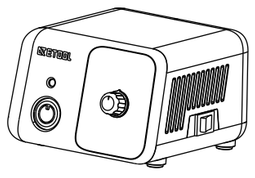
ATETOOL

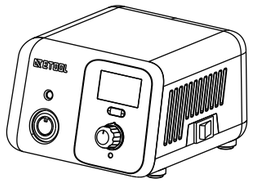
User Manual

AE988/AE988D/AE970/AE970D Soldering Station

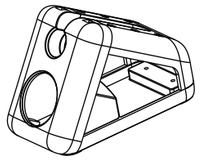
Packing List

Main unit: 1pc
Handle: 1pc
Iron stand: 1pc
User manual: 1pc
Brass wool: 1pc


Main unit (AE988/AE970)


Main unit (AE988D/AE970D)


Handle


Iron stand


Brass wool


User manual

Product Specification

Model No.	AE988	AE970	AE988D	AE970D
Total Power	70W	80W	70W	80W
Main Unit				
Output voltage	25VAC			
Temperature range	200—480°C(392-896°F)		50—500°C (122-932°F)	150—550°C (302-1022°F)
Temperature stability	±1°C (±1.8°F) {}200°C(400°F)}			
Dimension	148x120x85mm			
weight（power cable excluded）	1.32kg	1.32kg	1.33kg	1.334kg
Handle				
Power consumption	65W	75W	65W	75W
Tip to ground impedance	<2Ω			
Tip to ground voltage	<2mV			
Heating element	PTC ceramic heater	Integrated tip	PTC ceramic heater	Integrated tip
Cable length	1.2m			
Weight	79g	68g	79g	68g
Note: specifications and appearance are subject to change for product improvement without prior notice				

Safety and Precautions

The precautions in this manual are divided into the following [warning] and [attention]. Please fully understand the content.

Warning: misuse may cause death or serious injury to the user

Note: misuse may cause injury to users or substantial damage to objects involved

For your own safety, please strictly abide by the following precautions

Warning

When power is on, the temperature of the soldering iron tip might reach to 50 ~ 550 ℃ (120 ~ 1022°F).
Misuse may cause burns and fire, please strictly observe the following precautions:

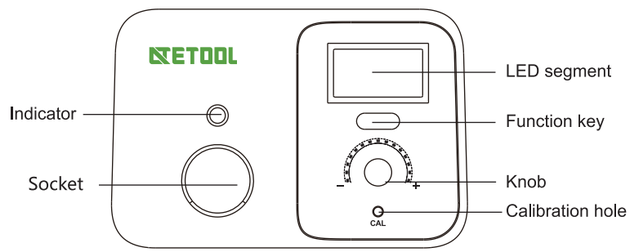
- Do not touch the soldering iron tip or the metal part around it while using
- Do not use it around combustibles
- Inform the people around of the potential risk caused by high temperature
- Turn the power off when not in use
- Before replacing parts or tip, turn off the power and wait till the iron tip cools down
- Do not use this product if you are inexperienced or have no sufficient necessary knowledge without the guidance of related qualified personnel
- Please keep it out of reach of children
- If the power cord is damaged, please ask the manufacturer or its service agent or similar qualified personnel to repair it, so as to avoid personal injury or damage to product

Please strictly observe the following precautions, otherwise it may cause injuries or death

- Do not use this product for works other than soldering
- Do not hit the handle hard for removing the tin on the iron tip
- Do not modify this product
- When replace parts, must use original ATETOOL parts
- Do not soak the product in water or use it with wet hands
- Unplug it properly after using
- Smoke will be emitted during soldering, please use it in open space
- Do not engage in other dangerous acts with this product

Using Method(AE988D/AE970D)

1.Operation and display instructions



Panel display:
LED segment: digital display
Indicator: indicates the statement of heater (light on/off means power on/off)
Function key: function operation
Knob: to adjust temperature
Calibration hole: for calibrate the temperature

2.Turn on the power switch

After switching on, indicator lights up and LED segment displays 888 for 1 second, now power is on. And then it displays the temperature unit --C or --F for 1 second, so you know which unit is used right now. If the standby function is enabled in this soldering station, SLP will be displayed for 1 second to show standby function is available. Then displays the set temperature for 1.5 seconds, and finally displays the real time temperature. When the temperature is stable, indicator will flash.
Note: when not in use, please put the soldering iron on the holder. If it won't be used for a while, please cut off the power supply.

3.After use

After use, please clean the soldering iron tip and apply new solder on it.

4.Temperature unit conversion

First press function key, in the meanwhile switch on the power, till LED segment displays 888, release the function key, now the temperature unit changes. If it was Fahrenheit, now switch to Celsius, and vice versa.

5.Temperature adjustment

Temperature range
AE988D：50-500℃（122-932°F）
AE970D：150-550℃（302-1022°F, note: as LED segment shows only 3 digits, 1022 will be displayed as A22, "A" represents digit "10"）
Temperature adjusted by knob.

6.Screen brightness setting

1) Press and hold the function key till the the screen displays LEd, to enter the brightness setting.
2) Show the current digital display brightness level Lt1 - Lt6 .
3) Adjust the brightness level through the knob: gear 1-6.
4) Press the function key or wait for 10s to automatically save to complete the setting.

7.Standby and sleep functions

Standby function on and off:
1)Press and hold the function key till SLP display on LED segment to enter the standby function on/off setting:
2)Display the current setting On or OFF
3)Adjust by knob: On or OFF to turn on/off the standby and sleep function.
4)Press the function key or wait for 10s to automatically save to complete the setting.

Standby function
1)When standby function is turned on, the soldering station will enter standby mode after not in use for 10 minutes.
2)In standby mode, LED segment displays Stb and temperature drops to 250 ℃ (482 °F).
3)When any operation is detected, such as using the soldering iron, adjusting knob or pressing the function key, it will return to the work mode.
4)When in standby mode, if no further operation is detected for 10 minutes, it will enter sleep mode.

Sleep function:
1)That short press the function key or long time in standby mode can make it enter sleep mode:
2)When entering sleep mode, screen displays OFF and heating is turn off.
3)Press the function key to return to normal heating work mode.

8.Temperature locking function:

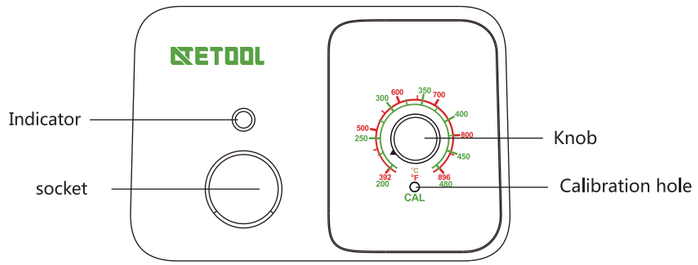
Temperature locking function on and off:
1)Turning the knob to adjust the temperature to be set.
2)Long press the function key till LOC is displayed.
3)Now LEd segment displays On or OFF
4)Turn the knob to set the locking function to be On or OFF .
5)Press the function key or wait for 10s to automatically save to complete the setting.
6)When the temperature is locked, adjusting the knob does not change the setting temperature, it will display LOC for 1 second to show that the current temperature is locked.

9.Temperature calibration

1) Adjust the set temperature to 350 ℃ (662 °F) by knob and wait for 2 minutes to stabilize the temperature.
2) Use a thermometer to measure the temperature of the soldering iron tip.
3) Use a cross screwdriver to adjust the calibration hole to make the displayed temperature value equal to the measured value. For example, if the measured value is 345 ℃, adjust calibration hole to reduce display temperature 350 to 345, make the display temperature match the measured value.
4) Press the function key to complete calibration.

Using Method（AE988/AE970）

1.Operation and display instructions



Indicator: indicate the power state(light on/off means power on/off)
Knob: adjust the temperature
Calibration hole: for calibrate the temperature

2.Switch on the power

After the power is on, indicator lights up, and the soldering station starts heating up according to the set temperature. After the temperature is stable, indicator flashes.
Note: when not in use, please put the soldering iron on the holder. If it won't used for a while, please cut off the power supply.

3.Temperature adjustment

Temperature range: AE988/AE970：200-480℃（392-896°F）.
Temperature adjusted by knob.

4.Temperature calibration

1) Adjust the set temperature to 350 ℃ (662 °F) by knob and wait for 2 minutes to stabilize the temperature.
2) Use a thermometer to measure the temperature of the soldering iron tip.
3) Use a cross screwdriver to adjust calibration hole to make the measured value equal to set temperaure. For example, if measured value is 345℃, adjust calibration hole to increase it to 350, make the measured value match set temperature.
4) Temperature calibration completed.

Maintenance

In order to make this product durable, please maintain it regularly. The lifespan of this product depends on the used temperature, quality of solder wire and soldering paste, frequency of use etc. Please repair and maintain it according to specific use conditions.

Warning

Please pay close attention when the soldering station is in use at high temperature, cut off the power and unplug the power cord after use.

Soldering iron tip maintenance
1. Set the temperature to 250 ℃ (480 °F).
2. After the temperature is stable, clean the soldering iron tip with a brass wool and check its condition.
3. If black oxide is attached to it, please apply new solder (including flux) and wipe it repeatedly with a brass wool until it's clean, then apply some new solder.
4. If the soldering iron tip has been deformed, perforated or worn out, please replace it with a new one.

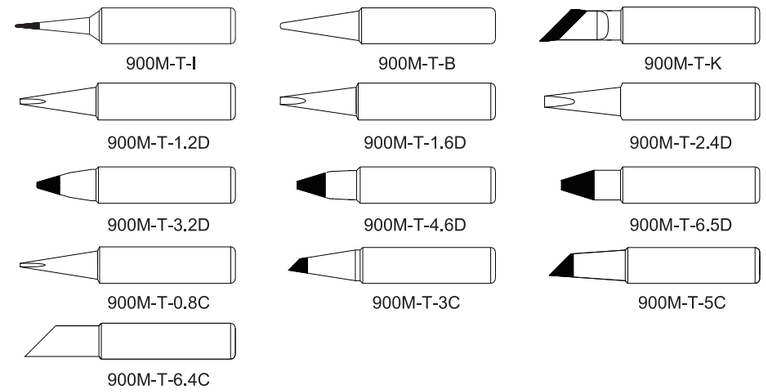
Troubleshooting Guide

Warning

- When checking or replacing parts, be sure to pull out the power plug to prevent electric shock
- If the power cable is damage, it must be sent to the manufacturer, agency store or maintenance personnel with the same qualification for repair to avoid accidents

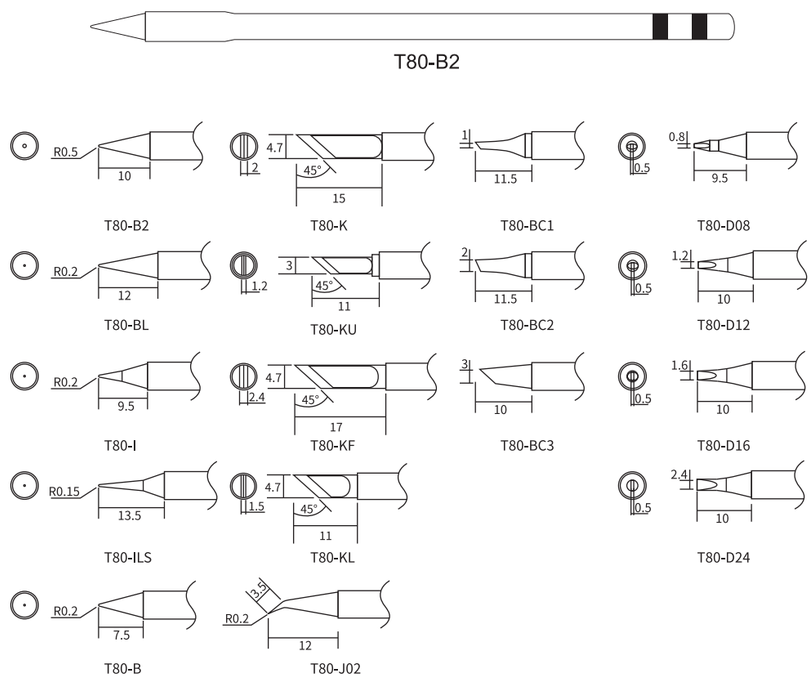
Failure phenomenon	Examination	Dealing method
Not working after power is on	Check whether the power cord is good, or plug falls off	Connect the power supply well
	Is the fuse OK	Figure out the cause of fuse damage: 1. Short circuit inside the station. 2. Inside the handle, the spring might meets the heating element. 3. Check whether the pin of heating element is twisted or short circuited. Even if the cause is unknown, please replace the fuse. If the fuse get burnt out again, please return the handle with the main unit for maintenance.
The display shows "S-E"	Whether the handle cable is well connected with main unit	Reconnected
	Whether the wire connecting to handle is broken	If so please replace it with a new handle
	Whether the heater is damaged (the resistance of the blue lead wire shall be less than 100 Ω at room temperature).	If damaged, replace the heater
The display shows "H-E"	Whether the wire connecting to handle is broken	If so please replace it with a new handle
	Whether the heater is damaged (the resistance of the red lead wire shall be less than 100 Ω at room temperature)	If damaged, replace the heater
Iron tip heating is on and off	Whether the wire connecting to handle is broken	If so please replace it with a new handle
The solder won't get on the iron tip	Check whether the temperature of the iron tip is too high	Adjust to the proper temperature
	Check whether there is oxide on the tip	Clean the oxide with a brass wool
Iron tip temperature is too low	Check whether there is oxide on the tip	Clean the oxide with a brass wool
	Whether the temperature is proper	Adjust to the proper temperature
The iron tip won't fit	Whether there is oxide inside tip, or soldering iron tip expands	Change the tip and heater
	Not original tip or not same type tip	use original factory tip or same type tips
The actual temperature can't reach	Is the temperature adjusted correctly	Adjust the set temperature again
	Haven't done temperature calibration for a long time	Re-calibrate temperature accordingly

T900M series soldering tips (AE988/AE988D)



(More soldering tips information please contact us)

T80 series soldering tips (AE970/AE970D)



(More soldering tips information please contact us)

Shenzhen ATTEN Technology Co., Ltd. Electronic Tools Branch
Address：F5, 1-2 #, Tongfuyu, Aiqun Road, Shiyan Street, Bao'an District, Shenzhen, 518132,P.R.China
Tel：(0755) 23408674 - 802
Support：(0755) 23408704 - 818
URL：www.atten.com.cn(in Chinese)
www.atten.com(in English)

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