Bakon BK870A

Bakon BK870A 700W Digital Hot Air SMD Rework Station User Manual

Model: BK870A

1. Introduction

Thank you for choosing the Bakon BK870A Digital Hot Air SMD Rework Station. This device is designed for precise soldering and desoldering of Surface Mount Devices (SMD) on Printed Circuit Boards (PCB), commonly used in motherboard repair and other electronic applications. This manual provides essential information for safe and efficient operation, setup, maintenance, and troubleshooting.

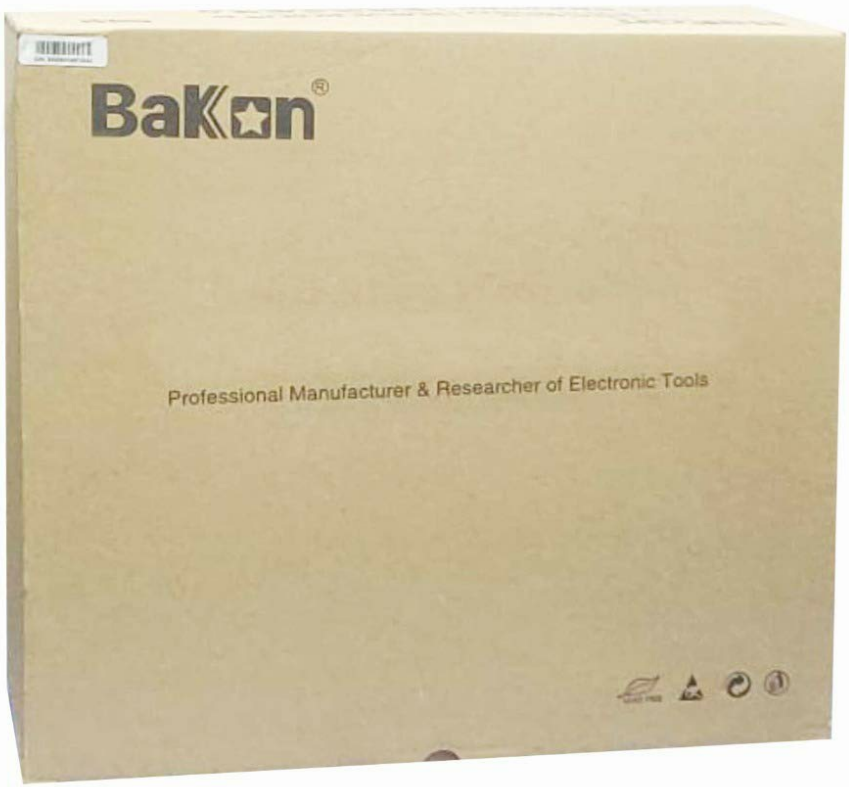

Figure 1.1: Bakon BK870A Rework Station packaging. The packaging protects the unit during transit and contains all

necessary components.

2. Safety Information

WARNING: Use this equipment carefully. Failure to follow safety instructions can result in electric shock, fire, or serious injury.

- Always operate the rework station in a well-ventilated area to avoid inhaling fumes from soldering.
- Wear appropriate personal protective equipment, including safety glasses, to protect against splashes or flying debris.
- The hot air gun reaches high temperatures. Avoid direct contact with the nozzle or heated components. Allow components to cool before handling.
- Ensure the power cord is undamaged and properly grounded. Do not operate with wet hands.
- Keep flammable materials away from the work area.
- Unplug the unit from the power source when not in use or before performing any maintenance.
- Do not modify the equipment. Use only original replacement parts and accessories.

3. Product Overview

3.1. Key Features

- Digital display shows the temperature of the heating element and dynamically indicates airflow.
- Ability to set and save preferred temperature and airflow settings for convenience.
- Integrated microcomputer for precise digital adjustment and display of settings.
- Adjustable temperature and airflow via the handle or main station for various soldering and desoldering tasks on different chip types.
- LCD display for clear visibility of operational parameters.
- Automatic cooling system activates after desoldering, cooling the unit before shutting down.

3.2. Components

Figure 3.1: Main unit of the Bakon BK870A Rework Station. This image shows the control panel, digital display, and the hot air gun connected.

Figure 3.2: Included accessories: hot air gun and various nozzles. Different nozzle sizes allow for precise work on various component sizes.

- **Main Control Unit:** Houses the power supply, microcomputer, and control panel with digital display.
- **Hot Air Gun:** The primary tool for directing heated air.
- **Nozzles:** Interchangeable attachments for the hot air gun to focus airflow.
- **Gun Holder:** Provides a safe place to rest the hot air gun when not in use.
- **Power Cord:** Connects the unit to the electrical outlet.

4. Setup

1. **Unpacking:** Carefully remove all components from the packaging. Inspect for any damage incurred during shipping.
2. **Placement:** Place the main control unit on a stable, heat-resistant, and level surface in a well-ventilated area. Ensure adequate space around the unit for airflow.
3. **Connect Hot Air Gun:** Securely connect the hot air gun cable and air hose to the designated ports on the main control unit.
4. **Install Gun Holder:** Attach the gun holder to the side of the main unit or a suitable location on your

workbench.

5. **Power Connection:** Connect the power cord to the main unit and then plug it into a grounded electrical outlet.

Figure 4.1: Hot air gun resting in its holder. Always place the gun in its holder when not actively in use to prevent accidental burns and activate the automatic cooling function.

5. Operating Instructions

5.1. Powering On/Off

- To power on, flip the red "ON/OFF" switch located on the front panel to the "ON" position. The digital display will illuminate.
- To power off, flip the "ON/OFF" switch to the "OFF" position. The automatic cooling system will activate, and the unit will shut down after cooling.

5.2. Adjusting Temperature and Airflow

Figure 5.1: Close-up of the hot air gun and nozzle. The handle may also feature controls for quick adjustments.

- Use the temperature control buttons (usually marked with up/down arrows or '+' / '-') on the main unit or the hot air gun handle to adjust the desired temperature. The digital display will show the set temperature and the real-time temperature of the heating element.
- Use the airflow control buttons (e.g., "LO", "HI", or up/down arrows) on the main unit to adjust the air volume. The display will dynamically indicate the airflow level.
- Refer to component manufacturer specifications for recommended desoldering temperatures and airflow settings.

5.3. Saving Settings

The BK870A allows you to save frequently used temperature and airflow settings. Consult the specific button layout on your unit for the "Save" or "Memory" function. Typically, you would adjust to your desired settings and then press and hold a designated button to store them.

5.4. Automatic Cooling System

When the hot air gun is placed back into its holder or the unit is powered off, the automatic cooling system activates. This system continues to blow air at a lower temperature until the heating element has cooled down to a safe level, extending the lifespan of the heating element and ensuring safety. Do not unplug the unit until

the cooling cycle is complete.

6. Maintenance

- **Cleaning:** Regularly clean the exterior of the unit and the hot air gun with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Nozzle Care:** Ensure nozzles are free from solder residue. Clean them carefully when cool. Replace damaged or clogged nozzles.
- **Air Filter:** If your unit has an accessible air filter, inspect and clean it periodically to maintain optimal airflow.
- **Storage:** Store the rework station in a clean, dry environment when not in use.

7. Troubleshooting

Problem	Possible Cause	Solution
Unit does not power on.	No power supply; power switch off; faulty power cord.	Check power connection and outlet; ensure switch is ON; inspect power cord for damage.
No hot air or insufficient heat.	Temperature set too low; heating element failure; blocked air path.	Increase temperature setting; check for obstructions in the nozzle or air intake; contact support if heating element is suspected faulty.
Weak or no airflow.	Airflow setting too low; blocked nozzle; faulty pump.	Increase airflow setting; clean or replace nozzle; contact support if pump is suspected faulty.
Temperature display error.	Sensor malfunction.	Power cycle the unit. If the error persists, contact customer support.

8. Specifications

Parameter	Value
Model	BK870A
Power Consumption	700 Watts
Pump Type	Diaphragm Mode Suction
Air Flow	23 L/Min (Max)
Display Type	LCD Digital Display
Dimensions (LxWxH)	19 x 14.5 x 25 cm
Item Weight	1.5 kg

9. Warranty and Support

For warranty information, please refer to the documentation provided with your purchase or contact your retailer. For technical support, inquiries, or to report issues, please contact Bakon customer service through their official website or the contact details provided in your product packaging.

Legal Disclaimer: Use this product carefully. The manufacturer and seller are not responsible for any damage or injury caused by improper use or modification of the device.