

COLDHEAT™

Soldering Tool



Instruction Manual

Thank you for purchasing the ColdHeat Soldering Tool. Our patented technology creates the heat you need to solder within seconds, and its cordless design lets you operate it anywhere.

The patented Split-Tip combines unique material properties into two electrically insulated electrodes that form part of an internal electrical circuit. Unlike regular soldering irons, the ColdHeat Pro Soldering Tool does not require pre-heating the tip. When the tip's two electrodes make simultaneous contact with an electrically conductive material (such as a wire lead, terminal, solder, PCB pad, metal jewelry or other material), the circuit is completed and the electrodes generate nearly instantaneous heat at the tip. The heat is then rapidly transmitted to the work piece.

Battery Installation & Replacement

The ColdHeat Soldering Tool uses four replaceable AA alkaline batteries (not included).

To insert or change the batteries:

1. Unscrew and slide the battery compartment cover (located on the bottom of the tool) away from the tool.
2. Insert or replace batteries according to the polarity diagram
3. Replace the battery compartment cover prior to use.

Battery Notes:

- Do not mix old and new batteries.
- Do not use rechargeable batteries.
- Remove batteries if not using the soldering tool for an extended period of time.
- Dispose of batteries promptly and properly.

USE REPLACEABLE AA ALKALINE BATTERIES.

RECHARGEABLE BATTERIES ARE NOT RECOMMENDED.



Operation

When you first open the ColdHeat™ tool's case, a translucent cap protects the electrical contacts at the front end of the tool. Remove the protective cap and insert one of the tips by pushing it into the tool.

1. Slide the ON/OFF switch on top of the tool to ON. The white light illuminates, and although the tip is still cool, your tool is now ready to solder.
2. To heat the tip, gently place it against the electrically-conductive work piece so that both tip electrodes make solid contact with the work piece; then add solder. If the tip is placed correctly, the red light illuminates and the tip will create heat almost instantly, allowing for clean solder flow and the formation of a smooth joint. A slight spark may occur at the tip during soldering.
3. When the joint is complete, remove the tip from the work piece. The tip should cool off to touch-safe temperatures within a few seconds to a few minutes, depending on the length of your soldering process.

Caution: DO NOT PRESS HARD. Excessive pressure does not improve performance and may break the tip. If the tool is not supplying the required heat, the tip electrodes are not both making contact with electrically-conductive material. Reposition the tool for better contact until the red light turns on.

Soldering Technique

Below are a few operational tips intended to improve your soldering technique with the ColdHeat™ Soldering Tool:

- This tool is intended for short bursts of heat. Do not dwell on a single soldering joint for a long duration.
- If you are having trouble establishing electrical contact between the Split-Tip™ electrodes and the work piece, tilt the tip so that it touches the work piece at an angle. The red light will then turn on when the tip makes correct contact with the work piece. A few minutes of practice will go a long way to ensure that you enjoy your ColdHeat™ tool. Remember: light-handed operation will prolong the life of your tip and create better joints.
- Users more experienced with the soldering process will recognize that the Split-Tip™ eliminates the need for wetting and cleaning the tip. The tips can also be used for desoldering with wick.
- When soldering electronic components with small pin-outs, do not bridge two or more different pins with the opposite halves of the Split-Tip™. Doing so will cause a current discharge and may damage the part.
- Turn off the tool when not in use. Extended use of the white light will diminish battery life.
- A new set of batteries will perform approximately 700 joints under normal conditions. We recommend that you replace the batteries often to maintain high performance from your tool.
- For best results use solder approximately 1 mm (0.040") in diameter.

Note: The ColdHeat Soldering Tool is not recommended for large joints that require long, continuous soldering.

Safety Instructions

Follow these safety precautions to reduce the risk of personal injury or property damage from fumes, burns, or fire.



- Use with proper ventilation, use caution, common sense, and become educated about the soldering process. This product, when used for soldering and similar applications, produces chemicals known to the State of California to cause cancer and birth defects (or other reproductive harm) (CA Health and Safety Code 25249.5 et seq.) Flux fumes from soldering and de-soldering can be harmful, especially when using lead-based solder.

To reduce the risk of fire or explosion:

- Do not operate near flammable or explosive materials. This tool may create a spark at the tip while soldering, which could ignite flammable fumes, liquid or other materials.

To reduce the risk of personal injury or property damage from burns or fire:

- Do not touch the tip during active operation (indicated by the red light). Make sure that the tip is cool before touching or replacing the cap. Allow sufficient time for the tip to cool before touching it. Under most circumstances, the tip will cool to the touch very quickly. However, after prolonged use—such as after applying solder to several joints or applying solder to a work piece for a long time—the tip may take longer to cool down.

- Do not leave the tip on the work piece for more than a few seconds at a time. Excess smoke may indicate that the flux in the solder is melting, which is a sign that the tip temperature is too high.

- Be sure the Split-Tip is free of debris when not in use. The tip may inadvertently become hot or remain hot if a piece of metallic debris is lodged in the gap between the Split-Tip electrodes. If debris is lodged in the Split-Tip, shut the unit off and use a thin, non-conductive material (such as a toothpick) to wedge the debris out of the Split-Tip.

- Turn the soldering tool OFF when not in use. The tool may inadvertently create heat if it is left in the ON position and conductive material becomes lodged between the Split-Tip electrodes.

- Keep out of reach of children.

To avoid damage to your soldering tool:



- Do not apply unnecessary pressure to the Split-Tip. The Split-Tip is fragile. Excessive pressure will damage or break the tip. Light-handed operation will prolong the life of your tip.

- Do not store tool in high-temperature environments as this can damage the batteries and electrical parts.

- Do not attempt to repair the ColdHeat soldering tool. This could damage the tool and will invalidate the warranty.

- For best results, we recommend that you do not use the solder tool continuously for more than 3 seconds at any one time.

SAVE THESE INSTRUCTIONS

Limited Warranty Information

We warrant this product to be free from defects in material or manufacture at the time of sale and that it will remain serviceable for a period of 90 days from date of purchase. This warranty does not cover damage through misuse, abuse, alteration, unauthorized repairs, accident, or Acts of God.

The preceding warranties are the sole express warranties made by ColdHeat. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING 90 DAYS FROM THE DATE OF PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

EXCLUSIVE REMEDY FOR NONCONFORMITY: If during the warranty period, the product does not conform to the preceding warranties, we will repair or replace the product at our option. We will use new and/or reconditioned parts in repairs or replacements. Following repair, the warranty will continue for the remaining portion of the warranty period. THIS IS THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY. To obtain warranty service, return the product, postpaid along with the original sales receipt and \$7.95 for postage and handling to:

COLDHEAT CONSUMER PRODUCTS LLC

400 Fulfillment Circle
Wallingford, CT 06494

DISCLAIMER OF INCIDENTAL AND CONSEQUENTIAL DAMAGES: IN NO EVENT SHALL COLDHEAT, ITS LICENSORS AND/OR ITS MEMBERS, BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE, OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Protected by U.S. Patent number 6,646,228.

Other U.S. and foreign patents pending.

See coldheat.com for more information.