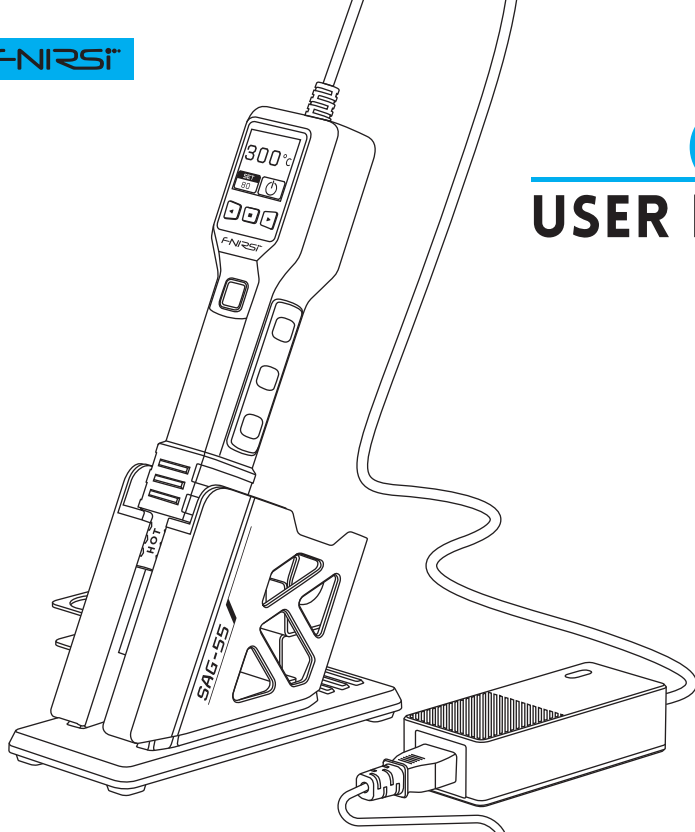


FNIRSI™



USER MANUAL

SAG55PRO

CATALOG



User Notice	>>>	12
1.Product Introduction	>>>	12
2.Structural Overview	>>>	13
3.Parameter Introduction	>>>	17
4.Operation Instructions	>>>	18
5.Precautions	>>>	23
6.Production Information	>>>	24

User Notice

- This manual provides detailed instructions on product usage, precautions, and related information. Please read the manual carefully before using the product to ensure optimal performance.
- Do not use the instrument in flammable or explosive environments.
- Used batteries and discarded instruments must not be disposed of with household waste. Please follow national or local regulations for proper disposal.
- If the instrument encounters any quality issues or if you have any questions regarding its use, please contact FNIRSI's online customer service or the manufacturer. We will assist you promptly.

1.Product Introduction

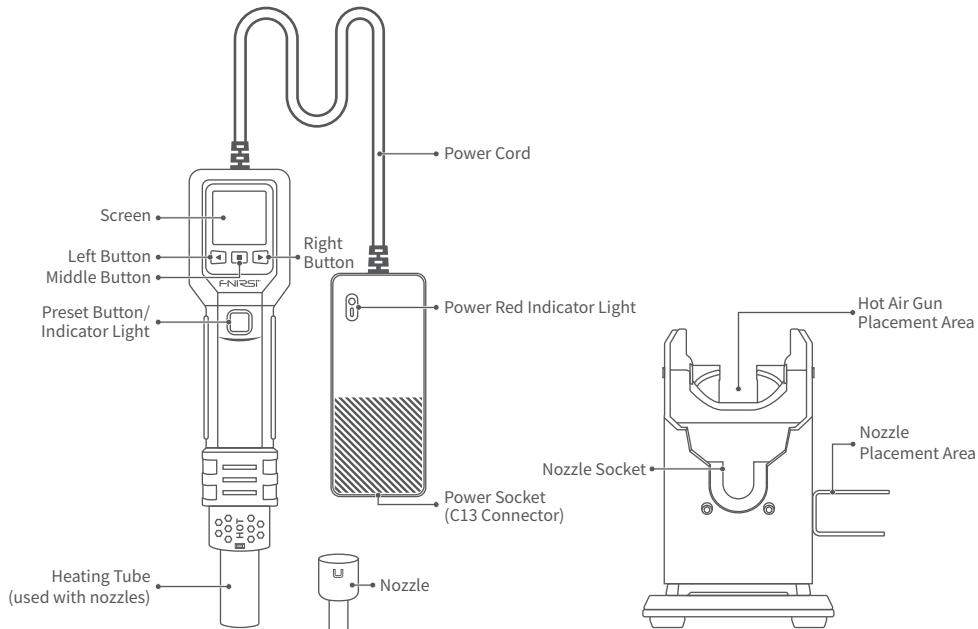
The SAG-55 Intelligent Hot Air Gun is a newly launched portable smart hot air gun by Shenzhen FNIRSI Technology Co., Ltd., designed to meet various application needs. It uses a microcontroller with PID precise temperature control technology, ensuring rapid heating with minimal thermal shock, which extends the lifespan of the heating element. The brushless fan supports adjustable wind speeds from levels 1 to 20, providing low noise, long life, and adaptability to different work environments.

The handle integrates a magnetic sensor that automatically heats up when picked up and cools down into standby mode when returned, making operation simple. The controller and display screen on the handle allow for effortless one-handed adjustment of temperature and wind speed. It also supports three sets of quick temperature/wind speed presets for fast switching. The fast cooling function accelerates cooling, further extending the heating element's lifespan. Real-time monitoring by various sensors ensures the device shuts off heating in case of any abnormalities, ensuring safety. The LCD display and LED indicator clearly show working status and temperature changes.

With its ergonomic handle design for a comfortable grip and compact, portable build, the SAG-55 is the ideal choice for professionals and DIY enthusiasts alike.

2. Structural Overview

[2.1] Appearance Description

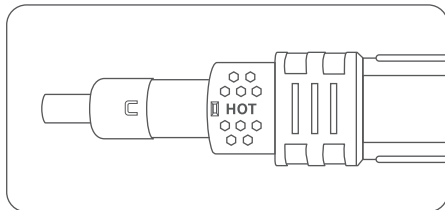
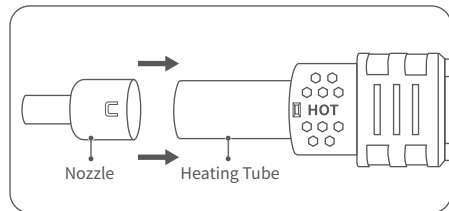


【 2.2 】 Indicator Light Description

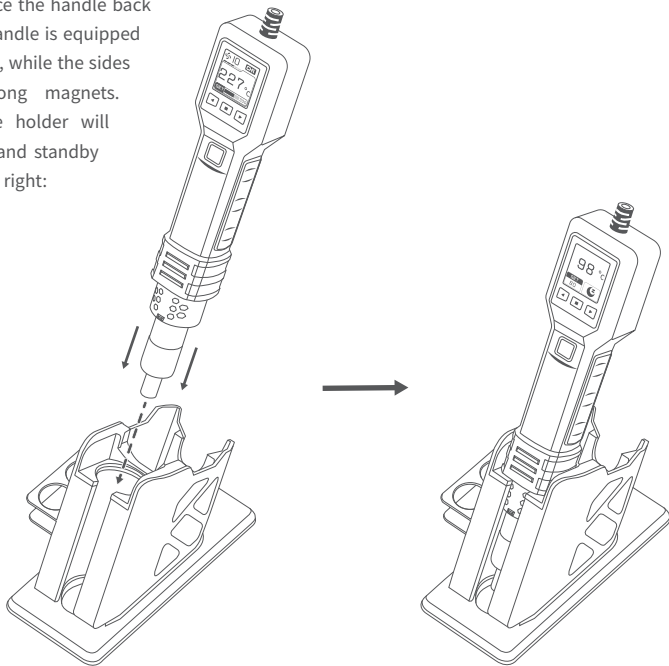
Indicator Light	
	Power-Off State
	Temperature < 100°C
	100°C ≤ Temperature < 300°C
	Temperature ≥ 300°C

【 2.3 】 Installation Instructions

- The diameter of the steel pipe at the air outlet is approximately 21.7mm, suitable for 850 series nozzles. You can select different nozzles with varying outlet diameters based on different application scenarios. When installing, make sure to place the nozzle in the correct position as shown in the diagram below:

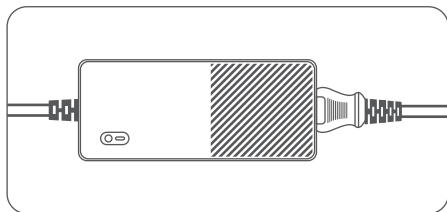
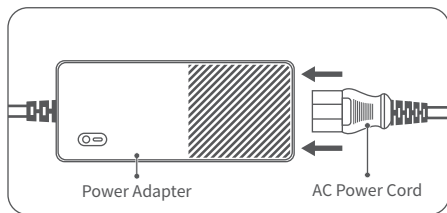


- After attaching the nozzle, place the handle back onto the handle holder. The handle is equipped with a magnetic control switch, while the sides of the holder contain strong magnets. Returning the handle to the holder will automatically initiate cooling and standby mode, as shown in the diagram right:



【 2.4 】 Power Supply Instructions

- First, connect the AC power cord to the SAG-55 power adapter, then plug the power cord into a 220V AC outlet. The power setup is shown in the diagram below:



! NOTE

The SAG-55 hot air gun must be powered by an AC220V (200V~240V), 50Hz/60Hz power supply.
For electrical safety, always use a socket with a ground wire!

3.Parameter Introduction

Product Model	SAG-55
Power Supply and Power Parameters	AC 220V/50Hz, Heating Power 550W (MAX), Standby Power <0.7W
Temperature Control Range	100°C-450°C (212°F-842°F)
Display Screen Size	1.54-inch LCD (240*240)
Airflow Rate	80L/min, Adjustable from 1-20 levels
Heating Tube Size	Length 80mm, Diameter 21.6mm (compatible with 850 series nozzles)
Body Dimensions	Handle (excluding nozzle): 260*60*40 mm;Power Adapter: 118*50*30.6 mm
Cable Length	Handle Silicone Cable: 1.2m;AC Power Cord: 1.2m
Operating Noise	<65dB
Overall Weight (including accessories)	≈1391g

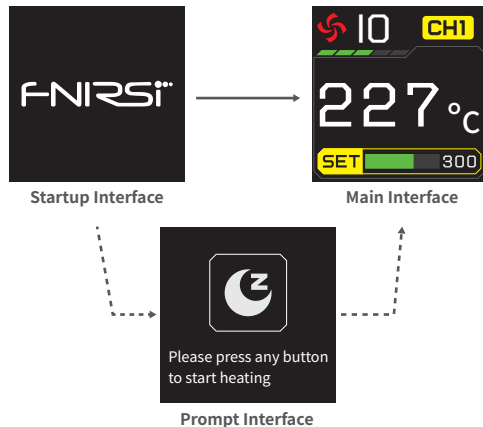
4. Operation Instructions

【 4.1 】 Power-Off State

Press and hold the middle button  for approximately 3 seconds to power on. The power on/off state has a memory function. After powering on, the startup logo will be displayed (as shown in Figure 5.1). Depending on whether the startup heating option is enabled or disabled (configurable), the device will enter different interfaces: If startup heating is disabled, you will be taken to a prompt screen (as shown in Figure 5.2) — press any button to start heating and enter the main interface. If startup heating is enabled, there will be no prompt; the device will directly enter the main interface and begin heating.

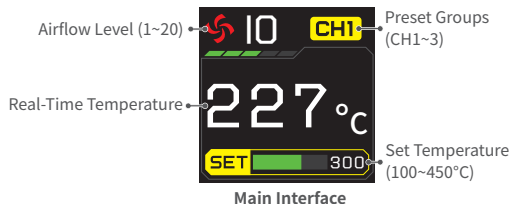
【 4.2 】 Prompt Interface

Press any button to enter the main interface and start heating. Double-click the middle button  to enter the menu interface. If automatic shutdown is enabled, the device will automatically shut down after reaching the set time (configurable from 5 minutes to 15 minutes). The interface is shown in Figure 5.2:



【 4.3 】 Main Interface

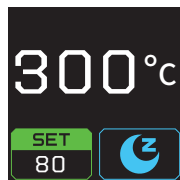
In the main interface, the functions of each button are as follows:



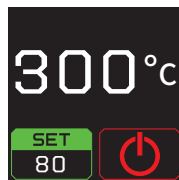
Button	Single Click	Double Click	Long Press
	Switch temperature/airflow speed settings	Enter menu settings interface	Cool down and shut down
	Step to decrease set temperature/airflow speed	\	Quickly decrease set temperature/airflow speed
	Step to increase set temperature/airflow speed	\	Quickly increase set temperature/airflow speed
	Switch three preset levels	\	Switch airflow to cold air

【 4.4 】 Cooling Interface

When the temperature decreases to the standby temperature value (configurable from 70°C to 100°C), the device enters standby mode. Cooling speed has two options: normal cooling with the current airflow (quick cooling off) and rapid cooling with airflow at level 15 (quick cooling on). During the cooling process, if you long press the middle button (if in the standby cooling interface, it will switch to the shutdown cooling interface and wait for shutdown; if in the shutdown cooling interface, you can return to the main interface to continue heating). If the handle is placed back in the holder during cooling, it will prompt standby mode. Picking up the handle will return to the main interface to continue heating. The interface is shown in the right image:



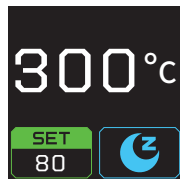
Standby
Cooling Interface



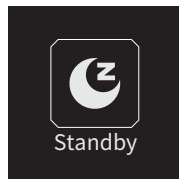
Shutdown
Cooling Interface

【 4.5 】 Standby Interface

The standby interface is as shown in the right figure. When the handle is placed back into its holder, the system begins cooling. Once the temperature decreases to the standby temperature value (which can be set between 70°C and 100°C), it enters the standby interface. If the handle is picked up, the system will return to the main interface to continue heating operations. If automatic shutdown is set, the system will enter the shutdown interface after reaching the set time. Additionally, pressing and holding the middle button  will also bring up the shutdown interface. This interface also allows access to the menu interface by double-clicking the middle button .



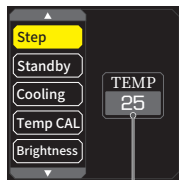
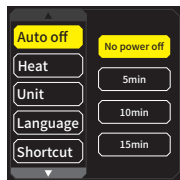
Standby
Cooling Interface



Standby Interface

【 4.6 】 Menu Interface

Double-click to enter the menu interface, where you can set various parameters. The main menu consists of 12 items, as shown in the right figure. The menu is divided into 2 levels (main menu and sub-menu). In the main menu interface, the functions of each button are as outlined in the table below:



Sub-menu

Button	Single Click	Long Press
	Select the previous menu item	\
	Enter sub-menu (parameter settings)	Exit the main menu interface
	Select the next menu item	\

Main Menu



In the sub-menu (parameter settings) interface, the functions of each button are as outlined in the table below:

Button	Single Click	Long Press
	Switch between different options / Adjust parameter values	\
	Save parameters and return to the main menu	Do not save parameters and return to the main menu
	Switch between different options / Adjust parameter values	\

The parameters and descriptions for each sub-menu are as outlined in the table below:

Menu Items	Definitions	Factory Settings	Adjustable Range
Auto off	Time to wait in standby mode before automatic shutdown. Setting it to OFF disables automatic shutdown.	5 minutes	Never Shutdown, 5 minutes, 10 minutes, 15 minutes
Heat	Whether to skip the prompt screen "Press any key to start heating" and proceed directly to heating.	Off	Off / On
Unit	The unit of temperature displayed on the interface.	Celsius (°C)	Celsius (°C) / Fahrenheit (°F)
Language	The language displayed on the interface.	Simplified Chinese	Simplified Chinese / English
Shortcut	Set the fan speed and temperature for preset levels.	Fan speed 10, Temperature 300°C	Fan speed 1-20, Temperature 100-450°C
Step	The temperature adjustment step value.	25°C	5°C ~ 25°C
Standby	Set the standby temperature/shutdown temperature	80°C	70°C ~ 100°C
Cooling	Whether to enable rapid cooling mode. When enabled, the system will blow a higher volume of air during standby to cool down faster.	Open	Close / Open
Temp CAL	Calibrate the temperature. After selection, the hot air gun will blow air at the corresponding temperature level.	120°C, 220°C, 320°C, 420°C	/
Brightness	Set the screen brightness.	10	1 ~ 10
Reset	Restore the settings to factory default.	Cancel	Cancel / Confirm
About	Brand information, version number.	V1.0	/

5. Precautions

- The air outlet of the hot air gun and its surroundings may reach extremely high temperatures. Even if the system is in cooling standby or turned off, exercise caution to avoid burns!
- After using the machine, always place the handle correctly back on the handle holder. Wait until the machine has automatically cooled down to the set standby temperature (70–100°C) before turning it off or unplugging it.
- Ensure that the steel pipe air outlet and the fan intake are unobstructed and free from blockages! Maintain proper air circulation.
- During use, maintain at least a 2mm distance between the air outlet and the object to be desoldered to ensure proper desoldering.
- For different desoldering scenarios, select the appropriate nozzle. Note that different nozzles may result in variations in the air outlet temperature.
- The brushless fan integrated into the handle may vibrate during operation; this is normal. You can reduce the fan speed to minimize vibration.
- Do not use the machine in environments with flammable or explosive gases or substances! Avoid using it in excessively humid environments as well.
- Use a 220VAC power supply with a grounding wire for the machine. If the machine is not used for an extended period, please unplug the power cord!
- Keep the machine out of reach of children!

6. Production Information

Any FNIRSI's users with any questions who comes to contact us will have our promise to get a satisfactory solution +an extra 6 months warranty to thanks for your support!

By the way, we have created an interesting community, welcome to contact FNIRSI staff to join our community.

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