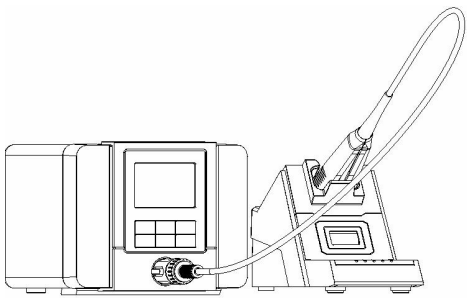
QUICK TS6 Soldering Station

Instruction Manual



Thank you for purchasing our products. Please keep the instruction manual properly for future reference.

Contents

1.Safety Instructions

 CAUTION

- During the installation and use of this product, all electrical safety regulations of the country and regions must be strictly observed.
- The power supply must be disconnected when disassembling the product. Do not operate with power on.
- If the product does not work properly, please contact the supplier or our company, and do not disassemble or change the product in any way. We are not responsible for any problems caused by unauthorized maintenance or modification.

 WARNING

- Don't install the product in a place where the surface is easy to shake or be impacted, as it may damage the product.
- Don't place the product in places where it may be exposed to rain or moisture.
- The product should be used away from places where there is magnetic interference.
- Don't use in flammable and explosive environments.
- Pay attention to the air outlet and its surroundings. High temperature operation, be careful of burns.
- Don't knock workbench with the soldering pencil to remove residual flux, which may seriously damage the soldering pencil.
- When the soldering pencil is not in use, please turn off the power to prolong its life.
- Please unplug the power cord when the product is not used for a long time.

2.Overview

This product is powered by switching power supply and adopts the principle of high-frequency eddy current heating with high power. It is mainly used for the soldering of PCB board and metal connector which are of fast heat dissipation speed.

3.Product Characteristics

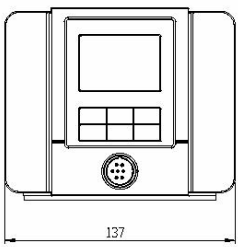
- Designed to imitate the characteristics of tweezers, it is exquisite and lightweight, and components are accurate and fast to pick and place.
- Anti-static design, LCD display, digital temperature calibration.
- Dual heating cores are heated at the same time, and the temperature is controlled independently.
- Directly heat the pins of the SMD device without thermal diffusion to the surrounding devices
- Suitable for safe and quick removal of SMD resistors and capacitors.

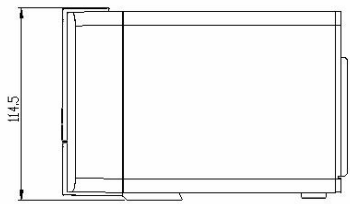
4.Product Specifications

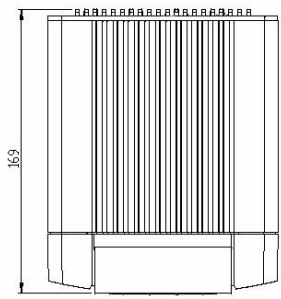
Product type	TS6
Display	LCD
Power consumption	60W
Voltage	AC 110V/220V
Temperature range	100℃～450℃/ 212℉～842℉
Temperature stability	±2℃（No load）
Ambient temperature	0～40℃
Tip to ground potential	＜2mV
Tip to ground resistance	＜2Ω
Dimensions (L×W×H）	137*169*114.5mm
Weight	About 1.5 kg

5.Functional Descriptions

5. 1. **Dimensions**

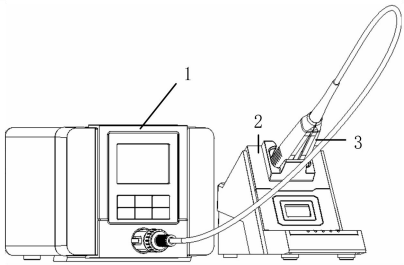






Unit：mm

5. 2. **Part Descriptions**



NO.	Part Descriptions
1	Main unit
2	Holder
3	Handle

5. 3. **Key Descriptions**

Key	Function Descriptions
1/2/3	1. Press on the main interface to switch between CH1, CH2 and CH3 2. Press “2” and “3” keys at the same time on the main interface to enter the menu setting interface. Press “1 “and “3” keys at the same time to enter the temperature calibration interface 3. Press “1” key on the menu setting interface to turn the page, and press“2” key to save,and“3” key to return
＋	1.Main interface: temperature up 2.Setting interface: page down
—	1. Main interface: temperature down 2. Setting interface: page up

5. 4. Function Descriptions of the Main Interface

Symbols	Descriptions	Symbols	Descriptions
CH0	Temporary channel		Black indicates ESD OFF, Red indicates ESD ON
	Heating state	℃/℉	℃/℉ interchangeable
1  2  3 	1.Indicates the heating state 2.Indicates that the set temperature is reached 3.Indicates the cooling state		Temperature setting state
	Buzzer on		Buzzer off
	No password lock		Password lock

6. Use of Holder and Sponge

1) Wet the cleaning sponge and then squeeze it dry.

2) Place the sponge into the groove of the holder base.

3) In the process of use, if the sponge becomes dry, please add water appropriately.

7.Connection

1)Insert the seven-core plug at the other end of the soldering pencil into the seven-core socket on the main unit panel (pay attention to the insertion position of the plug), and place the soldering pencil in the holder.

2)Insert the power plug of the soldering station into the power socket.

3)Insert one end of the grounding core into the grounding jack of the soldering station, and connect one end to anti-static ground.

8.Turn On/Off

Switch on/off, which can be divided into hard switch and soft switch.

1)Hard switch on / off: The power switch on the back of the main unit can realize hard switching.

2)Soft switch on / off:After the power switch is powered on, it can be turned on or off by long pressing the POWER key for 2 seconds.

9.Temperature Settings

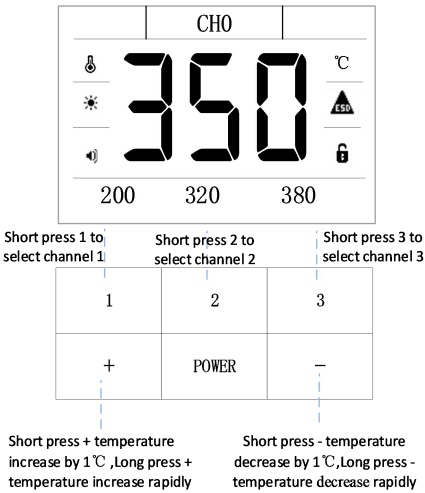
⚠Note:

1) When setting the soldering temperature, make sure that the soldering temperature is adjustable.

2) Enter the correct password, or the initial password "000000".

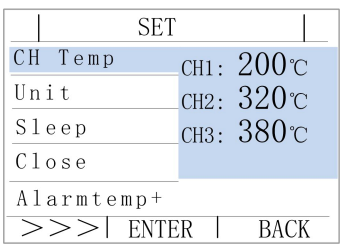
There are three temperature channels in total. Long press “1”, “2” and “3” keys on the main unit to quickly select the corresponding storage temperature of CH1, CH2 and CH3 respectively. The current temperature

value can be changed through +/- key, but the storage temperature of the three temperature channels will not be changed.



10.Menu Settings

Enter the menu setting interface.
Press and hold "2" and "3" keys at the same time to enter the menu setting interface.

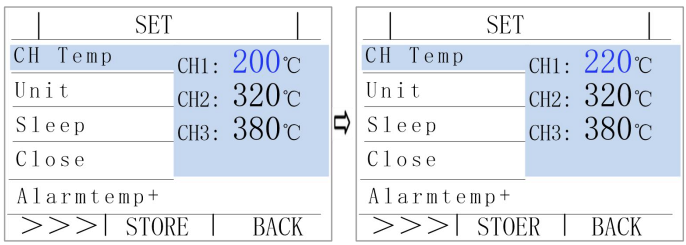


10. 1. **Temperature Parameter Settings**

1) Press “2” key to enter the "temperature modification interface

2) Press "+" or "-" key to change the value and Press “2” key to confirm.Press "+" key to move down to modify temperature II / temperature III. The setting method is the same as above.

3) Press “2” to save and “3” to return to the main interface.

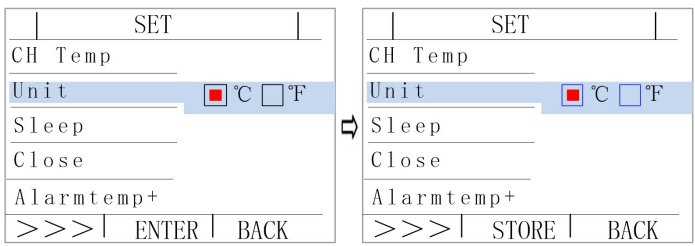


10. 2. **Temperature Unit Settings**

1) Press "1", "+" or "-" key to temperature Unit setting.

2) Press "2" key to enter the Celsius or Fahrenheit unit selection interface. and press"+" or "-" key to select the required unit.

3) Press "2" to save and "3" key to return to the main interface.



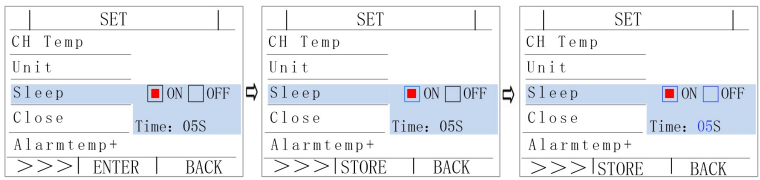
10. 3. **Sleeping Time Settings**

1) Press the "1", "+" or "-" key to select "Sleep": sleeping time setting.

2) Press the "2" key to enter the sleeping setting interface, press the"+" or "-" to select ON or OFF,

3) After selecting ON, press"1" key and press "+" or "-" to set the time, the setting range: 05S ~ 99 Mins.

4) Press the "2" to save and "3" key to return to the main interface.



Note: After sleep, press any key on the main unit to wake up the soldering station. When the set shutdown time is reached after sleep, it will be automatically shut down.

During sleep, the temperature of the tip is 50 ℃. After entering sleep, a "tea cup shape" will be displayed.

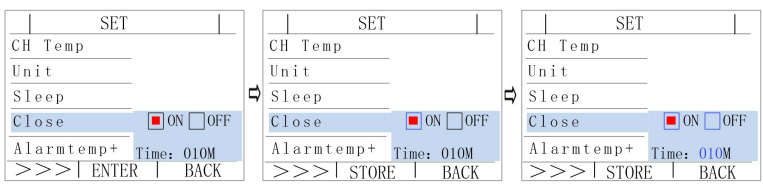
10. 4. **Close Time Settings**

1) Press "1", "+" or "-" key to select the "Close": close time setting.

2) Press the "2" key to enter the close setting interface, press "+" or "-" to select ON or OFF.

3) After choosing ON, press "1" key, and press the "+" or "-" key to set the close time, the setting range: 1Min ~ 240Mins.

4) Press "2" to save, press "3" to return to the main interface.



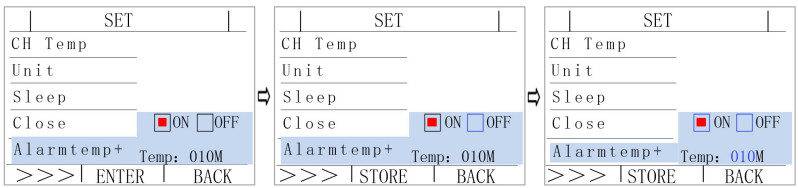
10. 5. **Alarm Temperature Settings**

1) Press "1" or "+" or "-" key to select "Alarm Temp+" or "Alarm Temp-".

2) Press "2" key to enter the alarm temperature upper/lower limit setting interface. Press"+" or "-" key to select the alarm function ON or OFF.

3) After choosing ON, press "1" key, and press the "+" or "-" key to modify the upper/lower alarm temperature, and the setting range is 2 ~ 99 ℃.

4) Press "2" key to confirm and "3" key to return to the main interface.

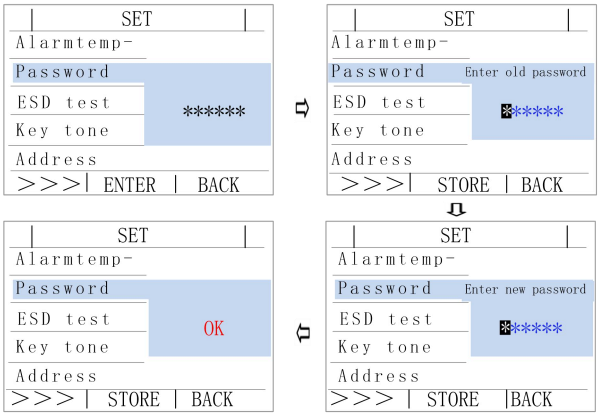


10. 6. **Password Settings**

1) Press "1", "+" or "-" key to select "Password" setting.

2) Press "2" to enter the password input setting interface. After inputting t he old password 000000 (original password), press key "2" to enter the new password input interface. Press the "+" or "-" key to select the value (0 ~ 9). Press "1" to change the digit.

3) Press "2" to save, press "3" to return to the main interface.



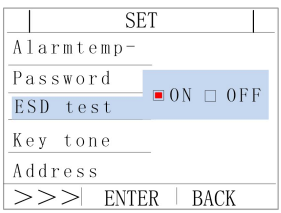
Note: After changing the password, to enter the menu setting interface, please enter the correct new password.

10. 7. **ESD Test Settings**

1) Press "1", "+" or "-" key to select "ESD Test" setting.

2) Press "2" to enter ESD test setting interface.Press "+" or "-" to select ESD Test mode (ON/OFF).

3) Press "2" to save, press "3" to return to the main interface.



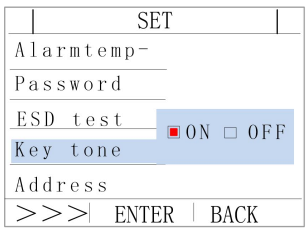
Note: when ON is selected, the grounding hole on the back of the station must be connected to the anti-static ground. Otherwise, the station will give an alarm (ESD on the main interface will be displayed in red).

10. 8. **Key tone Settings**

1) Press "1" or "+" or "-" key to select "Key Tone ".

2) Press "2" key to enter the key tone setting interface. Press "+" or "-" key to select ON or OFF to switch the sound function.

3) Press "2" key to confirm and "3" key to return to the main interface.

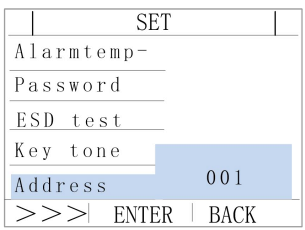


10. 9. **Address Settings**

1) Press "1" or "+" or "-" key to select "Address".

2) Press "2" key to enter into address settings interface.address rage：001～255.

3) Press "2" key to confirm and "3" key to return to the main interface.

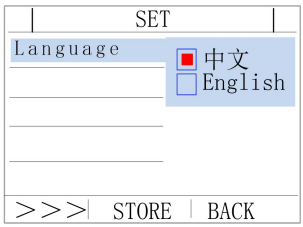


10. 10. **Language Settings**

1) Press "1", "+" or "-" key to select "Language" .

2) Press "2" to enter the language selection interface, and press "+" or "-" to switch between Chinese and English.

3) Press "2" to save, press "3" to return to the main interface.



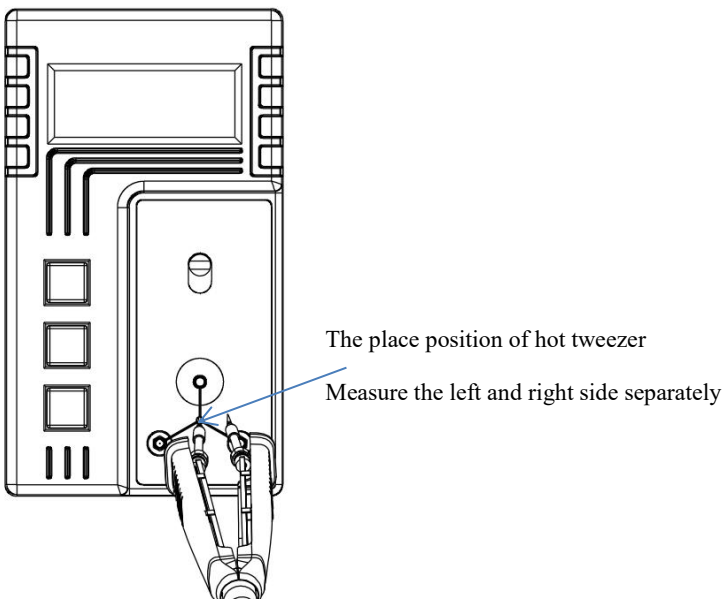
11.Temperature Calibration

Whenever the hot tweezer is replaced, the temperature shall be recalibrated.

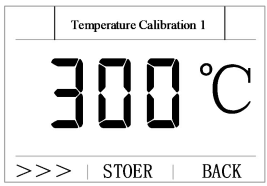
Calibrate with thermometer

1) Set a certain temperature value of the soldering station as required.

2) When the temperature is stable, measure the temperature with thermometer and record the reading values.



3) Long press "1" and "3" keys at the same time to enter the temperature calibration 1 state, and the temperature value displayed on the screen will flash. Press "+" or "-" key to change the value and adjust the value to the actual temperature of the soldering station measured in step 2. Press 2 key (STORE) to confirm, then "Successfully" will be displayed. Then press "1" key to switch to the temperature calibration 2, the displayed temperature will flash, press "+" or "-" key to change the value to make it consistent with the measured value, then "Successfully" will be displayed and press "3" key to return to the main interface.



Note:

* It is recommended to use Quick 191/192 thermometer to measure the hot tweezer temperature.
*Temperature deviation range: ± 5 ℃
*If the password is locked, the temperature cannot be calibrated, and the correct password must be input to operate.

12.Maintenance of Tips

1) When the new tip is used for the first time, add tin to protect it when the temperature is 250 ~ 280 ℃.
2) Select the appropriate tip size according to the size of soldering joint.
3) In order to prevent the oxidation of tip, a layer of melting tin should be plated before placing it into the holder.
4) In order to avoid rapid cooling of tip, the cleaning sponge should not be wet with too much water. But using cleaning sponge that is not wet will damage the tip and lead to failure of tinning the tip.
5) When the tip is oxidized due to improper use, do not clean the surface coating by grinding but use metal filament or resurrection ointment to clean it at 250 ~ 280 ℃.

6) When soldering, do not apply gravity to tip and avoid adding tin to the same place to operate.
7) Try to solder at low temperature, and the temperature is usually controlled at 320 ~ 380℃. If it is necessary to solder at high temperature, please analyze the adaptability of soldering station and tip before soldering.

13.Selection of Tips

1) It is very important to correctly select the size and shape of tip. A suitable tip can improve the efficiency and increase the durability.
2) The size of tip is directly related to the heat capacity. For continuous soldering, the larger the tip, the less the temperature drop. In addition, because the heat capacity of the large tip is higher and relatively low temperature can be used during soldering, the tip is not easy to oxidize and the service life is relatively prolonged.
3) Generally speaking, the selection of tip size is based on the standard that it does not affect adjacent components. Selecting the geometric dimension that can fully contact with the soldering joint can improve the soldering efficiency.

14.Troubleshooting

No.	Error Message	Descriptions
1	Sensor broken	Replace the sensor
2	Soldering pencil type	Replace the matching soldering pencil
3	No soldering pencil	1. Insert the soldering pencil 2. Check that the soldering pencil is fully inserted
4	Heater open circuit	Replace the heater
5	Heater short circuit	Replace the heater

15.List of Tips