



I N S T R U C T I O N M A N U A L

FOR

XYTRONIC 850D

DIGITAL - DISPLAY

SMD HOT-AIR STATION

Specification

Power Voltage	220V AC
Power Consumption	560W (Max.)
Pump	Diaphragm Pump
Capacity	23L/ min (Max.)
Hot Air Temperature	100°C – 480°C
Outer Dimensions	187 (W)* 135 (H)* 245 (D) mm

Usage

Suitable for desoldering of SMD components such as SOIC, CHIP, QFP, PLCC, BGA, etc.

On the 850D front panel, you will find an air control knob (sets air flow speed), temperature control knob, a numerical value LED display and a “REAL TEMP” button. To set the temperature, press and hold the red button while adjusting the temperature control knob to until the desired temperature is displayed – then release. The LED display will now show actual temperature of output air. When the indicator light flickers on, the heating element is being warming up, going off denotes that the preset temperature has been reached.

Operation Setup

1. Select the Nozzle that matches the size of the IC. Attach the nozzle when both the element and the nozzle are cool and the unit is turned off and unplugged.
2. Loosen the screw on the nozzle. Attach the nozzle.

IMPORTANT: Do not force on the nozzle or pull on the edge of the nozzle with a pliers. Also, do not tighten the set-screw too tightly.

Operating Instructions

QFP De-soldering

1. Plug the power cord into the power supply.

After connection, the automatic blowing function will start sending air through the pipe, but the Heating Element remains cool.

2. Turn the power on.

The power switch may be turned on at any time while the automatic blowing function is operating. Once the power switch is turned on, the heating element will begin to warm up.

3. Adjust the Airflow and Temperature Control Knobs.

After adjusting the airflow and temperature control knob, wait for the temperature to stabilize for a short period of time.

4. Melt the solder.

Hold the iron so that the nozzle is located directly over, but not touching the IC and allow the hot air to melt the solder. Be careful not to touch the leads of the IC with the nozzle.

5. Remove the IC.

Once the solder has flowed, remove the IC by lifting the plier.

6. Turn the Power Switch off.

After the power switch is turned off, an automatic blowing function begins sending cool air through the pipe in order to cool both the heating element and the handle. Do not disconnect the plug during this cooling process. In case you don't use the unit for a long time, disconnect the plug.

Note: After turning off the power switch of 850 or 850DB power to the unit is automatically shut off.

7. Remove any remaining solder from solder pads.

After removing the IC, remove remaining solder with a wick or desoldering tool.

Note: In case of SOP, PLCC, desolder it by using tweezers, etc.

QFP Soldering

1. Apply the solder paste.

Apply the appropriate quantity of solder paste & flux (preferably no-clean) and place the SMD on the PCB.

2. Preheat SMD.

Refer to the photo to preheat SMD.

3. Soldering

Heat the lead frame evenly.

4. Washing

When soldering is completed, wash the area with a defluxing agent.

NOTE: While there are many advantages Hot Air SMD rework, it's also possible to have defects such as solder balls and solder bridges. We recommend you to closely inspect all soldering joints.

Precautions

1. Before attaching the nozzle, make sure that both the heating element assembly and the nozzle are cool.

2. Caution High Temperature Operation

Do not use the 850 unit near ignitable gases, paper, or other inflammable materials.

Both the nozzle and the heated air are extremely hot and can cause painful burns.

Never touch the heater assembly or allow the heated air to blow against your skin.

Initially, the iron may emit white smoke, but this will soon dissipate.

3. After use, be sure to cool the unit.

After turning off the power switch, the unit will automatically blow cool air through the pipe for a short period of time. Do not disconnect the plug during this cooling process.

4. Never drop or sharply joint the unit.

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

5. Do not disassemble the pump.

If the pump or other critical internal components fail, please return to your vendor for proper servicing.

6. Disconnect the plug when the unit is not in use.

When the power cord is connected into the power supply, the unit has a little flow of electricity; even if the power switch is in off position. So if the unit is not in use for a long period of time, disconnect the plug.

Replacing the Heating Element

1. Remove the screws, slide off the tube

Remove the 3 screws that secure the handle and slide off the cord tubing.

2. Open the Handle.

Disconnect the ground wire sleeve and remove the outer tube assembly. Inside the tube a quartz glass/heat insulation layer is installed. Do not drop or damage it.

3. Remove the Heating Element.

Disconnect the terminals and remove the heating element.

4. Insert a new Heating Element.

Handle the new heating element with care and do not touch the wire leads. Insert a new heating element and reconnect the terminals. Reconnect the ground wire after replacing the element. Assemble the handle in the reverse order of disassembly.