

ATO 9-in-1 Indoor Air Quality Monitor Meter

ATO 9-in-1 Indoor Air Quality Monitor Meter User Manual

Model: 9-in-1 Indoor Air Quality Monitor Meter

1. INTRODUCTION

This manual provides detailed instructions for the operation and maintenance of your ATO 9-in-1 Indoor Air Quality Monitor Meter. This device is designed to accurately detect various air quality parameters, including Carbon Dioxide (CO₂), Total Volatile Organic Compounds (TVOC), Formaldehyde (HCHO), Particulate Matter (PM_{2.5}, PM_{1.0}, PM₁₀), Air Quality Index (AQI), Temperature, and Humidity. Please read this manual thoroughly before use to ensure proper functionality and longevity of the product.

2. PRODUCT OVERVIEW

The ATO 9-in-1 Indoor Air Quality Monitor Meter is a versatile device equipped with high-precision independent sensors and a high-speed ARM processor for fast and accurate detection. It features a 4.3-inch TFT LCD display for easy readability and multiple interface options. The monitor also includes time, calendar, and alarm clock functions. A built-in large capacity rechargeable lithium battery ensures extended working time.



This image demonstrates the versatility of the ATO Air Quality Monitor, showcasing its use in diverse settings such as vehicles, bedrooms, offices, during home renovation or decoration, in newly constructed homes, and healthcare facilities.

3. WHAT'S IN THE BOX

- Main device (ATO 9-in-1 Indoor Air Quality Monitor Meter)
- USB charging cable
- User manual

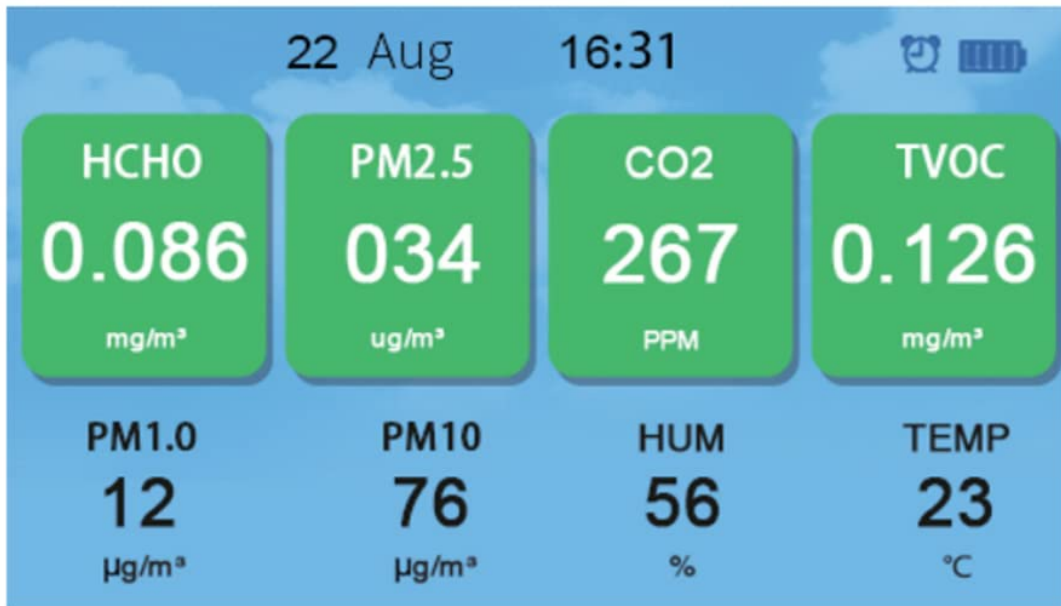
4. DEVICE LAYOUT AND CONTROLS

Familiarize yourself with the physical components and control buttons of the air quality monitor.

HCHO (formaldehyde) ideal range: ≤ 0.100 mg/m³ (0.08 ppm/m³)
TVOC ideal range: ≤ 0.600 mg/m³ (0.45 ppm/m³)

Chapter Five Mode of Operation

Interface 1



This is the main interface, the different background colors reflect different test levels.

This diagram illustrates the key components and display areas of the ATO Air Quality Monitor. Labels indicate the locations for HCHO, PM2.5, CO2, TVOC, PM1.0, PM10, Humidity, and Temperature readings, along with the battery symbol, alarm clock icon, and the Increase, Power/OK/Menu, and Decrease buttons.

1. HCHO Display Area
2. PM2.5 Display Area
3. CO2 Display Area
4. TVOC Display Area
5. PM1.0 Display Area
6. PM10 Display Area
7. Humidity Display Area
8. Temperature Display Area
9. Battery Symbol
10. Alarm Clock Icon
11. Increase Button (Switch 1)
12. Power / OK / Menu Button
13. Decrease Button (Switch)

5. SETUP

1. **Charging the Device:** Before first use, fully charge the monitor using the provided USB charging cable. Connect the cable to the device's charging port and a standard USB power adapter (not included). The battery symbol on the display will indicate charging status.
2. **Powering On/Off:** Press and hold the Power/OK/Menu button (12) for a few seconds to turn the device on or off.
3. **Initial Calibration:** Upon first power-on or after a long period of inactivity, the device may undergo a brief self-calibration process. Ensure the device is in a well-ventilated area during this time.

6. OPERATING INSTRUCTIONS

The monitor features multiple display interfaces to present air quality data. Use the Increase (11) and Decrease (13) buttons to navigate between these interfaces.

6.1. Interface 1: Main Real-time Readings



Interface 1 of the ATO Air Quality Monitor displays real-time measurements for HCHO, PM2.5, CO₂, TVOC, PM1.0, PM10, Humidity, and Temperature. The background colors dynamically change to reflect different air quality levels for each parameter.

This interface provides an immediate overview of all monitored parameters. The background color for each reading changes to indicate the current air quality level (e.g., green for good, yellow for moderate, red for poor).

6.2. Interface 2: Detailed Test Levels with Time



Interface 2 of the ATO Air Quality Monitor provides a comprehensive view including the current time and date, Air Quality Index (AQI), and detailed test levels for PM2.5, PM1.0, CO2, HCHO, TVOC, Humidity, and Temperature.

This interface displays the current time and date along with the Air Quality Index (AQI) and detailed test levels for PM2.5, PM1.0, CO2, HCHO, TVOC, Humidity, and Temperature. It offers a quick summary of overall air quality.

6.3. Interface 3: Hourly Trend Graph



Interface 3 of the ATO Air Quality Monitor displays the hourly trend for PM2.5 pollution concentration. This graph shows the last 8 hours of data for PM2.5, PM1.0, PM10, CO2, HCHO, and TVOC, with readings updated every hour.

This interface presents a graphical representation of the hourly trend for PM2.5 pollution concentration. The graph shows the last 8 hours of data for PM2.5, PM1.0, PM10, CO2, HCHO, and TVOC, allowing you to observe changes in air quality over time.

6.4. Setting Time and Alarm

Refer to the on-screen menu options by pressing the Power/OK/Menu button (12) to access settings for time, date, and alarm clock functions. Use the Increase (11) and Decrease (13) buttons to adjust values and the Power/OK/Menu button to confirm selections.

7. UNDERSTANDING READINGS

The monitor provides readings for various air quality parameters. Understanding these values is crucial for assessing your indoor environment.

- **CO₂ (Carbon Dioxide):** Measured in PPM (parts per million). High levels can indicate poor ventilation.
- **TVOC (Total Volatile Organic Compounds):** Measured in mg/m³. These are various chemicals and gases emitted from solids or liquids. An ideal range is typically ≤ 0.600 mg/m³ (0.45 ppm/m³).
- **HCHO (Formaldehyde):** Measured in mg/m³. A common indoor air pollutant. An ideal range is typically ≤ 0.100 mg/m³ (0.08 ppm/m³).
- **PM_{2.5}, PM_{1.0}, PM₁₀ (Particulate Matter):** Measured in $\mu\text{g}/\text{m}^3$. These refer to airborne particles of different sizes. Lower values indicate cleaner air.
- **AQI (Air Quality Index):** A numerical scale used to report daily air quality. Higher AQI values indicate greater levels of air pollution and greater health concern.
- **Temperature:** Measured in °C or °F.
- **Humidity:** Measured in %.

8. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the device. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** To prolong battery life, avoid fully discharging the battery frequently. Charge the device regularly, especially if it will be stored for an extended period.
- **Sensor Care:** Do not obstruct the air inlets or outlets on the device, as this can affect sensor accuracy.

9. TROUBLESHOOTING

- **Device not turning on:** Ensure the device is fully charged. Connect it to a power source using the USB cable and try again.
- **Inaccurate readings:** Ensure the device is placed in a stable environment, away from direct airflow, strong odors, or extreme temperature changes. Allow time for sensors to stabilize, especially after moving the device.
- **Display issues:** If the display is unresponsive or shows abnormal characters, try restarting the device by holding the Power/OK/Menu button.
- **Short battery life:** Ensure the device is fully charged. Battery performance can degrade over time with repeated charge cycles.

10. SPECIFICATIONS

Manufacturer	ATO
ASIN	B0BLNHDFH9
Date First Available	November 7, 2022

Display	4.3 inch TFT LCD
Detected Parameters	CO2, TVOC, AQI, HCHO, PM2.5, PM1.0, PM10, Temperature, Humidity
Power Source	Built-in rechargeable lithium battery

11. CUSTOMER SUPPORT

If you have any questions, require assistance, or encounter issues with your ATO 9-in-1 Indoor Air Quality Monitor Meter, please do not hesitate to contact us. We are committed to providing prompt support and will respond to your inquiries within 12 hours.

For support, please refer to the contact information provided with your purchase or visit the official ATO website.