

**T400**

# Smart Soldering Workstation User Manual



Please read the user manual carefully before use

# 1 Product Features

## • What can it do ?

### ➤ The world's first smart soldering workstation

Industry's first innovative outcome. Redefine soldering station and reshape the soldering experience with advanced innovative ideas.

### ➤ A pioneer in the industry Global upgrade through networking

Equipped with WiFi+Bluetooth module, continuous iterating and upgrading. Enjoy the latest and updated functions at any time, establishing new layouts of intelligent networking.

### ➤ AiXun new 7-core interface

Intelligent soldering station connection, realize more new operations and device linkage, showcasing the intelligent foresight layout.

### ➤ EB01 docking station Unlimited functions expansion

Support automatic control of multiple devices, multiple operations on one machine, zone management, unlimited functions expansion, building an efficient operational core for AiXun ecosystem.

### ➤ Comprehensive soldering expert 4-in-1 smart soldering handle T225

A milestone in self-designed soldering handle, industry's first 4-in-1 design, custom new standards. Compatible with 4 types of soldering tips, built-in 6-axis gyroscope, automatic standby in all scenarios, reaching a new level of gesture control.

### ➤ AI smart voice control Hands-free operation

Connect with BS08 voice center control, command via voice, instant response, intelligent and efficient, showcasing the convenience brought by technology.

### ➤ Neural network temperature control algorithm Intelligent control ensures swift temperature changes

Enables rapid heating without overheating and re-heating without cooling down. Intelligent control highlights the ingenuity.

### ➤ ES02 Fume extractor Universal adjustment, purify at will

4000rpm high-speed brushless motor provides sufficient power. Dual filtration system, high-precision filtration. One key to clear dust, smoke and odors, enjoy a fresh environment.

### ➤ Ultimate craftsmanship With both interior and exterior improvements

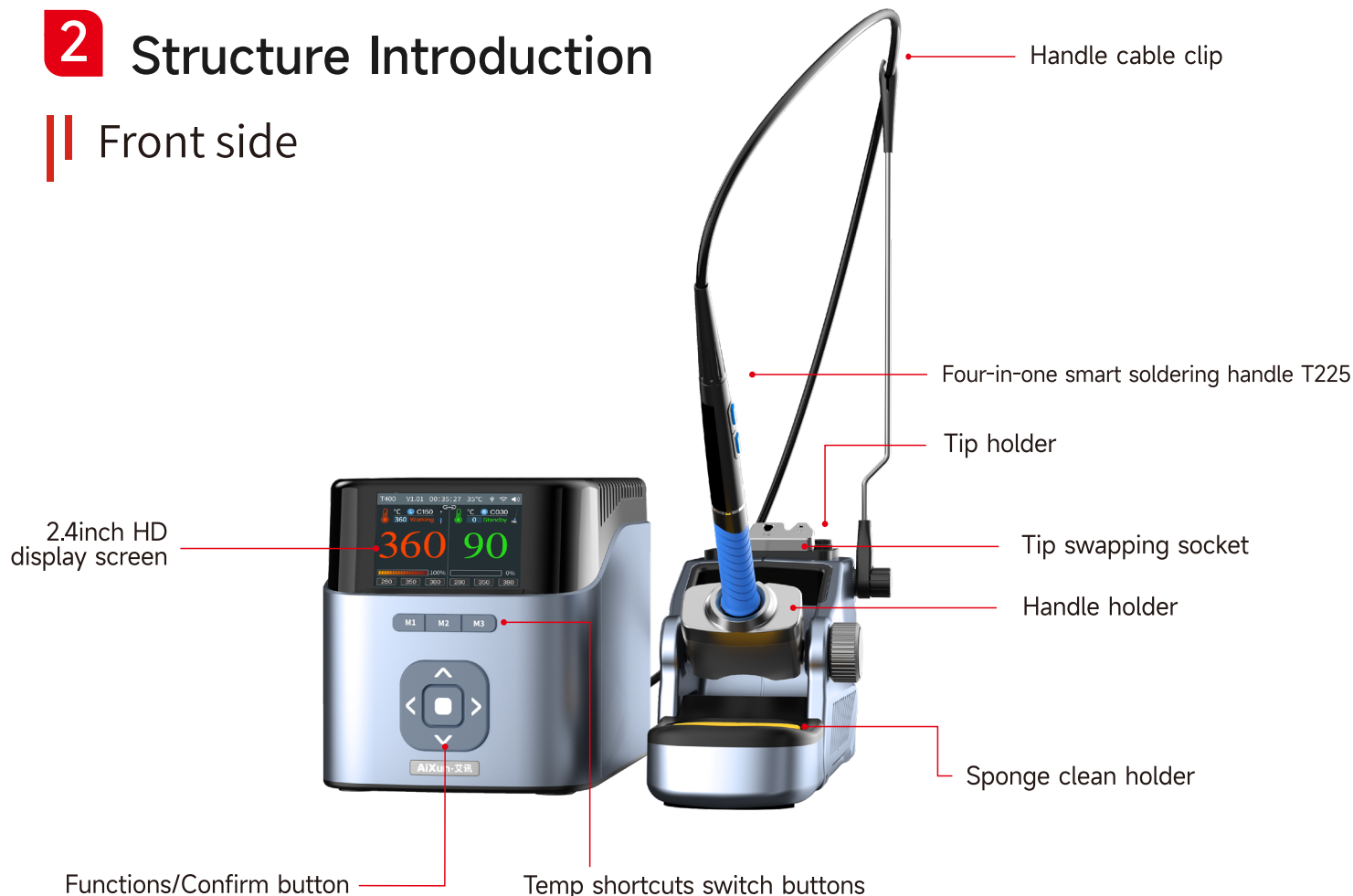
Adopt the latest PCD stack process, exquisite internal structure, avoid being troubled by disordered wires. Realize the perfect combination of performance and aesthetics.

### ➤ Ring transformer AC pure isolation

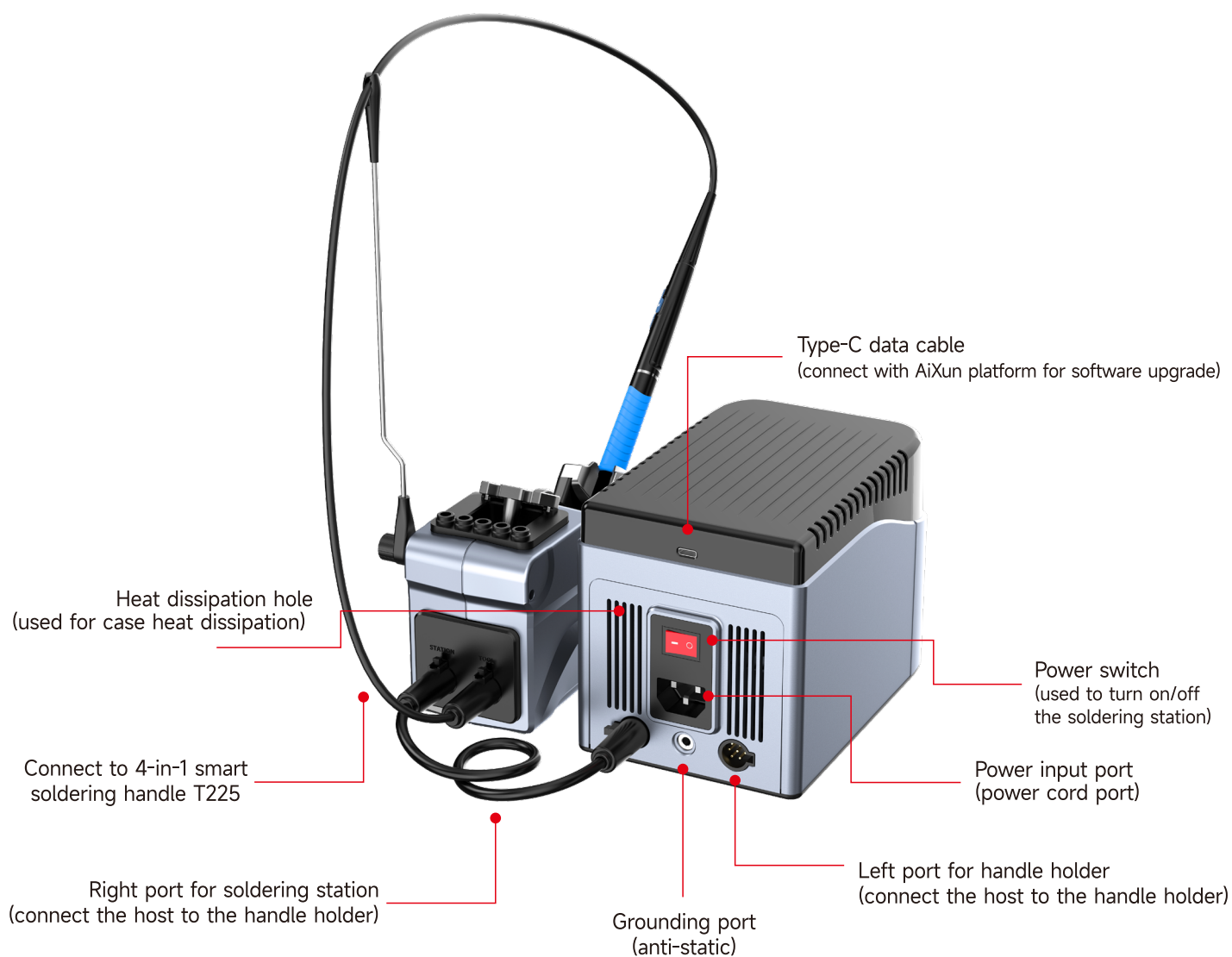
320W rated power, anti-interference, anti-static, low magnetic leakage, excellent performance, efficient and stable.

# 2 Structure Introduction

## || Front side



## Back side



## Product accessories



T400 host



Metal standby holder of soldering station



Dual-end 7-core aviation plug cable



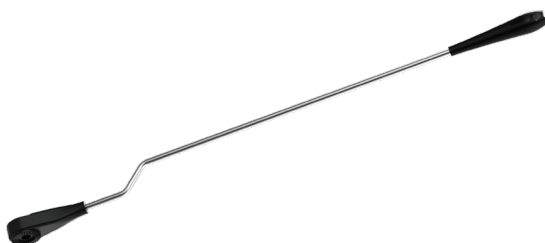
Power cord



Grounding wire



User manual card



Cable hanger



Screw



Certificate



Come with C030  
(K tip)



Come with C080  
(K tip)



Come with C150  
(K tip)



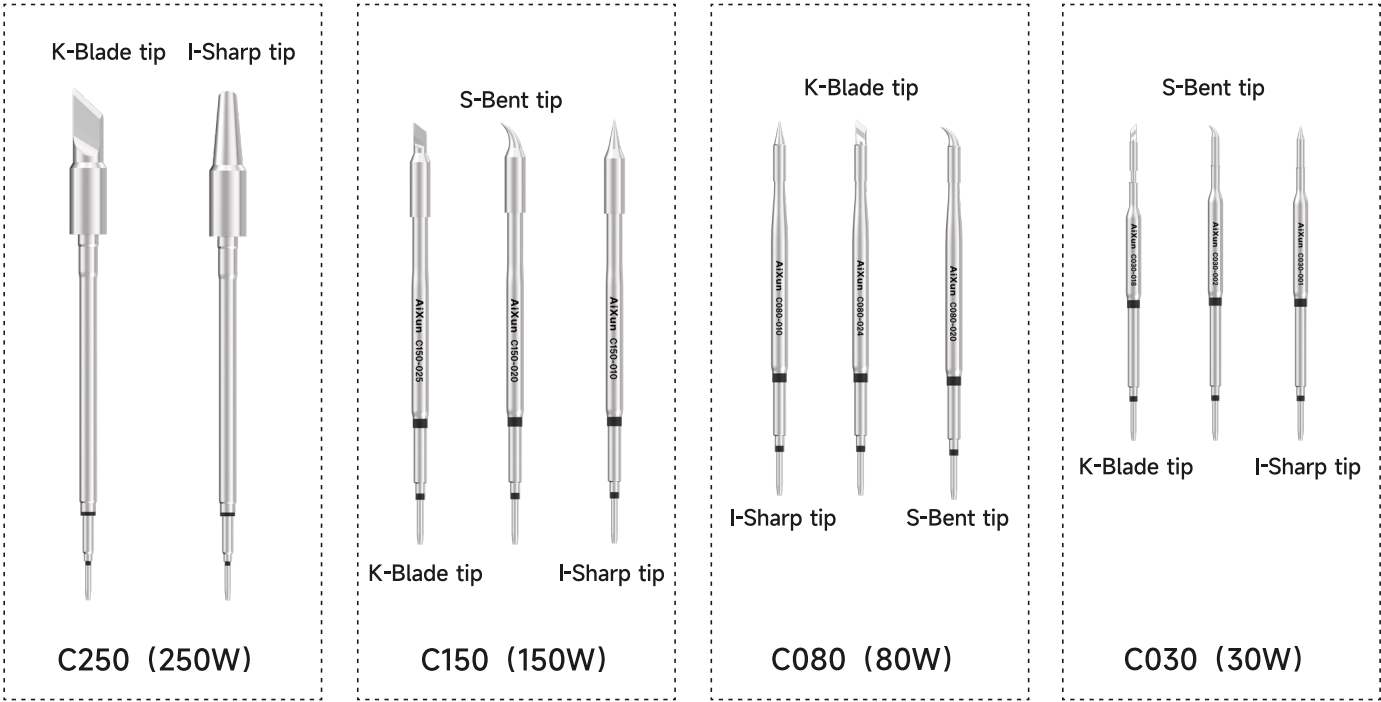
4-in-1 smart soldering handle T225



### 3 Product parameters

|  |                               |
|--|-------------------------------|
| Product name: T400 Smart Soldering Workstation | Brand: <b>AiXun</b>           |
| Input voltage: 230V-50Hz                       | Compatible handle model: T225 |
| Rated power: 320W                              | Fuse: 3A                      |
| Compatible soldering tips: C030-C080-C150-C250 |                               |

### 4 Support 4-in-1 smart soldering handle T225



## 5 Host interface and buttons explanation

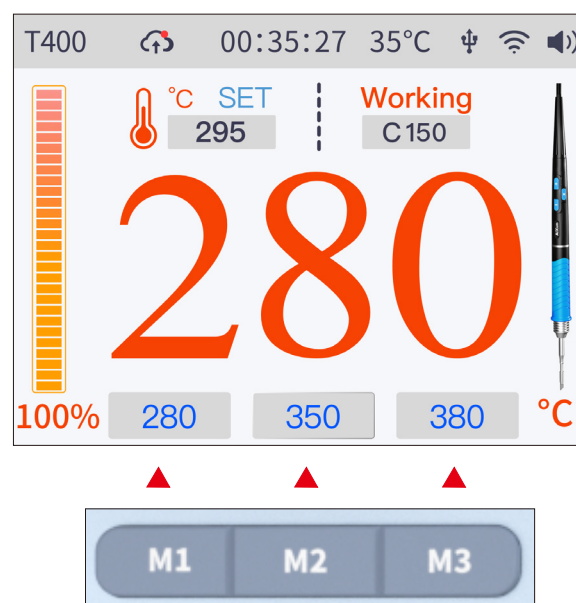
### Main Interface



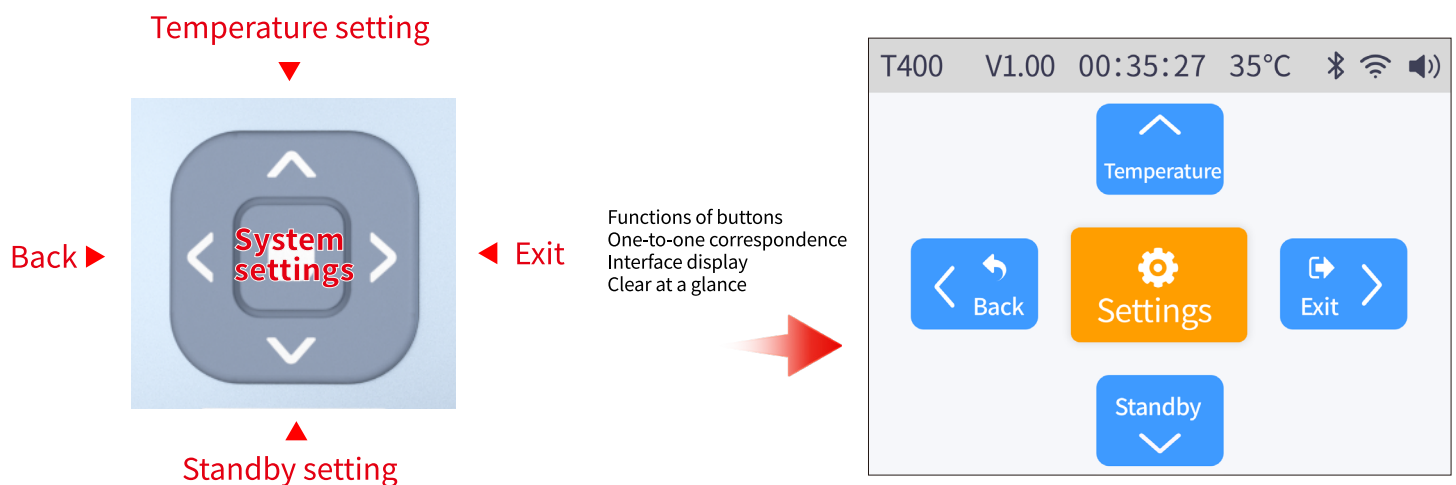
Note: The left and right channels can work simultaneously or independently

### Temp shortcuts switch

- There are "M1, M2, M3" buttons on the front lower side of the soldering station, and each corresponding to a temperature channel. Users can adjust and set temperature according to their own needs. **Single press the button to quickly switch temperature channels** (as shown in the figure)
- After setting the required temperature, **long press M1, M2, M3** to save the shortcut parameters for the corresponding channel.



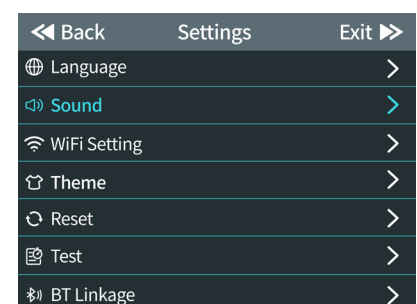
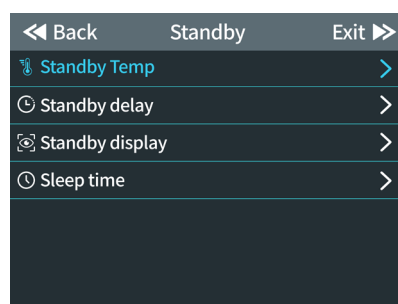
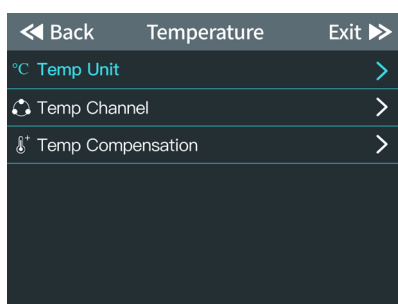
## Functional button operation



When the soldering station is turned on, the main interface is automatically displayed on the host. Press the button to enter the function setting interface, and the functions displayed on the interface correspond one-to-one with the function buttons. Users can operate according to the prompts.

1. Press to switch between digital/curve modes
2. Long press to enter the settings interface
3. In the settings interface:

- A. Press to back to the functional interface
- B. Press to back to the main interface
- C. Press and buttons for selection
- D. Press button to confirm



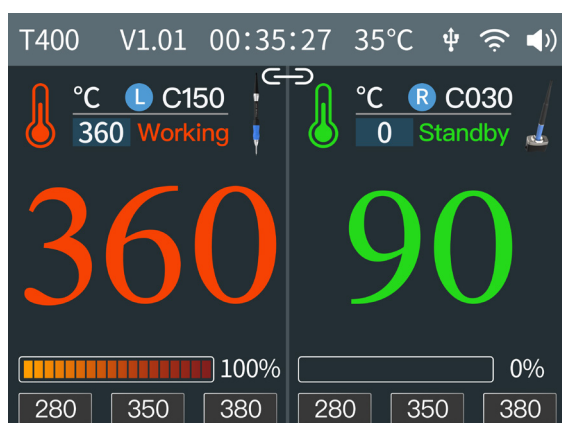
- Select to enter the **temperature setting interface**, where users can set functions such as "temperature unit, temperature channel, temperature compensation", etc. Press the left button to back to the functional interface, press the right button to exit and back to the main interface.
- Select to enter the **standby setting interface**, where users can set functions such as "standby temperature, standby delay, standby display and sleep time", etc. Press the left button to back to the functional interface, press the right button to exit and back to the main interface.
- Select to enter the **system settings interface**, where users can set functions such as "language, sound, WiFi, theme, reset, test, Bluetooth linkage, working time, system information" as needed. Press the left button to back to the functional interface, press the right button to exit and back to the main interface.

## 6 Soldering station operations

### • Working mode

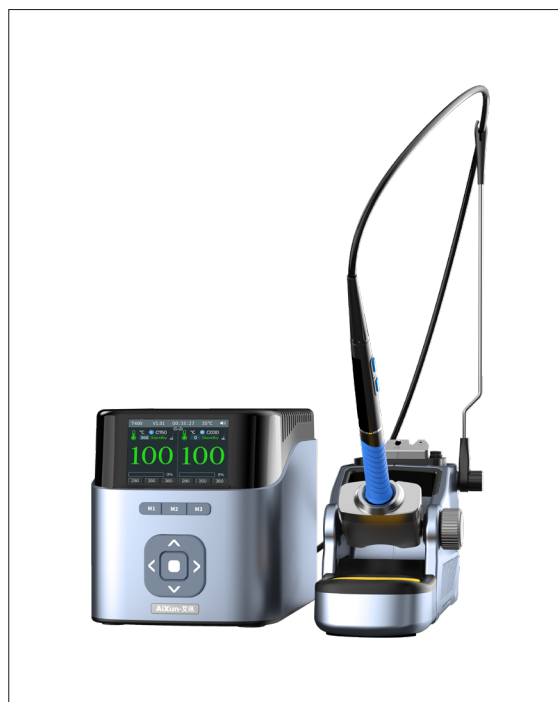


- The handle can work independently at a single channel or simultaneously at two channels. When picking up the handle from the standby holder, the soldering tip will automatically heat up to the set temperature and start working.



- **Change the temperature setting (90°C to 450°C).** Select the needed temperature in the temperature channels interface, and the soldering tip can be heated to the corresponding value.

### • Standby mode



- When the soldering handle is placed in the standby holder or on the desktop, the host will automatically enter standby mode and drop the temperature to the preset standby temperature.

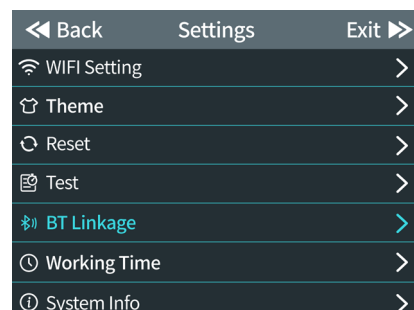


- Change the standby temperature (temperature can be customized) or the standby delay (standby delay time can be customized) **in the standby setting interface**

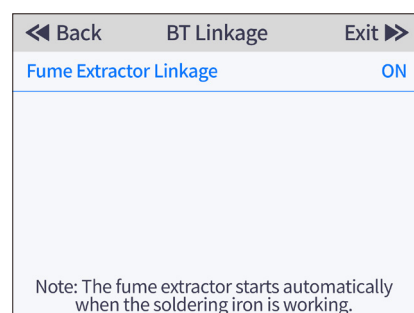
# 7 T400 Smart Soldering Workstation and ES02 Linkage



## STEP 1:




## STEP 2:



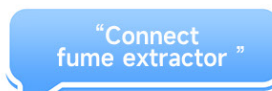
## STEP 3:



- Long press the  button on the soldering station to enter the system settings interface, turn on the "BT linkage" function;
- After the fume extractor is powered on, it will automatically connect to the soldering station;
- The soldering station pops up a connection prompt, select confirm;
- In linkage mode, when the soldering handle is working, the fume extractor automatically turns on, and smoke/dust is clearly visible.



## 8



- Link with BS08 voice center control, connect the needed devices according to the voice remind, such as: **connect soldering station, connect power, etc.**, realizing devices collaborative operation.
- If the fume extractor and soldering station are **in linkage mode**, BS08 **can also control the soldering station simultaneously** when connecting the fume extractor.

## Precautions

### Precautions for soldering station

To avoid damage to the soldering station and consider safety of the working environment, the following matters shall be observed:

- ◆ This product uses a three wire grounding plug, which must be inserted into a three hole grounding socket. Do not change the plug or use an ungrounded three head adapter to make the grounding poor. To lengthen the wire, use a grounded three wire power cord.
- ◆ Please do not make any change to the soldering station without authorization.
- ◆ When replacing parts, the original factory parts shall be used.
- ◆ Please do not wet the station. Do not use the station nor pull the power cord when hands are wet.
- ◆ There is smoke during soldering, good ventilation facilities should be available in the working environment.
- ◆ Please do not do anything that may harm the product when using the station.
- ◆ Please place the station in a dry environment when it's not in use for a long time.

### Precaution for soldering tips

When turning on the switch, the soldering iron tip is in a high temperature state. In view of the possibility of burns or fire caused by abuse, please strictly abide by the following items:

- ◆ Please avoid the abuse of this station and use this product according to the operating instructions.
- ◆ When replacing the soldering iron tip, do not touch it directly by hand to prevent scalding.
- ◆ Do not use the iron tip near flammable objects.
- ◆ Inform other personnel that the iron tip is very easy to burn and may cause dangerous accidents. The power shall be turned off when not using.
- ◆ Do not knock the soldering iron on the workbench to remove the residual flux, which may seriously damage the soldering iron.
- ◆ Do not use the soldering iron tip for work other than soldering.
- ◆ Keep out of the reach of children to prevent burns.

 **This product has anti-static measures.  
Please be sure to use it grounded.**



## 10 Use And Maintenance Of Soldering Tip

**! Note: do not use a file to remove the oxide on the iron tip**

1. After the temperature is stable, clean the iron tip with a cleaning sponge and check the state of the soldering iron.
2. If there is black oxide, plate with a new tin layer, and then wipe with a cleaning sponge. Cleaning like that repeatedly until the oxide is completely removed, and then plate with a new tin layer.
3. If the soldering iron tip is deformed or rusted, replace with a new soldering iron tip.

### II Use of soldering iron tip

|                                  |   |
|----------------------------------|---|
| ◆ Soldering iron tip temperature | Too high temperature will weaken the function of tip, choose the temperature as low as possible. This tip has an excellent temperature resilience, and support soldering at the lower temperature, which can protect components that are sensitive to temperature.  |
| ◆ Cleaning                       | Clean the soldering iron tip regularly with a cleaning sponge. After soldering, the oxides and carbides derived from the residual flux will damage the tip, cause soldering errors or reduce the thermal conductivity of the tip.<br><br>If using the tip continuously for a long time, please disassemble the tip once a week to remove the oxide to prevent it from being damaged and reduce the temperature. |
| ◆ When not in use                | When not in use, do not keep the tip at high temperature for a long time, or the flux on the tip will be converted into oxide and greatly reduce the heat conduction ability.   |
| ◆ After use                      | After use, the tip shall be wiped clean and plated with a new tin layer to prevent oxidation.   |

### II “Tin planting failure” may be caused by:

1. When the soldering iron is idle, it is not covered with new tin layer.
2. The soldering iron tip is at high temperature.
3. Insufficient melting during soldering.
4. Clean the tip on a dry or unclean sponge or cloth. [The clean and moist industrial grade sulfur-free sponge should be used]
5. The solder or iron coating is impure, or the soldering surface is not clean.

## II How to prolong the service life of soldering iron tip?

- ◆ Soak with fresh solder after each use to prevent the oxidation and prolong its service life.
- ◆ Apply the temperature as low as possible to fulfill the work, low temperature can not only reduce the oxidation of the iron tip, but also easy to solder.
- ◆ Use a thin iron tip only in necessary, the coating of a thin iron tip is not as durable as that of a thick iron tip.
- ◆ Do not use the soldering tip as a detection tool, bending of the soldering tip will lead to The rupture of the coating and shorten the service life.
- ◆ Use less active rosin flux, because the high content of active rosin will accelerate the corrosion of iron tip coating.
- ◆ When not in use or stop soldering, put the handle into the handle holder or turn off the power in time.
- ◆ Do not exert heavy pressure on the soldering tip, higher pressure does not mean fast heat transfer. In order to provide heat transfer, the solder must be melted to form a heat transfer solder bridge between the soldering tip and the solder joint.

 **Note: Proper daily maintenance will effectively improve the service life of the soldering iron tip**

## 11 After Sales

### ● Warranty regulations

- This product is guaranteed for one year from the date of purchase (subject to the purchase certificate).
- The warranty service is only valid under normal use. Any man-made damage, such as the use of inappropriate accessories, failure to use in accordance with the instructions, damage caused by non official maintenance, wrong use or negligence, the warranty service will be invalid immediately.
- AiXun company has the final right to interpret the above regulations.

# AiXun

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