

## YIHUA853D 5A(II) 3in1 multi-function rework station



### I. Product Features

1. This product is designed based on the market needs of a three in one tool; it combines together in one common unit: soldering station, rework station and DC stabilized switching power supply(minimum current display unit is 0.1mA), these three functions can be used independently or simultaneously. Small in size, lightweight, easy to transport and carry, it occupies less area, practical and saves energy. It also comes with a 5V 2A USB Output Current, which can charge smartphones.
2. The hot air gun and soldering iron adopt the PID program-controlled temperature control technology, and the highest-end precision PID program is implanted. The machine detects the actual temperature at high speed and corrects it. The temperature compensation speed is fast and the error is small.
3. Anti-static design, to prevent static or leakage damage to components.
4. The internal use of SMT double-sided manufacturing process, the components installation processes are performed orderly to ensure clarity of electric signal flow. Machine stability and safety performance are further improved, can adapt to a variety of harsh environment. The machine has self-detection functions, failure display of over-temperature, short circuit, overload etc. and protection function
5. The machine design has the following user-friendly functions:

#### A. Digital temperature correction function of the hot air gun and soldering iron:

It can be adjusted by this function when the temperature deviation caused by environmental influences or replacement of parts such as heater cores and soldering iron tips.

**B. Celsius/Fahrenheit display temperature conversion function of the hot air gun and soldering iron:**

This temperature display mode designed to meet the needs of different markets, you can choose according to your customary or interest.

**C. Sleep function of Soldering iron:**

The machine automatically detects its working state. When it is not used, it is in the static state, when it reaches the set standby time, the temperature of the soldering iron will automatically lower to 200 °C to enter the standby state, which can effectively prevent the soldering iron from oxidizing and prolong the service life of the soldering tips, energy saving and environmental protection.

Standby time can be set to: 0-99 minutes, set 0 to no standby.

**Wake up standby method:** a, shake the soldering iron handle several times. b. Press any key once. c. Turn off the power switch and turn it on again.

**B. One Press Cold/Hot Air Switch:**

Pressing the regulator enables switching between cold and hot air. At this point, the air gun heating wire stops heating, and the air pump is used for air supply, enabling the user to cool down the heating elements.

**E. No air Protection of Hot air gun**

In the process of using hot air gun, if the air is stopped abnormally, the heating wire will stop heating in order to prevent windless burning handle. This greatly improves the safety performance of the product

**F. Air gun Automatic / Manual function:**

a. When you select the automatic function, and the air gun handle is placed back to the handle holder, the machine is automatically cut off and the heating body cools down, effectively prolonging the useful life of the heating body and saving energy. The safety factor of rebooting the machine is extremely high, it can effectively prevent fire or other safety incidents caused by the machine turning on for unknown reasons and the hot air gun being stored in some other place.

b. When the manual function is selected, the air gun will not cool down when the air gun handle is put back into the handle holder, it is very suitable for frequent operation of the air gun, and the time for cooling and heating can be saved, and the work efficiency is improved. It is recommended that you switch back to the automatic function state after using the manual function status to complete the work and improve the safety!

**G. Three-section storage function:**

The hot air gun and soldering iron can be stored with three frequently-used temperatures. The power supply can store three frequently-used voltage and current parameters; you can directly press the preset button to switch freely which saves the setting time and improves the working

efficiency.

**H. The power supply part has an output status retention function:**

Set the function status to "On", then shut the power off. Turn the power back on, and the power output retains the same state as prior to being turned off.

**I. The power supply part has an over temperature protection function:**

When the device's internal temperature reaches approximately 92 °C, the power supply stops outputting; Once the temperature drops down to approximately 82 °C, the output of power resumes.

**J. The power supply part has a smart fan cooling function:**

The fan will automatically turn on when the device's internal temperature reaches approximately 80 °C; The fan will stop working when the temperature drops down to approximately 75 °C.

**Technical data:**

Model	853D5A II
Total power	920W
Power of air gun	650W
Power of soldering iron	60W
Power consumption of power supply	200W
Power supply output power	150W
USB output power	10W
size	L250xW190xH137MM±5MM
weight	4.5kg
working environment	0~40°C/32~104°F
Storage environment	-20~80°C/-4~176°F
Storage humidity	35%~45%
<b>Air gun part:</b>	
Airflow type	Brushless fan (soft air outlet)
Air volume	≤120L/min
temperature range	100°C~480°C/212°F~896°F
Temperature stability	±1°C (Static)
Display form	LED digital display
<b>Soldering iron part:</b>	
temperature range	200°C~480°C/392°F~896°F
Current display accuracy	±1°C (Static)
Temperature stability	<2mV
Tip to ground voltage	<2ohm
Tip to ground impedance	DC0~30V

<b>Power supply part:</b>	
The output voltage	0~5A adjustable
Output current	<0.067%±2mV
Load stability	<300ppm/°C
Temperature Coefficient	Vrms<0.1%
Ripple noise	0.1V
Voltage setting accuracy	0.01A
Voltage display accuracy	<0.6%±20mV
Current setting accuracy	<0.6%±0.2mA

### **III. General Uses**

1. Suitable for a various kind of de-soldering (removals) and soldering purposes of the electronic components such as SOIC, CHIP, QFP, PLCC, BGA, SMD, etc. (especially mobile phone's cable)
2. Suitable for heat shrinkage, drying, paint removal, adhesive removal, thawing, preheating, and plastic welding.
3. DC power supply is suitable for scientific research, product development, laboratory, laptop computer repair.