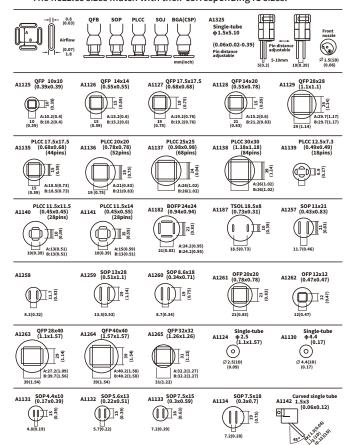
#### Nozzle style (specifications and sizes)

#### This product does not include the accessories below, information for reference only. The nozzles sizes match with their corresponding IC sizes.



# 902D IV

Made in China

**English** 

ESD Safe 2-in-1 Rework Station

OPERATION INSTRUCTION



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

product specifications and design are subject to change without notice.

Thank you for purchasing this product. Please read the manual carefully before operating and keep this manual for future reference.

This product should not be thrown in the garbage. In accordance with the European directive 2012/19/EU, electronic equipment at the end of their life must be collected & returned to an authorized recycling facility.

Dieses Produkt darf nicht in den Müll geworfen werden. Gemäß der europäischen Richtlinie 2012/19/EU müssen elektronische Geräte am Ende ihrer Lebensdauer gesammelt und an eine autorisierte Recyclinganlage zurückgegeben werden.

Ce produit ne doit pas être jeté à la poubelle. Conformément à la directive européenne 2012/19/UE, les équipements électroniques en fin de vie doivent être collectés et renvoyés à une installation de recyclage autorisée.

Questo prodotto non deve essere getaton nels pazazzatura. In conformità alla directiva europea 2012/19/UE, gli apparecchi elettronici giunti a fine vita devono essere raccolti e restituiti a un impianto di riciclaggio autorizzato.

De acuerdo con la directiva europea 2012/19/UE, los equipos electrónicos al final de su vida útil deben ser recolectados y devueltos a una instalación de reciclaje autorizada.

## **IMPORTANT SAFEGUARDS** Strictly follow the basic safety guidelines and precautions when using the product. The guidelines include:

- Read instruction manual before using.

  1. To provide continued protection against risk of electric shock, connect to properly grounded outlets only.

  2. Do not immerse in water.

  3. Hot Surface. Avoid Contact.

  4. Shock Hazard. To provide continued protection against electric shock disconnect from the power supply when not in use.

  5. The stand when not in use.

  6. HOUSEHOLD AND INDOOR USE ONLY.

  7. To prevent electric shock, unplue before replace the fuse and other than the property of th

- HOUSEHOLD AND INDOR'USE ONLY.

  To prevent electric shock, unplug before replace the fuse and other service.

  Replace only with same type and rating of fuse.

  This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

  Children should be supervised to ensure that they do not play with the appliance.

  Children should be supervised to ensure that they do not play with the appliance.

  If the SUPPLY CORD is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a bazard.

  Any servicine should be nerformed by an authorized service representative AND that the product has no user serviceable parts.

to avoid a nazard.

Any servicing should be performed by an authorized service representative AND that the product has no user serviceable parts.

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. Store indoors. Read instruction manual before using.

14. To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. Store indoors. Read instruction manual before using if the appliance is not used with care, therefore – be careful when using the appliance in places where there are combustible materials; – do not apply to the same place for a long time; – do not use in presence of an explosive atmosphere; – be aware that heat may be conducted to combustible materials that are out of sight; – place the appliance on its stand after use and allow it to cool down before storage; – do not leave the appliance unattended when it is switched on.
6. Hidden areas such as behind walls, ceilings, floors, soff be loadrs and other panels may contain flammable materials that could be ignited by the heat gun when working in these locations. The ignition of these materials may not be readily apparent and could result in property damage and injury to persons. When working in these locations, keep the heat gun moving in a back-and-forth motion. Lingering or pausing in one spot could ignite the panel or the material behind it.
17. WARNING: Extreme care should be taken when stripping paint. The peelings, residue and vapors of paint may contain lead, which is poisonous. Any pre-1977 paint may contain lead and paint applied to homes prior to 1950 is likely to contain lead, once deposited on surfaces, hand to mouth contact can result in the ingestion of lead. Exposure to even low levels of lead can cause inversible brain and nervous system damage; young and unborn children are particularly vulnerable.
18. Before beginning any paint removal process you should determine whether the paint you are removing contains lead. This can be done by your local health department or by a professional who uses a paint analyzer to check the lead content of the paint to be appropriate to the paint to be appropriated to th

18. Before beginning any paint removal process you should determine whether the paint you are removing contains seau. This can use done by your local health department or by a professional who uses a paint analyzer to check the lead content of the paint to be removed.

19. LEAD-BASED PAINT SHOULD ONLY BE REMOVED BY A PROFESSIONAL AND SHOULD NOT BE REMOVED USING A HEAT GUN.

20. Persons removing paint should follow these guidelines:

1) Move the work piece outdoors. If this is not possible, keep the work area well ventilated. Open the windows and put an exhaust fan in one of them. Be sure the fan is moving the air from inside to outside.

2) Remove or cover any carpets, rugs, furniture, clothing, cooking utensils and air ducts.

3) Place drop cloths in the work area to catch any paint chips or peelings. Wear protective clothing such as extra work shirts, overalls and hats.

4) Work in one room at a time. Furnishings should be removed or placed in the center of the room and covered. Work areas should be sealed off from the rest of the dwelling by the provided of the provi

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#### **Specifications**

Model number	902D IV
Rated voltage range	220V-240V~
Rated Frequency	50Hz
Rated power	775W
Main unit dimensions	L180xW147xH95mm ±5mm
Operating ambient temperature	0~40°C/32°F~104°F
Display	LED
Temperature range(Hot Air Rework Station)	100°C~480°C/ 212°F~896°F
Air Delivery	Brushless fan with smooth air delivery
Air Volume	≤ 120L/min
Temperature range(Soldering Station)	200°C~480°C/ 392°F~896°F
Soldering tip to ground resistance	<2 ohms



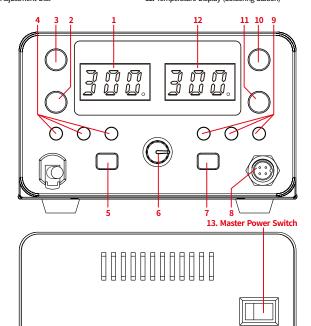
### I. APPLICATIONS

- 1. This unit is great for desoldering and soldering applications on various components, such as SOIC, CHIP, QFP, PLCC, BGA, SMD, and more. This unit is especially suited for desoldering operations on sockets in in-line packaging.
- 2. The station's applications include heat shrinking, drying, paint removal, adhesive removal, defrosting, pre-heating, soldering wire glues, and



#### II. Product Diagram

- Temperature Display (Hot Air Rework Station)
- 2. Temperature Decrease Button (Hot Air Rework Station)
- 3. Temperature Increase Button (Hot Air Rework Station) 4. Pre-set Channel Button (Hot Air Rework Station)
- 5. Power Button (Hot Air Rework Station)
- 6. Air Volume Adjustment Dial
- 7. Power Button(Soldering Station)
- 8. Receptacle (Soldering Iron)
- 9. Pre-set Channel Button (Soldering Station) 10. Temperature Increase Button (Soldering Station)
- 11. Temperature Decrease Button (Soldering Station)
- 12. Temperature Display (Soldering Station)



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#### IV. MAINTENANCE & PRECAUTIONS

### Hot Air Rework Station

- 1. Always keep the air outlet clear and free of blockages.
- 2. The installation of the hot air nozzles MUST be carried out ONLY when the hot air gun's steel pipe and the nozzle have cooled. Install the nozzle correctly. DO NOT install the nozzle with brute forces, pull the edge of the nozzle with tweezers, or over-tighten the screws.
- 3. Select the appropriate nozzle based on your operation requirement (temperatures may vary when using 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 duration possible to avoid damaging the hot air gun.
- 4. Keep a minimum distance of 2mm between the subject and the hot air gun's
- 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.

The station's hot air gun and soldering iron use high-strength stainless steel tubes. The station goes through 4 rounds of 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 the steel tube exhibits a slightly bronze color when you use a brand-new station; Rest assured for regular usage.

### Soldering Station

1. If a layer of oxidization forms on the surface of the soldering iron tip, a misconception can be created that the soldering tip cannot heat up properly to melt the solder and do the tinning. However, the actual temperatures of both the heating element and soldering tip are high. In such an instance, please do not increase the temperature value confusedly but use a metal wool ball to remove the oxidization following the steps below:

A. Set the temperature to 300°C (572°F).
B. Once the temperature stabilizes, gently rub the soldering iron tip inside the metal wool ball.
C. When the oxidization is partially removed, continue applying solder onto the tip while rubbing it until the soldering tip is completely coated with solder. If the tip is too severely oxidized beyond cleaning, replace the tip with a new one.

#### III. OPERATIONS

● 1. Before use: Install the hot air gun holder and hot air nozzle. Connect the soldering iron to the main unit and then connect the station to a power socket.

WARNING: Please replace the heating element when it is fully cooled to avoid burn injuries.

Caution: Please install or remove the hot air nozzle only after

the hot air rework station cools completely and has been DISCONNECTED from the electrical outlet.

Correct position when the heating element is correctly installed



Incorrect position when the heating element is not fully installed

CAUTION: Upon the first use of the soldering tip, set the temperature to 250°C/482°F. When the iron is just hot enough to melt solder, coat the soldering iron tip with a layer of solder (the use of rosin core solder is recommended), then set the temperature to your desired temperature.

2. Press the master power switch and the station is ready for use.

#### 3. Digital Temperature Calibration

- 3.1 Once the hot air rework station's (soldering station's) temperature is stabilized, press and hold the temperature increase and decrease buttons simultaneously for approximately 2 seconds. The temperature display will show the temperature value with 3 dots.

  3.2 Press the hot air rework station's (soldering station's) increase or decrease button to enter the measured hot air temperature value.

  3.3 Press and hold both the hot air rework station (soldering station) temperature increase and decrease buttons to confirm entry. The system automatically calibrates the temperature and exits the calibration interface.

#### 4. Sleep Mode (10-Minute Non-adjustable)

The station will automatically detects its own operation status. When the station detects no usage and movement for longer than 10 minutes, the soldering iron will enter sleep mode. This could effectively prevent the oxidization of the soldering iron tip, extend the lifespan of the soldering iron tip, save energy, and protect the environment.

#### To start-up the soldering iron from sleep mode:

A. Shake the soldering iron a few times B. Press any button on the soldering station's control panel. OR C. Turn OFF, and then turn ON the power switch

#### ■ 5. Stand-by Function (Soldering Station)

The soldering iron enters sleep mode when placed inside the soldering iron holder. At this point, the station's CPU will begin countdown. If the soldering is not picked up within approximately 30 minutes, the soldering station will automatically shut off.

- 2. DO NOT use metal files to remove the oxidization on the soldering iron tip. If the soldering iron tip deforms or rusts, replace the soldering iron tip with a new tip.
- 3. DO NOT apply excessive forces on the soldering tip when soldering. Doing so will not only damage the iron tip but also not improve the heat transfer.
- 4. When placing the soldering iron back in the holder to idle after a high-temperature operation, adjust the temperature to 250°C (482°F) or below for idling. Failure to do so, and leaving the soldering iron tip to idle on a high-temperature setting will cause the accelerated aging of the heating element and shorten the lifespan of the heating element and soldering iron tip.
- 5. After every operation, wipe off the soldering iron tip, and tin the tip with a new layer of solder to prevent oxidization.



### V. TROUBLESHOOTING

- 1. S-E This is an indication that the station's sensor module is faulty. You need to replace the heating element (the heating element and the sensor modules). Or it may be that the soldering iron has not been connected (Turn OFF the power, connect the soldering iron, then turn ON the station again.)
- 2. F-1/F-2 This is an indication that the hot air gun is in the hot air fail-safe mode. The hot air gun and the hot air gun's power circuitry require inspection
- 3. F-3-This is an indication that the input voltage is too low. To resume use, please turn up the air volume, turn OFF the power switch and then turn ON.
- 4. F-4-This is an indication that the input voltage is too high. To resume use, please turn up the air volume, turn OFF the power switch and then turn ON.
- 5. SLP This is an indication of the sleep mode being active.