

COLDHEAT®

TECHNICAL SUPPORT | FREQUENTLY ASKED QUESTIONS

Q: Can I melt heat-shrink tubing or engrave wood with my Cold Heat Soldering Pen?

A: Nope. The soldering tool must make contact with metallic (conductive) materials to generate heat. You cannot melt heat-shrink tubing or engrave wood with this tool.

Q: I chipped my tip. Will it still work?

A: Yes, but it may not be as easy to use as when first new. You may remove the tip and carefully file the tip back to a symmetrical shape with a nail file. The easier thing to do would be to go buy another tip from any retailer that sells ColdHeat products. We know, this is a bit self-serving.

Q: What is the power rating of this tool?

A: The power rating depends on size and thermal mass of soldering joint to be performed; A/C equivalent power rating is estimated at 25W to 30W. Of course, these figures are only provided as guidelines and may be different for your application. It's really hard to measure practical power output on a high-efficiency cordless tool, because there are so many variables.

And, by the way, that 65W corded tool that you have stashed in a drawer? Yes, that one. It theoretically puts out 65W, but in practice it loses about 40W into the air. Think about it: all that heat flying through a big heater and only one tiny place of delivery – the tip.

At least we create the heat in that tiny place of delivery.

Q: What temperatures does the tip reach?

A: It all depends on the size of the joint. For a small joint, the tip may reach 700°F in less than one second and may even exceed 1,000°F. We do not recommend applying the tip to a small joint for longer than a few seconds, as the temperature may keep rising. For large joints, the temperature will likely be significantly lower.

Q: Is there ESD (Electrostatic Discharge) with this tool?

A: ESD testing is performed on products to check the durability of the circuitry when a static shock is discharged on a conductive item on the cabinet of the product, similar to the static shock one may experience by walking on carpet and touching a doorknob. In testing, the tool withstood 12kV discharges without an interruption soldering operation. However, the LEDs may not continue to function properly, because they may become busted.

Q: What is the spark I see sometimes during soldering?

A: The spark (arc) is caused by the passing of electrical current from one half of the tip to the other. Although in testing the tool's spark did not damage any electrical or electronic components, we recommend caution when soldering sensitive components. Also, ensure that the tool is not used in flammable or explosive environments. Kaboom = totally bad.

Q: How many soldering joints is the tool expected to perform?

A: In testing, the tool completed at least 600 small joints in a consecutive manner from a pack high-quality alkaline batteries. This number will vary according to the size of the joints being soldered, the technique and timing of the operation, and a load of other factors that would take hours to discuss. What are you doing this afternoon?

Q: What size solder wire do you recommend for use with this tool?

A: The ColdHeat Soldering Pen will work well with any solder wire of gauges 18 to 24. It performs best with solder of AWG 18 (0.040 inches or 1mm diameter) to 20 (0.032 inches or 0,8 mm diameter).

Q: Can the Cold Heat Soldering Pen use solder of any composition?

A: Pretty much. The tool should perform with regular, lead-free, or silver-based solder of adequate gauge.

Q: Can the tool desolder joints?

A: Why yes, we thought you'd never ask. It can desolder joints using wick. Place a piece of clean wick over the joint to be desoldered and apply the Ceramic Tip to it. Because of the conductive nature of the wick, the tip will create heat and will transfer it into the wick in a few seconds or more, depending on the size of the joint. When it appears that the soldering joint melted under the wick, remove the wick from it. If you did a good job, the solder from the joint should have transferred to the wick. If you didn't do a good job, we applaud your effort and remind you that practice makes perfect.

COLDHEAT®

TECHNICAL SUPPORT | TROUBLE SHOOTING GUIDE

ISSUE: The white light (LED) does not turn ON when I turn the switch ON.

SOLUTION:

- Make sure the batteries are installed correctly according to the diagram in the battery compartment.
- The batteries may be discharged. Install fresh, new alkaline AA batteries of good quality.

ISSUE: The red light (LED) does not come on when I try to solder the joint.

SOLUTION:

- Adjust your tip orientation until you make appropriate contact with the solder joint.
- DO NOT PRESS HARDER OR USE EXCESSIVE FORCE, as you may chip or break the tip by doing so.
- Use light-handed operation.
- Make sure you are soldering electrically conductive (metallic) materials (not plastics, wood, or paper).
- Make sure the solder tip is firmly retained within the body of the solder tool.
- If you determine that it is not, with the power switch in the OFF position and the tip removed, gently bend the spring clips in the front end of the tool inward with a thin screwdriver to make better contact with the tip.

ISSUE: The red light (LED) stays ON after I finish soldering the joint.

SOLUTION:

- A small bit of solder may be wedged in the split between the electrodes of the Ceramic Tip. Turn OFF the power switch and use a thin, non-metallic part (such as a toothpick) to dislodge the solder bead.
- Use quality alkaline AA batteries only and do not mix old and new batteries.
- DO NOT USE RECHARGEABLE BATTERIES. Rechargeable batteries may cause indicator lights to respond inconsistently.
- The batteries may be discharged; replace as described above.

ISSUE: The red light (LED) comes ON, but the tip does not get hot enough to melt the solder.

SOLUTION:

- The batteries may be discharged (especially if the intensity of the red LED is not full); replace as described above.
- The solder joint is large; it may take the tool a longer time to heat it up. If the joint is too large, the tool may not have enough power to heat it up or this may discharge a significant portion of the battery voltage.

Contact Us

We tried to help you, but you outsmarted us - you still have questions.
Send us an email and let's see if we can catch up with you.

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