AMTAST AMT157

AMTAST Grain Moisture Meter AMT157 User Manual

High Precision Grain Moisture Tester with Temperature

INTRODUCTION

The AMTAST Grain Moisture Meter AMT157 is a high-precision, portable device designed for accurately measuring the moisture content and temperature of various grains. This manual provides comprehensive instructions for the proper setup, operation, and maintenance of your moisture meter to ensure reliable and consistent results.

Figure 1: AMTAST Grain Moisture Meter AMT157 with wheat grains, showcasing its primary function.

PRODUCT OVERVIEW

Components and Features

The AMT157 Grain Moisture Meter is built with durability and ease of use in mind. Its main body is constructed from stainless steel, ensuring longevity and robust performance in various environments. Key components include the power key, adjustment buttons (+/-), setup menu button (SET), and a sensitive internal sensor for accurate measurements.

Figure 2: Key components of the AMTAST Grain Moisture Meter, highlighting the power key, adjustment buttons, SET button, sensor, and grain moisture display.

- **18 Grain Support:** The meter is pre-programmed with 18 grain codes, allowing precise moisture readings for a wide range of grains including wheat, maize, soybean, rice, coffee, and more.
- **Portability and Durability:** Compact, pocket-sized design with a durable stainless steel body for easy transport and long-lasting use.
- **Fast & Accurate Readings:** Delivers quick and precise measurements with stable data, even with temperature fluctuations.
- **Easy Operation:** Features automatic and manual temperature compensation (ATC and MTC) for consistent readings. Simple interface for efficient use.
- **Customization Option:** The device can be tailored for additional grain types or more precise readings for specific seeds upon request.

Figure 3: The 18 types of grains supported by the AMT157 moisture meter, demonstrating its versatility.

SETUP

Battery Installation

The AMTAST Grain Moisture Meter AMT157 requires one 9V battery for operation. Batteries are typically not included in the package due to shipping regulations.

1. Locate the battery compartment at the bottom of the meter.
2. Remove the battery cover.
3. Insert a new 9V battery, ensuring correct polarity (+ and -).
4. Replace the battery cover securely.
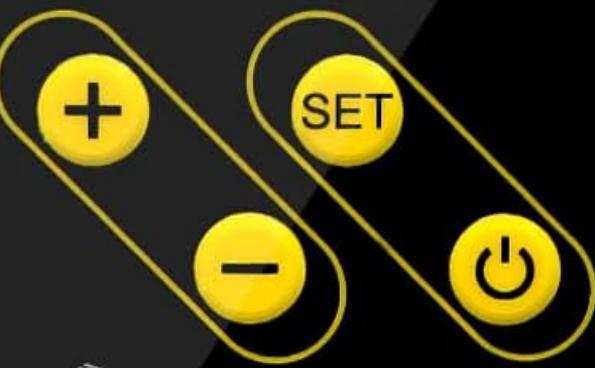
SEEDS TESTER

Select kind
Adjust moisture
Auto compensate

AMTAST

OPERATING INSTRUCTIONS

Follow these steps for accurate moisture measurement:

1. **Power On:** Press the **Power Key** (🔋) to turn the meter on.

2. **Select Grain Type:**

   - Press the **SET** key. The LCD will display "Select kind", "Adjust moisture", and "Auto compensate".
   - In the "Select kind" menu, press **SET** again to display a list of seed names.
   - Use the **+** or **-** buttons to navigate through the grain types (e.g., Wheat, Maize, Soybean, Rice, Peanut, Coffee Bean, Cocoa Bean, Tomato, Cucumber, Eggplant, Chili Seed, Cheery Radish Seed, Spinach, Lettuce Seed).
   - Once the desired grain type is selected, press **SET** to confirm. The LCD will return to measuring mode.

3. **Prepare Sample:**

   - Fill the measuring cup halfway with seeds.
   - Shake gently to settle the seeds.
   - Fill the cup to the brim (approximately 70ml). Ensure the cup is full to activate the sensor.

4. **Take Measurement:** Slowly press the cover onto the measuring cup until the LCD displays the moisture value. Then, release it.

5. **Repeat Measurement (Optional):** If the reading isn't detected or for increased accuracy, add more seeds and retest. After two tests, press **SET** to display the average value.

6. **Adjust LCD Brightness:** In measuring mode, use the **+** or **-** key to adjust the LCD brightness.

7. **Out of Range Indication:** If the measurement is out of the meter's specified range, the display will show "LOW".

REMOVABLE BATTERY

one 9V battery
*Batteries are not included in the package due to Aviation Security Check.

Figure 5: Detailed operational steps for using the moisture meter, from powering on to taking a reading.

Official Product Video: Operation Guide

Video 1: This official video demonstrates the setup, grain selection, and measurement process for the AMTAST Grain Moisture Meter AMT157, providing a visual guide to its operation.

MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your moisture meter.

- **Cleaning:** After each use, especially when testing different grain types, ensure the measuring cup and sensor area are clean and free of residual grains or dust. Use a soft, dry cloth. Do not use abrasive cleaners or immerse the device in water.
- **Storage:** Store the meter in a cool, dry place, away from direct sunlight and extreme temperatures. Use the provided carrying case (if applicable) to protect it from physical damage.
- **Battery Replacement:** Replace the 9V battery when the low battery indicator appears or if the device fails to power

on. Always dispose of used batteries responsibly.

TROUBLESHOOTING

If you encounter issues with your AMTAST Grain Moisture Meter, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Meter does not power on.	Dead or improperly installed battery.	Check battery polarity. Replace with a new 9V battery.
"LOW" displayed on screen.	Moisture content is below the measurable range, or insufficient sample.	Ensure the measuring cup is filled to the brim. If the issue persists, the grain moisture may be too low for the device's range.
Inaccurate or inconsistent readings.	Improper sample filling, sensor dirty, or incorrect grain type selected.	Ensure the cup is completely full and settled. Clean the sensor area. Verify the correct grain type is selected in the menu. Perform multiple tests and average the results.
Screen is broken or constant beeping.	Physical damage or internal malfunction.	This indicates a hardware issue. Contact AMTAST customer support for repair or replacement options.

SPECIFICATIONS

Detailed technical specifications for the AMTAST Grain Moisture Meter AMT157:

Parameter	Value
Model Number	AMT157
Accuracy	0.5%
Adjust Range	-9.9% ~ +9.9%
Working Temperature	0 ~ 40°C
Repeat Error	0.2%
Power Source	One 9V battery
Main Body Material	Stainless Steel
Dimensions (Package)	7.5 x 3.5 x 3 inches
Weight (Package)	1.85 Pounds
Supported Grains	18 types (e.g., Wheat, Maize, Soybean, Coffee, Rice, Peanut, etc.)

Figure 6: Visual representation of the key technical specifications of the AMT157 meter.

WARRANTY AND SUPPORT

The AMTAST Grain Moisture Meter AMT157 is manufactured by AMTAST. For any product-related inquiries, technical support, or warranty claims, please contact AMTAST directly. Information regarding protection plans may also be available through your retailer.

- **Manufacturer:** AMTAST
- **Brand Store:** Visit the AMTAST Store on Amazon
- **Protection Plans:** Optional 3-Year or 4-Year Protection Plans may be available for purchase through your retailer.