



Cordless irons, clockwise from upper right, are: Ungar (in charger stand), \$26; Black & Decker (with plug-in charger), \$15; Weller, \$15; Wahl 7500, \$20; Wall-Lenk, \$21; Wen gun, \$20; and Wahl Quick-Charge in charger stand.

Soldering irons are just about the last power tools to go cordless—but they may be the most useful ones.

If you've ever used a soldering iron for any job besides electronic soldering at your bench—repairing ceiling fixtures, auto wiring, or connections inside a console TV—you'll appreciate the cordless irons' obvious advantages. But there are less obvious advantages, too. Even in bench work, an iron without a cord to trail across a crowded work surface, or to pull and twist when you're working in tight places, can be a boon. And since the cordless irons generate no electromagnetic fields, they're just perfect for soldering field-effect transistors, which could otherwise be damaged.

Not all cordless irons are alike—though there are significant similarities. Most of them weigh about 6 ounces—slightly more than a conventional iron and cord, but not enough so to be bothersome. They heat up in five or six seconds to a



How to solder when there's no place to plug in

Cordless, rechargeable soldering irons are popping up all over.

by Ivan Berger ELECTRONICS EDITOR

Even for benchtop jobs like this, where power is available, cordless irons are handy.



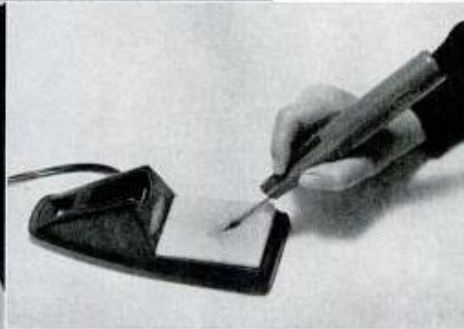


Tips for cordless irons come in many shapes and sizes. Wahl has largest choice, followed by Weller and Ungar.

For bench work, we preferred the drop-in charger stands of Ungar (below, with handy tip-cleaning sponge) and Wahl (below left) to chargers that had to be plugged into irons (like that shown with Black & Decker's on the facing page).



Photos: Benn Mitchell



Switch locks on Wahl (right), and Lenk, Ungar and Weller irons prevent accidental heating or battery discharge. Black & Decker uses a switch guard instead; pistol grip protects Wen's trigger switch.

tip temperature of about 700° F., make about 100 joints per charge (depending on the size of the wires and your speed in making joints), and are good for about 500 to 1000 battery charge/discharge cycles before their built-in batteries need replacement.

All have built-in bulbs to illuminate the work as you solder. And all fall within a fairly narrow range of prices, from \$15 to \$26.

But the differences are also worth knowing before you buy. While most irons take overnight to charge, one—the Wahl Iso-Tip 7700 Quick-Charge—recharges in one to 4½ hours. And the power available differs from iron to iron, too. The Lenk and Black & Decker irons are about equal, at 10 and 12 watts; the Wen runs 15 to 25 watts; the Ungar, 35 watts; and the similarly named, similar-looking Wahl and Wall-Lenk irons, 50 watts each.

With the exception of the gun-style Wen, all the irons are pencil-shaped; but their balance and trigger locations differ, so heft the various models in your local stores to determine the ones that feel most comfortable.

For bench work, we preferred the Ungar and Wahl irons, whose handy stands recharge the batteries as you rest the irons in them between joints. Of the two, Ungar's stand was handiest, but the Wahl iron felt a bit better in my hand.

For getting into tight corners, the easiest irons were the Ungar, Black & Decker and the Wen, in about that order, followed by the Wahl with its optional tuner extension tip. Optional tips in different shapes and sizes were available for most models: Wahl, the original cordless iron, now offers five tips (which also fit the Wall-Lenk), while Weller and Ungar, the biggest names in soldering generally, offer four and three tips respectively.

Wahl is also offering a 12-volt, \$5 charger that plugs into a car's cigaret-lighter socket, as well as a portable carrying case that will protect the tip but is a tight squeeze for the iron.

Ungar gave us some useful tips on how to get the most from cordless irons: To make the most joints per charge, start soldering as soon as the iron is hot enough to melt the solder, and try to solder several joints each time you turn the iron on. Use your iron as much as possible, and discharge most of the way before recharging—the more you use nickel-cadmium batteries like the ones that are built into these irons, the greater amount of charge these batteries will hold. ★★★