Subject: Learning to Solder

Posted by Christy on Fri, 07 Oct 2011 16:01:42 GMT

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My dad bought me a small soldering iron, but I have yet to figure out how to use it. Everyone I know keeps telling me they will help teach me, yet no one has time. So, how did you learn to solder, and what did you practice on? Any tips would be greatly appreciated!

Subject: Re: Learning to Solder

Posted by Wayne Parham on Fri, 07 Oct 2011 16:21:22 GMT

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Four tips:

- 1. Tin the soldering iron tip. What this means is to flow some solder onto the tip until it is completed coated with a shiny film of molten solder. Remove any excess with a damp towel. Keep the tip in this condition by periodically cleaning it with a damp towel.
- 2. Touch the hot iron tip to both surfaces to be soldered. Leave it in place long enough that the items to be soldered are hot enough to melt the solder. Flow the solder into the surfaces to be joined, not the solder tip. Hint: You can increase the surface area of the heated tip using a slight amount of molten solder, so sometimes you can flow a tiny bit into the iron tip near the surfaces to be joined just to get started then feed the rest into the joint, directly into the pool of solder flowing onto the surfaces to be joined.
- 3. Heat the surface(s) just long enough to flow solder as described, but not long enough to damage the devices being soldered. With large active components and most passive components, heat can be applied for several seconds without damage. But for smaller active devices, small transistors and chips, sometimes just a couple seconds is all they can take. Until you've soldered a while, use IC sockets instead of soldering ships directly. The sockets can usually handle the heat a little longer.
- 4. Practice, practice, practice.

Subject: Re: Learning to Solder

Posted by gofar99 on Sat, 08 Oct 2011 01:56:00 GMT

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Hi, I would like to add a couple of suggestions as well. Instead of using a cloth, use a piece a few inches square of a "natural" sponge. Do not use the synthetic ones as they melt. A better alternative and will last forever is get one of the bronze pads designed for cleaning the tips. They look like copper brillo pads or pot scrubbers. On sale they run under \$5 from places like Parts

Express and MCM. When it gets full of junk, just shake it out over the trash and you are back in business. You can put the thing in something like a small cat food can and screw it down on a small piece of wood to make it stable. If your soldering iron doesn't have a "rest" you can make one from coat hanger wire and attach it also to the same board. In the photo the one in the foreground shows the "pad" the thing behind it is a vacuum desoldering iron and it has one of the sponge pads. Please excuse the junk in sight, I'm in the middle of several projects and could only push it so far to the side.

File Attachments

1) Soldering Iron Stands.jpg, downloaded 2605 times

Subject: Re: Learning to Solder

Posted by gstarey66 on Tue, 02 Jan 2018 18:02:39 GMT

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Another suggestion for reliable solder joints. Make the wire(s) and whatever you are solder to a good close mechanical connection before applying solder. You will not have failures from vibration or have the solder bridging large gaps (solder conducts, but not as well as copper).

Subject: Re: Learning to Solder

Posted by Tikki on Wed, 03 Jan 2018 22:57:34 GMT

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Those are all great tips, guys. I got an ebook online some time back called 'Simple Soldering' and I would suggest you get something like that if you're a total newbie to soldering.

Subject: Re: Learning to Solder

Posted by Jethro on Thu, 08 Nov 2018 23:02:26 GMT

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I tried soldering when I was in high school, which is ages ago. I cannot solder because my hands start to tremble when I focus on the part which I like to connect. Any tips for controlling a shaky hand?