

Adam Equipment HCB3001

AE ADAM HCB 3001 Highland Balance

INSTRUCTION MANUAL

INTRODUCTION

The Adam Equipment Highland compact balances are designed for versatile use in various environments, including schools, industrial settings, universities, and laboratories. They are suitable for a range of applications such as general weighing, density determination, and mixing of materials like paint, powders, or ink. This manual provides essential information for the proper setup, operation, and maintenance of your HCB 3001 Highland Balance.

Key Features:

- Integrated internal rechargeable battery and AC adapter for flexible power options.
- USB and RS232 interfaces for data connectivity.
- Built-in Handical calibration eliminates the need for external calibration masses.
- ShockProtect three-point overload protection for enhanced durability.
- 2-year warranty for peace of mind.

PRODUCT OVERVIEW



Image: The AE ADAM HCB 3001 Highland Balance, featuring a white and blue body, a digital display, control buttons, and a removable blue draft shield on top. This image illustrates the overall design and key components of the balance.

SETUP

1. **Unpacking:** Carefully remove the balance and all accessories from the packaging. Retain the packaging for future transport or storage.
2. **Placement:** Place the balance on a stable, level surface, free from vibrations, drafts, and direct sunlight. Ensure the surface is robust enough to support the balance and any items being weighed.
3. **Power Connection:** Connect the supplied AC adapter to the balance and a suitable power outlet. The internal rechargeable battery will begin charging automatically. Allow sufficient time for the battery to fully charge before initial use for optimal portable operation.
4. **Leveling:** Use the adjustable feet at the base of the balance to ensure it is perfectly level. Refer to the bubble level indicator, usually located near the display, to achieve proper leveling.
5. **Draft Shield Installation:** If included, carefully place the blue draft shield onto the weighing pan area to minimize air

current interference during measurements.

OPERATING INSTRUCTIONS

- Power On/Off:** Press the **ON/OFF** button to turn the balance on or off. The display will show a self-test sequence before settling at zero.
- Weighing:** Place the item to be weighed gently on the center of the weighing pan. The weight will be displayed on the screen.
- Tare Function:** To subtract the weight of a container, place the empty container on the pan and press the **TARE** button. The display will reset to zero, allowing you to weigh only the contents.
- Unit Selection:** Use the **UNIT** or **MODE** button (depending on model) to cycle through available weighing units (e.g., grams, kilograms, pounds).
- Handical Calibration:** The balance features integrated Handical calibration. To perform calibration, refer to the specific instructions in the full user manual, typically involving a sequence of button presses. This internal calibration system ensures accuracy without external weights.
- Data Output (USB/RS232):** Connect the balance to a computer or peripheral device using the USB or RS232 interface cables (sold separately). Data can be transmitted for logging or analysis. Consult the full manual for specific communication protocols and software requirements.

MAINTENANCE

- Cleaning:** Regularly clean the balance using a soft, damp cloth and a mild detergent. Avoid abrasive cleaners, solvents, or excessive moisture, especially around the display and buttons. The ABS plastic material is durable but can be damaged by harsh chemicals.
- Storage:** When not in use for extended periods, store the balance in a clean, dry environment, away from extreme temperatures and humidity. Ensure the internal battery is charged periodically if stored for a long time to maintain its lifespan.
- Inspection:** Periodically inspect the weighing pan, draft shield, and power cable for any signs of damage or wear.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Balance does not turn on.	No power, discharged battery, faulty AC adapter.	Check AC adapter connection. Ensure outlet is functional. Charge the internal battery.
Inaccurate readings.	Not level, drafts, vibrations, calibration needed, overloaded.	Level the balance. Move to a stable, draft-free location. Perform Handical calibration. Ensure weight is within capacity (3000g). The ShockProtect system prevents damage from minor overloads, but extreme overload can affect accuracy.
Display shows "Err" or error code.	Overload, internal fault.	Remove excess weight. Turn off and restart the balance. If error persists, contact support.
Buttons unresponsive.	Temporary software glitch, physical damage.	Turn off and restart the balance. Ensure buttons are clean and not stuck.

SPECIFICATIONS

Attribute	Detail
Model Number	HCB3001
Brand	Adam Equipment
Product Dimensions (L x W x H)	24 x 17 x 8 cm
Item Weight	0.25 grams (Note: This seems to be the shipping weight, not the balance's operational weight. The balance itself would be heavier.)
Weight Limit / Capacity	3000 Grams
Material	ABS Plastic
Form Factor	Portable
Number of Units	1 unit
UPC	819309013167, 644535753460







WARRANTY AND SUPPORT

The AE ADAM HCB 3001 Highland Balance comes with a **2-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

For technical support, warranty claims, or inquiries regarding spare parts, please contact Adam Equipment customer service. Refer to the contact information provided with your purchase documentation or visit the official Adam Equipment website for the most up-to-date support details.

Please note that information regarding spare parts availability is not readily available in the product data. It is recommended to contact the manufacturer directly for such inquiries.

Related Documents - HCB3001

 <p>The image shows the cover of the 'HIGHLAND SERIES' user manual. It features the Adam Equipment logo at the top, the title 'HIGHLAND SERIES' in a bold box, and a small image of a portable balance scale. Below the title, it says '2.5 to 10.0 kg capacity 0.1 mg readability 2000'. The bottom left corner has the text 'EAB 100'.</p>	<p>Adam Equipment Highland Series Portable Balance User Manual</p> <p>User manual for the Adam Equipment Highland Series portable balances, covering setup, operation, functions, parameters, calibration, troubleshooting, and specifications.</p>
 <p>The image is a datasheet for the Solis series. It includes the Adam Equipment logo, a photo of a Solis balance, and technical specifications in both English and Chinese. The English text mentions 'High resolution, intuitive operation, and robust performance for demanding laboratory applications'. The Chinese text at the bottom right says '高精度、操作简便、坚固耐用、易于清洁'.</p>	<p>Solis Semi-Micro Analytical Balances - Adam Equipment</p> <p>Adam Equipment's Solis semi-micro analytical balances offer high resolution, intuitive operation, and robust performance for demanding laboratory applications. Explore features, specifications, and accessories.</p>
 <p>The image shows the cover of the 'Eclipse' set-up guide. It features the Adam Equipment logo, the 'Eclipse' brand name in a large stylized font, and a photo of an Eclipse series weighing balance. At the bottom, it says 'Revised 01/2015, Rev 1.0, Sep 2015' and 'www.adamequipment.com'.</p>	<p>Adam Eclipse Weighing Balance Set-Up Guide</p> <p>A concise and accessible setup guide for Adam Eclipse series weighing balances, detailing initial setup, calibration, weighing operations, taring, and warranty information. Includes component lists and compliance details.</p>
 <p>The image is a detailed datasheet for the Solis series. It includes the Adam Equipment logo, a photo of a Solis balance, and extensive technical specifications in both English and French. The English text highlights 'High performance, superior accuracy and operation suitable for the laboratory, industry and education'.</p>	<p>Adam Equipment Solis Analytical and Semi-Micro Balances Datasheet</p> <p>Detailed specifications, features, and applications for the Adam Equipment Solis series of analytical and semi-micro balances, designed for laboratory research, quality assurance, education, and manufacturing.</p>
 <p>The image is a datasheet for the Equinox EAB series. It includes the Adam Equipment logo, a photo of an Equinox EAB balance, and technical specifications. The English text mentions 'High resolution, intuitive operation, and robust performance for demanding laboratory applications'.</p>	<p>Adam Equipment Equinox EAB Semi-micro Analytical Balances Datasheet</p> <p>Detailed specifications, features, and accessories for the Adam Equipment Equinox EAB series semi-micro analytical balances. Ideal for research, quality control, and industrial applications.</p>
 <p>The image is a datasheet for the Luna LAB series. It includes the Adam Equipment logo, a photo of a Luna LAB balance, and technical specifications. The English text mentions 'High precision, fast performance, and versatile applications for laboratory use'.</p>	<p>Adam Equipment Luna LAB Analytical Balances - Specifications and Features</p> <p>Explore the Adam Equipment Luna LAB series of analytical balances, featuring high precision, fast performance, and versatile applications for laboratory use. Details on specifications, models, and accessories.</p>

