User Guide

Getting the Batteries Ready. The Cold Heat Soldering Pen uses four replaceable AA alkaline batteries (not included). A battery polarity diagram (+/-) is located to the left of the battery compartment; please get it right, or else you will overheat the batteries and trouble will ensue.

This is important: use replaceable AA alkaline batteries. Rechargeable batteries will not work because their lower voltage messes with the circuit.

Here is how you should insert or change the batteries:

1. Loosen the two screws located on the battery compartment cover (the bottom grey section) of the Soldering Pen.
2. Remove the battery compartment cover by grasping it and gently moving it away from the rest of the unit.
3. Insert or replace the batteries according to the polarity diagram (+/-) on the Soldering Pen.
4. Put the battery compartment cover back on and tighten the screws prior to use.

These bits are also important:

1. Do not mix old and new batteries.
2. Remove batteries if not using the tool for an extended period of time.

Getting the Ceramic Tip Ready. When you first open the Soldering Pen's case, the Ceramic Tip lies in a separate compartment in the black foam base; remove it from there gently. A translucent cap protects the front end of the tool; remove this protective cap, and insert the tip by pushing it into the tool.

You're set to go soldering now.

Soldering Operation. You've made it this far already, so by now you have understood that this is not an old-fashioned soldering tool. Let's agree right now that you will not try to operate it as such, because otherwise you will only become frustrated. So let's try this instead:

1. Slide the ON/OFF switch to the 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 your work piece (wire, electrical or electronic part, etc.) so that both of the Ceramic Tip's electrodes make solid contact with the work piece; then add solder.
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. Ceramics are brittle! Excessive pressure does not improve performance and may break the Ceramic Tip. If the tool is not supplying the required heat, the tip electrodes are not properly making contact with electrically-conductive material. Reposition the tool for better contact until the red light turns on. Light-handed operation will serve you best!

The first time you try this, it may not be all dreamy. But with a few minutes of practice, you can become an expert. Let's work on your technique:

1. If you are having trouble establishing electrical contact between the Ceramic Tip electrodes and the work piece, tilt the tip so that it touches the work piece at an angle. You may also pull the tip out, turn...
it 180°, and re-insert it. The red light will then turn on when the tip makes correct
contact with the work piece. Look for the red light to confirm good contact!

2. The Soldering Pen delivers approximately 25W of AC-equivalent power. It's intended
for hobby or light professional use in electrical projects with small and medium-
sized components, such as 18-24 AWG wires, small jewelry repairs, and larger
printed circuit boards and components. We do not recommend it for soldering
temperature-sensitive, very small electronic components, or large joints that require
long, continuous soldering.

3. For best results, use solder approximately 1 mm (0.040") in diameter or 18 AWG. This
will fit best with the gap in the Ceramic Tip and will make contact a breeze.

4. This tool is intended for short bursts of heat. Do not dwell on a single soldering joint
for a long duration. This may overheat the Soldering Pen and discharge the battery.

5. Users more experienced with the soldering process will recognize that the Ceramic
Tip eliminates the need for wetting and cleaning the tip. The tip can also be
used for desoldering with wick. If you don’t understand this, it’s OK, you’re still
awesome in your own way.

6. A new set of batteries will perform approximately 600 joints under normal
conditions. We recommend that you replace the batteries often to maintain high
performance from your tool.

OK, you’re getting there. Room temperature to 700° F in a quarter of a second? Yes, we can.

Precautions. There are some things we have to
tell you. Please follow these safety precautions
to reduce the risk of personal injury or property
damage from fumes, burns, or fire.

1. A slight spark may occur at the Ceramic
Tip during soldering. Will this damage
your electronic parts? We don’t think
so, but please use caution, and definitely
do not operate the Soldering Pen near
flammable or explosive fumes, liquids,
or other materials. Kaboom = totally bad.

2. Do not touch the Ceramic 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.

3. Do not leave the Ceramic 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.

4. When soldering electronic components with
small pin-outs, it’s easy to unintentionally
bridge two or more different pins with
the opposite halves of the Ceramic Tip.
Not good! Doing so will cause a current
discharge into the component and may
damage it.

5. Be sure that the Ceramic 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 Ceramic Tip electrodes.
If debris is lodged in the tip, shut the
unit off and use a thin non-conductive
material (such as a toothpick) to wedge
the debris out of the tip.

6. 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 Ceramic Tip electrodes.
Also, extended use of the white light
will diminish battery life.

Warranty. We warrant this product to be free
from defects in material or manufacture for
a period of 1 year from the date of purchase.
This warranty does not cover damage through
misuse, abuse, alteration, unauthorized repairs,
accident, or natural disasters.

The preceding warranties are the sole express
warranties made by ColdHeat. ALL IMPLIED
WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF FITNESS AND
MECHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING 5 YEARS
FROM THE DATE OF PURCHASE. Some states
do not allow limitations on how long an implied
warranty last, 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, please return the product to the
retailer where you purchased it.

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.

With all that legal stuff out of the way, we hope
that you will cheerfully enjoy your ColdHeat
Cordless Soldering Pen forever and ever!