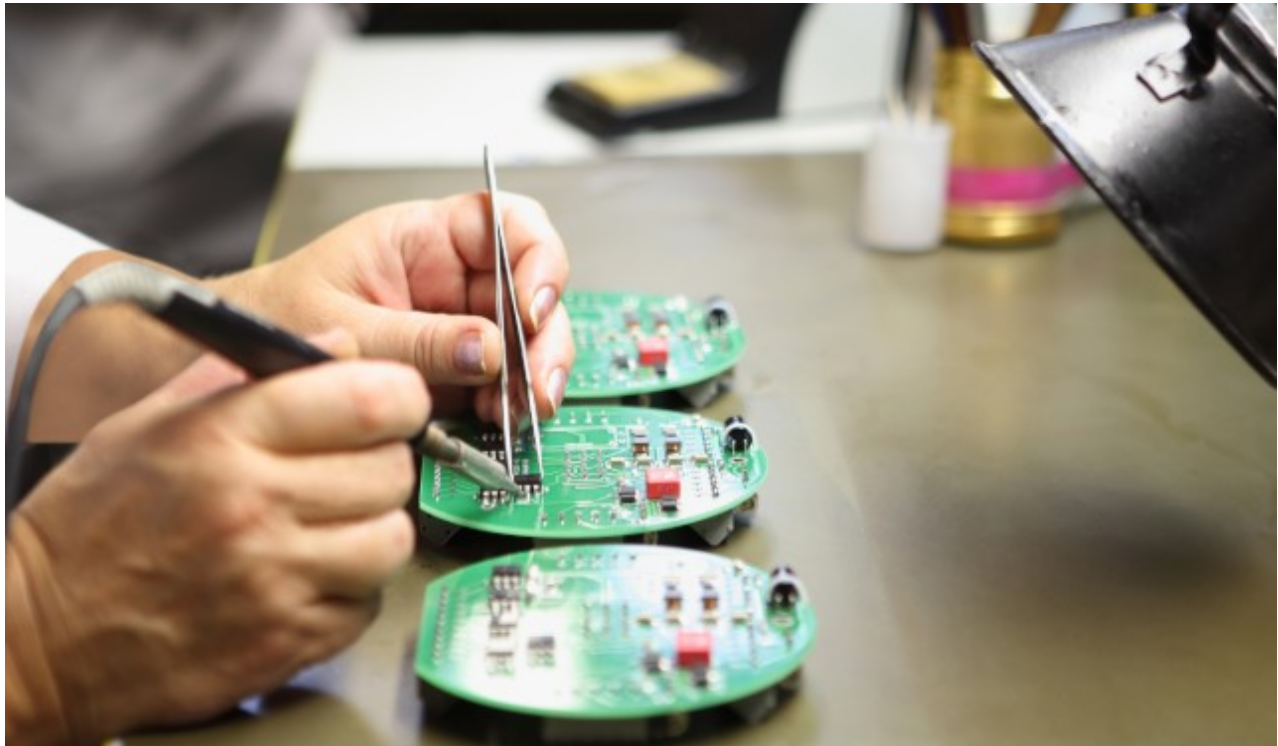


Best Soldering Iron



We at Linquip are glad to welcome you to our guide to the best soldering iron. We have selected a few products from a variety of models available on the market that we believe deserve your consideration. Ideally, soldering irons should be robust and comfortable to use, with slim rubberized handles. Regardless of the level of your experience, investing in a soldering station is a great way to improve your work in electronics, DIY repair, and the like.

All the information about the soldering equipment you need can be found at Linquip, so you won't have to worry. At Linquip, we strive to provide you with access to the most advanced soldering irons in the market, making it possible for you to perform your duties more efficiently. To learn more about Linquip's soldering services and what they offer, click on the "**What Is Soldering?**" page.

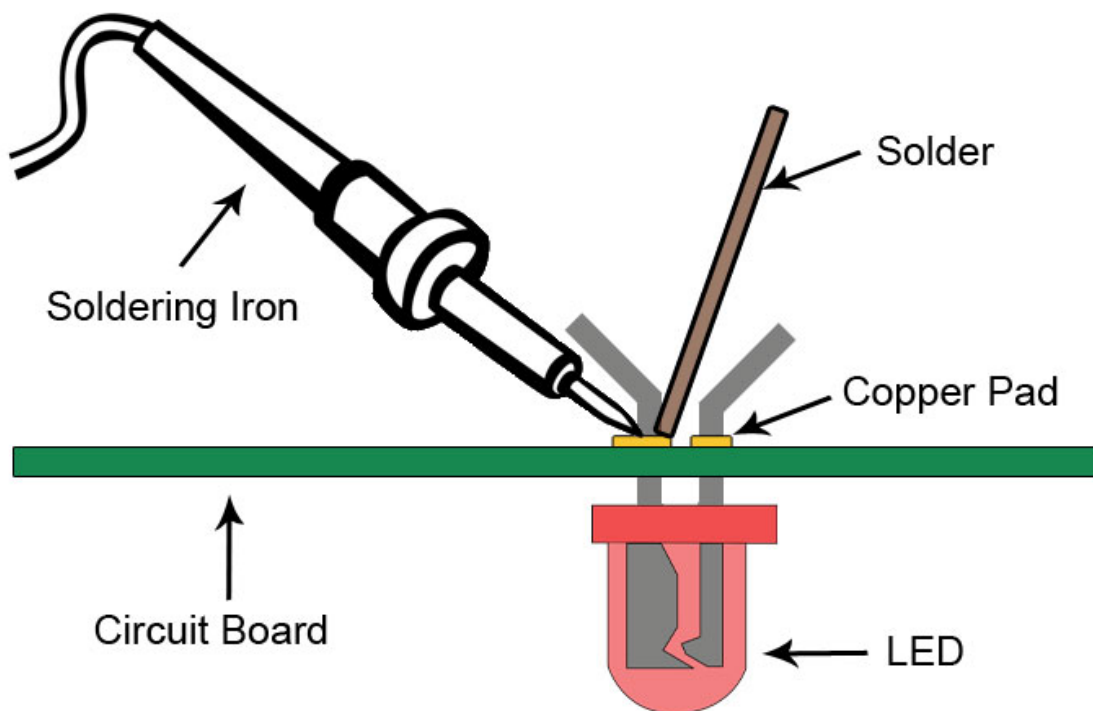
Would you like to purchase a soldering iron for your purposes? You can search through Linquip's database of **Soldering Products** and find the products that you are looking for completely free of charge. If you would like to know how much to pay for soldering iron, then Linquip can provide you with up-to-date information. Linquip lets you request free quotes quickly from a variety of **Soldering Suppliers and Companies**, so you'll have them shortly.

When it comes to electronics, fixing instruments, or restoring retro hardware, Hammers and screwdrivers just won't cut it. Soldering irons are needed. Soldering irons are commonly used by electricians for splicing and fusing wires but also by people in auto

repair, roofing, plumbing, and jewelry shops.

It's no surprise that soldering irons are so popular in so many industries and are a staple in the toolbox of many workers, engineers, and homeowners. They were first mass-produced in 1894. A soldering iron may be needed for repairs or maintenance work on metal gutters, printed circuit boards (PCBs), stained glass and mosaics, and vacuum tubes, among others.

How To Solder



Schematic diagram of soldering process (Reference: makerspaces.com)

Soldering iron is a handheld device used for soldering, i.e., for permanently joining two metal components with another metal (solder) with a lower melting point than the objects being joined.

The temperature at which soldering irons operate is usually between 200-450°C for corded irons and up to 600°C for cordless ones. In order to adjust the temperature, the control knob or selector should be easily accessible. You don't have to power corded soldering irons on and off from the mains if they have an inline on-off switch.

Iron tips and accessories are usually included with soldering irons stored in a well-designed carrying case.

An array of soldering tips include:

- chisel tips tailored for general use,

- wider chisel tips,
- fine precision tips,
- heat reflectors,
- hot knife tips, and
- hot air gun tips.

Desoldering pump, cleaning sponge, brass cleaning ball, tweezers, wire cutter, stripper, and wire cutter and stripper are among the other soldering accessories included in the kit.

A soldering station often consists of a complete kit. Additionally, some soldering stations come with pyrography pens and extra iron tips for wood burning.

Soldering Iron Buying Guide

Soldering is the most common method of assembly of electronic components on printed circuit boards. Therefore, when organizing an electronic workshop, choosing a soldering iron is an important step. The best soldering iron may be a challenge for many electronic engineers who are just starting out. In terms of your specific needs, a simple soldering iron, a soldering gun, or even something more advanced, such as a soldering station, are available on the market.

Here are some tips to help you get started with soldering if you are just an amateur.

- It is first necessary to decide between a simple soldering iron (often referred to as a soldering pencil) and a transformer-equipped soldering gun. The hot air soldering iron is also available but is for advanced users and is typically used for soldering SMDs (surface-mounted devices), especially ICs with bottom surface connectors.
- Although soldering guns heat up quicker than soldering pencils, when you need a more precise tool, use a soldering pencil instead of a soldering gun. In addition, they also come with much smaller soldering tips, which is ideal for soldering small components, which is why they are sometimes referred to as “needle tips” for their size and design.
- When choosing a soldering iron for electronics, a number of important parameters should be considered – power, temperature range, and tip size. Choosing a soldering iron depends on its intended use – you should take that into consideration before making your final decision.

If you’re looking to buy a soldering iron, don’t buy the first one you come across, even if it is on sale or packaged with accessories of questionable quality. You should instead consider the key features of soldering irons and make sure that these features are appropriate for your needs and your budget.

Purpose

You need to consider what the soldering iron will be used for when picking one. Soldering cables require a different soldering iron from soldering SMD components.

If you intend to use the tool to solder wires, especially those with a large cross-section, you should choose a soldering iron with high power – (at least 100 W) and a large tip. Suitable tools for this purpose include soldering guns and simple soldering irons.

You can use a soldering gun or a soldering pencil to solder larger electronic components, especially those that use pins for THT mounting. It is critical to choose the right tip for your soldering gun.

You'll need a soldering pencil with a precise soldering tip if you want to solder small electronic components, such as SMDs.

Temperature Range

Soldering irons require enough power to melt the solder on the workpieces. In electronics, solder has a melting temperature of 180°C to 230°C, depending on what alloy additives are applied. Lead-containing alloys that are currently being replaced operate at lower temperatures. The melting point of lead-free solders is approximately 210°C to 230°C. As a result, your soldering iron must reach this temperature at least.

To quickly heat the workpiece, the soldering tip must be heated above the melting point of the solder during soldering. A soldering tip's temperature typically ranges from 260°C to 350°C, depending on its size and the workpiece's thermal capacity.

Wattage

A soldering iron's wattage does not determine the temperature; it simply indicates how quickly it heats up. Soldering irons cool down every time a joint is soldered, however, that is not the most important factor.

When you are soldering thick cables or tin plating (also called tinning), a lot of power will be needed to quickly heat up the large volume of metal. For this purpose, soldering irons and soldering guns equipped with transformers with power over 100 W are suitable. The power of a soldering pencil for soldering electronic components should range from 30 to 90 watts. The soldered components must be protected from damage by a precise temperature control system.

With more powerful soldering irons, the temperature is maintained steadily longer and heats up faster. Choosing a tool that has a good temperature control system will significantly improve the comfort of use, so it is better to buy one with a higher power.

Temperature control

The majority of soldering jobs don't require temperature controls, but having them around is handy. When buying a tool, make sure it can maintain a constant temperature on the tip. It is especially important when soldering electronic components that are sensitive because overheating may damage them. The use of these tools is ideal for lead-free soldering (which requires high temperatures) or heat-sensitive soldering (which requires low temperatures).

Soldering Tip Type

The soldering tip refers to the hot element at the end of the soldering iron – which is responsible for transferring heat to the soldered piece. Soldering iron's tip wears out most quickly as a result of its heavy use. Make sure you can easily buy and replace the soldering tips when buying a soldering iron. Therefore, it will be possible to replace this component without any difficulties if it is damaged.

Soldering tips come in various sizes and shapes. Conical, hoof, chisel, and minispoon tips are among the most popular. As you choose a soldering tip, also look at the compatibility of the tip with the soldering station.

It is important to match the size of the soldering tip to the size of the soldered element – if the component is larger, then the soldering tip should be bigger to transfer heat more efficiently. Using the right tip shape also determines the distribution of solder on the soldered surface. If you are a first-time buyer, the minispoon is recommended as a versatile tip.



Types of soldering iron tip (Reference: components101.com)

Economics

It is also important to take the handle shape into consideration when selecting a soldering iron. It is recommended to purchase a soldering iron with a comfortable handle, such as one with silicon overlays.

Accessory

Auxiliary accessories are often included with soldering irons. In spite of the fact that this should not affect the choice of the device itself, it is wise to purchase a set that includes a stand for the soldering iron and a tip cleaner – either a metal chip or a sponge. There is also the possibility of paying for them separately if you wish.

Cordless Soldering Irons

The popularity of cordless soldering irons is growing. Gas soldering irons dominated this field until recently, but battery-powered versions of these appliances are now on the market in increasing numbers.

You can use a cordless soldering iron when working in remote areas without access to electricity. The soldering iron is very useful to have with you even in the tent, on the camping site, or in the car, along with some basic tools.

Investment

The purchase of a soldering iron is a long-term investment. As long as they're taken care of properly, they can last for a few decades. You might be better off purchasing an expensive soldering iron now if you anticipate using costly features such as temperature controls in the future. Consider other things you might need to invest in, like soldering wire, capacitors, and other electronic components.

Best Soldering Iron Reviews

To assist you in your selection, we searched the market for the best soldering irons and found the following models. We have compiled a list of the best soldering irons based on feedback from buyers.

1. Soldering Iron Kit, Tabiger 60W Welding Tools



Soldering Iron Kit, Tabiger 60W Welding Tools (Reference: **amazon.com**)

Pros & Cons

Pros

- Featuring an adjustable temperature range of 200 – 450°C, this soldering iron works with a variety of solder types.
- With this soldering kit, you get a range of soldering iron tips. It is possible to practice using needle tips and chisel tips without investing in a complete set.
- A moderately-priced kit comes with a decent desoldering pump. You can use it to remove molten solder from printed circuit boards.

Cons

- There have been complaints that the temperature control dial gets in the way of some users. Keeping an eye on it will be necessary, as it can be knocked, and the temperature can change drastically.

- The temperature control dial is hard to read. There is an excellent feature missing from this iron — a visual temperature reference.
- Although the set includes wire strippers, they aren't of outstanding quality. It's unclear how long they will last. The cost of a proper set of wire strippers isn't that high.

Specifications

Dimensions	28 x 20.8 x 5.5 cm
Weight	500 Grams
Power Source	Corded Electric
Material	Aluminum
Style	Gun

With Tabiger's enormous soldering iron kit, you've got everything you need to start soldering. Moreover, it won't break the bank either. It is an ideal kit for beginners who want to learn how to solder. With this soldering iron, you'll easily fix circuit boards within minutes!

This set comes with a lot of equipment. There are five different shapes of soldering iron tips to go along with the soldering iron itself. The set includes a de-soldering pump, needle-nose tweezers, a wire cutter and stripper, lead-free solder, 1.5 meters of solder wick, and a soldering stand featuring a sponge. An attractive polyurethane leather-look case neatly packages everything.

An inline ON/OFF switch is located halfway up the power cord, so you don't need to turn it off at the mains every time you use it. This little gadget is convenient.

2. SREMTCH Electronics Soldering Iron Kit



SREMTCH Electronics Soldering Iron Kit (Reference: [amazon.com](https://www.amazon.com))

Pros & Cons

Pros

- The soldering tips range from an extra fine tip to a wide knife-style tip.
- Onboard power buttons are much more elegant than inline power switches. It takes only one finger to turn it on and off.
- Brass wool soldering cleaning balls are included in this kit.

Cons

- The power cord has been reported to be too stiff for fine work by some users. Working on delicate circuits requires a cable that is flexible.
- Wire strippers and cutters are not included in this kit. Whenever you work with electrical wires, you will need to strip them.
- It has been reported by several users that this soldering iron does not heat up to the maximum temperature of 450°C. Quality control could be at fault here.

Specifications

Dimensions	11.42 x 6.69 x 1.97 inches
Weight	725 Grams
Power Source	Corded Electric
Material	Metal, Rubber, Plastic
Style	Gun

The Sremtch 80 Watt iron puts together one of the best soldering irons. An array of useful accessories is included, as well as a brilliant digital display that allows you to adjust the temperature.

When it comes to getting started with soldering, this is a complete kit. In addition to the 80 Watt slimline soldering iron, it also includes some other useful tools. In addition to a sturdy stand and a set of fine-tip tweezers, you also get a de-soldering pump, a brass cleaning ball, and a tin solder. Having a sponge cleaner is handy, but wire ball cleaners are needed for extremely dirty tips. Also included is a leather-look PU case for storing everything.

In addition to its clever features, the soldering iron itself is one of the best on the market. A backlit LCD screen displays the adjustable temperature, which can be set from 200 to 450°C with the selector knob. It's also no longer necessary to look for the mains switch, as you can turn it on and off directly from the soldering iron.

There are four interchangeable soldering tips included. There are five types of iron tips included, including 0.2 mm, 1.2 mm, 2.4 mm, 3 mm, and 5 mm.

3. ANBES Soldering Iron Kit

- There are no wire strippers included in this kit.
- There may be a little shock from the cord.
- The maximum temperature is difficult to obtain.

Specifications

Dimensions	7.5 x 4 x 2.8 inches
Weight	1.23 pounds
Wattage	60 watts
Material	Copper

With this device, it is possible to set the temperature between 392F and 842F with the knob. The iron is also compact and secure to hold, with an enclosed handle to prevent burning.

In addition to reducing energy and power consumption, it can speed up job hours, which results in successful performance.

This product has an anti-slip handle that is safe to grasp and easy to wear. With the cutter, you can sever the cable without rotating it. Using the advanced magnetic base and the eight removable parts makes it simple to use.

With its PU leather pack, it is easy to hold the different tools. When everything is in one piece, shipping is easy, and the contents don't get damaged.

A simple on/off switch allows you to switch it on/off at any time, saving you energy and ensuring great soldering even after long hours. Using the stand ensures that the iron will not overheat at high temperatures or fall to the bottom, thereby preventing overheating and accidental burns when soldering.

4. AOZOY Soldering Iron Kit Welding Tools



AOZOY Soldering Iron Kit Welding Tools (Reference: AOZOY.com)

Pros & Cons

Pros

- You can melt almost anything with this little soldering iron, thanks to its maximum temperature of 500 °C.
- Celsius and Fahrenheit temperatures are easily displayed on the digital readout.
- Soldering iron is automatically shut off after 10 minutes of inactivity. As well as saving electricity, this is also a crucial safety feature.

Cons

- It doesn't have a long enough power cable. This cord will be difficult to reach unless you have a plug socket at bench height.
- The cable is rather stiff, which makes it difficult to work with.

- Soldering iron stands are too light. To prevent the iron from falling over, it needs to be heavier. In addition to being a safety hazard, it is also annoying.
- There have been dissatisfied reviews about the quality of the tips included in this set from several users.

Specifications

Dimensions	27 x 15 x 5 cm
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Weight	900 Grams
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Power Source	Corded Electric
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AOZOY has a kit that has everything you need to get started soldering, so you don't have to worry about anything else. In a handy carry case, the electronics soldering kit includes a 60-Watt soldering iron, plus lots of clever accessories, such as a multimeter.

For added comfort, the soldering iron has a foam finger grip and a backlit LCD display that shows the current temperature. Next to the screen are small buttons that allow temperature control up to 500°C as well as power activation. These elevated temperatures are necessary for some types of solder to perform at their best.

There are many things you get with this kit that make it one of the best beginner's soldering kits. A variety of tools are included in the package, such as five tips, an iron stand, a solder sucker, a wire stripper and cutter, two electronic wires, tweezers, and tin wire. In spite of its comprehensive nature, the kit isn't too expensive.

5. Dremel Versatip 2000 Cordless Soldering Iron



Dremel Versatip 2000 Cordless Soldering Iron (Reference: [dremel.com](https://www.dremel.com))

Pros & Cons

Pros

- 550 °C maximum temperature makes this soldering iron ideal for melting flux, as well as pyrography, jewelry making, and hot cutting.
- In addition to being readily available, liquid butane gas fuel is inexpensive as well.
- It has a maximum run time of 60 minutes, and can refill on the go wherever you are and work all day.
- When instant heat is needed, it's perfect, thanks to its gas-powered iron.

Cons

- This soldering iron is larger than a regular electric soldering iron, resulting in more difficult control.
- You must avoid scorching delicate circuit boards with this gas-powered soldering iron. Although you can control the temperature, it still has a lot of power.

- The soldering iron doesn't show how much fuel is left, according to several users. You may run out unless you know your usage.

Specifications

Dimensions	19 x 2.5 x 2.5 centimeters
Weight	135 Grams
Power Source	Gas-Powered
Color	Black, Stainless Steel

As well as their incredible rotary tools, Dremel also makes some of the best butane gas-powered soldering irons on the market. Dremel Versatip 2000 is basically what it says: it's a soldering iron that heats up to 550°C with the use of flame.

Included in a handsome metal tin are six very useful iron tips as well as a good selection of soldering accessories. Soldering tip, shaping knife, hot cutting knife, hot air tip, and deflector are included. DIY and craft soldering projects can be completed with this multi-purpose soldering iron. All sorts of tasks can be accomplished with the heat reflector iron tip. In addition to using heat shrink tubing, you can also bend copper pipes and braze copper pipes with this tool.

In comparison to traditional soldering irons, the Versatip 2000 has the advantage of being cordless. It doesn't matter if you're working on a ladder or in a confined space. When working without mains electricity, it's a great tool to have in your toolbox. The soldering iron is more than just a soldering iron after a bit of practice using the included iron tips.

6. Hakko FX601 Soldering Iron



Hakko FX601 Soldering Iron (Reference: hakko.co.uk)

Pros & Cons

Pros

- Professionals and amateurs alike can benefit from it.
- Various soldering tips are available to suit your needs.
- The design is sturdy enough to last for a long time, even if it is frequently used and abused, which means you won't have to replace it anytime soon.

Cons

- It is pretty expensive.
- In order to complete all tasks within a given timeframe, you will need additional tips.
- This model does not come with a soldering iron stand, which makes storage very difficult, especially if you do not have enough space on your workstation or desk.

Specifications

Dimensions	10.1 x 3.9 x 1.5 inches
Weight	0.01 Ounces
Power Source	Solar
Style	Pencil

Among the best-selling soldering irons on the market, the Hakko FX-601 is one of the most popular. The reasons for this are numerous. With this model, you can solder faster than ever before, thanks to its ceramic heating element. You'll also learn how it works properly, so you don't damage your equipment or burn yourself!

People who are committed to their career and don't want anything less than their best earned through hard work and dedication to be put to good use every day when they get home from work should consider the Hakko FX-601. Whether you're a skilled individual or an inexperienced user, it has everything you need.

This Hakko FX-601 cord measures 5ft long, making it ideal for use with a variety of power sources. Temperatures as high as 900°F (480°C) can be reached by Hakko FX-601.

7. Weller WPS18MP High-Performance Soldering Iron



Weller WPS18MP High-Performance Soldering Iron (Reference: weller-tools.com)

Pros & Cons

Pros

- This product is a soldering iron with low power consumption.

- There is a high-temperature rating on this product.
- A standard warranty is provided for reliability.

Cons

There could have been more brightness in the LED light.

Specifications

Dimensions	13 x 5 x 2.35 inches
Weight	0.60 lbs
Power Source	AC
Style	Gun

One of the most power-efficient soldering irons on this list is Weller’s WPS18MP. With this soldering gun, you can reach temperatures as high as 925 degrees Fahrenheit. Weller’s WPS18MP soldering iron heats up in just 35 seconds, making it a worthy competitor for expensive soldering irons. Besides its quick heating and jack-and-plug tip-changing ability, its lightweight and easy-to-grip co-molded design allow the user to have a superior level of control and overall flexibility when using the tool.

In addition to bright working lights for better visibility, there is a simple light that turns from red to green when ready for use.

Since Weller’s WP lineup soldering irons have only been available for a short amount of time and just recently launched, they offer a higher level of efficiency and power.

8. LEXIVON Butane Soldering Iron Multi-Purpose Kit



LEXIVON Butane Soldering Iron Multi-Purpose Kit (Reference: [lexivon.com](https://www.lexivon.com))

Pros & Cons

Pros

- As opposed to many gas soldering irons, this one stands up on its own. The flame can be used as a stationary heat source, and you can go hands-free.
- The flame length can be easily adjusted. The range is between 13 mm and 63 mm, which is good for getting into really tight spaces.

Cons

- There have been complaints reported that the piezo-powered flame starts with a bit of a hit-and-miss. The frustrating thing is that it doesn't light up every time.

- Despite the safety lock's effectiveness, it's quite annoying. To start the torch, you need both hands. On a ladder, it isn't ideal!

Specifications

Dimensions	46 x 152 x 297 millimetres
Weight	480 Grams
Power Source	Butane
Style	Gun

Featuring a wide variety of good-looking butane soldering kits, Lexivon's butane soldering kit has everything you need to get started. There are many tools and accessories included in the smart-looking plastic case, including tools for crafting and soldering.

The wireless gas soldering iron powered by butane has a very high-quality construction. A protective cap like a pen lid comes with it to protect it while you're traveling. The pocket-sized soldering iron is capable of putting out a massive 590°C.

This package of soldering irons includes a wide variety of iron tips. Among the soldering accessories you get are: a good quality heat reflector, a general-purpose chisel tip, a wider chisel tip, a fine precision tip, and a hot air gun tip with a wide hole. This isn't bad for a soldering kit of moderate price.
