安全守则

使用本机器时，下列基本措施要遵循，以免触电对人体造成伤害，避免火灾的现象的危害。

1.为了确保人身安全，该机器工作完毕后，请拔掉电源线！！！
2.必须使用原厂认可或推荐的零件，否则将导致严重后果。
3.机器故障必须由专业人士或本公司制定人员进行维修。
4.本产品使用三线接地插头，必须插入三孔接地插座内，不要更改插头或使用未接地三头适配器而接地不良。
5.电焊台开启后，其温度都有可能达到400℃以上。切勿在易燃、易爆气体 等物体附近使用，切勿触摸焊铁金属部分，谨防烫伤。
6.电焊台开启后切勿离开工作岗位。
7.安装或更换焊铁部件时，必须在关闭电焊台后进行，必须在焊铁冷却后方可进行安装或更换。
8.切勿使用焊铁进行焊接以外的工作；切勿将焊铁敲击工作台面。
9.焊接时会冒青烟，请做好应有专的通风设施。

一、包装清单

请检查产品包装，以证实所列清单项目正确无误
1、RF-ONE 焊台主机
2、RF-ONE 焊铁手柄
3、RF-ONE 一体烙铁头
4、烙铁手柄架
5、说明书

二、产品特点

RF-ONE

特点：
加热速度快，控温准确，回温快，设置人性化，可设置选项多样化，具有环境温度补偿，各种保护和节能技术，并具有蜂鸣提示。

三、规格参数

产品型号	RF-ONE
功率	80W
输入电压	AC220V
输出电压	DC24V

四、休眠功能

当菜单设置的休眠时间不为0时，0时，休眠功能打开，右上角休眠设置灯亮。
当手柄停止动作计时，到时进入休眠模式，以某单中设定的休眠温度加热，此时中休眠灯亮设定定温度显示设定的休眠温度。
当手柄动作或按键任意按下后，退出休眠模式，以原温度重新加热。

五、密码功能

在主界面双击中键对焊台加锁后，将无法设置温度，无法进入菜单，但可以正常使用设定好的温度加强和休眠功能。
如需解锁，再次双击中键，在左侧数码管中输入密码即可解锁。

六、功能操作说明及功能设置

1、连接好烙铁和控制台。
2、接上电源。
3、打开开关，屏幕显示设置和实际温度，烙铁开始加热。

RF-ONE数码管使用设置说明

一、硬件方案
主控芯片选用MM32SPIN25PF，运放SGM8551，电源芯片78M05。

二、主界面操作
左右键加减温度：短按按照菜单中温度步进调整温度，长按实现连续快速调整温度
双击为切换温度通道（通道一250℃、通道二350℃、通道三450℃）。
正常情况下，温度设置范围150-480℃（302-896℉）。
中键短按为温度加强开关，单击打开温度加强功能并开始计时，达到菜单中设定的温度加强时间后自动恢复原温度，也可以提前短按中键退出温度加强模式。
中键双击将锁定焊台，中键长按进入菜单。

三、菜单操作
在主界面长按中键进入菜单，左侧数码管显示当前选项，右侧数码管关闭，加减键切换选项。
短按中键选中该选项，右侧数码管显示该选项值，加减键调整值。
设置完毕后再次短按中键可取消选中。在菜单中任意位置长按中键可退出菜单，在菜单中按键无任何动作2分钟后退出菜单，所有设置选项在退出菜单后生效并保存。
菜单中包含以下十项，依次命名为F01-F10。

F01	休眠时间：设置范围0-60分钟，默认5分钟。其中设置为0时禁止休眠功能。
F02	休眠温度：设置范围100-300℃(212-572℉)，默认200℃(392℉)。
F03	加强时间：设置范围1-30分钟，默认2分钟。
F04	加强温度：设置范围10-50℃(18-90℉)，默认50℃(90℉)。
F05	温度步进：设置范围1-50，默认10。
F06	温度单位：设置范围0-1，默认0。(0代表℃，1代表℉)
F07	蜂鸣器开关：设置范围0-1，默认1。(0代表关闭，1代表打开)
F08	密码设置：设置范围0-999，默认888。
F09	温度校准：进入温度校准后，会依次按照低中高三个温度加热，显示的为三个目标温度，加热为实际温度，温度稳定后在右侧输入实际温度后单击此功能键进入下一个温度点，三个温度点完成后即完成校准。
F10	恢复默认：设置范围0-1，默认0。(0代表不恢复，1代表恢复)

七、烙铁头的维护和使用

烙铁头温度	温度过高会减弱烙铁头寿命，因此应选择尽可能低的温度。此烙铁头的温度恢复力优良，较低的温度也可充电焊接，可以保护温度敏感的元件。
清理	应定期使用清洁海绵清理烙铁头，焊接后，烙铁头的残余焊剂所衍生的碳合物和氧化物会损害烙铁头，造成焊接误差，或使烙铁头导热功能减退，长时间连续使用烙铁头时，应每隔一次拆开烙铁头清除氧化物，防止烙铁头受损而减低温度。
当不使用时	不使用烙铁时，不可让烙铁长时间处于高温状态，会使烙铁头的焊剂转化为氧化物，致使烙铁头导热功能大为减退。
使用后	使用后，应抹净烙铁头，镀上新锡层，以防止烙铁氧化。

1、当烙铁初次使用时，要注意检查烙铁的升温情况，待其温度剖刚刚能融化锡丝时，在烙铁咀部分上一层锡，然后再将温度升至所要的温度。注记工作时烙铁咀应长期附有一层锡保护烙铁咀，才能达到最佳的焊接功能。

2、如烙铁表面出现一层氧化物，出现过焊铁咀低温的假象，无法熔锡和上锡，此时发热芯与烙铁都处于高温状态，出现这种情况时，不要盲目把温度再调高，应用清洁海绵清除氧化物，如不能清除，请将电源关闭，待烙铁温度降低至室温后，用砂纸小心把氧化物清除，然后重复第一点烙铁初次使用时的操作。

3、切勿用锉刀削除烙铁头的氧化物，如果烙铁头变形或衍生锈蚀，必须更换新的烙铁头。

4、焊接时不要给烙铁头太大的按压力，这样不会改变导热性能，反而会使烙铁头受损。

RF4
FOCUS DESIGN AND CONCEPT

智能温控防静电焊台
INTELLIGENT TEMPERATURE CONTROL ANTI-STATIC SOLDERING STATION

RF-ONE 使用说明书
AN INSTRUCTION MANUAL

声明：本公司保留改进升级产品的权利，产品规格及设计如有变更，恕不另行告知。
Statement: The company reserves the right to improve and upgrade products. Product specifications and designs are subject to change without prior notice.

Warning！！！

When using the machine, the following basic measures shall be followed to avoid injury to human body caused by electric shock and the harm of fire.

1. In order to ensure personal safety, please unplug the power cord after the machine is completed!!!

2. Parts approved or recommended by the original manufacturer must be used, otherwise serious consequences will be caused.

3. Machine failure must be repaired by professionals or personnel designated by the company.

4. This product uses a three wire grounding plug, which must be inserted into a three hole grounding socket. Do not change the plug or use an ungrounded three head adapter to cause poor grounding.

5. After the electric welding table is opened, its temperature may reach more than 400 ° C. Do not use near inflammable, explosive gas and other objects. Do not touch the metal part of the soldering iron to avoid scalding.

6. Do not leave the post after the electric welding table is opened.

7. The installation or replacement of soldering iron parts must be carried out after the electric welding table is closed, and the installation or replacement can be carried out only after the soldering iron is cooled.

8. Do not use soldering iron for work other than welding; Do not strike the soldering iron on the worktable

9. There will be smoke during welding. Please make proper ventilation facilities.

I. Packing List

Please check the product packaging, to confirm the list item listed is correct:
1. **RF-ONE** Sodering station   x1Pcs
2. **RF-ONE** Soldering handle   x1Pcs
3. Integeral Type Soldering Tip   x1Pcs
4. Iron holder (with cleaning sponge) x1Pcs
5. Instruction Manual   x1Pcs

II. Product Features

Features:
Fast heating speed, accurate temperature control, fast temperature return, humanized setting, various options setting, environmental temperature compensation, various protection and energy saving technology, and with bee prompt

III. Specifications

Product model	RF-ONE
power	80W
input voltage	AC220V
output voltage	DC24V

IV. Sleep function

When the sleep time set in the menu is not 0, the sleep function is turned on and the sleep setting light in the upper right corner is on.

When the time is counted after the handle stops acting, it will enter the sleep mode and heat with the temperature set in the menu.
At this time, the sleep light will be on, and the set temperature will display the set sleep temperature.

When the handle acts or the key is pressed arbitrarily, exit the sleep mode and reheat at the original temperature.

V. Password function

After double clicking the middle key on the main interface to lock the welding table, the temperature cannot be set and the menu cannot be entered, but the set temperature enhancement and sleep functions can be used normally.

To unlock, double-click the middle key again and enter the password in the left nixie tube to unlock.

VI. Operating instructions and function settings

1. Connect the soldering iron and the console.
2. Connect the power supply.
3. Turn on the switch, the screen displays the setting and actual temperature, and the soldering iron starts to heat.

Usage setting instructions

1、Hardware scheme
The main control chip adopts mm32spin25pf,operational amplifier sgm8551 and power chip 78m05.

2、Main interface operation
Add and subtract temperature with the left and right keys: short press to adjust the temperature step by step according to the temperature in the menu, long press to realize continuous and rapid temperature adjustment, and double click to switch the temperature channel (channel 1 250 ℃, channel 2 350 ℃, channel 3 450 ℃).
Under normal conditions, the temperature setting range is 150-480 ℃ (302-896 °F).
Short press the middle key as the temperature enhancement switch.
Click to open the temperature enhancement function and start timing.
After reaching the temperature enhancement time set in the menu, the original temperature will be restored automatically. You can also short press the middle key in advance to exit the temperature enhancement mode.
Middle double clicking will lock the welding table. Press and hold the middle key to enter the menu.

3、Menu operation
Long press the middle key in the main interface to enter the menu. The left nixie tube displays the current option, the right nixie tube closes, and the plus and minus keys switch options. Short press the middle key to select the option, the right nixie tube displays the option value, and the plus or minus key adjusts the value. After setting, short press the middle key again to deselect. Long press the middle key at any position in the menu to exit the menu. Press the key in the menu without any action for 2 minutes to exit the menu. All setting options will take effect and be saved after exiting the menu.
The menu contains the following ten items, named f01-f10 in turn.

F01	Sleep time: the setting range is 0-60 minutes, and the default is 5 minutes. When set to 0, the sleep function is disabled
F02	Sleep temperature: setting range: 100-300℃ (212-572°F), default: 200℃(392°F).
F03	Enhancement time: the setting range is 1-30 minutes, and the default is 2 minutes.
F04	Strengthening temperature: the setting range is 10-50 ℃ (18-90 ℉), and the default is 50℃(90°F).
F05	Temperature step: setting range 1-50, default 10.
F06	Temperature unit: setting range 0-1, default 0. (0 for °C, 1 for °F)
F07	Buzzer switch: setting range 0-1, default 1. (0 for off, 1 for on)
F08	Password setting: the setting range is 0-999, and the default is 888.
F09	Temperature calibration: after entering the temperature calibration, it will be heated according to three temperatures: low, medium and high, The target temperature is displayed on the left nixie tube and the actual temperature is displayed on the right. After the temperature is stable, enter the actual temperature on the right and click the function key to enter the next temperature point. The calibration will be completed after the three temperature points are completed.
F10	Restore default: set the range 0-1, default 0. (0 means no recovery, 1 means recovery)

VII. Tip Maintenance And Use

Tip temperature	High soldering temperature can degrade the tip. Use the lowest possible soldering temperature. The excellent thermal recovery characteristics ensure efficient and effective soldering even at low temperatures. This also protects the solder de items from thermal damage.
Cleaning	Clean the tip regularly with a cleaning sponge. As oxides and carbides from the solder and flux can form impurities on the tip. These impurities can result in defective joints or reduce the tips heat conductivity. When using the soldering iron continuously, be sure to loosen the tip and remove all oxides at least once a week. This helps prevent seizure and reduction of the tip conductivity.
When not in use	Never leave the soldering iron sitting at high temperature for long periods of time, as the tip's solder plating will become covered with oxide, which can greatly reduce the tip's heat conductivity.
After use	Wipe the tip clean and coat the tip with fresh solder.

1. When soldering iron is used for the first time, you should pay attention to monitor iron tip warming situation, wait until the temperature just melted in wire, a layer of tin on the part of the gold-plated iron tip, and then the temperature was raised to the required temperature. Keep in mind when working iron tip should be long-term with a layer of tin to protection iron tip,in order to achieve optimal soldering function.

2. As an oxide layer on the surface of iron tip, resulting in false low temperature soldering iron tip, unable to melt tin and the tin, in fact, at this time the heating elements with the soldering iron is high temperature state, This happens situation not to blind the temperature rises again, the application of clean sponge clear oxides, such as not clear, please turn off the power, soldering iron be dropped to room temperature, with No.0 sandpaper accidentally cleared the oxide, then repeat the operation of the first point iron initial use.

3. If the tip deformation or the occurrence of heavy erosion, to replace the new one. (Note: Do not use knife file remove oxides of soldering iron tip.)

4. Soldering, do not give iron tips too much pressure, this will not change the thermal conductivity, otherwise will lead to iron tip damage.