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> uxcell 20g F1 Precision Calibration Weight Instruction Manual

uxcell a20092900ux0123

uxcell 20g F1 Precision Calibration Weight Instruction Manual

Model: a20092900ux0123

1. PRODUCT OVERVIEW

This manual provides instructions for the uxcell 20g F1 Precision Calibration Weight. This weight is designed for calibrating digital balance scales requiring high accuracy.

Key Features:

- **Nominal Mass:** 20 grams (g).
- **Precision Class:** F1, suitable for balances with readability from 0.01g to 0.001g.
- **Material:** Constructed from high-quality stainless steel for durability and corrosion resistance.
- **Application:** Ideal for re-calibrating digital scales and testing the accuracy of various weighing instruments.



Figure 1: uxcell 20g F1 Precision Calibration Weight.

The uxcell 20g F1 Precision Calibration Weight is a single, cylindrical weight with a polished finish, marked with '20' on its top surface, indicating its mass.

2. SETUP

The uxcell 20g F1 Precision Calibration Weight requires no assembly. It is ready for use directly out of its protective packaging.

Preparation Steps:

1. Carefully remove the calibration weight from its packaging. Avoid direct skin contact to prevent transferring oils or dirt, which can affect accuracy. Use tweezers or gloves if available.
2. Ensure the digital balance scale to be calibrated is placed on a stable, level surface, free from vibrations and drafts.
3. Verify the scale's weighing pan is clean and free of any debris.



Figure 2: The uxcell 20g F1 Precision Calibration Weight stored in its protective plastic case.

The calibration weight is supplied in a protective plastic case to maintain its cleanliness and integrity during storage and transport.

3. OPERATING INSTRUCTIONS

Follow these general steps to calibrate your digital balance scale using the uxcell 20g F1 Precision Calibration Weight. Always refer to your specific scale's instruction manual for its exact calibration procedure, as steps may vary.

Calibration Procedure:

1. **Warm-up:** Turn on your digital balance scale and allow it to warm up for the time recommended by the scale manufacturer (typically 5-15 minutes) to ensure stable readings.
2. **Zeroing:** Ensure the scale is empty and stable, then press the 'TARE' or 'ZERO' button to set the display to 0.00g.
3. **Enter Calibration Mode:** Initiate the calibration mode on your digital scale. This usually involves pressing a specific button (e.g., "CAL", "MODE", or "FUNCTION") or a sequence of buttons. Consult your scale's manual for exact instructions.
4. **Place Weight:** The scale display may prompt you to place a specific weight. When prompted for 20g,

carefully place the uxcell 20g calibration weight onto the center of the scale's weighing pan.

5. **Stabilize:** Allow the scale to stabilize and complete the calibration process. The display will typically show "PASS", "END", or return to normal weighing mode once calibration is complete.
6. **Remove Weight:** Carefully remove the calibration weight from the scale.
7. **Verify Accuracy:** Test the scale's accuracy by weighing the 20g calibration weight again or by using other known reference weights.

Measuring Range: 20g
Precision: F1



Figure 3: uxcell 20g F1 Precision Calibration Weight, indicating its 20g measuring range and F1 precision class.

This image shows the 20g F1 precision calibration weight, highlighting its key specifications for accurate measurement.

4. MAINTENANCE

Proper care and maintenance will ensure the longevity and accuracy of your uxcell 20g F1 Precision Calibration Weight.

- **Cleaning:** To clean the calibration weight, use a soft, lint-free cloth. If necessary, a small amount of isopropyl alcohol can be used, followed by thorough drying. Avoid abrasive materials or harsh chemicals, which can damage the surface and alter its mass.
- **Handling:** Always handle the weight with care. Avoid dropping or scratching it, as this can alter its

mass and precision. Use tweezers or clean gloves to prevent contamination from skin oils, dirt, or moisture.

- **Storage:** Store the calibration weight in its original protective case in a clean, dry environment. Protect it from extreme temperatures, high humidity, and strong magnetic fields, which can affect its stability and accuracy.
- **Recalibration:** For critical applications or after prolonged use, periodic recalibration of the weight itself by a certified metrology laboratory is recommended to ensure its continued adherence to F1 precision standards.



Figure 4: A close-up view of the uxcell 20g F1 Precision Calibration Weight, showing its smooth, polished stainless steel surface.

Maintaining the weight's surface integrity is crucial for its precision.

5. TROUBLESHOOTING

If you encounter issues during calibration or with scale accuracy, refer to the following table for common problems and solutions.

Problem	Possible Cause	Solution
Inaccurate Scale Readings after Calibration	Scale not properly zeroed before calibration.	Ensure the scale is tared (zeroed) before initiating the calibration process.
Inaccurate Scale Readings after Calibration	Calibration weight contaminated or damaged.	Inspect the calibration weight for any visible dirt, scratches, or damage. Clean it carefully as per maintenance instructions or replace if damaged.
Inaccurate Scale Readings after Calibration	Environmental factors affecting scale.	Ensure the scale is on a stable surface, away from drafts, vibrations, and temperature fluctuations.
Scale Fails to Calibrate	Incorrect calibration procedure followed for the scale.	Refer to your digital scale's specific instruction manual for its exact calibration steps.
Scale Fails to Calibrate	Scale malfunction.	If the scale continues to fail calibration after following all steps, the scale itself may require service or replacement.

6. SPECIFICATIONS

Detailed specifications for the uxcell 20g F1 Precision Calibration Weight:

- **Model:** a20092900ux0123
- **Nominal Mass:** 20 grams (g)
- **Precision Class:** F1
- **Material:** Stainless Steel
- **Color:** Silver
- **Approximate Dimensions:** 13mm (diameter) x 22mm (height)
- **Recommended Use:** Calibration of digital balance scales with readability from 0.01g to 0.001g.



Figure 5: Physical dimensions of the uxcell 20g F1 Precision Calibration Weight.

This image illustrates the physical dimensions of the 20g calibration weight, showing its diameter and height.

7. WARRANTY AND SUPPORT

For warranty information or technical support regarding your uxcell 20g F1 Precision Calibration Weight, please refer to the documentation provided with your purchase or contact uxcell customer service directly.

Contact Information: Please visit the official uxcell website for the most current support and contact details.

Online Resources: Additional product information and support may be available on the uxcell brand store page on Amazon: [uxcell Store](#).