

T380

Portable Smart Soldering Station User Manual



Please read this manual carefully before use

1 Product Features

- **Built-in with battery, movable soldering is more convenient and smart; 5G dual mode Bluetooth WiFi module/heating up in one second/pure aluminum alloy shell**
- Full aluminum alloy shell, small volume with massive material, a symbol of power and technology!
- First 5G dual mode WiFi, support OTA upgrade, become smarter
- Support Bluetooth AI voice central control, control any of the functions by voice within 6 words, support multiple languages
- Support built-in 2600MAH battery, support continuous soldering for 40 minutes under 400°C after fully charged
- Integrated OLED screen, buzzer prompt, minimalist design of three buttons, allowing blind operation
- Glass display panel, design of aluminum alloy shell and metal vent, high temperature resistance of the surface, insusceptible to the corrosion of the PCB cleaner
- The sponge silicone groove adopts the design of buckles on three sides, which allows omnidirectional operation when cleaning the soldering tip
- Support operation of T210 and T115 handles, automatic recognition, plug and play
- Original design of all-metal contact wireless standby holder, wire connection is unnecessary for standby signal, truly solving the unstable standby problem
- Original neural network temperature control algorithm, proper heating up without overheating, instantaneous cooling is within 20°C during large-area welding, which is much higher than international standard

2 Structure Introduction



Product Accessories



T210 handle



C210 soldering tip (K-tip)



Charger



User manual card



Certificate

3 Product Parameters

Product name: Portable Smart Soldering Station	Model: T380
Rated power: 80W	Supported handles: T115/T210
Temperature range: 100-450°	Charging voltage: 9-15V
Charger voltage: 110-230V	Charging protocol: PD/QC
Charging port: Type-C	Host weight: 1.6 kg

4 Button and Main Interface Introduction

The main interface of the T380 device displays the following information:

- Product name:** T380
- Handle model:** T210
- Device temperature:** 34°C
- Battery power of T380:** 95%
- Current temperature of handle:** 298°C
- Set temperature of T380:** 258

Icons on the interface include a moon (standby), a thermometer (heated), and a battery level indicator.

Buttons and their functions:

- The button on the left:**
 - * It can increase the set temperature
 - * It serves as down button in setting interface
 - * Long press the left and right buttons simultaneously to save customized shortcut temperature
- The button in the middle:**
 - * Single press the middle button to switch temperature shortcut channels
 - * It serves as confirm button in the settings
 - * Long press it to enter into setting interface, long press it continuously to select to shut down the station
- The button on the right:**
 - * It can decrease temperature
 - * It serves as back button in the settings
 - * Long press the left and right buttons simultaneously to save customized shortcut temperature

Introduction to buttons in setting interface (one-to-one correspondence)

Button Function

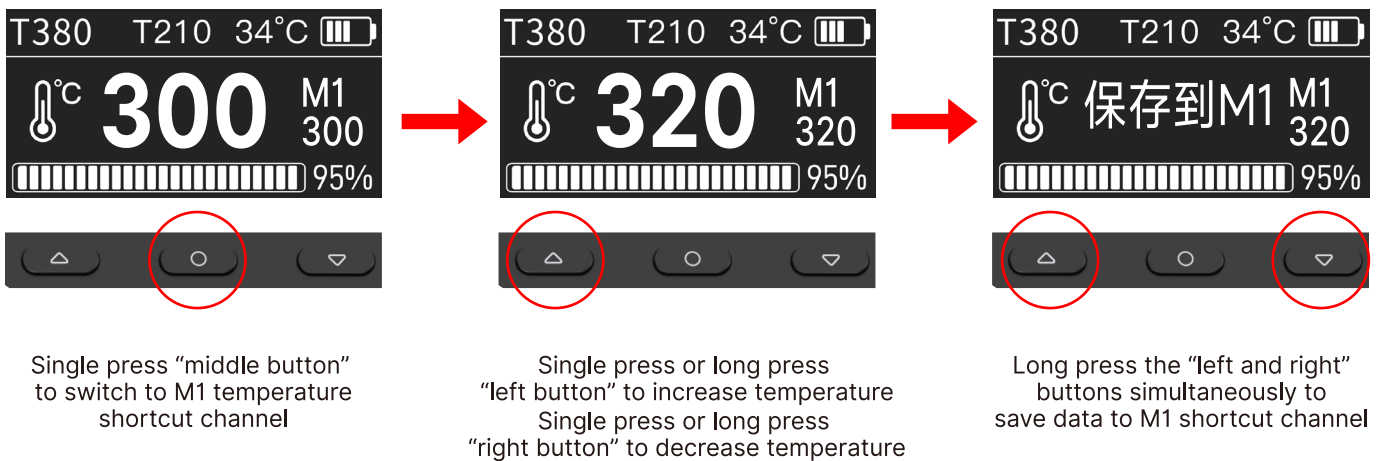
Down	Yes	Back
▼	▼	▼

- The button for function selection (Up arrow)
- The confirm button after selecting a function (Middle circle)
- The button for returning function (Down arrow)

5 Operation Interface

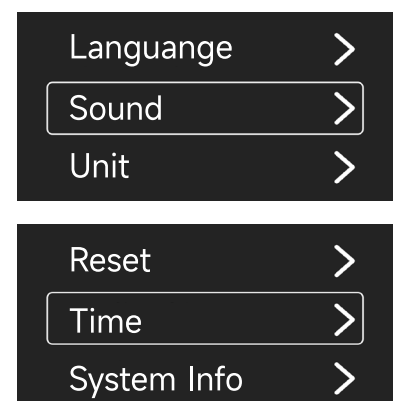
Temperature shortcut channel operation

- Single pressing "middle button" can switch to M1, M2, M3 temperature shortcut channels quickly, meanwhile, users can customize shortcut temperature according to their needs
- Single press "middle button" to switch to M1/M2/M3 temperature shortcut channels, single press or long press "left button" to increase temperature
Single press or long press "right button" to decrease temperature. Long press "left and right" buttons simultaneously to save data to M1/M2/M3 temperature shortcut channels
(Meanwhile, "Save to current M1/M2/M3" will be prompted in the interface)
- Temperature shortcut channel can be exited when adjusting the temperature



Operation of setting interface

- Long press "middle button" to enter into the setting interface of T380 station, button instruction can be seen (Users can operate according to button instruction)
- Users can set [Language], [Sound], [Temp Unit], [Reset], [Working Time], [System Info] according to their personal needs.
- Language settings: Chinese and English can be set
Sound settings: It can be turned on or off
Temperature unit: Celsius and Fahrenheit can be set
Reset: It can reset all settings of the station
Working time: Booting time and accumulative working time can be seen
System information: The version, model and date of the station can be seen
- Single press "right button" to return to the previous step and main interface



6 Charging and battery installation step

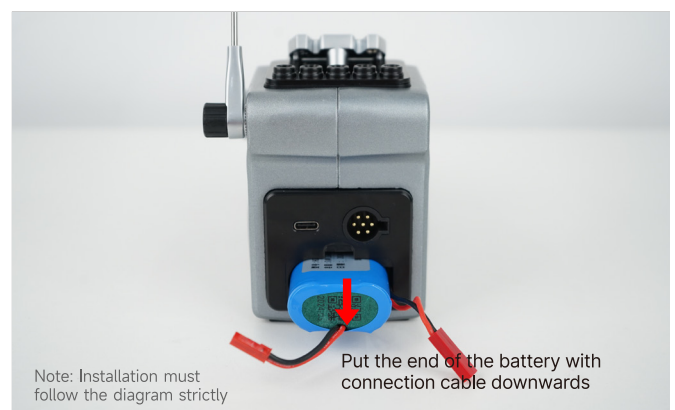
Charging and power supply of the station

- T380 is charged and supplies power with a Type-C cable, please charge with built-in charger as much as possible;
- Support PD/QC fast charging protocols, fully charged only in 1.5 hours
- The battery supports continuous soldering for 40 minutes under 400°C, no need to charge



Battery installation steps

- T380 is built-in with 18650 battery, detachable battery with 2600mAh capacity
- Check the appearance of the material for scratches, dirt, bumps and other defects;
- It is necessary to take measures for electrostatic protection in the process of operating. Wearing rings, bracelets, manicures and other jewelry while operating is prohibited, and be careful not to scratch the product



I. Prepare T380 and "lithium polymer battery"

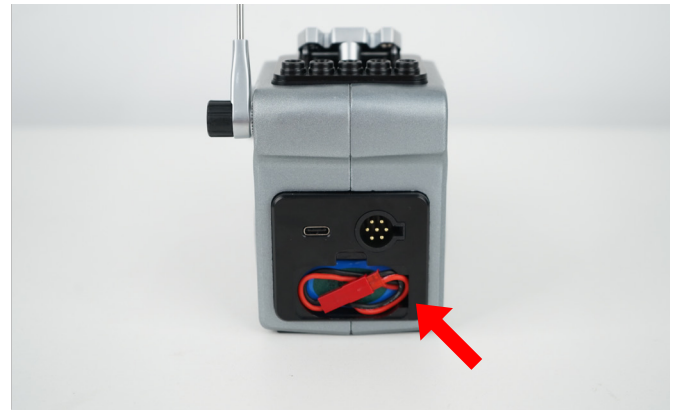
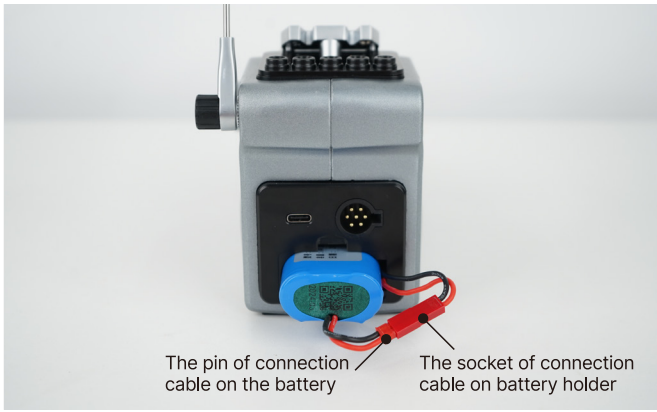
Note: lithium polymer battery is optional; users need to purchase it by themselves

Built-in battery parameters

1. L*W*T:66*36.8*19.8mm
2. 2600mah/7.4V/ two 18650 batteries connected in series/10 A rated current for battery
3. No. 20 silicone wire of 0.178mm diameter with 3.5CM length, JST port

II. Open the lid of the battery holder on the machine, and install the lithium polymer battery into the battery holder with the wired end outwards;

Note: Put the battery into the battery holder with the wired end downwards. If it is installed reversely, it will affect the installation of the battery holder lid;



III. After the lithium polymer battery is completely installed into the battery holder, connect the pin of connection cable on the battery to the socket of connection cable on battery holder, make sure that the connection is solid;

IV. Fold the connection cable well and put it into the battery holder



V. Finally, cover the battery holder lid and battery installation is done

7 Soldering Tip Replacement

• Create the safest, most stable and smartest soldering station



1. Disassembly: Put the soldering handle into the "soldering tip swapping socket" and pull out the soldering tip.



2. Installation: Place the soldering tip that needs to be replaced into the "tip placing area" and insert the soldering tip into the handle



3. After replacement, touch the swapping socket slightly with handle to heat up quickly

8 Connect platform for upgrade/WiFi OTA upgrade

Connect platform for upgrade



1. AiXun official website: aixun.com, download AiXun platform

2. Use Type-C cable to connect AiXun platform

3. The interface after it is connected to the platform successfully, click "Upgrade" to upgrade it to the latest software

Connect WiFi for operation

• If the device is connected to WiFi for the first time, please use "AiXun Assistant" WeChat Mini Program

➤ Enter into "AiXun Assistant" mini program

Option one: Scan the QR code below to enter into "AiXun Assistant" mini program

Option two: Search "AiXun Assistant" mini program on WeChat

Option three: Connect through "AiXun Assistant Platform". Click "WiFi" in the upgrade interface of T380 and the QR code of the mini program will appear

➤ Find the corresponding device

Enter into "AiXun Assistant" mini program to check device list, find corresponding product model, click "Connect"

(Choose Allow to use when Bluetooth or Bluetooth mini program is turned on. When there are several T380 stations at the same time, check the SN of the device according to device information to connect correspondingly)

➤ Connected successfully

Just wait for the connection, after the first connection is successful, there is no need to connect again for the second time and WiFi will be connected automatically when using the device



Scan the QR code through WeChat



Search "AiXun Assistant" mini program on WeChat



9 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:

- ◆ 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.
- ◆ Keep the soldering station in standby state when replacing the soldering tip. Do not touch it directly with your hands 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.

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.

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. 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.

“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.

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.

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