

AIOMEST AI-100WM

AIOMEST AI-100WM Handheld Anemometer User Manual

1. INTRODUCTION

The AIOMEST AI-100WM is a multifunctional handheld anemometer designed for measuring various environmental parameters. This device provides accurate readings for wind speed, wind temperature, atmospheric pressure, altitude, humidity, and wind chill. It is suitable for a wide range of outdoor activities such as boating, sailing, hiking, long-range shooting, hunting, kite flying, and drone piloting, as well as for HVAC system analysis.

7 in 1 Multifunctional Anemometer

Records 16 Air Pressure Data



Figure 1: The AIOMEST AN-100WM Anemometer, showcasing its display and the seven measurable parameters: Wind Speed, Dew Point, Barometer, Altitude, Humidity, Wind Chill, and Wind Temperature.

2. SETUP

2.1. Battery Installation

1. Locate the battery compartment cover on the back of the device.
2. Use a small screwdriver (often included) to open the battery compartment.
3. Insert two AAA batteries, ensuring correct polarity (+/-).
4. Replace the battery compartment cover and secure it with the screw.

2.2. Attaching the Wrist Strap

Thread the included wrist strap through the designated loop on the bottom of the anemometer to prevent accidental drops during use.

2.3. Tripod Mounting

The AI-100WM features a 1/4-inch metal mounting port at the bottom, allowing it to be fixed onto a standard tripod for stable, long-term measurements.



Figure 2: The anemometer showing the wrist strap attachment point and the 1/4-inch tripod mounting thread on the bottom.



Figure 3: Contents of the AIOMEST AI-100WM package, including the anemometer, carrying case, wrist strap, screwdriver, and AAA batteries.

3. OPERATING INSTRUCTIONS

3.1. Power On/Off

- To power on the device, press the red power button  once.
- To power off, press and hold the red power button  for approximately 2 seconds.
- The device features an automatic power-off function after 10 minutes of inactivity to conserve battery life.

3.2. Measurement Modes and Unit Switching

The AI-100WM can measure wind speed, temperature, humidity, atmospheric pressure, and altitude. Use the dedicated buttons to switch between functions and units.

- **Wind Speed (Wind button):** Press the "Wind" button to cycle through wind speed units: m/s, ft/min, Knots, Km/hr, Mph.
- **Temperature/Humidity (T/RH button):** Press the "T/RH" button to switch between temperature (°C/°F), relative humidity (RH%), dew point (DP-°C/DP-°F), and wind chill (WCL-°C/WCL-°F) displays.
- **Barometer (Baro button):** Press the "Baro" button to view atmospheric pressure readings. Long press

to browse the 16-group barometer record.

- **Altitude (Alt button):** Press the "Alt" button to view altitude readings. Units can be switched between meters and feet.
- **Mode button:** Short press to cycle through current, maximum, minimum, and average wind speed readings. Long press for 3 seconds to turn the backlight ON/OFF.



Figure 4: Detailed view of the anemometer's display, showing various measurement parameters, units, and button functions for comprehensive environmental monitoring.

3.3. Backlight Function

The device features a neat backlit display for visibility in low-light conditions.

- To activate or deactivate the backlight, press and hold the "Mode" button for approximately 3 seconds.



Figure 5: Comparison of the anemometer's display with the backlight off (left) and backlight on (right), illustrating improved visibility.

3.4. Barometric Pressure Record

The AI-100WM stores up to 16 groups of atmospheric pressure data, refreshing every hour. This feature is useful for analyzing barometric trends. The barometer can be calibrated to local pressure for accurate altitude readings.

3.5. Wind Chill and Dew Point

The device automatically displays a wind chill symbol when the wind temperature drops below 32°F (0°C). Dew point measurements assist in predicting fog conditions, particularly useful for activities like long-distance shooting.



Figure 6: The AIOMEST AI-100WM Anemometer being used outdoors near a body of water, demonstrating its portability and application in various environments.

3.6. Official Product Video

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Video 1: An official AIOMEST video demonstrating the features and operation of the AI-100WM handheld anemometer, including wind speed and temperature measurements.

4. MAINTENANCE

4.1. Cleaning

To clean the device, use a soft, dry cloth. Avoid using abrasive cleaners, solvents, or harsh chemicals, as these can damage the casing or internal components. Ensure the wind vane is free from dust and debris for accurate readings.

4.2. Storage

When not in use for extended periods, store the anemometer in its protective carrying case in a cool, dry place. Remove the batteries to prevent leakage and potential damage to the device.

4.3. Battery Replacement

The device will display a low battery reminder when the battery level is critical. Replace the batteries promptly following the instructions in Section 2.1 to ensure continuous and accurate operation.

5. TROUBLESHOOTING

- **Temperature readings seem inaccurate:** The device measures wind temperature, not ambient room temperature. Ensure the device is exposed to the airflow you wish to measure.
- **Altitude readings vary:** Altitude is converted from atmospheric pressure. Variations can occur due to changes in local barometric pressure and uneven air density. Calibrate the barometer to local pressure for the most accurate altitude readings.
- **Device not powering on:** Check if the batteries are correctly installed and have sufficient charge. Replace batteries if necessary.
- **Inconsistent wind speed readings:** Ensure the vane impeller is unobstructed and rotates freely. Hold the device steady and point it directly into the wind for optimal accuracy.

6. SPECIFICATIONS

Feature	Detail
Brand	AIOMEST
Model Number	AN-100WM
Material	Acrylonitrile Butadiene Styrene (ABS)
Item Weight	7 Ounces
Wind Speed Range	0.2~65 mph (approx. 0.32~104.6 km/h)
Wind Speed Accuracy	±5% at average
Temperature Range	14~86°F (approx. -10~30°C)
Barometer Record	16 groups
Power Source	2 x AAA Batteries (included)
Auto Power Off	After 10 minutes of no operation
Mounting	1/4-inch tripod mountable

7. WARRANTY INFORMATION

The AIOMEST AI-100WM Handheld Anemometer is covered by a standard manufacturer's warranty. For specific details regarding warranty duration, coverage, and terms, please refer to the warranty card included with your product packaging or visit the official AIOMEST website.

8. CUSTOMER SUPPORT

Should you encounter any issues or require technical assistance with your AIOMEST AI-100WM Anemometer, please contact AIOMEST customer support. You can typically find contact information on the official AIOMEST website or through the retailer from whom you purchased the product.