959D-1 **04.07.03.436**

OPERATION INSTRUCTION Hot Air Rework Station ESD Safe

Statement: The company reserves the right to improve & upgrade products, product specifications and design are subject to change without notice.

OPERATION INSTRUCTION

English



Specifications

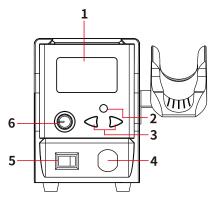
Main unit dimensions	0~40°C/32°F~104°F
Operating ambient temperature	L170*W95*H130mm \pm 5mm
Display	LED Nixie Tube
Temperature range	100°C~480°C/212°F~896°F
Air delivery	Brushless motor with smooth air delivery
Air volume	≤120L/min

I. APPLICATIONS

- This unit is suitable for rework & soldering operations on a broad range of components. E.g., SOIC, CHIP, QFP, PLCC, BGA, SMD, and more. The unit is especially suited for rework operations on in-line sockets.
- 2. The unit can be used for heat shrinking, drying, paint removal, conformal coating removal, defrosting, pre-heating, glue soldering, and more.



II. CONTROL PANEL



- 1. Hot Air Temperature
- Version A: °F/°C Temperature Display Switch (110V~127V)

 Version B: Cool/Hot Air Switch (220V~240V)

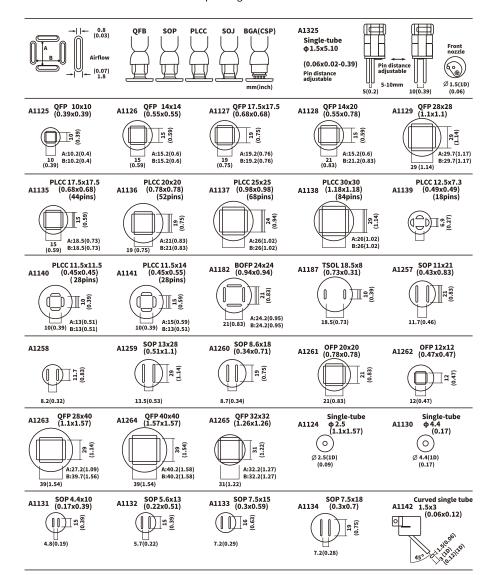
 Note: identify version A or version B based on the rated voltage specified on the station's nameplate.
- 3. Temperature Increase/Decrease Button
- 4. Receptacle / Cord (Hot Air Gun)
- 5. Power Switch
- 6. Air Volume Adjustment Knob



For reference: compatible parts

● (Nozzle style (specifications and sizes)

The nozzles sizes match with their corresponding IC sizes.





VI. TROUBLESHOOTING

- 1. "S-E" This is an indication that the hot air gun's sensor module is faulty. To resolve this issue, you need to replace the heating element (the heating element and the sensor modules). Or, the hot air gun is not connected (turn OFF the station, connect the hot air gun and turn ON the station).
- 2. "0-E" This is an indication that the hot air gun's heating element is faulty. To resolve this issue, you need to replace the heating element (the heating element and the sensor modules).
- 3. "F-1/F-2" This is an indication that the rework station is in the "hot air fail-safe" mode. Check the hot air gun's motor and its power circuitry.
- 4. When replacing the heating element, take note of the original connecting order and colors of the wires, which MUST NOT be connected incorrectly.



III. OPERATIONS

- 1. Set the rework station appropriately. Install the hot air gun holder onto the right side of the station and place the hot air gun into its holder.
- 2. Connect the rework station's power cord to the power outlet. Turn ON the power switch. The hot air temperature display will show "---" to indicate the hot air gun is in standby mode. Press the temperature increase or decrease button to set the desired temperature. Pick up the hot air gun, and it will enter standard operation mode, and the hot air rework station's operation indicator light (the dot located at the bottom-right of the hot air temperature display) will turn ON. The operation indicator stays ON constantly when heating up, blinks rapidly when the temperature stabilizes and turns OFF when the station is cooling. Turn the air volume adjustment knob to set the desired air volume, wait until the temperature is stabilized, then begin your work. Once the temperature is stabilized, the hot air operation indicator can be seen blinking rapidly. At this point, the precision PID program is tracking the actual hot air temperature and making temperature compensations every millisecond. The hot air gun is now in the high-precision thermostatic state.

Indicator for program tracking temp. at high speed and making temp. compensations.

3. The hot air gun must be placed back in the holder when the operation is complete. The system will cut off the power to the hot air gun, and the hot air gun's operation indicator will turn OFF. The hot air gun then enters cooling mode. When the hot air gun cools to below 100 °C /212°F, the hot air temperature display will display "---". At this point, turn OFF the power switch. If the station is not in use for an extended period, DISCONNECT the station's power cord.



IV. CONFIGURATIONS

Digital Temperature Calibration (configurations for version A and version B are identical)

Temperature discrepancies may occur due to the change in the environment's temperature or the replacement of the heating element and other components. You can correct the discrepancies with this function. The temperature calibration function can improve work efficiency and prolong the lifespan of the heating element.

- Once the hot air temperature stabilizes, press and hold the hot air temperature increase and decrease buttons for approximately 2 seconds. The display will alternate with the set temperature value and the value "CAL".
- 2. Press the hot air temperature increase or decrease button to enter the measured hot air temperature value.
- Press and hold the hot air temperature increase and decrease buttons to confirm entry. The system will automatically correct the temperature discrepancies and exit the calibration interface.



This function allows the station to adapt to user preferences in different regions.

Click the °F/°C temperature display switch to select the temperature display mode.



● Cool/Hot Air Toggle (Version B)

Press the Cool/Hot air button to switch between cool air and hot air mode. In cool air mode, the hot air gun's heating element stops heating and its fan puts out cool air which can assist users in cooling components and removing solder blobs from the circuit board.





V. MAINTENANCE & PRECAUTIONS

- 1. Keep the air outlet clear and free of blockages at all times.
- 2. The installation of the hot air gun nozzles MUST be carried out ONLY when the steel pipe and nozzle have cooled. Install the nozzle correctly, and DO NOT install the nozzle with brute force, pull the edge of the nozzle with tweezers, or overtighten the screws.
- 3. Select the appropriate nozzle based on your operation requirement (hot air temperature may vary when you use nozzles in different diameters). When using nozzles smaller than the stock nozzles, you MUST use the maximum air volume with a relatively lower temperature setting. Complete this operation in the shortest possible duration to avoid damaging the hot air gun.
- 4. Keep a minimum distance of 2mm between the object and the hot air gun's air outlet.
- 5. DO NOT allow the hot air to come in direct contact with facial parts, and beware of the danger of burn injuries. Upon the first use, the hot air gun may emit white fumes, and the white fume will dissipate in a short while.

NOTE:

The station's hot air gun and soldering iron handles use high-strength stainless steel tubes. The station goes through 4 times or more testing, inspection, and calibration procedures before rolling off the assembly line. The steel tube may exhibit light bronze color as a result of our quality control efforts. It is normal to have a slightly bronzed steel tube when you use a brand-new station. Rest assured for regular usage.