

Automatic Solder-Feeding Soldering Station
ESD Safe & Thermostatic

OPERATION INSTRUCTION

English

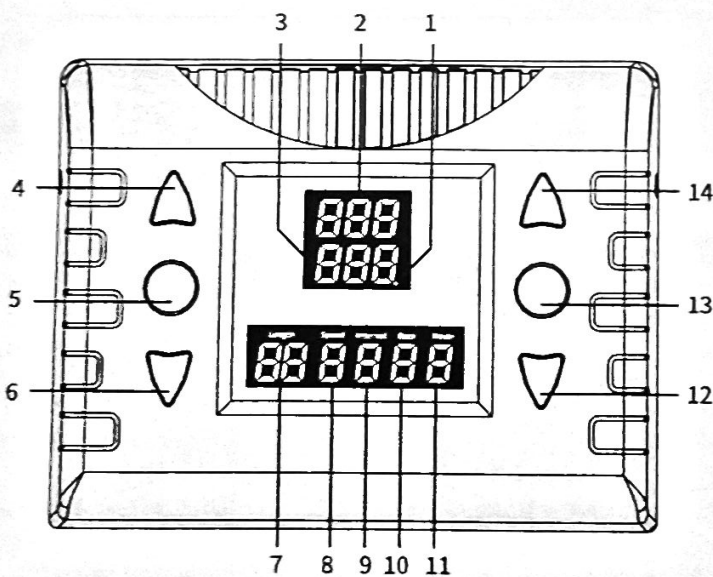
Thank you for purchasing this product. Please read the manual carefully before operating and keep this manual for future reference.

I. APPLICATIONS

Suitable for soldering wire, connectors, and other specialized soldering applications.

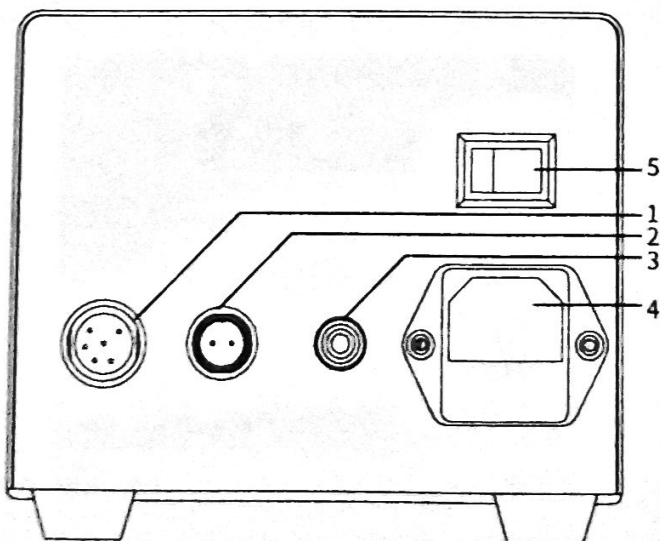
II. REFERENCE DIAGRAMS

Reference: Control Panel



1. Operation Indicator
2. Set Temperature
3. Display Temperature
4. Temperature Increase Button
5. Function Button (Soldering Station)
6. Temperature Decrease Button
7. Output Length (Solder Wire Feed)
8. Speed (Solder Wire Feed)
9. Feeding Interval
(between every solder feed)
10. Return Length (Solder Wire Feed)
11. Mode (Consecutive Solder-Feeding Counts)
12. Data DOWN Button (Stepper Motor)
13. Function Button (Stepper Motor)
14. Data UP Button (Stepper Motor)

Reference: Rear Panel



1. Receptacle (Soldering Iron)
2. Receptacle (Pedal Switch)
3. Receptacle (ESD-Safe Grounding Terminal)
4. Receptacle (Power Cord)
5. Power Switch

III. OPERATIONS

1. Set the station appropriately. Please refer to "Reference: Solder Wire Feeding & Spool Installation" to install the relevant components & parts, and connect the soldering iron to the station.
2. Adjust the angle of the soldering iron, and place the residue tray underneath the soldering iron tip. Place the pedal switch correctly.
3. Connect the station's power cord to an electrical outlet, and turn ON the power switch.
4. 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 the solder, coat the soldering iron tip with a layer of solder (the use of solder flux is recommended), then set the temperature to your desired temperature. Configure the station's solder-feeding settings based on the required output solder length, feeding speed, interval, solder return length, and feeding mode.
5. Once the temperature is stabilized, press the pedal switch to begin feeding the solder wire, and begin soldering.
6. When the operation is complete, use a damp sponge or metallic wool ball to clean the soldering iron tip. Tin the soldering iron tip with a new layer of solder, and turn OFF the power switch. If the station is not used for an extended period, DISCONNECT the power cord.

CAUTION: *If the soldering iron handle comes with a power switch, the soldering iron DOES NOT have to be secured on the bracket. You can hold the soldering iron with your hand and do hand-soldering.*

°C/°F Temperature Display Setting (FOR AC 110V-127V model ONLY)

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

1. Turn ON the power switch, press, and hold the soldering station function button for approximately 3 seconds. The display blinks and shows the "C" or "F".
2. Press the temperature decrease or increase button to select either the Fahrenheit or Celsius display mode.
3. Once done setting, press the soldering station function button to confirm the setting. The system automatically saves the data and exit the setting interface.

Temperature Calibration

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 soldering iron.

1. Turn ON the power switch, and wait for the temperature to stabilize. Once stabilized, press and hold the temperature increase and decrease buttons for approximately 3 seconds, and the display shows "CAL".
2. Press the temperature increase or decrease button to enter the measured temperature value. Once done entering, press both the temperature increase and decrease button to confirm entry. The system exits the setting interface and saves the data – setting complete. If minor temperature discrepancies remain, repeat the calibration procedure.

Parameters (Solder Wire Feeding)

Adjust the solder wire feeding parameters based on your needs to improve work efficiency. When only one of the parameters requires adjustment, confirm and exit the setting menu by pressing the soldering station function button once done setting.

Press and hold the stepper motor function button for approximately 3 seconds.

Configuration: Output Solder Length (Solder Wire Feeding)

Press the Data UP or DOWN button (Stepper Motor) to set the required output length. The length can be set from 1 to 99mm.

Press the motor function button one time

Configuration: Speed (Solder Wire Feeding)

Press the data UP or DOWN button to set the feeding speed. The speed can be set from 1 to 9mm per second.

Press the motor function button one time

Configuration: Interval (Solder Wire Feeding)

Press the data UP or DOWN button to set the interval timing for solder feeding. The interval can be set from 1 to 9 seconds.

Press the motor function button one time

Configuration: Solder Return Length (Solder Wire Feeding)

Press the data UP or DOWN button to set the return length. The solder return length can be set from 0 to 9mm. (Note: the solder return length should be no more than the output solder length)

Press the motor function button one time

Configuration: Modes

Press the data UP or DOWN button to select the mode. The mode ranges from 0 to 9. When the mode is set to 0, the output length is controlled manually, the interval, and return length parameters DO NOT apply. In mode 1, when stepping once on the motor pedal switch, the soldering station will feed the solder one time; in mode 2, when stepping on the motor pedal switch once, the soldering station will feed the solder two times. The same logic applies to modes 1 to 9.

Once done setting, press the soldering station function button to save the setting and return to the setting interface.

Reset the station to the default parameters

When the station is turned OFF, press the motor function button and hold, and turn ON the power switch.

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. 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 while rubbing until the solder completely adheres to soldering tip. If the soldering iron tip is too severely oxidized beyond cleaning, replace the iron 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 the soldering iron tip with a new tip.
3. DO NOT apply excessive force on the soldering iron tip when soldering. This will not improve the heat transfer and 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.
5. After every operation, clean the soldering iron tip, then tin the tip with a new layer of solder to prevent oxidization.

V. TROUBLESHOOTING

1. "S-E" - This is an indication that the soldering 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.
2. Jammed Solder Wire - Straighten the jammed solder wire and solder wire feeding tube. Re-adjust the tube and solder wire following steps 6 and 7 in the "Reference: Solder Wire Feeding & Spool Installation"

SPECIFICATIONS

Temperature range	200~480°C/392~896°F
Motor (Solder Feeder)	Stepper motor
Temperature Control	PID Temperature Control Program
Compatible Solder Wire Diameter	0.5~1.2mm
Main Unit Dimensions	L200xW170xH273mm ±5mm
Operating ambient temperature	0~40°C / 32~104°F