

# X-TRONIC USA

**Soldering Technology  
Professionals Can Trust**



# 4040-PRO-X

## Instructions



# SPECIFICATIONS

Model	XTR-4040-PRO-X
Power Consumption	700 Watts
Power Cord	USA Type B - 3-pin Grounded Plug
Voltage	AC 110V 60Hz
Current	≤ 8 Amps
Fuse	15 Amps
Dimensions	9.0 L x 9.5" W x 5.5" H
Weight	7.5 lbs
Working Environment	32°F ~ 104°F / 0°C ~ 40°C
Storage Environment	-4°F ~ 176°F / -20°C ~ 80°C
Storage Humidity	35% - 45%
HOT AIR REWORK	
Hot Air Gun Total Output	600W
Airflow Type	Brushless DC Vortex Blower
Airflow Volume	55 L/Min
Airflow Velocity	3.4 M/S
Programmable Air Flow	20-100
Temperature Range	212°F ~ 932°F / 100°C ~ 500°C
Temperature Stability	± 1°C
Cord Length	≥ 33.2 in
Cord Material	Silicone
Sound Intensity	≤ 69dB
SOLDERING IRON	
Soldering Iron Total Output	75W
Temperature Range	392°F ~ 932°F / 200°C ~ 500°C
Temperature Stability	± 1°C
Output Voltage	24 V AC
Tip Impedance	< 2Ω
Cord Length	≥ 33 in
Cord Material	Silicone

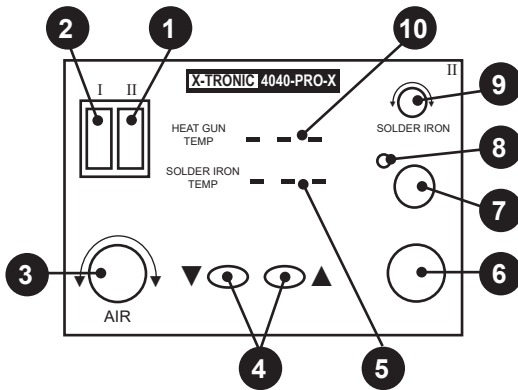
# **PACKAGE CONTENTS**

- 700 Watt Main Power Unit
- 75 Watt Soldering Iron with Ergonomic Grip
- Deluxe Upright Tower Soldering Iron and Hot Air Gun Holder
- Soldering Cord Extension Holder
- Wet Sponge Tip Cleaner
- 700 Watt Hot Air Gun
- Hot Air Gun Holder (on side of main unit)
- 5 - Sizes/Styles of Hot Air Gun Nozzles
  - 3 Straight Air - 5mm, 7mm, & 10mm
  - 2 Spiral/Cyclone Air - 8mm & 10mm

# **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 or hot air gun near any flammable substance, material, or gas.
4. Never touch the metallic components of the soldering iron or hot air gun 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 can produce smoke - ensure the area is well ventilated.

# PANEL DIAGRAM



1. Soldering Iron Power Switch
2. Hot Air Gun Power Switch
3. Air Flow Control Knob
4. Temperature Adjustment Buttons for Hot Air Gun
5. Soldering Iron Temperature Display
6. Hot Air Gun Cord Receptical (Hard-wired)
7. Soldering Iron Cord Receptical
8. PID (Proportional-Integral-Derivative) Indicator
9. Temperature Adjustment Knob for Soldering Iron
10. Hot Air Gun Temperature Display



Hot Air Gun  
Side Holder



Hot Air Gun -  
Vertical Position

## INITIAL SET-UP

1. Attach the hot air gun holder onto the left side of the unit - the screws can be found in the unit. (This can also be attached to the right side of the unit if desired. To do this, detach the bracket from the holder, flip it around and reattach it, then mount it to the right side of the main unit.)
2. Place the hot air gun in the holder on the left side of the unit or in the vertical position in the upright tower holder.
3. Plug the Soldering Iron into the front cord receptacle on the right side of the unit and tighten the ring nut.
4. Place the soldering iron in the soldering iron area of the upright tower holder provided.
5. Plug the 3-Prong AC cord into a 110/120V grounded outlet to prevent electric shock or injury.
6. Turn ON the power switches for both the hot air gun (I) and soldering iron (II) on the front of the unit.
7. Turn the main power on with the power switch on the back of the unit. When the unit is first turned on "C - C" or "F - F" will briefly show on the top display to indicate if the unit readouts are in Celsius or Fahrenheit respectively. Then both LED displays will show "---".

## SOLDERING IRON

1. The bottom display will show the current temperature of the soldering iron when it is turned on and will immediately start to heat up to the last set temperature.
2. To adjust the temperature of the soldering iron, turn the knob "+" or "-" to increase or decrease the temperature. The soldering iron can be set between 392°F ~ 932°F / 200°C ~ 500°C. The display will change to show the temperature being set, once the temperature set as been chosen it will switch back to show the actual temperature of the soldering iron.
3. To turn the soldering iron off, turn off the I power switch on the front of the unit.

## HOT AIR GUN

1. The top display will show "SLP" when the hot air gun is in its holder and in sleep/standby mode.
2. Push the Hot Air Temperature Adjustment Buttons (▲ or ▼) in the middle unit to set the hot air gun temperature. The hot air gun can be set between 212°F ~ 932°F / 100°C ~ 500°C.
3. Turn the Air Flow Control Knob to adjust the airflow for the hot air gun. This can be set from 20 - 100.



### CAUTION



***When using a temperature higher than 300°C on the hot air gun the air flow should be set at 45 or higher. This will prevent damage to the hot air gun and increase the life of the heating element.***

4. When the hot air gun is removed from the holder it will start blowing air and ramp up to the programmed temperature and air speed quickly.
5. When the hot air gun is not in use always place it back in the side holder or in the vertical position in the upright tower holder. When the hot air gun is placed in one of these holders, it will start going into the Auto Cool Down and Sleep/Standby mode immediately. The hot air gun will continue blowing air until the temperature gets back down to 100°C and then the airflow will stop and the hot air gun will go into sleep/standby mode.

***Note:*** *When the hot air gun is initially returned to either of these holders, the air flow may increase noticeably while the hot air gun is cooling down and going into sleep/standby mode. This is a safety feature built into the unit.*

6. When the hot air gun is removed again from either of these holders it will start blowing air and ramp up to the programmed temperature and air speed again quickly.
7. To turn the hot air gun off, turn off the II power switch on the front of the unit.

***Note:*** *Do not unplug the unit or shut off the Main Power Switch on the back of the unit until you have placed the hot air gun in the holder and it has cooled down and the air has stopped blowing automatically - this allows a full cool down of the hot air gun.*

When the unit is not in operation and has fully cooled down, turn the unit off with the power switch located on the back of the unit and unplug from the outlet.

# FEATURES

## SOLDERING IRON SLEEP FUNCTION

When the soldering iron is placed in the holder, the iron will go into sleep mode after a few minutes (depending on the number of minutes that have been programmed for this feature). The display will show “SLP” to signify this and the temperature of the soldering iron will ramp down to 392°F / 200°C. When the soldering iron is removed from the holder to use again, the temperature of the soldering iron will quickly ramp back up to the set temperature.

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

## SETTING THE SOLDERING IRON SLEEP TIMER

1. Ensure the soldering iron and the hot air gun are in their respective holders and that the main switch on the back of the unit is OFF.
2. Turn on the power switches for both the hot air gun and soldering iron on the front of the unit.
3. With both of those switches ON, press and hold both of the Function setting buttons (also known as the Hot Air Temperature Adjustment Buttons) while turning ON the unit with the main switch on the back.
4. The bottom display will show the number of minutes that sleep timer is currently set at.
5. To adjust the sleep minutes rotate the Soldering Iron Temperature Knob. This can be set from 0 to 30 minutes.
6. When the number of minutes is set, press the right (▲) button and the setting will be saved.

**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.*



## **HOT AIR GUN COOL DOWN SLEEP/STANDBY FUNCTION**

When the hot air gun is placed in the side holder or the vertical position in the upright tower holder (see page 3), it will automatically go into Cool Down mode. When the hot air gun is initially returned to either of these holders, the air flow may increase noticeably while the hot air gun is cooling down and going into sleep mode. This is a safety feature built into the unit.

## **TEMPERATURE CONVERSION**

1. Ensure the soldering iron and the hot air gun are in their respective holders and that the unit is OFF.
2. Turn ON the power switches for both the hot air gun and soldering iron on the front of the unit.
3. With both of those switches ON, press and hold the right Function setting button (also known as the ▲ Hot Air Temperature Button) while turning ON the unit with the main switch on the back.
4. The top display will say C - C or F - F to indicate that the unit is now in Celsius or Fahrenheit respectively.

## **MUTE / UNMUTE FUNCTION**

The unit beeps when buttons are pushed, knobs are turned and when it goes into sleep mode.

1. Ensure the soldering iron and the hot air gun are in their respective holders and that the unit is OFF.
2. Turn on the power switches for both the hot air gun and soldering iron on the front of the unit.
3. With both of those switches ON, press and hold the left Function setting button (also known as the ▼ Hot Air Temperature Button) while turning ON the unit with the main switch on the back.
4. The bottom display will say "on" or "off" to indicate that the sounds for the unit are unmuted or muted accordingly.

# MAINTENANCE

## SOLDERING TIP PREPARATION & CARE

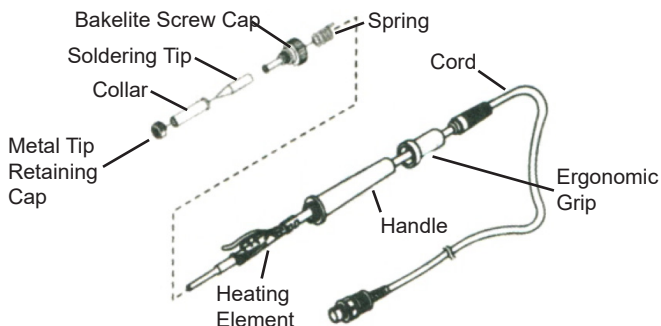
1. Keep the soldering tip properly tinned. Always use solder with sufficient rosin flux or the tip will degrade. A well tinned tip will be bright all over when hot, with no dull or discolored spots.
2. To tin the iron, do the following:
3. Plug in the iron and allow it to reach solder melt temperature.
4. Flood the tip with solder and let it stand for one minute.
5. Apply more solder to the tip, allow it to idle for one or two more minutes, wipe it lightly on the sponge. Do not remove all of the solder, but use the sponge to remove excess solder and wipe solder onto non-tinned areas.
6. Do not file or attempt to reshape the tip. This will destroy the plating and shorten tip life. Do not use chloride and acid fluxes; they will also shorten tip and heater life.
7. For maximum tip life, always apply solder to the heated connections or joints. Repeated application of solder directly to the tip will shorten the tip life.

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

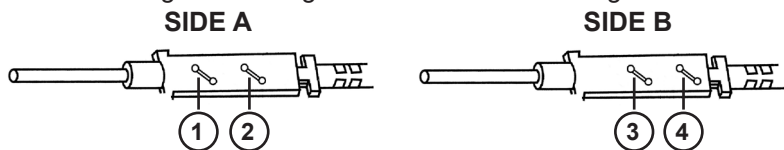
## REPLACING SOLDERING IRON TIP

1. Turn off the soldering station, 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.**
2. Unscrew the larger metal tip retaining screw ring 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.
3. 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 ring to snug the tip into place. Do not over tighten the tip retaining screw
5. Plug the soldering iron AC cord into a grounded outlet to resume soldering.

## 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.
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 Bakelite Retaining 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.

## REPLACING HOT AIR GUN NOZZLE

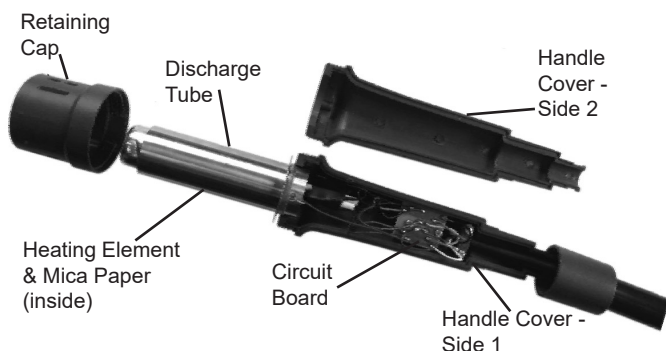
1. Turn the power off to the unit and unplug it from the power source.
2. Allow the hot air gun to reach room temperature before proceeding.
3. The nozzle is held on with a clamp ring, using the Metal Nozzle Extractor on the upright tower holder, place the Metal Nozzle Extractor in the 3mm gap between the nozzle and the hot air gun and then pull to remove the nozzle. The nozzle will fall into the metal area, which will protect the work area if the nozzle is still hot.



**\*\* DO NOT TOUCH THE HOT AIR GUN TO INSTALL A NOZZLE UNTIL IT IS FULLY COOLED DOWN \*\***

4. Place the desired nozzle on the end of the hot air gun, applying a little pressure so it can clamp into place.

## REPLACING THE HOT AIR GUN HEATING ELEMENT



1. Turn off the unit and unplug it from the outlet. Allow the hot air gun to cool down to room temperature.  
***Never attempt to handle the gun while it is hot.***
2. Slide the ergonomic grip up and unscrew the retaining cap, pull the ergonomic grip down off the handle.
3. Unscrew both of the screws at the base of the handle and separate the two handle sides.
4. Pull the heating element out of the Mica Paper and Discharge Tube, being careful not to disconnect grounding wire.

5. Unscrew the two screws holding the circuit board in place.
6. Desolder the four wires to the heating element - Please take note of the location of the 4 wires thickness/color for installation of new heating element.
7. Solder the new heating element into place.
8. Reassemble the hot air gun.

## **TROUBLESHOOTING**

<b>ISSUE</b>	<b>POSSIBLE SOLUTIONS</b>
Unit does not have power	<ul style="list-style-type: none"> <li>• Ensure the power cord is securely plugged into the outlet and that the unit is powered on at both the back of the unit and the front of the unit.</li> <li>• Ensure that the outlet is functional.</li> <li>• Contact X-Tronic International for assistance - Contact information on back of manual</li> </ul>
S-E Error	<ul style="list-style-type: none"> <li>• Ensure the soldering iron and/or the hot air gun is securely plugged into the front of the unit.</li> <li>• The heating element may need to be replaced</li> <li>• Contact X-Tronic International for assistance - Contact information on back of manual</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> <li>• Contact X-Tronic International for assistance - Contact information on back of manual</li> </ul>

*Note: Although tip temperature is not the key element in soldering you should always start at the lowest temperature possible. A good rule of thumb is to set the soldering iron tip temperature at 260°C (500°F) and increase the temperature as needed to obtain the desired result.*

# **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**