



# 敏维®无线焊台

Cordless Soldering Station TS1C

User Manual

V1.2

使用前请仔细阅读本手册内容。本用户手册基于TS1C DFU V1.00, APP V1.1。  
Read this user manual carefully before use. This manual is based on TS1C DFU V1.00, APP V1.1.

**Caution:** The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- the appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction

- children being supervised not to play with the appliance

This product must only be supplied at SELV.

- this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved

- children shall not play with the appliance

- cleaning and user maintenance shall not be made by children without supervision

## 产品合格证

Product Certificate

本产品经检验合格，准予出厂。

This product has passed the quality inspection.

生产日期：\_\_\_\_\_

检验员QC:\_\_\_\_\_



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## Safety Instructions

Please read this user manual carefully before using the product. The user manual contains safe use information, and please keep it properly for future reference. Users can visit our website to learn about the update of the user manual.

### General Safety

- Please only use reliable power adapters suitable for this product or certified by your country/region (please refer to P24 for detailed power standards);
- Do not operate in a humid environment;
- Do not operate in flammable/explosive environments;
- Please keep the surface of the product clean and dry.

### Precautions

- Please turn off the power when finishing using or leaving to prevent fire;
- After the power is turned on, the temperature of soldering tip will reach 100°C-400°C (212°F-752°F), be careful to prevent burns;
- When using for the first time, due to the heating of the electric heating element, the soldering tip may smoke slightly, which is a normal phenomenon.
- Do not soak the whole TS1C in water or use it with wet hands to prevent leakage;
- TS1C is composed of precision components, please avoid falling.

### Use Responsibility Statements

For Any special, indirect, incidental or consequential damages or losses arising from inappropriate use of the product shall be borne by the user. Any damage or loss caused by unauthorized disassembly and modification of the product shall be borne by the user.

Please keep this product properly to prevent children from using it as a toy without supervision.

## Operating Environment

Operating environment	Working state		Non-working State
Temperature	0°C ~ 50°C		-20°C ~ 60°C
Humidity	High temperature	40°C ~ 50°C, 0% ~ 60%RH	40°C ~ 60°C, 5% ~ 60%RH
	Low temperature	0°C ~ 40°C, 10% ~ 90%RH	0°C ~ 40°C, 5% ~ 90%RH

## 1/Product Introduction

Designed and developed by e-Design, MINIWARE Cordless Soldering Station TS1C is the first new energy storage intelligent desktop soldering tool based on BLE4.2 Bluetooth communication. Using lithium-ion capacitor cell energy storage technology, which is different from the traditional lithium battery power supply mode, bringing high-tech wireless soldering experience to users.

MINIWARE Cordless Soldering Station TS1C includes two parts: a control station and a soldering pen. The control station connects with the soldering pen via Bluetooth wireless pairing and communication, and realizes complex remote control such as standby preheating, temperature adjustment, menu setting, and viewing information and status, while working as a stand and charging station for the soldering pen. TS1C's soldering pen uses MINIWARE's 3.5mm audio interface soldering tip (MINIWARE TS80/80P soldering tip series), performs operations such as preheating, constant heating, and temperature adjustment according to the control signal from the station, and enters boost mode by holding the button on the pen. The soldering pen also holds multiple intelligent safety protections as over-temperature protection, capacitor low-voltage protection, and charging protection.

The overall design of TS1C is simple and smooth, hard core and handsome. The control station features 128\*64 pixel OLED screen to display the soldering pen status in real time. The front of the station is equipped with a USB Type-C interface for standard PD 20V, 45W power input and firmware upgrade. In addition, there are 3 expansion slots at the bottom of the station, which can be used to install different accessories like sponge slot to offer more functional usage. TS1C soldering pen is ergonomically designed with a good grip; the top of the pen adopts a USB Type-C interface for firmware upgrade (under the stainless steel decorative piece), which can be used for power input in emergency cases; The pen has built-in high-efficiency energy storage capacitor,

with 36W maximum heating power, it can continuously solder more than 180 solder joints (0805) under a single full charge—TS1C's excellent performance will help you significantly improve work efficiency.

- New high-efficiency capacitor energy storage technology, rechargeable up to ten thousand times;
- Separable structure + real cordless, providing smooth cordless soldering experience;
- Based on BLE4.2 Bluetooth communication, realizing remote control and setting;

#### **Control Station:**

- Standard PD 20V 45W (MAX) power input, over current safety protection;
- 128\*64 pixel OLED screen, display soldering pen status in real time;
- Control station preheating, improve heating efficiency;
- Remote control and setting: temperature regulating, menu setting, viewing device info and status, etc.;
- Work as soldering stand and charging station;
- Three expansion slots for multiple expandable accessories like sponge slot;

#### **Soldering Pen:**

- Built-in 750F capacitor, can be charged via control station (or via USB Type-C interface in emergency cases);
- 36W maximum heating power, can solder more than 180 solder joints (0805) continuously under a single full charge;
- Compatible with MINIWARE 3.5mm audio interface soldering tip (TS80/80P soldering tip series);
- Boost mode (holding the button on the pen);
- Multiple intelligent safety protections: over-temperature protection, capacitor low-voltage protection, charging protection, etc.

## **1.1 Performance Parameters**

### **TS1C Control Station:**

Model	TS1C-S
Screen	128*64 pixel OLED
Interface	USB Type-C

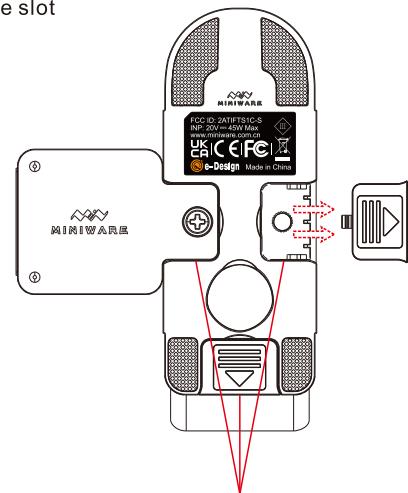
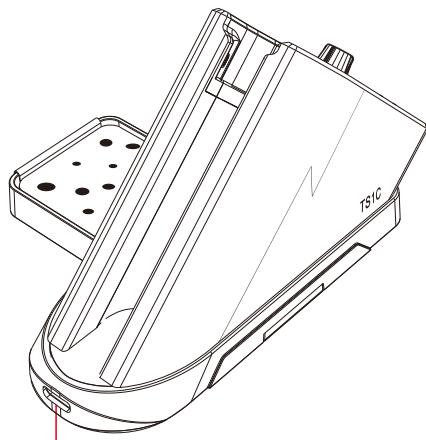
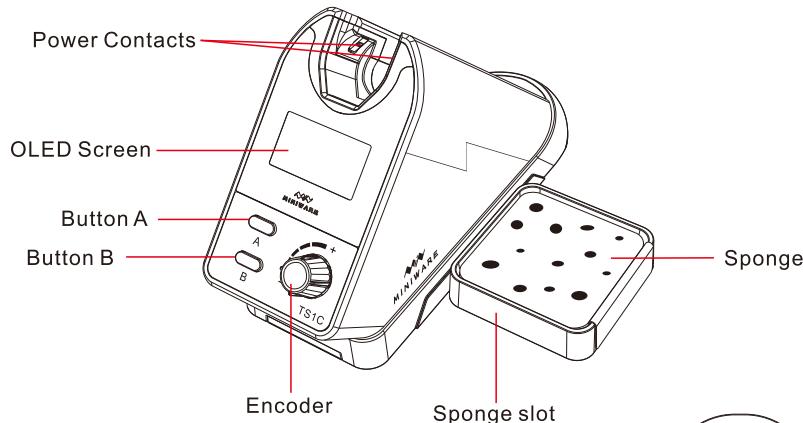
Maximum input voltage	PD 20V
Maximum input power	45W
Other	Three expansion slots for multiple expandable accessories
Safety protection	Over current protection
Size	Control Station: 44.5*122*73 (mm); Sponge Slot: 42*43 (mm)
Weight	186g (Including a sponge slot)

#### TS1C Soldering Pen:

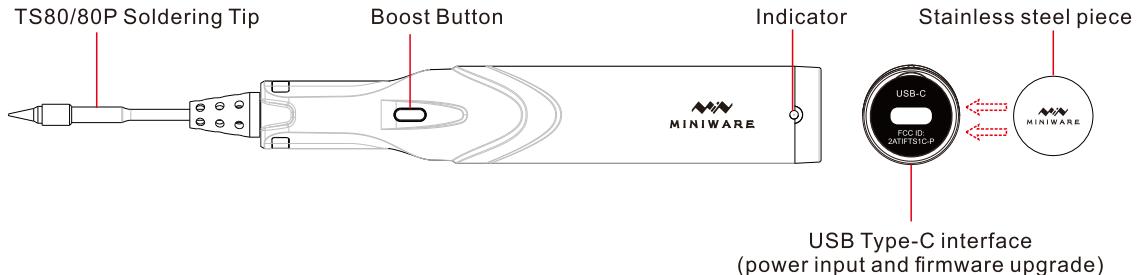
Model	TS1C-P
Interface	USB Type-C
Capacitance	750F
Charging time	7 minutes
Maximum heating power	36W
Temperature range	100~400°C (212°F ~ 752°F)
Temperature stability	±3%
Soldering tip	MINIWARE 3.5mm audio interface soldering tip (TS80/80P soldering tip series)
Safety protection	Capacitor low voltage protection, capacitor charging protection, over temperature protection
Size	φ23*133 (mm)
Weight	62g (without soldering tip)

## 2/Buttons And Interface

### 2.1 Soldering Control Station



## 2.2 Soldering Pen



## 2.3 Indicator light

The LED indicator light at the tail of TS1C soldering pen can indicate the status of the pen. The light status and corresponding description are as follows:

Light Status	Description
Off	Soldering pen is turned off or the battery has run out
Always on	Soldering pen is in normal working condition
Flash	Soldering pen is in a low/ultra-low battery state/alarming
Slow flash	Soldering pen is charging

## 3/Power Source

### 3.1 Power Source Selection

Cordless Soldering Station TS1C's control station uses a USB Type-C power supply input interface, which can support a PD power supply of PD 20V 45W (MAX) or above (including but not limited to charging plug, mobile power supply, etc.). The control station has a preheating function. After the soldering pen is paired with the station and enters the main interface, the soldering pen will automatically preheat to the preset preheating temperature and keep the temperature constant.

Please choose a standard PD power supply that supports PD 20V 45W or above to power the control station:

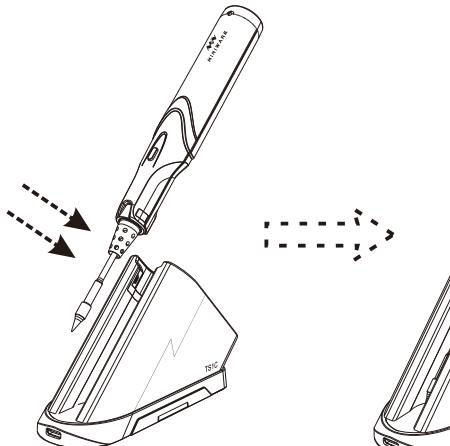
Operating Voltage	Preheat temperature	The fastest time required to heat up from 25°C to preheat temperature	The fastest time required to heat up from preheating temperature to 300°C
20V	100°C	8s	12s
20V	150°C	12s	9s
20V	200°C	16s	7s
20V	250°C	20s	4s

## 3.2 Placement And Charging

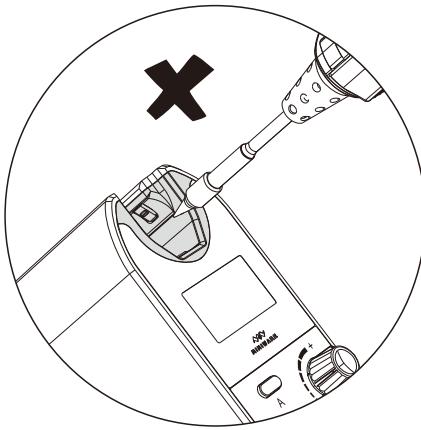
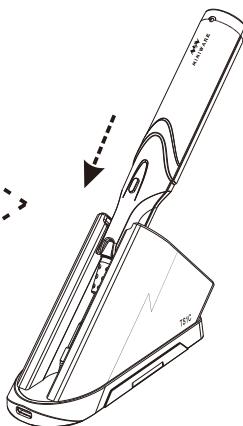
The built-in capacitor of TS1C Soldering Pen can be charged through the control station. The charging method and status are as follows:

1. Place soldering pen correctly on the station's pen slot. Align the soldering tip with the long slot of the station and put it in, and push the soldering pen forward (See below pictures 1) to ensure that the power contacts of the station are in full contact with the power contacts on the soldering pen (this way of placing can avoid the hot tip damaging the plastic part near the slot front);
2. After the soldering pen is placed correctly, it will automatically charge through the station, and the charging status icon “” will appear in the status bar;
3. After each soldering is completed, it is recommended to put the soldering pen back on the station to recharge. If the power of the soldering pen has completely run out, it takes about 7 minutes to fully charged again. It is recommended to charge it to at least two bars before soldering.

Note: In case of emergency, the soldering pen can be powered through the USB Type-C interface on the top, and the power input parameters are the same as those of the station.



(Pic 1)



(Pic 2)

## 4/How to use

### 4.1 Power On And Off

#### Power on:

When TS1C's control station is connected to the PD power supply, it will automatically power on. The screen will first display the brand icon and customized icon, and then enter the standby state and display the standby menu. If TS1C is turned on for the first time, the screen will jump directly to the Bluetooth connection page (please refer to 4.2 for Bluetooth connection) after boot-up icons, and the standby menu will be displayed after the connection is successful.

	Boot-up icon	Brand icon, cannot be modified
		Customized icon, modifiable; if not modified, it will display the brand icon by default
	Standby menu	Button A for heating icon; press A to enter home interface
		Button B for parameter setting icon; press B to enter menu setting

### **Power off:**

1. If the soldering pen is already placed on the station, disconnect power supply of the station, so that the pen will shut down together with the station;
2. Triple-click the “BOOST” button of the soldering pen to turn off the soldering pen separately. After the pen is turned off, it will be disconnected from the station.

## **4.2 Bluetooth Connection And Disconnection**

### **[4.2.1 Bluetooth Connection]**

When using the cordless soldering station TS1C for the first time, you need to pair the soldering pen with the control station via Bluetooth.

- 1) Place the pen on the control station correctly for the best Bluetooth signal;
- 2) Turn on the control station by connecting to PD power supply. After the boot-up icon is displayed on the screen, it will directly enter the Bluetooth search interface;



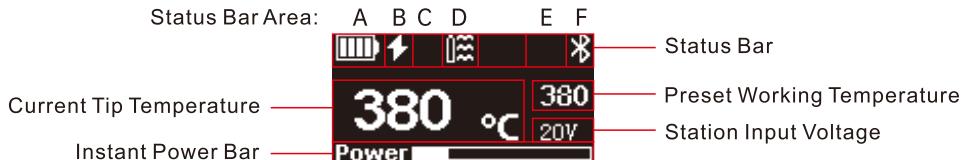
- 3) Select the device to be connected by rolling the encoder, press B to confirm the pairing and return to standby menu interface;
- 4) After the device is successfully paired, a Bluetooth logo will appear in the upper right corner of the status bar. Press A on the control station to enter the home interface and preheat tip; or press B to enter setting menu to set parameters. When using it again after successful pairing, the pen and the station will automatically complete the connection.
- 5) In Home interface, long press Button B to see Bluetooth devices. Roll Encoder to choose a new device if needed, press B to confirm pairing or press A to exit.

### **[4.2.2 Bluetooth Disconnection]**

If you need to disconnect the Bluetooth connection or pairing between the soldering pen and station, long press A on the station to disconnect Bluetooth connection when the station is in the home interface. Next time using, it is necessary to Bluetooth pair the devices again (see 4.2.1).

## 4.3 Screen Display

### 4.3.1 Home interface



### 4.3.2 Status bar

When TS1C's soldering pen is correctly placed on the control station, or the soldering pen and the control station have been successfully connected by Bluetooth, the status bar on control station screen will display corresponding icons according to the actual status of the pen.

Status bar icons description:

Area	Icon	Name	Description
A	■ / □ / □	Soldering pen power	Display the current battery/low battery/ultra-low battery capacity of the soldering pen; when it is at low/ultra-low battery status, the icon will flash and a low battery prompt will appear on the screen (please refer to 4.4.2 for details)
B	⚡	Soldering pen charging status	Indicates that the soldering pen is in charging via the control station
C	⌚	Sleep mode	When this icon appears, the soldering pen is in sleep mode*
D	heat / cool / heat	Pen working status	Display the current working status of the soldering pen: heating/cooling/constant temperature

Area	Icon	Name	Description
E	300°C	Soldering tip status	This icon appears only in standby status, indicating the tip temperature
	☒		When this icon appears, it means that the soldering tip on the pen is not connected properly, please check whether the soldering tip is inserted into the pen correctly or whether the soldering iron tip is abnormal**
F	.bluetooth	Bluetooth connection status	When the soldering pen and the control station are in Bluetooth connection state, this icon is always on; otherwise, the icon will not be displayed

\* When TS1C enters sleep mode, the soldering pen will automatically cool down to the sleep temperature and maintain a constant temperature. Pick up the soldering pen or press any button to activate.



\*\* When TS1C detects that the soldering tip is abnormal, in addition to the prompt on the status bar, the home interface will display "NO TIP!".



Note: If the soldering pen is not connected to the control station via Bluetooth and is not placed on the station, there will be no status icons displayed on the screen status bar (as shown in the figure below).



## 4.4 Menu Settings

In the home interface, press B on the control station to enter the menu setting, press B again to cycle through the menus, and roll encoder to adjust the setting value; wait for 5 seconds or press A to confirm and return to the home interface/standby page.

Shortcut: Roll the encoder on the control station in the home interface to adjust the working temperature of the soldering pen.

Menu Interface	Menu Name	Description	Setting Range	Defaults
 WORK TEMP <b>380</b> °C	Working temperature	Working temperature of soldering pen	100~400°C (212~752°F)	300
 Preheat Temp <b>250</b> °C	Preheat temperature	Preheat temperature of the soldering pen when it is preheated on the control station (not higher than the working temperature)	100~400°C (212~752°F)	250
 Sleep Temp <b>100</b> °C	Sleep temperature	After the soldering pen stays static for a certain period of time, the pen will enter sleep mode, and the tip will be kept at the sleep temperature	100~400°C (212~752°F)	100
 Sleep Time <b>300</b> s	Sleep time	Time needed for the soldering pen to go from static to sleep mode. Move the soldering pen to or press any button to wake it up.	30~900S (with a step size of 30)	300
 Idle Time <b>300</b> s	Standby time	Time needed for the soldering pen to go from sleep to standby (station screen off)	30~900S (with a step size of 30)	300
 Temp Step <b>1</b>	Temperature stepping	The step size when using the control station to adjust the temperature	1~25	1
 Back Light <b>5</b>	Backlight brightness	Control station backlight brightness	1~10	5
 Temp Unit <b>°C</b>	Temperature unit	Temperature display unit	°C/°F	°C

Menu Interface	Menu Name	Description	Setting Range	Defaults
	Device version information	HW: hardware version; FW: firmware version S: Control station; P: Soldering pen	-	-

## 4.5 Heating And Temperature Adjustment

### 4.5.1 Normal heating and temperature adjustment operation

1. After TS1C's control station is powered on, the paired control station and the soldering pen will automatically connect via Bluetooth (if TS1C is being used for the first time, please refer to 4.2 for Bluetooth connection); after the station and the pen are successfully connected, you can read the status of the soldering pen in the status bar;
2. On standby interface, press A to enter home interface, the soldering tip will start to preheat; if you need to set parameters, press B to enter menu setting;
3. To start soldering, pick up the soldering pen from the control station, and the pen will automatically heat up to the preset working temperature;
4. In working state, directly rolling the encoder can adjust working temperature;
5. After the soldering is completed, put the pen back on the control station for recharging, and it will automatically adjust to preheat temperature and keep the temperature constant.

Note: When Bluetooth is disconnected between the soldering pen and the control station, the pen will stop heating.

### 4.5.2 Boost mode

In normal working state, press and hold the "BOOST" button on the soldering pen to enter boost heating mode, and the tip temperature will rise and remain at 400°C. After releasing the button, the tip temperature will return to the preset working temperature.

#### [4.5.3 Low battery]

When the battery of the soldering pen is too low, the battery icon on the station screen will flash, the home interface will display “Low Power!” warning, and the buzzer will make a short beep. The battery of the soldering pen is in a low battery state, but it can still be heated at a constant temperature for a short time, please recharge it in time.



When the remaining power of the battery can no longer maintain a constant temperature, the pen enters an ultra-low power state. The battery icon on the station screen will show an exclamation mark and flash, and the home interface will display “Heating Stop!” warning, and the buzzer will beep three times. The soldering pen will stop heating and gradually cool down. Please put the soldering pen back to the control station or use a USB Type-C cable to connect to PD power supply for charging.



## 4.6 Configuration

Use a USB Type-C data cable to connect the control station to PC, a removable hard disk will appear on the computer, and the screen of the control station will display “CONFIG”. Users can modify the parameter settings of TS1C through the CONFIG.TXT file in the removable hard disk.

The configuration file parameters are described as follows:

Parameter	Name	Description	Setting Range	Defaults
Work_Temp	Working temperature	The working temperature of the soldering pen, as in °C/°F	°C: 100-400 °F: 212-752	300
Preheat_Temp	Preheat temperature	Preheat temperature of the soldering pen when it is preheated on the control station (not higher than the working temperature), as in °C/°F	°C: 100-400 °F: 212-752	250

Parameter	Name	Description	Setting Range	Defaults
Sleep_Temp	Sleep temperature	After the soldering pen stays static for a certain period of time, the pen will enter sleep mode, and the tip will be kept at the sleep temperature, as in °C/°F	°C: 100-400 °F: 212-752	100
Sleep_Time	Sleep time	Time needed for the soldering pen to go from static to sleep mode. Move the soldering pen or press any button to wake it up, as in second	30-900	300
Idle_Time	Standby time	Time needed for the soldering pen to go from sleep to standby (station screen off), as in second	30-900	300
Temp_Unit	Temperature unit	Temperature display unit, as in °C/°F	0: °C 1: °F	0
Temp_Step	Temperature step	The step size when using the control station to adjust the temperature	1-25	1
Back_Light	Backlight brightness	Control station backlight brightness	1-10	5
Version	Version Information	Device version information	Cannot be modified	-
Ble_Addr	Bluetooth address	Bluetooth connection information	Automatically generated by the device	-

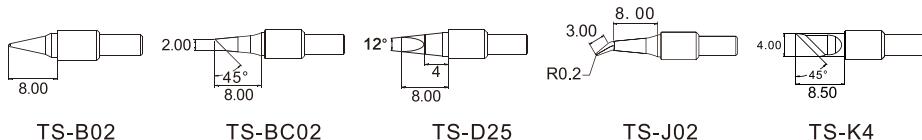
## 5/Soldering Tips

### 5.1 Replacing soldering tip

1. Please replace the soldering tip after power off and cool down to appropriate temperature;
2. Pull out the original soldering tip directly, and reinsert another soldering tip;
3. You can confirm whether the soldering tip has been installed correctly by reading the soldering tip icon in the status bar of the station and the screen prompt. If a “” icon is displayed on the status bar or a “NO TIP!” warning prompts, it means that the soldering tip is not firmly installed, please reinsert the soldering tip.

## 5.2 Selecting a soldering tip

Cordless Soldering Station TS1C is compatible with MINIWARE 3.5mm audio interface soldering tips (the tips also used by MINIWARE Smart Soldering Iron TS80/80P). Choosing the right soldering tip can make your soldering more efficient.



## 5.3 Maintenance of soldering tips

1. When not in use for a long time, it is recommended to tin the tip of the soldering tip to prevent oxidation;
2. Do not let the soldering tip be heated at high temperature for a long time to avoid dry burning;
3. When soldering, do not apply too much pressure to the soldering tip to rub the solder joint to avoid damage to the soldering tip;
4. It is absolutely not allowed to use rough materials or files to clean the soldering tip;
5. If the surface of the soldering tip has been oxidized and does not stick to tin, User can carefully rub it with 600-800 mesh emery cloth and clean it with ethyl propanol or an equivalent solution, and immediately dip it in tin to prevent oxidation after heating to 200°C;
6. Do not use chlorine or high-acid flux, only use synthetic resin or activated resin flux.

## 6/FAQs

Question	Inspection & Solution
“PD ERROR” or “CONFIG” is displayed after the control station is connected to the power supply	1. The connected power supply does not support PD power supply protocol, please replace it with a suitable power supply;

Question	Inspection & Solution
	<p>2. The power cable used does not support PD power supply protocol, please replace it with a suitable power cable;</p> <p>3. The interface is in bad contact.</p>
The control station and the pen have been successfully connected via Bluetooth, but there is no temperature display/the pen does not respond when modifying the menu settings through the station	<p>If the Bluetooth icon is displayed on the station screen, the Bluetooth communication may be blocked, please put the pen back to the station, disconnect the power of the station and then power on again.</p>
The soldering pen does not respond after placing it on the control station	<p>1. Check whether the soldering pen has been correctly placed on the control station, and whether the lightning charging icon appears in the status bar of the station screen;</p> <p>2. Is the soldering pen connected to computer to enter DFU mode? If yes, please place it on the station again after completing firmware upgrade.</p>
The soldering pen cannot connect to the control station via Bluetooth	<p>1. Is the soldering pen connected to computer to enter DFU mode? If yes, please complete firmware upgrade before connecting Bluetooth;</p> <p>2. Re-pair the soldering pen with the control station. For Bluetooth connection please see 4.2;</p> <p>3. When the soldering pen is in low power state, Bluetooth connection may not be successful. Place the soldering pen on the control station or charge it alone for a few minutes before activating Bluetooth connection.</p>
The soldering pen is placed on the control station, but the status bar only displays the lightning charging icon, no signs of other status icons	<p>1. Has the soldering pen been Bluetooth paired with the control station? If not, please carry on Bluetooth connection first;</p> <p>2. Pull out the soldering pen and place it on the station again;</p>

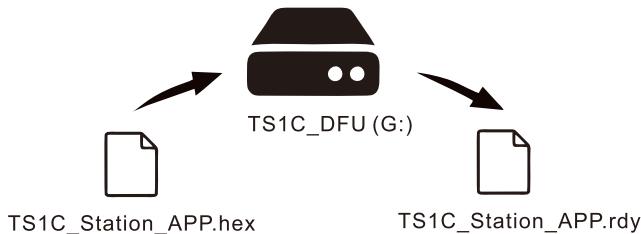
Question	Inspection & Solution
The temperature of the soldering pen jumps around the preset temperature	<ol style="list-style-type: none"> <li>1. Is the soldering tip be used for the first time or stored in a humid environment? After the soldering tip is fully heated, the temperature will be stabilized;</li> <li>2. Whether the soldering tip is firmly plugged in;</li> <li>3. Whether the power cable is in bad contact.</li> </ol>
The soldering tip does not stick to tin	<ol style="list-style-type: none"> <li>1. Whether the tip temperature exceeds 400°C;</li> <li>2. Whether the soldering tip is not properly tinned;</li> <li>3. Whether there is a lack of flux or solder with low purity or low tin content;</li> <li>4. Have you ever wiped the soldering tip with a high-sulfur or dry sponge;</li> <li>5. Whether the soldering tip has come into contact with organic substances such as plastics, silicon grease or other chemicals.</li> </ol>

## 7/Technical Services

### 7.1 Firmware Upgrade

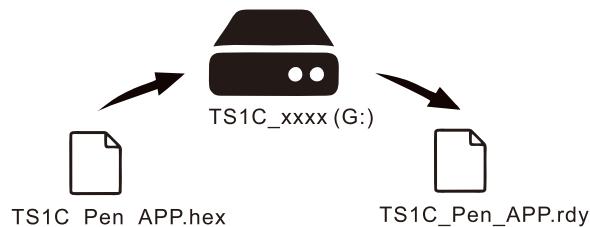
#### [7.1.1 Control station firmware upgrade]

1. Visit [www.miniware.com.cn](http://www.miniware.com.cn) to download the applicable TS1C control station firmware to computer;
2. Press and hold Button B on the control station, and at the same time connect the station to the computer via a USB Type-C data cable. A removable hard disk named "TS1C DFU" will appear on the computer, thus the control station enters DFU mode, and "TS1C DFU" is displayed on the station screen;
3. Copy the prepared hex file to the root directory of the hard disk. When the file suffix changes from .hex to .rdy, disconnect USB connection to complete the firmware upgrade of the control station.



### [7.1.2 Soldering pen firmware upgrade]

1. Visit [www.miniware.com.cn](http://www.miniware.com.cn) to download the applicable TS1C soldering pen firmware to computer;
2. Press and hold "Boost" button of the soldering pen, and at the same time connect the pen to computer via a USB Type-C data cable. A removable hard disk named "TS1C\_xxxx" will appear on the computer, release "Boost" button, and the pen enters DFU mode;
3. Copy the prepared hex file to the root directory of the hard disk. When the file suffix changes from .hex to .rdy, disconnect USB connection to complete the firmware upgrade of the soldering pen.



## 7.2 Customized boot-up icon

The boot-up icon of TS1C control station can be customized, and the setting method is as follows:

1. Prepare a 128\*64 pixel monochrome BMP picture, and name the bmp file as logoin.bmp;
2. Connect TS1C control station to the computer via a USB Type-C data cable, a removable hard disk will appear on computer, click to enter the hard disk;

3. Copy the prepared bmp file to the root directory of the hard disk, disconnect USB connection to complete the customized icon setting.

## 8/Legal Statements

This device is complied with the regulation in the 15th part of FCC regulation. Operation is subject to the following two conditions:



- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including the interference that may cause undesired operation.



The CE mark is a registered trademark of European Community.

This CE mark shows that the product complies with all the relevant European Legal Directives.



UKCA (United Kingdom Conformity Assessed) mark is a certification mark for UK conformity.

This device complies with the standard testing and certification under British regulations required for electrical and electronic products to enter the British market.



Please do not dispose of the product together with household garbage.

Please handle it according to your local laws and regulations.



# 保修卡 Warranty Card

S.N.:

Product Name 产品名称: Cordless Soldering Station TS1C

## User File 客户信息:

Buyer Name 买家姓名 \_\_\_\_\_ Contact Number 联系电话 \_\_\_\_\_

Email 邮箱 \_\_\_\_\_ Purchase Date 购买日期 \_\_\_\_\_

Product Malfunctions 产品故障 \_\_\_\_\_

## Warm reminder 温馨提示:

1. Please keep this Warranty Card and visit [www.morningtools.com](http://www.morningtools.com) for future customer service;
2. For product details and User Manual, please visit [www.miniware.com.cn](http://www.miniware.com.cn).

1. 请务必保留此保修卡以便提供售后服务, 售后咨询可登录[www.morningtools.com](http://www.morningtools.com);
2. 查看产品详情及《用户手册》可登录[www.miniware.com.cn](http://www.miniware.com.cn)。

## 保修条例 Warranty

1. This Product has a 12-month warranty. During the warranty period, if Product fails or is damaged under correct operations, Product can be repaired or replaced for free. If the warranty period is exceeded, certain maintenance cost would be charged.

2. During warranty period, if following occurs, certain maintenance cost will be charged or after-sale service might be even refused:

- (1) Failure to follow Safety Instructions or User Manual that results in product failure or damage;
- (2) Product failure or damage caused by unauthorized disassembly, repair or modification.

1、本产品保修期为12个月。保修期内，产品在正确使用时发生故障或者损坏的，我司提供免费维修或更换。超出保修期限的，我司将视产品故障情况酌情收取维修成本费用。

2、在产品保修期内，发生以下事项的，我司有权利酌情收取维修服务费或拒绝提供售后维修：

- (1) 不按照产品《使用须知》、《用户手册》正确使用产品而导致产品故障或者损坏的；
- (2) 擅自拆装、维修或改造而导致产品故障或者损坏的。



网站  
Website



技术论坛  
Tech Forum



公众号  
WeChat



微博  
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For More details and updates please visit [www.miniware.com.cn](http://www.miniware.com.cn).