

H5 Series

# ANTI-STATIC MULTI-FUNCTION REWORK STATION

# **INSTRUCTION MANUAL**

Thank you for choosing this type of Unsoldering Equipment with Hot Air. The product is designed for soldering and unsoldering without lead. Please read the User Guide thorough ly before use, and keep it in a safe place for future reference.

# PRODUCTS FEATURE

- 1. Using the new microcomputer processor PID programmable temperature control technology and implantation of the most high-end precision PID program. The machine to every 20 ms as a cycle ,using super speed to tracking detection the gun and iron actual temperature and correction. Magic temperature compensation to make its temperature stability. Temperature error and temperature compensation rate, to beyond the same type of products in the market. internal process neatly, the direction of signal clarity, machine stability and safety performance is further improved, can adapt to a variety of harsh environment.
- 2. The gun heater adopts a ceramic skeleton heater, heating element firmly around the model of ceramic, rapid and uniform heating up. Ceramic super high temperature and very tough material at long time high temperature under the condition of no deformation, greatly enhance the heating element stability, prolong the life of the heating element.
- 3. The machine part of the device has a self-test function, the whole intelligent over-temperature, short circuit, open circuit, overload, fault indication and protection functions.
- 4. By the strong pressure of the pump as the air source, long life.
- 5. Soldering iron has smoke absorbed function. Smoke generated by soldering iron was immediately sucked away, after a dust-sheet absorption, filtration, this function is to achieve air purification effect, to bring users healthy, environmentally friendly work environment, no longer have to worry about the smoke produced for the use of soldering iron. If you don't use soldering iron, in the case of using air gun, can iron inspiratory interface to the vacuum wand for blowing demolition IC to pick up the IC.
- 6 968DA++ air gun has automatic / manual function. When choosing the automatic function, put the gun handle back on the holder, the machine automatically cut off the heating up and cooling, its effectively improve the heater service life and energy saving, good for environmental protection and high safety factor. can be effective to avoid hot air gun handle caused by fire or other accidents. Select the manual function: when the gun handle back on the holder, that the gun is not cool and keep in work. Its very suitable for frequent operation and save cooling and heating time to improve work efficiency, it is recommended to use the manual function status was finished, please switching back to the automatic function to improve safety!
- 7.968DA+ has Celsius / Pahrenheit temperature display function: meet different market needs to design the temperature display mode, according to the custom to choose.
- 8. H5 has a function of colsius/fahrenheit temperature display, temperature correction function, use wind speed ball dynamic display simulation of air flow, intuitive and clear.

# Specification

Model	968DA+	968DA++	H5	
Power Consumption	720W ±10%	720W ±10%	720W ±10%	
Measurement	124*187*249MM	124*187*249MM	124*187*249MM	
Weight	4.04Kg	4.04Kg	4.04Kg	
Working environment	0~50℃/0~122℉			
Storage environment	-20℃~80℃/-68°F~176°F			

	Hot Air Reworks		
Airflow type	Diaphragm pump spiral wind		
Air Flow	28L/min		
Temperature Range	100°C ~480°C/212°F ~896°F		
Temperature Stability	±1℃		
Display Type	LED		
Handle cable length	≥90cm		
	Soldering Iron		
Temperature Range	200℃~480℃/392°F~896°F		
Temperature Stability	±1℃		
Tip of ground voltage	<2mV		
Tip ground impedance	√- <2ohm		
Display Type	LED		
Handle cable length	. ≥100cm		

#### Performance comparison table

968DA+	968DA++	H5
LED	LED	LED
Yes	No	Yes
No	Yes	No
Yes	Yes	Yes
Diaphragm pump	Diaphragm pump	Diaphragm pump
Digital PID	Digital PID	Digital PID
Yes	Yes	Yes
No	No	Yes'
No	No	Yes
	LED Yes No Yes Diaphragm pump Digital PID Yes No	LED LED Yes No No Yes Yes Yes Diaphragm pump Diaphragm pump Digital PID Digital PID Yes Yes No No

#### General Usage

- 1). Suitable for a various kind of soldering or de-soldering (removals) purposes of the electronic components such as: SOIC, CHIP, QFP, PLCC, BGA, SMD, etc. (especially mobile phone's cable).
- 2), Shrinking, Paint drying, adhesive removal, thawing, warming, Plastic welding.

# Operating instructions

- A. Hot air rework operation
- 1. First please loose fixed pump's screws in the bottom of the chassis., otherwise will a lot of noise, long-term use can cause incalculable consequences.
- 2. The nozzle of the device required, connect the power supply.
- 3. Turn on whole device power switch in the back of the chassis, and then open the gun switch, the hot air begin heating normally, at this time the gun indicator (the lower right corner of the gun display window) is on! Work indicate light is always light when heating up; it is high-speed flash when constant temperature; it is go out when drop in temperature.

Adjust airflow knob to set the appropriate airflow, will be able to normal operation until the temperature stability. The thermostat can visually see the air gun work lights at high speed flash, when high-precision PID program in milliseconds for the units of high-speed tracking compensation the actual temperature of air gun, air gun into temperature high-stability and high-precision constant temperature (Figure A)

4, The work is completed, the handle is placed in the handle rack, direct close air gun switch, the machine automatically cut off the heater power of the air gun, air gun work indicate light goes out ,then enter into the air cooling heat mode, when the temperature is below 100 ° C stop the air and turns off the display. If unused for long periods and needs to close the whole machine switch in the , back of chassis.

Note: The 968DA ++ air gun with automatic / manual function, set to manual mode, after open the air gun switch, air gun start normal heating; set to automatic state, air gun handle if has no hold on the handle rack, air gun will not work., unique security features to prevent air gun caused by fire or other accidents in other places set aside in the case of the unknown.

#### B. Soldering iron parts

- 1. The soldering iron handle connected, it will handle on the iron holder.
- 2. Turn on whole device power switch in the back of the chassis, and then open the iron switch, the display shows the factory default values, the soldering iron heating elements begin heating, at this time the iron indicator (the lower right corner of the iron display window) is on! Work indicate light is always light when heating up; it is high-speed flash when constant temperature; it is go out when drop in temperature, when the iron work indicator has a regular high-speed flash into a constant temperature state after normal working!
- 3. Work is completed, clean high-temperature sponge to clean up the residue of the iron lips under re-plated on a new layer of solder, the iron into the iron frame, you can turn off the iron power switch, if long time no use need to turn off the whole switch in the back of classis.

Not: Soldering iron has suction smoke function, when air gun no use, need to turn on "SMOKE ABSORBER" switch staftup suction smoke function.

#### C. The vacuum suction pen usage. (Figure C)

- 1, when the vacuum suction pipe is required, can be vacuum suction pen pipe connect into iron smoke absorbed pipe interface.
- 2, Air guns blowing demolition IC, IC foot tin melt then use vacuum suction pen to pick up IC.
- 3, If the vacuum pen attractive force small can not suction IC, proper adjustment larger airflow, increasing the attractive force of the vacuum pen. The sucker of the vacuum pen has different size according to IC size choose it, large IC use big sucker, small IC with a small sucker.
- 4. When the air gun is no use, if you want to start smoke absorbed function, you need to open the iron switch and smoke absorbed switch ithe attractive force big or small of the vacuum pen can be changed by adjusting the airflow.

program high-speed tracking temperature compensation instruction

#### H5 Function Setting Description

1. Fahrenheit / Celsius conversion function set (Figure B) turn on soldering iron, air gun switch or one of a switch, press soldering iron temperature up button meanwhile press air gun temperature down button for 3 seconds, showing the splash of "C" or "F", press any one temperature setting button to convert Fahrenheit or Celsius, stop the operation for a few seconds, "C" or "F" stops flashing, the program automatically remembers and save the settings, set the digital display temperature setting.

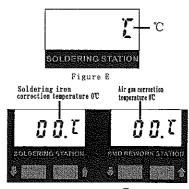


Figure F

2. The temperature correction function set (Figure F): turn on soldering iron, air gun switch or one of a switch, press soldering iron temperature down button meanwhile press air gun temperature up button for 3 seconds, the digital display "00C", press soldering iron, air gun temperature up and down buttons to set the soldering iron and air gun of the correction temperature, stop the operation for a few seconds, the program automatically remembers and save the settings, set the digital display temperature setting.

#### WARNING!

In view of could cause serious injuries or 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); DO NOT touch metal parts of air gun or soldering iron, to replace nozzles or other parts of the tip, 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 air's outlet is clear, must free from any blockages or obstructions.
- 2. After the work is completed, the machine automatically cooled to stop the air, then turn off the whole device power switch in the back of the chassis.
- 3. 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.
- 4. 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.
- 5. The tip temperature should not be too high, too high temperature would weaken the tip function. When Interval using, can lowering the temperature.
- 6, 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.
- 7. Do not use soldering iron smoke absorbed pipe, vacuum suction pen to draw on other foreign matter to prevent clogging the suction pipe. Time to open the iron smoke absorbed interface nut, clean up the dust piece of foreign matter or replace the piece of dust, to maintain the patency of the suction tube.

FigureA

#### 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 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 started initially with white smoke, but this soon will go away.
- 4). Replacement heater, be careful not to damage the grounding line!!
- 5). Replace the cable should pay attention to the order and color, can nottake a wrong!!
- 6). Replace the same type of heater or heating core!!

### Display Notes

- A). When the LED digital displays "---", it means the outlet temperature is below 100°C; the hot air rework station is in 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 Description

- A. Replacement of Hot Air rework heating element (Figure B)
- 1. Ensure the Hot Air Rework is fully cooled down before replacing the element
- 2 Figure, loosen the two screws on the handle.
- 3. Turns the handle anti-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 wrap 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 reverse process by open bottles and handle back.
- B. Replacement of the soldering iron's tip and soldering iron heating core's element (Figure D)
- 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.

