SHENZHEN ATTEN TECHNOLOGY CO., LTD.

- Soldering iron ● Soldering station ● Hot air rework station
- Multi-function maintenance system
- Regulated DC power supply ● Switching DC power supply
- Programmable power supply

ATTEN



ST-965 User Manual

The soldering iron needs to be tested before it leaves the factory,so the soldering tip may cover a small amount of tin, and thecasing will be slightly yellowing, which is a normal phenomenon.

SHENZHEN ATTEN TECHNOLOGY CO., LTD.
Add: Floor 8,Building 2,Senyang High-tech Park,7 West Road
High-tech Park, Guangming New district, Shenzhen 518132, China
Tel：+86-755-2697 6387
Fax：+86-755-8602 1337
Web：www.atten.com.cn(CN)
www.atten.com(EN)
Email：sales@atten.com.cn

Engineer's partner

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MADE IN CHINA

CBN031426(C)

SHENZHEN ATTEN TECHNOLOGY CO., LTD

Maintenance

(diagram 1-25) Display S-E is a sensor fault, (diagram 1-26) diaplay H-E is a heater core fault.



diagram 1-25

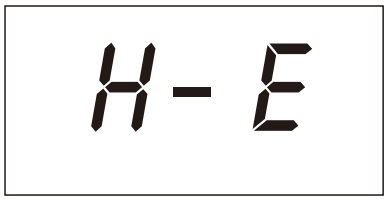


diagram 1-26

Product warranty

- This product is guaranteed for two years from the date of purchase(excluding consumables such as the heating core). If any quality problem is found within the guarantee period, we will response for the maintenance free of charge.
- For those product beyond the warranty period, we provide life-long maintenance services.
- For those product damaged due to users' improper application and unauthorized changes to the product parts, our company only provides limited warranty service.
- In case of a product fault, please send the faulty product to the designated maintenance shop for maintenance, and those service center and personnel unauthorized by the factory are prohibited from carrying out any maintenance on the product.

After-sales contact

After-sales service department Tel: (+86) 755-26976387

Product warranty card	Product Certification
This product is guaranteed for two years from the date of purchase. If any quality problem is found within the guarantee period, we will response for the maintenance free of charge on presentation of this card and the receipt. We will repair and return the repaired equipment to the customer within 2 working days of the receipt date. Note: This warranty card must be attached when this product is returned to the factory for maintenance, otherwise free maintenance will not be accepted. Thank you for your cooperation!	Product Model:_____ Product No.:_____ Inspector:_____ Ex-factory date:_____ Salesperson:_____ Sold Date:_____

8. Alarm temperature settings

Under the H-L menu, press “▲” and “▼” button to set the upper /lower temperature values and OFF. (diagram 1-19)It will alarm if upper temperature more than 20 °C and the lower temperature less than -20 °C. (diagram 1-20) alarm function is OFF . The upper and lower temperature rang is 20 to 80 °C.

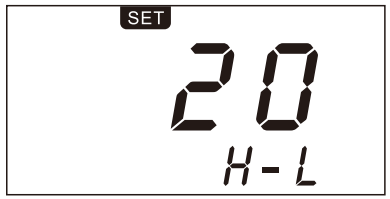


diagram 1-19

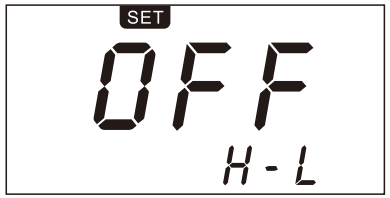


diagram 1-20

9. Password setting function

Under the PSD menu, press “▲” and “▼” button to adjust the password setting value. The password value can be set from “01” to “999”. (diagram 1-21) Display 00 means the password function is off, (diagram 1-22) to enter the menu interface. The first time you enter the password is not set, press 2 button to enter the menu mode , then set the password and press 2 button to confirm the menu.
(Note: Directly enter password 906 to enter the menu interface in case of forgetting the password)

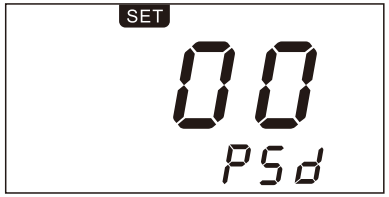


diagram 1-21



diagram1-22

10. Restore factory setting

Under the FAC menu, press “▲” and “▼” to adjust ON and OFF. Press [2] to return the normal operation interface and restore the factory setting when the menu is ON.

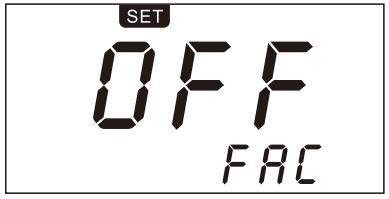


diagram 1-23



diagram 1-24

Factory default : Loc (Temperature lock) : OFF
CAL(Temperature calibration) : Reset
SLP (Auto-sleep) : Open (10)
OFF (Off heating) : Open (20)
H-L (Alarm temperature) : 20℃
BI (Alarm) : Open
C-F (Temperature unit) : ℃
PSD (Password) : 00
Memory temp.1 : 200°C
Memory temp.2 : 300°C
Memory temp.3 : 400°C

Copyright information

The design of this product (including internal software) and its accessories is under the protection of relevant state-laws.Any violation of the relevant rights of our company will be subject to legal sanctions. Users shall consciously abide by the relevant state laws when using this product.

Description of common icons

Thank you for using our products. Before using the product, please read this manual carefully and pay attention to the relevant warnings and cautions mentioned in this manual.

Warning	Misuse of this product may lead to serious injury or death to the user.
Caution	Misuse of this product may lead to serious injury to the user or material damage to the object involved.

Essential knowledge for users

Users are required to have basic knowledge of common sense and electrical operations before using the product. Minors shall use the product under the guidance of a professional or guardian.

[Caution]:To avoid damaging the equipment and keep the safety of the operational environment,please read this manual carefully and keep it well so that you may read it atanytime when necessary.

Safety precautions

To avoid electric shock or injury to the human body or fire hazard,the following basic rules must be observed when using the equipment.In order to ensure personal safety,only parts and accessories approved or recommended by the original factory canbe used,otherwise serious consequences may occur!

WARNING

When using this product, the soldering pencil/soldering tip, with the temperature up to 200-480℃, may cause burns to the user or cause a fire due to improper application.
So Users shall strictly observe the following rules:

- Keep this product away from flammable materials.
- Keep the product out of children's reach.
- Do not use this product if you are inexperienced or have no sufficient necessary knowledge without the guidance of related personnel.
- Do not use this product under wet environment or with wet hands to avoid electric shock.
- Do not modify this product and its accessories without authorization.
- Please turn off the power when replacing parts and iron tips, and not resume the use until the equipment is completely cooled down.
- Please use the accessories from the original factory When replacing the product parts.
- Make sure to turn off the power switch when the equipment is temporarily stopped or out of use.

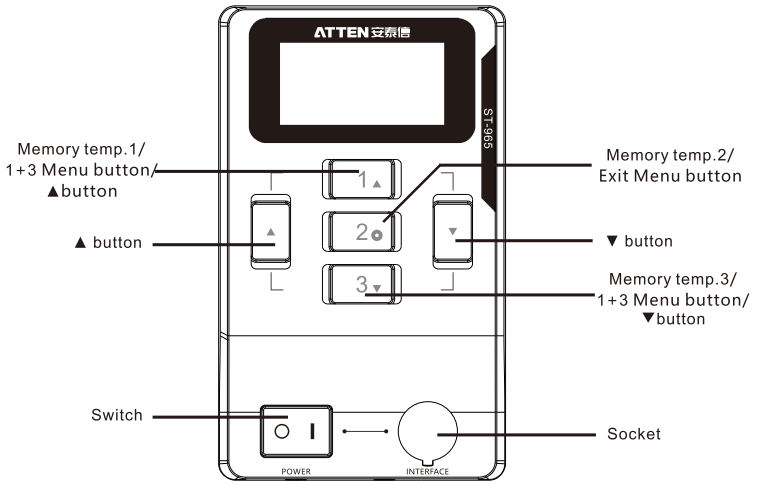
WARNING

- To ensure the normal operation of this product’s ESD function,only three-core power cord shall be used as the host connectingline.
- Smoke will be generated during the soldering operations. So please pay attention to the smoke evacuation.
- Do not play or do other similar dangerous actions during using this equipment, because it can easily lead to injury to others or yourself.
- Do not use this product for purposes other than soldering.
- Do not modify this product and accessories, otherwise the original warranty will be invalidated or damage may occur to the product.
- When plugging and unplugging the power cord and handle plug, please hold the plug body and do not pull the cord.
- Do not hit the product or its accessories too hard during the operation, otherwise damage may occur to the product.

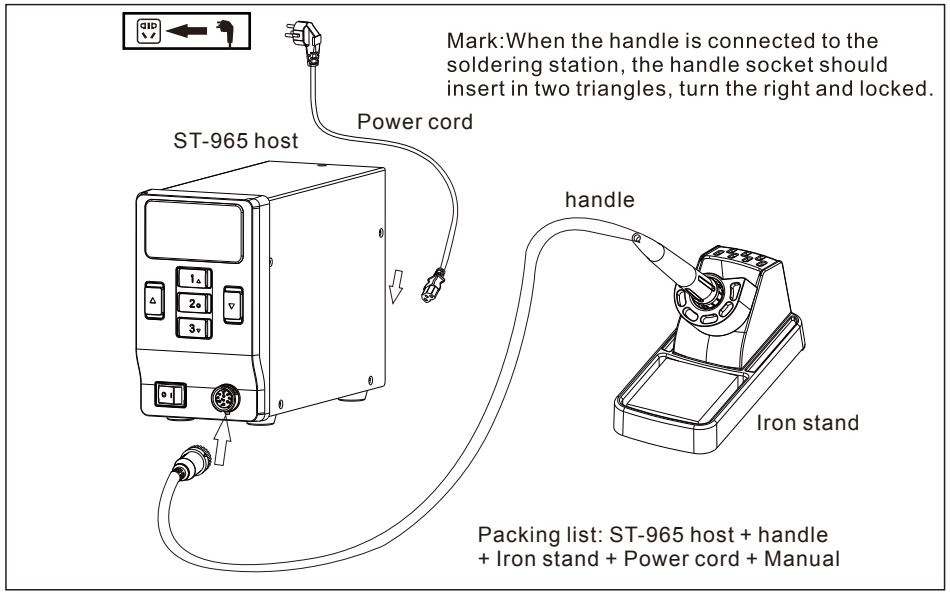
Disclaimer

We will take no responsibility for any personal injury or property damage caused by reasons other than the product quality problem, which may include force majeure (natural disasters,etc.) or personal behavior during the operation of this product. This manual is organized, compiled and released by SHENZHEN ATTEN TECHNOLOGY CO.,LTD. according to the latest product features. We will not responsible for further notice of the subsequent improvement of the product and this Manual.

The host view



Connect diagram



5. Auto-sleep function

Under the SLP menu, press "▲" and "▼" to set the sleep parameters: Off/On Time: 10~60 (default 10)minutes. the heater temperature is 200 °C under sleep status. (diagram 1-14) open the auto sleep function, and the sleep time is 25 minutes. (diagram 1-15) turn off the auto sleep function. In sleep mode, pick up the soldering tool or press any key to automatically resume normal operation. (Note: If the device is not in a static state, it will affect the device to enter auto sleep)

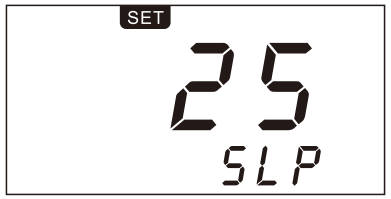


diagram 1-14

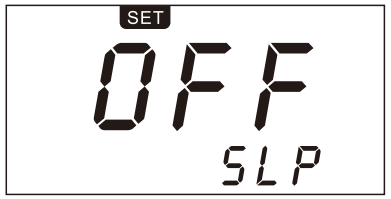


diagram 1-15

6. Automatically power off the heating function

Note: The auto power off function needs to be used when the auto sleep function is turned on. When the auto sleep function is turned off, the auto power off function is turned off at the same time. The auto power off function cannot be turned off when the auto sleep function is turned on. Under the OFF menu, press"▲" and "▼" button can be set the heating time : 10~60 (default 20) minutes. When the heating state is turned off, pressing any button will automatically resume the normal working mode.
Example: The sleep time is 10, and the heating time is 20. The total time is 30 minutes . After heating is turned off, the heating core is not heated.



diagram 1-16

7. Alarm setting function switch

Under the BL menu, press "▲" and "▼" button to switch the alarm function. (diagram 1-17) is OFF , (diagram 1-18) is ON .

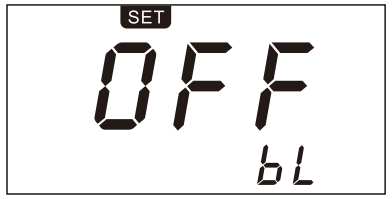


diagram 1-17

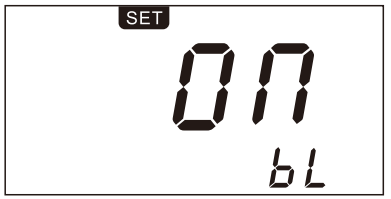


diagram 1-18

2. Temperature lock function

Under the Loc menu, press “▲” and “▼”button to turn on/off . [1] [3] button to switch menus up and down, [2] button to exit and save settings. diagram 1-8 is locked,diagram 1-9 is unlocked.

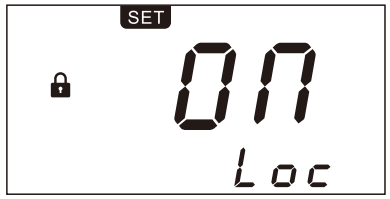


diagram 1-8

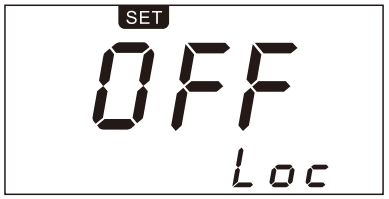


diagram 1-9

3. Temperature unit exchange

Under C-F menu ,press“▲” and “▼”button to exchange temperature unit, Diagram 1-10 -C- set temperature unit is ℃ ,diagram 1-11 is ℉.

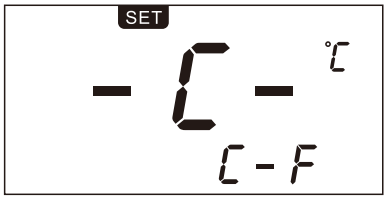


diagram 1-10

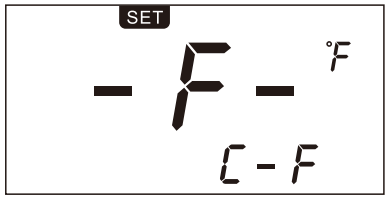


diagram 1-11

4. Temperature calibration

Under the CAL menu, press the “▲” and “▼” button to adjust the value. Calibration range [-50 ℃ ~ 50 ℃ (-90℉ ~ 90℉)]. When the real temperature is lower than the display temperature, the compensation takes a positive temperature value. When the real temperature i s higher than the display temperature, take a negative temperature value.

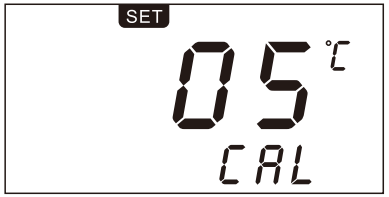


diagram 1-12

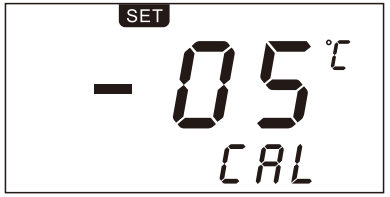


diagram 1-13

When replacing the heating element or the handle, the temperature if not accurate, can be calibrated by changing the following parameter.

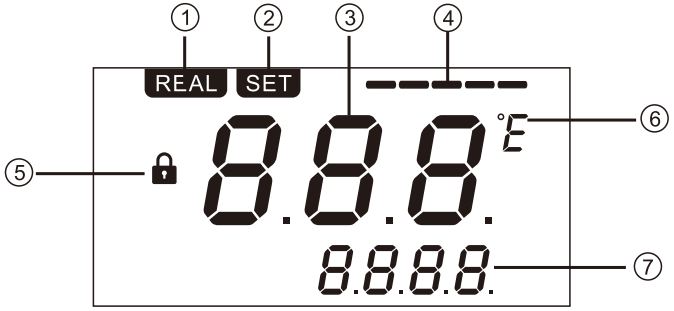
Operation is as follows:

1. Set the to-be-calibrated temperature of the handle to a suitable temperature, such as 350° C / 662 °F.
2. After the temperature is stabilized, use the thermometer to measure the actual temperature of the soldering tip of the current handle, for example, the actual temperature is measured as 365 ℃ / 689 ℉.
3. Through the analysis, it is concluded that the actual current temperature is 15 ℃ / 27 ℉ higher than the set temperature.
4. Set the temperature compensation value to -15 ℃ / -27 ℉ F to compensate the error of the output temperature.

Specifications

Product No	ST-965
Rated working voltage	AC 230V±10% 50Hz（110V±10% 60Hz）
Rated power	65W
Security Level	Class 1(Host of the controller)Class 3(Accessories of soldering handle)
Power fuse	T1A(230VAC) T2A(110VAC)
Temperature range	80℃~450℃/176℉~842℉
Temperature stability	±1℃
Temperature adjustment step	Long press to adjust 10 units at a time, short press to adjust 1 unit at a time
Standby mode	0~60 minutes can be set up, default 10 minutes, turn on the standby function
Dormancy mode	0~60 minutes can be set up, default 10 minutes, turn on the auto-sleep function
Rapid temperature	3 groups of temperature, which can be called quickly.
Working conditions	Temperature 0℃～40℃Relative humidity＜80%
Storage conditions	Temperature -20℃～80℃Relative humidity＜80%
Dimension	(L)210x(W)88x(H)150mm
Weight	Approximately 2kg

LCD display panel



1. REAL(Real Temperature)： Real temperature display symbol
2. SET(Set Temperature)： Power on and set temperature display symbol
3. Main display window: display actual temperature value
4. Analog heating-up bar to show the current power.
5. Lock symbol
6. Temperature unit symbol
7. Preset temperature value

Power on display

After turning on the power switch. The screen display the system version number for 1 second. (The version display depending on the version upgrade, such as VXX, where X stands for any number.)



（means:ST-965 V0.1 version)

Working status

1. Normal work

(diagram 1-1)means: Real temperature 350 ℃ ,preset value 350 ℃ and locked ,heating power value 3 .

2. Enter sleep mode

(diagram 1-2)means: it will heat at 200 °C in sleep mode.press any key or move the handle to return to normal.

3.Turn off the heating mode (only after turning on the sleep function)

(diagram 1-3)means: The heating function is turned off . press any key to return.

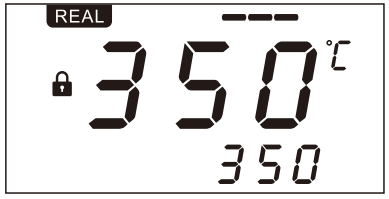


diagram 1-1



diagram 1-2



diagram 1-3

Temperature setting

Under normal work, press “▲” or “▼” button (diagram 1-4) to adjust temperature value (diagram 1-5). long pressing can be quickly adjusted. After stop pressing for 3 seconds to store . (The temperature value cannot be adjusted when locked)

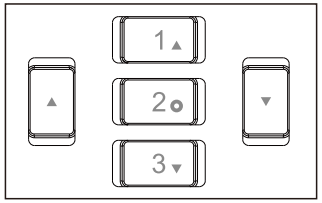


diagram 1-4

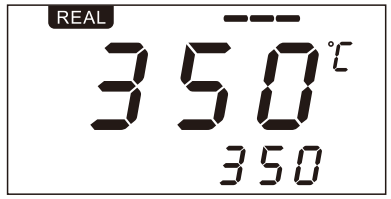


diagram 1-5

Memory temperature (user-defined)

Press“1 or 2 or 3” button (diagram 1-6) to quickly preset temperature value which stored .

Long pressing “1 or 2 or 3” button (more than 3 seconds) to store temperature value .

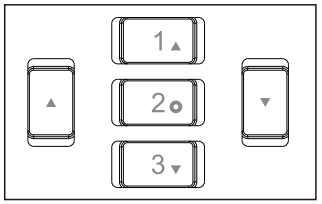


diagram 1-6

Menu setting

Under normal work, press "1 "+ "3 "button more than 3 seconds to enter the password input interface. No password for the first time . press 2 button to enter the menu mode , then input password to enter. Press the 2 button on the menu to exit and save the settings. (Note: After all the functions are set, press 2 to save the settings)

2. Button definitions in menu setting mode.

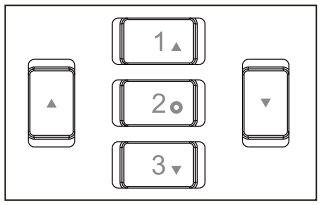


diagram 1-7

【1】Up button
【2】Exit and set button
【3】Down button
▲ increase value
▼ decrease value