

ATTEN



ST-862D Hot Air Station User Manual



SHENZHEN ATTEN TECHNOLOGY CO., LTD

Copyright information

The design of this product (including internal software) and its accessories is under the protection of relevant state laws. Any infringement upon 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 symbols

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 before use and keep it well so that you may read it at any time 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 can be used, otherwise, serious consequences may occur!

 Warning
<p>When using this product, the spray nozzle of hot air gun, with the temperature up to 100–480°C, may cause burns to the user or cause a fire due to improper application. So Users shall strictly observe the following rules:</p> <ul style="list-style-type: none">● 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 or its accessories without authorization.● Please turn off the power when replacing parts and iron tips, and do 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.

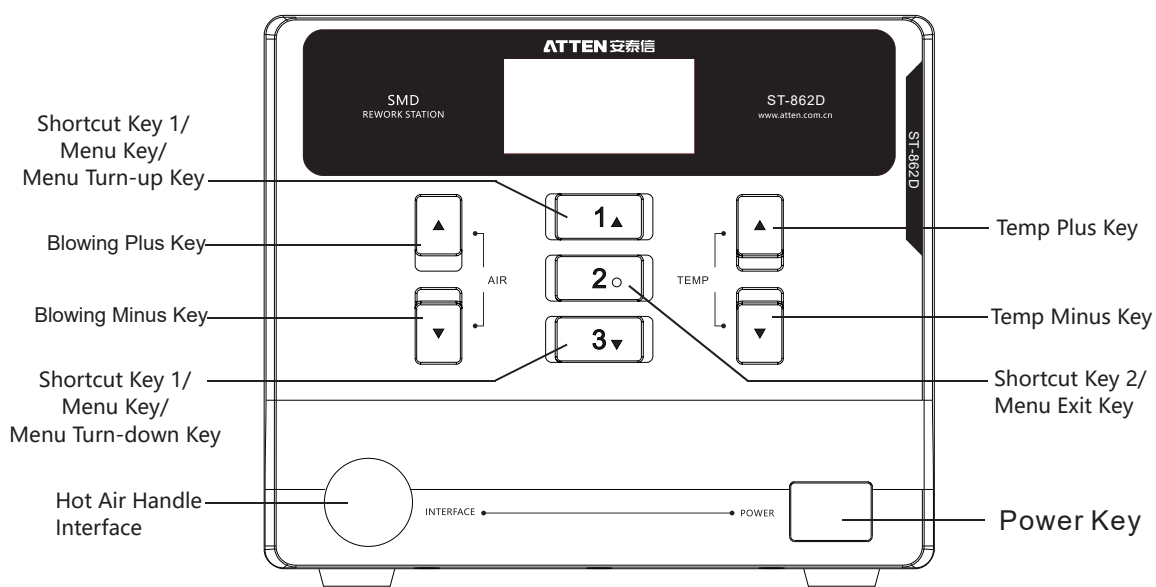
 Caution
<ul style="list-style-type: none">● To ensure the normal operation of this product's ESD function, only three-core power cord shall be used as the host connecting line.● Do not play or do other similar dangerous actions when using this equipment, because it can easily lead to injury to others or yourself.● Do not use this product for purposes other than de-soldering.● Do not modify this product and its 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

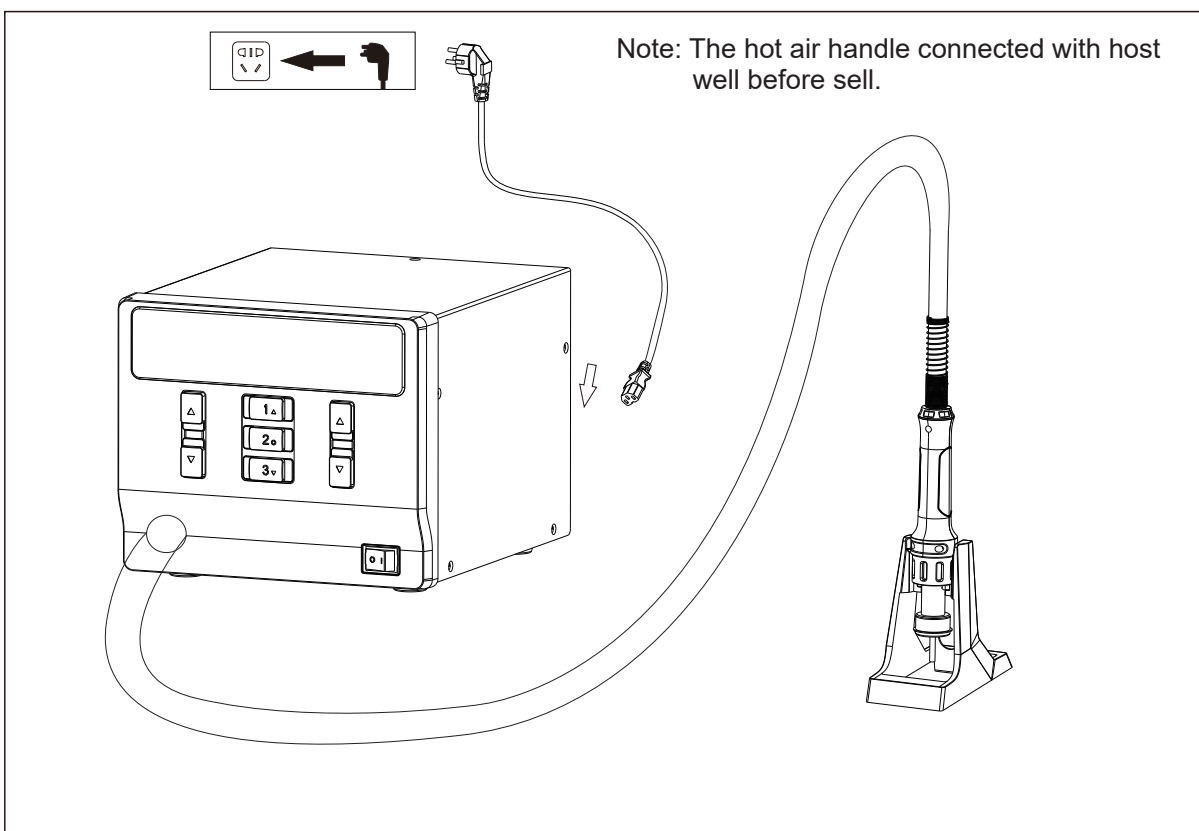
We will take no responsibility for any personal injury or property damage caused by reasons other than the product quality problem, which may include force majeure (natural disasters, etc.) or personal behavior during the operation of this product.

This manual is organized, compiled and released by SHENZHEN ATTEN TECHNOLOGY CO., LTD. according to the latest product features. We will not be responsible for further notice of the subsequent improvement of the product and this Manual.

Schematic Diagram of the Whole Equipment



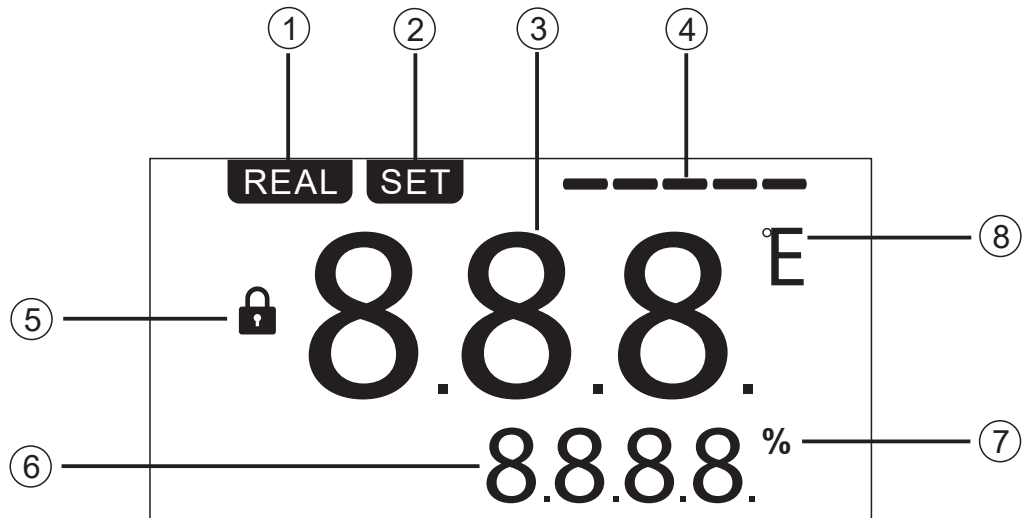
Connection Diagram for the Whole Equipment



Technical Data

Model:	ST-862D
Voltage	AC230V±10% 50Hz (110V±10% 60Hz Optional)
Power	1000W(Max)
Fuse type	T6.3A(230VAC) T10A(110V AC)
Temperature range:	100℃ ~ 480℃/ 212°F ~ 896°F
Temperature accuracy	±35℃
Setting range of air volume	10 %~99%
Temperature unit	℃/°F (default °C)
Air flow	120L/min(Max) 30L/min(Min)
Standby heater cooling function	Support
Abnormal detection of heating element	Heating element remove detection; heating element open circuit detection; heating element overheating detection
Abnormal detection of temperature sensor	Temperature sensor open circuit detection
Beep alarm function	Available
Quick function	3 sets shortcut temperatures
Temperature compensation	±50℃/±90°F
Heating status display	5 dynamic simulate bars
Temperature adjustment	10 digits (Coarse)/1 digit (Fine-tuning)
Air flow adjustment	2 digits (Coarse)/1 digit (Fine-tuning)
Shortcut temperature/air flow	3 sets shortcut temperatures/air flow for quick selection
Working conditions	Temperature 0-40℃, relative humidity <80%
Storage conditions	Temperature -20-80℃, relative humidity <80%
Dimension	208(L)x175(W)x150(H)mm
Weight	About 3340g

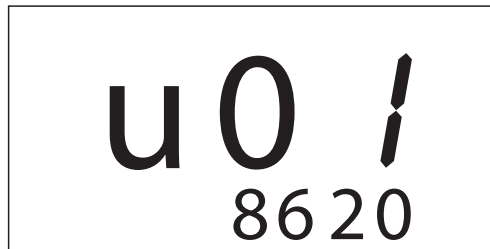
LCD Description



1. REAL (Real Temperature): Real Temperature status
2. SET (Set Temperature): Start up and set temperature status
3. Actual temperature value
4. Display bar for heating power status
5. Symbol for lock
6. Display settings value
7. Air flow percentage
8. Temperature unit

Boot-up Screen

After the station has been switched on, the display will turn on and show the system version number for one second before switching to the normal display.



(Means ST-862D V0.1 version)

Settings

1. Normal display

(FIG. 1-1) shows real temperature is 300°C, the temperature setting value is locked, the air volume is 50% and the heating power value is 3 bars.

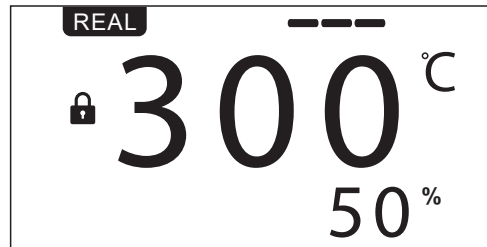


FIG. 1-1

2. Display Of Hot Air Gun Status

(FIG. 1-2) shows when the air gun is off (non-power)) The setting value can be adjusted when the hot air gun is off. When the hot air gun is on, it will work according to the setting value.(FIG. 1-3) When the handle of the air gun is placed on the holder, the hot air gun will automatically stop heating and delay air supply, (the air supply will stop after the heating wire cools). Pick up the handle again and press the switch key on the handle, it will resume to work.



FIG. 1-2

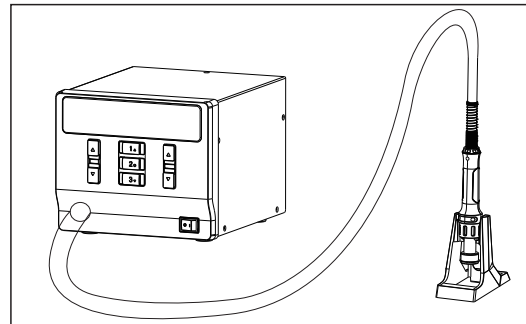


FIG. 1-3

Temperature/Air Flow Setting

1. Adjust the air volume: Press air "▲" or "▼" key (see FIG 1-4). Long press for quickly adjusting. Stop pressing the key for 3 seconds, it will save the setting automatically.
2. Adjust temperature value (when temperature value is locked, it can not be adjusted): Press temperature "▲" or "▼" key, switch to SET status (see figure 1-5). Long press for quickly adjusting, stop pressing the key for 3 seconds, it will automatically save temperature setting, and state switch to REAL.

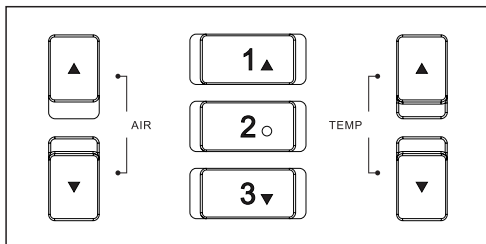


FIG. 1-4

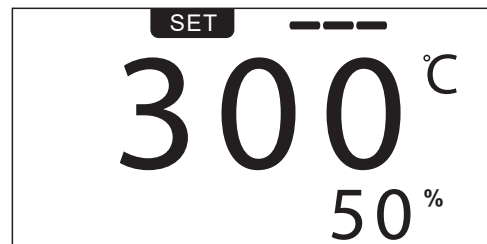


FIG. 1-5

Saving and Retrieving Shortcut Temperature(User define)

1. Retrieving shortcut temperature: It can rapidly retrieving preset temperature and blowing restored in Button "1" / "2" / "3" by pressing Button "1" / "2" / "3" .(FIG. 1-6) when working
2. Saving shortcut temperature: It can save the user-define temperature and blowing in Button "1" / "2" / "3" by pressing Button "1" / "2" / "3" more than 3 seconds.

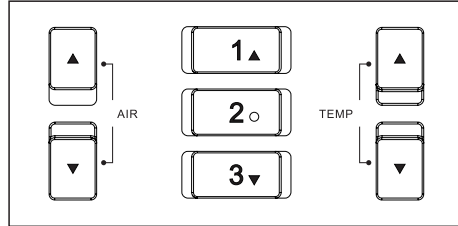


FIG. 1-6

Menu Mode

Enter into menu mode by pressing both Button "1" and "3" more than 3 seconds under working status.

1. Button Definition under Menu Setting Mode

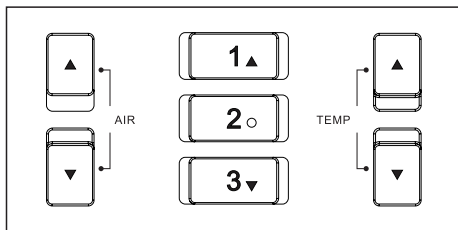


FIG. 1-7

Button "1": Menu page up
 Button "2" : Menu exit
 Button "3" : Menu page down
 Parameter plus
 Parameter minus

2. Temperature Locking Function

Under Menu Loc, it can turn on or turn off temperature locking function by pressing "▲" or "▼" key(FIG. 1-8, ON means turn on temperature lock function, OFF means turn off temperature locking function); it can turn up or down menu by pressing Button "1" or "3" , then press Button "2" to exit and save your setting.

3. Defining Work Function

Under menu HTO mode, it can adjust time of defining work by pressing "▲" or "▼" key (FIG. 1-9, the time of defining work is 20 seconds, "0" means turn off defining work function, the minimum setting time for defining work is 10 seconds, maximum setting time is 900 seconds.); it can turn up or down menu by pressing Button "1" or "3" , then press Button "2" to exit and save your setting.

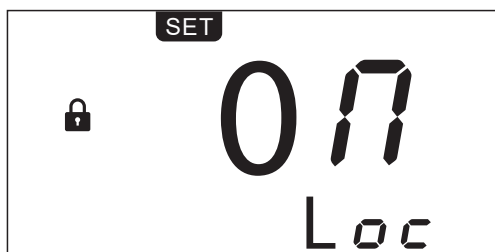


FIG. 1-8



FIG. 1-9

4. Switching Temperature Unit

Under menu C-F mode, it can switch temperature units(°C & °F) by pressing “▲”or“▼”key.
Refer Pic.1-10, set -C- which means temperature unit is °C;
Refer Pic. 1-11, set -F- which means temperature unit is °F.

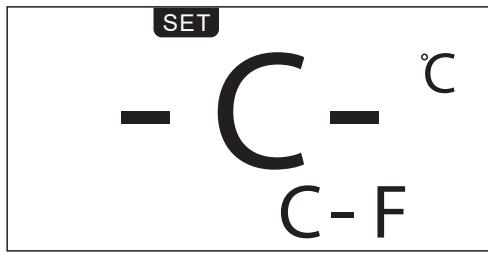


FIG. 1-10

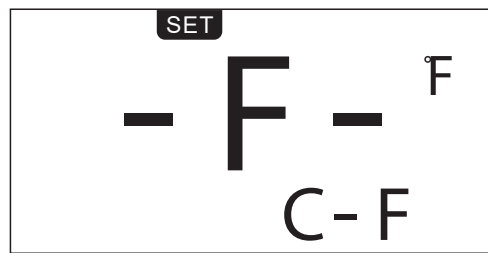


FIG. 1-11

5. Temperature Calibration

Under menu CAL mode, press “▲” or “▼” key to enable temperature calibration function, whose calibration range is -50°C~ 50°C(-90°F~90°F). Calibration value will be negative as actual-measured temperature is lower than setting temperature; Calibration value will be positive as actual-measured temperature is higher than setting temperature.



FIG. 1-12

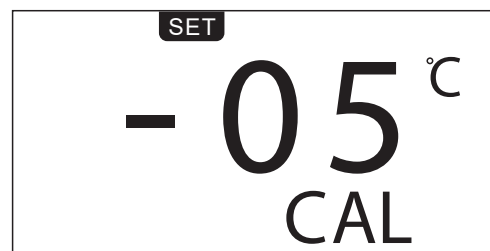


FIG. 1-13

Note: User need calibrate temperature by adjusting its value if the displayed temperature is much different with actual-measured temperature after changing a new heater or tips, its calibration method be refered as below:

- 1.Set this handle required calibration as a suitable temperature like 350°C/ 662°F;
- 2.After this setting temperature is stable, use temperature tester to measure the actual temperature of its tip, for example, its actual-measured temperature is 365°C/ 689°F;
- 3.We can get conclusion that the actual-measured temperature compared to the setting temperature is 15°C/ 27°F higher;
- 4.Then press “▲” key to calibrate temperature.

6. Button Beeping Function

Under menu BL mode, user can turn on/ off the beeping function by pressing “▲” or “▼” key.Refer Pic.1-14, OFF disable beeping function;Refer Pic.1-15, ON enables beeping function.



FIG. 1-14

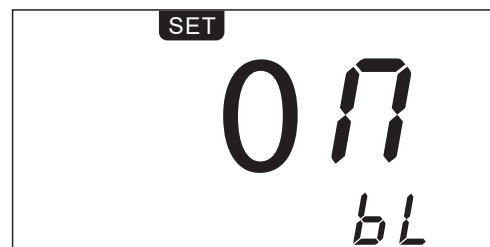


FIG. 1-15

7. Restore Factory Setting

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



FIG. 1-16



FIG. 1-17

Default value :

Loc (temperature locked function) : OFF

CAL (calibration value) : cleared

BL (Beeping function) : ON

F-C(temperature unit): °C

HTO(Timing operation) : OFF

Memory temperature 1: 200°C

Memory temperature 2: 300°C

Memory temperature3: 400°C

Care And Maintenance

Fault code or fault description	Likely causes of the faults
E2: Open circuit of sensor	Poor contact of air gun connector or handle.
E3: No zero-cross signal	The zero-cross sensor is damaged
E7: Short circuit of sensor	The short circuit occurs to the temperature sensor in the heating core; pleas replace the heating core.
E8: Over-temperature protection	1. The temperature sensor is abnormal; please replace the heating core. 2. The temperature of heating core is too high; after the heating core i s cool, restart the machine.
Display of messy code:	1. In case there is strong interference source from the outside environment, please change the application environment or evacuate from the interference area. 2. In case the internal circuit is abnormal, please send the equipment to the designated after-sales outlet for maintenance.

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 the casing will be slightly yellowing, which is a normal phenomenon.

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WARNING

When using this product, the soldering pencil/soldering tip, with the temperature up to 200-480 °C, 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.

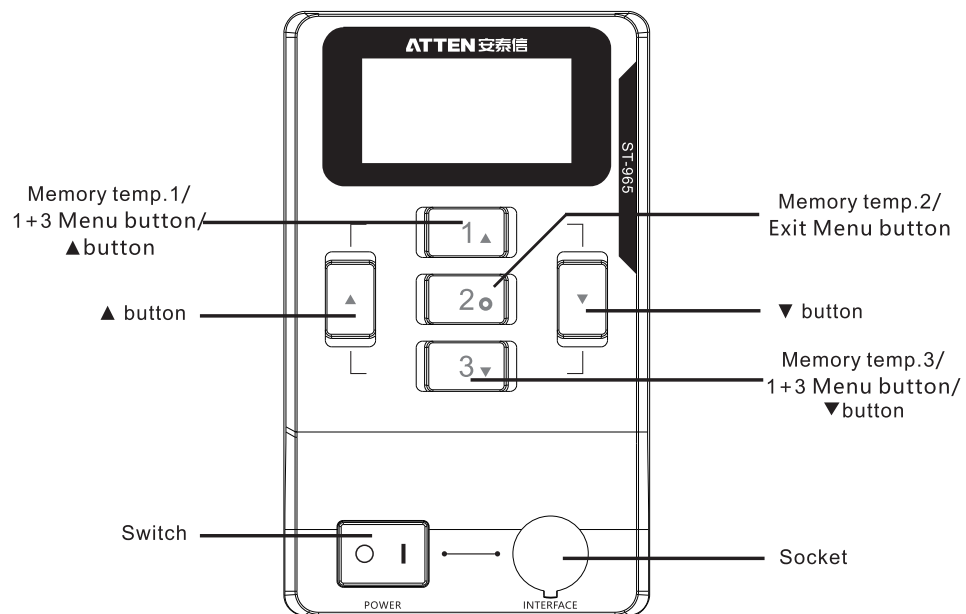
WARNING

- To ensure the normal operation of this product's ESD function, only three-core power cord shall be used as the host connecting line.
- 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.

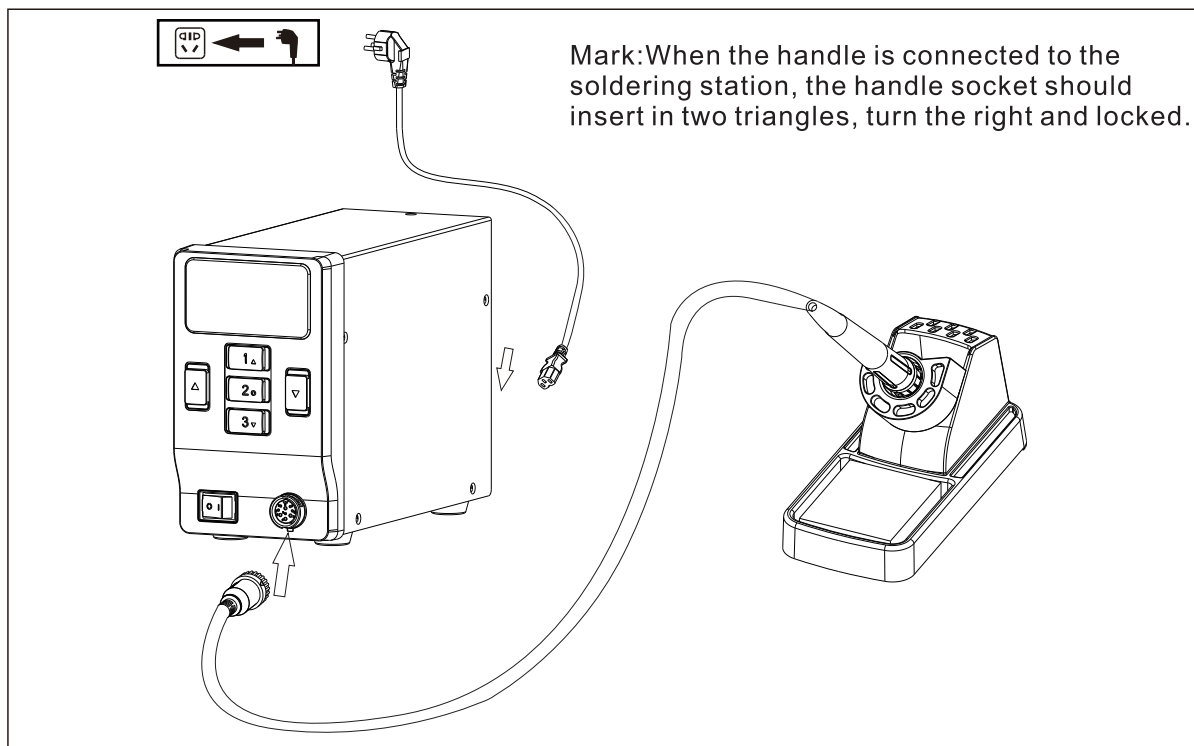
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The host view



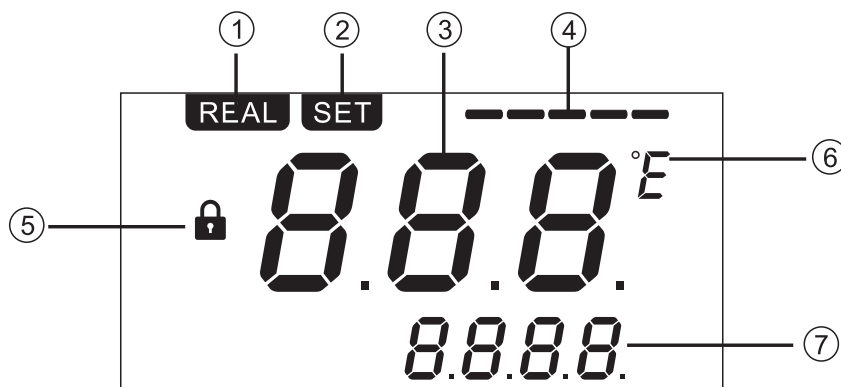
Connect diagram



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	200°C~450°C/392°F~842°F
Temperature accuracy	±10°C
Temperature stability	±1°C
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°C ~40°C Relative humidity<80%
Storage conditions	Temperature -20°C ~80°C 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 °C ,preset value 350 °C 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.

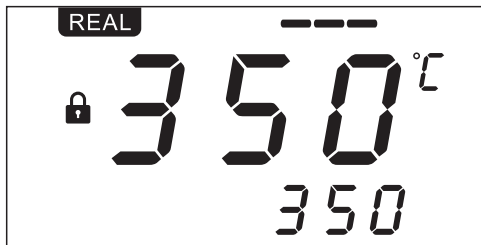


diagram 1-1



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)

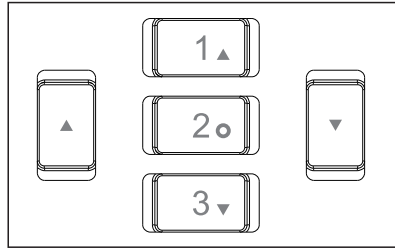


diagram 1-4

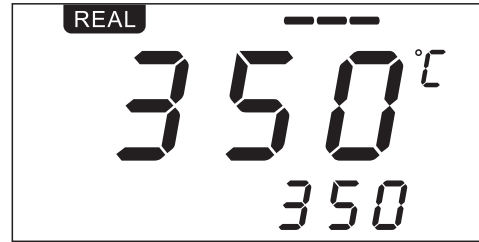


diagram 1-5

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 .

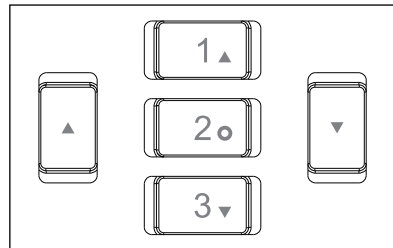


diagram 1-6

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.

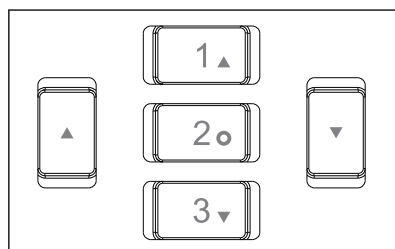


diagram 1-7

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

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.

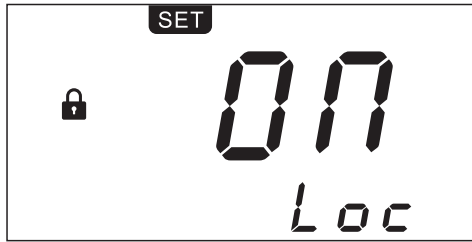


diagram 1-8

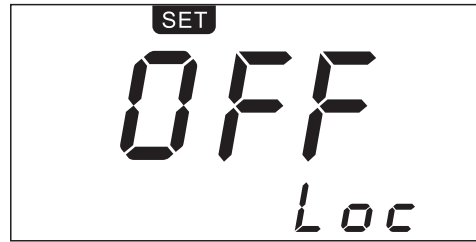


diagram 1-9

3. Temperature unit exchange

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

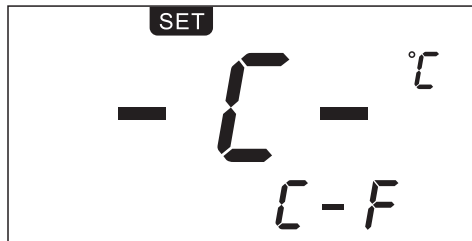


diagram 1-10

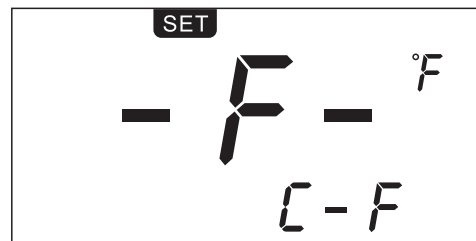


diagram 1-11

4. Temperature calibration

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

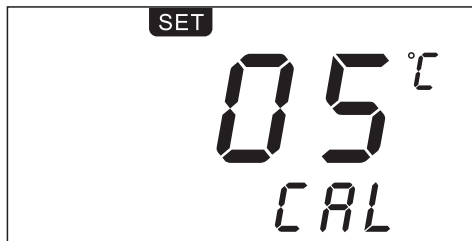


diagram 1-12

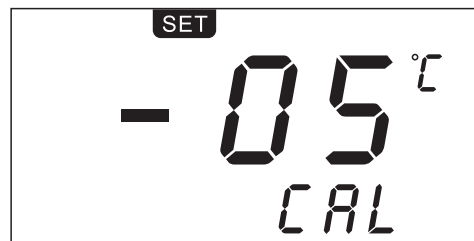


diagram 1-13

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 °C / 689 °F.
3. Through the analysis, it is concluded that the actual current temperature is 15 °C / 27 °F higher than the set temperature.
4. Set the temperature compensation value to -15 °C / -27 °F to compensate the error of the output temperature.

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)

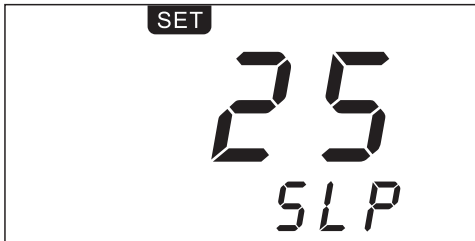


diagram 1-14



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 .

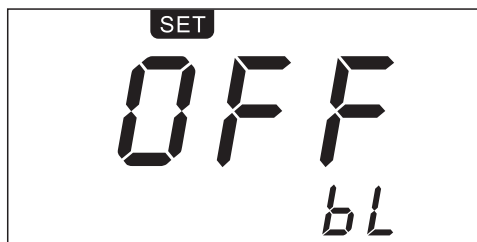


diagram 1-17

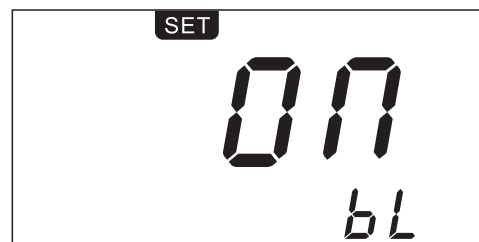


diagram 1-18

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)

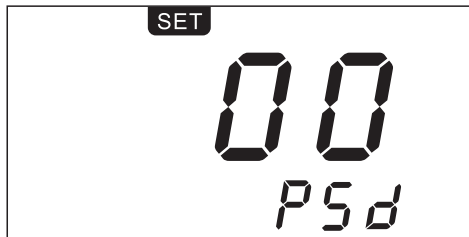


diagram 1-21



diagram 1-22

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.

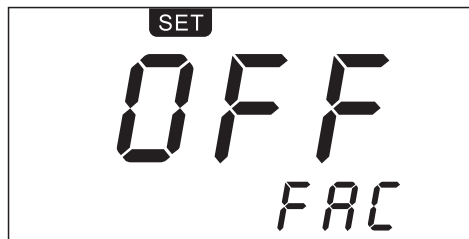


diagram 1-23

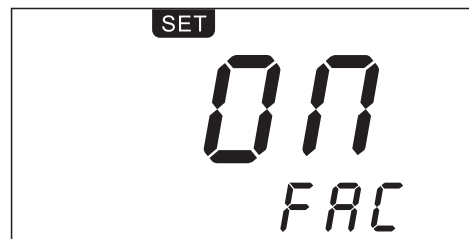


diagram 1-24

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°C
BI (Alarm) : Open

C-F (Temperature unit) : °C
PSD (Password) : 00
Memory temp.1 : 200°C
Memory temp.2 : 300°C
Memory temp.3 : 400°C

Maintenance

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

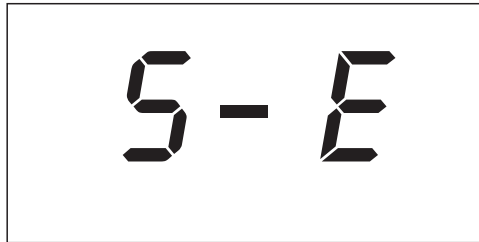


diagram 1-25



diagram 1-26

ATTEN 安泰信



User Manual of APS15-3A Maintenance Power Supply

SHENZHEN ATTEN TECHNOLOGY CO., LTD



Thank you for choosing our product. Please read this manual carefully before using this product.

Copyright Information

The design of this product (including internal software) and its accessories is protected by national laws. Any infringement of our rights shall be subject to the legal sanctions. When using this product, the user shall consciously abide by the national laws.

Common Symbol Description

Thank you for use our product. Please read this manual carefully and pay attention to the relevant warnings and notices mentioned in the manual before using this product.

 Warning	Noncompliance may cause death or serious injury to the user.
 Notice	Noncompliance may cause injury to the user or substantial damage to the object.

User Prerequisites

We request that the user should have common sense of life and the basic electrical operating knowledge before using this product. The minor shall use this product under the guidance of professionals or guardians.

[Notice]: To avoid damaging the machine and keep the operating environment safe, please read this manual carefully and keep it properly for future reference before using this product.

Safety Precautions

The user shall follow the following basic precautions to avoid electric shock or personal injury or fire and other hazards when using this product.

To ensure personal safety, the user shall use the parts and accessories recognized or recommended by ATTEN, otherwise it will cause serious consequence!

Warning

- Do not use this product near inflammables.
- Before use, please ensure that the power line is earthed reliably to avoid electric shock.
- Do not use this product if the user is not under the guidance of relevant personnel, inexperienced or has poor knowledge preparation.
- Do not use this product in the humid environment or operate this product with wet hands to prevent electric shock.
- Do not change this product and its accessories without permission.
- Please replace the product components with ATTEN original components.
- Be sure to turn off the power switch when the user temporarily needs not to use or stops using this product.
- There is high voltage in the product. Do not disassemble the product without permission from professionals.

Notice

- Avoid using this power supply in the environment above 40°C. Reserve enough space for heat emission holes on the rear panel to dissipate heat.
- Confirm whether the current and voltage as well as the specification of power line meet the requirements.
- Before the device is connected to the power supply, please turn off the power switch.
- Do not refit this product and its accessories, which will cause the loss of warranty qualification and the damage to the product.
- Do not place heavy objects on the device.
- Do not violently knock this product and its accessories in use, which will damage the product.

Disclaimer

The company shall not be responsible for any personal injury or property loss caused by user's failure to follow relevant instructions, natural disasters and other force majeure, or individual behaviors and other non-quality problems in the use process of this product.

This manual is sorted, compiled and issued by SHENZHEN ATTEN TECHNOLOGY CO., LTD according to the latest product characteristics. The company will make the subsequent changes to product and manual without prior notice.

Product Introduction

APS series power supply is designed for the needs of electronic training schools, communication maintenance technicians and related engineering research and development personnel. The current best-stability series voltage stabilization scheme is adopted for this product, and the digital MCU chip is used for control. With very high stability and low ripple, simple operation and control, and complete protection functions, it provide the user with convenient and reliable high quality power supply.

Product Specification

Power input: refer to the voltage identification at the tail of the product (other input voltage can be customized).

Rated value/dimensions/weight:

Model	Voltage Regulation Range	Current Regulation Range	Input Power	Weight
APS15-3A	0-5V/0-15V	0-0.5A/0-3A	124VA	2.4Kg
Dimensions: (L) 215mm *(W) 88mm * (H)150mm				

Protection function: overvoltage protection/overcurrent protection (cut-off mode, delay start)/overheat protection.

Other functions: locking function, voltage coarse/fine adjustment, sound function, 5V/15V voltage switching, 0.5A/3A current switching.

Cooling mode: temperature controlled fan, forced air cooling.

Operating environment: 0°C~40°C, <80% (indoor use).

Storage temperature and humidity: -10 ~70 , <70%.

Packing list: host × 1, power line × 1, user manual × 1.

Technical Parameters

Constant Voltage mode (CV):

Output voltage range: 0 to rated voltage continuously adjustable.

Power supply variation rate: $\leq 0.01\%+3\text{mV}$.

Load variation rate: $\leq 0.01\%+3\text{mV}$ (rated current $\leq 3\text{A}$).

Recovery time: $\leq 120 \mu\text{s}$ (50% load variation, minimum load of 0.5A).
Ripple and noise: $\leq 0.5\text{mVrms}$ (5Hz~1MHz) (rated current $\leq 1\text{A}$).
Ripple and noise: $\leq 1.0\text{mVrms}$ (5Hz~1MHz) (rated current $>1\text{A}$).
Temperature coefficient: $\leq 300\text{ppm/}$

Read-back display:

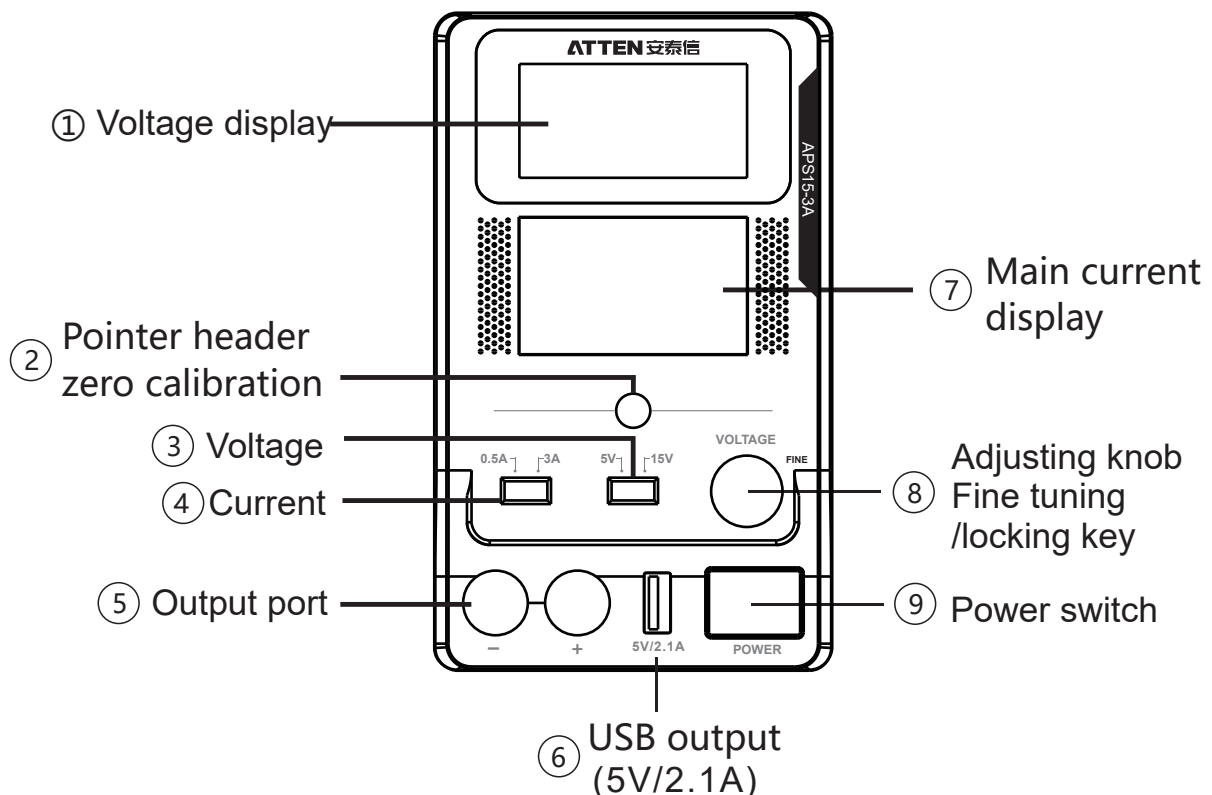
Display: double 3-bit LCD with blue background and white words (main voltage and USB current display)
Accuracy: LCD header: $\pm(0.5\% \text{ reading} + 2 \text{ bits})$;
current pointer header: CLASS-2.5

USB interface parameters:

Voltage: fixed 5V output ($\pm 5\%$ accuracy)
Current: maximum 2.1A (overcurrent protection, cut-off output)

Product Panel Diagram

Front Panel Diagram



Operating Instructions

1. Precautions before use

AC power input: AC power input shall be within the range of rated voltage $\pm 10\%$ 50/60hz.



Warning: the protective conductor of the power line must be earthed to avoid electric shock.

Instrument installation: Avoid using this power supply in the environment above 40°C. Reserve enough space for heat emission holes on the rear panel to dissipate heat.



Notice: To avoid damage to the instrument, do not operate it in the environment above 40°C.

2. Output voltage regulation

1. Turn on the power switch to make the product work normally.
2. Adjust the knob to the right to increase the output voltage value.
3. Adjust the knob to the left to reduce the output voltage value.
4. Press the adjusting knob forward to change fine/coarse adjustment status.
5. Conduct step adjustment at 0.01V in the in the fine adjustment state and 0.1V in the fine adjustment state.

3. Output current regulation

1. When the current switch is switched to the position 0.5A, the host can provide the current output capacity of 0.5A.
2. When the actual output current exceeds 0.6A at the position 0.5A, the power supply will automatically conduct overrange protection. At this time, the power supply will temporarily shut off the output for about 2S and make a buzzing alarm to prompt the user to switch positions.
3. When the current switch is switched to the position 3A, the host can provide the current output capacity of 3A.
4. When the actual output current exceeds 3.2A at the position 3A, the power supply will automatically conduct overrun protection. At this time, the power supply will temporarily shut off the output for about 2S and make a buzzing alarm to prompt the user to remove the load.

4. Voltage range setting

1. When the voltage is switched to the position 5V, the host provides the maximum limited voltage output of about 5.1V.
2. When the voltage is switched to the position 5V, the host provides the maximum limited voltage output of about 15.5V.

5. Parameter locking operation

1. Under normal working conditions, long press the knob for about 3S to lock the voltage output parameters.
2. In the locking state, the locking icon will be displayed on the LCD. At this time, the adjusting knob is inactive.
3. Long press the knob again for about 3S to release the parameter locking. At this time, the voltage can be adjusted normally.

6. Sound ON/OFF

1. Turn on the power switch to turn on/off the sound function while pressing the knob.
2. When the sound function is turned off, the alarm sound will also be heard if the current exceeds the range.

Product Warranty

- The company will provide a warranty period of two years for the user since the date of sale. The company will provide free maintenance service for the faults caused by quality problems in the normal use within the warranty period.
- The company will provide the product beyond the warranty period with lifelong maintenance service.
- The company will only provide the limited warranty service for the damage caused by the user's improper use or arbitrary change to product components.
- In case of product failure, please send the product to the designated maintenance point for maintenance. Unauthorized maintenance points and personnel shall not maintain the product.

After-sales Service

After-sales service hotline: (+86)0755-23408704

For more contact information, visit the official website www.atten.com.cn.

After-sales Information

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