

RF4

FOCUS DESIGN AND CONCEPT

USERS MANUAL

◀ 使用手册 ▶

RF-H2

Anti-static Hot Air
Desoldering station
Manual

涡流防静电热风拆焊台



Welcome to use our high-quality products, please read this manual carefully before using. Thank you very much!
欢迎使用本公司系列优质产品, 使用之前请仔细阅读本使用手册。谢谢!

一、功能用途

- 1.本设备主要用于电子元器件表面贴装的拆除和焊接如：SOIC、CHIP、QFP、PLCC、BGA等。
- 2.用于手机排线及排线座的拆焊。
- 3.可用于热收缩软管和各种塑料等所需的加热、烘干、除漆、除粘、解冻、胶焊、热能测试及其它需要加热的工序。

二、包装清单附件

收到本产品后请打看包装，检查以下基本配件有无漏放。拔焊台型号众多，型号不同配件会有增减，请以当地销售商咨询。

主机	喷嘴	AC电源线	拔焊台手柄架	烙铁手柄 二合一机型	烙铁手柄 二合一机型	高温吸水海棉 二合一机型	说明书
1台	3个(φ6, φ8, φ10)	1条	1个	1本	1个	1个	1本

三、产品性能说明

1. 本设备采用电阻丝加热,K型热电偶传感闭合回路微电脑PID全程控温的方式控温。具有提前预判，精确控温，多重故障指示和安全保护措施。温度恒温精度不大于 ± 2 度，线性失真 $< \pm 3$ 。
2. 风量送风采用高性能双滚珠涡轮风扇送风，具有噪声小、重量轻、风量大、风压高、超长使用寿命等特点。风量大小可调节，风量调节范围：5%-100%。
3. 手柄装有感应开关，从托架取下手柄便可迅速进入工作模式。手柄放归手柄架内，系统便会降温送冷风进入待机状态。实时操作方便，节省能源损耗延长发热体使用寿命。

4. 本产品具有独特的主动安全保护专利技术，不自燃，不烧手柄，故障负载自动切断，即使在无人值守也不用担心手柄自燃。
5. 产品具备声音报警功能：
开机通电警示、恒温警示、休眠警示、过温警示、不发热故障警示、手柄脱落警示等提示功能。

四、操作说明

1. 取出本设备放于工作台面。
2. 将工作中所需规格的风枪喷嘴按装在本设备出风口钢管上。按装好后将本手柄放置于手柄架上。
3. 连将AC电源线插入本设备后部AC座内，确保电源线与本设备良好的接地。
4. 打开设备电源开关，显示屏显示“HOT SLEEP”此时拆焊台处于待机状态。
5. 调节面板中“AIR”和“HOT”指示的“▲”和“▼”按键达到所需风量和温度。
6. 拿起拆焊台手柄，拆焊台正常加热工作。待温度恒定后方可进行拆焊作业。
7. 工作完毕，必须把手柄放置在手柄架内，此时拆焊台会自动切断电源，进入送冷风冷却发热器件模式。当温度你低于70°C时，拆焊台进入待机模式。此时风机停止送风，发热丝不工作。
8. 选购二合一焊台，烙铁使用同理，此处不再做说明。
9. 长期不作业时必须开闭设备电源总开关。
10. 本设备具有预调节记忆工作模式：“CH1、CH2、CH3”。可以调用事先设定好的工作通道来工作，也可预先设定所选通道“温度”和“风机流量”。开机默认主工作模式，也就是当前工作模式。如需调用CH1、CH2、CH3的任意工作模式时，按键一次为查

看是否为所需工作模式，重复再按一次可以调用当前通道的参数工作。查看通道时在显示屏右侧会有通道的编号显示。如果需要保存工作模式时，在当前工作模式下连按2次需要保存的通道对应按键。也可以在所选通道模式下进行数值更改温度和风量，更改完成后再按下对应的通道就能将所设定的值保存在相应通道。

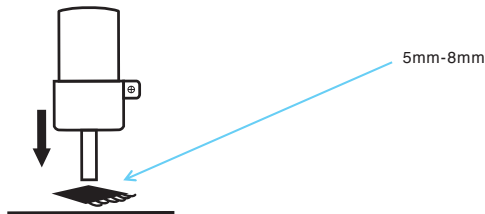
11.隐藏功能说明设定：长按“CH1”可进行华氏/摄氏转换。长按“CH2”对当前温度校准，只需输入风口的实际温度再按一次“CH2”，拔焊台会自动修正使风口温度与显示温度一致，如未达到可重复操作直到准确。

注意：

在作业中，尽量使用低温度大风量。这样有利于保护IC芯片的安全同时有助于延长发热体使用寿命。

五、操作技巧

- 1.在使用本设备时，确保本设备可靠良好接地，这样有助于除静电，可以防止设备漏电对操作者造成触电危险。
- 2.选择拔焊台喷嘴规格时，在工作中应尽量选择大号，这样有利于增加对象受热面积，使对象能够快速的吸收热量使之熔锡。
- 3.在工作中，尽量低温大风，一般使用温度在280°C-330°C为宜。
- 4.操作时，风嘴离加工件最好距离在5mm-8mm之间。对加工件预热时，请移动手柄使热气流直达芯片引脚，使加件受热均匀，这样能起到很好的保护加工件。



5.拆除芯片时,可以在芯片底部或引脚处插入IC起拔器,待芯片充分熔锡后方可取下芯片。

6.芯片焊接时,将PCB板上的芯片引脚焊盘上的污垢和残渣去除干净。抹上锡膏将IC放置焊盘上,用风枪对准IC引脚焊盘做环形运动,使锡膏熔化焊。焊接时注意风嘴不要触碰放置好的IC和IC引脚。

拆除和焊接时注意,请保持加工件底部悬空(最好PCB底部悬空),这样可使热量不会被底部台面吸收。这样能达更优的拆除和焊接。

注意:

用热气进行焊接是有效的,但也可能导至焊剂起球、焊剂搭焊、连焊等问题,根据需要可用烙铁加以补焊并清除熔残余渣。

六、使用安全注意事项

1.使用本机时请将电源可靠良好接地,方可起到除静电的功效。

切勿靠近易燃易爆气体、纸张或其它易燃物防止火灾发生。

本产品工作中为高温发热气体,请注意安全以防烧伤。

切勿触摸工作中的拔焊台发热管。

切勿使拔焊台喷出的气流接触体肤。

切勿用手触摸工作中的电烙铁。

2.拔焊台初次使用时风管会冒白烟属正常现象,工作一段时间可消除。

3.本设备带过温保护,为安全起见热风拔焊台温度升高至580度会触发过温保护,控制器会强制切断负载使之不再加热。并启动过温警示,显示故障代码:"ERR2".

当温度冷却至正常范围或者断电故障排除后重启,故障警示方可清除。

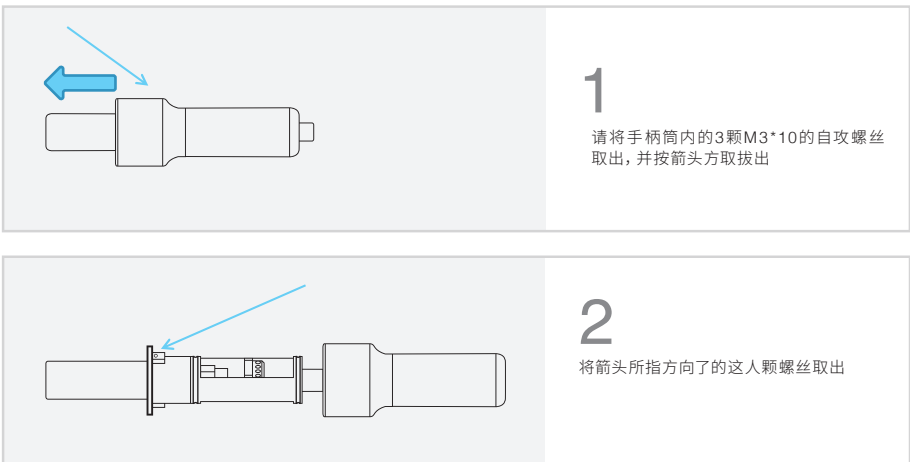
七、规格

电压	功率	风枪温度范围	气流分辨率真	气流大小	显示形式
220VAC (110VAC)	1000W	100°C--480°C. (212F-896F)	5%-100%	50L/Min	LCD
恒温精度	风机类别		风机转速	手柄线长	机身重量
±2°C	高速涡轮风机		15000转/Min	90cm	2.1KG

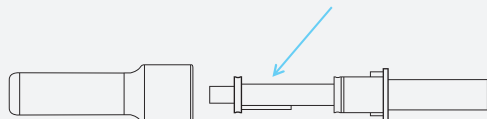
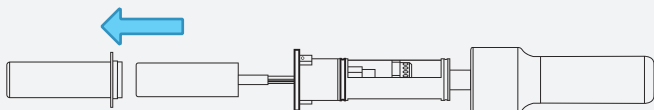
八、发热芯替换

- 因发热体是易损耗部件，发热体的使用寿命与空气湿度、工作温度、环境气候、功率大小、内部材质结构和制造工艺有关。
- 如发现发热体损坏，请根换同型号的发热体。一般要求：功率匹配、外观大小一至、丝径相同，传感线KP+与KP-一一对应即可。当然不同厂家的发热体存在差异。建议跟换原厂发热体！
- 本设备传感线为K型热电偶，替换时请注意区分“极性”，否则会引起不恒温。

附图



3 将钢管的接地线拔开，将钢管按箭头拔出。并抽出发热芯，发热芯外面包裹着一层高温云母纸，是用于绝缘。



4 用十字螺丝刀松开排线柱，取出发热引线和传感器引线。
注意：排线标明专感线极性：KP+KP-。请做好记录。

取出发热芯后，将好的发热芯卷一层云母纸。按照拆开的相反顺序装回到手柄筒内。

装回去时请注意区分：传感器极性，发热体引线。此时替换发热芯就算完毕，在确保替换完好的情况下可以通电测试！

九、警示提示说明

本设备具有多重故障保护、显示提示、声意警示功能。下面对出现的故障和按键做简要说明：

ERR1:提示发热体损坏或者传感线极性错误。请断开电源排除故障。

ERR2:提示发热体高温或者手柄脱落，请断开电源排除故障

SLEEP:提示设备处于待机休眠状态。

OFF: 关闭。

ON: 打开。

▲：设定值增大。

▼：设定值减小。

声音提示功能：通电、恒温和设备出错都会出现不同的声意提示功能。请将故障排除后方可清除。

敬告：

本设备为高温作业工具，使用时请注意以防烫伤。
操作时需有人值守，不可在易燃易爆物附近使用。感谢您的使用！

I. Functional uses

1. The equipment is mainly used for dismantling and welding the surface mount of electronic components
Such as: SOIC, CHIP, QFP, PLCC, BGA, etc.
2. Used for disassembly and welding of mobile phone wiring and wiring holder.
3. It can be used for heating, drying, removing paint, removing glue, thawing, bonding, thermal testing and other processes that need heating for heat shrinkable hose and various plastics.

II . Packing List Attachment:

After receiving this product, please open the package and check whether the following basic accessories are missing. There are many types of welding table, different types of accessories will increase or decrease, please consult with local vendors.

The host	Nozzle	AC power cable	Desoldering station Handle bracket	IC extractor
1 pcs	3 pcs (φ6, φ8, φ10)	1 pcs	1 pcs	1 pcs
Soldering iron handle (2-in-1 model)	Instructions	Soldering iron handle (2-in-1 model)	High temperature absorbent sponge (2-in-1 model)	
1 pcs	1 pcs	1 pcs	1 pcs	1 pcs

III . Product performance description

1. This equipment adopts resistance wire heating, K-type thermocouple sensing closed loop microcomputer PID full program temperature control. It has advanced prediction, accurate temperature control, multiple fault indication and safety protection measures. Temperature constant temperature accuracy is not more than ± 2 degrees, linear distortion $< \pm 3$.
2. Air volume air supply adopts high-performance double ball vortex fan, which has the characteristics of low noise, light weight, large air volume, high wind pressure, long service life and so on. Air volume size can be adjusted, air volume adjustment range: 5%-100%.
3. The handle is fitted with an induction switch and can be removed from the bracket to quickly enter the working mode. When the handle is placed in the handle holder, the system will cool down and send cold air to the standby state. Real-time operation is convenient, save less energy loss and prolong

the service life of heating element.

4. This product has a unique active safety protection patent technology, no spontaneous combustion, no burning handle, fault load automatically cut off, even in unattended handle do not worry about spontaneous combustion.

5. The product has sound alarm function:

Power-on warning, constant temperature warning, sleep warning, over temperature warning, no heating failure warning, handle off warning and other reminders.

IV . Operation instructions

1. Remove the device and place it on the work table.

2. Install the air gun nozzle of the required specifications on the steel pipe of the air outlet of the equipment. After assembling, place the handle on the handle holder.

3. Connect the AC power cable into the AC seat at the rear of the device to ensure that the power cable is properly grounded with the device.

4. Turn on the power switch of the equipment, and the display screen shows "HOT SLEEP".

5. Adjust the "AIR" and "HOT" buttons "▲" and "▼" to achieve the required AIR volume and temperature.

6. Pick up the handle of the welding table, the welding table is heated normally. Disassembly and welding can be carried out after the temperature is constant.

7. After the work is finished, the handle must be placed in the handle frame. At this time, the welding platform will automatically cut off the power supply and enter the mode of sending cold air to cool the heating device. When the temperature is below 70°C, the welding table enters standby mode. At this time, the fan stops supplying air and the heating wire does not work.

8. Choose two-in-one welding platform, the use of soldering iron is the same, no longer explain here.

9. The main power switch of the equipment must be turned on and off when it is not working for a long time.

10. The device has pre-regulated memory working mode: "CH1, CH2, CH3". You can call the pre-set working channel to work, and you can also pre-set the selected channel "temperature" and "fan flow".

The default operating mode is the current operating mode. If you need to invoke any working mode of CH1, CH2, or CH3, press the button once to check whether the required working mode is available. Press the button again to invoke the parameters of the current channel. When you view a channel, the channel number is displayed on the right of the screen.

Save working mode: In the current working mode, double click the key corresponding to the channel to save.

You can also change the temperature and air volume in the selected channel mode. After the change is complete, you can press the corresponding channel to save the set value in the corresponding channel.

11. Hidden function Description Setting: Long press "CH1" to convert Fahrenheit/Celsius. Long press "CH2" to calibrate the current temperature, just press "CH2" again for the actual temperature of the input tuyere, and the drawing table will automatically correct the tuyere temperature to be consistent with the displayed temperature. If not, repeat the operation until it is accurate.

Note:

In the operation, try to use low temperature and high air volume. This is helpful to protect the safety of IC chip and prolong the service life of heater.

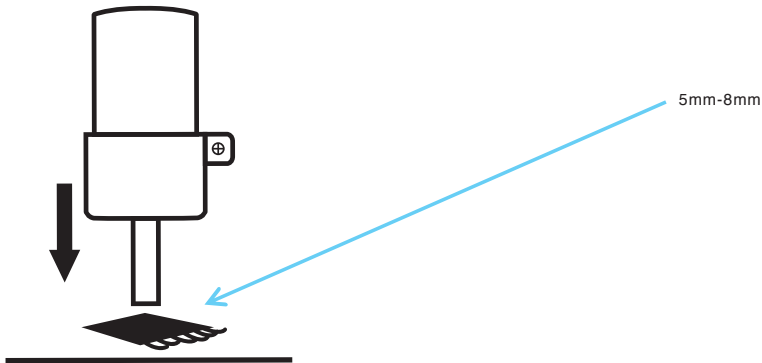
V .Operation skills

1.When using the equipment, ensure that the equipment is reliable and well grounded, which helps to remove static electricity, can prevent the leakage of equipment to the operator caused by electric shock danger.

2.When selecting the specification of welding nozzle, large size should be selected as far as possible in the work, which is conducive to increasing the heating area of the object, so that the object can quickly absorb heat to make it melt tin.

3.In the work, as far as possible low temperature wind, the general use of temperature in 280°C-330°C is appropriate.

When operating, the best distance between the nozzle and the workpiece is 5mm-8mm. When preheating the workpiece, please move the handle to direct the hot air flow to the chip pin, so that the workpiece is heated evenly, which can protect the workpiece well.



4.When removing the chip, you can insert an IC puller at the bottom or pin of the chip, and remove the chip after the chip is fully melted.

5.During chip welding, clean the dirt and residue from chip pin pad on PCB board. Apply the solder paste will be placed on the IC pad, with the air gun at the IC pin pad to do circular movement, so that the solder paste melting welding. When welding, pay attention to the air nozzle should not touch the IC and IC pin placed.

6.When dismantling and welding, please keep the bottom of the workpiece hanging in the air (preferably the bottom of PCB), so that the heat will not be absorbed by the bottom table. This allows for better dismantling and welding.

Note:

Welding with hot air is effective, but it may lead to problems such as flux pilling, flux overlay welding and tandem welding. If necessary, use soldering iron to repair welding and remove residual slag.

VI .The use of safety precautions

1. When using this machine, please keep the power supply reliably and well grounded, so as to have the effect of removing static electricity. Keep away from flammable and explosive gases, paper or other inflammable objects to prevent fire.

This product is high temperature and heating gas, please pay attention to safety to prevent burns.

Cut and touch the heating tube of the drawing welding platform.

Cut the material so that the air flow out of the welding table contact the body skin.

Cut objects by touching the working electric soldering iron.

2. It is normal for the air pipe to emit white smoke when the welding platform is first used, which can be eliminated after working for a period of time.

3. The equipment is equipped with overtemperature protection. For safety, overtemperature protection will be triggered when the emperature of hot air drawing welding table rises to 580 degrees, and the controller will forcibly cut off the load to make it no longer

heated. And start over temperature warning, display the fault code: "ERR2".

When the temperature is cooled to the normal range or the power failure is rectified after the restart, the fault warning can be cleared.

VII.Specification

The fan type	Power	Hot Air gun temperature range	Airflow resolution true	Airflow	Display
High speed turbofan	1000W	100°C--480°C. (212F-896F)	5%-100%	50L/Min	LCD
Voltage	Constant temperature precision		The fan speed	Handle line length	Machin weight
220VAC(110VAC)	±2°C		15000 r/Min	90cm	2.1KG

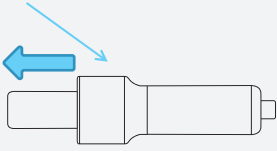
VIII. Core replacement

Because the heating element is a lossy part, the service life of the heating element is related to air humidity, working temperature, environmental climate, power size, internal material structure and manufacturing process.

If the heating element is damaged, please replace the heating element of the same model. General requirements: Power matching, appearance size to one, wire diameter is the same, the sensor line KP+ and KP- one by one corresponding. Of course, there are differences in heating elements from different manufacturers. It is recommended to replace the original heating element!

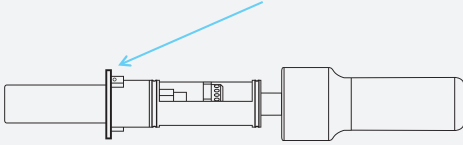
The sensor line of this equipment is k-type thermocouple, please distinguish the "polarity" when replacing. Otherwise, it will cause an irconstant temperature.

The appended drawings



1

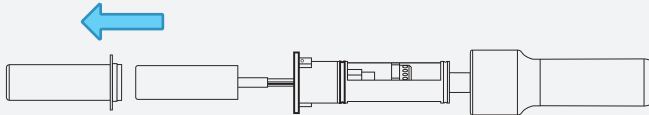
Remove the three M3*10 tapping screws from the handle barrel and remove them according to the arrow.



2

Remove the screw pointing in the direction of the arrow.

3 Unplug the ground cable of the steel pipe and pull out the steel pipe according to the arrow. And draws out the heating core, which is covered with a layer of high-temperature mica paper for insulation.



4

Loosen the cable tray using a Phillips screwdriver and remove it

Thermal leads and sensor leads. Note: The polarity of the induction line is marked KP+KP-. Please take notes.

After removing the heating core, roll the good heating core with a layer of mica paper. Assemble back into handle barrel in reverse order of disassembly.

Please distinguish: sensor polarity, heating body lead.

At this point, the replacement of the heating core is complete, in the case of ensuring that the replacement can be energized test!

IX. Warningo instructions

This equipment has multiple fault protection, display prompt, sound warning function. The following is a brief description of the failures and keys:

ERR1: Indicates that the heater is damaged or the polarity of the sensor cable is incorrect. Disconnect the power supply to rectify the fault.

ERR2: The heater is in high temperature or the handle is off. Disconnect the power supply to rectify the fault.

SLEEP: indicates that the device is in standby SLEEP state.

OFF: Closes.

ON: Open.

▲ : The set value increases.

▼ : The set value decreases.

Sound prompt function: different sound prompt function will appear when power on, constant temperature and equipment error. Please rectify the fault before it can be cleared.

Warning:

this equipment is a tool for high-temperature operation, please pay attention to avoid scalding when using. When operating, someone should be on duty. Do not use near inflammable and explosive objects. Thank you for using it!

涡轮防静电热风拆焊台

RF-H2

Anti-static Hot Air
Desoldering station
Manual