V1.1

Instructions of HT140 Hot Tweezers

Thanks for buying this product! Please read the instructions carefully before use and strictly abide by the specified operating instructions . Users must have a certain electronic foundation and good welding skills. Wrong use may cause personal injury and equipment damage. We do not assume any liability arising from the use of this product or unauthorized modifications to the product, including but not limited to liability for incidental or indirect losses.

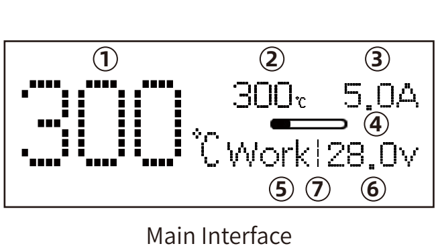
1.Product Description

(1) Working Temperature: 50-500°C/122-932°F. Support multiple power supplies: PD3.1/3.0/2.0, QC3.0/2.0, DC(5-28V), Lipo Battery, power adapters, etc.
(2) HT140 is a combination of hot tweezers and soldering iron, which can be independently controlled for single-sided heating. It can be used as a soldering iron when installing a soldering tip. When set to heat on both sides, it becomes hot tweezers, making it easier to desoldering SMD components.
(3) Support setting the working voltage and current according to the actual power plug, meeting the usage of various power heads with different power. Maximum working power is 140W.
(4) Built-in dual system to control temperature. Supports multiple functions such as preset temperature, one key to increasing temperature, fine-tuning, etc.
(5) Adopting 128 * 32 OLED, the screen brightness and display direction can be adjusted. The menu supports multiple languages such as Chinese, English, Russian, etc. Temperature unit can be switched between °C/°F. Supports upgrade firmware.
(6) HT140 features high precision heating element, precise temperature, and intelligent temperature control algorithm, with a maximum accuracy of ±1%. It only takes 2s to melt the tin.
(7) Intelligent standby & sleep & wake-up function, extending the service life of desoldering tips as well as improving work efficiency.
(8) Support temperature calibration & compensation, meeting desoldering scenarios that require high-precision temperature.
(9) Equipped with a 1.5m high-temperature resistant silicone PD 150W wire and an all-metal base HT Station for easy use and storage.
(10) HT140 can replace the desoldering tips and freely adjust the working angles to meet the needs of different SMD welding scenarios.

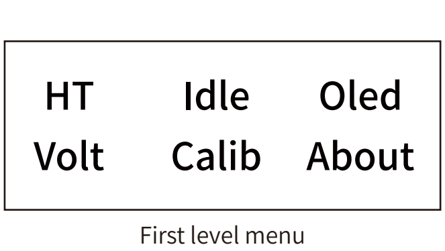
2.Parameters of Product

Model	HT140
Working Voltage	DC 5-28V
Maximum Power	140W
Working Temperature	50-500°C / 122-932°F
Tin Melting Time	2s
Interface Type	Type-C, DC5525
Power Supplies	PD3.1/3.0/2.0, QC3.0/2.0, DC (28V Max)
Screen Specifications	128*32 OLED
Menu Language	Chinese, English, Russian
Firmware Upgrade	Support
Product Size	160mm*27mm*17.5mm (L*W*H)
Product Weight	50g

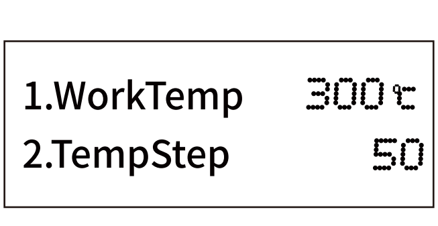
3.Menu Introduction



Main Interface



First level menu



Secondary menu

(1) Main Interface

Main Interface	Icon Display	Icon Description	Operation Method
1	300°C	Temperature of tweezer tip	/
	No Tip L	Tweezers' tip warning	Please readjust the position of the left tweezer tip or replace the left tweezer tip
	No Tip R	Tweezers' tip warning	Please readjust the position of the right tweezer tip or replace the right tweezer
	No Tip L R	Tweezers' tip warning	Please readjust the positions of the left and right tweezer tips or replace them
	High-V	High voltage warning	Please use DC5-28V/2S-6S power supply
	Low-V	Low voltage warning	Please increase the voltage of power supply or decrease the setting value of "LowVolt"
	Pcb-T	PCB high temperature warning	Please disconnect the power, and let the tweezers down to room temperature. Then turn on the power again for operation
2	300°C	Working temperature setting value	Short press the A or B key to set the operating temperature value
3	5.0A	Output maximum current	/
4	▭	Power progress bar	/
5	Stop	Stop mode	Press and hold the A key to switch between working mode and stop mode
	Work	Working mode	
	Sleep	Sleep mode	
	N-T	Tweezers' tip warning	Please readjust the position of the tweezer tip or replace it. After the warning condition is eliminated, the warning icon will automatically change to "stop"
	H-V	High voltage warning	Please use DC5-28V/2S-6S power supply.After the warning condition is eliminated, the warning icon will automatically change to "stop"
	L-V	Low voltage warning	Please increase the voltage of power supply or decrease the setting value of "LowVolt". After the warning condition is eliminated, the warning icon will automatically change to "stop"
	P-T	PCB high temperature warning	Please disconnect the power, and let the tweezers down to room temperature. Then turn on the power again for operation. After the warning condition is eliminated, the warning icon will automatically change to "stop"
6	28.0V	Supply voltage	/
7	¦	Sleep progress bar	/

(2) Level 1 Menu & Level 2 Menu

Level 1 Menu	Level 2 Menu	Description	Default value	Set Range
HT	1.WorkTemp	Working temperature shown on the main interface	300°C	50°C-500°C
	2.TempStep	Set the step value for the working temperature shown on the main interface	50	1-100
	3.TempCom_L	Temperature compensation of L(left) tweezer tip	0°C	-20°C-20°C
	4.TempCom_R	Temperature compensation of R(right) tweezer tip	0°C	-20°C-20°C
	5.TempUnit	Temperature unit	℃	℃/℉
	6.TempShield	Stable temperature display	ON	OFF/ON
	7.Buzzer	Buzzer	ON	OFF/ON
	8.StartHeat	Automatic heating at startup	OFF	OFF/ON
	9.TurboSets	Preset configuration for Turbo mode	/	/
	10.LRselect	Choose to use L or R tweezer tips	LR	L / R / LR
	11.Restore	Reset menu parameters to factory settings	OFF	OFF/ON
Idle	1.SleepTime	Sleep time	60s	5-360s
	2.SleepTemp	Sleep temperature	50°C	50°C-500°C
	3.IdleTime	Standby time	360s	30-990s
	4.Sensitive	Awaken sensitivity	2	1-20
	5.ScreenOpen	Standby screen display	ON	OFF/ON
Oled	1.Brightess	Display brightness	5	1-10
	2.Direction	Display direction	0°	0°/180°
	3.KeyAction	Button direction	A-B+	A-B+/A+B-
	4.Language	Display language	EN	EN / Pycc. / 中
	5.WorkShow	Main interface work display content	ALL	TEMP/ALL
	6.LogoDelay	Startup Logo Delay Time	MIN	MIN/MID/MAX
Volt	1.MaxVolt	PD/QC maximum output voltage	20V	5V/9V/12V/15V/20V/28V/DC
	2.MaxCurrent	Maximum output current	3.0A	1.5A/2.0A/2.5A/3.0A/5.0A/Max
	3.LowVolt	Low voltage protection	OFF	OFF/5.0-26.0V
	4.CompVolt	Supply voltage compensation	0.00V	-5.00V-5.00V
Calib	Please Calib L	Temperature calibration of tweezer tip	/	T1-T4
About	/	Information about tweezers	/	/

(3) Level 2 Menu & Level 3 Menu

Level 2 Menu	Level 3 Menu	Description	Default value	Set Range
9.TurboSets	1.SetTemp1	Preset temperature 1 in Turbo mode	280°C	50°C-500°C
	2.SetTemp2	Preset temperature 2 in Turbo mode	320°C	50°C-500°C
	3.SetTemp3	Preset temperature 3 in Turbo mode	380°C	OFF/50°C-500°C
	4.TurboTemp	Increased temperature in Turbo mode	410°C	50°C-500°C
	5.TurboTime	Duration of temperature increase in Turbo mode	60s	0-360s/ON
	6.TurboKey	Temperature boost button in Turbo mode	B	A / B
	7.Presets	Whether or not to turn on the Turbo mode when starting up	OFF	OFF/ON

(4) Menu operation guide

★ Main interface:
① Press and hold the A key to switch between "stop" mode and "work" mode.
② Long press the B key to enter the first level menu.
③ Simultaneously press the AB key to switch between normal mode and Turbo mode, and the heating will automatically stop after switching.
④ In normal mode, press the A or B key briefly to adjust the value of operating temperature.
⑤ In Turbo mode, if the "TurboKey" is set to B, short pressing the A button can quickly switch the preset temperature. If the 'TurboKey' is set to A, short press the B button to quickly switch the preset temperature.
⑥ In Turbo mode, if the "TurboKey" is set to B, under heating conditions, short pressing B to set the working temperature to "TurboTemp". After reaching the "TurboTime", the working temperature will be returned to the original preset temperature. If the "buzzer" is set to on, the buzzer will sound 3 times at this time. Short pressing the B key is ineffective without heating. If the "TurboKey" is set to A, then under heating conditions, short pressing A to set the working temperature to "TurboTemp". After reaching the "TurboTime", the working temperature will be returned to the original preset temperature. If the "buzzer" is set to on, the buzzer will sound 3 times. Short pressing the A key is ineffective without heating.
⑦ If there is a warning icon, please eliminate the warning condition. Then it will automatically change to "Stop".

★ Level 1 Menu:
①Short press A key or B key,loop to select the level 1 menu function box.
②Long press A key or B key,enter level 2 menu.
③Long press AB key at the same time or no button operation for 5 seconds, it will return to the main interface.

★ Level 2 Menu, level 3 Menu
①Short press A key or B key,loop to select the level 2 menu function box.
② Long press the A/B button to enter the secondary menu setting interface, and the parameter setting box appears. Short press the A/B button to set the parameter. After setting, long press AB buttons simultaneously to exit the parameter setting box and return to level 2 menu. Or it will automatically exit the setting box and return to level 2 menu when no button operation for 5s.
③ Long press AB key at the same time or no button operation for 5 seconds, it will return to level 1 menu.

(5) Calib Temperature Calibration

Calibration	ADC1	Reference Value
	ADC	Actual Value
	T1	Temperature of Thermometer
	Next	Next Step
	Save	Save

In the process of temperature calibration, add tin to clean the tweezers' tip first, then use a thermometer to measure temperature. During calibration, the tweezers' tip is in a high-temperature state, please be careful to avoid scalding.

Temperature calibration is divided into four parameters: T1, T2, T3, T4. After entering the calibration interface, the T1 parameter defaults to the parameter in the selection box. Long press A or B key, T1 temperature parameter changes to the setting box 62, waiting for the value of "ADC" to steadily fluctuate within the value range of "ADC1". After the thermometer measures the actual temperature of the tweezer tip, short press A or B key to write thermometer data to T1. After setting T1 calibration temperature, long press AB key at the same time to exit the setting box 62 .Then short press B key to enter "Next" and T2 in turn,continue to complete temperature calibration of T2, T3, T4. Finally, enter "Save", long press A or B key until "Save Succeed" appear, the calibration is completed.

During the calibration process, long press AB key at the same time to exit the calibration interface, the parameters are not saved.

4. Eliminate warnings

When a warning appears on the tweezers, the screen prompts a warning icon (accompanied by a warning sound if the buzzer is on). According to the warning icon, step by step check and eliminate the warning condition (if the buzzer is on, the warning sound will immediately stop), and the warning icon (main interface ⑤) will automatically change to "stop".

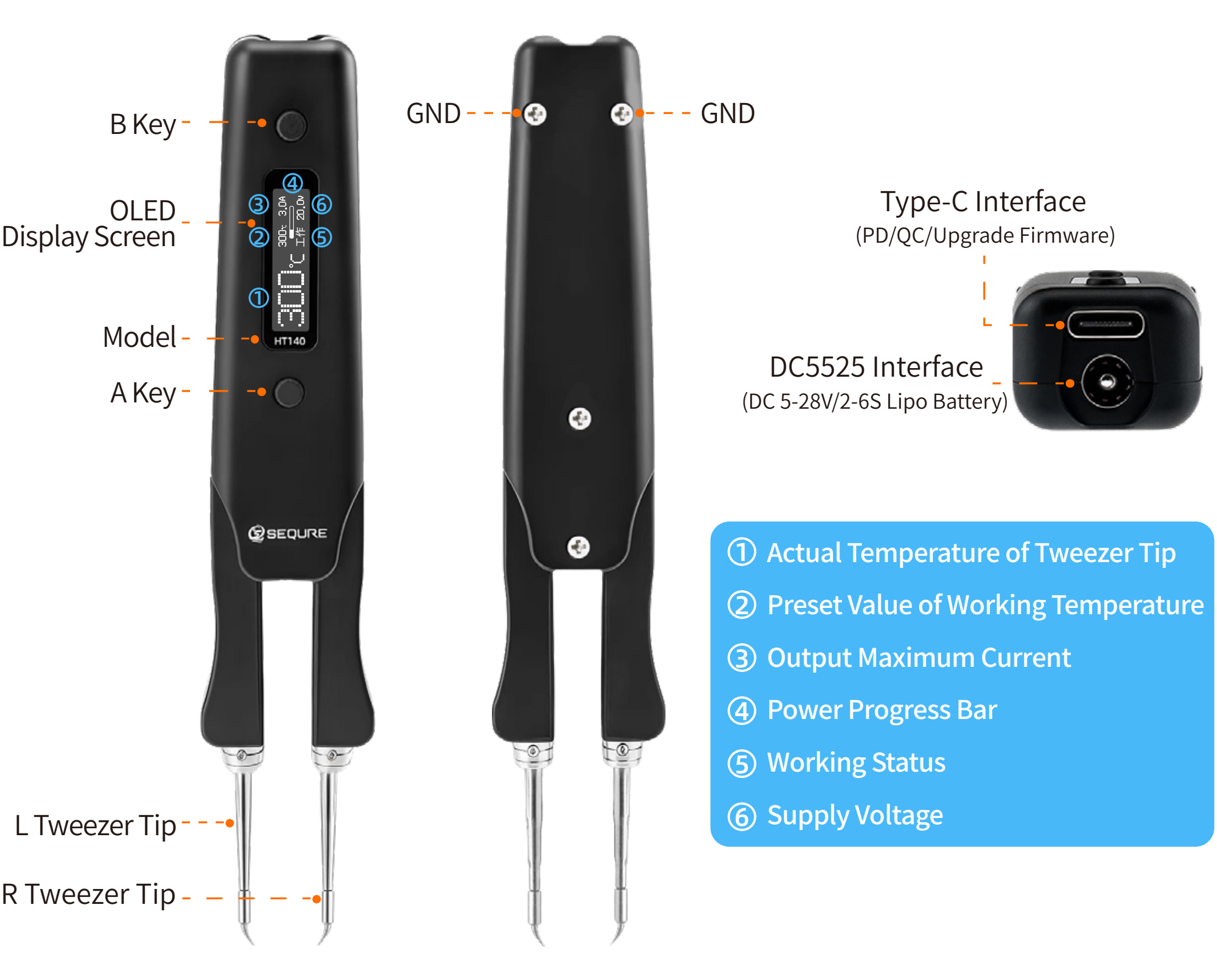
5. Sleep and Wake-up

● "Work" mode: The tweezers are in a static state without any operation for the "SleepTime", it will automatically enter the "Sleep" mode. The temperature will be automatically set to the "SleepTemp".If the buzzer is in the on state, it will be accompanied by a prompt sound.

● "Sleep" mode: When there is a key operation or movement of the tweezer, it will be woken up and automatically restore the temperature to the original setting(If the buzzer is in the on state, it will be accompanied by a prompt sound). If the tweezer is not woken up and reaches the "IdleTime", it enters the "Stop" mode and stops working.

● "Stop" mode: The tweezer is in a static state without any operation for 180 seconds, it enters "ScreenOpen". Exit the "ScreenOpen" by pressing the button or moving the tweezers.

6. Component Structure

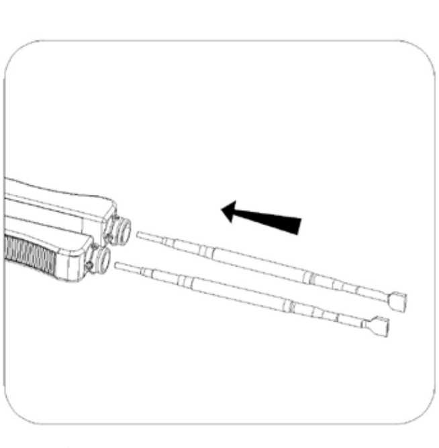


7. Assemble, Disassemble, And angle-adjust of HT140 tweezer head

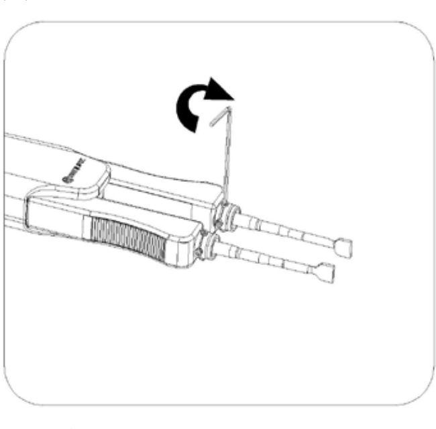
Note: Please pay attention not to be burned by the high temperature when assemble and disassemble the tweezer head.

1. Assemble & disassemble the tweezer head

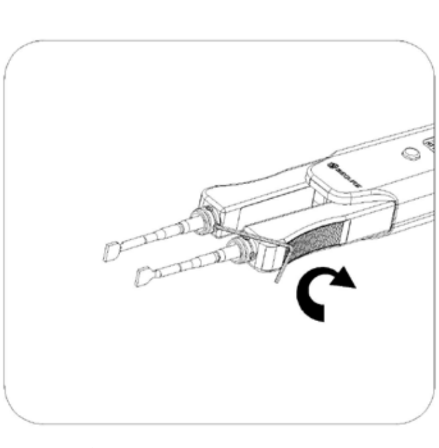
(1) Assemble the Tweezer Head



① Insert the tweezer head

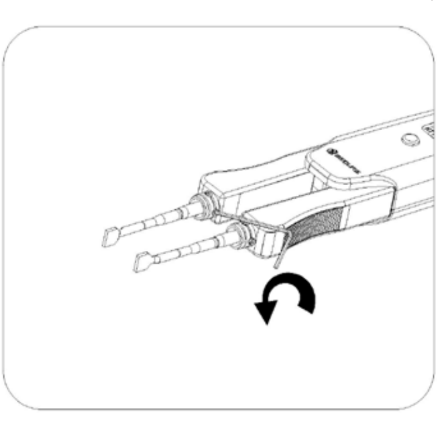


② Tighten the 4 screws on the upper and lower

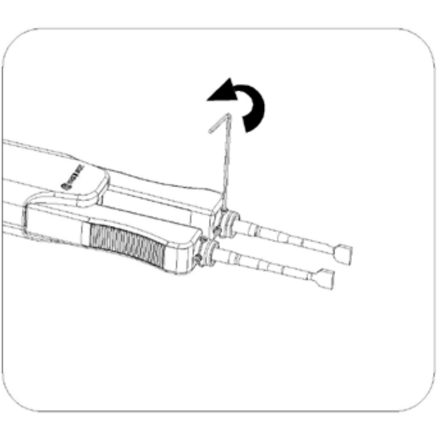


③ Tighten the 4 screws on the left and right

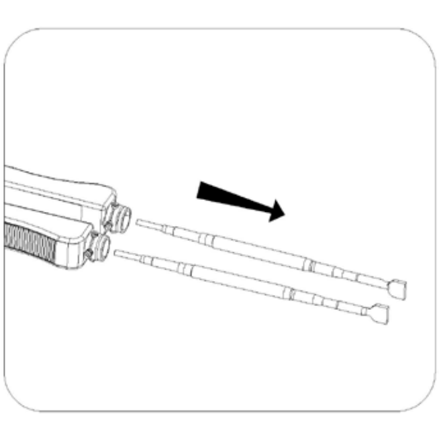
(2) Disassemble the Tweezer Head



① Loosen the 4 screws on the left and right

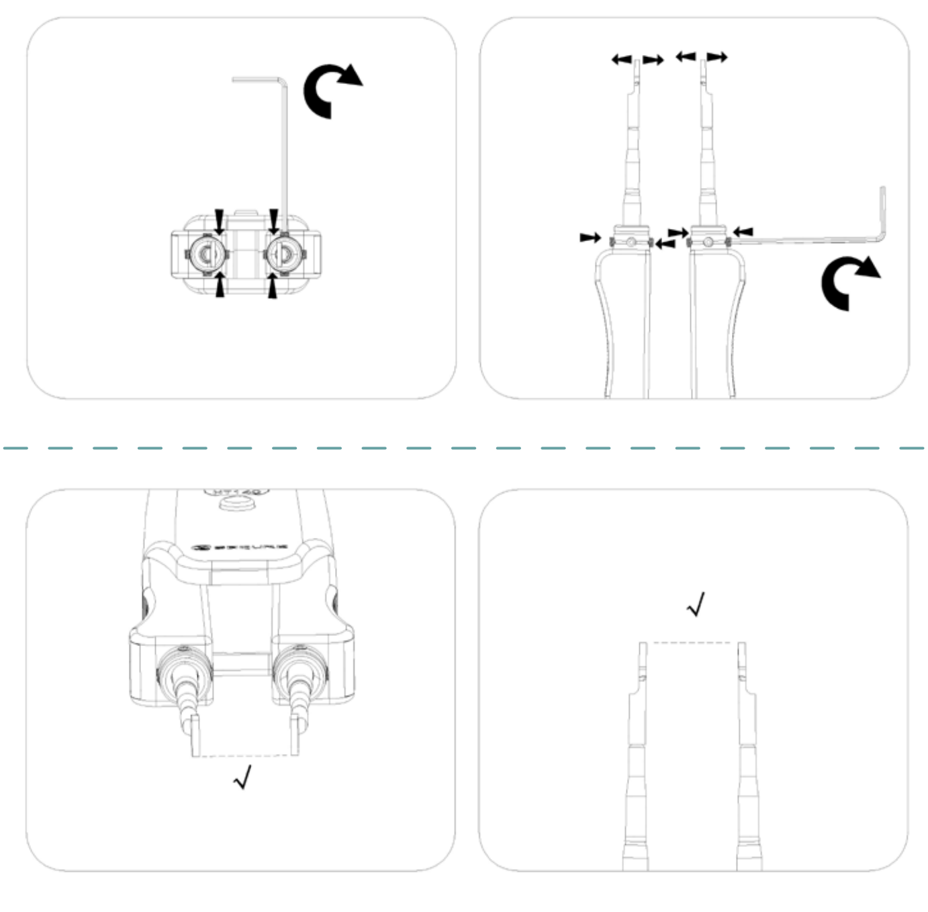


② Loosen the 4 screws on the upper and lower



③ Get out the tweezers' head

2. Adjust the angle of Tweezers Head



Observe whether the tweezers on both sides are aligned up, down, front, and back.

①If the upper and lower ends are not aligned, use a hex wrench to tighten the screw on the higher end, making it down to align with the other end. Or, loosen the screws on the shorter end until it aligns.

②If the front and back are not aligned, similarly, adjust the alignment by tightening or loosening the left and right screws.

Align it up, down, front, back, adjustment finished!

8. Technical Reference

HT140 Test Data of Heating

Voltage Current	Heating Power	Fastest Time From 30°C to 300°C	Fastest Time From 30°C to 500°C
5V 3A	15W	12s	50s
9V 2A	18W	8s	19s
9V 3A	27W	6s	11s
12V 3A	36W	5s	8s
15V 3A	45W	4s	6s
20V 3A	60W	3s	5s
20V 5A	100W	2.5s	4s
28V 5A	140W	2s	3s

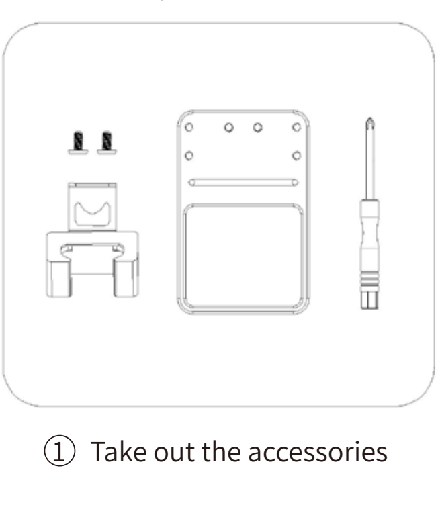
9. Firmware Upgrade

First, press and hold the "A" key, then connect the tweezers to the computer using a Type-C cable. At this point, the tweezers screen will display "Update". Copy the firmware to the virtual disk on the computer. If the upgrade is successful, the "READY" on the screen will change to "YES". If the upgrade fails, the "READY" on the screen will change to "NO". Just disconnect the connection.

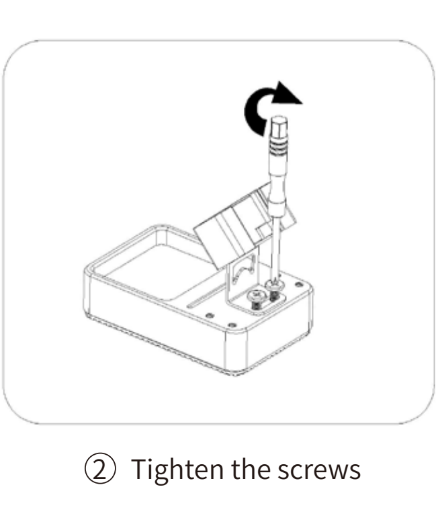
Please visit www.sequremall.com to obtain the firmware.
Please download the firmware version that corresponds to the product name. Incorrect upgrades may result in an unusable or damaged product.

10. Assembly and Usage Skills for HT Station

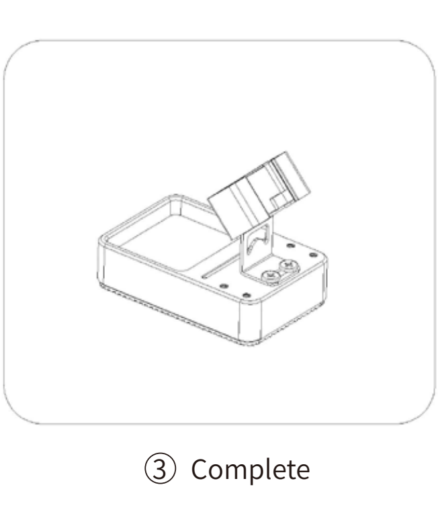
1. Assembly of HT Station



① Take out the accessories



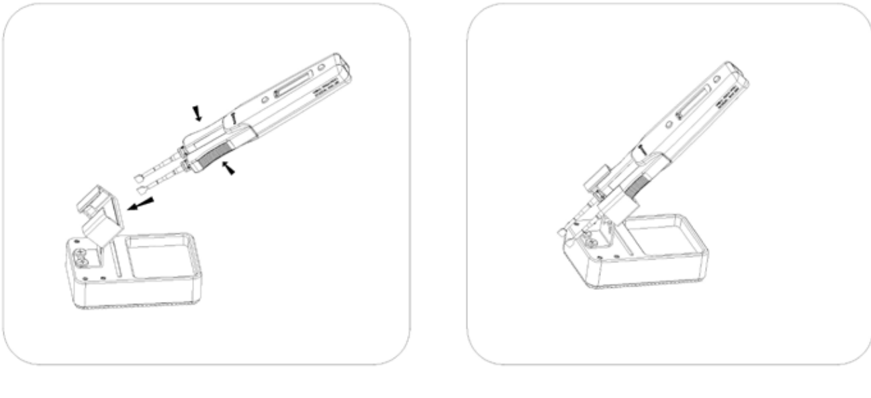
② Tighten the screws



③ Complete

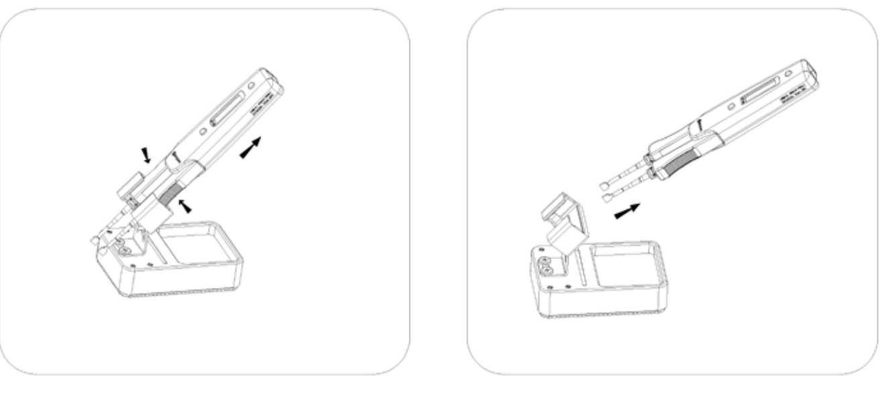
2. Usage of HT Station

Install



① Lightly press the tweezer arm to close the tweezer head, gently align it with the bracket slot, and insert it into the bracket. Then the hot tweezers are fixed on the bracket.

Take Out



② Lightly press the tweezer arm to close the tweezer head, and gently take it out upwards.

11. Warranty Terms

1. For those performance faults caused by non-human factors within 3 months from the date of purchase, we provide repair & maintenance service for free. After 3 months, no labor fee will be charged for repairs. If you want to replace parts, you must pay for the cost.
2. All man-made damage, faults caused by self-disassembly & improper use, and all consumables like tweezer tips are not covered by the warranty.

12. Safety Precautions

● Use power supplies and accessories that meet safety standards. SEQURE accessories are recommended.
● It is necessary to ensure the power is off and the tweezer tip is at normal temperature before replacing tweezer tip, so as not to scald users or damage the product.
● Tweezer tip burns easily. Power off after rest or completion, and store it in a place that not easily accessible to children.

www.sequremall.com
info@sequremall.com