ESD-Safe Soldering Station
Temperature - Adjustable

OPERATION INSTRUCTION

English

Made in China

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

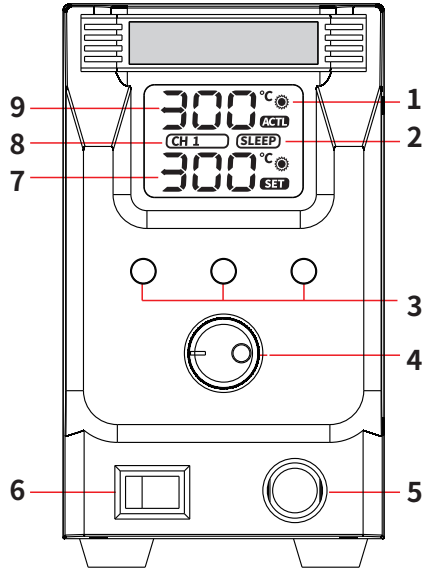
Specifications

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
Soldering tip to ground resistance	<2 ohms

I. APPLICATIONS

The station is suitable for desoldering and soldering operations on large-sized components, thick wires and thick component pins. It is also suitable for application on components with fast heat dissipation properties.

II. PRODUCT DIAGRAM



1. Operation Indicator

2. Sleep Mode Indicator

3. Preset Memory Buttons (3 Channels)

4. Temperature Adjustment Knob

5. Receptacle (Soldering Iron)

6. Power Switch

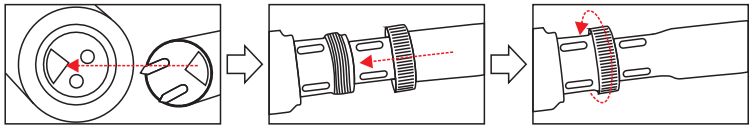
7. Set Temperature

8. Preset Memory Channel Indicator

9. Actual Temperature

III. OPERATION

1. Reference: Heating Element Installation.



Note: After replacing the heating element, please set the temperature to 300 (572) and calibrate the temperature.

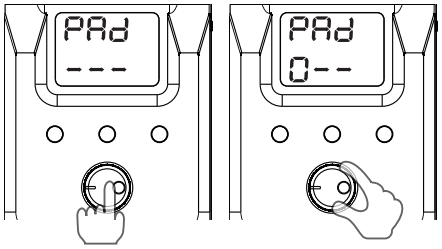
2. Connect the soldering iron to the soldering station and place the soldering iron to the soldering iron holder.

3. Connect the soldering station to an electrical outlet. Turn on the master power switch and the soldering station will begin heating. The station's operating indicator light 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.

CAUTION:
Upon the first use of the 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) and then increase the temperature to your desired temperature.

4. 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.

5. Password Setting



When the password function is activated, the correct password entry is required to adjust the temperature or configure other functions.

5.1 Press the temperature adjustment knob or preset memory button and the display will show value “PAd ---”.

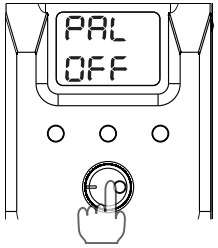
5.2 Turn the temperature adjustment knob to enter the first digit, press the temperature adjustment knob again to move the cursor to the next digit, then, enter the value by turning the knob. You can enter the rest of the password following this procedure. Once done setting, press the temperature adjustment knob to confirm the entry. The factory default password is 000.

Note: If no operation is detected 5 minutes after the password is entered, the entry will expire. You should enter the correct password again to set the parameters.

6. Activate/Disable Password Function

6.1 Press and hold the temperature adjustment knob for approximately 2 seconds and press the temperature adjustment knob 4 times. The display will show “PAL OFF”, indicating that the password function is turned OFF.

6.2 Turn the temperature adjustment knob to turn ON or OFF the password function. Once done setting, press the temperature adjustment knob twice to exit the setting interface. -Setting complete.



7. Password Change

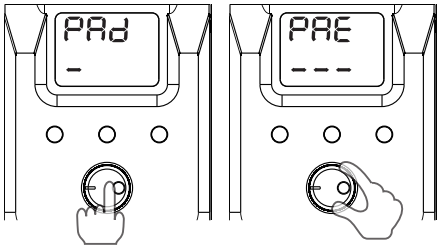
Note: After entering the new password, please note down the password before pressing the temperature adjustment knob to confirm. If the changed password is forgotten, please enter the administrator password “880” to enter the menu interface and then change the password.

7.1 Press and hold the temperature adjustment knob for approximately 2 seconds and press the knob 5 times. The display will show “Pad -”.

7.2 Turn the temperature adjustment knob and the display will show “PAE ---”.

7.3 Please refer to the “Password Setting” section to enter the new password. Once done setting, press the temperature adjustment knob once to confirm the entry.

Press the knob once again to exit the setting interface. -Setting complete.

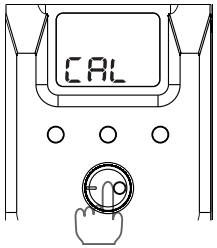


8. Digital Temperature Calibration

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.

8.1. Set the temperature that requires calibration. When the temperature stabilizes, press and hold the temperature adjustment knob for approximately 2 seconds and then press the knob for 3 times. The display will show value “CAL”.

8.2. Turn the temperature adjustment knob to enter the measured temperature. Once done entering, press the temperature adjustment knob to confirm the entry, and the system will calibrate the temperature and save the data. Once done setting press the temperature adjustment knob for 3 times to exit the setting interface. -Setting complete.



9. Sleep Mode

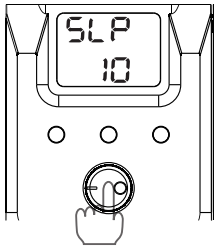
When the station’s sleep mode is turned ON, the system will automatically detect the station’s operation status. If the station is not in use and no motion is detected for the timespan of the set sleep mode timer, the soldering iron will enter the sleep mode. This effectively prevents the soldering iron tip from oxidization, extends the soldering iron tip’s lifespan and protects the environment.

9.1 Press and hold the Temperature Adjustment Knob for approximately 2 seconds. The display will show the value "SLP 10", indicating the Sleep Mode timer is set to 10 minutes.

9.2 Turn the temperature adjustment knob to change the sleep mode timer. Once done setting, press the temperature adjustment knob for consecutive 6 times to exit the setting interface.

-Setting complete.

The sleep mode timer can be set to 5, 10 and 30 minutes. Select "0" to turn OFF the sleep mode.

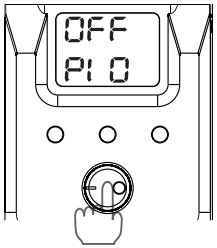


To re-start the station from sleep mode: a. shake the iron a few times, b. press any button, or C. turn OFF the master power switch, and then turn ON.

10. Stand-by Function

When the soldering station enters the sleep mode, its CPU will start counting down. If the station is not woken within its set stand-by timespan, the soldering station will cut its power to the heating element. To restart the soldering station, please turn OFF the power switch and then turn ON.

Note: The stand-by function is ONLY activated when the sleep mode is turned ON.



10.1 Press and hold the temperature adjustment knob for approximately 2 seconds and press the knob once again. The display will show value “OFF P10”, indicating the stand-by timer is set to 10 minutes.

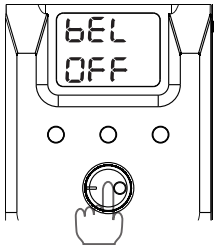
10.2 Turn the temperature adjustment knob to set the stand-by timer from 0 to 99 minutes. Set the value “0” to turn OFF the stand-by function.

10.3 Once done setting, press the temperature adjustment knob for 5 times to exit the setting interface. -Setting complete.

11. Buzzer

11.1 Press and hold the temperature adjustment knob for approximately 2 seconds and press the knob twice. The display will show value “bEL OFF ”, indicating the buzzer is turned OFF.

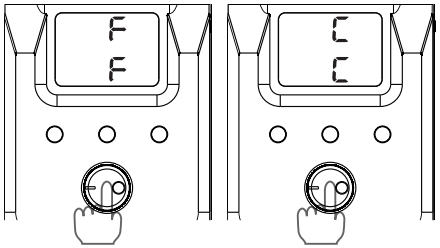
11.2 Turn the temperature adjustment knob to turn ON or OFF the buzzer. Once done setting, press the temperature adjustment knob for 4 times to exit the setting interface. -Setting complete.



12. Fahrenheit/Celsius Display Modes

This function complies with user preferences in different regions.

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



13. 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 save the set temperature value in Channel 1. Use the above method to set your desired preset temperature for CH2 and Ch3.

IV. MAINTENANCE & PRECAUTIONS

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. But the actual temperatures of both the heating element and soldering tip are high. The soldering iron tip may exhibit black color when there's a layer of oxidation on the tip, or when the tip is oxidized. In such an instance, please do not increase the temperature value further 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.

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 disconnected (Turn OFF the station, connect the handle and turn ON the station).

2. When replacing the heating element, take note of the original order and colors of the wires which MUST NOT be connected incorrectly.