



2-in-1 Soldering Station ESD Safe & 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
982D II



Select the corresponding logo
according to the nameplate.

Made in China

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- 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 gettato nella spazzatura. In conformità alla direttiva europea 2012/19/UE, gli apparecchi elettronici giunti a fine vita devono essere raccolti e restituiti a un impianto di riciclaggio autorizzato.
- Este producto no debe ser arrojado a la basura. 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.

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

IMPORTANT SAFETY GUIDELINES

Read instruction manual before using.

- To provide continued protection against risk of electric shock, connect to properly grounded outlets only.
- Do not immerse in water.
- Hot Surface. Avoid Contact.
- Shock Hazard. To provide continued protection against electric shock disconnect from the power supply when not in use.
- Heat gun, soldering iron, desoldering iron must be placed on its stand when not in use.
- HOUSEHOLD AND INDOOR 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.
- The soldering iron and desoldering iron is only to be used with the power supply unit provided 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 hazard.
- 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.
- A fire may result 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.
- Hidden areas such as behind walls, ceilings, floors, soffit boards 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.
- 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 irreversible brain and nervous system damage; young and unborn children are particularly vulnerable.
- 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 removed.
- LEAD-BASED PAINT SHOULD ONLY BE REMOVED BY A PROFESSIONAL AND SHOULD NOT BE REMOVED USING A HEAT GUN.
- Persons removing paint should follow these guidelines:
 - 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.
 - Remove or cover any carpets, rugs, furniture, clothing, cooking utensils and air ducts.
 - 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.
 - 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 sealing doorways with drop cloths.
 - Children, pregnant or potentially pregnant women and nursing mothers should not be present in the work area until the work is done and all clean up is complete.
 - Wear a dust respirator mask or a dual filter (dust and fume) respirator mask which has been approved by the Occupational Safety and Health Administration (OSHA), the National Institute of Safety and Health (NIOSH), or the United States Bureau of Mines. These masks and replaceable filters are readily available at major hardware stores. Be sure the mask fits. Beards and facial hair may keep masks from sealing properly. Change filters often. DISPOSABLE PAPER MASKS ARE NOT ADEQUATE.
 - Use caution when operating the heat gun. Keep the heat gun moving as excessive heat will generate fumes which can be inhaled by the operator.
 - Keep food and drink out of the work area. Wash hands, arms and face and rinse mouth before eating or drinking. Do not smoke or chew gum or tobacco in the work area.
 - Clean up all removed paint and dust by wet mopping the floors. Use a wet cloth to clean all walls, sills and any other surface where paint or dust is clinging. DO NOT SWEEP, DRY DUST OR VACUUM. Use a high phosphate detergent or trisodium phosphate (TSP) to wash and mop areas.
 - At the end of each work session put the paint chips and debris in a double plastic bag, close it with tape or twist ties and dispose of properly.
 - Remove protective clothing and work shoes in the work area to avoid carrying dust into the rest of the dwelling. Wash work clothes separately. Wipe shoes off with a wet rag that is then washed with the work clothes. Wash hair and body thoroughly with soap and water.
- To ensure personal safety, please turn off the power switch after work is completed; When not in use for an extended period, please unplug the power cord!!!
- Do not install nozzle when the hot air gun is turned on, the heat pipe and the nozzle must be cooling. Then installed the other nozzle.
- The soldering iron should only be used for soldering. Do not hit the soldering iron against the work surface to remove flux residues (Can be cleaned by the cleaning device of the product), as doing so may seriously damage the soldering iron.
- Soldering produces fumes, ensure there is adequate ventilation.
- After used, remember that cooling the unit, the handle should be placed on the handle holder.
- Longer detachable power-supply cords are available and may be used if care is exercised in their use.
- If a long detachable power-supply cord is used: 1) The marked electrical rating of the detachable power-supply cord or extension cord should be at least as great as the electrical rating of the appliance; 2) The extension cord should be a grounding type 3-wire cord; 3) The longer cord should be arranged so that it will not drape over the countertop or tabletop where it can be tripped over, snagged, or pulled on unintentionally (especially by children).
- A short power-supply cord(or short detachable power-supply cord)is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord.
- If the bottom of the brass wool tip cleaner contains solid-state rosin, the below warning applies: This product contains rosin (colophony), and the substance may cause an allergic skin reaction. When using the tip cleaner (rosin-inside), DO NOT inhale the fume generated or consume the solid-state rosin, DO NOT allow your skin and eyes to get in direct contact with the rosin.

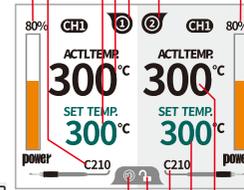
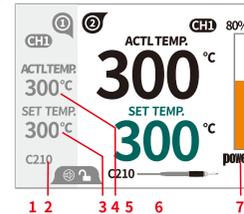
Strictly follow the basic safety guidelines and precautions when using the product.
The guidelines include:
CAUTION!!! WARNING!!!

Specifications

Model number	982D II		
Rated power	240W (245 Handpiece + 245 Handpiece)	160W (245 Handpiece + 210 Handpiece)	80W (210 Handpiece + 210 Handpiece)
Main unit dimensions	L180*W244*H114mm ±5mm		
Operating ambient temperature	0~40°C/32°F~104°F		
Temperature range	90°C~450°C/194°F~842°F		
Display	LCD		
Tip to ground resistance	<2 Ohms		

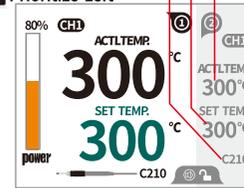
I. PRODUCT DIAGRAM

Display mode: Prioritize-Right



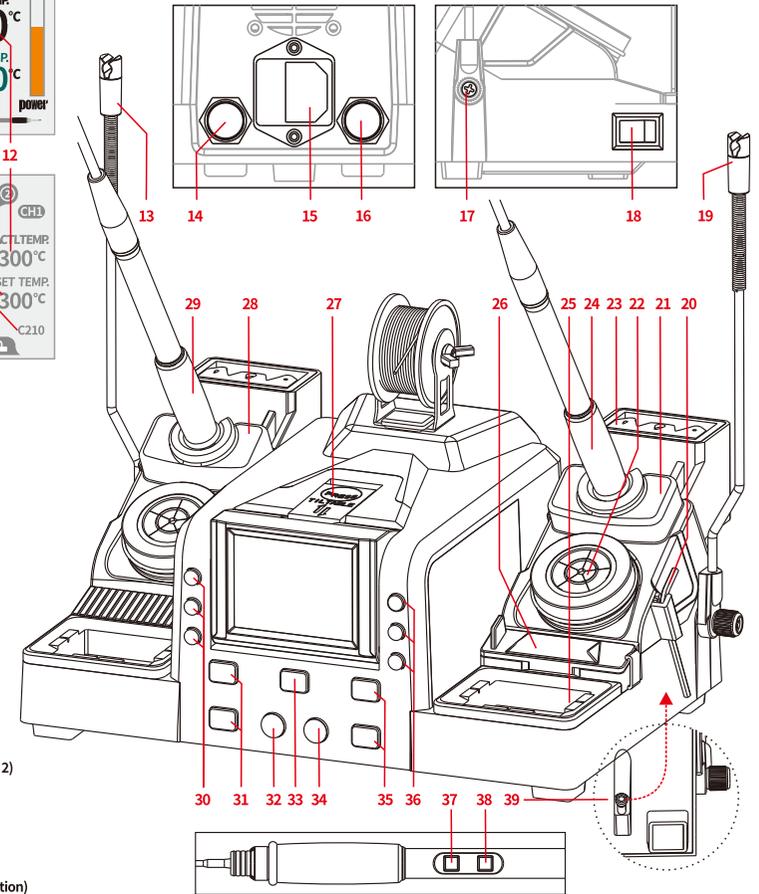
50:50

Prioritize-Left



Adaptive:

- Simulated Power (Soldering Iron ①)
- Heating Element Indicator (Soldering Iron ①)
- Set Temperature (Soldering Iron ①)
- Actual Temperature (Soldering Iron ①)
- Soldering Iron ① Indicator
- Soldering Iron ② Indicator
- Simulated Power (Soldering Iron ②)
- Buzzer Indicator
- Function Lock Indicator
- Heating Element Indicator (Soldering Iron ②)
- Set Temperature (Soldering Iron ②)
- Actual Temperature (Soldering Iron ②)
- Cable Guide (Soldering Iron ①)
- Receptacle (Soldering Iron ②)
- Receptacle (Power Cord)
- Receptacle (Soldering Iron ①)
- Locking Screw for Cable Guide
- Power Switch
- Cable Guide (Soldering Iron ②)
- Allen Key
- Soldering Iron Holder (Soldering Iron ②)
- Tip Cleaner
- Groove (For Heating Element Change)
- Soldering Iron ②
- Residual Tray
- Groove (For Automatic Temperature Calibration)
- Display Tilt Angle Adjuster (Press and hold the adjuster, move the display back or forth to adjust the tilt angle)
- Soldering Iron Holder (Soldering Iron ①)
- Soldering Iron ①



- Pre-set Channel Buttons (Soldering Iron 1)
- Temperature Increase /Decrease Button (Soldering Iron 1)
- Auto Temp Calibration Button (Soldering Iron 1)
- Function Button
- Auto Temp Calibration Button (Soldering Iron 2)
- Temperature Increase /Decrease Button (Soldering Iron 2)
- Pre-set Channel Buttons (Soldering Iron 2)
- Temperature Decrease Button (Soldering Iron)
- Temperature Increase Button (Soldering Iron)
- Locking Screw to Residual Tray (Located at the bottom of the station)

II. APPLICATIONS

This unit is suitable for de-soldering and soldering operations on various surface-mount components and through-hole components, such as SOP, DIP, SOIC, etc.

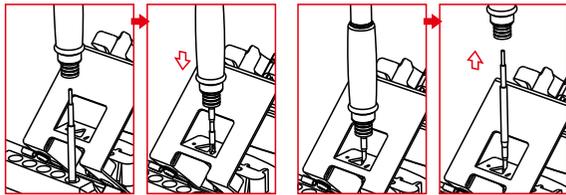
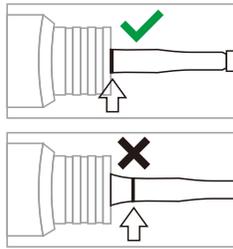
III. OPERATION

1. Changing Heating Element

WARNING: Please replace the hot air pencil/soldering iron heating element when the handpiece is completely cooled to avoid burn injuries.

Installing and Changing Heating Element

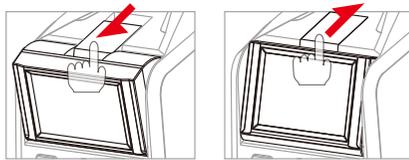
Attach the heating element to the soldering iron and place the soldering iron tip into the hole. Once in place, apply pressure to secure the heating element (1-1). Slot the soldering iron tip into the V-shaped groove and lift the soldering iron to separate the heating element (1-2).



CAUTION: Upon the first use of the soldering iron, 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. Adjust Display Tilt

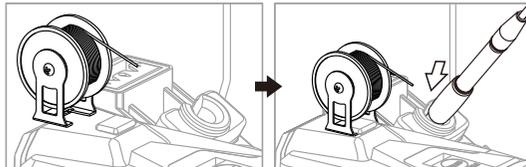
You can adjust to a better viewing angle based on different positions.



3. Before Use

If the package comes with the solder holder, slot the solder holder onto the top of the unit and secure the holder in place.

Place the soldering iron into the soldering iron holder and connect the soldering iron. Connect the power cord to a power socket and power on the soldering station.



4. Digital Temperature Calibration

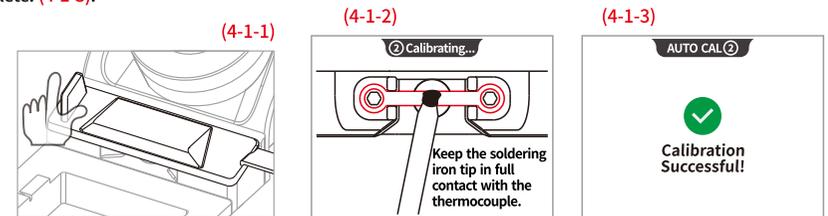
Temperature discrepancies may occur due to the change in the environment's temperature or due to the replacement of the heating element and other components. You can correct the discrepancies with this function. The temperature calibration can help improve work efficiency and extend the lifespan of the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

4-1 Temperature Calibration (Automatic) (4-1):

4-1-1 Set the temperature that requires calibration 250°C~450°C(482°F~842°F). When the temperature has stabilized, lift the calibration groove cover. (4-1-1-2).

4-1-2 Place the soldering iron tip (tinned) on the sensor and allow the solder to make full contact with the sensor while keeping the soldering iron tip still for 3-5 seconds. (4-1-2).

4-1-3 Press and hold the Auto Temp Calibration Button for approximately 2 seconds and the CPU will automatically calibrate the temperature. When the display shows "Calibration Success" and exits the temperature calibration interface, remove the soldering iron tip, and cover the lid. - Automatic temperature calibration complete. (4-1-3).



Note: a. If you need to exit calibration in the middle of the procedure, please press the function knob.
b. If the temperature that requires calibration is below 250°C(482°F), the temperature cannot be calibrated automatically. Please calibrate the temperature manually as per "4-2" section in this manual.

Sensor change: Remove the locking screw to remove the original sensor. Then, install the new sensor. NOTE: ensure the polarity of the sensor is correct when installing.



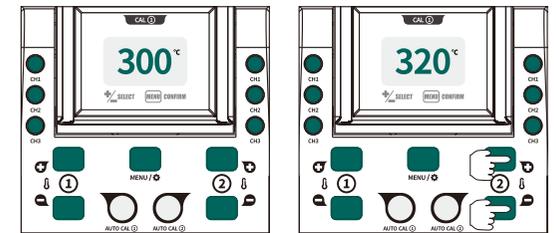
4-2 Temperature Calibration (Manual)

To calibrate the Soldering Iron ①, press the Soldering Iron ①'s temperature increase and decrease button to enter the calibration interface; To calibrate the Soldering Iron ②, press the Soldering Iron ②'s temperature increase and decrease button to enter the calibration interface.

4-2-1 When the soldering station has stabilized, press and hold the temperature increase and decrease button for approximately 2 seconds (4-2-1).

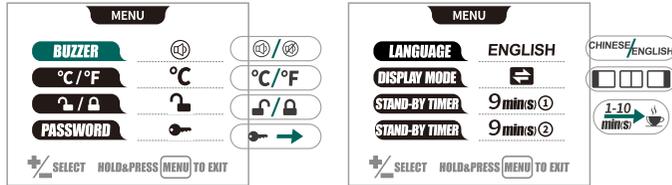
4-2-2 Press the temperature increase or decrease button to enter the measured temperature (4-2-2).

4-2-3 Once done entering, press the function knob to confirm the entry. The system will automatically calibrate the temperature and exit the calibration interface.



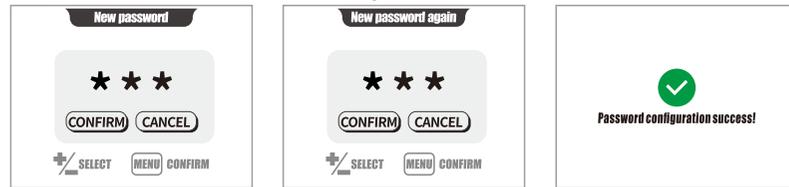
5. Menu

Press and hold the function button for approximately 2 seconds to enter the menu. Eight options are available for configuration. Press the temperature increase or decrease button to move the cursor. Press the function knob to select the option, and the option flashes once selected. Then, press the temperature increase or decrease button to configure (or enter) the option. Once done configuring, press the function button to return to the main menu. Press and hold the function button to exit the menu interface and the system will automatically save the changes.



6. Menu Password Configuration

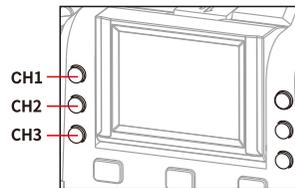
The default password is 000. No password is required when entering the menu for the first time. Press the temperature increase or decrease button to move the cursor (options) and press the function button to confirm the selection. Once done selecting, press the temperature increase or decrease button to configure the number (option). The new password needs to be entered for 2 times for double-confirmation. Select the "Cancel" icon to return to the main menu, and the password changes will not be saved. Once the new password has been set successfully, the system will automatically save the change and return to the menu interface.



7. Memory Channels CH1/CH2/CH3

You can preset temperature configurations in each memory channel for different requirements. When soldering, you can select the suitable preset temperature configurations quickly in CH1/CH2/CH3 according to different soldering applications.

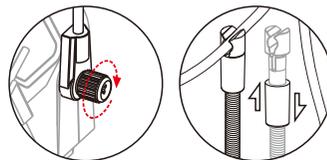
Select the desired preset channel by pressing the corresponding preset channel buttons. Once selected, press the temperature increase or decrease button to set the desired temperature. Once done setting, waiting for approximately 4 seconds and the preset temperature configuration is complete.



8. Cable Guide

Secure the cable guide and pull down the cable tie. Insert the cable to the slot of the cable guide and pull up the cable tie. The cable will be securely fastened.

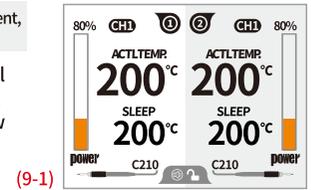
(Note: We recommend installing the cable guide leaning backwards.)



9. Sleep Mode

This function extends the lifespan of the heating element, conserves energy, and protects the environment.

When the soldering iron is placed back into the holder, the soldering iron will enter sleep mode (9-1). When the set temperature is 200°C (392°F) or higher, the temperature will cool to 200°C/392°F; when the set temperature is below 200°C/392°F, the temperature will remain unchanged. Pick up the soldering iron to wake the station.



10. Automatic Stand-by

Preset the timer (1-10 minutes). After reaching the preset time during sleep mode, the soldering station will enter standby mode. Pick up the soldering iron to restart the soldering station (10-1).



IV. MAINTENANCE AND PRECAUTIONS

1. 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 the tip are high. 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:

- Set the temperature to 300°C (572°F).
- Once the temperature stabilizes, gently rub the soldering iron tip inside the metal wool ball.
- 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.

- 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.
- 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.
- Clean the soldering iron tip after use and tin the tip with a new layer of solder to prevent oxidization.
- Clean the Residue Tray (Rear)

Please clean the residue tray(Rear) when the station is disconnected, fully cooled and the residue tray (Front) is empty.

 - Remove the solder dispenser, cleaning sponge, soldering iron and heating element inside the groove (For Heating Element Change)
 - Place the station sideways and unscrew the locking screw to the residue tray (Rear). Remove the tray to clean the residue inside the tray.
 - Install the residue tray (Rear) and tighten the locking screw.
- Change the sensor module: Unscrew the locking screw to remove the original sensor module. Please note to connect positive and negative ends correctly before installing the new sensor module and tightening the locking screw.

V. TROUBLESHOOTING

"Handpiece Disconnected" - 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, the soldering iron/heating element is not connected.