

**T3B**

# Smart Soldering Station **Product Manual**



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Caution Notice	01
Product Features	02
Parameters	02
Parts Introduction	03
Station Usage	06
Use and Maintenance of Soldering Iron Tip	07
Aftersales	09

# 1 Caution Notice

## Station Caution Notice

To avoid station damage and keep safe working environment, the following items should 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 terminal adapter. To lengthen the wire, use a grounded three wire power cord.
- Do not make any changes to the station without permission.
- When replacing parts, original factory parts should be used.
- Do not wet the soldering station. It is forbidden to use the station or pull the power cord with wet hand.
- There will be smoke during soldering, the working environment should have good ventilation facilities.
- When using the station, do not do anything that may harm the product.
- Keep the station in a dry environment if not use it for a long time.

## Soldering Iron Tip Caution Notice

When power turns on, the soldering tip is in a high temperature state, as abuse may cause burns or fire, please strictly observe the following:

- Avoid the abuse of this soldering station, follow operating instructions to use.
- Do not touch the metal part near the tip of soldering iron.
- Do not use soldering iron near flammable objects.
- Inform other personnel that the soldering iron tip is easy to burn and may cause dangerous accidents. Turn off the power during rest or after completion.
- Do not strike the soldering iron on the workbench to remove the flux residual, which may seriously damage the soldering iron.
- Do not use soldering iron tip for other work other than soldering.

 This product has anti-static measures, please be sure to use grounding

## 2 Product Features

T3B intelligent soldering station has the following characteristics

- It can be automatically updated by connecting to AiXun platform, and the function of soldering station software can be upgraded infinitely.
- 210/115 soldering pen nano-precision welding, extremely fast heating, 2 seconds melting tin.
- Intelligent recognition of soldering target and environment, intelligent power compensation and automatic protection.
- 2.4 inch color display, 100-500 °C temperature adjustable, with real-time dormancy induction.
- Support T210, T115 two handles, automatic identification of model and working status
- Personal habit temperature self memory, three channels temperature fast switching, knob adjustment
- The host has built-in environment temperature sensor to avoid high temperature operation
- Automatic record of working time, automatic reminder of fatigue operation
- Super anti static isolation design, meet the industrial ESD standard
- Connect to the AiXun platform to customize the personalized startup interface

## 3 Parameters

### || Station Host Parameters

Part Number: T3B	Input voltage: AC85-220V	AC frequency: 50/60HZ
Total power: 96W	Temperature range: 100-450°C	Size: 160*110*54mm

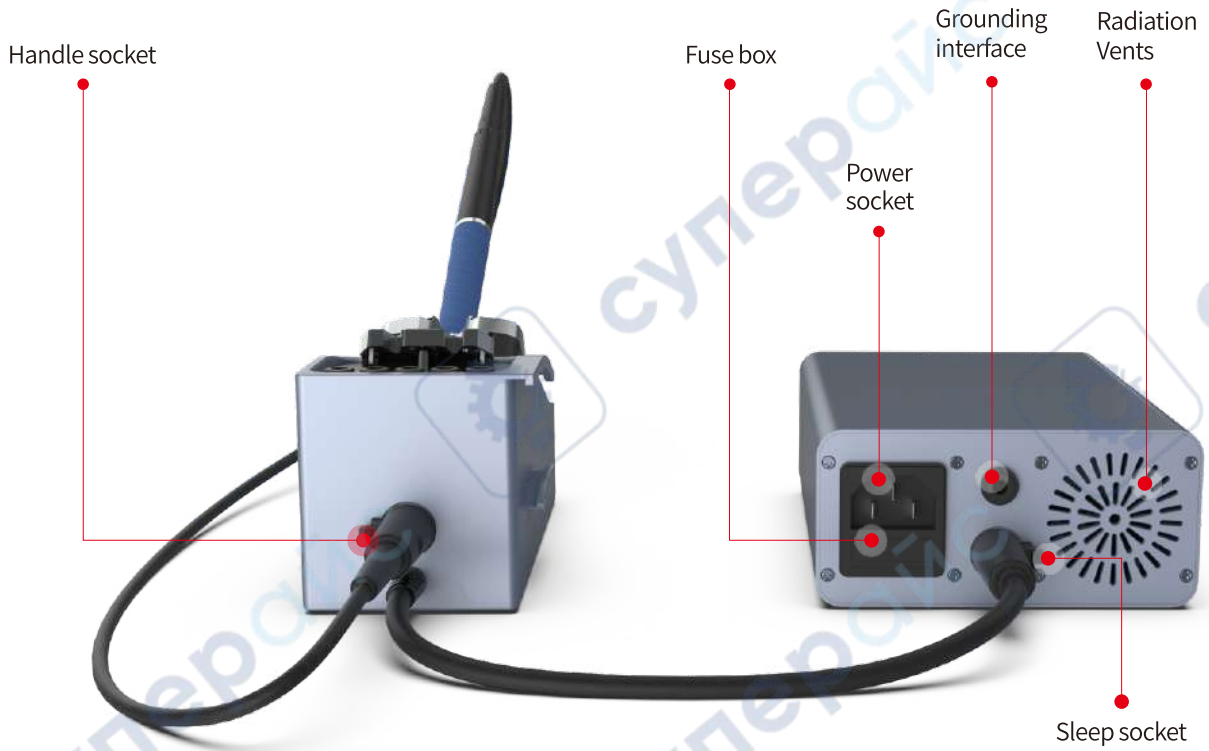
## Soldering Iron Parameters

Handle PN:T210/T115	Handle socket:Aviation plug
Heating core:C210/C115	Handle material: Plastic/Metal
Soldering iron tip material: Copper	Earth impedance of soldering nozzle:<2ohms
Temperature range:100°C~500°C	

## 4 Parts Introduction

### Soldering station introduction





## Soldering pen selection

T210 handle

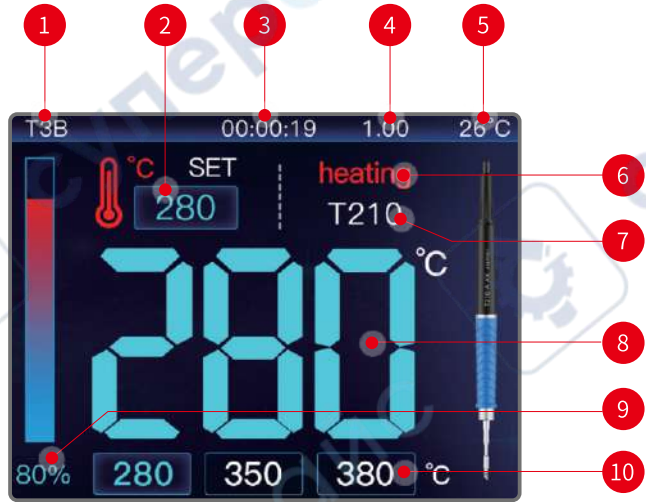


T115 handle



## Interface introduction

- 1 Soldering station mode
- 2 Set temperature display
- 3 Boot time
- 4 Firmware version
- 5 Chassis temperature
- 6 Working status
- 7 Handle model
- 8 Real-time temperature display
- 9 Power
- 10 Fast temperature switch



## Intelligent Soldering Station Handle Holder

### Splash guard

Use brass wire cleaning balls to prevent solder particles from splashing



### Brass wire cleaning ball

Very effective cleaning method. Leave a thin layer of solder on the solder tip after use to prevent oxidation during cleaning and tin planting



# 5 Station Usage

## ➤ Operating mode



Lift the handle from the holder and the soldering tip automatically heat to the selected temperature.

Change the temperature setting (100~450°C) Ⓢ rotate ±5  
Through the settings menu · Change the quick temperature setting

## ➤ Standby mode



Handle being placed in the stand, the host will automatically enter the standby mode, and the temperature will drop to the Preset sleep temperature

Through the settings menu · Change the standby temperature (Temperature can be customized)  
· Change the standby delay (Sleep delay time can be customized)

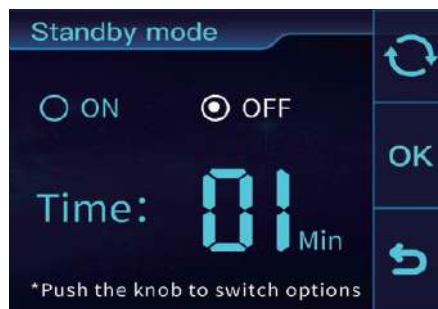
## ➤ Sleep mode



Handle being placed in the holder for a long time, the temperature will automatically drop to the preset sleep temperature.

Through the settings menu  
· Change the sleep time  
(No heating after sleep, default 30 minutes, time can be customized)

## ➤ Rest screen mode




Through the settings menu

The screen rest time can be customized, and the

screen is not off by default



## 6 Soldering tip use & maintenance

 Note: Do not clean the oxide on the soldering tip with a grater

- Set the temperature to 250 degrees Celsius (482 degrees Fahrenheit).
- After the temperature is stable, clean the tip with the soaked sponge and check the status of the soldering iron.
- If there is oxide, plate a new tin layer, then clean with the sponge.
- If the soldering tip is deformed or heavy rusty, must replace a new one.

### Use of the soldering tip

<ul style="list-style-type: none"> <li>• Temperature control</li> </ul>	<p>Too high temperature will weaken the soldering tip function, control the temperature as low as possible.</p> <p>The soldering tip has excellent temperature recovery and can offer fully welding at low temperature, which can protect the temperature sensitive components.</p>
<ul style="list-style-type: none"> <li>• Clean</li> </ul>	<p>Clean the tip with soaked sponge regularly, to avoid tip damage / welding deviation / thermal conductivity weakening caused by the oxides and carbides derived from the flux residual.</p> <p>With continuous and long time use, please disassembly the soldering tip once a week to remove the oxide, to prevent it from damage nor temperature deduction.</p>
<ul style="list-style-type: none"> <li>• When not in use</li> </ul>	<p>When the soldering iron is not used, do not keep the soldering tip in a high temperature state for a long time, to avoid thermal conductivity weakening by the flux oxide.</p>
<ul style="list-style-type: none"> <li>• After use</li> </ul>	<p>After use, clean the soldering iron head and plate with a new tin layer to prevent oxidation.</p>

### Temperature calibration for the soldering tip

Recalibrate to avoid temperature deviation if change a different type soldering tip.

Enter setting page  
 Choose correct  
 Choose temperature calibration



## || Possible reasons for failed tin staining

- Did not cover the tip with tin in idle state
- The soldering tip stays in a high temperature state
- Insufficient melting during welding
- Scrub the iron tip on a dry or unclean sponge or cloth[ Clean, moist, industrial grade, sulfur-free sponge should be used]
- The solder or iron coating is not pure, or the welding surface is not clean

## || Solution for failed tin staining

- Remove the tip from the handle after the tip cooled
- Remove the dirt and oxide from the tin surface of the iron tip by using 80# Yaan ester, abrasive foam or 100# emery paper.
- Put the soldering tip into the handle and use the tin wire containing rosin (  $\Phi$  8 mm above) to wrap the new exposed tin layer surface of the tip, and turn on the power supply of the soldering station.



Note: proper routine maintenance can effectively prevent the soldering tip from failed tin staining

## || Temperature regulation of soldering tip:

The temperature of different types of iron tips may be different.

The best way to adjust is by temperature calibration, or by using the temperature control knob basing on applicable temperature of each type iron tip.

## || Prolong the lifespan of soldering 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 weld.
- 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 head coating.
- When not in use or stop soldering, put the handle into the dormancy stand 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.

## 7 Aftersales

### 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. All man-made damage, such as improper use of accessories, failure to use according to instructions, damage not caused by our company's repair, wrong use or negligence, the warranty service will be immediately invalid.
- The company has the final right to interpret the above regulations for users who do not comply with the above regulations.

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