Inkbird AK3

INKBIRDPLUS AK3 Indoor Air Quality Monitor User Manual

Model: AK3

1. INTRODUCTION

This manual provides detailed instructions for the proper use and maintenance of your INKBIRDPLUS AK3 Indoor Air Quality Monitor. This device is designed to accurately detect and display levels of Carbon Dioxide (CO2), Volatile Organic Compounds (TVOC), Formaldehyde (HCHO), temperature, and relative humidity in real-time. Please read this manual thoroughly before operating the device to ensure optimal performance and longevity.

Figure 1: INKBIRDPLUS AK3 Air Quality Monitor displaying various environmental parameters.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Real-Time Measurement:** Detects Carbon Dioxide (CO2), Volatile Organic Compounds (TVOC), Formaldehyde (HCHO), temperature, and humidity with real-time updates on a colorful display.
- **High Accuracy:** Utilizes a high-precision infrared sensor and a built-in high-performance chip for accurate CO2 measurements.
- **Smart Alarm System:** Provides visual (color indicator) and audible alerts for different air quality levels (GOOD, OK, POOR).
- **Long Battery Life:** Equipped with a 1200mAh built-in lithium battery, offering 6 to 8 hours of operation on a full charge. Can also operate while connected to power.
- **Wide Application:** Suitable for monitoring air quality in various indoor environments such as homes, offices, schools, hospitals, and restaurants.

2.2 Device Components

The INKBIRDPLUS AK3 monitor features a clear 3.5-inch LCD screen for easy readability and intuitive display of all measured parameters.

Figure 2: Overview of the parameters measured by the monitor.

3. SETUP AND INITIAL USE

3.1 Charging the Device

Before first use, fully charge the monitor. Connect the provided USB cable to the device's charging port and a suitable USB power adapter (not included). A full charge takes approximately 2.5 hours and provides 6 to 8 hours of continuous operation. The device can be used while charging.

Figure 3: Charging the INKBIRDPLUS AK3 monitor.

3.2 Powering On/Off

To power on the device, press and hold the power button located on the side or back of the unit until the display illuminates. To power off, press and hold the power button again until the display turns off.

4. OPERATING INSTRUCTIONS

4.1 Display Readings

The 3.5-inch LCD screen displays the following parameters:

- **CO2 (Carbon Dioxide):** Measured in parts per million (ppm).
- **TVOC (Total Volatile Organic Compounds):** Measured in milligrams per cubic meter (mg/m³).

- **HCHO (Formaldehyde):** Measured in milligrams per cubic meter (mg/m³).
- **Temperature:** Displayed in Celsius or Fahrenheit.
- **Relative Humidity:** Displayed as a percentage (%).

Readings are updated every second. For accurate assessment of overall air quality, it is recommended to observe measurements over a period of at least 60 minutes, as air conditions can fluctuate.

4.2 Air Quality Indicator

The device categorizes air quality into three levels, indicated by color and audible alerts:

- **GOOD:** Green indicator. Air quality is within acceptable limits.
- **OK:** Yellow indicator. The device will sound "Bee--Bee" twice. This indicates that air quality is deteriorating and attention may be required.
- **POOR:** Red indicator. The device will sound "Bee--Bee--Bee" twice. This indicates poor air quality, and action should be taken, such as ventilation.

5. PLACEMENT AND APPLICATION

The INKBIRDPLUS AK3 monitor is versatile and can be used in various indoor settings. For best results, place the monitor in a central location within the area you wish to monitor, away from direct drafts, heat sources, or areas with high moisture.

Figure 4: Examples of suitable application environments for the monitor.

The device features an anti-slip bottom for stable placement on flat surfaces and a hook design for hanging, offering flexible installation options.

Figure 5: Anti-slip bottom and hook design for versatile placement.

6. MAINTENANCE

- Keep the device clean by wiping it with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- Avoid blocking the ventilation openings on the device, as this can affect measurement accuracy.
- Store the monitor in a cool, dry place when not in use.
- Do not expose the device to extreme temperatures, direct sunlight, or high humidity.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low battery or no power.	Charge the device using the USB cable. Ensure the power adapter is working.

Problem	Possible Cause	Solution
Inaccurate or fluctuating readings.	Sensor interference, device not calibrated, or environmental changes.	Ensure the device is placed away from direct drafts, strong odors, or heat sources. Allow the device to stabilize for at least 60 minutes. If issues persist, contact support.
No audible alarm.	Alarm function may be disabled or volume is too low.	Check device settings to ensure the alarm is enabled. Refer to the full product manual for specific button functions to adjust alarm settings.

8. SPECIFICATIONS
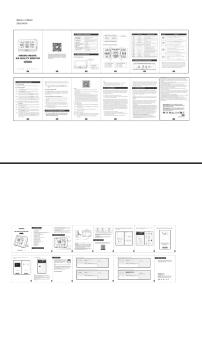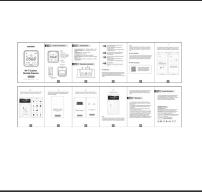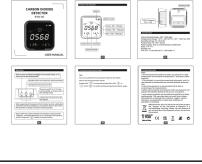
Parameter	Value
Model Number	AK3 (CO2 Monitor)
Brand	Inkbird
Dimensions	13.8 x 10.2 x 7.2 cm
Item Weight	224 g
CO2 Measurement Range	350~2000 ppm
TVOC Measurement Range	0.000-2.000 mg/m³
HCHO Measurement Range	0.000-1.000 mg/m³
Temperature Measurement Range	0°C~99°C
Humidity Measurement Range	0~99% RH
Battery	1200mAh Built-in Lithium Battery
Battery Life	6-8 hours (fully charged)
Charging Time	Approx. 2.5 hours
Power Source	AC/DC (USB powered)
Display	3.5-inch LCD Color Display

9. WARRANTY AND SUPPORT

The INKBIRDPLUS AK3 Air Quality Monitor comes with a standard manufacturer's warranty. For specific warranty details, please refer to the warranty card included with your product or visit the official Inkbird website. For technical support, troubleshooting assistance, or any inquiries regarding your device, please contact Inkbird customer service through their official channels.

Contact Information: Please refer to the packaging or the official Inkbird website for the most up-to-date contact details.

Related Documents - AK3

	[INKBIRD IAQM-129-W Indoor Air Quality Monitor User Manual](#) User manual for the INKBIRD IAQM-129-W Indoor Air Quality Monitor, detailing its features, specifications, operation, app connectivity, FCC compliance, and warranty information.
	[INKBIRD IAQM-129-W Indoor Air Quality Monitor User Manual](#) User manual for the INKBIRD IAQM-129-W Indoor Air Quality Monitor, detailing technical specifications, operation instructions, app connection, and FCC compliance.
	[INKBIRD HM-058 Air Quality Detector User Manual - Specifications, Operation, and App Guide](#) Comprehensive user manual for the INKBIRD HM-058 Air Quality Detector. Learn about its specifications, how to operate the device, connect to the INKBIRD app, export data, and understand the product warranty.
	[INKBIRD PTH-9CW Wi-Fi Carbon Dioxide Detector User Manual](#) Comprehensive user manual for the INKBIRD PTH-9CW Wi-Fi Carbon Dioxide Detector, covering specifications, operation, calibration, warnings, and product warranty. Learn how to monitor CO2 levels, temperature, and humidity with smart connectivity.
	[INKBIRD PTH-9C Carbon Dioxide Detector User Manual](#) User manual for the INKBIRD PTH-9C Carbon Dioxide Detector, covering operation, customization, specifications, and warranty information.
	[INKBIRD IAM-O2 Smart Indoor Air Quality Monitor User Manual](#) Comprehensive user manual for the INKBIRD IAM-O2 Smart Indoor Air Quality Monitor, detailing features, specifications, operation, maintenance, and troubleshooting for optimal indoor air quality.