

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

- › [Mettler Toledo](#) /
- › [Mettler Toledo 30355435 Model XSR105DU Analytical Balance, 120g Weight Capacity User Manual](#)

Mettler Toledo XSR105DU

Mettler Toledo XSR105DU Analytical Balance User Manual

Model: XSR105DU | Brand: Mettler Toledo

1. INTRODUCTION

This manual provides comprehensive instructions for the safe and efficient operation, setup, maintenance, and troubleshooting of the Mettler Toledo XSR105DU Analytical Balance. Please read this manual thoroughly before using the instrument to ensure accurate results and prolong the life of your balance.



This image displays the Mettler Toledo XSR105DU Analytical Balance. It features a clear glass draft shield enclosing the weighing pan, a separate digital display unit showing '0.00000' grams, and the main balance unit with 'METTLER TOLEDO' branding visible on the side.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury and damage to the instrument:

- Operate the balance only in a stable, level environment free from vibrations and drafts.
- Do not expose the balance to extreme temperatures or humidity.
- Use only the power adapter supplied with the instrument.
- Avoid spilling liquids on the balance. In case of spillage, disconnect power immediately and clean carefully.
- Do not attempt to open or repair the balance yourself. Refer all servicing to qualified personnel.
- Ensure the weighing pan is clean and free of debris before each use.

3. WHAT'S IN THE BOX

Upon unpacking, verify that all components are present:

- Mettler Toledo XSR105DU Analytical Balance
- Power Adapter
- Draft Shield Components
- Weighing Pan
- User Manual (this document)

4. SETUP

4.1 Unpacking

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

4.2 Placement

Place the analytical balance on a stable, level, and vibration-free surface. Ensure it is away from direct sunlight, heat sources, air currents (e.g., from air conditioning vents), and strong electromagnetic fields. Use the adjustable feet to level the balance, observing the integrated level indicator.

4.3 Power Connection

Connect the supplied power adapter to the balance and then to a suitable power outlet. Allow the balance to warm up for at least 30 minutes after connecting power before performing any measurements to ensure optimal stability.

4.4 Initial Calibration

After initial setup and warm-up, perform an internal calibration. Refer to the on-screen prompts or the balance's menu for the specific calibration procedure. Regular calibration is crucial for maintaining measurement accuracy.

5. OPERATING INSTRUCTIONS

5.1 Basic Weighing

1. Ensure the balance is level and the draft shield doors are closed.
2. Press the 'On/Off' button to power on the balance.
3. Wait for the display to show '0.00000g' and the Status Light to indicate readiness.
4. Carefully place the sample on the center of the weighing pan.
5. Read the stable weight value displayed on the screen.
6. Remove the sample from the pan.

5.2 Tare Function

To weigh a sample in a container, use the tare function:

1. Place the empty container on the weighing pan.
2. Press the 'Tare' button (usually indicated by a 'T' or '0/T' symbol). The display will reset to '0.00000g'.
3. Add your sample to the container. The display will show the net weight of the sample.
4. Remove the container and sample from the pan.

5.3 Advanced Functions

The XSR105DU features advanced functionalities to streamline weighing workflows:

- **Smart Grid Weighing Pan:** Designed for easy cleaning and efficient sample placement.
- **Automated Doors:** For convenient and precise sample handling, minimizing external influences.
- **Results Protocol:** The balance can generate and store results protocols, simplifying data management.
- **Built-in Methods:** Utilize pre-programmed weighing methods or develop and save your own custom methods directly from the method window for specific applications.
- **Status Light:** Provides visual feedback, indicating when all conditions for correct weighing have been met, ensuring reliable results.

6. MAINTENANCE

6.1 Cleaning

Regular cleaning is essential for accurate and reliable operation:

- Disconnect the balance from the power supply before cleaning.
- Use a soft, lint-free cloth dampened with a mild detergent solution or isopropyl alcohol.
- Do not use abrasive cleaners or solvents.
- Clean the weighing pan and draft shield components regularly. These parts can often be removed for thorough cleaning.
- Ensure no liquid enters the interior of the balance.

6.2 Calibration Checks

Perform routine calibration checks as recommended by Mettler Toledo or your internal quality procedures. This ensures the balance maintains its accuracy over time. If deviations are found, perform a full calibration.

6.3 Storage

When not in use for extended periods, store the balance in a clean, dry, and stable environment. Cover the balance to protect it from dust and debris.

7. TROUBLESHOOTING

This section addresses common issues you might encounter:

Problem	Possible Cause	Solution
Balance does not turn on	No power supply; Faulty power adapter	Check power cable connection; Try a different outlet; Contact support if adapter is faulty.
Unstable readings	Vibrations; Air currents; Unlevel surface; Temperature fluctuations	Relocate balance to a stable area; Close draft shield doors; Level the balance; Allow balance to acclimatize.
Inaccurate readings	Needs calibration; Dirty weighing pan; Overload	Perform calibration; Clean weighing pan and surrounding area; Ensure sample weight is within capacity.
Error message on display	Specific internal issue	Refer to the balance's on-screen help or contact Mettler Toledo support with the error code.

8. SPECIFICATIONS

Feature	Detail
Model Number	XSR105DU
Brand	Mettler Toledo
Weighing Capacity	120g
Product Dimensions (L x W x H)	18.98 x 7.68 x 11.5 inches
Product Weight	26 Pounds
Manufacturer	Mettler Toledo
First Available	May 2, 2019

9. WARRANTY AND SUPPORT

The Mettler Toledo XSR105DU Analytical Balance is covered by a manufacturer's warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or visit the official Mettler Toledo website.

For technical support, service, or inquiries regarding your analytical balance, please contact Mettler Toledo customer service. Have your model number (XSR105DU) and serial number ready when contacting support.

Note: No official product videos from the seller were available for embedding in this manual.