

# X-TRONIC™ 5000 Series

## SMD/SMT HOT AIR REWORK STATION & CERAMIC PREHEATING STATION MODEL #5040-XTS



### PROGRAMING/OPERATING INSTRUCTIONS

9171576#

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Thank you for purchasing the XTRONIC #5040-XTS SMT/SMD Reworking/Soldering/Preheating station. This multi-function rework 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 soldering station. Please store this manual in a safe, dry place for future consulting.

## Package Contents

- 1 – X-TRONIC #5040-XTS “ALL IN ONE” Hot Air Rework Station
- 1 - X-TRONIC Soldering Iron 2 Stand & Sponge
- 1 – Hot Air Gun
- 1 – IC Popper
- 1 – Stainless Steel, Anti Magnetic - Anti Static Tweezers
- 1 – Goot Wick Desoldering Braid
- 4 - Hot Air Nozzles (Assorted Sizes & Shapes)
- 10 Soldering Tips (Assorted Sizes & Shapes)

## Product Features

- ESD Safe
- Genuine Samsung Microcontroller
- PID Technology
- Digitally Controlled
- Independent Temperature Adjustment & Compensation
- Intelligent Detection and Cool Airflow Features
- No Memory Silicone Cords
- Highest Quality and Reliability
- High Temperature Stability
- Both Centigrade & Fahrenheit Conversion
- Powerful High Output Brushless Fan
- Magic Temperature Compensation Technology
- Ceramic Heat (Preheating Station)
- Hands Free Telescopic Hot Air Gun Mount
- Adjustable Rails for Accommodating Various Board Sizes & Shapes
- Overall Small Footprint Unit

## Product Specifications

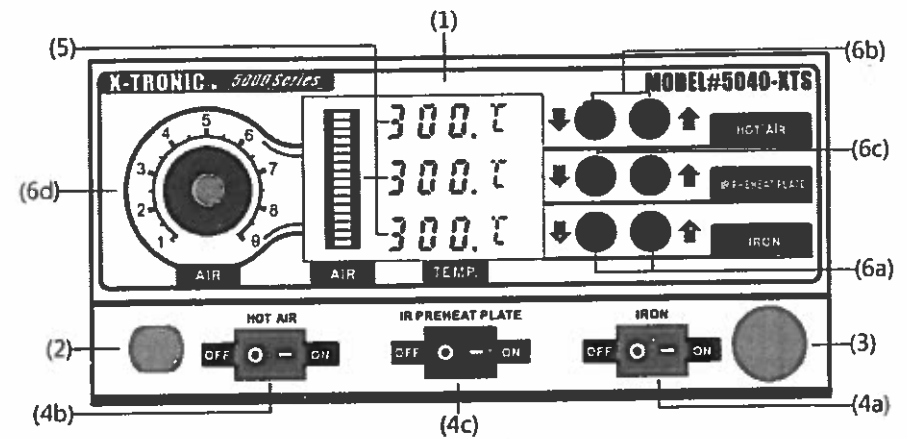
MODEL	#5040-XTS
Power Consumption	1270 Watts ± 5%
Dimensions	8.7 x 3.1 x 12.6 in. / 22.1 x 7.9 x 32.0 cm.
Weight	6.6lbs. / 3.0 Kg
Working Environment	0°F ~ 122°F / 0°C ~ 50°C
Storing Environment	-68°F ~ 176°F / -20°C ~ 80°C
<b>Hot Air Rework</b>	
Airflow Type	Brushless Fan (Spiral Wind)
Airflow	≤ 130 L/min.
Temperature Range	212°F ~ 896°F / 100°C ~ 480°C
Temperature Stability	± 1°C
Display Type	LED
Cable Length (Material)	≥ 39.4 in. / ≥ 100 cm. (Silicone)
<b>Soldering Iron</b>	
Temperature Range	392°F ~ 896°F / 200°C ~ 480°C
Temperature Stability	± 1°C
Grounded Tip Voltage	< 2mV
Tip Impedance	< 2Ω
Display Type	LED
Cable Length (Material)	≥ 39.4 in / ≥ 100 cm. (Silicone)
<b>Preheating Station</b>	
Temperature Range	122°F ~ 752°F / 50°C ~ 400°C
Temperature Stability	± 2°C
Heating Area	4.7 in. x 4.7 in. ~ 22.1 in. <sup>2</sup> / 12 cm. x 12 cm. ~ 144 cm. <sup>2</sup>
Display Type	LED

## Product Setup

1. Unpack all contents of the X-TRONIC #5040-XTS kit
2. Inspect unit and accessories for any damage
 

**NOTE:** If damage is detected, contact X-TRONIC immediately
3. Assemble Hands Free Telescopic Assembly
  - a. Attach "L" bracket to metal rod using included screw already in rod
  - b. Attach bracket and rod assembly to rear of unit using lower 2 screws in center of unit
  - c. Secure rod to machine by attaching "U" shaped bracket around rod in rear of machine using the upper 2 screws in center of unit
  - d. Slide stop bushing over rod and secure with attached screw
  - e. Slide Hot Air Gun Holder assembly over rod and secure with the included thumb screw
4. Attach soldering iron to unit using the Soldering Iron Connection
5. Place soldering iron into holder
6. Attach hot air gun holder to the side of unit using the 2 included screws
7. Place hot air gun into holder
8. Ensure all connections are secure and correct before applying power to the unit
9. Ensure the safety fuse is installed, and in good working order before applying power to the unit
10. Plug power cord into a **GROUND**ED AC wall outlet
11. Turn on the main power switch by means of the main power switch located in the rear of the machine
12. Power on unit
  - a. Soldering Iron
    - i. Attach desired tip to the soldering iron
    - ii. Power on soldering iron by means of the power switch
    - iii. Adjust soldering iron temperature by pressing soldering iron  $\uparrow$  and  $\downarrow$  buttons
  - b. IR Preheating Station
    - i. Power on Preheating Plate by means of the IR Preheating Plate switch
    - ii. Adjust preheating plate temperature buy using IR preheating Plate  $\uparrow$  and  $\downarrow$  buttons
  - c. Hot Air Gun
    - i. Attach desired nozzle to hot air gun
    - ii. Turn on hot air gun by means of the power switch
    - iii. Adjust hot air temperature by using the hot air gun  $\uparrow$  and  $\downarrow$  buttons
13. To use Hot air gun in Hands Free Telescopic Assembly
  - a. Attach cord to side of machine using attached clip

## User Interface



- 1) X-TRONIC #5040-XTS Unit
- 2) Hot Air Gun Connection (Permanent)
- 3) Soldering Iron Connection
- 4) Power Switch
  - a. Soldering Iron
  - b. Hot Air Gun
  - c. IR Preheating Plate
  - d. Main (Not Pictured – Located in rear of unit)
- 5) Display
- 6) Adjustment
  - a. Soldering Iron Temperature
  - b. Hot Air Temperature
  - c. IR Preheating Plate Temperature
  - d. Air Speed

## Operating Guidelines

### General setup & use

1. Before turning on the unit, ensure that the hot air gun is in the holster and the soldering iron connected properly.
2. Ensure there are no obstructions or blockages in the hot air gun and/or attachments.
3. After using hot air gun, place back into holster, and allow unit to initiate cool down procedure until the display reads "---", then turn off power.
4. When using the small nozzle attachment for hot air gun, set airflow to maximum value to keep the hot air heating element from overheating and breaking down.
5. When using soldering iron for the first time, be sure to allow iron to come to proper temperature 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 hot air nozzles or soldering iron tips.
8. Do not over tighten bolt on hot air attachments.
9. Store 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 troubleshooting section or contact manufacturer.
12. Always shield surrounding components while using hot air gun, failure to do so could cause other components to become unsoldered and blow off of the board
13. Adjust Rails to fit the board to be worked on by means of the 4 thumbscrews on top of rail

### Function Setup

1. Temperature Conversion
  - a. Turn on the power switches to whatever component you wish to convert the temperature for
  - b. Press and hold Hot Air <sup>+</sup> and IR Preheating Plate <sup>+</sup> buttons for 3 seconds
  - c. "C" or "F" will show up on the display for each component that is turned on

**NOTE:** If Hot Air Gun is turned on but in the holster, the "C" or "F" will not show up during the selection process but the temperature will still be converted one handle is removed from the holster.

- d. Select desired conversion by using Hot Air <sup>+</sup> and IR Preheating Plate <sup>+</sup> buttons
  - e. Once desired conversion is selected, let unit stand for 5 seconds
  - f. Unit will automatically store selection
2. Temperature Correction
    - a. Turn on the power switches to whatever component you wish to compensate the temperature for
    - b. Press and hold Hot Air <sup>+</sup> and IR Preheating Plate <sup>+</sup> buttons for 3 seconds, until "00" is displayed
      - i. Adjust soldering iron temperature compensation by using soldering iron temperature <sup>+</sup> and <sup>+</sup> buttons
      - ii. Adjust hot air gun temperature compensation by using the hot air gun temperature <sup>+</sup> and <sup>+</sup> buttons
      - iii. Adjust IR Preheating Plate temperature compensation by using IR Preheating Plate <sup>+</sup> and <sup>+</sup> buttons
    - c. Once desired compensation has been obtained, allow selection to stand for a few second
    - d. The unit will automatically store the selection into memory and output compensated temperature

**NOTE:** For best results, you should only compensate the temperature for one component at a time.

### Safety Precautions

1. **Never** use soldering iron or hot air gun near any flammable substance, material, or gas.
2. **Never** touch 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 unit to properly cool to room temperature before attempting to touch them.
3. **Never** point 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.
6. **Never** place anything flammable on or near IR Preheating Plate
7. **Never** Touch IR Preheating Plate or surrounding chassis while in operation
8. Ensure a minimum distance of 2mm while using Hot air gun while in Hands Free Telescopic Assembly
9. Always keep hot air gun moving unless reflowing large chips

## Maintenance

### Unit

1. Keep unit plugged into a **GROUND**ED outlet at all times during operation.
2. Keep unit and all components free from dirt, debris, and liquid at all times.
3. Make sure power cord is plugged in correctly and safely off the floor to prevent accidents.
4. Keep all cords in immediate workspace and avoid letting them hang off the side of a table or bench top.
5. Wipe unit down, when needed, with dry, "static free" cloth.

### Soldering Tip Care

1. For first use, allow tip to come up to stable temperature, clean tip on damp sponge and tin the tip (apply small amount of fresh solder to the tip).
2. **Never** hit soldering iron or tip on anything to remove excess solder.
3. Do not use extreme temperature with soldering iron tips doing so will shorten the life span of the tip.
4. Clean tip before each use, use copper cleaning brush for better temperature stability during cleaning.
5. Always clean and re-tin tip after each use this will aid in the prevention of oxidation on the tip and help extend life span.
6. Do not allow Soldering iron or 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 tip with fresh solder and wipe clean on damp sponge or copper cleaning pad, this may need 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 power to the unit and unplug from power source.
2. Allow soldering iron and tip to reach room temperature.
3. Loosen nut at base of the metallic shaft of the soldering iron.
4. Slide metallic tube off of soldering iron and tip.
5. Slide tip off of the heating element.
6. Repeat in reverse order for installation.

## Install/Remove Hot Air Attachment

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

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

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

### Troubleshooting Guide

- Nothing appears to happen when turning on the unit.
  - Check to ensure that the unit is plugged in
  - Make sure that the plug used is grounded
  - Check for blown fuse on main power input, replace if needed
  - Make sure house mains breaker is not tripped
  - Contact manufacturer
- Soldering Iron not heating.
  - Ensure unit is plugged into a grounded outlet
  - Ensure that proper power switch is on
  - Ensure soldering iron is securely attached to unit
  - Replace heating element
  - Contact manufacturer
- Hot air gun not getting hot
  - Ensure unit is plugged into a grounded outlet
  - Ensure correct power switch is turned on
  - Replace heating element
  - Contact manufacturer
- IR Preheating plate not getting hot
  - Ensure unit is plugged into a grounded outlet
  - Ensure correct power switch is turned on
  - Contact Manufacturer
- No/insufficient airflow
  - Ensure there are no blockages in nozzle or hot air gun shaft
  - Adjust air flow knob to higher setting
  - Contact manufacturer.
- Noisy unit
  - Ensure unit is on flat level surface

- Ensure all screws and brackets are secure
- Contact manufacturer

### Replace Heating Elements

#### **Soldering Iron**

1. Turn off unit and unplug from power source
2. Allow unit to reach room temperature before proceeding
3. Disconnect soldering iron from unit
4. Loosen nut on metallic shaft
5. Slide metallic shaft off of soldering iron
6. Remove soldering iron tip and inner shaft
7. Unscrew plastic nut from top of soldering iron
8. Push cord through bottom of iron while pulling heating element out of the top of the iron exposing circuit board
9. Unsolder existing heating element taking note of the wire color and location
10. Remove heating element
11. Replace heating element
12. Solder new element leads in correct location
13. Pull cord out bottom of soldering iron while pushing new element into top, aligned with notches
14. Replace plastic nut to top of iron and tighten
15. Replace inner small metallic shaft
16. Replace tip over heating element
17. Replace outer metallic shaft of soldering iron
18. Replace metallic nut and tighten

#### **Hot air gun**

1. Turn off unit and unplug from power source
2. Allow 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 silicone tubing off of hot air gun
6. Pull two halves of hot air gun apart (they are glued together)
7. Slide metallic shaft off of heating element
8. Remove fiberglass paper from heating element
9. De-solder broken heating element, paying special attention to wire color and placement
10. Solder new heating element leads in correct places

11. Wrap heating element in mica paper
12. Slide metallic shaft over heating element and place back into hot air gun lining up the holes with the standoff present in the gun
13. Put two sides of hot air gun back together lined up with the holes on the metallic shaft
14. Reinsert the 3 screws and tighten up
15. Reattach the silicone hose

## Warranty

All "X-TRONIC" products come with a 3 year guarantee!

The 1<sup>st</sup> 30 days are covered by a "Money Back or Replacement Guarantee" from the date of shipment 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 the unit or give you a complete refund for your product and we will pay all shipping involved (to and from) with this part of the guarantee.

If you have "Buyer's Remorse" and decide that you do not want the product, it must be returned "New and Unused" in the original box and you must pay the return shipping. PLEASE NOTE that there will be a 10% restocking fee for "Buyer's Remorse" and it cannot be returned if it has been "Used"!!!

The remainder of the 1<sup>st</sup> year (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 and/or replace your product, but shipping (to and from) must be paid by the buyer. Please email us for a return authorization number.

Although all of our products are checked and thoroughly inspected by us before they are shipped out, we strongly urge you to use/run your product during the first 30 days to make sure it is in perfect working order.

### Contact Info

**X-TRONIC International Inc.**  
2159 Magnum Circle  
Lincoln, Nebraska 68522  
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[www.XtronicUSA.com](http://www.XtronicUSA.com)

**5000serie**

**Preheating station&Hot air reworks  
&soldering staiong combinationg**

## **INSTRUCTION MANUAL**

**Special Prompt!**

This product will be a comprehensive upgrade, upgrade all the functions of the machine is turned off, when the screen "---" has been flashing! Prompts you to close the rear of the machine power switch! Ensure that the machines and use a more secure environment, energy saving and environmental protection!

***Energy saving and environmental protection from you and me!!!***

Thank you for choosing this type of product.



## General Usage

1. Suitable for de-soldering and soldering BGA, SOIC, CHIP, QFP, PLCC package SMD IC, Particularly suitable for de-soldering BGA module, computer motherboard north and south bridge, all kind of mobile phone motherboard SMT IC and LED lights.
2. Shrinking, Paint drying, adhesive removal, thawing, warming, Plastic welding etc.

## Feature

1. Using microcomputer processor PID programmable temperature control technology, the program cycle every 20 milliseconds to detect the actual temperature of the heating element and a quick correction, rapid return temperature, temperature stability LED display, precise preheating station, air gun and soldering iron temperature.
2. Preheating station is to use a glaze layer having a high thermal effect, good thermal shock resistance of the ceramic as the substrate, high-quality nickel branded alloy wire once sintering. It has a high thermal effect, overall good, good thermal stability, uniform heating, high dielectric strength, clean, easy to install and so on features.
3. Air Gun heater use ceramic heater, heating elements firmly wrapped around the model ceramic, rapid and uniform heating. Use the upgraded version fan, the airflow larger than the ordinary fan, spiral out of the wind, long life.
4. Soldering iron part using Hakko heater, heating up rapidly, temperature stability, long service life; antistatic design to prevent electrostatic damage to delicate SMD components.
5. The machine has a self-test function full intelligent over-temperature, short-circuit, overload and fault display and protection functions.
6. 5020 preheating station practical and easy to operate, the card plate sliding bracket bearing technology, to move around freely durable, convenient card board, coupled with a fixed sliding bracket screws at the same time, the card board is solid and reliable.
7. 5030/5040 preheating station using the user-friendly design, the cover affixed with a high-temp, insulated protection pads to prevent scalding operation. The stent uses magnetic induction technology, card board bracket to prevent protective pads suck hood above, can rotate 360 degrees, flexible card board, it is suitable for the circuit boards of different shapes and sizes.
8. 5030/5040 temperature correction function to adapt to the environmental impact: or replace the heating elements, soldering iron tips etc. spare parts caused by temperature deviation, can use this function calibration temperature. The correction temperature range is -50°C +50°C.
9. 5030/5040 has Celsius/Fahrenheit temperature display function: meet different market needs to design the temperature display mod, you can choose under customary interest.

## Specification

Model	X-TRONIC-5020	X-TRONIC-5030	X-TRONIC-5040
Voltage	AC 220V ±5%	AC 220V ±5%	AC 220V ±5%
Max power consumption	500W	1200W	1270W
Measurement	220(W)×73(H)×247(D)mm	220(W)×80(H)×320(D)mm	220(W)×80(H)×320(D)mm
Weight	3.0Kg		
Working environment	0~50°C / 0~122°F		
Storage environment	-20°C ~80°C / -68°F ~176°F		

## Preheating station

Temperature Range	50-300°C 或 50-400°C / 122-572°F 或 122-752°F
Temperature Stability	±2°C
Display Type	LED
Area	120x120mm

## Hot Air Reworks

Airflow type	无刷风机螺旋风
Air Flow	≤130L/min
Temperature Range	100°C ~480°C / 212°F ~896°F
Temperature Stability	±1°C
Display Type	LED
Handle cable length	≥100cm

## Soldering Iron

Temperature Range	200°C ~480°C / 392°F ~896°F
Temperature Stability	±1°C
Tip of ground voltage	<2mV
Tip ground impedance	<2ohm
Display Type	LED
Handle cable length	≥100cm

## Performance comparison table

Function	Model	5020	5030	5040
Functional components		Preheating station	Preheating station + Hot air reworks	Preheating station + Hot air reworks + Soldering station
Display type		LED	LED	LED
Fahrenheit/Celsius Conversion		NO	YES	YES
Temperature correction		NO	YES	YES
High temperature protection		YES	YES	YES
Gun Type		---	Brushless fan	Brushless fan
Control Temperature way		Digital PID	Digital PID	Digital PID

## Operating

### 1. Preheating station part

A. 5020

1) Preheating station laid out → plugged

2) Move bracket card board will need to preheat the element is placed above the plate → move/tighten the four screws on the bracket, fixed need to preheat components

3). Turn on the heating switch, the preheat plate heating → set the appropriate temperature can be preheated B. 5030/5040

1). Preheating station laid out → plugged

2). Move bracket card board, select the appropriate orientation will need to preheat components placed above the preheat plate. Note bracket above two pallets mouth. Note that bracket above two card board ports, usually with the following, if use above bayonet, you need to preheat the components from the hot plate farther, preheat temperature is a little lower.

3). Open the master switch on the back of the chassis → the open the preheating stage switch, the preheat plate heating → set the appropriate temperature can be preheated

4). Preheat station, hot air reworks, soldering station can flexibility combination to use. Preheat station, hot air reworks, soldering station three functions are independent, you do not need to use

2. Hot air reworks part

1). The hot air gun rework station is laid out → handle frame is installed on the side of the chassis, air gun bracket rack installed in the back of the chassis → fixed to the handle in the air guns handle frame.

2). Open the back of the chassis whole switch → open air gun switch, air gun switch heating → press air gun temperature plus button "▲ or ↑" and minus buttons "↓ or ▼" to set temperature → adjust the air flow knob to set the appropriate airflow → Gun to be wind indicator regularly means the flashing temperature stability will be able to normal operation.

3). After work, turn off the air gun switch, the machine automatically cut off the air gun heating body the power to enter the cooling heating element mode. When the temperature is below 100 °C, the air gun display window goes off and stop the wind.

3. Soldering station part

1). The soldering iron handle → handle on the iron holder.

2). Open the soldering iron power switch, heating elements begin to heating → press soldering iron temperature plus button "▲ or ↑" and minus buttons "↓ or ▼" to set the appropriate temperature, when the soldering iron work indicator regular flash at high speed into the thermostat state can work properly!

3). After work, you can use the residue under high temperature cleaning sponge cleaning up the soldering iron lips and re-coated with a new layer of solder, the soldering iron into the iron hp, der can turn off the power!

4. Attached: technical article-Rework the process (for reference only)

Air gun with preheating station to facilitate the large flat IC dual-panel large components de-soldering.

● Remove the components

The successful rework first component removal location of the fault on mother board, and the solder is heated to the melting point, and then carefully scored the components from the board.

Heating control is key factor in the rework, the solder must be fully melted, so as to avoid injury in the removed component plate and copper. While the temperature is not too high, to prevent the circuit board is heated excessively caused Motherboard distorted.

● PCB and component heating

Advanced rework system uses a microcomputer to control the heating process, with solder paste manufacturer specifications given parameters as possible, and using a combination of the top and bottom of heating.

Bottom heating to complement the board due to pass of heat, while elevated board temperature; the top heating is used heating components, in addition the use of coders bottom heater can be eliminated due to local over-heating the circuit board caused by distortions.

Motherboard heating can be used three methods, namely conduction, convection, and thermal effect effects. Conduction heating when the heat source with the motherboard contacts (for example, using a hot plate), which on the rear components of the circuit board not applicable (NA); The thermal effect of using an infrared (IR) energy, it is to be practical, but due to the board heating was proved is rework and assembled in the most effective and the most practical technology.

Components heating (or top heating) generally use a convection hot air nozzles, careful control of top heating components uniformly heated is extremely important, especially for small quality components is particularly critical (Figure 1).

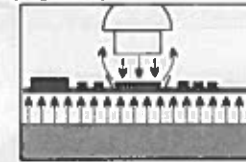


Figure 1

To pay attention to avoid rework station nearby components reflow or blow away small chip components, the hot gas stream discharged by the nozzle must be isolated with these elements, the thin layer of shielding plate or the mask can be put in the surrounding components of the rework station. Mask technology is quite effective, but more trouble consuming, but can be used dedicated BGA rework nozzles, it can reduce the damage to the components in the vicinity of the demolition components and circuit boards in the process of unsoldering.

## Description for Function Setting

1. The temperature correction function setting (Figure 2)

In the case of the boot, to press the air gun and preheat the cool button for 3 seconds, then preheat window will show the factory default the correction temperature "00". If need to correct the working temperature of the preheating stage or electric iron, you can press button heating and cooling to make compensation of the respective temperature (compensation range: +50°C to -50°C). After 4 seconds, the program and exit the automatic memory, display windows shows working temperature, the setting is completed.

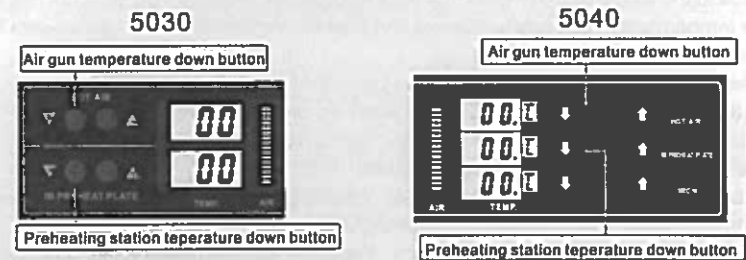


Figure 2

2. Celsius/Fahrenheit display the conversion feature setting (Figure 3)

In the case of the boot, pressing the air gun and the preheating station heating button for 3 seconds, then (5030) the temperature display window shows "C or F", (5040) "C or F" are flashing in display window, then pressing air gun and preheat station warming button to set the status of Celsius or Fahrenheit, after set 4 seconds and the program is automatically memory setting and exit, the setting is completed.

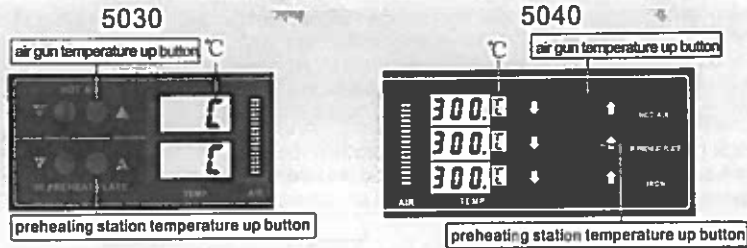


Figure 3

## WARNING

In view of could cause serious injuries of fire accidents, please strictly observe the following

1. Must be confirmed well-connected handle and the machine, after that open the power supply switch, all the parts removal or installed, must be turn off the power supply switch, then operate it (High-Pressure is dangerous!)
2. When the power supply is turned, the air gun or soldering iron outlet temperature higher than 100 to 480 degrees Celsius (212-896 degrees Fahrenheit); the preheat plate surface temperature of 60-408 degrees Celsius (122-752 degrees Fahrenheit); DO NOT touch the air gun or soldering iron metal part and preheat plate near the chassis, aluminum mesh, to replace nozzles or the tips and the tips and other parts, should turn off the power supply and cooling to room temperature, then operate it (High-temperature is risk!)
3. DO NOT use the machine near flammable things (Fire hazard is dangerous!)

## Terms of Use

1. Please ensure the Hot's outlet is clear, must free from any blockages or obstructions.
2. After the work is completed, the air gun handle put the frame or turn off air gun switch, the machine automatically cooled to display"—"stop the air, then turn off the whole device power switch in the back of the chassis.
3. When using the machine standard three nozzles: big, middle, small nozzles other than the smaller nozzle, must separate air volume was adjusted to the maximum use of a lower temperature and in a short use. Avoid prolonged use of the damage to the air gun.
4. In regards to the usage requirements, choose the appropriate Hot air flow, different Hot air flow will cause the temperature to be slightly different, and please maintain the distance between the outlet and the object must be at least 2 mm.
5. When the iron is used for the first time, please pay attention to check the iron tip warming condition, when the tip can melt the tin wire, please plate some tin on tip, then adjust to the desired temperature.
6. The tip temperature should not be too high, too high temperature would weaken the tip function, when interval using, can lowering the temperature.
7. Should be regularly use clean sponge to clear soldering tip, after finish use, should wipe clean soldering iron tip, plate new tin to prevent soldering iron tip oxide.
8. Preheat plate non-turn on the water structure, therefore, do not install the storage and use of contact with oil, water, and plastic pellets to prevent leakage and other security risks.
9. The preheat plate should avoid being forced to tap or hard objects collided causing tiles fracture, alloy resistance wire exposed affect the operating life.
10. The preheat plate DO NOT for prolonged use, and prevent chassis overheating.

## Special Instructions:

Dear User! Our air gun and soldering iron handle adopt high strength stainless steel tube, the machine must be inspected or calibrated four times in normal working condition during the production process, the copper tube could be slight yellowing due to high temperature! When use the new machine first time, it is normal that the steel tube at tube at a slight yellowing, please be assured!

## The do's and don'ts

1. DO NOT install/De-install Nozzles with excessive force. DO NOT use pliers to pull the nozzle edge out, DO NOT tight the nozzle's bolt excessively.
2. Only install nozzles when the unit is cool (room temperature)
3. DO NOT use unit near flammable gas or liquid or any combustible material WHATSOEVER especially when using the unit in high-temperature operation. DO NOT face the hot air outlet or touch the soldering iron to the human body WHATSOEVER because it is very hot and can instantly burn the skin/body. When the first use the unit might start initially with white smoke, but this soon will go away.
4. Replacement heater, be careful not to damage the grounding line!
5. Replacement the cable should pay attention to the order and color, can not.

## Display Notes

- A. When the LED digital displays"—", it means the outlet temperature is below 100°C; the hot air rework station is standby mode, and the handle is placed on the handle's rack.
- B. When the LED digital displays "S-E", it means the Soldering iron and Hot air rework's sensor is having a problem or handle is un-plugged, if this the case it needs to replace the heating element (heating core's element and sensor components)

## Interchangeable Component Desiption

- A. Replacement of Hot Air rework heating element (Figure 4)
  1. Ensure the Hot Rework is fully cooled down before replacing the element.
  2. Figure, loosen the two screws on the handle.
  3. Turns the handle antic-clockwise until it comes off and then remove the handle's cover.
  4. Gently takes out the fan, loosen the three screws to remove the fixed wiring board.
  5. The wiring board vice versa, apart from the heater wiring board connection cable, pay attention to the connection location.
  6. Remove from the heat pipe heat body with mica paper, careful not broken ground wire of the steel.
  7. Wraps well with the new heater mica, inserted into the tube, the attention heater to install in place.
  8. According to the original location of the connection to connect heater.
  9. When the revers process by open bottles and handle back.
- B. Replacement of the soldering iron's tip and soldering iron heating core's element (Figure 5)
  1. Unscrews the nut NO. 1, and then removes the steel tube NO. 2, followed by removing the tip which is going to be replaced.
  2. For the replacement of heating core's element can be performed by unscrewing the plastic cap NO. 4, pulls out gently the heating core's element NO. 6 along with the circuit board NO. 7, please carefully remember the connection of spring NO. 5.
  3. The iron core from the circuit board welding, the replacement of the heating core, can be fitted well. Note that the order of the iron core wire connection.
- C. Replacement of the preheating plate (Figure 6)
  1. Remove the top cover 1.
  2. Unscrew the screws 2.
  3. Remove the warm-up bracket.
  4. Pull out the clamp.
  5. Remove the preheated plate.

