

# X-TRONIC USA

**Soldering Technology  
Professionals Can Trust**



# 9080-XR3 Instructions



PLEASE READ THESE INSTRUCTIONS BEFORE USING YOUR  
NEW X-TRONIC MODEL #9080-XR3 SOLDERING STATION

## TABLE OF CONTENTS

<b>Product Specifications</b> .....	<b>3</b>
<b>Package Contents</b> .....	<b>3</b>
<b>Safety Precautions</b> .....	<b>4</b>
<b>Unit Diagram</b> .....	<b>5</b>
<b>Initial Set-up</b> .....	<b>5</b>
<b>Operating Instructions</b> .....	<b>6</b>
<b>Features</b> .....	<b>6</b>
Celsius / Fahrenheit Conversion .....	6
Sleep Function .....	6
Calibration Function .....	7
<b>Maintenance</b> .....	<b>9</b>
Soldering Tip Care.....	9
Changing the Soldering Tip .....	9
Replacing the Heating Element.....	10
<b>Troubleshooting</b> .....	<b>11</b>
<b>Warranty</b> .....	<b>12</b>
<b>Contact Information</b> .....	<b>14</b>



# PRODUCT SPECIFICATIONS

Model	XTR-9080-XR3
Dimensions	7.0 x 5.75 x 5.0 in
Weight	1.5 lbs
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	± 1.8°F / 1.0°C (Static)
Tip Impedance	< 2Ω
Display Type	LED Numeric Display
Cable Length	36 in

## PACKAGE CONTENTS

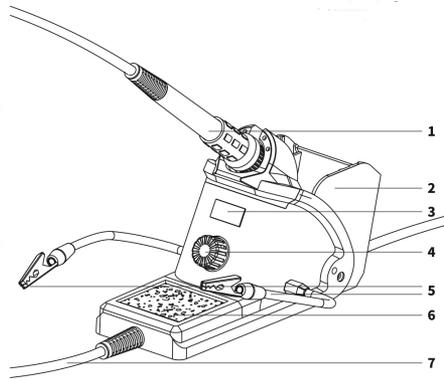
- 110 Watt Main Power Unit
- Soldering Iron with Ergonomic Grip
- 2 - Helping Hands (Detachable)
- Top-mounted Soldering Iron Holder - Attached to Main Unit
- Solder Roll Holder to Mount on Side of Unit
- Wet Sponge Soldering Tip Cleaner
- Complete Instruction Manual

# **SAFETY PRECAUTIONS**

1. Always use a grounded outlet for the unit.
2. Always turn the power off and unplug the unit when not in use.
3. Never use the soldering iron near any flammable substance, material, or gas.
4. Never touch the metallic components of the soldering iron while the unit is on. They are extremely hot and will cause serious burns instantly.
5. Always turn the power off, unplug the unit, and let it fully cool down before attempting to replace any parts (tips, heating element, etc.)
6. Use only genuine replacement parts for this unit.
7. Do not use the unit for any application other than soldering.
8. Do not tap the soldering iron against the work bench to remove residual solder.
9. Do not modify the unit in any way.
10. When replacing consumable parts, only use approved manufacturer parts.
11. Do not get the unit wet or use when your hands are wet.
12. The soldering process will produce smoke - ensure the area is well ventilated.

# UNIT DIAGRAM

1. Soldering Iron
2. Soldering Iron Holder
3. Temperature Display Screen
4. Thermostat & Menu Knob
5. Helping Hands (Detachable)
6. Wet Sponge
7. Soldering Cord



# INITIAL SET-UP

1. Open the package and check that all parts are present and are not damaged. If anything is missing or damaged, please contact X-Tronic immediately for assistance (see back cover for contact information).
2. Remove everything from the packaging.
3. Attach the helping hands - use the enclosed wrench to ensure they are attached securely.
4. Place the soldering iron in the soldering iron holder on the top of the unit.
5. Wet the blue sponge and place in the space at the base of the soldering iron holder (see #6 in drawing above).
6. Plug the 3-prong AC cord that is in the back of the unit into a grounded outlet to prevent electric shock or injury.

# OPERATING INSTRUCTIONS

1. Place the soldering iron in the holder.
2. Turn the unit on with the power switch on the back of the unit.
3. Set the desired temperature using the thermostat knob on the front of the unit. The desired temperature will flash on the display indicating it is being set.
4. The temperature on the display will then return to the current temperature of the iron and will show the temperature as the iron heats up or cools down to the selected desired temperature.
5. Wait for the unit to stabilize at the desired temperature. This could take up to 1 minute to ensure the tip is fully heated to the new temperature.
6. Remove the iron from the holder and flood the tip with a good quality rosin core solder-preferably 63/37 or 60/40 grade solder.
7. Wipe the tip across the moist sponge to remove excess solder. The tip should then be shiny.
8. The soldering iron is now ready to solder. Proceed according to your standard working practice.

## FEATURES

### CELSIUS / FAHRENHEIT CONVERSION

To switch between displaying the temperature in Celsius or Fahrenheit, press and hold the Menu Knob for approximately 3 seconds. The display will show either °C or °F depending on what the current setting is. To change this setting, simply turn the knob. After 5 seconds the unit will auto save the setting and return to the temperature setting and is ready for use.

### SLEEP FUNCTION

If the soldering iron sits idle in the soldering iron holder for 10 minutes (default time), Sleep Mode will be activated. The screen will flash "SLP" and the soldering iron will cool down to 90°C (194°F). To bring the unit out of Sleep Mode, simply pick up the soldering iron from the holder.

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

To change the default time before sleep mode is activated, press and hold the Menu Knob for approximately 3 seconds. °C/°F will appear on the screen, then press the Menu Knob one more time and the screen will read L10 (indicating that the sleep time is set at 10 minutes). Turn the knob to choose between 00, 05, 10, and 30 minutes. After 5 seconds the unit will auto save the setting and return to the temperature setting and is ready for use.

*Note: Setting the sleep timer at “00” 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.*

## **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  $\pm 1.8^{\circ}\text{F}/1.0^{\circ}\text{C}$  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](http://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. It is then time to calibrate the unit.

The unit can be calibrated by pressing and holding the Menu Knob for approximately 3 seconds, the screen will show °C/°F, then press the knob two more times and it will say CAL. Turn the knob to compensate for the degrees of variance. After 5 seconds the unit will auto save the setting and return to the temperature setting and is ready for use.

***If calibration is used to compensate for a diminished heating element, once the heating element is replaced the calibration will need to be repeated to ensure the unit is operating at the appropriate temperature.***

*Note: If this feature is used please be aware that without proper testing equipment and methods, the outcome could be less than desirable.*

## **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

## SOLDERING TIP CARE

1. For first use, allow the tip to rise to a stable temperature. Clean the tip on the damp sponge and tin the tip (apply a small amount of fresh solder to the tip).
2. The soldering iron should be run in the 330°C ~ 360°C range for regular use, which is the normal temperature range for most soldering applications. The heating element should last for 6 to 12 months depending on hours of use when the unit is regularly used within this range.
3. Never hit the soldering iron or tip on anything when trying to remove excess solder.
4. Do not use extreme temperatures with the soldering iron tips, doing so will shorten the life span of the tip.
5. Clean the tip before each use, using the brass cleaning sponge for better temperature stability during use.
6. Always clean and tin the tip after each use. This will aid in the prevention of oxidation on the tip and help extend its life span.
7. Do not allow the soldering iron or the tips to sit idle at high temperatures for extended periods of time.
8. Never use a file or other abrasive materials to remove oxidation from the tips.
9. To remove oxidation, simply flood the tip with fresh solder and wipe it clean on the damp sponge or copper cleaning pad. This may need to be repeated several times for badly oxidized tips.
10. To remove the yellowing on the tip shaft (which is perfectly normal, especially after first use) clean with 90% Isopropyl alcohol.

***WARNING: Do NOT use anti-seize or any other lubricant on the tip retainer or heater of the soldering iron***

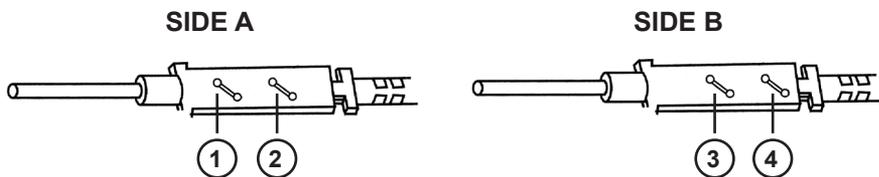
## INSTALL/REMOVE SOLDERING IRON TIP

1. Turn off the power to the unit and unplug from the power source.
2. Allow the soldering iron and tip to fully cool down and reach room temperature.
3. Loosen the metal nut at base of the metallic shaft of the soldering iron.

4. Slide the metallic tube off of the soldering iron and tip.
5. Slide the tip off of the heating element.
6. Repeat in the reverse order for installation. Do not over-tighten the nut on the soldering iron.

## REPLACING THE HEATING ELEMENT

1. Turn off the unit and unplug it from the power source.
2. Allow the soldering iron to cool down to room temperature.  
**Never attempt to remove the tip while the iron is hot.**
3. Unscrew the Black Bakelite Polymer Retaining Cap and slide off the full tip assembly.
4. Push the Power Cord through the bottom of the soldering iron while simultaneously pulling gently on the heating element to expose the heating element.
5. 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).
6. On one side of the circuit board solder a thin wire to ① and a thick wire to ② (see diagram below).
7. Flip the circuit board over and solder a thin wire to ③ and a thick wire to ④ (see diagram below).
8. 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.
9. Replace Bakelite Polymer Retaining Cap and screw back on and hand tighten - **Do NOT over-tighten.**
10. 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 back onto either side of the circuit board, as there is no polarity for the element.

# TROUBLESHOOTING

ISSUE	POSSIBLE SOLUTIONS
Unit does not have power	<ul style="list-style-type: none"><li>• Ensure the power cord is securely attached to the outlet and that the unit is powered on at the back of the unit.</li><li>• Ensure that the outlet is functional.</li></ul>
S-E Error	<ul style="list-style-type: none"><li>• The soldering tip could be oxidized, it is important to always tin your tip and keep it clean. See Tip Maintenance section of manual.</li><li>• The heating element may need to be replaced</li></ul>
Tip is not heating up as expected	<ul style="list-style-type: none"><li>• The soldering tip could be oxidized, it is important to always tin your tip and keep it clean. See Tip Maintenance section of manual.</li><li>• The heating element may need to be replaced</li><li>• Unit may need to be calibrated - see Calibration section of manual</li></ul>

**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](http://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 in-warranty service. We recommend you promptly register this product on our website ([www.XTronicUSA.com](http://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](mailto: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.**



**Toll Free: 844-861-4762**



**Info@XTronicUSA.com**

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](http://www.XTronicUSA.com)

**X-TRONIC USA**

**Soldering Technology  
Professionals Can Trust**