

Ohaus PA4102C

OHAUS PA4102C Pioneer Precision Balance User Manual

1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, and maintenance of your OHAUS PA4102C Pioneer Precision Balance. To ensure accurate results and prolong the lifespan of your instrument, please read this manual thoroughly before use and keep it for future reference.

The OHAUS PA4102C is a precision laboratory balance designed for accurate weighing applications, featuring a 4100g capacity and internal calibration for reliable performance.

2. SAFETY INFORMATION

- Operate the balance only under the environmental conditions specified in this manual.
- Ensure the power supply voltage matches the requirements specified on the balance.
- Do not operate the balance in hazardous environments or with unstable power sources.
- Avoid spilling liquids or powders into the balance housing.
- Do not attempt to open or service the balance yourself. Refer all servicing to qualified personnel.
- Always place the balance on a stable, level surface away from vibrations, drafts, and direct heat sources.

3. PRODUCT OVERVIEW

The OHAUS PA4102C Pioneer Precision Balance is engineered for reliable and precise weighing. Key features include a clear digital LCD display, a front-mounted bubble level for easy leveling, and selectable environmental settings to adapt to various operating conditions.



An image showing two OHAUS Pioneer precision balances. The balance on the left features a transparent draft shield, typically used for higher precision models. The balance on the right is a simpler model without a draft shield, designed for general weighing tasks. Both balances have a digital LCD display and a stainless steel weighing pan. The PA4102C model is a precision balance with a 4100g capacity and internal calibration.

4. SETUP

4.1 Unpacking

Carefully remove the balance and all accessories from the packaging. Retain the packaging for future transport or storage.

4.2 Placement

Place the balance on a firm, stable, and level surface. Ensure the location is free from vibrations, drafts, direct sunlight, and rapid temperature changes. Allow the balance to acclimate to the room temperature for at least 30 minutes before operation.

4.3 Leveling the Balance

Adjust the leveling feet located at the base of the balance until the air bubble in the front-mounted level indicator is centered within the circle. This ensures accurate weighing results.

4.4 Power Connection

Connect the supplied AC adapter to the balance and then to a suitable power outlet. The balance may perform a self-test upon initial power-up.

4.5 Initial Calibration

The PA4102C features internal calibration. After initial setup and warm-up, it is recommended to perform an internal calibration. Refer to the operating instructions section for details on initiating the internal calibration procedure.

5. OPERATING INSTRUCTIONS

5.1 Turning On/Off

- To turn on: Press the **[ON/OFF]** button. The display will show a self-test sequence and then settle at 0.00g.
- To turn off: Press and hold the **[ON/OFF]** button until the display turns off.

5.2 Basic Weighing

1. Ensure the balance is level and displaying 0.00g.
2. Carefully place the item to be weighed onto the center of the weighing pan.
3. Wait for the stability indicator (usually a star or circle) to appear on the display.
4. Read the stable weight value from the digital LCD display.

5.3 Taring (Zeroing a Container)

1. Place an empty container onto the weighing pan.
2. Press the **[TARE]** or **[ZERO]** button. The display will return to 0.00g.
3. Add the material to be weighed into the container. The display will show the net weight of the material.

5.4 Unit Selection

Press the **[UNIT]** button (if available) to cycle through available weighing units (e.g., grams, kilograms, milligrams, ounces). The selected unit will be indicated on the display.

5.5 Environmental Settings

The balance allows selection of environmental settings to optimize performance in varying conditions. Consult the on-screen menu or specific button functions to adjust these settings (e.g., for stable, normal, or unstable environments). This helps to compensate for drafts or vibrations.

6. MAINTENANCE

6.1 Cleaning

Clean the balance regularly using a soft cloth dampened with a mild detergent or water. Do not use abrasive cleaners, solvents, or harsh chemicals. Ensure no liquids enter the balance housing.

6.2 Calibration Checks

Although the PA4102C has internal calibration, it is recommended to periodically verify its accuracy using external calibration weights. If discrepancies are found, perform an internal calibration.

6.3 Storage

When not in use for extended periods, disconnect the power adapter and store the balance in a clean, dry, and stable environment, ideally in its original packaging.

7. TROUBLESHOOTING

- **Unstable Readings:** Check for drafts, vibrations, or temperature fluctuations. Ensure the balance is level. Recalibrate if necessary.

- **Display Shows 'Error':** Refer to the balance's on-screen error codes (if any) or consult the manufacturer's support. Often, this indicates an overload or internal fault.
- **Balance Does Not Turn On:** Verify the power adapter is correctly connected and the power outlet is functional.
- **Inaccurate Readings:** Ensure the balance is level and has been calibrated recently. Check for debris under the weighing pan.

8. SPECIFICATIONS

Feature	Specification
Brand	Ohaus
Model Number	PA4102C (Article No. 001530)
Capacity	4100 g
Calibration	Internal Calibration
Display	Digital LCD (without backlight)
Leveling	Front Bubble Level
Environmental Settings	Selectable for optimal adaptation
Approximate Package Dimensions	10 x 10 x 10 cm
Approximate Package Weight	10 Kilograms
Material	Regular

9. WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included with your product or contact your authorized OHAUS dealer. Technical support can be obtained by contacting OHAUS customer service directly or through your local distributor. Please have your model number (PA4102C) and serial number ready when requesting support.