

## Pro Soldering Tool Instruction Manual

### Limited Warranty Information

Cooper Hand Tools warrants to the original purchaser and any subsequent owner ("Buyer") that this product will be free from defects in material and workmanship for a period of 90 days from date of purchase, provided that no warranty is made with respect to products which have been altered, subjected to abuse or improperly used, installed or repaired. Use of non-Cooper Hand Tools components will void this warranty if a non-Cooper Hand Tools component is defective (or is the source of the defect).

Cooper Hand Tools will repair or replace products found to be defective not caused by a part, component or accessory manufactured by another company, during the warranty period. Contact Cooper Hand Tools with dated proof of purchase and return to Cooper Hand Tools, 1000 Lufkin Road, Apex, NC 27539. All costs of transportation and reinstallation shall be borne by Buyers.

IN NO EVENT SHALL COOPER HAND TOOLS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. COOPER HAND TOOLS LIABILITY FOR ANY CLAIMS ARISING OUT OF THIS WARRANTY SHALL NOT EXCEED THE PURCHASE PRICE OF THE PRODUCT.

THE PERIOD OF ALL IMPLIED WARRANTIES APPLICABLE TO THIS PRODUCT INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS, OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO 90 DAYS FROM THE DATE OF PURCHASE BY THE USER.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, 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](http://coldheat.com) for more information.

### Accessories

The patented Split-Tip™ soldering tips are replaceable, and can be easily removed by gently pulling on the tips' black housing. Please turn off power and allow the tip to cool before changing. There are three different Split-Tips™, the Chisel tip, the Bevel tip and the Conical tip:



**Bevel** - the most versatile tip, useful for general applications.



**Conical** - ideal for precision soldering and work in tight spaces.



**Chisel** - wide and flat-faced tip is good for larger components and applications.

### The Weller® / ColdHeat™ Pro Soldering Tool

Thank you for purchasing the Weller® ColdHeat™ Pro Soldering Tool. The Pro Tool's 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 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.

The Pro Tool has the highest available power, giving you more ability to work with larger projects. It will tin wires up to 12 gauge (or equivalent mass).

### Battery Installation & Replacement

The Weller® ColdHeat™ Pro Soldering Tool uses five replaceable AA alkaline batteries. Please see battery polarity diagram below for proper placement of batteries.



USE REPLACEABLE AA ALKALINE BATTERIES.  
RECHARGEABLE BATTERIES ARE NOT RECOMMENDED.

#### To insert or change the batteries:

1. 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 located above and also inside the tool's battery compartment.
3. Replace the battery compartment cover prior to use.

#### Battery Notes:

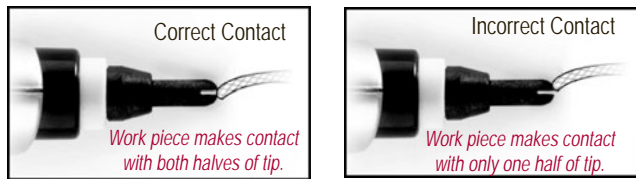
- Do not mix old and new batteries.
- Do not use rechargeable batteries.
- Remove batteries if not using the soldering tool for an extended period of time.
- Dispose of batteries promptly and properly.

## Operation



When you first open the Pro 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 the appropriate power setting (I for low power or II for high power). 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.

The Weller® ColdHeat™ Pro Soldering Tool displays a white light and a red light that indicate the tool's operating status, as follows:

White Light	Red Light	Meaning
OFF	OFF	The tool is shut off.
ON	OFF	The tool is ready to solder. If just used, the tip may be hot.
ON	ON	The tool is soldering and the tip is hot.
OFF	ON	Error. Turn power off and check tool*.

\* First try changing the batteries. If this does not help, or if your tool in any way does not function properly, please visit [coldheat.com](http://coldheat.com) for detailed troubleshooting, help and frequently asked questions.

## Soldering Technique

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

- This tool is intended for short bursts of heat. Do not dwell on a single soldering joint for a long duration.
- The Low Power setting (I) is best for smaller projects (tinning 20-24 gauge wires, or equivalent). The High Power setting (II) is best for larger projects (tinning 12-18 gauge wires, or equivalent).
- 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 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 Weller® ColdHeat™ Pro Soldering Tool is not recommended for large joints that require long, continuous soldering.**

## Safety Instructions – Read All Instructions Before Use

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

### WARNING

- 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.
- 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.

### CAUTION

**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 soldering tool. This could damage the tool and will invalidate the warranty.

**SAVE THESE INSTRUCTIONS**