## **SOLDERING STATION ESD-SAFE, TEMPERATURE-CONTROLLED & THERMOSTATIC**

# **OPERATION INSTRUCTION**

**English** 

Thank you for purchasing this product. Please read the manual carefully before operating and keep this manual for future reference. Statement: The company reserves the right to improve & upgrade products, product specifications and design are subject to change without notice. Made in China

● 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. ● Este producto no debe desecharse en la basura. De acuerdo a la directiva europea 2012/19/EU, los equipos electrónicos al final de su vida se deberàn recoger y trasladar a una planta de reciclaje autorizada. ● Dieses Produkt sollte nicht mit dem Hausmüll entsorgt werden. In Übereinstimmung mit der europäischen Richtlinie 2012/19/EU müssen elektronische Geräte am Ende ihrer Lebensdauer eingesammelt und einem autorisierten Recyclingbetrieb zugeführt werden.



### **SPECIFICATION**

Model	936	936B	937D	936A	937D+	939	939D
Main Unit Dimensions	L138*W112*H90mm±5mm						
Output Voltage	24V AC 10%						
Temperature Range	200~480°C/392°F~896°F						
Display	LED	LED	LED Nixie Tube	LED	LED Nixie Tube	LED	LED Nixie Tube
Tip to ground resistance	<2 ohms						
Operating Ambient Temperature	0°C~40°C/32°F~104°F						



### I. APPLICATIONS

Suitable for soldering and desoldering operations on a broad range of surface-mount, and through-hole components such as SOP, DIP, SOIC and more.



### II. OPERATION

- 1. Have the soldering iron handle well connected and place the handle into its holder.
- 2. Connect the power cord to an electrical socket, and turn ON the power switch. The soldering station's heating element will begin heating as per normal, and its operation indicator will turn ON. The operation indicator stays ON when the soldering iron is heating up, blinks rapidly when the temperature stabilizes, and turns OFF when the soldering iron is cooling. Once the Indicator is blinking rapidly, begin operating.

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

3. When the operation is complete, use a wet sponge or metal wool ball to clean the soldering iron tip. Tin the tip with a new layer of solder, then put the soldering iron back to its holder. If the station is not in use for an extended period, turn OFF the power switch and DISCONNECT the power plug.

### Temperature Calibration (For 937D/937D+/939D)

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

- 1. Connect the soldering iron, then, adjust the temperature to the lowest temperature setting.
- Turn ON the power switch, and use a small screw driver to press and hold the switch inside the hole (close to the CAL sign) for approximately 2 seconds. The display will show the setting temperature while showing 3 digit-dots when the soldering iron is heating up.
- 3. Wait approximately 3 to 5 minutes, then measure the soldering iron tip's temperature. Compare the measured temperature against 300°C/572°F, if the value is greater or less than 300°C/572°F, adjust the temperature adjustment knob to enter the measured temperature value. Wait another 3 to 5 minutes, measure the soldering iron tip's temperature again. If minor temperature discrepancies remain, re-enter the measured temperature value, then, press the button inside the hole (close to the CAL sign) again to confirm entry and save the data.



# III. MAINTENANCE & PRECAUTIONS

- If a layer of oxidization forms on the surface of the soldering iron tip, a misconception can be created that the tip cannot heat up properly to melt the solder and do the tinning. However, the actual temperatures of both the heating element and 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 soldering iron tip while rubbing it until the tip is completely coated with solder. If the tip is too severely oxidized beyond cleaning, replace it with a new one.
- 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 force on the soldering iron tip when soldering. Doing this will NOT I-MPROVE the heat transfer but damage the soldering iron tip instead.
- 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.
- After every operation, clean the soldering iron tip, then tin the tip with a new layer of solder to prevent oxidization.



### IV. TROUBLESHOOTING

- "S-E" This is an indication that the soldering iron's sensor module is faulty. You need to replace the heating element (the heating element and the sensor modules). Or, the soldering iron is not connected to the station.
- 2. The heating indicator stays ON, but the soldering iron is not heating up This is an indication that the heating element is faulty. To resolve this, you need to replace the heating element.
- 3. When replacing the heating element, take note of the original connecting order and colors of the wires which MUST NOT be connected incorrectly.