½-8 inches at 45 degrees. (The TS 55's 6½-4-inch blade cuts 1½-16 inches and 1½-16 inches, respectively.)

In my opinion, all finish carpenters, cabinetmakers, and remodelers should consider adding one of these two tools to their arsenal. Although it won't replace an everyday circular saw for cutting framing, it's the perfect tool for special high-accuracy cuts.



Depth of cut with guide rail: 2¹/8 inches at 45 degrees;

2³/4 inches at 90 degrees Blade diameter: 8¹/4 inches Rpm: 1,350 to 3,550

Bevel capacity: 45 degrees

Festool USA 888/337-8600 www.festoolusa.com



Features

The secret to these saws' accuracy is the guide rail: It comes in eight different lengths from 32 to 197 inches. For greater versatility, connectors are available that allow you to join rail sections.

The rail has a rubber lip that presses onto the work-piece to prevent splintering; it shows the exact path of the blade even when the saw is set to cut on a bevel. You don't have to compensate for the width of the saw shoe the way you do when you use a shooting board or after-market guide — you simply put the rubber lip on your measuring marks and start cutting. And you don't need to clamp the guide; it stays where you put it. Just remember that you'll need to trim the rubber strip by making a full-length test cut before using the guide for the first time.

The tool's plunge-cutting action is unique, too. The TS 75 EQ doesn't have a rotating lower guard, like an ordinary circular saw; instead, its blade pivots through the bottom shoe. It's a great design, and I think it's safer than a conventional blade guard. Marks on the housing show exactly where the blade will enter the wood and where the cut will stop. I've heard that this feature makes the saw a favorite among high-end hardwood flooring installers, who use it for cutting in decorative borders.

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The TS 75 EQ weighs 13½ pounds — a little heavy, but it's so well-balanced the weight isn't really noticeable. Since Festool is a German firm, the saw has metric depth-setting marks, which I found a little annoying, but after a while I got used to eyeballing the correct depth. An intelligently designed modular carrying case keeps the saw protected and the accessories organized. All the company's tools are packed in "Systainer" cases that stack and lock together for transport.

Applications

My first day out with the TS 75 EQ, I made several crosscuts on a sheet of ³/₄-inch cabinet-grade plywood. After marking measurements on both sides of the panel, I placed the 55-inch guide rail on the marks, set the depth adjustment, and



One of the saw's few sticking points is the metric markings that show the depth-of-cut.



started the saw. The motor has a soft start and maintains a constant speed under load. It also has a variable-speed function for cutting everything from wood and plastics to aluminum and ferrous metals. The saw cut the veneer plywood in no time flat and provided straight, splinter-free cuts on both sides of the blade.

In my job, I hang a lot of new doors in old jambs; most times I have to trim the door bottom. The saw and guide worked beautifully for this task — even when the cut tapered down to zero.

Perhaps the greatest challenge I threw at the saw was trimming 6 inches from a laminate countertop. Since the counter didn't have a backsplash, I used the guide to make this cut. The saw worked perfectly — the guide didn't slide around

and the laminate blade provided a smooth, splinter-free cut.

The Verdict

I highly recommend this saw. It does everything the company says it will and then some. Perhaps the only obstacle is the price. The rig I tested — the saw, a 75-inch guide rail, an extra laminate blade, and a pair of rail connectors — sells for \$750, a sizable investment. Still, I don't mind spending money on tools that work well and save me time. As far as I'm concerned, buying a TS 75 EQ is money well-spent.

Kreg McMahon owns Honey-Do Handyman & Carpentry Service in Huntersville, N.C.

Toolbox

Stanley FatMax Sawhorses

by Norm St. Onge

Since I work mostly in older, occupied homes, I appreciate the minimal weight and portability of plastic sawhorses. They're easy to carry, and they're pretty forgiving on walls, floors, and furniture. They do have one weakness, however: If you snap the four-pin plastic hinge where the lower shelf meets the leg, there's no real fix. The horse gets tossed. After throwing away four of these plastic horses for that very reason, I started looking for something that would be just as light and portable — but tougher.

I found what I was looking for at my local big box: Stanley's FatMax Adjustable Sawhorse. Several features set this model apart from the all-plastic ones I'd been using: metal adjustable legs, continuous piano-type hinges (instead of the pin hinge), and notches on the top that accept 2-by stock.

Adjustable legs. Another difference is the telescoping legs, which adjust independently from 32 to 39 inches. This feature is great for working within the space constraints of funky old houses. It allows me to take advantage of the top or bottom step of a stairway to set up in

a short hall; it accommodates subtle floor-height changes from room to room; and it helps when I'm working on cabinets or other tall items or when I need to support bulky tools like portable planers and table saws.

Stable table. Notches on

Stable table. Notches on the top of the sawhorse are just snug enough to securely hold pieces of 2-by stock. Spanning two horses with two 2-bys produces a very steady platform that takes some persuasion to pull apart; I often screw a piece of ply-



FatMax sawhorses have independently adjustable aluminum legs and notched tops that accept standard 2-by stock. A handy tray on the bottom holds small tools and parts.

The legs adjust from 32 to 39 inches by means of a sliding latch. Footpads make it easy to raise the height while the horses are set up.

wood to the 2-bys to achieve a work surface that's as stable as any collapsible table.

Although Stanley claims that a pair of FatMax horses will support 2,500 pounds, I'm not convinced they could withstand the rigors generated by a framing crew. On the other hand, I recently lost control of a 10-footlong pressure-treated 6x6 and dropped it on my horses from about 18 inches up. They didn't flinch. When that happened with my previous all-plastic models, they broke

The FatMax sawhorses are sold individually and in pairs and cost about \$40 each.

Norm St. Onge owns St. Onge Renovations in North Bennington, Vt.

Toolbox | Finish Carpentry | by Patrick McCombe

Door Hanger. I've seen countless door stands and benches, any of which could help you prep a door. Until recently, though, I hadn't seen one that could help you hang a door, too. The Door Dolly — invented by GC David Williams — is one of the best ideas I've come across in some time. Its quick-release clamps hold the door during prep work; afterward, you use the dolly to wheel the door into position and line up the hinges. According to Williams, the product is also suitable for moving drywall and panel products. It costs \$300 plus \$35 shipping.

Williams Development Group, 888/875-3667, www.thedoordolly.com.



Tight Tolerance.

Sometimes finish carpentry requires measuring with a greater degree of precision than is possible with your PowerLock. In those instances you might turn to Starrett's fractional dial calipers, *Model 1202F*. Its 6-inch capacity allows you to quickly and accurately measure inside and outside dimensions as well as depth; its large dial is graduated by 64ths and decimal equivalents. I found it on the Web for \$110.

Starrett, 978/249-3551, www.starrett.com.

When it comes to air compressors for finish work, bigger is not necessarily better. The one-gallon Maxus *EX1001* weighs a mere 19 pounds but boasts heavy-duty components and an integral handle and roll cage; the tank pumps up to full pressure in about 90 seconds. The whole rig is covered by a five-year warranty and delivers .66 scfm at 90 psi. It costs about \$150.

Maxus, 888/241-5858, www.maxustools.com.

Toolbox I Drywall

Big Guns. If you're in the market for a drywall gun, check out Bosch's three new offerings. The SG45, SG45M, and SG45M-50 all feature huge triggers for a two-fingered grip, and "depth-retention" nosepieces, which allow the user to slip off the nose and then return it to the gun without resetting the depth. The SG45 (\$80) has a



plastic housing and a 6.2-amp motor. The SG45M (\$100) has a metal nosepiece and gearbox and a 7-amp motor; its twin, the SG45M-50 (\$110), also has a 50-foot cord.

Bosch, 877-267-2499, www.boschtools.com.

Form Fitting. I've never met anyone who enjoys sanding drywall, but a new tool could make the job more palatable. The Speare *Ultimate 90* corner sand-

ing tool is a corner
sander and flat sander
in one.
The pad —
which
accepts
hook-andloop sandpaper — covers 30
percent more
surface area than the pads
for most other sanding tools
do. It costs about \$40.
SpeareTools, 262/245-1614,
www.speare-tools.com.

Texture Whiz. There are dozens of tools for texturing walls and ceilings, but few look as easy to master as the *Magic Mudder*. According to the manufacturer, this device can create virtually any texture pattern and is often faster than a spray rig. It comes in both polemounted and hand-held versions; prices range from \$32 to \$60. For details on how the tool works, visit the manufacturer's Web site.

Magic Mudder, 832/667-7322, www.magicmudder.com.

