

Pacific Laser Systems PLS2

by Victor Rasilla

As a full-time residential remodeler, I am constantly trying to establish plumb and level reference marks. In the past, I've done this with spirit levels, but recently I tried doing it with a PLS2 loaned to me by Pacific Laser Systems.

The PLS2 is a self-leveling laser-line tool that projects visible vertical and horizontal lines. It has four functions, all controlled by the "on" button: Press the button once for a level line, twice for a plumb line, and three times to project cross hairs consisting of a plumb and a vertical line. If you press the button a fourth time, it overrides the six-degree self-leveling function so that you can aim the laser like a flashlight and project 90-degree cross hairs onto any surface you want. Pressing the button one more time turns the laser off.

Bright Beam

I was impressed with the brightness of the lines cast by the PLS2. The beams are clearly visible indoors — and even though the tool is not designed for outdoor use, the lines are still somewhat visible in dim outdoor conditions. (Bright sunlight, however, will completely wash them out.)

The self-leveling pendulum is super fast, stopping in one or two seconds. Although the tool is designed to be mounted on a tripod or placed on a solid surface, I found that I could check conditions on the fly by holding the laser in one hand and steadying my elbow with the other.

Intended Use

The PLS2 is not intended to replace the kind of laser you would use to lay out a large foundation, but it is a good replacement for a spirit level when you need to create plumb or level lines. According to the manufacturer, the

device is accurate to 1/8 inch in 30 feet.

I had some initial concerns about being able to use this tool efficiently in a small room: What if I couldn't get the laser far enough back to project the line all the way across the wall? As it turned out, this was not a problem, because the PLS2 projects a very wide-angle beam. The manufacturer says the beams fan out at 90 degrees. In situations where I normally would have had to walk a spirit level across the wall, I used the laser instead and got more accurate results in a fraction of the time.

The PLS2 would have paid for itself on



PLS2

Weight: .6 pound (without case and bracket)

Size (in inches): 2 by 2⁷/₈ by 3³/₈

Power supply: three AA batteries

Range: 100 feet indoors

Pacific Laser Systems

800/601-4500

www.plslaser.com

a job I recently did that involved setting a number of decorative columns: We put the laser on top of a 4-foot ladder in the center of the room and used it to project plumb reference lines at each location. I also loaned the tool to a friend who had to tile an irregularly shaped room that was out of square. He put the tool on a tripod and used the cross-hairs function to project square layout lines onto the floor. This allowed him to see quickly how various layouts would work — without having to draw and erase a whole bunch of lines.

continued on next page



The lines projected by the PLS2 are clearly visible indoors, even in a well-lighted room. It's possible to use the tool outdoors, but in bright sunlight the lines are too hard to see.

The PLS2 is small enough to fit in the palm of your hand and comes in a high-quality case that fits on your belt. It includes a magnetic bracket and mounting screws. You can temporarily secure the bracket to the wall with screws or you can use the magnets, which are powerful enough to hold the laser to metal corner bead. The PLS2 costs about \$260 — but it's such a timesaver it's at the top of my personal wish list.

Pacific Laser Systems recently released a variation of this tool, the PLS2E. The new model sells for about \$500 and includes a hand-held detector that extends the tool's outdoor range to 100 feet. The detector emits a sound when it's in line with the beam.

Victor Rasilla is a working supervisor for Brinton Construction in San Leandro, Calif.

Ridgid R843 Cordless Jigsaw

by Marc Shapiro

When I started my tool collection more than 30 years ago, the only battery-powered tool available was a flashlight. Once cordless drills hit the market in the '80s, however, they became an indispensable part of my toolbox. Recently, I decided to expand my cordless collection with a jigsaw, which is how I ended up test-driving Ridgid's new 18-volt Model R843 cordless jigsaw.

I began the trial with a healthy dose of skepticism. I've found few tools that perform as well and last as long as my trusty top-handled Bosch, and I'm not about to sacrifice the quality of my work just for cordless convenience. I set the bar high: The Ridgid jigsaw would have to cut and perform as good as or better than my Bosch 1581.

Features

The Ridgid jigsaw has four orbital settings that adjust easily with a small lever on the housing and a variable-speed trigger control. The shoe adjusts with a hex wrench to 45 degrees in both directions; the wrench rides on board. The detents — at 0, 15, 30, and 45 degrees — are an improvement over the 0- and 45-degree detents on my old Bosch.

Unfortunately, the Ridgid doesn't have a dust blower to clear the cut line, but it does include a removable anti-splintering insert. Another nice feature is the lever release for blade replacement, which allows for rapid blade changes and is easy to use. You have to depress a safety button before you can pull the trigger — a potential annoyance that I got used to quickly.

The tool comes with one battery and an excellent charger, which boasts a speedy 30-minute charge time and a very logical set of LED indicators. Thanks to solid, dependable latches, the battery pack is easy to insert into and remove from the tool and charger. While the blow-molded plastic case is



Ridgid's new 18-volt cordless jigsaw boasts most of the features found on professional-grade corded models, including four-position orbital cutting and a toolless blade clamp. The sturdy cast-aluminum shoe bevels to 45 degrees in both directions and has detents at 0, 15, 30, and 45 degrees.



The jigsaw's toolless blade clamp operates by means of a spring-loaded, thumb-operated lever. The clamp holds securely and is easy to use; it accepts Bosch-style T-shank blades.

larger than it needs to be, it doesn't supply a place where you can store a substantial number of blades inside their packages. The only provision for organizing blades is a small tray that holds about 10 loose blades, which are left unsecured when the case is open.

continued on next page

Testing

The tool arrived for testing just as I was renovating my shop. I had a 3-by-16-foot bench made from 2x8 framing material that was no longer useful and had to go. Demo is not the primary purpose of a jigsaw, but I thought it would be a good way to test horsepower and durability. Choosing an aggressive Bosch T101D blade, I used the Ridgid and the Bosch in identical tests, crosscutting and ripping to test speed and power, and cutting tight ovals to test for blade deflection.

The Ridgid proved to be very powerful, staying with the corded Bosch stroke for stroke. Its orbital action was also effective; it tore right through the crosscuts. Both tools found long rips a little tiring, but the Ridgid cordless motor held its own and moved right down the line. After cutting some 2-inch ovals, I was surprised to see burn marks left by the Bosch but not by the Ridgid.

Next, I used both tools to cut a random set of curves through some 3/4-inch bamboo flooring. Both left a surprising amount of burn, but generally performed well. I attribute the burn marks to the extreme curves I was making and the density of bamboo.

As a final test, I used the two jigsaws to cut some very tight scallops in a piece of 3/4-inch red oak. Again, the Ridgid's performance was equal to the Bosch and it left fewer burn marks.

During the testing, I paid close attention to blade deflection, an annoying problem with a jigsaw, particularly when cutting curves. On my initial tight-ovals test cuts — as with all jigsaws — the cut started out square for both tools but began deflecting as the blade moved into very tight curves. Upon



The jigsaw kit comes in a blow-molded case and includes one battery and a 30-minute fan-cooled charger. It sells for about \$200.

completing the oval cuts, the Ridgid was out of square by 6 degrees — which compares quite favorably with the Bosch's 8 degrees of deflection.

Complaints

Without the battery, the Ridgid jigsaw weighs about the same as the Bosch. But I got used to the added weight quickly, and even found that the additional mass helped to dampen the vibration — albeit not enough to prevent the Ridgid's plastic chip guard from falling off when I made the tightest turns.

The chip guard has a small spring clip that attaches to the wire blade guard. I found this attachment system unreliable and annoying: It just would not stay put and it was awkward to reattach. Without the chip guard, the Allen key is left unsecured and can also come off. I finally decided to leave these two items in the case.

My only other complaints about the Ridgid are that it doesn't have a speed-control dial like the Bosch does, and its variable-speed trigger is a little lacking in sensitivity.

The Verdict

Aside from those problems, the Ridgid held its own quite nicely against my old workhorse Bosch. It has more than enough power, holds an accurate line, and supplies sufficient battery time to offset the power advantages of a cord.

In fact, the nicest feature is perhaps the most obvious — no darn cord. This is particularly beneficial with a jigsaw. As I was turning tight curves with the Bosch, I was forced to keep an eye on the cord so I wouldn't cut it off. With the Ridgid, I could focus on what I was cutting without worrying about that. The combination of cordless convenience and corded-tool power makes the Ridgid a tool I can use. If you're considering a cordless jigsaw, I recommend you check it out. It sells for about \$200.

Marc Shapiro is a general contractor and the owner of *Quality Woodwork Construction* in Alexandria, Va.

Tajima Chalk and Ink Lines

by Dan Parish and Gary Katz

You know the problems with chalk lines: chalk all over your hands and in your nail bags; snapped lines that are too dark, too wide, or too faint; hooks that won't grip; and cheap cotton string. There's no need to talk about it further — you've been there. We recently tried out three Tajima chalk lines and a Tajima ink line (888/482-5462, www.tajimatool.com). If you're unhappy with your current chalk line, you'll find there's a lot to like about these tools.

What's Different?

The first improvement over conventional chalk lines is the string. With these devices, there's no cheap cotton to ball up inside the housing. Instead, the Tajima Chalk-Rite Snap-Line is high-quality braided nylon, the same stuff commonly used for the backing on fly reels. The nylon is stronger than cotton and produces a sharper line — but it requires chalk that's ground much finer than the conventional kind; otherwise, it won't properly adhere to the line. Tajima produces its own special chalk made from micro-fine particles, which is sold in 10-ounce bottles in white, blue, red, and yellow.

The Tajima lines also have a better hook. Using a downspout to hold the “dumb end” of your line wouldn't work with an ordinary chalk line. But despite the downspout's rounded corner, the Tajima holds like a grapple. Almost twice as wide and deep as a standard chalk-line hook, and with a tacky back side, the hook securely grabs almost anything.

There's nothing worse than snapping long lines and then spinning the crank furiously to get the line reeled back in. Tajima's geared system winds the line three times for every spin of the handle. The winding system also has a lock



A small lever locks the string on Tajima's Chalk-Rite Snap-Line. The \$30 chalk line's braided-nylon string produces distinct lines; the tool's large hook grips most surfaces easily.

lever. Controlled with your thumb, it locks the line so you can use your other hand for snapping the line.

Another great feature is the absence of a dust cloud every time you pull out the string. A patch of fleece cleans away excess chalk and leaves an even layer on the string, helping to keep the line crisp and fine. This also means you don't have to fill it with chalk as often, because you aren't dropping pounds of it on the floor every time you extend the string. At \$30, this chalk line is more expensive than those sold at the lumberyard, but it's worth the price.

Auto Wind Option

The standard Tajima chalk box worked so well, we decided to try the company's Chalk-Rite Auto-Wind model, too. This chalk box uses a similar line and hook, but has a self-winding feature for quick and easy retrievals. The spring-loaded mechanism sits just below the chalk reservoir and has an indented wheel on the outside so that you can hold the line while you snap it.

Unfortunately, it won't retract automatically when the line is extended more than 23 feet. The string stretches to 33 feet, but beyond 23 feet the self-reeling mechanism must be disengaged. The body of the Auto-Wind is clear, so you can see how much chalk is left. It sells for about \$22.

Fine Lines in Ink

If you want a really fine chalk line, or you want to snap lines on a wet surface (we've heard that framers work in the rain sometimes), try Tajima's Ink-Rite Snap-Line. You may never have heard of ink lines before, but they are not some newfangled thing. Widely used in Japan for many years, it's surprising that they haven't caught on in the United States, considering the benefits. Since the ink is water-resistant, you can snap a line in wet weather and it won't smudge or wash away. The Ink-Rite is very similar to Tajima's self-winding Chalk-Rite and has a similar rewind mechanism, but instead of a chalk reservoir, there's an inkwell. The line



Tajima's two self-winding snap lines, the Ink-Rite Auto-Wind (left) and Chalk-Rite Auto-Wind (center) have a similar design and share some of the same features as the hand-crank version (right), including the braided nylon line and hook. The ink version produces water-resistant lines that are less than $\frac{1}{16}$ inch thick, while the chalk version has a clear reservoir with a metal mixing ball inside that prevents the chalk from caking inside the housing.

runs through a sponge that puts the ink on the string, while an appropriately named ink-metering button dispenses ink from the reservoir onto the sponge. You don't want to overfill the well or push the button too many times or you'll end up with ink all over your hands — but once you get used to how it works, it's easy to produce an extremely thin line. The Ink-Rite extends to 25 feet in auto-rewind mode, and up to 65 feet when the mechanism is disengaged. It, too, sells for about \$22.

Fine Lines in Chalk

If you're a framer, you don't necessarily need to read any further, but finish carpenters should take notice. Tajima's newest chalk line, the Ultra-Thin Snap-Line, snaps a line almost as thin as the ink line. By combining nylon and polyester, Tajima has created a super-fine string that has just the right balance of strength and chalk adhesion. It provides multiple snaps,

yet produces an extremely fine line.

The bad news is that you can't put the .5-millimeter string in the original (red) 1.2-millimeter Tajima chalk box. You'll want to save the original version for longer lines, anyway. The newer, blue boxes are meant for lines less than 40 feet. But if you're doing precision work, like laying out tile, snapping control lines, or installing crown, you'll

appreciate the greater precision. The blue box has all the same features as the red box, including fast retrieval, precise chalk dispensing, and handy, thumb-activated line lock.

The Ultra-Thin Snap-Line sells for about \$30.

Dan Parish and Gary Katz are finish carpenters in Southern California.



Finish carpenters will appreciate the fine lines of the newest Tajima chalk line, the Chalk-Rite Ultra-Thin Snap-Line. It's similar to the original red-case version, but its .5-millimeter string makes an even thinner line for tasks that require tight tolerances.

CHAIN SAWS AND ACCESSORIES

Breathe Easy. Chain saws are an ideal match for some framing and demo tasks, but forcing your co-workers to choke on the clouds of blue smoke coming from your machine's muffler won't win you any friends. Compared with previous models, Husqvarna's newly introduced 575XP reduces exhaust emissions by 70 percent and fuel consumption by about 20 percent, says the manufacturer. It also provides about 10 percent more cutting power at the medium-engine speeds commonly used for construction applications. And the Husky Air Injection system removes up to 97 percent of dirt before it reaches the saw's filter. The 575XP sells for about \$400.

Husqvarna, 800/487-5962, www.husqvarna.com.



Better Protection. Like all power tools, chain saws require appropriate safety gear — yet most occasional chain-saw users wear protective chaps only when they're riding a Harley. If you want a little more protection than your blue jeans, check out the *Chain-Saw Chaps* from W.E. Chapps. In the event of a mishap, fibers from the fabric — a combination of Cordura and Kevlar — wind around the saw's spinning chain, jamming it. The chaps are offered in two lengths, 36 and 45 inches. Prices start at about \$100. The company also offers protective gear for landscapers, loggers, and arborists.

W.E. Chapps, 800/816-2427, www.wechapps.com.

Chain Gang. Cutting with any dull tool is dangerous and frustrating, but a dull chain saw has to be the absolute worst. According to the maker, *Carbide-Tipped Chain Saw Chains* will stay sharp up to 25 times longer than conventional chain-saw chains. Available in several pitches for all saws, they are ideally suited for tough jobs like demolition and cutting stumps and railroad ties. The manufacturer also offers carbide sharpening tools and professional sharpening services. Carbide-tipped chains start at \$110 for a saw with a 16-inch bar.

Rapco Industries, 800/959-6130, www.rapcoindustries.com.



CHAIN SAWS AND ACCESSORIES

Rapid Demo. Originally designed for fire rescue, the *VentMaster Chain Saw Upgrade Kit* can convert your 4-hp (or greater) chain saw into a powerful demo tool. The heart of the kit consists of a slotted bar and an adjustable depth gauge that prevents cutting too deeply. The kit also includes a carbide-tipped chain that purportedly lasts much longer than conventional chains, especially when cutting difficult materials like asphalt roofing and nails. The company claims the kit's roller-nose guide bar won't throw the chain or gum up with debris during plunge cuts. Retail prices start at about \$300.

Tempest Technology, 800/346-2143, www.tempest-edge.com.

**DRYWALL TOOLS**

Easy Terms. In addition to setting you back \$2,500 or so, buying a complete set of automated taping tools means you have to maintain and repair them — a real pain in the mud bucket. If you want the use of these tools without the hassle and expense of owning them, check out the *Ames Taping Tool Rental*. This program brings the tools right to your job site and, in many locations, provides training on how to use them. At the end of the job, you send the stuff back to Ames. A

complete set of automated taping tools, including a Bazooka, flat boxes, and corner tools, generally rents for about \$12 per day, with a 16-day minimum.

Ames, 800/408-2801, www.amestools.com.



Cover Your Butt. Invisible butt joints may be the holy grail of drywall finishing, but they're not unachievable. The *ButtTaper* promises invisible, 6-inch butt seams without proprietary backers. Here's how it works: After spraying the joint with water, you roll the tool back and forth over it until you've created a slight recess, which you fill with regular setting-type compound, using a special notched trowel (included in the tool kit). According to the maker, prepping the joint for finishing takes about 3½ minutes. The kit sells for \$269.

Fords Drywall, 800/640-9093, www.butt taper.com.



DRYWALL TOOLS

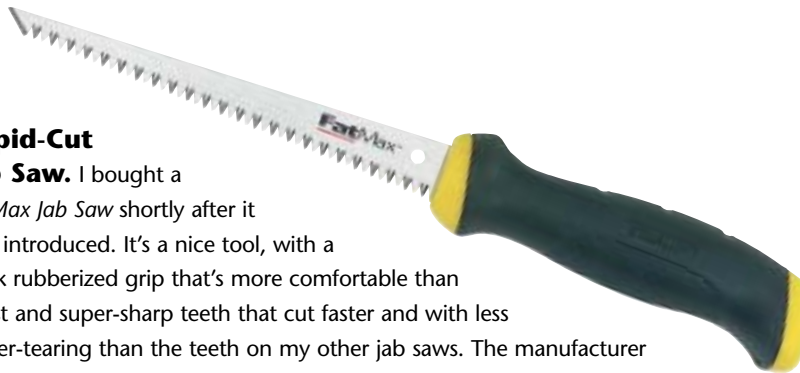
Quick Rip. If narrow drywall cuts are slowing you down, the *EZRip* may be able to help. The telescopic cutter makes rips of up to 24 inches and has two measuring scales that show both the off-cut and the remaining piece. Blade changes are easy, the maker says, and the tool stores 10 blades on board. The whole process looks much more accurate than guiding your knife with a tape measure. The tool sells for about \$70 on the manufacturer's Web site.

EZRip, 707/552-5510, www.buyezrip.com.

**Long-Reach Drywall**

Router. When you're hanging a lot of drywall, there's really only one way to cut holes for outlets and fixture boxes: a RotoZip spiral saw. The newest version, *Model RZ25*, has a 50-foot cord that eliminates the need for an extension on even the most outlet-starved job sites. The saw has a 5¹/₂-amp motor that spins at 30,000 rpm and a soft-grip housing that reduces vibration. According to RotoZip, the new tool pairs well with the company's new line of *X-Bits*, which reportedly stay sharp five times longer than other spiral bits. The RotoZip RZ25 kit, with three bits and a "carrying bucket," sells for about \$80.

RotoZip, 877/768-6947, www.rotozip.com.

**Rapid-Cut****Jab Saw.**

I bought a *FatMax Jab Saw* shortly after it was introduced. It's a nice tool, with a thick rubberized grip that's more comfortable than most and super-sharp teeth that cut faster and with less paper-tearing than the teeth on my other jab saws. The manufacturer says the tool can cut cement board, drywall, wood, and plastic. I've found that it also works great for irregular cuts in foam insulation. It sells for about \$15.

The Stanley Works, 800/782-6539, www.stanleytools.com.

Quick-Study Taping Tools. Most automated taping methods have a pretty steep learning curve — but the maker of *Better Than Ever Tools* contends that even inexperienced tapers can usually master its system by the end of their first house. The company also claims the tools are easy on workers' bodies and produce a high-quality finish. A video on the Better Than Ever Web site explains how it all works. To get started, expect to pay about \$800 for a set of tools — about one-third the cost of other taping systems.

Better Than Ever Tools, 800/444-7908, www.betterthanevertools.com. 

