VECTECH 991DS 。

Duplen service system

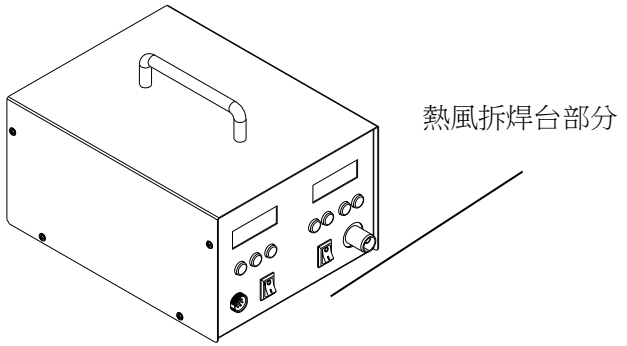
Make.
Use.
Hand.
Book.

Thank you for purchasing this duplece repair system, this product is designed for lead-free, please read this manual carefully before use,

please keep it for future review.

First, an overview

Welcome to purchase this maintenance system, this maintenance system set lead-free welding table, hot wind welding table in one, suitable for lead-free welding, welding, is a good helper of electronic engineers. The two tools are controlled by their respective power switches and do not interfere with each other, allowing them to work independently or simultaneously.



Note: Lead-free welding table part temperature adjustment button switch to"" and " s"for, hot wind de-welding table part temperature adjustment key switch to"TEMP" and"TEMP" for, air volume adjustment button to "AIR" " and "AIR" are indicated.

Second, pay attention

- Avoid the misuse of this product and use it in accordance with operating instructions.
- This product uses rated voltages and frequencies. (Please refer to the trademark on the back of the machine).
- Do not use the appliance near flammable objects.
- The appliance uses a three-wire ground plug and must be inserted into a three-hole ground socket. Do not change the plug or use an uns grounded three-headed adapter to cause poor grounding. To lengther the wires, use a grounded three-wire power cord.
- Regular inspections, maintenance and repairs. Do not use when damaged, especially if the power cord is damaged.
- Do not alter the appliance without authorization.
- When replacing parts, the original should be used.
- Children are unaware of the dangers of electrical appliances and should not use or store them where they are accessible to children.

Third, lead-free welding table part

3.1 Security Help

When the power is on, the iron head temperature is at a high temperature. Since abuse can cause burns or fires, strictly observe the following:

- Do not touch the iron head and the metal parts near it.
- Do not use near flammable objects.
- Inform others that the iron head is highly susceptible to burns and may cause dangerous accidents. Turn off the power during rest or after completion.
- When replacing a component or unit iron head, turn off the power supply and allow the iron head to cool down to room temperature before carrying on.
- Do not change the welding table without authorization.
- Do not tap the iron handle on the work station to remove the remains of the solder, which may seriously damage the iron handle assembly and the iron head.
- Do not use the soldering iron head for work other than welding.
- Do not wet the welding table, hand wet can not use and disassemble the welding table, can not pull the power cord.
- Smoke can come from welding and the work site should have good ventilation.

3.2 Welding table specifications and features

3.2.1 Parameter specifications

Power 90W

The heating body operating voltage is 48V DC

Welding table temperature range 80℃. .480℃

Sleep temperature range 50℃ . .250℃

Sleep time ranges from 0to250 minutes

The shutdown time range is 0to250 minutes

Temperature stabilization 2℃± (no load in stationary air).

Maximum ambient temperature40℃

The ground resistance of the soldering iron head ＜2Ω

Electromagnetic heating body of the heating element

The handle line1.4m

Handle length (excluding handle line)180m m

3.2.2 Characteristics.

1. Thermocouple sensor front, microcomputer number display,PID temperature control, heating and return temperature speed is extremely fast, truly lead-free welding.
2. Power supply using switching power supply, with short-circuit protection, overheat protection, overvoltage protection, reduce copper loss, iron loss, output power does not change with the voltage fluctuations of the supply.
3. Comes with a large LCD screen.
4. It has a password lock function, which is conducive to control.
5. Key-type temperature adjustment with automatic hibernation/shutdown.
6. The upper and lower temperature limits can be set, and the temperature exceeding the temperature alarm can be achieved as needed.
7. Digital temperature calibration for easy operation.
8. Can be equipped with a number of long-life general-purpose iron head, easy to use.
9. The welding handle is lightweight and comfortable to use.

3.3 Operations Help

⚠**Attention:**

- Before use, check that the supply voltage used is consistent with the voltage rating on the device specification plate.
- When installing or disassemblying, remember to turn off the power switch and unplug the power supply to avoid damaging the welding table or causing accidents.

3.3.1 Preparations before operation

1. Use of iron racks and sponges

（1） Place the small piece of clean sponge in the base groove of the soldering iron frame by wetting the water and then squeezing it dry.

（2） Add water to the soldering iron frame. Cannot exceed the middle protruding part. When a small sponge absorbs moisture, it keeps the large sponge placed on it moist. (You **can also use a large sponge alone, saving small sponges and adding water).**

（3） Then wet large pieces of clean sponge and place it on the base of the soldering iron frame.

⚠**Note: If the sponge drys out during work, add a moderate amount of moisture to moisten the sponge.**

2. Connect

（1） Insert the connecting plug of the iron handle wire into the socket on the front of the welding table, paying attention to how the plug is inserted.

（2） Place the iron handle in the iron rack.

（3） Plug the power plug into a three-end ground outlet at the appropriate voltage.

（4） One end of the ground wire is connected to the ground jack of the welding table and the other end is to the earth.

（5） Switch on the power switch.

3.3.2 Parameter settings

1. Go to password settings

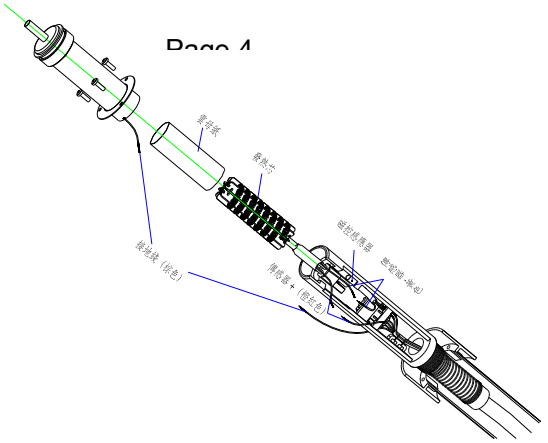
The initial password for the welding table is 000, in which the parameters of the *welding table can be set, and the password must* be modified if you want to limit the setting and adjustment of *the parameters.*

Enter the password modification method: turn off the power switch on thewelding table, press the "" and " s" keys atthe same time,and then turn on the power switch, poweron, display on the display, enter the password modification mode.

Enter the original **password correctly: after** entering the password modification method, click the key to display, at this point, pressthe "" or "key" to enter the original password and then press the key.

If the password is entered incorrectly: the display window shows the current setting value for about 4 seconds, the welding table enters a normal working state, and the parameter setting cannot be made due to the incorrect input password.

If the input password is correct: If the window shows that the input password is correct, display for **about 4** seconds, the welding table enters a normal working state and allows parameters to be set.



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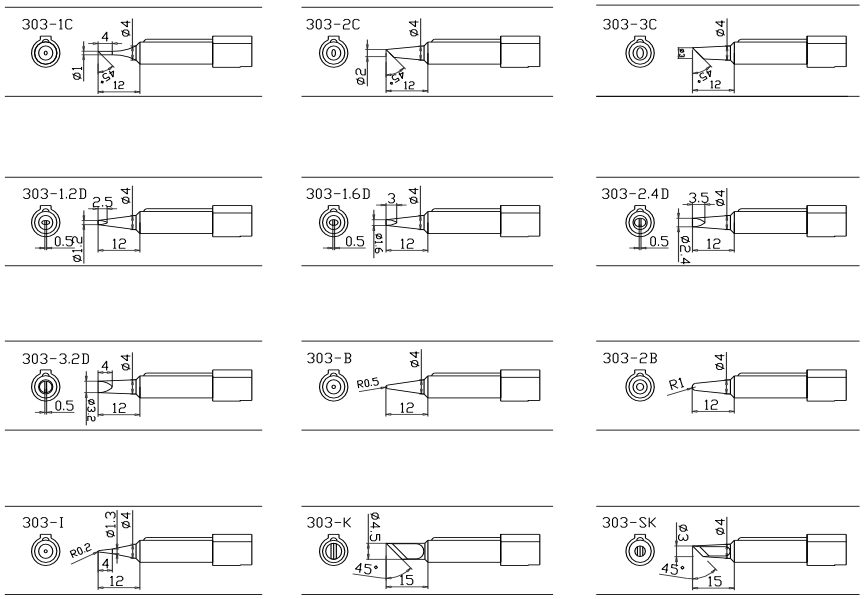


7. In the operating state, when the temperature is stable300℃( ), re-measure the air port temperature with the handle. If there is still an error in temperature, repeat the calibration as follows.

Note: It is recommended to use the 191/192 tester to measure the temperature.

4.9 Parts equipment and replacement

4.9.1 Installation and removal of the nozzle

1 . Installation: Insert the selected nozzle into the air-out steel pipe of the handle and press the nozzle into the air-out pipe. Make sure the nozzle is stuck before you can start using it.

2. Remove: Remove the air gunner handle from the handle holder when removing the nozzle. There is a card slot between the air nozzle and the air drain steel pipe, through which the handle is placed on the air nozzle removal plate (fixed to the bottom of the handle holder), the handle holder is secured with one hand, and then gently pulls the handle back to remove the nozzle.

⚠**Note: The air nozzle can be fixed. Replace the nozzle after it is cold to avoid burns.**

4.9.2Replace the air gunner handle with a heating body

1. Replace the heating body after it has cooled down.

2. Remove the spring on the handle assembly and unscrew the three screws that secure the steel pipe and pull the tube out of the handle housing (see figure).

3. Cut off the tie, pull out the sensor cable, release the ground socket and ground connection wire of the steel pipe and the skeleton inside the handle, pull the hot core from the steel pipe, remove the steel pipe and the broken heat core.

4. Roll the attached mica paper on the new heating core (as appropriate as to fit into the steel pipe, cut off the excess part) andinsert the steelpipe.

⚠**Note: Heating core sensing wire should be back-to-back** with the steel pipe ground lead, the set **of red, yellow heat shrink tube is the sensing wire.**

5. The installed heating core element will be installed inside the handle skeleton, screw on the fixing screws. (The heating body plug-in of the heating core to be inserted into place) according to the illustration to connect

the connection lines, and tie on the tie. Sensor wire has polarity, should pay attention to color differences, the same color line connection.

6. Finally, put on the handle housing and screw the screws and springs (back-mount the handle in reverse order when removed).

⚠**Note: When replacing the heating body, be careful not to damage the ground wire on the steel pipe.**

2. New password settings

The same password value must be entered twice to save the new password you set, and the password modification will be successful (see below).

（1） **Enter a new password for the first time: When the password** [0.1] [– – –] is [000] entered correctly, the window displays,within 4 seconds, pressthe " key and "

（2） [– – –] Enter a new password a second time:press the [000] ""

（3） **The new password is entered the same twice: if the last two times the new password is the same, pressing** the ""

（4） **The new password is entered differently twice: if the last two password**values are different, press the "" [– – –]

3. Temperature setting

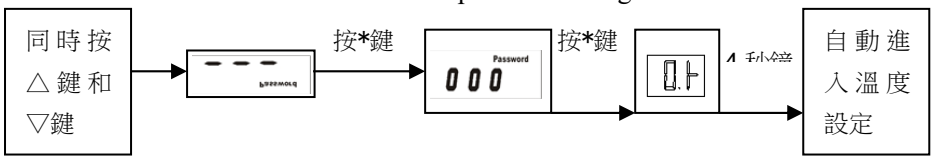
⚠**Attention:**

- **The temperature of the welding table can only be set** if the welding table is in a temperature-adjustable state **(password** is the original **password 000** or enter **the correct password setting state, enter the correct password).**
- **If you turn off the power switch when setting the temperature, the set value will not be stored in memory. Press the "**

(1) Enter the temperature setting state

If the password is the initial password 000: When powered on, go directly to the temperature setting state.

If the password is not the initial password 000:After you reset the password, you will need to enter the password setting state and enter the correct password before you can enter the temperature setting.



(2) Temperature setting

"Heating up: press the " button directly, 1℃ press the " key once, then set the temperature rise, the display window shows the set temperature, if you press the " key does not put for at least one second, then set the temperature to rise rapidly, until the desired setting of the temperature release of the ""

Cooling down: Press directly onthe"" key, press the "" keyonce, 1℃ set the temperature drop, display the window shows the set temperature, if you press the ""key does not put for at least one second, then set the temperature drop rapidly, until the desired setting of temperature release the ""key.

4. Mode settings

When the correct password is entered, the window displays when the keys of the welding table section are pressed to enter the mode settings and the window displays the current setting mode. Press the ""

0 1 0 1 。

The working mode table

Working	The temperature	The type of iron head	The welding	Note.
0。	80℃~480℃	Ordinary iron head	No.	In working mode is marked for an
1。	80℃~480℃	Extra large iron	No.	
0。	80℃~480℃	Ordinary iron head	Yes.	
1。	80℃~480℃	Extra large iron	Yes.	

2. The window displays 100℃"off"when the temperature isbelow and the welding table goes intohibernation.

4.6.2 Wake up to hibernation

1. Do not wake up if the handle is placed on the handle holder.

2. When the handle is removed from the handle holder, the system immediately enters the working state.

4.7 Unseeding table symbol Description

1. Displays**"H-E"**to indicatethat there isa problem with the heating body part of the welding table and that the heating body and related parts need to be detected.

2. Displays "S**-E" to**indicate thatthere is a problem with the sensor portion of the soldering table and that the sensor and related parts need to be detected.

3. Displays"ERR"to indicatethat the fan has failed and that the fan and related parts need to be detected.

4. When working, the display temperature is 50℃ less than and no longer heats up, indicating that the heating body of the welding table may be damaged and the heating body (heating material and sensor assembly) needs to be replaced.

4.8 Calibration temperature

Recalibrate the soldering table temperature whenever the heating element of the air gunner handle is replaced. This machine is digitally calibrated by temperature. The calibration method using the temperature tester is as follows:

1. **While operating, set** the calibration temperature of the system. 300℃
2. **After the window shows that the temperature** is stable, use the temperature tester to measure the air gun out of the air port temperature and write down the reading.
3. Press and hold the "TEMP" and"AIR" buttons for approximately 15 seconds at the same time to enter temperature calibration mode and the window displays"CAL"for approximately 2 seconds before entering the temperature calibration input window.
4. At this point, the LCD displays a hundred-bit flash, press the"TEMP"or "TEMP"key for numerical selection,after selecting the value, press"AIR"or"AIR"key to determine,enter thenext numerical selection.
5. Enter the reading value of the temperature tester, after the three-bit reading value input is complete, press the "AIR" or "AIR"keyto determine, the temperature calibration is complete.
6. If the temperature calibration is successful, the window displays"SAV ---"and if the temperature calibration is notsuccessful,the windowdisplays"no---".

(3) If you enter the password inconsistently twice in a row, the window displays"no" toindicate that thepassword modification was unsuccessful, and then the system enters a working state.

(4) If the passwords entered twice in a row are the same, thewindow displays "SAV_" and a tone(in the sound start-up state), indicating that the password was modified successfully, and then the system enters a working state.

2. When the password has been modified, you must enter the correct password before you can enter the password **settings,** as follows:

Enter the correct password: turn off the power switch, press and hold the"AIR" or "AIR"buttondo notput and turn on the power switch until the window shows"C"and releases,the system enters the password input state, the window displays "password",thehundred digitsstart flashing, you can start to enter the password.

3. If ***the password is not entered correctly:*** the window displays "no"and thengoes directly to the working state (the keys are locked and cannot be modified).
4. If ***the password is entered*** *correctly:* the window will display"SET"for approximately 20 seconds.

（1） **When"SET" is displayedin the window,**press and hold the**"AIR"**or **"AIR"buttons to enter the** new password settings (referring to the password settings in the initial state). If you re-enter the initial password, 000”decode it, or you can set a new password.

（2） If"SET"isdisplayed in the window, press the"TEMP"or"TEMP" keys toexit the password settingand go directly to the working state (the keys are locked and cannot be modified).

（3） If nothing is done whenthe "SET"is displayed in the window, the system goes straight into the working state (the keys are locked and cannot be modified).

5. After setting the password, turn on the power switch and the window shows"no"before officially going to work or hibernate.

Note: In the initial state (password is 000),you can modify the passworddirectly and enter the password settings window without entering it.

4.6 Hibernate

4.6.1 Go into hibernation

1. Place the handle correctly on the handle holder and the system automatically enters the high wind volume cooling, and when the display temperature is less than, the 100℃ system immediately goes into hibernation.

5. Hibernate settings

After entering hibernation, if it is not awakened within the set shutdown time, the power supply to the welding table is automatically cut off and the welding table stops working. When the power switch is turned on and off, the welding table can be resumed.

（1） After selecting the appropriate mode as required, press **the " key to** enter the Sleep Time sleep time setting, and the window **displays that the sleep** time ischangedby pressing the "

（2） Once you have set the required sleep time, press**the**key to enter the shutdown time setting.

（3） How to wake up to hibernation:

- Turn off the solder power switch and turn on the power switch.
- Press any button in the ironing position.
- Pick up the iron handle from the iron rack.

（4） The handle must be placed on the iron rack and, if not used during the set sleep time, the welding table will automatically go into hibernation within the specified time.

6. Shutdown time settings

（1） After entering the shutdown time setting, the window displays that the shutdown time should be changed by **pressing the "**

（2） The shutdown time range is:0to250 minutes.

7. Sleep temperature setting

（1） After entering the sleep temperature setting, the window displays and **presses the keys "**

（2） The range of settings for the sleep50℃temperature:250℃.

8. Alarm upper limit temperature

（1） After entering the alarm temperature upper limit setting, the window displays that the temperature setting is changed by **pressing the "Set Temp" key,** andonce the difference between the set temperature (SetTemp)and the actual temperature(RealTemp) exceeds the alarm upper limit temperature (UpTemp),the welding station will sound an alarm in alarm mode.

（2） Alarm upper limit temperature(Up Temp) range:0℃.99℃

9. Alarm the lower temperature

（1） After entering the alarm temperature lower limit setting, the window displays that the temperature setting is changed by pressing the **"Set Temp" key,** andonce the difference betweentheset temperature (SetTemp)and the actual temperature (RealTemp) exceeds the alarm lower temperature (DownTemp),the welding table will sound an alarm in alarm mode.

（2） Alarm lower temperature(Down Temp) range:0℃.99℃

3.4 Use and maintenance of the iron head

3.4.1 The choice of iron head

1. Select a soldering iron head with the maximum contact area with the solder joint, which produces the most efficient heat transfer, enabling the operator to quickly weld out high-quality solder joints.

2. Should choose a good path to transfer heat to the welding point of the iron head, shorter length iron head can be more accurate control of heat, and the assembly of dense circuit board welding, perhaps must choose a longer or a certain angle of the iron head.

合適　　太輕　　太重

3.4.2 Maintenance of the iron head

3.4.2.1 Attention to the use of iron-solding heads

1. Too high a temperature reduces the life of the soldering iron head, so choose the possible low temperature. The heat return capacity of this welding table is excellent, and the lower temperature can also be fully welded to protect temperature-sensitive components.
2. When using the soldering iron continuously for a long time, remove the soldering iron head once a week to remove the oxides and prevent damage to the soldering iron head and reduce the temperature.

Heating up: Press the "TEMP"key directly once,set the temperature rise, the temperature parameter display window shows the set temperature, if you hold down the 1 ℃ "TEMP"key for at leastone second,then set the temperature to rise rapidly until the desired setting of temperature release TEMP "T-" key.

Cooling down: press 1 ℃the "TEMP"key directly, then set the temperature drop,the temperature parameters display window shows the set temperature, if you hold down the"TEMP" key does not put for at least one second,then set the temperature to drop rapidly untilthe desired setting of temperature release TEMP "" key.

4.5.2.2 Wind measure file degree settings

Increase the air volume: press the "AIR"key directly once,then set the air volume increase by one gear, the air volume parameter display window shows the set air volume gear, if you hold down the "AIR"key does not put at least one second, then the air volume gearrises rapidly until the desired set gear release "AIR"key.

Reduce the air volume: pressthe "AIR"key directlyonce, then set the air volume to decrease by one gear, the air volume parameter display window shows the set air volume gear, if you hold down the"AIR"key does not put at least one second,then set the air volume gearto drop quickly,until the desired set gear release"AIR"key.

4.5.3 Password settings

1. In the initial state (password is), whenyou need to change000” your password, the steps are as follows:

Turn off the power switch, press and hold the "AIR" or "AIR"buttons donot put and turn on the power switch, until the window shows"C"and releases the OK key, at which point the window displays "password"and"SET"and the systementers the password setting state.

（1） The hundred-digit flashes into the first password entry interface.

Press theTEMPand AIR buttonsto enter yourpassword.

（A） Press the "TEMP"or "TEMP"keys to select the passwordvalue, and the numbers vary from 0 to 9.

（B） Press the"AIR"or "AIR"key to selectthe numbers of 100, ten, and each number.

(2) After the first password entry is complete, press the"AIR"or "AIR"button to determine the password entry, the hundreddigits flash, enter the second password input.

4. If in a non-password locked state, the temperature and air volume parameters can be modified. Press the ▲ "TEMP" ▼ 4.5.2or "TEMP"key to set theoperating temperature (refer to the temperature setting), press the"AIR"or ▲ "AIR"▼key to set the operating air volume (refer to the 4.5.2 air volume setting).
5. If the password is locked, the "no" will appear in thepost-power-onwindow. In the working state, you can not modify the temperature, air volume parameters, than you can modify the button tone and so on.
6. After the work is completed, the handle holder must be placed, at this time the welding table automatically enters cold air cooling heat body mode, when the temperature is lower than the 100℃ welding table into hibernation.
7. If you do not use it for a long time, turn off the power switch.

⚠**Attention:**

- The initial password000” is . In the initial password state, the system is unlocked and parameters can be set.
- In the case of completion of the work, as far as possible the use of low temperature and high air volume, which helps to extend the life of the heating body of the welding table and protect the safety of the welded IC chip.

4.5 Parameter settings

Note: The chime, temperature, and air volume settings cannot be entered in the password lock state (i.e. in the non-initial password state). In the password lock state, re-enter the initial password 000”" is decoded.

4.5.1Tone settings

1. The system switches between silent tones while viewing the status in the working or sleep parameters while holding down thetemperature settings "Yuan" and "
2. The window displays "" to indicate that the system has a key tone and a beep tone. When the window does not display, there are no key tones or beep tones in the system.

4.5.2 Temperature and air volume settings

4.5.2.1 temperature setting

3. When not using the welding table, try to turn off the power supply to extend the service life. Do not allow the iron to be in a high temperature for a long time, will make the solder on the iron head into oxides, resulting in the iron head thermal function greatly reduced.

4. Soak fresh solder after each use to prevent oxidation of the soldering iron head and extend its service life.

5. Clean the iron head with a clean sponge on a regular basis. After welding, the oxides and carbides derived from the residual solder of the iron head can damage the iron head, cause welding errors, or reduce the thermal conductivity of the iron head.

6. In the case of working as far as possible to use a lower temperature, low temperature can reduce the oxidation of the iron head, but also easy to weld components.

7. Only when necessary, the use of fine iron head, small iron head coating is not dull iron head coating durable.

8. Do not use the iron head as a detection tool, iron head bending will cause the coating to break, shorten the service life.

9. Use less active pine solder, as high content of active pine will accelerate the corrosion of the iron head coating.

10. Do not apply heavy pressure to the soldering iron head, because the greater pressure is not equal to heat transfer fast, in order to improve heat transfer, the solder must be melted, so that the solder head and the solder joint between the formation of a heat transfer of the solder bridge.

3.4.2.2 Check and clean the soldering iron head

1. Set the temperature to 250 degrees Celsius.

2. After the temperature is stable, clean the soldering head with a clean sponge and check the condition of the soldering head.

3. If the tinned part of the iron head contains black oxides , the new tin layer is coated and the iron head is cleaned with a moist cleaning sponge . So repeat the cleaning until the oxides are completely removed and then coated with a new tin layer.

4. If the iron head is deformed or corroded, it must be switched off and replaced with a new iron head after the iron head has cooled down.

3.4.2.3 Restore the iron head that is not on the tin

1. Why can't a tinned iron head be used?

The iron head without tin is a soldering iron head **that cannot be soaked, and the exposed coating is oxidized, which** invalidates the heat transfer of the soldering iron head.

2. The iron head of "not tin" is caused by the following reasons

（1） The solder head is not covered with a new solder when the solder is

idle.

（2） The iron head is at high temperature.

（3） Not fully melted during welding work.

（4） Scrub the iron head with a dry or unclean sponge or cloth (a clean, moist, industrial-grade sulfur-free sponge should be used).

S - E。

（5） The solder or iron coating is not pure, **or the** welding surface is not clean.

3. Restore an iron head that is not tinned

(1) Remove the soldering iron head from the iron **handle** after cooling it.

H - E。

（2） Remove dirt and oxides from the **tinned surface of the soldering iron head with 80'polyurethane grinding foam blocks or** 100's gold sand steel.

（3） Put the soldering iron head into the handle, **wrap the new exposed iron head tin layer surface with the tin wire with** 0.8mpine(more **than** m) **and** turn on the soldering table power.

⚠ **Attention:**

- **Do not use a sickle to remove oxides from the iron head.**
- **Proper daily maintenance will effectively prevent the iron head from not tinned.**

3.5 Error tag

Various error marks are displayed when there is a problem with the welding table.

Sensor error: If the sensor or any part of the sensor circuit does not function, the window displays the"S-E"markand the current delivered to the soldering iron is cut off.

Heat body error: If the welding table is unable to deliver power to the soldering iron heating body, the window displays an**"H-E"**mark, indicating that the heating core may be broken.

2. Instant operation is convenient, with magnetic switch control, handle placed on the handle holder immediately into hibernation. Parameters can be set in hibernation.
3. Sensor closed circuit, microcomputer zero trigger temperature control, high power, rapid heating, temperature regulation is convenient and accurate and

stable, not affected by air output.

4. The use of brushless vortex fan, air flow adjustable, large range, can be adapted to a variety of uses.

5. The system is equipped with automatic high wind cooling function, which extends the life of the heating body and protects the hot air handle.

4.3 Use

1. Suitable for disassembly and welding of various components suchas: SOIC,CHIP, QFP,PLCC,BGA, etc.

2. Suitable for heat shrinkage, drying, decoloring, de-sticking, thawing, preheat, disinfection, glue welding and so on.

3. The air volume is non-grade adjustable and is suitable for applications where small air volume and high wind volume heating are required.

4.4 Action Help

4.4.1 Key description

THE POWER key	Disassemble the welding table part of the power switch
Temperature(TEMP)/button:	Adjust the hot air temperature
Press the temperature(TEMP) /buttonatthesame time	The switch has a silent tone
Air volume (AIR)/button:	Adjust the air volume or determine the setting function

4.4.2 Operation.

Note: After opening the package, please check the parts for loss or damage according to the packing slip, if any, please contact our company or distributor immediately. If the purchase is not ordered, there will be no such thing in the **package.**

1. Select the desired wind and device (use a large diameter wind as much as possible) and place the handle on the wind gunner handle holder.

2. Connect the power cord and turn on the power switch.

3. Remove the handle from the gun holder, the system enters normal operation, and the temperature window displays"Real Temp".

3.7.5 Replace the fuse

1. Unplug the power supply from the power station and remove the fuse box with a word or cross-shaped starter;
2. Remove the bad fuse and replace it with a new fuse;
3. Install the fuse box.

Fourth, hot wind welding table part

4.1 Security Help

1. Hot wind welding typhoon has a wind port and the surrounding may have

very high temperature, should be careful to guard against burns.

2. The heating handle must be placed on the handle holder and must never be placed on the work surface or elsewhere.
3. Please keep the air out of the air and there must be no obstructions.
4. When the work is complete, the handle must be placed on the handle holder and the machine automatically cooled down to 100℃ below (into standby) in order to turn off the power switch.
5. The minimum distance between the air port and the object when 2毫米 using is , calculated as the air port. Depending on the work needs, choose a suitable nozzle, different nozzles, the temperature may vary slightly.

4.2 Specifications and features

4.2.1 Specifications.

Power:	1000W
Power:	110VAC
Temperature100℃	range:500℃
Air volume:	1 to 120

4.2.2 Characteristics.

1. Password protection and key locking.

3.6 Welding table temperature calibration

1. Recalibrate the iron temperature whenever the soldering iron, heating element, or iron head is replaced.
2. This machine uses digital temperature calibration, through the key input correction values, adjustment is simple and fast.
3. Method for recalibrating the iron temperature: This method is more accurate by using the soldering iron temperature tester.
4. The calibration steps for the iron temperature tester are as follows:
   (1) Set a temperature value for the welding table.
   (2) When the temperature is stable, measure the iron head temperature with an iron-solder temperature tester and write down the reading values.
   (3) Press and hold the key, then press the"" and "" keys at the same time, and the machine enters calTemp.
   (4) The LCD shows no flickering, press the "
   (5) If there is still an error in temperature, repeat the calibration.

- **It is recommended to use the 191/192 tester to measure the iron head temperature.**
- **If the password is locked, the temperature cannot be calibrated and the correct password must be entered to do so.**

3.Detection of faults and replacement of components

When the soldering iron fails, it can be detected, the damaged components can be identified, and then replaced.

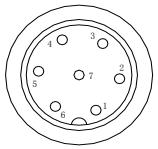
3.7.1Detection Handle Assembly

Pull out the plug and test the resistance between the foot and the foot connecting the plug as follows:

1. If the resistancevalues for items"a"and "b"are different from the resistance values in the table below, a heat changer assembly(sensor) and/or wire are required. Follow these steps.
2. If the resistance value of the"c"item is greater than the resistance value in the table below, gently erase the oxidation layer at the connection between the iron head and the heating element, between sandpaper or steel lint.

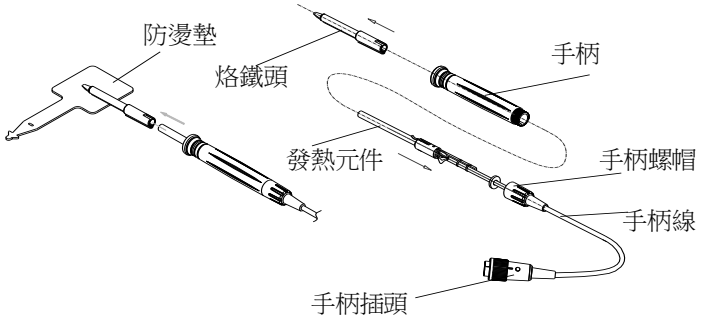
⚠**Note: When measuring items band c,** the **soldering iron must be marked with a soldering iron head.**

A.	Between the 4th and 5th feet (heating assembly).	slt;4 Ohm (normal).
B.	Between the 1st and 2nd feet (sensor).	slt;10 ohms (normal).
C.	Between the 1st foot and the iron head	2 ohms below



Remove the iron handle

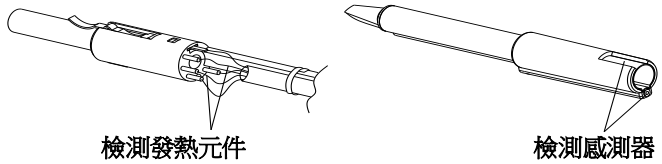
1. Turn off the power switch on the welding table and turn the power plug on.
2. Remove the plug from the soldering iron handle wire from the welding table until the soldering iron is slightly cold before removing.
3. Pull the iron head out of the handle with an anti-hot mat and do not use metal tools such as pliers.
4. Open the sleeve at the end of the handle.
5. Pull the thermal element from the handle in the direction of the handle line.



3.7.2 Detection of heating elements and sensor components

The following tests are performed when the heating component is returned to room temperature:

1. The resistance value of the heating assembly (white and black)slt;4Ω.
2. Sensor resistance value (redline and ground line)slt;10Ω.
3. If the resistance is abnormal, replace the heating assembly.



3.7.3 Replace the heating unit

1. Cut off the strap connecting the heating element to the handle wire, pull out the sensor pin, and remove the leads in the handle wire from the heating element.
2. Remove the damaged heating assembly and replace the new heating element.
3. Weld the leads in the handle wires to the pins of the heating assembly according to the connection at the time of removal. The black and white leads are connected to the two heater pins on the heating element, and the ground wire (shielding wire) is connected to the ground foot.
4. Insert the red in-line sensor pin into the sensor jack of the heating unit.
5. After replacing the heating assembly, test 3. 7. 4the heating element according to the following "Test heating element" to confirm that it is correct before installing.
6. Tighten the heating element with the handle wire with a strap.
7. Insert the heating assembly into the handle in reverse order at the time of removal, and the heating element is inserted to the end. The protruding part of the sensor pin on the heating assembly must be inserted in the groove of the handle.
8. Tighten the handle Nut at the rear.
9. To install the iron head, the sensor jack part of the iron head needs to be installed in the groove of the handle.

⚠**Attention:**

- Each lead is connected to the pin and a heat shrink tube is required.
- Metal tools, such as pliers, should not be used, but heating elements should be pulled out of the handle using an anti-hot mat.

3.7.4 Test the heat component

1. Measure between foot 4 **and foot** 1 **or foot** 2, foot between foot 5 and foot or **foot** 2, foot between foot 3 and foot or **foot** 2, foot 3 and foot 4 The resistance value **between the foot or the** 5th foot. If ∞, it is touched by the heating element and the sensor or vibration switch, which may damage the printed circuit board.
2. Measure the"a""b""c"resistance value to **determine that the leads are not** distorted and that the ground wires are properly connected.