Temtop PMD371 & Airing2000 Bundle

Temtop PMD371 & Airing2000 Professional Air Quality Monitoring Bundle User Manual

Model: PMD371 & Airing2000 | Brand: Temtop

1. INTRODUCTION

This user manual provides detailed instructions for the operation and maintenance of the Temtop PMD371 and Airing2000 Professional Air Quality Monitoring Bundle. This bundle offers a comprehensive solution for precise particle and air quality monitoring in various environments, including laboratories, cleanrooms, and field applications. The PMD371 is designed for detailed particle detection and environmental monitoring, while the Airing2000 extends capabilities with advanced particulate and formaldehyde detection. Please read this manual thoroughly before using the devices to ensure proper function and safety.

2. SAFETY INFORMATION

- Do not expose the devices to extreme temperatures, humidity, or direct sunlight.
- Avoid dropping or subjecting the devices to strong impacts.
- Do not attempt to disassemble or modify the devices. Refer all servicing to qualified personnel.
- Keep the devices away from water and other liquids.
- Ensure proper ventilation when operating in enclosed spaces.
- Use only the specified power adapters and accessories provided by Temtop.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Temtop PMD371 Particle Counter
- Temtop Airing2000 Particulate Monitor
- USB Charging Cables (x2)
- Power Adapters (x2)
- User Manual (this document)
- Calibration Certificate (if applicable)

4. PRODUCT OVERVIEW

Image: The Temtop PMD371 (right) and Airing2000 (left) air quality monitors, showcasing their distinct designs and displays.

Image: Front view of the Temtop PMD371 Particle Counter, highlighting its display and control buttons.

Image: Front view of the Temtop Airing2000 Particulate Monitor, showing its ergonomic design and display.

4.1 Temtop PMD371 Particle Counter

The PMD371 is a precision instrument designed for multi-size particle detection and environmental monitoring. It features a robust all-metal construction for durability and reliable data collection.

- **Display Screen:** Shows real-time particle counts (0.3µm, 0.5µm, 1.0µm, 2.5µm, 5.0µm, 10.0µm), PM2.5, PM10, temperature, and humidity.
- **Power Button:** Turns the device on/off.
- **Function Buttons:** Navigation and selection for various modes and settings.
- **Inlet Port:** Where air samples are drawn in for analysis.
- **USB Port:** For charging and data transfer.

Image: The Temtop PMD371 highlighting its durable all-metal casing, ensuring robust performance.

Image: The Temtop PMD371 illustrating its compact size (170 x 110 x 48 mm) and lightweight design (1.76 lbs), emphasizing its portability.

4.2 Temtop Airing2000 Particulate Monitor

The Airing2000 is designed for comprehensive field monitoring, providing accurate measurements of PM2.5, PM10, TSP, temperature, humidity, and formaldehyde.

- **Display Screen:** Shows real-time readings for PM2.5, PM10, TSP, temperature, humidity, and HCHO.
- **Power Button:** For turning the device on/off.
- **Navigation Buttons:** For menu navigation and setting adjustments.
- **Air Inlet/Outlet:** Ports for air sampling.
- **Charging Port:** For recharging the internal battery.

Image: The Temtop Airing2000 showcasing its enterprise-grade precision, industrial-grade pumping sensor, comprehensive monitoring, instant data access, user-friendly operation, and portable design.

Image: The Temtop Airing2000 demonstrating its comprehensive monitoring capabilities, including particulate concentration (PM2.5, PM10, TSP), particle count (0.3µm, 0.5µm, 1.0µm), and environmental conditions (temperature, humidity).

Image: A detailed view of the Temtop Airing2000's internal pump-suction sensor, highlighting its advanced optics and wide particle size detection capabilities.

5. SETUP

5.1 Initial Charging

Before first use, fully charge both the PMD371 and Airing2000 devices. Connect the provided USB charging cables to the respective devices and plug them into the power adapters. A full charge typically takes 3-4 hours. The battery indicator on the screen will show charging status.

5.2 Powering On/Off

- To power on: Press and hold the **Power** button until the screen illuminates.
- To power off: Press and hold the **Power** button until the screen turns off.

5.3 Basic Settings

Upon first power-on, you may need to set the date, time, and preferred units. Navigate through the menu using the arrow buttons and confirm selections with the **OK** button.

- **Date & Time:** Set current date and time for accurate data logging.

- **Units:** Select preferred units for temperature (°C/°F) and particulate matter (μg/m³).

6. OPERATING INSTRUCTIONS

6.1 Taking Measurements with PMD371

1. **Placement:** Position the PMD371 in the area you wish to monitor. Ensure the air inlet is unobstructed.

2. **Start Measurement:** Press the **START/STOP** button to begin continuous monitoring. The screen will display real-time particle counts and environmental data.

3. **Interpreting Readings:**

   - **Particle Counts:** Displays the number of particles per liter for various sizes (0.3μm, 0.5μm, 1.0μm, 2.5μm, 5.0μm, 10.0μm).

   - **PM2.5/PM10:** Shows the concentration of particulate matter in micrograms per cubic meter (μg/m³).

   - **Temperature/Humidity:** Displays ambient temperature and relative humidity.

4. **Stop Measurement:** Press the **START/STOP** button again to pause or stop monitoring.

5. **Data Logging:** The device automatically logs data. You can access historical data through the menu.

Image: The Temtop PMD371's screen displaying detailed particle count data for various sizes (0.3µm, 0.5µm, 0.7µm, 1.0µm, 2.5µm, 5.0µm, 10.0µm) and PM2.5/PM10 concentrations.

6.2 Taking Measurements with Airing2000

1. **Placement:** Hold the Airing2000 or place it in the desired monitoring location. Ensure the air inlet is clear.

2. **Start Measurement:** The device typically starts measuring automatically upon power-on. Observe the real-time readings on the display.

3. **Interpreting Readings:**

   - **PM2.5/PM10/TSP:** Displays concentrations of various particulate matters.
   - **HCHO:** Shows formaldehyde concentration.
   - **Temperature/Humidity:** Displays ambient temperature and relative humidity.

4. **Data Management:** Use the navigation buttons to review historical data or adjust settings.

6.3 Data Transfer and Analysis

Both devices support data export. Connect the devices to a computer using the provided USB cables. The devices will appear as a removable storage device, allowing you to access logged data files (e.g., CSV format) for further analysis using spreadsheet software.

7. MAINTENANCE

7.1 Cleaning

- Wipe the exterior of the devices with a soft, dry cloth.
- Do not use abrasive cleaners, solvents, or strong chemicals.
- Ensure the air inlet and outlet ports are free from dust and debris. Use a soft brush or compressed air if necessary, but avoid forcing anything into the ports.

7.2 Storage

- Store the devices in a cool, dry place, away from direct sunlight and extreme temperatures.
- If storing for an extended period, ensure the batteries are partially charged (around 50%) to prolong battery life. Recharge every 3-6 months.

7.3 Calibration

The devices are factory calibrated. For professional applications requiring high accuracy, periodic re-calibration by authorized service centers is recommended. Refer to Temtop's official website or contact customer support for calibration services.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low battery; device malfunction.	Charge the device fully. If problem persists, contact support.
Inaccurate readings.	Sensor obstruction; environmental interference; need for calibration.	Ensure air inlets are clear. Move away from strong air currents or dust sources. Consider professional calibration.
Screen is blank or frozen.	Software error; low battery.	Recharge the device. Perform a hard reset (refer to specific device manual for button combination, usually holding power for 10+ seconds).
Cannot connect to computer.	Faulty USB cable; driver issue; device not in data transfer mode.	Try a different USB cable or port. Ensure the device is powered on and in data transfer mode if applicable.

9. SPECIFICATIONS

9.1 Temtop PMD371 Particle Counter

- **Particle Size Channels:** 0.3µm, 0.5µm, 1.0µm, 2.5µm, 5.0µm, 10.0µm
- **Measurement Range (PM2.5/PM10):** 0-999 µg/m³
- **Temperature Range:** -10°C to 50°C (14°F to 122°F)

- **Humidity Range:** 0-99% RH
- **Battery:** Rechargeable Lithium-ion
- **Dimensions:** Approximately 170 x 110 x 48 mm (6.7 x 4.3 x 1.9 in)
- **Weight:** Approximately 0.8 kg (1.76 lbs)
- **Data Storage:** Up to 5000 sets of data

9.2 Temtop Airing2000 Particulate Monitor

- **Particulate Measurement:** PM2.5, PM10, TSP
- **Formaldehyde (HCHO) Range:** 0-1.0 mg/m³
- **Temperature Range:** -10°C to 50°C (14°F to 122°F)
- **Humidity Range:** 0-99% RH
- **Battery:** Rechargeable Lithium-ion (Extended battery life)
- **Data Storage:** Ample storage for continuous logging
- **Sensor Type:** Industrial-grade pumping sensor

10. WARRANTY AND SUPPORT

10.1 Warranty Information

Temtop products typically come with a standard manufacturer's warranty covering defects in materials and workmanship. Please refer to the warranty card included with your product or visit the official Temtop website for specific warranty terms and conditions. Keep your purchase receipt as proof of purchase.

10.2 Customer Support

For technical assistance, troubleshooting, or service inquiries, please contact Temtop customer support:
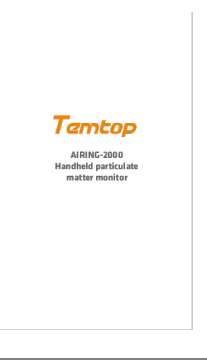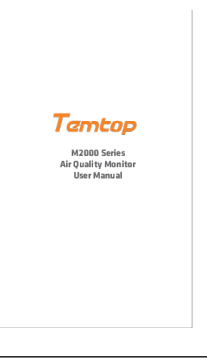
- **Website:** www.temtop.com
- **Email:** Refer to the contact section on the official website.
- **Phone:** Refer to the contact section on the official website.

When contacting support, please have your product model number (PMD371 & Airing2000) and purchase date ready.

Related Documents

Temtop
Air Station User Manual
P100/M100

[Temtop P100/M100 Air Station User Manual: Comprehensive Air Quality Monitoring](#)
User manual for the Temtop P100 and M100 Air Stations. Learn about monitoring PM2.5, PM10, CO2, temperature, and humidity with detailed explanations, specifications, and operational guides.

Temtop LKC-1000 Series Air Quality Monitor User Manual	[Temtop LKC-1000 Series Air Quality Monitor User Manual](#) User manual for the Temtop LKC-1000 Series Air Quality Monitor, detailing its functions, specifications, operation, and maintenance.
Temtop AIRING-2000 Handheld particulate matter monitor	[Temtop AIRING-2000 Handheld Particulate Matter Monitor User Manual](#) User manual for the Temtop AIRING-2000 handheld particulate matter monitor, detailing its features, specifications, operation, system settings, calibration, data management, troubleshooting, and warranty.
Temtop M2000 Series Air Quality Monitor User Manual	[Temtop M2000 Series Air Quality Monitor User Manual](#) User manual for the Temtop M2000 Series Air Quality Monitor, detailing its features, operation, specifications, and maintenance.