SMTmax

OPERATING INSTRUCTIONS

SMD Rework Station

850 SERIES HOT AIR STATION

8502

Packing List

Please check the contents of the SMTmax 8502 ***package and confirm that al the items listed below are included.***

- SMTmax 8502 Service System × 1
- Warranty × 1
- Nozzle × 1
- Instruction Manual × 1
- 907 Handle × 1
- Soldering Iron Station × 1
- Nozzle Supporter × 1

Specifications

Power	110V AC/220V AC
Power Consumption	360W(Max)
Hot Air	100℃ ~480℃
Tip of iron	200℃ ~480℃
Pump	Diaphragm Pump
Capacity	23L/min(Max)
Leakage Voltage of Iron Tip	<0.5mV
Standard Iron Tip	AT-900M
Outer Dimensions	245 × 187 × 150 (L × W × H)mm

Functions

- Multi-purpose anti-static service system, it can remove flat IC safely and effectively. Coupling with 900M-ESD soldering iron, it is able to manage all kinds of service work.
- 8502 2 in 1 Service system, both of its parts can be used separately or simultaneously, they both have anti-static function..
- Air flow and temperature can be adjusted, suitablef or any kinds of QFP、PLCC、SOIC、BGA、etc.
- Output voltage of iron is about 20V preventing creepage damage circuit board.
- Temperature of iron increasing fast, temperature control accurately, with slight handle, tireless after long time use.

Instructions of SMD Rework

- Before operation, select the nozzle that matched the size of IC and attach it.
- Plug the power cord into power supply, turn on the General POWER.
- Turn the SMD Rework power switch on. Heating Element begin to warm up.
- Adjust the Air Flow and Temperature control knobs, waiting for the temperature to stabilize for a short period of time.
- The nozzle is located directly over, but not touching the IC. and allow the hot air to melt the solder. Be care not to touch the leads of the IC with the nozzle.
- Once the solder has melted, remove the IC by lifting the plier.
- Turn the SMD Rework power switch off, an automatic blowing function begins sending cool air throught the pipe in order to cool both the heating element and the handle. So do not turn the General POWER off during this cooling process. About one minute later, it will turn off automatically.
- **Soldering**
  Apply the proper quantity of solder paste and install the SMD on the PCB. Preheat SMD, then heat the lead frame evenly. When soldering is completed, wash away the flux.

Instructions of Soldering Iron

1. Steps

- Set the temperature control knob to 200℃.
- Connect the iron to the control station.
- Plug the power cord into power supply.
- Turn on the switch.
- Set the temperature control knob to the desired temperature.

2. Care and Use of Tip

- **Tip Temperature**
  High soldering temperatures 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 soldered 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 tip's 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 temperature.

- **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. This helps prevent tip oxidation.

3. Maintenance

Caution!

Never file the Tip to remove oxide.

Inspect and Clean the tip

- Set the temperature to 250℃(482℉)
- When the temperature stabilizes, clean the tip With the cleaning sponge and check the condition of the tip.
- If there is black oxide on the solder-plated portion of the tip, apply new solder *(containing flux)* and wipe the tip on the cleaning sponge. Repeat until the oxide is completely removed. Coat with new solder.
- If the tip is deformed or heavily eroded, replace it with a new one.

4. Calibrating the Iron Temperature

- The soldering iron should be recalibrated after changing the iron, or replacing the heating element or tip.
- Use screwdriver to calibrate the little hole CAL on the panel by users.

Caution!

Since mishandling may lead to burns or fire. be sure to comply with the following precautions.

- Do not use the unit near ignitable gases, paper, or other inflammable materials. The nozzle, heated air and iron tip are extremely hot and can cause painful burns Never touch the heater pipe and Metallic parts near the iron tip, or allow the heated air to blow against your skin.
- Initially, the iron may emit white smoke, but this will soon disappear. It is a normal phenomenon.
- Advise other people in the work area that the unit canreach a very high temperature and should be considered Potentially dangerous. So turn the power off while taking breaks and when finished using the unit.
- Never drop or sharply jolt the unit.

The pipe contains quartz glass which can break if the unit is dropped or jolted sharply.

- Do not wet the unit or use the unit when your hands are wet..
- Use only genuine SMTmax replacement parts.
- Disconnect the plug when you don't use the unit for a long time.
- Do not disassemble the unit.

Replacement Parts

Number	Name	Specifications
1144	Heating Element	100V/ 250W
1146	Heating Element	220~240V/ 250W
1144A+	Heating Element	100V/ 250W
1146A+	Heating Element	220~240V/ 250W