# K-TRONIC USA

Soldering Technology Professionals Can Trust



# 1010-PRO Instructions

# PLEASE READ THIS MANUAL BEFORE USING YOUR NEW X-TRONIC #1010-PRO SOLDERING IRON

This manual is provided to make a safe and effective use of the X-Tronic 1010-PRO soldering iron and to maintain this instrument in proper working condition. Be sure to keep this manual in a handy place near the unit for future reference.

## PACKAGE CONTENTS

- X-Tronic 1010-PRO Soldering iron with Integrated LED Lights and LED Display
- · Soldering Iron Holder
- · Brass Sponge with Rosin Flux Tin
- 5 Assorted Soldering Tips (assorted models only)

## **SPECIFICATIONS**

Model	XTR-1010-PRO		
Input voltage	110/120V 60Hz		
Weight	.25 lbs / 104 g		
Working Environment	32°F ~ 104°F / 0°C ~ 40°C		
Storing Environment	-4°F ~ 176°F / -20°C ~ 80°C		
Storage Humidity	35%-45%		
Temperature Range	194°F ~ 896°F / 90°C ~ 480°C		
Temperature Stability	± 2°C (static)		
Tip to Ground Resistance	<2Ω		

## **SET-UP & OPERATION**

WARNING: Do NOT leave the unit on full power for a long periods of time. This will greatly reduce the life of your soldering iron.

- 1. Remove all components from the box.
- Assemble the soldering iron holder by placing the soldering iron holder coil in the base behind the rosin flux tin.
- 3. Determine where the soldering iron holder will be used and secure it to the workbench by removing the liner on the bottom of the holder and sticking it to the workbench.
- 4. Place the soldering iron in the soldering iron holder.
- 5. Plug the iron into the outlet.
- Turn the power on by pressing the power switch on the side of the unit.
- 7. Once the power is on the LED Screen located on the side of the iron will light up.
- 8. Set the desired working temperature by pressing the "+" or "-" buttons on the side of the iron. The temperature of the soldering iron can be set anywhere from 194°F ~ 896°F/90°C ~ 480°C.
- 9. Remove the iron from the cradle and flood the tip with a good quality rosin core solder-preferably 63/37 or 60/40 grade solder (See page 4).
- 10. Dip the tip into the brass sponge to remove excess solder. The tip should then be bright and shiny.
- 11. The soldering iron is now ready to solder. Proceed according to your standard working practice.
- 12. When you are finished soldering, place the iron in the holder while it cools down. Unplug the unit from the outlet when not in use.

## **FUNCTION SETTINGS**

## **FAHRENHEIT / CELSIUS CONVERSION**

- 1. Turn off the power switch.
- 2. Press and hold the "+" button while turning the power switch on. The display will show "F" for Fahrenheit display mode.
- 3. Press the "-" or "+" buttons to select "C" or "F".
- 4. Wait for approximately 4 seconds and the program will save and exit on its own. The temperature display will then show the temperature measurement being used.

## **SLEEP TIMER**

Note: The unit will NOT go into sleep mode unless the soldering iron is in the holder.

When the soldering iron is placed in the holder, the iron will go into sleep mode after 5/10/30 minutes (depending on how you have the sleep timer set). The display will show "SLP" to signify this and the temperature of the soldering iron will ramp down to 194°F / 200°C. When the soldering iron is removed from the holder to use again, the temperature of the soldering iron will ramp back up to the temperature it was previously being used at within 5-10 seconds.

- Note: Setting the sleep timer at "L00" will turn the sleep function off and the unit will NOT go to sleep regardless of how long the unit sits idle in the soldering station holder. It is not recommended to turn the sleep timer off for normal use. The use of the sleep timer will help extend the life of the heating element and tip if the unit is left on for long periods of time.
  - 1. Turn off the power switch.
  - 2. Press and hold the "-" button while turning the power switch on. The display will show "LXX" (where XX is the number of minutes the iron must be still for the iron to go into sleep mode).
  - Press the temperature "+" or "-" to adjust the sleep timer. This can be set anywhere from "00" (where the sleep timer will NEVER turn on) to "99" (where the sleep timer will turn on after 99 minutes of inactivity).
    - Note: Selecting L00 can greatly reduce the life of your soldering iron and heating element.
  - 4. Wait for approximately 4 seconds and the program will save and exit on its own.

## **CALIBRATION FUNCTION**

## When is it time to Calibrate your Soldering Station?

All X-Tronic Soldering Stations come with a high quality ceramic heating element in the soldering iron that is calibrated to within  $\pm 3.6^{\circ} F/2.0^{\circ} C$  of the temperature that is shown on the LED Display. While calibrating to the exact temperature is the ultimate goal, this heating element and tip design is as close as can be achieved with this technology.

The age of the heating element, the hours of use, and the temperature at which the soldering iron is regularly used will affect the life of the heating element and can cause fatigue. When a heating element begins to fatigue, the heat that is transferred to the soldering tip from the heating element will begin to drop. If the typical temperature used to solder is not working as well as when it was new, then it might be time to calibrate the unit.

Note: Heating elements are consumable parts for soldering stations.

There will come a time when the heating element stops working due to age and/or too much deterioration. At this point, it will need to be replaced and cannot be calibrated. Heating elements for this unit can be found on our website (XTronicUSA.com).

## **Calibration Instructions**

Once the desired temperature has been set and the temperature of the unit stabilizes, measure the heat at the soldering tip using a high quality and well calibrated soldering tip tester. If the temperature shown on the unit's display does not reflect the temperature shown on the tester, the unit can be calibrated.

- 1. Turn on the power switch.
- 2. Press and hold both the "+"and "-" buttons until the display flashes "CAL". This indicates you are now in Calibration Mode.
- 3. While the display is flashing, press "+" or "-" to input the tested temperature.
- 4. Wait for approximately 4 seconds and the program will save and exit on its own.

## IMPORTANT - PLEASE READ

Infrared (IR) Thermometers should NOT be used to measure the temperature of the soldering tip as they often provide inaccurate readings. All IR Thermometers are different and the capability depends on the Distance to Spot (D:S) ratio of the model being used. Many IR thermometers have a D:S ratio of 8:1 or 12:1 which means that the thermometer needs to be a distance of 8" or 12" in order to read a 1" spot size. The tip of a soldering iron is approximately 2 to 3 mm (.07-.11"), requiring the thermometer to be 0.8" or 1.2" away from the tip. However, the IR thermometer also has a minimum distance it needs to be away from the object. Most IR thermometers will not be capable of measuring such a small spot size and will provide disappointing calibration results.

## **MAINTENANCE**



## **WARNING**



## DISCONNECT POWER CORD BEFORE REPLACING A SOLDERING TIP AND/OR A HEATING ELEMENT

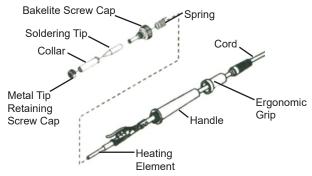
## REPLACING THE SOLDERING TIP

- 1. Turn off the soldering iron, unplug the power cord from the power source and allow the soldering iron to cool down to room temperature. Never attempt to remove the tip while the iron is hot.
- Unscrew the small metal tip retaining screw cap at the bottom of the soldering irons metal shaft. Slide off or remove the soldering tip retaining collar. Now, remove the tip by sliding it forward. (There is NO need to remove the black Bakelite screw cap to change the tip.)
- Slide a new tip over the exposed ceramic heating element, slide the metal retaining collar over the new soldering tip back onto the soldering iron.
- 4. Tighten the metal tip retaining screw cap to secure the tip into place. Do not over tighten the metal tip retaining screw cap.
- 5. Plug the soldering iron AC cord into a grounded outlet to resume soldering.

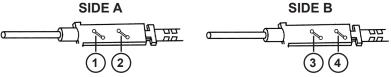
## **BLACK BAKELITE SCREW CAP TIPS**

- Bakelite is a strong and stable material when handled correctly. This
  part cannot be made of metal for heat transfer safety reasons.
- The black Bakelite screw cap does NOT need to be removed to replace the tip. This is only removed to access the heating element.
- The Bakelite screw cap should never be tightened or re-tightened when the iron is hot. If the iron is not at room temperature when the Bakelite screw cap is removed it can cause it to crack.
- When tightening the Bakelite screw cap, at room temperature, it only needs to be snug - DO NOT OVER-TIGHTEN.

## REPLACING THE SOLDERING IRON HEATING ELEMENT



- 1. Turn off the unit and unplug it from the outlet. Allow the soldering iron to cool down to room temperature.
  - Never attempt to handle the tip while the iron is hot.
- 2. Unscrew the Black Bakelite Screw Cap and slide off the full tip assembly.
- 3. Push the Cord through the bottom of the soldering iron while simultaneously pulling gently on the heating element to expose the heating element circuit board.
- 4. De-solder the 2 Thin (red or white) wires and the 2 Thick (blue) wires that have heat shielding on them from the circuit board and pull the heating element away from the board. Please take note of the location of the wire thickness/color for installation of new heating element (see diagram below).
- 5. On one side of the circuit board solder a thin wire to ① and a thick wire to ② (see diagram below).
- 6. Flip the circuit board over and solder a thin wire to ③ and a thick wire to ④(see diagram below).
- 7. Pull the cord back gently and align the circuit board to the slots on the iron so the cord can be pulled back to its original position.
- 8. Replace black Bakelite Screw Cap and screw back on and hand tighten *Do NOT over-tighten*.
- 9. Install the soldering tip, slide the metal soldering tip retaining collar and hand tighten it. Plug the AC cord back into a grounded outlet.



NOTE: The wires on the heating element can be soldered onto either side of the circuit board, as there is no polarity for the element.

## X-Tronic International Inc.

# 3-YEAR LIMITED WARRANTY

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS, AS THEY VARY FROM STATE TO STATE.

THIS LIMITED WARRANTY CAN ALSO BE FOUND ON OUR WEBSITE AT WWW.XTRONICUSA.COM/SUPPORT/WARRANTY.

WE WARRANT THAT DURING THE WARRANTY PERIOD, THE PRODUCT WILL BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP.

WE LIMIT THE DURATION AND REMEDIES OF ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO THE DURATION OF THIS EXPRESS LIMITED WARRANTY.

SOME STATES HAVE DIFFERENT LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

OUR RESPONSIBILITY FOR DEFECTIVE GOODS IS LIMITED TO REPAIR, REPLACEMENT OR REFUND AS DESCRIBED BELOW IN THIS WARRANTY STATEMENT.

## WHO MAY USE THIS WARRANTY?

X-Tronic International Inc. located at 2159 Magnum Circle, Lincoln, Nebraska 68522 ("we") extend this limited warranty only to the consumer who originally purchased the product in the United States, the District of Columbia or Canada ("you"). It does not extend to (a) any subsequent owner or other transferee of the product, (b) any product shipped outside of the United States, the District of Columbia or Canada, or (c) anyone who may have purchased it from someone other than X-Tronic International Inc.. Proof of purchase is required for inwarranty service. We recommend you promptly register this product on our website (www.XTronicUSA.com) to facilitate verification of the date of the original purchase. Keep the product manual and your sales receipt together for future reference.

## WHAT DOES THIS WARRANTY COVER?

This limited warranty covers defects in materials and workmanship of the product for the Warranty Period as defined below. In addition, during the Initial Warranty Period, this limited warranty also covers defects occurring in the initial shipment of the product to you.

## WHAT DOES THIS WARRANTY NOT COVER?

This limited warranty during the Warranty Period does not cover any damage due to: (a) improper use; (b) failure to follow the product instructions or to perform any preventive maintenance; (c) modifications; (d) unauthorized repair; (e) normal wear and tear that comes with household use; or (f) external causes such as accidents, abuse, or other actions or events beyond our reasonable control. It also does not cover consumable parts.

## WHAT IS THE PERIOD OF COVERAGE?

This limited warranty starts on the date of your purchase and lasts for 3 years ("The Warranty Period"), which shall be divided into two periods: (1) the first 30 days from the date of your purchase ("Initial Warranty Period"); and (2) the remainder of the 3 year period after the Initial Warranty Period has expired (the "Remainder Warranty Period"). The Warranty Period is not extended if we repair or replace the product. We may change the availability of this limited warranty at our discretion, but any changes will not be retroactive.

## WHAT ARE YOUR REMEDIES UNDER THIS WARRANTY?

With respect to any defective product during the Initial Warranty Period, we will, in our sole discretion either (a) replace such product (or the defective part) free of charge, or (b) refund the purchase price of such product.

With respect to any defective product during the Remaining Warranty Period, we will repair such product free of charge and provide a full-service inspection of your product. You will be responsible for all shipping and handling fees to and from our facility.

## **HOW DO YOU OBTAIN WARRANTY SERVICE?**

To obtain warranty service, you must call 844-861-4762 or email us at Info@ XTronicUSA.com during the Warranty Period to open a service request. Proof of purchase will be required to open a service request.

## LIMITATION OF LIABILITY

THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES AND OUR ENTIRE LIABILITY FOR ANY BREACH OF THIS LIMITED WARRANTY. OUR LIABILITY SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE PRODUCT, NOR SHALL WE UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT.

SOME STATES HAVE DIFFERENT LIMITATIONS OF LIABILITY AND EXCLUSIONS, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

## QUESTIONS, PROBLEMS OR COMPLIMENTS?

Thank You for purchasing this X-Tronic International Product! We are grateful for your business!

All of our X-Tronic International Products are inspected then sealed with our NEW Product Seal prior to shipment. Our goal is to ensure Quality, Completeness, and Satisfaction for your order.

For Any Questions, Problems, or Compliments please call or email us.



Our Business Hours are: Monday - Thursday: 8am - 4pm CST Friday: 8am - Noon CST

If you would like to shop for other X-Tronic International Products
Please visit our website
www.XTronicUSA.com

