

# ATTEN

**AT850D**

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**Hot Air Station**

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**USER'S Manual**

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SHENZHEN ATTEN TECHNOLOGY CO., LTD.

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## Copyright

The design of this product (including software) and its accessories is under tutelage of laws. Any action to violate relevant right of our product will be penalized through law. Please consciously observe relevant local laws in the use of this product.

## Symbols and Conventions

Thank you for purchasing this soldering station product. Please read this manual carefully and pay attention to warnings and precautions mentioned herein before using this product.

	<b>Warning you against the risk of electric shock.</b>
	<b>Warning you against the risk of physical injury.</b>

## Assumption for User

We assume that user have common sense and basic relevant electrical operation knowledge before using this product. This device is not intended for use by persons (including children) with limited physical, sensory or mental aptitude, or by persons who lack knowledge or experience in handling the device.

## Safety

- User must observe following rules while using this product to avoid electric shock, physic injury or fires and other damage.
- To ensure personal safety, user must use approved or recommended parts and accessories. Otherwise it will lead to serious consequences!
- Maintenance or repairing work must be carried out by qualified technician or assigned man by our company.

**Attention:** This product uses three-wire grounded plug which must be inserted into three-hole grounded socket. Do not replace plug or use ungrounded three-hole adapter which will cause poor grounding.



**WARNING:** Improper operation will cause injury, fires and other accidents due to that surrounding temperature of nozzle could reach 480°C. So be sure to observe following precautions.

- Do not aim hot air gun at human or animals. Do not take hot air gun as hairdryer, touch heating tube or blow skin.
- Never use this product around flammable gas and other objects and never place hot air gun near flammable gas or objects after soldering work.
- User must switch off power immediately after each operation. Power will not been truly cut off if the temperature of hot air gun is above 100°C until the temperature of hot air gun is below 100°C.
- Be careful while using hot air gun. Do not drop, shake rework station, put heavy object on rework station and use rework station violently.
- Do not use this product while hand or cord of hot air gun is wet to avoid short circuit and electric shock.
- Keep this product out of reach of children.
- Use approved nozzle by manufacturer and do not try to modify it.
- The temperature will be different as nozzle changed which is normal and it is not problem of product quality.
- Pay attention to input voltage while use hot air gun which provided by manufacturer with different specification and user should choose it carefully.
- Never play with others while using this product which will cause injury to others or yourself.

## Disclaimer

- For physical injuries and possessions loss caused by those reasons which are not related to product quality such as operating without following manual guide, natural disasters or force majeure, we take no responsibility for that.
- Under the supervision of Shenzhen ATTEN Technology Co., Ltd, this manual has been compiled and published which covered the latest product description and specification. The content of this manual is subject to change without notice.

**ATTENTION:** To avoid damaging to unit and keep operation safe, please read the instruction manual ahead and keep it accessible for any operator.

## Item Check List

Name	Quantity
Hot air station	1 Set
Hot air gun holder	1 Set
Hot air gun	1 PCS
Manual	1 Copy
Power cord	1 PCS
Nozzle	4 PCS(A1125,A1126,A1130,A1170A)

## Product Overview

AT850D is a lead-free desoldering rework station with MCU controller and LED digital display. It has being widely used in business research & development center, colleges & universities, research institutes and production line.

## Features

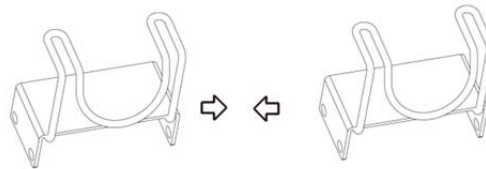
- Closed-loop and MCU zero crossing design for achieving fast heating-up, accurate and stable control.
- Knob control and LED display make work easy.
- High power diaphragm pump with high pressure make it suitable for various nozzles.
- Patented heater for obtaining fast heating-up and extending lifespan.
- Switchable between Fahrenheit temperature and Celsius temperature.
- Automatic standby function to save more energy.
- Temperature offsetting function make it versatile.
- Intelligence cooling system and deferred power-off function to extend handpiece lifespan.


## Specification


Model	AT850D
Power source	AC(100V/110V/120V     220V/230V/240V) 50/60Hz(optional)
Power consumption	550W
Display	LED digital display
Temperature range	100°C~480°C
Air flow grade	A25~A99 grades
Pump	Diaphragm pump
Noise	<52dB(A)

Model	AT850D
Air flow	23L /min(Max)
Net weight	4.0 Kg

## First Glance



PM3\*6  Installed on left side

 PM3\*6 Installed on right side

## Operational Guide

- 1 Installation
  - 1.1 User should install handle stand of hot air gun supporting stand according to user's personal operation habits, on left side or on right side as schematic representation shows, for your first operation on this product. Then check it favorable for you after you put handle on handle stand.
- 2 Connection
  - 2.1 Place hot air gun handle on supporting stand.
  - 2.2 Plug power cord into a power socket.
- 3 Power-on
  - 3.1 Switch power on. Please confirm again that power supply being used is conforming to the specifications of this product.
  - 3.2 Setting temperature and adjusting airflow. LED display screen will show real air temperature of nozzle after displaying setting value for 3 seconds. User can start operating it as the indicator start twinkling which shows that real temperature of hot air has reached the preset temperature.
  - 3.3 Please place hot air gun handle on supporting stand after soldering work completed or not-using temporary. Please switch power off for long time of no operation.
- 4 Settings
  - 4.1 User can adjust working temperature by tuning temperature setting knob. Then LED display screen will show real air temperature of nozzle after displaying setting value for 3 seconds.
  - 4.2 You can set the knob to adjust the air flow, and air flow gradations will be showed by LED numbers. The device will continue display real temperature 2 seconds later. Air flow gradations: A25~A99, from low air flow to high air glow.

- 4.3 Temperature unit switching: Holding down "SET" and turning on switch will switch temperature scale between Fahrenheit and Celsius.
- 4.4 Standby time:
- Press and hold the "SET" button, then screen displays "--", adjust air volume knob to set standby time which range from 20s to 600s. Release holding and stand time settings will be stored.
  - The device will make a beep and LED numbers start to blink when time remaining is less than 10s.
  - Every press on "SET" will make the device back to normal working state and reset time remaining if standby function enabled.
  - The device will enter standby state and display "--" after restarted if standby function is enabled before. Please press "SET" to enter normal working state.
  - If the standby time is set to "OFF", timed standby function will be inactive. E) The standby function will be disabled if standby time set as "OFF".
- 4.5 Calibration:
- Press and hold the "SET" button, then screen displays "--", adjust temperature knob to set offsetting value which range from  $-50^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ . Release holding and offsetting values will be stored.
  - Calibration manner: Use thermometer to start testing air temperature from nozzle. Then, for example, denote actual temperature as  $T_1(300^{\circ}\text{C})$  and denote display temperature as  $T_2(350^{\circ}\text{C})$ . So the offsetting temperature will be " $T_1-T_2$ " whose output is  $-50^{\circ}\text{C}$ . Please adjust offsetting value as  $-50$ ;
5. Malfunction indication
- 4.6 Displaying of "S-E" indicate malfunction probably is caused by sensor open loop or exceeding of maximum working temperature.
- 4.7 Displaying of "H-E" indicate malfunction probably is caused by sensor short circuit or heating element open loop.
- 4.8 Displaying of "C-E" indicate zero-crossing malfunction.
6. Power off
- 6.1 The device will not power off right after turning switch off and it will continue blow air until air temperature is lower than  $100^{\circ}\text{C}$  which was designated for protect soldering gun.

## Maintenance

### Replacing heating element

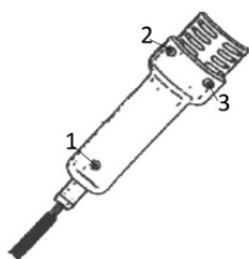


Figure 1

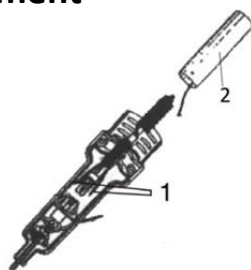


Figure 2

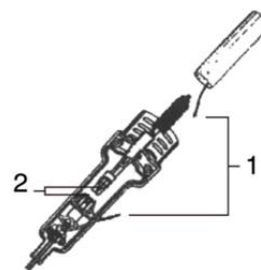


Figure 3

- Switch power off and let it cool down for hot air gun.
- Unscrew 3 screws used to fasten handle (Part 1,2,3 of Figure 1) to move conduit out.
- Open handle(Figure 2)
  - Separate grounding wire sheath (part 1 of Figure 3). Remove protective tube (part 2 of Figure 2) in which quartz glass embedded and thermal insulator embedded and do not drop or lose them. Separate yellow wire and red wire sheath (Part 1 of Figure 2).
- Remove heating element
  - Separate heating element end (Part 2 of Figure 3) then take heating element out.

- 5 Replace with new heating element
  - 5.1 Please take care! Do not rub wire of heating element. Plug a new heating element and reconnect wires with attention to circuit polarity (red to red, yellow to yellow). Assemble handle in reversed disassembling order.

**Service Contact**

**Service Department TEL: 86-755-61618282**

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**Warranty**

This product warranty period cover 12 months from the day this product purchased. We will make free maintenance for any quality problem itself if this warranty and receipt provided. We will repair and return your device within 2 workdays after receiving repairing-required device.

Note: please attach this warranty card if you want your device to be repaired without charge.

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**Certificate of Product**

Model: \_\_\_\_\_ Product NO.: \_\_\_\_\_

QC: \_\_\_\_\_ Production date: \_\_\_\_\_

Sales clerk: \_\_\_\_\_ Sale date: \_\_\_\_\_  
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## SHENZHEN ATTEN TECHNOLOGY CO., LTD.

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- Soldering Iron ●Soldering Station ●Hot Air Rework Station
- Multi-function Rework System ●BGA Rework System
- Regulated DC Power Supply ●Switching DC Power Supply
- Programmable Power Supply
- RF Microwave Instruments ●RF Microwave Components
- Attenuator ●Amplifier ●Coaxial Load

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