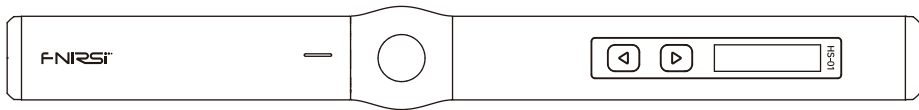


FNIRSI 菲尼瑞斯

HS-01

# 智能电烙铁使用说明书

INTELLIGENT ELECTRIC SOLDERING IRON USER MANUAL





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## 用户须知

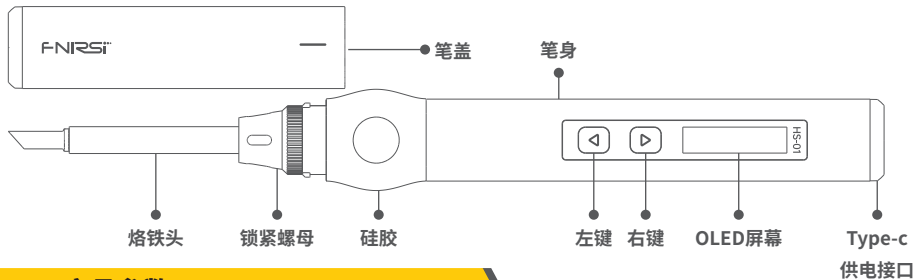
- 请详细读完本使用说明书以及操作指示,并且要确实遵守文中的规定。
- 请妥善保存本使用手册。
- 报废的仪器不可与生活垃圾一同处理,请按国家或者当地的相关法律规定处理。
- 当仪器出现任何质量问题或者对使用仪器有疑问时,可联系“菲尼瑞斯-FNIRSI”在线客服或厂家,我们将在第一时间为您解决。
- 感谢您购买此产品,为了您能更加方便的使用本产品在使用时请按说明书操作。

## 一、产品简介

HS-01是本公司推出的一款便携式屏显智能电烙铁。该电烙铁具有以下特点:

- 小巧便捷,携带方便
- 回温快,升温迅速
- 自带OLED屏显
- 人体工学设计,握感舒适
- 控温精准
- 9-20V工作电压
- Type-c接口供电

## 二、仪器说明



## 三、产品参数

功率	65W	屏幕	0.87寸OLED屏	工作电压	DC9-20V
供电	USB Type-c接口	温度范围	80-420°C (180-780°F)	快充协议	PD触发

## 四、电源选择

使用PD快充协议的电源适配器，烙铁可以设置向适配器获取9V\12V\15\20V中任意一档的工作电压(默认设置20V)。不同的工作电压下，工作电流、功率及化锡时间参考如下：

工作电压	20V	15V	12V	9V
工作电流	$\geq 3.25\text{A}$	$\geq 2.5\text{A}$	$\geq 2\text{A}$	1.5A
功 率	65W	37.5w	24w	13.5w
化锡时间	8秒	12秒	17秒	30秒

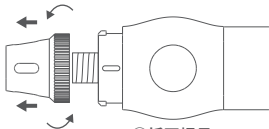
### 注意：

※低于9V会屏幕会显示电压低。

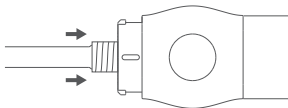
- 智能烙铁默认获取工作电压为20V，如果您的适配器输出最高电压小于20V，则获取输出的最高电压。如您的适配器最高输出12V，则获取12V。
- 当使用不带PD快充协议的电源适配器时，智能烙铁工作电压则为输入的电压。注意：接入适配器，进入主界面后加热就重启，说明适配器输出功率不足以正常工作，请更换其他适配器！
- 如果您的适配器输出20V，但输出电流小于3.25A时（即输出功率小于烙铁所需功率），进入主界面后加热，适配器可能会断电重启，导致屏幕重启！（其他工作电压也是一样）。
- 出现加热就重启的情况，说明您的适配器当前电压的输出功率不足以正常工作，请根据适配器输出功率选择设置更低的工作电压。如您的适配器输出：12V/2.5A，15V/2A，20/1.5A，输出总功率30W。则选择设置工作电压为12V。

## 五、产品使用状态

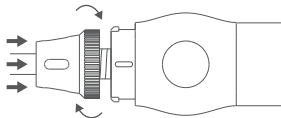
### 1. 安装说明



① 拆开螺母



② 插入烙铁头



③ 锁紧螺母

※插入烙铁头时发现卡顿可以尝试旋转一下再插入。

### 2. 工作流程说明



HS-01智能烙铁工作流程如上图所示,上电后显示logo,短按一次对应闪烁的实体按键进行加热,当童锁模式开启时短按三下对应的实体按键进行加热。进入主界面,烙铁处于正常工作状态,分为以下三种:

●**工作状态:**烙铁处于加热或已加热完成可以使用状态,切勿触碰高温部位。

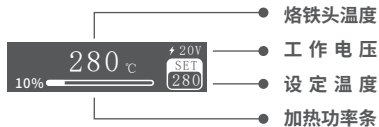


●**休眠状态:**烙铁已处于加热使用状态下,静止未使用超过设定休眠时间进入休眠,使用即解除。

●**关机状态:**断电即关机。



### 3.主界面说明



主页面如右图所示,右下角显示的是用户设定的目标温度,中间显示烙铁实时温度。底下显示的是加热功率,右上角显示的是工作电压。



## 六、操作说明



●**开机:**上电即开机,屏幕显示开机图标  随后显示提示插入烙铁头  ,烙铁头插好后显示界面  。

●**加热:**  中的图标按键会闪,这时短按对应的实体按键进入加热页面  ,烙铁加热。

●**温度设置:**  在加热的页面状态下按左右键可进入温度设置页面  ,进行温度设置,短按右键加一个步进数值,短按左键减一个步进数值。长按快加或快减,步进为10°C或20°F。


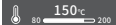
●**设置模式**:在非设置温度的页面下,同时长按左右键进入设置模式 。









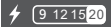
●**屏幕亮度**:进入到设置模式下短按左右键切换到屏幕亮度 ,长按右键进入 ,左右键调节,调节完成长按任意键退出。

●**温度校准**:进入到设置模式下短按左右键切换到温度校准 ,长按右键进入 ,左右键调节,调节完成长按任意键退出。在主页面下,设定目标温度为350°C,温度稳定后使用烙铁测温仪测量实际温度,记录目标温度减去实际温度的差值(值可正可负),在进入菜单将差值填入此项。

●**温度单位**:进入到设置模式下短按左右键切换到温度单位 ,长按右键进入 ,左右键切换,切换完成长按任意键退出。

●**休眠时间**:进入到设置模式下短按左右键切换到休眠时间 ,长按右键进入 ,左右键调节,调节完成长按任意键退出。休眠时间默认20分钟,设置范围为1-20分钟,设置到最大时再短按一下可以关闭休眠。

●**休眠温度**:进入到设置模式下短按左右键切换到休眠温度,  长按右键进入,  左右键调节,调节完成长按任意键退出。当工作温度低于休眠温度时,休眠状态下保持工作温度,当工作温度高于休眠温度时,休眠状态时温度会降到休眠温度。

- 童锁模式:**进入到设置模式下短按左右键切换到童锁模式 , 长按右键进入 , 左右切换, 切换完成长按任意键退出。开启童锁模式后再次上电使用时会显示  图标按键有个锁的图标, 这时要连续短按3下左键才能加热。
- 语言选择:**进入到设置模式下短按左右键切换到语言选择 , 长按右键进入 , 左右切换, 切换完成长按任意键退出。
- 手持模式:**进入到设置模式下短按左右键切换到手持模式 , 长按右键进入 , 左右切换, 切换完成长按任意键退出。产品默认右手, 客户可凭自己的使用习惯和喜好设置。切换到左手后按键的操作逻辑相反。
- 电压档位:**进入到设置模式下短按左右按键切换到电压档位 , 长按右键进入 , 进入后左右切换9V/12V/15V/20V四个电压档位, 切换完成后长按任意按键退出, 默认20V, 客户可根据自己的充电器功率参数进行设置, 以避免出现功率不足导致充电器启动过流保护, 设备强制关机黑屏现象。当出现此现象的时候, 只需待充电器恢复后, 在不加热或者无烙铁头的时候进入设置页面重新选择合适的档位。
- 产品在休眠的状态下无操作30分钟后会自动关机**

## 七、固件升级

- 设备断电, 按住左键, 再使用USB Type-c数据线连接电脑给设备上电, 进入Bootloader界面进行固件升级。
- 选择相应的串口号, 左边显示就绪时打开选择文件, 点击烧录即可。

## 八、维护保养

- 新的烙铁头第一次使用时需要先加热至250°C上锡,防止干烧氧化。
- 新的烙铁第一次使用会存在温度乱跳的问题,反复使用几次后会稳定。
- 烙铁使用完后请在烙铁头上涂上适量的焊锡,防止氧化。
- 烙铁头的正常工作温度约为300-380°C,不宜长时间温度过高使用影响烙铁头寿命。
- 焊接工作时避免暴力敲击烙铁头。
- 使用湿海绵切勿有明水,半干状态最佳。
- 不要使用含氯或酸过高的助焊剂,避免腐蚀表面。
- 如果烙铁头表面氧化不沾锡,可用纱布或其他工具小心擦除表面层,然后上电加热至250°C,立即上锡黏住表面,以防再次氧化。

## 九、安全须知

- 烙铁头工作时温度可达80-420°C,切勿触碰烙铁头。
- 请放置于儿童接触不到的地方。
- 切勿弄湿本产品,或在潮湿环境中使用。
- 长时间不使用时,请断开电源。
- 正常工作时,手柄处会有一定的温度,属于正常现象,请放心使用!

## 十、保修条款

### ●服务期限

深圳市菲尼瑞斯科技有限公司承诺产品的良好品质,产品自售出之日起 7 天内正常使用 情况下机器出现故障,客户可以选择退货或者保修(不影响二次销售才可以退货),正常使用一年内出现故障可以免费保修。

●购买日期以销售商开出的购机发票或收据日期为准,网购可以以交易截图为准。

●对于以下的情况,不提供免费保修服务

(1) 一切人为损坏、私自改装、维修造成机器损坏的。

(2) 烙铁头属于易耗品,不支持保修。

## 十一、生产信息

产品名称:HS-01智能电烙铁

品牌/型号:FNIRSI/HS-01

服务电话:0755-83242477

生产商:深圳市菲尼瑞斯科技有限公司

网址:[www.fnirsi.cn](http://www.fnirsi.cn)

地址:广东省深圳市龙华区大浪街道伟达工业园C栋西边8楼

执行标准:GB/T 7157-2019

## USER NOTICE

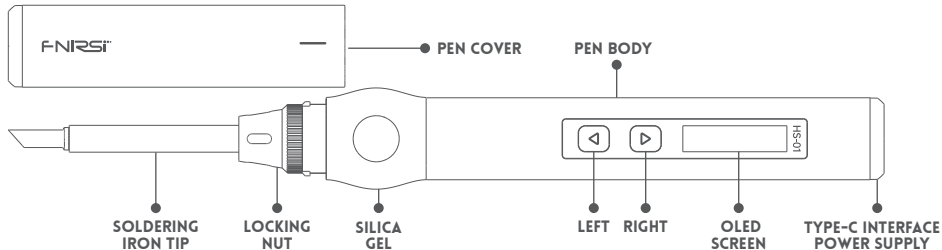
- Please read this user manual and operating instructions carefully, and be sure to abide by the stipulations in the text.
- Please keep this manual properly.
- Discarded instruments cannot be disposed of together with household waste, please dispose according to relevant national or local laws and regulations.
- When there are any quality problems or questions about the use of the instrument, you can contact the online customer service of "Fnirsi-FNIRSI" or the manufacturer, and we will solve them as soon as possible.
- Thank you for purchasing this product. In order to make it more convenient for you to use this product, please operate follow this instructions.

## 1.PRODUCTS OVERVIEW

HS-01 is a portable screen display intelligent electric soldering iron launched by our company. The electric soldering iron has the following characteristics:

- Small and convenient, easy to carry.
- Fast temperature recovery and rapid temperature rise
- Built-in OLED screen display
- Ergonomic design, comfortable grip.
- Precise temperature control
- 9-20V operating voltage
- Type-c interface power supply

## 2. INSTRUMENT DESCRIPTION



## 3. PARAMETER

<b>Power</b>	65W	<b>Screen</b>	0.87 inch OLED screen	<b>operating voltage</b>	DC9-20V
<b>Power supply</b>	USB Typr-c port	<b>Temperature range</b>	80-420°C (180-780°F)	<b>Fast charging protocol</b>	PD trigger

## 4.POWER SELECTION

Using the power adapter of the PD fast charging protocol, the intelligent electric soldering iron can be set to obtain any operating voltage of 9V\12V\15\20V from the adapter.(The default setting is 20V).Under different operating voltages, the working current, power and tinning time are as follows:

Operating voltage	20V	15V	12V	9V
Operating current	$\geq 3.25A$	$\geq 2.5A$	$\geq 2A$	1.5A
Power	65W	37.5w	24w	13.5w
Tin melting time	8s	12s	17s	30s

### NOTICE:

※If the voltage is lower than 9V, the screen will display low voltage.

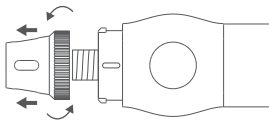
- The default operating voltage of the Intelligent soldering iron is 20V. If the maximum output voltage of your adapter is less than 20V, the maximum output voltage will be obtained. If your adapter outputs up to 12v, get 12V.
- When the power adapter without PD fast charging protocol is used, the operating voltage of the intelligent soldering iron is the input voltage.It is noted that when the adapter is connected and the heating will restart after entering the home page.This indicates that the output power of the adapter is not sufficient for adapter, please replace another adapter.



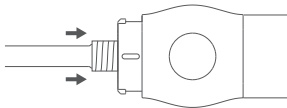
- If output voltage of your adapter is 20V, but the output current is less than 3.25A (That is to say, the output power is less than the power required by the soldering iron), after entering the main interface and heating, the adapter may be powered off and restarted, which will cause the screen to restart! (Other operating voltages are the same)
- If it restarts after heating, it means that the output power of the current voltage of your adapter is not enough to work normally. Please select a lower working voltage according to the output power of the adapter. If your adapter output is 12V/2.5A, 15V/2A or 20V/1.5A, the total output power is 30W, set the operating voltage to 12V.

## 5. PRODUCT USAGE

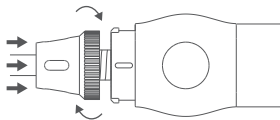
### INSTALLATION INSTRUCTIONS



① Remove the nut



② Insert the soldering iron tip



③ Lock nut

※ If it is found that the soldering iron is stuck when inserting, you can try to rotate it and insert it again.

## WORKFLOW DESCRIPTION

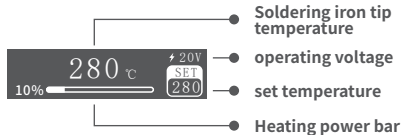


The working process of HS-01 intelligent soldering iron is shown in the figure above. After power-on, the logo is displayed. Short press the corresponding flashing physical button once to heat up. When the child lock mode is turned on, short press the corresponding physical button three times to heat. Enter the main interface, the soldering iron is in normal working state, divided into the following three types:

- **WORKING STATE**: The soldering iron is in a heated or ready-to-use state, please do not touch the high temperature parts.
- **SLEEP STATE**: The soldering iron is already in the state of heating and use, and it will enter into sleep state if it is not used for more than the sleep time, and it will be released after use.
- **SHUTDOWN STATE**: It will shut down when the power is disconnected.



## HOME PAGE DESCRIPTION



The home page is shown on the right, the lower right corner shows the target temperature set by the user, and the middle is the real-time temperature of the soldering iron. The bottom shows the heating power, and the upper right shows the operating voltage.






## 6. OPERATING INSTRUCTIONS



● **Power on:** Power on when connected to the power supply, the screen displays the boot icon,  and then displays a prompt to insert the soldering iron tip  , The interface will be displayed after the soldering iron tip is inserted  .



● **Heating:**  The icon button will flash, then short press the corresponding physical button to enter the heating page  , and the soldering iron will heat up.



● **Temperature setting:**  In the heating page state, press the left and right keys to enter the temperature setting page to set the temperature,  short press the right button to add a step value, short press the left button to decrease a step value. Long press to increase or decrease quickly, the step is 10°C or 20°F.



● **Setting mode:** In the non-temperature setting page, press and hold the left and right keys at the same time to enter the setting mode  .




● **Screen brightness:** In the setting mode, short press the left and right keys to switch to brightness  , long press the right key to enter  , and the left and right keys adjust, and long press any key to exit.



● **Temperature calibration:** When entering the setting mode, short press the left and right keys to switch to the temperature calibration  , long press the right keys to enter  , the left and right keys to adjust, long press any key to exit. Under the home page, set the target temperature as 350 °C. After the temperature is stable, use the soldering iron thermometer to measure the actual temperature, record the difference between the target temperature and the actual temperature (positive or negative), and fill the difference into this item in the menu.



● **Temperature unit:** In the setting mode, short press the left and right keys to switch to the temperature unit , long press the right key to enter,  and the left and right keys switch, and long press any key to exit.

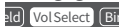
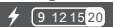
● **Sleep time:** In the setting mode, short press the left and right keys to switch to the sleep time , and long press the right key to enter , Left and right keys to adjust, after the adjustment is completed, long press any key to exit. The default sleep time is 20 minutes, and the setting range is 1-20 minutes. When it is set to the maximum, short press to turn off the sleep.

● **Sleep temperature:** In the setting mode, short press the left and right keys to switch to the sleep temperature , long press the right key to enter,  and adjust the left and right keys. After the adjustment is completed, long press any key to exit. When the working temperature is lower than the sleep temperature, the working temperature is maintained in the sleep state, and when the working temperature is higher than the sleep temperature, the temperature will drop to the sleep temperature in the sleep state.

● **Child lock mode:** In the setting mode, short press the left and right keys to switch to the child lock mode , long press the right key to enter , switch left and right, and long press any key to exit after the switch is completed. After the child lock mode is turned on, when the power is turned on again, the button with a lock icon will be displayed . At this time, it is necessary to press the left button 3 times continuously to heat up.

● **Language selection:** In the setting mode, short press the left and right keys to switch to language selection , long press the right key to enter,  switch left and right, and long press any key to exit when the switch is complete.

●**Handheld mode:**In the setting mode, short press the left and right buttons to switch to the handheld mode , long press the right button to enter , switch left and right, long press any key to exit after switching is complete. The product is right-handed by default and can be set according to your own usage habits. The logic of switching to the left hand is reversed.

●**Voltage gear:** In the setting mode, short press the left and right buttons to switch to the voltage gear type voltage gear , long press the right button to enter , after entering, switch left and right to the four voltage gears of 9V/12V/15V/20V, after the switch is completed, the long press any button to exit, the default is 20V, and the customer can set it according to the power parameters of the charger to avoid the phenomenon that the charger starts over-current protection due to insufficient power, and the device is forced to shut down with a black screen. When this phenomenon occurs, just wait for the charger to recover, and enter the setting page to re-select the appropriate gear when there is no heating or no soldering iron tip.

●**The product will automatically shut down after 30 minutes of inactivity in the dormant state**

## 7.FIRMWARE UPGRADE

- The device is powered off, press the left button, use the USB Type-c data cable to connect the computer to power on the device, and enter the Bootloader interface to upgrade the firmware.
- Choose the corresponding serial port number, open the selected file when ready is displayed on the left, and click to burn.

## 8.MAINTENANCE

- When a new soldering iron tip is used for the first time, it needs to be heated to 250°C and tinned to prevent dry burning oxidation.
- The new soldering iron has the problem of the temperature jumping for the first time, and it will be stable after several times of use.
- After using the soldering iron, please apply an appropriate amount of solder to the tip of the soldering iron to prevent oxidation.
- The normal working temperature of the soldering iron tip is about 300-380°C, please don't use it for a long time if the temperature is too high to affect its life.
- Avoid hitting the soldering iron head violently during welding.
- Do not use wet sponge with clear water, semi-dry state is best.
- Do not use scaling powder with high chlorine or acid to avoid corroding the surface.
- If the surface of the soldering iron tip is oxidized and does not stick to tin, use gauze or other tools to carefully wipe the surface layer, then heat it up to 250 °C, immediately apply tin to stick the surface to prevent re-oxidation.

## 9.SAFETY INSTRUCTIONS

- The temperature of the soldering iron tip can reach 80-420°C, please do not touch the soldering iron tip.
- Please keep out of reach of children.
- Please do not get this product wet, or use it in a humid environment.
- When not in use for a long time, please disconnect the power.
- When working normally, there will be a certain temperature at the handle, which is a normal phenomenon, please use it with confidence!

## 10.WARRANTY TERMS

### ●Service period

Shenzhen Finiris Technology Co., Ltd. promises the good quality of the product. If the product fails under normal use within 7 days from the date of sale,the customer can choose to return or warranty (it can only be returned without affecting the second sale).There is a free warranty for failures within the year.

●The date of purchase is subject to the date of purchase invoice or receipt issued by the seller. For online purchases, the screenshot of the transaction shall prevail.

●For the following cases, no free warranty service is provided

- (1) All damage to the machine caused by man-made damage, unauthorized modification or maintenance.
- (2) Soldering iron tips are consumables and do not support warranty.

## 11.PRODUCTION INFORMATION

Product Name: HS-01 Intelligent Electric Soldering Iron

Brand/Model: FNIRSI/HS-01

Service Tel: 0755-83242477

Manufacturer: Shenzhen Fnirsi Technology Co., Ltd.

Website: [www.fnirsi.cn](http://www.fnirsi.cn)

Address: 8th Floor, West of Building C, Weida Industrial Park, Dalang Street, Longhua District, Shenzhen City, Guangdong Province

Executive standard: GB/T 7157-2019



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