

# X-TRONIC USA

**Soldering Technology  
Professionals Can Trust**



## 6020-PRO-X

### Instructions



# SPECIFICATIONS

Model	XTR-6020-PRO-X
Power Consumption	750 Watts
Voltage	AC 110V 60Hz
Power Cord Type	USA Type B - 3-Pin Grounded Plug
Current	≤ 8 Amps
Fuse	10 Amp
Dimensions	7.0" L x 6.75" W x 6.25" 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%
Airflow Type	Brushless DC Fan
Airflow Velocity	1.5 M/S
Air Volume	31 L/Min
Programmable Air Flow	20-100
Temperature Range	212°F ~ 932°F / 100°C ~ 500°C
Temperature Stability	± 1°C
Cable Length	≥ 33.2 in
Cable Material	Silicone
Noise	≤ 67dB

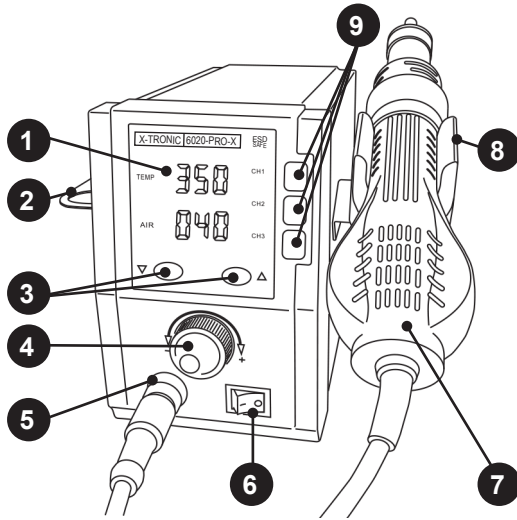
# **PACKAGE CONTENTS**

- 750 Watt Main Power Unit
- Brushless Vortex Fan Hot Air Gun
- Hot Air Gun Holder (attached to side of main unit)
- Patented Hot Air Nozzle Holder (attached to side of 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 hot air gun near any flammable substance, material, or gas.
4. Never touch the metallic components of the 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 (nozzles, heating element, fan, etc.)
6. Do not use the unit for any application other than its intended use.
7. Do not modify the unit in any way.
8. When replacing consumable parts, only use approved manufacturer parts.
9. Do not get the unit wet or use when your hands are wet.
10. The soldering process will produce smoke - ensure the area is well ventilated.

# PANEL DIAGRAM



1. Temperature Display
2. Patented Quick Change Nozzle Rack
3. Temperature Adjustment Buttons
4. Air Flow Control Knob
5. Hot Air Gun Cord Receptical
6. Hot Air Gun Power Switch
7. Hot Air Gun
8. Hot Air Gun Holder
9. 3 Memory Preset Channels

## INITIAL SET-UP

1. Plug the Hot Air Gun into the front cord receptacle on the lower left side of the unit and tighten the ring nut.
2. Place the hot air gun into the holder on the right side of the unit.
3. Plug the 3-Prong AC cord into a 110/120V grounded outlet to prevent electric shock or injury.
4. Turn on the power switch for the hot air gun in the lower right on the front 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 "---".
5. The top display will show "---" when the hot air gun is in its holder and in standby mode.
6. Push the Hot Air Temperature Adjustment Buttons (▲ or ▼ ) in the middle of the unit to set the temperature.
7. 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.***

8. 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.
9. When the hot air gun is not in use always place it back in the holder. When the hot air gun is placed in the holder, it will start going into the Auto Cool Down and 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 standby mode.

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

10. When the hot air gun is removed again from the holder it will start blowing air and ramp up to the programmed temperature and air speed again quickly.
11. To turn the hot air gun completely off, turn off the power switch on the lower right hand side of the unit.

**Note:** *Do not unplug the unit or shut off the Power Switch until you have placed the hot air gun in the holder and it has cooled down and the air has stopped blowing automatically.*

When the unit is not in operation, turn the entire unit off with the power switch on the front of the unit and unplug from the outlet.

### **NOZZLES INCLUDED**

- 3 Straight Air Nozzles - used for components that needs to be quickly disassembled
  - 5mm
  - 7mm
  - 10mm
- 2 Spiral / Cyclone Air Nozzles - used to disassemble fragile equipment
  - 8mm
  - 10mm

## QUICK CHANGE NOZZLE RACK

With the patented Quick Change Nozzle Rack that is included, changing out hot air nozzles is quick and efficient.

### To Install a Nozzle

1. Center the hot air gun over the chosen nozzle in the Quick Change Nozzle Rack. See Figure 1 below.
2. Firmly press the hot air gun down on the nozzle until it snaps into position. There will be approximately a 3mm gap when it is secured on the tip of the hot air gun. See Figure 2 below.
3. The nozzle is then secured on the hot air gun and ready to use. See Figure 3 below.

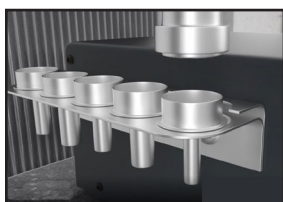


Figure 1

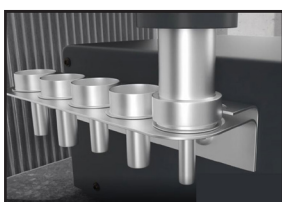


Figure 2



Figure 3

### To Remove a Nozzle

1. Choose an open nozzle space on the Quick Change Nozzle Rack. See Figure 4 below.
2. Placing the nozzle tip into the opening, tilt the nozzle so that the 3mm of space between the gun and the nozzle are against the fingers of the rack, then use the rack to pull the nozzle free from the hot air gun. See Figure 5 below.

***WARNING: Do NOT touch the hot nozzle!***

3. Pull the hot air gun away from the nozzle while the Quick Change Rack holds the nozzle in place. See Figure 6 below.

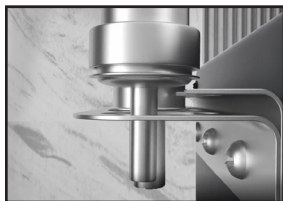


Figure 4



Figure 5



Figure 6



# FEATURES

## AUTO COOL DOWN AND STANDBY MODE

When the hot air gun is placed in the holder, the hot air gun will go into Auto Cool Down and Standby mode immediately. The display will show the temperature as it cools down. Once it has cooled down, the display will show "---" for both temperature and air flow indicating it is now safe to shut the unit off.

**Note:** *The unit will NOT go into standby mode unless the hot air gun is in the holder.*

## TEMPERATURE CONVERSION

1. Press and hold both ▲ and ▼ buttons.
2. 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 standby mode.

1. Ensure the hot air gun is in the holder.
2. Press and hold both the CH1 and CH2 buttons.
3. The bottom display will say "on" or "off" to indicate that the sounds for the unit are unmuted or muted accordingly.

## SETTING MEMORY PRESETS

1. When the temperature and air flow are set, press and hold any one of the three memory preset buttons for approximately 5 seconds.
2. These settings are now programmed into that memory preset.
3. To quickly change to any of the presets, just briefly touch the preset while the hot air gun is in use and it will start to change to the appropriate settings.
4. To re-program one of the presets, set the temperature and air flow parameters to the new settings and then press and hold the preset to be programmed for approximately 5 seconds.

## **CALIBRATION FUNCTION**

### **When is it time to Calibrate your Hot Air Station?**

All X-Tronic Stations come with a high quality heating element in the hot air gun that is calibrated to within  $\pm 3.6^{\circ}\text{F}/2.0^{\circ}\text{C}$  of the temperature that is shown on the LED Display. While calibrating to the exact temperature is the ultimate goal, this heating element and nozzle 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 hot air gun 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 blowing air from the heating element will begin to drop. If the typical temperature used to desolder is not working as well as when it was new, then it might be time to calibrate the unit.

*Note: The heating elements a consumable part for hot air rework 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).*

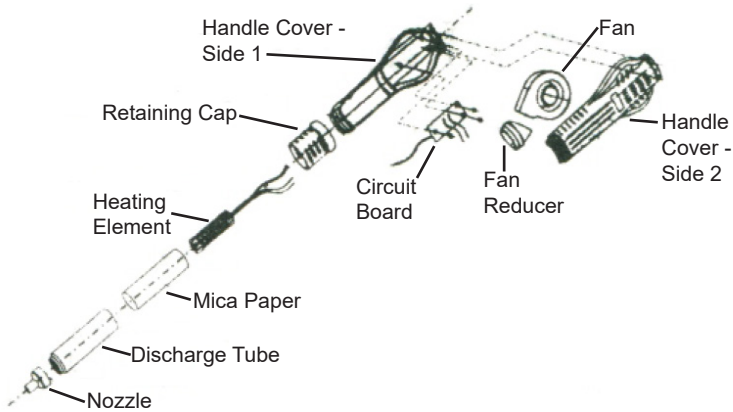
## CALIBRATION INSTRUCTIONS

Remove any nozzle from the hot air gun before measuring the temperature or calibrating the unit. Once the desired temperature has been set and the temperature of the unit stabilizes, measure the heat at the hot air using **a high quality and well calibrated hot air tester or an infrared thermometer**. If using the infrared thermometer, aim it approximately three inches away from the end of the hot air gun. If the temperature shown on the unit's display does not reflect the temperature shown on the tester, the unit can be calibrated.

1. While the hot air gun is NOT in the holder, press and hold the CH1 & CH3 buttons for approximately 3 seconds.
2. The temperature display will flash and the bottom display will show the offset degrees - the first time this is done it will display 00.
3. Press the ▲ or ▼ buttons to change the temperature offset. The top display will show the new temperature and the bottom display will show how many degrees the calibration has been offset.
4. When the proper temperature offset has been achieved, press the CH2 button to save the setting.
5. When going back in to the calibration mode, the memory will show how many degrees the unit has been offset with the past setting. Setting it to 00 will reset it to factory settings.

# MAINTENANCE

## 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 the 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.

## REPLACING THE FUSE

1. Unplug the power cord from the outlet.
2. Remove the fuse compartment by using a Phillips head screwdriver to unscrew the fuse holder (found right above the power receptical on the back of the unit).
3. The fuse that is in use will be in the fuse clip. If the fuse is damaged, replace it with the new fuse.
4. Insert the fuse compartment back into the unit and tighten with the Phillips screwdriver.

## TROUBLESHOOTING

ISSUE	POSSIBLE SOLUTIONS
Unit does not have power	<ul style="list-style-type: none"><li>• Ensure the power cord is securely plugged into the outlet.</li><li>• Ensure that the outlet is functional.</li><li>• Contact X-Tronic International for assistance - Contact information on back of manual</li></ul>
Soldering Iron "Rattles"	<ul style="list-style-type: none"><li>• This is expected behavior. The "rattle" is a small ball that allows the unit to determine when the soldering iron is not in use and it should go into Sleep Mode.</li></ul>
S-E Error	<ul style="list-style-type: none"><li>• Ensure 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>

*Note: When using a temperature higher than 300°C/572°F 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.*

# **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)

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