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

ST-862D Hot Air Station User Manual
9. Start mode options (S-S) : Heating-up start mode option, there are two options available

Nor: Normal (Default)

The standby function is not turn on or entered to standby mode; the device turn on/off is control by handle button, press once to open, press again to close.

Enter to standby mode

The standby function has been turn on but not enter to standby mode; the output is control by handle seat, the handle will start immediately when remove from the handle seat; return handle to handle seat to turn off output.

For: In forced mode, turn on/off the device is only control by handle remove/return to handle seat, the handle will start immediately when remove from the handle seat; return handle to handle seat to turn off output. The standby function is forbid under this mode.
Error information

<table>
<thead>
<tr>
<th>Fault code or fault description</th>
<th>Likely causes of the faults and solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2: Open circuit of sensor</td>
<td>Poor contact of air gun connector or handle, please change heater</td>
</tr>
<tr>
<td>E7: Short circuit of sensor</td>
<td>The zero-cross circuit is damaged, please return to factory repair</td>
</tr>
<tr>
<td>E8: Over-temperature protection</td>
<td>1. The temperature sensor is abnormal; please replace the heating core. 2. The temperature of heating core is too high; after the heating core is cool, restart the machine.</td>
</tr>
<tr>
<td>E10: Heater overheating</td>
<td>Solution: return to factory maintenance</td>
</tr>
<tr>
<td>E11: Fan broken</td>
<td>Solution: return to factory maintenance</td>
</tr>
<tr>
<td>E13: The heating output switch component was failed</td>
<td>The heating output switch component was failed, the component has been broken by short circuit, please return to factory repair.</td>
</tr>
</tbody>
</table>

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.

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 respond for the maintenance free of charge.
- For those products beyond the warranty period, we provide life-long maintenance services.
- For those products 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 products 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

<table>
<thead>
<tr>
<th>Product warranty card</th>
<th>Product Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>This product is guaranteed for two years from the date of purchase. If any quality problem is found within the guarantee period, we will respond 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!</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Model:</th>
<th>Product No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspector:</td>
<td>Ex-factory date:</td>
</tr>
<tr>
<td>Salesperson:</td>
<td>Sold Date:</td>
</tr>
</tbody>
</table>

Schematic Diagram of the Whole Equipment

Connection Diagram for the Whole Equipment

Packing list: ST-862D hot air station 1PCS + hot air gun holder 1PCS + 4PCS Spray nozzles + 1PCS Power cord + 1PCS ground wire + 1PCS Manual + 1PCS nozzle converter
Note: The hot air handle connected with host well before sell.
### Technical Data

<table>
<thead>
<tr>
<th>Model:</th>
<th>ST-862D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>AC230V±10% 50Hz (110V±10% 60Hz Optional)</td>
</tr>
<tr>
<td>Power</td>
<td>1000W (Max)</td>
</tr>
<tr>
<td>Fuse type</td>
<td>T6.3A(230VAC) T12A(110V AC)</td>
</tr>
<tr>
<td>Temperature range:</td>
<td>100°C ~ 480°C/ 212°F ~ 896°F</td>
</tr>
<tr>
<td>Setting range of air volume</td>
<td>1%~99%</td>
</tr>
<tr>
<td>Temperature unit</td>
<td>°C/°F (default °C)</td>
</tr>
<tr>
<td>Air flow</td>
<td>20~130L/min</td>
</tr>
<tr>
<td>Standby heater cooling function</td>
<td>Support</td>
</tr>
<tr>
<td>Abnormal detection of heating element</td>
<td>Heating element remove detection; heating element open circuit detection; heating element overheating detection</td>
</tr>
<tr>
<td>Abnormal detection of temperature sensor</td>
<td>Temperature sensor open circuit detection</td>
</tr>
<tr>
<td>Beep alarm function</td>
<td>Available</td>
</tr>
<tr>
<td>Quick function</td>
<td>3 sets shortcut temperatures</td>
</tr>
<tr>
<td>Temperature compensation</td>
<td>±50°C/±90°F</td>
</tr>
<tr>
<td>Heating status display</td>
<td>5 dynamic simulate bars</td>
</tr>
<tr>
<td>Temperature adjustment</td>
<td>10 digits (Coarse)/1 digit (Fine-tuning)</td>
</tr>
<tr>
<td>Air flow adjustment</td>
<td>2 digits (Coarse)/1 digit (Fine-tuning)</td>
</tr>
<tr>
<td>Shortcut temperature/air flow</td>
<td>3 sets shortcut temperatures/air flow for quick selection</td>
</tr>
<tr>
<td>Working conditions</td>
<td>Temperature 0-40°C, relative humidity &lt;80%</td>
</tr>
<tr>
<td>Storage conditions</td>
<td>Temperature -20-80°C, relative humidity &lt;80%</td>
</tr>
<tr>
<td>Dimension</td>
<td>208(L)x175(W)x150(H)mm</td>
</tr>
<tr>
<td>Weight</td>
<td>About 3340g</td>
</tr>
</tbody>
</table>

### LCD Description

1. REAL: Real Temperature status
2. SET: 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

### 6. Button Beeping Function

Under menu BL mode, user can turn on/off the beeping function by pressing “▲” or “▼” key. Refer Pic.1-16, OFF disable beeping function; Refer Pic.1-17, ON enables beeping function.

![Pic.1-16](image16.png)  ![Pic.1-17](image17.png)

### 7. Defining Work Function

Under menu HTO mode, it can adjust time of defining work by pressing “▲” or “▼” key (FIG. 1-18, 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.

![Pic.1-18](image18.png)  ![Pic.1-19](image19.png)

### 8. Standby Function

Under Menu STBY, that press button can adjust standby function. (Pic.1-20) When standby function is off, it can adjust the time (time can be set from 1 to 10mins) when this machine can enter into standby. When standby function is on, this handle can be shut off automatically when putting it into this holder after used, it will recover to work after taking this handle out if within standby time, if beyond the standby time, it don’t work until pressing the button in this holder after taking this handle out. (Note: If both timing function and standby function are on simultaneously, timing function will be recount time when the hot air gun working.)

![Pic.1-20](image20.png)
4. 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.

![SET OFF FAC](image)
![SET ON FAC](image)

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 temperature 3: 400°C

5. Temperature Calibration

Under menu CAL mode, press “▲” or “▼” key to enable temperature calibration function. The 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.

![SET 05°C CAL](image)
![SET -05°C CAL](image)

Note: User need calibrate temperature by adjusting its value if the displayed temperature is much different from 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.

![Boot-up Screen](image)

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.

![Settings](image)

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.

![Display Of Hot Air Gun Status](image)

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.

![Default Setting](image)
**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.

3. The cool air function is used when the temperature setting value under 100 °C.

**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 2 seconds.

**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**
   - 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. **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.