ESD-Safe Soldering Station Temperature - Adjustable

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

# **OPERATION INSTRUCTION**

English



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

Specifications		
Dimensions	L200*W90*H156mm ±5mm	
Operating ambient temperature	0°C~40°C/32°F~104°F	
Temperature range	200°C~480°C/392°F~896°F	
Display	LED Nixie	
Soldering tip to ground resistance	<2 ohms	

## **I. APPLICATIONS**

This unit is suitable for desoldering and soldering various surface-mount components and through-hole components, such as SOP, DIP, SOIC, and others.

# II. PRODUCT DIAGRAM



1. Operating Indicator Light

2. Sleep Mode Indicator

- 3. Access Buttons (3 Preset Memory Channels)
- 4. Temperature Adjustment Knob
- 5. Receptacle (Soldering Iron)

6. Master Power Switch

7. Display (Set Temperature)

8. Indicator (3 Preset Memory Channels)

9. Display (Actual Temperature)



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# **V. TROUBLESHOOTING**

- 1. The display shows "S-E" This is an indication that the sensor module of the soldering station is faulty. In such an instance, you need to replace the respective heating element (the heating element and the sensor modules). Or, the handle is not connected (Turn OFF the station, connect the handle and turn ON the station).
- 2. When replacing the heating element, take note of the original connecting order and colors of the wires which MUST NOT be connected incorrectly.

## **III. OPERATION**

- 1. Connect the soldering iron to the soldering station, and place the soldering iron to the soldering iron stand.
- 2. Connect the soldering station to an electrical outlet. Turn on the master switch at the rear of the station, and the soldering station will begin heating. The station's operating indicator light (the dot located at the bottom-right corner of the display) will light up. The indicator will be ON constantly when the soldering iron is heating up, blink rapidly and regularly when the iron's temperature stabilizes, OFF when the soldering iron is cooling off. When the station's temperature is stabilized (with the operating indicator light blinking rapidly and regularly), begin your operation.

Program real-time tracking & temperature compensation indicator

CAUTION: Before increasing the temperature to your desired value when using a new soldering iron tip, set the temperature to 250°C/482°F. When the iron's temperature is just hot enough to melt solder, tin the soldering iron tip with a layer of solder (the use of rosin-core solder is recommended).

3. When the operation is complete, use a dampened sponge or metal wool ball to clean the soldering iron tip. Re-tin the soldering iron tip with a new layer of solder, then return the soldering iron back to the stand. Turn OFF the soldering station. If the station is not in use for an extended period, please DISCONNECT the power plug.

• Turn ON/OFF the Sleep Mode (Soldering Station).

- 1. Press and hold the temperature adjustment knob for approximately 2 seconds; the display will show "SLP ON" to indicate that the sleep mode is ON. The sleep mode duration is approximately 10 minutes.
- 2. Turn the temperature adjustment knob to turn ON or turn OFF the sleep mode. Stop operating for approximately 5 seconds. The system will then exit the setting interface and the setting is now complete.



To re-start the station from sleep mode:

a. shake the iron a few times, b. press any button, or C. turn OFF the power, then turn ON the power

## • Buzzer

- 1. Press and hold the Temperature Adjustment Knob for approximately 2 seconds, the value "SLP XX" will show on display. Then, press the Temperature Adjustment Knob one more time, the display will show value "bL OFF" to indicate that the buzzer is turned OFF.
- 2. Turn the Temperature Adjustment Knob to turn the buzzer ON or OFF. Once done setting, stop input for approximately 5 seconds to exit the setting interface. Then, the buzzer configuration is complete.



#### Digital Temperature Calibration

Temperature discrepancies may occur due to the change in the operating environment and the replacement of the heating element, soldering tip, or other parts. This function can help improve work efficiency and extend the lifespan of the soldering iron.

1. Press and hold the Temperature Adjustment Knob for approximately 2 seconds. The value "SLP XX" will show on display. Then, press the Temperature Adjustment Knob two more times to enter the Temperature Calibration interface. Upon entering the Temperature Calibration Interface, the value "CAL 300" will show on display.



2. Turn the Temperature Adjustment Knob to enter the soldering iron tip's actual temperature measured, and press

the Temperature Adjustment Knob one time to confirm the input. The system will automatically save the setting and exit the Temperature Calibration interface. Repeat the above steps to calibrate the temperature again if minor temperature discrepancies remains.

#### Fahrenheit/Celsius Display Modes

This function complies with user preferences in different regions.

Press the Temperature Adjustment Button to select either the Fahrenheit or the Celsius temperature display mode.



#### Preset Channels (3 Available Channels)

Press the CH1 button, and the value "CH1" will show on display. Turn the Temperature Adjustment Knob to set the desired temperature for this channel, and the system will automatically store the set temperature value in Channel 1. Use the above method to set your desired preset temperature for CH2 and Ch3.

# **IV. MAINTENANCE & PRECAUTIONS**

- 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. But 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 has stabilized, 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 solder completely adheres to soldering iron tip. If the tip is too severely oxidized beyond cleaning, replace the tip 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 it with a new tip.
- 3. DO NOT apply excessive force 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 its stand 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, always clean the soldering iron tip, then coat it with a new layer of solder to prevent its oxidization.