X-TRONIC USA

X-Tronic® Model #9020-XTS Instructions

Package Contents

1 – X-Tronic® #9020-XTS Multifunction Unit

1 – X-Tronic® Soldering Iron & Extractor-Vacuum Tool Combo

1 - Soldering Iron Stand, Sponge, & Solder Holder

1 – X-Tronic® Hot Air Gun

1 – IC Popper

1 – Stainless Steel, Anti Magnetic/Static Tweezers

5 – Hot Air Nozzles (Assorted Sizes & Shapes)

10 – Soldering Iron Tips (Assorted Sizes and styles)

1 - Soldering Iron Heating Element

1 - Hot Air Gun Heating Element

Product Features

- ESD Safe
- Genuine Samsung Microcontroller
- PID Technology
- Upgraded LCD Display
- Digitally Controlled
- Independent Temperature Adjustment and Compensation
- Intelligent Detection and Cool Airflow Features
- No Memory Silicone Cords
- Highest Quality and Reliability
- High Temperature Stability
- °C / °F Conversion
- Powerful High Output Brushless Fan (Hot Air Gun)
- Magic Temperature Compensation
- Small Footprint

Product Specifications

Model	#9020-XTS
Power Consumption	720 Watts
Dimensions	123 x 187 x 249 MM
Weight	4.7 kg
Working Environment	32°F ~ 122°F / 0°C ~ 50°C
Storing Environment	-68°F ~ 176°F / -20°C ~ 80°C
Hot Air Rework	
Airflow Type	Diaphragm pump (Spiral Wind)
Airflow	≤ 28 L/min
Temperature Range	212°F ~ 896°F / 100°C ~ 480°C
Temperature Stability	± 1°C
Display Type	Digital LCD
Cable Length (Material)	≥ 90 cm (Silicone)
Soldering Iron	
Temperature Range	392°F ~ 896°F / 200°C ~ 480°C
Temperature Stability	± 1°C
Grounded Tip Voltage	< 2 mV
Tip Impedance	< 2Ω
Display Type	Digital LCD
Cable Length (Material)	≥ 100 cm (Silicone)

Primary Functions

Hot Air Gun - Automatic Mode

The automatic functionality of the hot air gun is a unique safety feature. When the hot air gun power switch is placed in the ON position, the unit will not begin operation unless the unit detects that the hot air gun is placed properly in its cradle when the automatic mode is on. Once the unit has detected the hot air gun is cradled properly, it will resume standard functionality when removed from the cradle, quickly reaching the desired temperature. When the hot air gun is returned to the cradle, the unit will automatically reduce the temperature to 100°C, then place the gun in stand-by. If the hot air function is turned off while the temperature is above 100°C, the gun will continue to operate until it has cooled below the 100°C threshold, then it will turn off. Safety is important to X-Tronic® and this feature effectively reduces the risk of inadvertently activating the hot air gun from any other location than the cradle, reducing the risk of fire and/or accident. Additionally, this feature helps to prolong the operation life and stability of the heating element.

Hot Air Gun - Manual Mode

The manual functionality of the hot air gun disables the automatic standby mode that is enabled when the gun placed in its cradle. This feature is suitable for where the constant operation of the hot air gun is required. It is recommended to place the hot air gun back into automatic mode upon completion of the work that required manual mode so the safety features provided by the automatic mode are utilized.

Temperature Calibration / Correction Feature

Due to environmental conditions, worn equipment components, or other outside factors, it is possible that as conditions change, the delivered temperature may not match the temperature indicated by the internal temperature sensors. The X-Tronic® 9020-XTS provides functionality to compensate for this deviation with the ability to adjust the temperature independently for both the soldering iron and the hot air gun by ± 50° C.

Celsius / Fahrenheit Temperature Display

In order to meet the needs of different markets and users, the X-Tronic® 9020-XTS provides the ability for the operator to select the displayed temperature format, °F or °C.

Soldering Iron Automatic Sleep Function

The unit has the ability to detect when the soldering iron has been placed in the provided cradle. When the user-designated sleep duration has elapsed with the iron in the cradle, the X-Tronic® 9020-XTS will place the iron in sleep mode, reducing the temperature to 200°C. This feature can effectively reduce the oxidation of the iron tips and prolong the service life of the heating element. The unit provides for the user to designate a sleep timeout from 0 to 99 minutes. Setting the sleep timeout to 0 will disable the sleep functionality.

Fume Extractor

The X-Tronic® 9020-XTS incorporates a built-in, iron-mounted fume extraction system to provide for a cleaner and healthier work environment. This system helps reduce the fumes generated through soldering that can be an irritant to the operator. The smoke and fumes are removed at the source through a vacuum tube. The fumes are drawn through a filter to remove particulates and contaminants prior to the air entering the air pump and exiting through the hot air gun. The suction of the fume extractor is user adjustable in the same accordance as the hot air gun.

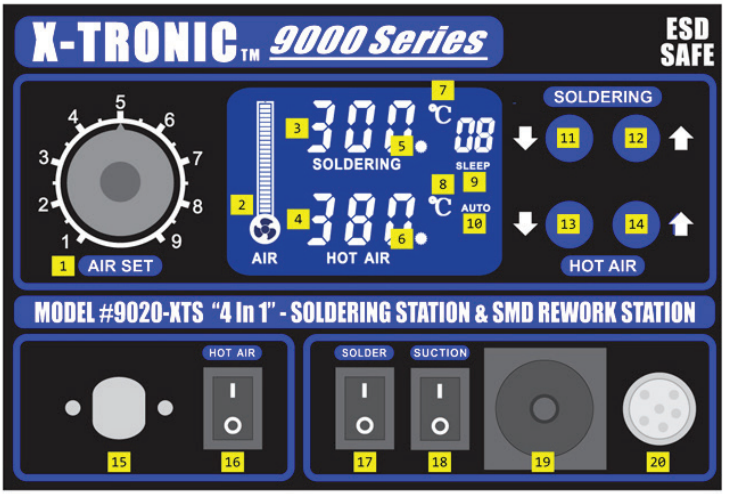
Note: Either the fume extractor or the vacuum pick-up tool may be operated at any given time, but they may not be operated concurrently as they utilize the same vacuum port.

Vacuum Pick-Up / Suction Pen

The X-Tronic® 9020-XTS also includes a vacuum pick-up tool / suction pen. This pen includes a variety of suction pads for aiding in the removal of IC packages during de-soldering.

Note: Either the fume extractor or the vacuum pick-up tool may be operated at any given time, but they may not be operated concurrently as they utilize the same vacuum port.

Unit Interface



1. Airflow adjustment knob
2. Airflow speed gauge
3. Soldering iron temperature display
4. Hot air gun temperature display
5. Soldering iron heating indicator
6. Hot air gun heating indicator
7. Soldering iron °F or °C indicator
8. Hot air gun °F or °C indicator
9. Soldering iron sleep time indicator
10. Hot air gun mode indicator
11. Decrease iron temperature
12. Increase iron temperature
13. Decrease hot air temperature
14. Increase hot air temperature
15. Hot air gun hardwired outlet
16. Hot air gun operation switch
17. Soldering iron operation switch
18. Fume extractor operation switch
19. Dual-use suction port
20. Soldering iron connector port

Function and Mode Configuration

Hot Air Gun - Selecting Automatic or Manual Mode

1. Press and hold both buttons labeled C and D in figure 1 for four seconds.
   a. Press C for Manual Mode
   b. Press D for Automatic Mode.

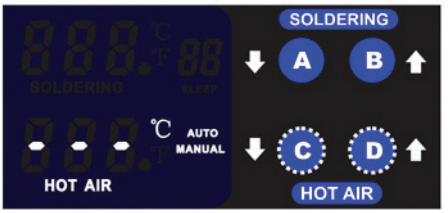


Figure 1

Temperature Mode

1. Press and hold both buttons labeled B and D in figure 2 for four seconds.
   a. Press B for Celsius
   b. Press D for Fahrenheit.

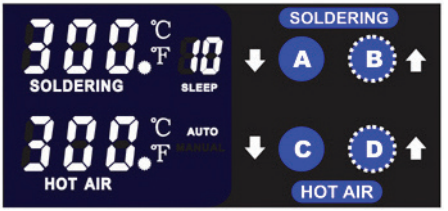


Figure 2

Soldering Iron Sleep Function

1. Press and hold both buttons labeled A and D in figure 3 for four seconds.
   a. Press A to reduce the sleep timer duration (0 to disable).
   b. Press B to increase the sleep timer duration.

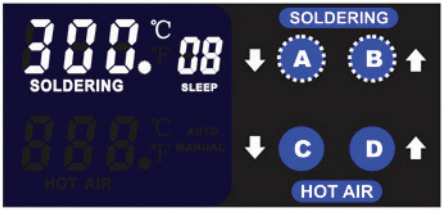


Figure 3

Independent Temperature Calibration

1. Press and hold both buttons labeled A and C in figure 4 for four seconds.
   a. Press A to reduce the soldering iron temperature.
   b. Press B to increase the soldering iron temperature.
   c. Press C to reduce the hot air gun temperature.
   d. Press D to increase the hot air gun temperature.

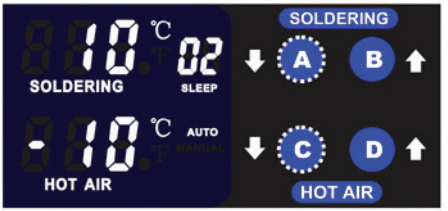


Figure 4

Operating Guidelines

Hot Air Rework

IMPORTANT! Prior to using the Hot Air Gun REMOVE the 1 Silver Pump Securing Screw which is located on the bottom of the unit. This screw is inplace to ensure the unit is not damaged during shipping. Failure to remove this screw prior to operation WILL cause permanent damage to the air pump.

1. Install the included cradle for the hot air gun by attaching it to the left side of the unit with the two screws included. Place the hot air gun into the cradle. The hot air gun is factory set to be in automatic mode and the use of the cradle is required for proper operation.
2. If not already installed, insert the supplied power cable into the back of the base unit and plug into a grounded 110V AC outlet.
3. Switch the main power switch on the rear of the base to the ON position.
4. Install the desired hot air tip to the hot air gun by inserting the nozzle of the hot air gun into the hot air tip. The set screw on the side of the hot air tip can be used to secure the tip to the nozzle. Be careful to NOT over-tighten.
5. Switch the hot air power switch up to the ON position. The hot air region of the LCD display will temporarily show the current temperature setting in the format chosen by the user (Celsius by default). This will then be replaced with three dashes (---), indicating that the hot air gun is in standby mode.
6. Adjust the hot air output to the desired temperature by pressing the UP or DOWN button to alter the output temperature in 1 degree increments with UP increasing and DOWN decreasing the temperature. A confirmation beep will be heard each time a button is pressed. To rapidly change the temperature, press and hold the UP or DOWN until the desired temperature is reached. **The hot air gun is now ready for operation.**
7. To utilize the hot air gun, lift the hot air gun by the handle from the cradle. The air flow will start and the heating indicator light will show solid briefly while the unit reaches the desired temperature. Once the desired temperature has been reached, the heating indicator will begin to flash at a high rate of speed. This is normal operation, as the PID monitors the temperature of the hot air gun very 20 ms, performing a high-speed tracking of the output temperature and maintaining the desired constant temperature with great accuracy. The air volume can be adjusted with the AIR SET knob on the front of the unit. Clockwise will increase air volume and counter-clockwise will reduce air volume.

8. When the work is complete, the hot air gun should be placed properly into its cradle. This will immediately cause the hot air system to prepare for standby. The heating element will be disengaged and cool air will continue to flow across the heating element to cool it down to 100°C, at which point (assuming the fume extractor is not running) the air pump will stop and the hot air gun will successfully be in standby. The hot air temperature display will return to showing three dashes (---), indicating this state. If the hot air switch is set to OFF prior to successfully reducing the temperature to 100°C, the cooling operation will continue and the unit will stop upon completion.

Soldering Iron and Fume Extractor

IMPORTANT! Prior to using the Fume Extractor REMOVE the 1 Silver Pump Securing Screw which is located on the bottom of the unit. This screw is in place to ensure the unit is not damaged during shipping. Failure to remove this screw prior to operation WILL cause permanent damage to the air pump.

1. Assemble the included soldering iron cradle, sponge tray and spool holder with the included screws. One screw for the sponge tray and two screws for the spool holder. The spool holder can be assembled on either the right or left side, according to preference. The soldering iron cradle is required for proper operation of the soldering iron sleep function.
2. If not already installed, insert the supplied power cable into the back of the base unit and plug into a grounded 110V AC outlet.
3. Switch the main power switch on the rear of the base to the ON position.
4. Switch the Solder power switch up to the ON position. The Soldering region of the LCD display will temporarily show the current temperature in the format chosen by the user (Celsius by default). The temperature reading will climb rapidly with the heating indicator light constantly lit during the heat up process (around 15 seconds). Once the desired temperature has been reached, the heating indicator will begin to flash at a high rate of speed. This is normal operation, as the PID monitors the temperature of the soldering iron every 20 ms, performing a high-speed tracking of the output temperature and maintaining the desired constant temperature with great accuracy.

5. Adjust the soldering iron to the desired temperature by pressing the UP or DOWN button to alter the output temperature in 1 degree increments with UP increasing and DOWN decreasing the temperature. A confirmation beep will be heard with each press. To rapidly change the temperature, press and hold the UP or DOWN button until the desired temperature is reached.
6. To utilize the fume extractor ensure the vacuum hose for the fume extractor is atached to the suction port, then place the Suction button up into the ON position. The air pump should start to function and the fume extracor should be operational. The air volume an be adjusted with the Air Set knob on the front of the unit. Clockwise will increase the air volume, counter-colockwise will reduce air volume.
7. When the work is complete, clean and tin the soldering tip and place the iron in the cradle. While in the cradle, the sleep function will begin to count down. When the set duraction has elapsed, the unit will enter sleep mode, the iron temperature will be dropped to 200°C, and the display will flash between 200°C and SLP. When the iron is removed frm the cradle, it will immediately start to heat back up to the desired operating temperature.

Vacuum Pick-Up Tool / Suction Pen

IMPORTANT! Prior to using the Vacuum Tool REMOVE the 1 Silver Pump Securing Screw which is located on the bottom of the unit. This screw is in place to ensure the unit is not damaged during shipping. Failure to remove this screw prior to operation WILL cause permanent damage to the air pump.

1. Attach the vacuum tube from the suction pen to the suction port that may also be utilized by the fume extractor.
2. Attach either the curved or straight metal pick-up nozzle to the tip of the suction pen.
3. Attach the desired size suction pad to the end of the pick-up nozzel.
4. Adjust the airflow to the required force with the Air Set knob.
5. For picking up an IC (or other target item), cover the side vent hole on the suction pen with your finger. To release the IC, remove your finger from the side vent hole.
6. It is suggested to only use the pick-up tool after the IC is ready for removal and to move quickly. While the suction tool is blocked with the target IC, no air will be flowing through the hot air gun. Release the IC as soon as possible to resume air flow and to prevent overheating of the hot air gun.

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 the hot air gun while they are 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 hot air nozzles.
5. Do not try to reform 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 safely off the floor to prevent accidents.
4. Keep all cords in the immediate workspace and avoid letting them hang off the side of a table or bench top.
5. Wipe the unit down, when needed, with a dry, static-free cloth.

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. Never hit the soldering iron or tip on anything to remove excess solder.
3. Do not use extreme temperature with the soldering iron tips, doing so will shorten the life span of the tip.
4. Clean the tip before each use, using the copper cleaning brush for better temperature stability during cleaning.
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 the life span.
6. Do not allow the soldering iron or the tips to sit idle at high temperatures for extended periods 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 it clean on the damp sponge or copper cleaning pad. This may need to be repeated several times for badly oxidized parts.
9. To remove the yellowing on the tip shaft, which is perfectly normal especially after first use, 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 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 overtighten the nut on the soldering iron.*

Install/Remove Hot Air Attachment

1. Turn the power off to the unit and unplug it from the power source.
2. Allow the hot air gun and attachment to reach room temperature before proceeding.
3. Do not use excessive force when installing/removing hot air attachments. Loosen the screw and nut from the attachment by holding the nut with a pair of pliers and turning the screw counterclockwise.
4. Slide the attachment off of the metallic shaft of the hot air gun.
5. Repeat in the reverse order for installation. *Do not overtighten the screen and nut on the hot air gun.*

Replacing Heating Elements

Soldering Iron

1. Turn off the unit and unplug it 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 soldering iron while pulling the heating element out of the top of the soldering iron, exposing the circuit board
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 the bottom of the soldering iron while pushing the new heating element into the top, aligning it with the notches.
14. Replace the plastic nut to the top of the soldering iron and tighten.
15. Replace the inner, small 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 it 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 wire color and placement.
10. Solder the new heating element leads in the correct places.
11. Wrap the new heating element in mica paper.
12. Slide the metallic shaft over the heating element and place it back into the hot air gun. Line up the holes with the standoff present in the gun.
13. Put the two sides of the hot air gun back together, lining 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.

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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

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WHEN YOU CARE ENOUGH TO USE THE VERY BEST!!!