Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

LIAMOS BK2000s

BK2000s 120W Soldering Station User Manual

Professional High Frequency Soldering Station with Accurate Temperature Control

1. Product Overview

The LIAMOS BK2000s is a professional 120W high-frequency soldering station designed for precise and efficient soldering tasks. It features rapid heating, stable temperature control, and advanced functionalities like automatic sleep and password protection, making it ideal for various repair and welding applications.

Key Features

- Compact body with high-definition large-screen display.
- Drive circuit design with wide voltage power supply.
- PID temperature control algorithm for fast temperature return and high stability.
- Three-level quick temperature adjustment with one-key preset temperature recall.
- Automatic sleep function to prevent soldering iron tip oxidation.
- Short-circuit protection for heating element and abnormal sensor alarm.
- Ergonomic handle design for comfortable use.
- Password protection to prevent unauthorized setting changes.

High Frequency Soldering Advantage

High-frequency soldering stations offer significant advantages over low-frequency counterparts:

- **Faster Heating Speed:** Heat generated by the high-frequency heating core is directly transferred to the iron tip, reducing heat conduction time and loss.
- **Improved Temperature Stability:** The sensing core is positioned at the top of the iron tip, allowing for more sensitive temperature detection and greatly improving temperature rise and return speed.
- **Efficient Soldering:** With fast heating and sensitive temperature features, the station can reach peak high temperatures in approximately 20 seconds, easily melting 5mm solder spots.

2. Components and Package Contents

Before beginning, please ensure all components listed below are present and undamaged.



Image 2.1: The BK2000s Soldering Station, including the main unit, soldering iron, and soldering iron holder with cleaning accessories.

Package List (Standard Kit)

- Main machine (1)
- Power cord (1)
- LF202C handle with heating core H90C and iron tip-K (1)
- Soldering iron holder with cleaning sponge and cleaning ball (1)
- User manual (1)

3. Setup

Follow these steps for the initial setup of your soldering station.

1. **Unpacking:** Carefully remove all components from the packaging. Retain the packaging for future storage or transport.
2. **Placement:** Place the main soldering station unit on a stable, heat-resistant, and non-flammable surface. Ensure adequate ventilation around the unit.

3. **Connect Soldering Handle:** Connect the LF202C soldering handle cable to the designated port on the front of the main unit. Ensure the connection is secure.
4. **Position Soldering Iron Holder:** Place the soldering iron holder in a convenient and safe location near the main unit. Ensure it is stable and will not tip over.
5. **Prepare Cleaning Accessories:** Moisten the cleaning sponge with water and place it in the designated tray on the soldering iron holder. The cleaning ball should be placed in its compartment.
6. **Power Connection:** Connect the power cord to the power input on the rear of the main unit, then plug the other end into a suitable electrical outlet. Ensure the power supply matches the station's requirements (wide voltage power supply supported).



Image 3.1: The BK2000s Soldering Station ready for operation, showing the main unit and connected soldering iron.

4. Operating Instructions

4.1 Power On/Off

To power on the station, press the power button located on the front panel. The display will illuminate, indicating the station is active. To power off, press and hold the power button until the display turns off.

4.2 Temperature Control

The BK2000s utilizes a PID temperature control algorithm for precise and stable temperature management. You can adjust the temperature using the up/down arrow buttons on the front panel.

The station also features three-level quick temperature adjustment channels (CH1, CH2, CH3) to store and recall frequently used temperature settings. Press the corresponding channel button to instantly switch to the preset temperature.



Image 4.1: The control panel showing the shortcut keys (CH1, CH2, CH3) for quick temperature adjustments.

- **CH1:** Typically suitable for micro welding (e.g., 350°C).
- **CH2:** Suitable for general welding (e.g., 365°C).
- **CH3:** Recommended for sensitive components (e.g., 380°C).

To set a preset temperature for a channel, adjust the temperature to your desired value, then press and hold the respective channel button (CH1, CH2, or CH3) until the setting is saved.

4.3 Automatic Sleep Function

The automatic sleep function protects the components of the soldering station, prolongs service life, and reduces oxidation of the soldering iron tip. When the soldering iron is placed in its holder and remains inactive for a set period (adjustable from 10 to 60 minutes), the station will automatically enter sleep mode, lowering the tip temperature.



Image 4.2: The display indicating the automatic sleep function is active or being configured.

To exit sleep mode, simply pick up the soldering iron, and it will quickly return to the set operating temperature.

4.4 Password Protection

The station includes a password protection feature to prevent unauthorized changes to system settings. This ensures consistent operation in professional environments.



Image 4.3: The display showing the password lock interface, preventing unauthorized system setup.

Refer to the on-screen prompts for setting or entering the password. The password typically consists of a 4-digit code (0000-9999).

4.5 High Frequency Eddy Current Technique

The BK2000s utilizes a high-frequency eddy current heating technique. This advanced method ensures rapid heating and superior temperature stability by directly transferring heat from the heating core to the soldering tip.

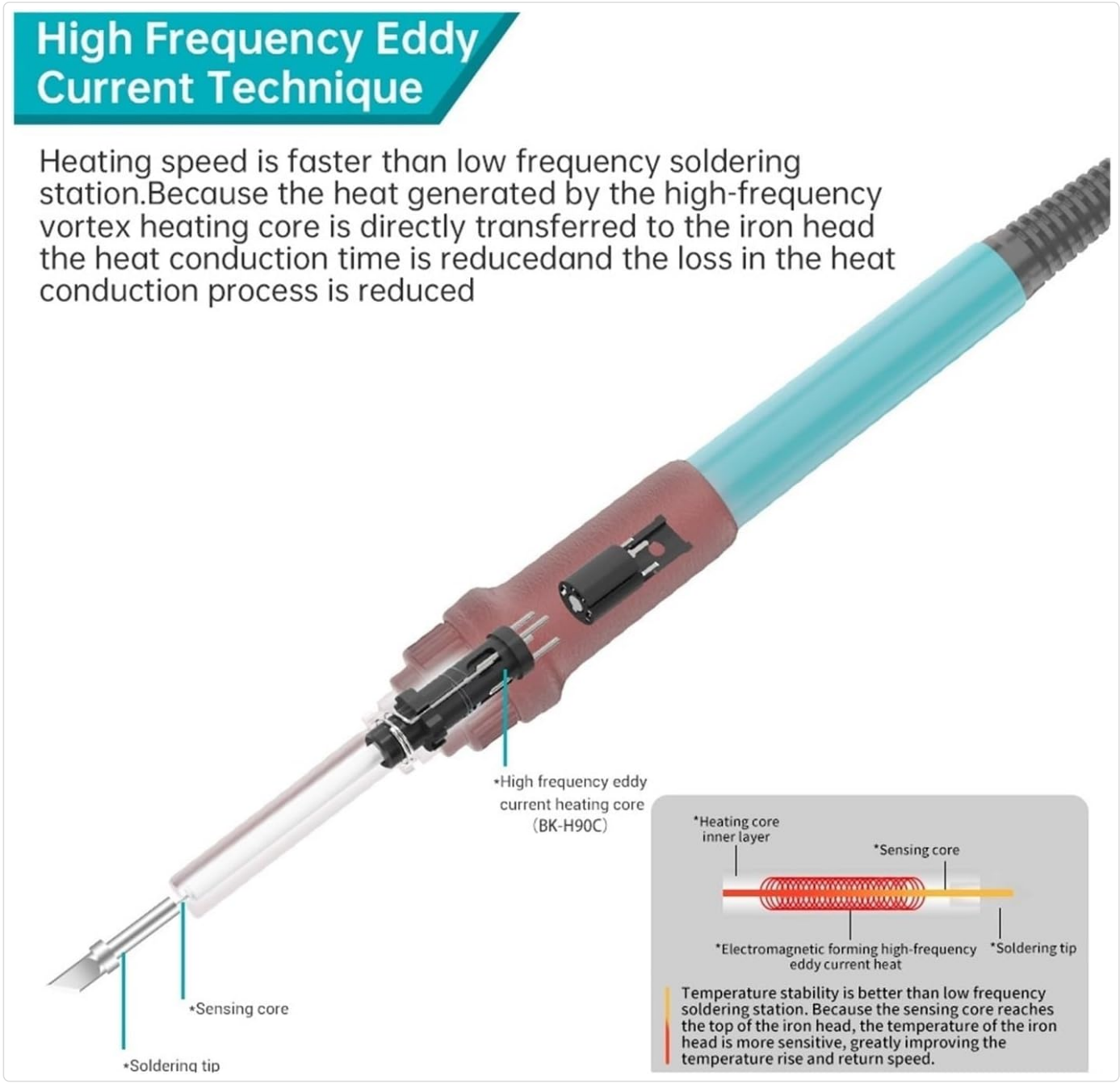


Image 4.4: Diagram illustrating the high-frequency eddy current heating core (BK-H90C) and sensing core within the soldering iron tip.

The diagram shows how the high-frequency eddy current heating core generates heat, which is then efficiently transferred to the soldering tip. The integrated sensing core ensures accurate and responsive temperature feedback, leading to precise temperature control and quick recovery during soldering.

5. Maintenance

Proper maintenance ensures the longevity and optimal performance of your soldering station.

- **Tip Cleaning:** Always clean the soldering iron tip before and after use. Use the provided cleaning sponge (dampened) or the brass cleaning ball to remove excess solder and oxidation. A clean tip ensures efficient heat transfer and prevents cold solder joints.
- **Tip Tinning:** After cleaning, always tin the tip with a small amount of fresh solder. This protects the tip from oxidation and prolongs its life.
- **Station Cleaning:** Periodically wipe down the main unit and soldering iron handle with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- **Storage:** When not in use, ensure the soldering iron is placed securely in its holder. Store the station in a clean, dry

environment away from dust and moisture.

- **Tip Replacement:** Replace the soldering iron tip (BK200M) when it becomes excessively worn or corroded, as this can affect performance.
- **Heating Core Replacement:** If the heating core (H90C) or handle (LF202C) malfunctions, consult the manufacturer for replacement parts and instructions.

6. Troubleshooting

This section addresses common issues you might encounter with your soldering station.

Problem	Possible Cause	Solution
Station does not power on.	No power supply; loose power cord.	Check power cord connection to the station and wall outlet. Ensure the outlet is functional.
Soldering iron not heating up.	Loose handle connection; faulty heating core; station in sleep mode.	Ensure the handle is securely connected. Pick up the iron to exit sleep mode. If issue persists, the heating core (H90C) may need replacement.
"Abnormal Sensor" alarm.	Sensor malfunction or disconnection.	Check the connection of the soldering handle. If the alarm persists, the sensor within the heating core (H90C) may be faulty and require replacement.
"Short-circuit protection" alarm.	Short circuit in heating element or handle.	Immediately power off the station. Disconnect the handle and inspect for visible damage. Do not use if a short circuit is suspected. Contact support.
Temperature unstable or inaccurate.	Worn out tip; faulty sensor; environmental factors.	Clean and re-tin the soldering tip. Ensure the tip (BK200M) is properly seated. If the problem persists, the heating core (H90C) or sensor may be compromised.
Cannot change settings (password locked).	Password protection is active.	Enter the correct password to unlock settings. If the password is forgotten, refer to the manufacturer's support for reset procedures.

If you encounter an issue not listed here or if the suggested solutions do not resolve the problem, please contact LIAMOS customer support for further assistance.

7. Specifications

Detailed technical specifications for the BK2000s Soldering Station.

Host Unit

Output Power	120W (max)
Operating Conditions	Temperature: 10-45°C, Humidity: 45-80%RH
Item Weight	2800 Grams
Number of Pieces	1

Assembly Required	No

Soldering Handle (LF202C)

Power	90W
Input Voltage	AC380KHZ (Note: This appears to be a typo in the source data, likely referring to frequency or internal voltage, not mains input)
Temperature Range	100-480°C / 212-896°F
Temperature Stability	±2°C
Voltage from Iron Tip to Ground	<2mV
Resistance from Iron Tip to Ground	<2Ω

Accessories

- Handle: LF202C
- Heating Core: H90C
- Soldering Iron Tip: BK200M

8. Warranty and Support

LIAMOS is committed to providing high-quality products and customer satisfaction.

Warranty Information

Specific warranty terms and conditions may vary by region and retailer. Please refer to the warranty card included with your product or contact your point of purchase for detailed warranty information. Typically, the warranty covers manufacturing defects under normal use.

Customer Support

For technical assistance, troubleshooting, or inquiries regarding replacement parts and accessories, please contact LIAMOS customer support. Have your product model (BK2000s) and purchase details ready when contacting support.

Manufacturer: LIAMOS

For the most up-to-date contact information, please visit the official LIAMOS website or refer to the contact details provided on your product packaging or purchase invoice.

© 2025 LIAMOS. All rights reserved.
This manual is subject to change without notice.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

https://manuals.plus/asin/B0F4DP2K27

More documents and user manuals: **https://manuals.plus/**