

X-TRONIC USA



X-Tronic Model #4040-XTS Instructions

Table of Contents

Introduction

Package Contents	5
Product Features	5
Product Specifications	6

Getting Started

Product Set Up	7
User Interface	8
Operating Guidelines.....	9
Safety Precautions	10

Maintenance

Soldering Tip Care	10
Install/Remove Soldering tip	11
Install/Remove Hot Air Attachment	11
Troubleshooting Guide	12
Replacing Heating Elements	13
Warranty and Contact Info.....	14-15

Thank you for purchasing the X-Tronic #4040-XTS SMT/SMD Rework/Soldering station. This 2-in-1 station is designed to meet all of your soldering and reworking needs including BGA re-balling and reflow. Please take a moment to read through this manual in its entirety before attempting to use your new station. Please store this manual in a safe, dry place for future reference.

X-Tronic International, Inc.
2159 Magnum Circle
Lincoln, Nebraska 68522
Toll Free Phone: (844) 861-4762
Email: Info@X-TronicUSA.com
www.XTronicUSA.com

INTRODUCTION

Package Contents

- 1 – X-Tronic #4040-XTS Hot Air Rework Station
- 1 – X-Tronic Soldering Iron
- 1 – Soldering Iron Stand (w/Sponge)
- 1 – Hot Air Gun
- 1 – IC Popper
- 1 – Stainless Steel Tweezers
- 1 – 5X Magnifying Lamp
- 1 – De-soldering Braid (GOOT Wick)
- 1 – Replacement Heating Element (Soldering Iron)
- 1 – Replacement Heating Element (Hot Air Gun)
- 4 – Hot Air Nozzles (Assorted Sizes)
- 10 – Soldering Tips (Assorted sizes and shapes)

Product Features

- ESD Safe
- Samsung Microcomputer Controlled
- Independent Temperature Adjustment
- Intelligent Detection and cool airflow Features
- Silicone Cords (No Memory)
- High Quality Steel Construction
- High Reliability
- High Temperature Stability ($\pm 2^{\circ}\text{C}$)
- Switch temp display between $^{\circ}\text{C}$ and $^{\circ}\text{F}$
- Ceramic heating element
- Low noise diaphragm pump

Soldering Iron

Product Specifications

MODEL	4040
Power Consumption	700 Watts
Dimensions	4.9 x 7.4 x 9.8 in / 12.4 x 17.4 x 24.9 cm
Weight	9.9 lbs. / 4.5 Kg
Working Environment	0°F - 122°F / 0°C - 50°C
Storing Environment	-68°F - 176°F / -20°C - 80°C
Input Voltage	AC 110/120V - 60Hz

HOT AIR REWORK	
Airflow Type	Diaphragm Pump (Spiral Wind)
Airflow	≤ 24 L/min
Temperature Range	212° - 896°F / 100°C - 480°C
Temperature Stability	± 1°C
Display Type	LED
Cable Length	≤ 35.4 in / 90 cm
Cable Material	Silicone

SOLDERING IRON	
Temperature Range	392°F - 896°F / 200°C - 480°C
Temperature Stability	± 2°C
Grounded Tip Voltage	< 2mV
Tip Impedance	< 2 Ω
Display Type	LED
Cable Length	≥ 39.4 in / 100 cm
Cable Material	Silicone



WARNING



You must remove the 2 red screws on the bottom of the machine mentioned in Step 2 before using the unit. Failure to follow this precaution could result in undesired results and harm your unit!

PRODUCT SET UP

1. Unpack all of the contents of the X-TRONIC # 4040-XTS Kit.
2. Remove the 2 Red screws from the bottom of the main unit.
NOTE: Failure to complete this step could result in permanent damage to the unit!
3. Plug the soldering iron into the correct connector and secure it using the attached nut.
4. Attach the hot air gun holder to the side of the main unit using the 2 included screws.
5. Place the hot air gun into the holder before applying power to the unit.
6. Ensure all connections are secure and the fuse in the rear of the unit is in good working order before applying power.
7. Plug in the power cord to a GROUNDED AC wall outlet.
8. Select the proper unit of temperature measurement to be displayed ($^{\circ}\text{C}$ – $^{\circ}\text{F}$) using the slider switch located between the temperature displays on front panel.
9. Turn the unit on.
 - a. Soldering Iron
 - i. Turn on the soldering iron power switch located on the front of the machine.
 - ii. Adjust the temperature to the desired value using the Sol-Temp Set knob located at the bottom center of the front panel.
NOTE: See maintenance section for proper setup, use and cleaning of the solder iron tip.
 - b. Hot Air Gun
 - i. Attach the desired nozzle to the hot air gun.
 - ii. Turn on the hot air power switch located on the front of the machine.

- iii. Adjust the temperature to the desired value using the Air Temp Control knob located in the upper right hand corner of the front panel.
- iv. Adjust the air flow to the desired amount using the Air Set knob located in the center right of the front panel, directly beneath the Air Temp set knob.

NOTE: Please be sure to use an air setting of above 4 when using hot air temperatures of over 300°C. Failure to do so could result in overheating of the hot air heating element and cause premature failure.

USER INTERFACE

1. 4040 Unit
2. Hot Air Gun Connection
3. Soldering Iron Connection
4. Power Switch
 - a. Soldering Iron
 - b. Hot Air Gun
5. Temperature Display
 - a. Soldering Iron
 - b. Hot Air Gun
6. Temperature Control Knob
 - a. Soldering Iron
 - b. Hot Air Gun
7. Air Flow Adjustment Knob
8. Hot Air Heating indicator LED

OPERATING GUIDELINES

1. Before turning on the unit, ensure that the hot air gun is in the holster and the soldering iron is connected properly.
2. Ensure there are no obstructions or blockages in the hot air gun and/or attachments.
3. After using the hot air gun, place it back into the holster and allow the unit to initiate the cool down procedure until the display reads "---", then turn off the power.
4. When using the small nozzle attachment for the hot air gun, set the airflow to the maximum value to keep the hot air heating

element from overheating and breaking down.

5. When using the soldering iron for the first time, be sure to allow the iron to come to proper temp and then clean and tin the tip to provide longer life expectancy.
6. When “---“ is displayed on the LED display, this means that the outlet temperature of the hot air gun is below 100°C, the handle has been properly replaced into the holster, and that the unit is in standby mode.
7. Do not use excessive force when installing/removing the hot air nozzles or soldering iron tips.
8. Do not over-tighten the bolt on the hot air attachments.
9. Store the spare heating elements in a cool, dry, safe place to avoid damage for future use. The ceramic heating elements are extremely fragile.
10. Upon first use, the tube on the soldering iron may discolor a bit due to the combination of the material composition and high heat. This is perfectly normal.
11. Upon first use, white smoke may be visible from the hot air gun and will go away shortly after heating. If the unit keeps smoking, refer to the troubleshooting section or contact the manufacturer.

SAFETY PRECAUTIONS

1. Never use the soldering iron or the hot air gun near any flammable substance, material, or gas.
2. Never touch the metallic components of the soldering iron or hot air gun while in use. The items may be extremely hot and will cause serious burns instantly. Allow the unit to properly cool to room temperature before attempting to touch them.
3. Never point the hot air gun towards any flammable material or human skin. There is very hot air exiting the outlet that may cause serious burns or damage.
4. Do not use pliers or any other tool to manipulate the hot air nozzles.
5. Do not try to reform the nozzle attachments into other shapes.

MAINTENANCE

Unit

1. Keep the unit plugged into a GROUNDED outlet at all times during operation.
2. Keep the unit and all components free from dirt, debris, and liquid at all times.
3. Make sure the power cord is plugged in correctly and is kept safely off the floor to prevent accidents.
4. All cords should be kept in immediate workspace. Avoid letting them hang off the side of a table or bench top.
5. As needed, wipe the unit down with dry static free cloth.

Soldering Tip Care

1. On the first use, allow the tip to come up to a stable temperature, clean the tip on a damp sponge and tin the tip (apply a small amount of fresh solder to the tip).
2. Never hit the soldering iron or tip on anything to remove excess solder.
3. Do not use an extreme temperature with soldering iron tips. Doing so will shorten the life span of the tip.
4. Clean the tip before each use.
5. Always clean and re-tin the tip after each use. This will aid in the prevention of oxidation on the tip and help extend its life span.
6. Do not allow the soldering iron or tips to sit idle at high temperatures for extended amounts of time.
7. Never use a file or other abrasive materials to remove oxidation from the tips.
8. To remove oxidation, simply flood the tip with fresh solder and wipe clean on a damp sponge, this may need to be repeated several times for badly oxidized parts.
9. To remove the yellowing on the tip shaft, clean with 90% Isopropyl alcohol.

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 reach room temperature.
3. Loosen the nut at the 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 reverse order for installation.

Install/Remove Hot Air Attachment

1. Turn the power off to the unit and unplug from the power source.
2. Allow the hot air gun and attachment to reach room temperature before proceeding.
3. Loosen the screw and the nut from the attachment by holding the nut with a pair of pliers and turn the screw counterclockwise.
4. Slide the attachment off the metallic shaft of the hot air gun.
5. Repeat in reverse order for installation.

NOTE: Do not use excessive force when installing or removing the hot air attachments.

NOTE: Do not over-tighten the nut on the soldering iron or the screw and nut on the hot air gun.

SE ERROR MESSAGE

When the display shows “SE” this means that the heating element needs to be replaced. The heating element could be worn out or cracked.

Note that if you run the soldering iron in the 230°C ~ 280°C range, which is the normal temperature range for most “all” soldering applications, your heating element should last for 6 to 12 months depending on hours of use.

Troubleshooting Guide

Problem	Solutions
Nothing appears to happen when turning the unit on	<ul style="list-style-type: none">• Check to ensure that the unit is plugged in• Make sure that the plug used is grounded• Check for a blown fuse on the main power input, replace it if needed• Make sure the breaker is not tripped• Contact the manufacturer
Soldering iron not heating	<ul style="list-style-type: none">• Ensure the unit is plugged into a grounded outlet• Ensure that the proper power switch is on• Ensure the soldering iron is securely attached to unit• Replace the heating unit• Contact the manufacturer
Hot air gun not getting hot	<ul style="list-style-type: none">• Ensure the unit is plugged into a grounded outlet• Ensure the correct power switch is turned on• Replace the heating element• Contact the manufacturer
No/Insufficient airflow	<ul style="list-style-type: none">• Ensure the red screws on the bottom of unit have been removed• Adjust the air flow knob to a higher setting• Contact the manufacturer
Noisy Unit or Excessive vibration coming from unit	<ul style="list-style-type: none">• Ensure screws from the bottom of the unit have been removed• Ensure the unit is on a flat level surface• Contact the manufacturer

REPLACING HEATING ELEMENTS

Soldering Iron

1. Turn off the unit and unplug from the power source.
2. Allow the unit to reach room temperature before proceeding.
3. Disconnect the soldering iron from the unit.
4. Loosen the nut on the metallic shaft.
5. Slide the metallic shaft off of the soldering iron.
6. Remove the soldering iron tip and inner shaft.
7. Unscrew the plastic nut from the top of the soldering iron.
8. Push the cord through the bottom of the iron while pulling the heating element out of the top of the iron.
9. Unsolder the existing heating element, taking note of the wire color and location.
10. Remove the heating element.

11. Replace the heating element.
12. Solder the new element leads in the correct location.
13. Pull the cord out of the bottom of the soldering iron while pushing the new element into the top, aligned with the notches.
14. Replace the plastic nut on the top of the iron and tighten.
15. Replace the small inner metallic shaft.
16. Replace the tip over the heating element.
17. Replace the outer metallic shaft of the soldering iron.
18. Replace the metallic nut and tighten.

Hot Air Gun

1. Turn off the unit and unplug from the power source.
2. Allow the unit to reach room temperature before proceeding.
3. Remove any attachments that are on the hot air gun.
4. Remove the 3 screws on the hot air gun.
5. Slide the silicone tubing off of the hot air gun.
6. Pull the two halves of the hot air gun apart (they are glued together).
7. Slide the metallic shaft off of the heating element.
8. Remove the fiberglass paper from the heating element.
9. De-solder the broken heating element paying special attention to the wire color and placement.
10. Solder the new heating element leads in their correct places.
11. Wrap the heating element in the fiberglass paper.
12. Slide the metallic shaft over the heating element and place it back into the hot air gun, lining up the holes with the standoff present in the gun.
13. Put the two sides of the hot air gun back together, lined up with the holes on the metallic shaft.
14. Reinsert the 3 screws and tighten them.
15. Reattach the silicone hose.

X-TRONIC INTERNATIONAL, INC.

3-YEAR WARRANTY

All X-Tronic Products come with 3-Year Guarantee, valid only in the 48 Contiguous United States. If you purchase this product and ship it to a destination outside of the 48 Contiguous United States this warranty becomes null and void. This Guarantee covers the main unit itself. Consumable parts such as soldering tips, heating elements, nozzles, etc. are not covered by this warranty.

The first 30 Days are covered by a Money Back or Replacement Guarantee from the date of the receipt of the product. If your product becomes damaged in shipment or is found to be defective in any way during this period, we will replace or issue a complete refund for your product upon return. We will pay all shipping involved during this first 30-day period.

The remainder of the 3 Years (after the first 30 days) is covered by a FREE REPAIR Guarantee (parts and labor included). If anything becomes defective during this period we will fix the issue and provide a full service inspection to your product, shipping (to & from) will be paid by the buyer. Please email us at Info@XTronicUSA.com to set up a service request.

Returns of New/Unused Products

If you have Buyer's Remorse and decide that you do not want the product, it must be returned NEW & UNUSED in the original box and you will pay the return shipping. PLEASE NOTE: There will be a 10% Restocking Fee and original Shipping Costs (if applicable) will not be refunded. **Used product cannot be returned.**

How To Register Your Warranty

Go to www.XTronicUSA.com. Click on "Register Your Warranty" tab and fill out the form. This is a fully secure website. Your information will never be sold or misused in any way. This registration site is strictly for order verification that will be used to speed up the process should you ever need to use your Warranty for service.

X-Tronic International, Inc.
2159 Magnum Circle, Lincoln, NE 68522
844-861-4762
Info@XTronicUSA.com • www.XTronicUSA.com

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 with 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

