

FTVOGUE ZN-MT32

FTVOGUE ZN-MT32 Air Quality Meter User Manual

Model: ZN-MT32

INTRODUCTION

The FTVOGUE ZN-MT32 is a versatile 18-in-1 air quality meter designed for indoor environment monitoring. It utilizes semiconductor and infrared technology to provide accurate measurements of various air quality parameters. This device features a 2.8-inch HD LCD screen for clear data display, a built-in 2000mAh rechargeable battery, and data storage capabilities.

This manual provides essential information for the proper setup, operation, and maintenance of your air quality meter.

PRODUCT FEATURES

- **18-in-1 Measurement:** Accurately measures Air Quality Index (AQI), CO₂, HCHO, TVOC, PM_{0.3}, PM_{1.0}, PM_{2.5}, PM_{5.0}, PM₁₀, temperature, and humidity.
- **High Sensitivity Sensors:** Equipped with sensitive sensors that provide precise readings of CO₂ (1PPM), TVOC (0.01mg/m³), HCHO (0.01mg/m³), and PM (1µg/m³).
- **2.8-inch HD LCD Screen:** Displays 13 data points in real-time with color-coded indicators for easy interpretation of air quality status.
- **Data Storage & Analysis:** Records PM particle ratios, displays data curves for PM_{2.5}, HCHO, TVOC, and CO₂. Connects to a computer for data extraction, saving up to one year of records.
- **Rechargeable Battery:** Built-in 2000mAh Li-ion battery provides approximately 7 hours of continuous operation. Features a Type-C charging port.

PACKAGE CONTENTS

- 1 x FTVOGUE ZN-MT32 Air Quality Meter
- 1 x USB Type-C Cable
- 1 x User Manual

SETUP

1. Charging the Device

Before first use, fully charge the air quality meter. Connect the provided USB Type-C cable to the charging port on the device and plug the other end into a standard USB power adapter (DC5V 1A, not included) or a computer USB port.



Figure 1: Air Quality Meter with Type-C Charging Port

The battery indicator on the screen will show charging status. A full charge typically takes several hours. The device can operate continuously for approximately 7 hours on a full charge.

2. Initial Power On

Press and hold the power button (usually located on the side or front) for a few seconds until the screen illuminates. The device will perform a self-check and then display the main interface with real-time air quality data.

LARGE-CAPACITY BATTERY POWER-SAVING FUNCTION WHEN THE SCREEN IS OFF

TYPE-C CHARGING PORT, WITH A BUILT-IN RECHARGEABLE
2000MAH LITHIUM BATTERY, LONG STANDBY TIME OF 12 - 15 HOURS



Figure 2: 2.8-inch HD Display showing real-time data

Allow the device to stabilize for a few minutes after powering on to ensure accurate readings, especially for initial calibration of certain sensors.

OPERATING INSTRUCTIONS

The FTVOGUE ZN-MT32 features a simple interface controlled by a single button. The following instructions detail how to navigate and utilize its functions:

- Single Click:** On the main interface, a single click switches between Celsius and Fahrenheit temperature units.
- Double Click:** Toggles the sound (beeps/alerts) on or off.
- Triple Click:** Enters the calibration interface. (*Refer to advanced settings for calibration procedures if needed.*)
- Quadruple Click:** Enters screen-off mode. A single click will turn the screen back on.
- Quintuple Click:** Enters the curve interface to view historical data trends.
 - While in the curve interface, a single click switches between different data curves (e.g., PM2.5, HCHO, TVOC, CO2).

- Another quintuple click returns to the main interface.



Figure 3: Historical Data Curve Display

6. **Sextuple Click:** Enters the PM2.5 comparison interface.

- A double click records the first group of 30-second evaluation data.
- Another double click records the average data of 2 groups of 30 seconds.
- A quintuple click returns to the main interface.

2.8-INCH TFT COLOR HIGH-DEFINITION DISPLAY THE ENVIRONMENT STATE IS CLEAR AT A GLANCE

18 SETS OF DATA DISPLAY - AQI VALUES AND SPECIFIC VALUES OF EACH PARAMETER, UPDATED IN REAL - TIME; COLOR GRADING - NOT ONLY SHOWS SPECIFIC VALUES BUT ALSO ALLOWS YOU TO QUICKLY UNDERSTAND THE ENVIRONMENTAL SITUATION THROUGH DIFFERENT COLORS.



Figure 4: Particle Detection Comparison Interface

7. **Septuple Click:** Enters the temperature adjustment interface.
- A single click increases the temperature by 1 degree Celsius.
 - A double click decreases the temperature by 1 degree Celsius.
 - A quintuple click exits the interface, or it will exit automatically after five seconds of inactivity.

Understanding the Display

The 2.8-inch HD screen provides a comprehensive overview of your indoor air quality. Key indicators include:

- **Temperature and Humidity:** Displayed at the top left and right.
- **AQI (Air Quality Index):** A composite value indicating overall air quality.
- **PM Values:** PM0.3, PM1.0, PM2.5, PM5.0, PM10 (Particulate Matter) in µg/m³.
- **Gas Concentrations:** CO2 (Carbon Dioxide in ppm), CO (Carbon Monoxide in ppm), HCHO (Formaldehyde in mg/m³), TVOC (Total Volatile Organic Compounds in mg/m³), C6H6 (Benzene in mg/m³).

WARM AND COLD DRY AND WET READ THE AIRHEALTHY BREATHING IS ONE STEP CLOSER



Figure 5: Sensing System and Display Overview

The display uses color grading to visually represent air quality status, making it easy to quickly assess the environment.

Contrast

DATA EVALUATION INTELLIGENT ANALYSIS, CONCISE COMPARISON STYLE

VS 30 seconds later, the air quality data speaks for itself!



Figure 6: Color Grading Display for Air Quality Status

Data Storage and Export

The device can store up to one year of detection data. To extract data records, connect the air quality meter to a computer using the provided USB Type-C cable. The device will appear as a storage device, allowing you to access and export the data files for further analysis.

18 REAL-TIME VIEWING OF ITEM VALUES

UPDATE 18 ITEMS (TEMPERATURE, HUMIDITY, PARTICULATE MATTER, CO, CO₂, HCHO, C₆H₆ (TVOC)) OF DETECTION DATA IN REAL-TIME EVERY SECOND; 1 ITEM OF AQ COMPREHENSIVE VALUE.



VIEW THE AQL COMPOSITE INDEX

BASED ON VARIOUS NUMERICAL VALUES, INTELLIGENTLY CALCULATE THE COMPREHENSIVE AIR QUALITY INDEX. THE ENVIRONMENTAL SITUATION IS CLEAR AT A GLANCE.



COLOR GRADING DISPLAY

BY CHANGING THE COLOR OF EACH VALUE ON THE SCREEN, QUICKLY UNDERSTAND THE INDOOR ENVIRONMENT.



Figure 7: Connecting to PC for Data Export

MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use abrasive cleaners, solvents, or immerse the device in water.
- **Storage:** Store the device in a cool, dry place away from direct sunlight, extreme temperatures, and

high humidity.

- **Battery Care:** To prolong battery life, avoid fully discharging the battery frequently. Charge the device regularly, even if not in use for extended periods.
- **Sensor Protection:** Avoid exposing the sensor vents to dust, liquids, or strong chemical fumes, as this can affect accuracy and device longevity.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low battery or no charge.	Connect the device to a power source using the USB Type-C cable and charge it for at least 30 minutes before attempting to power on again.
Inaccurate or fluctuating readings.	<ul style="list-style-type: none">• Device not stabilized after power-on.• Sensor vents blocked.• Exposure to strong air currents or contaminants.• Needs calibration.	<ul style="list-style-type: none">• Allow 5-10 minutes for stabilization after powering on.• Ensure sensor vents are clear.• Move the device to a stable environment away from drafts or direct sources of pollution.• Perform calibration if necessary (refer to "Operating Instructions" for calibration interface access).
Screen is off.	Device is in screen-off mode or powered off.	Single click the button to turn the screen back on if in screen-off mode. If completely off, press and hold the power button to restart.
Cannot connect to computer for data export.	Faulty USB cable or port, or incorrect connection.	Try a different USB Type-C cable or a different USB port on your computer. Ensure the cable is securely connected to both the device and the computer.

SPECIFICATIONS

Parameter	Value
Model	ZN-MT32
Temperature Range	0-70°C
Display	LCD screen with backlight (2.8-inch HD)
Operating Voltage	DC5V 1A (Type-C USB)
Operating Current	180mA

Parameter	Value
Sensors	PM2.5 infrared sensor, semiconductor sensor
Battery	1 x 3.7V rechargeable Li-ion battery, 2000mAh
Battery Life	Approx. 7 hours continuous operation
Dimensions	Approx. 90 x 70 x 35mm / 3.54 x 2.76 x 1.38in
Material	ABS
Color	Black
Item Weight	281 Grams

WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided with your purchase or contact FTVOGUE customer service. Contact details can typically be found on the manufacturer's official website or through your retailer.

Manufacturer: FTVOGUE

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