

## INKBIRDPLUS PTH-9C (3-in-One)

# INKBIRDPLUS Indoor CO2 Detector (PTH-9C) User Manual

Comprehensive guide for your INKBIRDPLUS Air Quality Monitor

## 1. INTRODUCTION

The INKBIRDPLUS Indoor CO2 Detector (Model PTH-9C) is a multifunctional air quality monitor designed to accurately detect and display the current CO2 concentration, temperature, and relative humidity in the air. This device provides essential information to help you maintain optimal indoor air quality in various environments such as grow tents, wine cellars, homes, offices, and cars.

Understanding your indoor air quality is crucial for health and comfort. The PTH-9C offers a clear, distinct LED screen for easy data viewing and features an alarm system to alert you when CO2 levels exceed customized safe values.

## 2. PRODUCT FEATURES

- **Premium Detector:** Accurately detects CO2 concentration, temperature, and humidity.
- **CO2 Concentration Stage & Sound Alarm:** Features 3 stages (Normal: 400-700 ppm, Warning: 700-1500 ppm, Dangerous: 1500-5000 ppm) with a customizable sound alarm for unsafe CO2 levels.
- **Convenient Calibration:** Supports calibration for accurate measurements using a simple three-button press in an open environment. Utilizes an NDIR CO2 sensor.
- **Long Battery Standby:** Equipped with a 2400 mAh lithium battery for extended continuous use. Features a large, distinct LED screen for easy viewing.
- **Wide Application:** Portable design with a hanging hole, suitable for grow rooms, offices, kitchens, schools, cellars, and cars.

## 3. SETUP GUIDE

Follow these steps to set up your INKBIRDPLUS CO2 Detector:

1. **Unboxing:** Carefully remove the device from its packaging.
2. **Initial Charge:** Before first use, ensure the device is fully charged using the provided USB cable. Connect the USB-C port on the device to a compatible power adapter (5V-1A input).
3. **Power On:** Press and hold the Power Button located on the top of the device to turn it on.
4. **Initial Calibration:** For optimal accuracy, it is highly recommended to perform an initial calibration in an open, well-ventilated environment (e.g., outdoors).
  - Ensure the device is shut down.
  - Press the three buttons on the top of the device simultaneously.

- Allow the device to stand for approximately 200 seconds in the open environment for calibration to complete.

5. **Placement:** Place the monitor in your desired location. A hanging hole on the back allows for wall mounting.



Front view of the INKBIRDPLUS Indoor CO2 Detector, displaying CO2, temperature, and humidity readings.



Back view of the INKBIRDPLUS Indoor CO2 Detector, showing the power button, hanging hole, and USB-C charging port.

## 4. OPERATING INSTRUCTIONS

The INKBIRDPLUS CO2 Detector provides real-time air quality data on its clear LED screen.

## 4.1 Display Overview

The main display shows:

- **CO2 Concentration (ppm):** Large central number indicating parts per million.
- **Temperature:** Displayed in Celsius or Fahrenheit.
- **Relative Humidity:** Displayed as a percentage.
- **Battery Indicator:** Shows current battery level.
- **Alarm Status:** Indicates if the alarm is active.



Visual representation of the detector's capabilities: Temperature, CO2, Humidity, Backlit LCD, °C/°F Selection, Calibration, CO2 Alarm, USB Charging.

## 4.2 CO2 Concentration Stages and Alarm

The device categorizes CO2 levels into three stages, indicated by color changes on the display and an optional audible alarm:

- **Normal Stage:** 400-700 ppm (Green indication)
- **Warning Stage:** 700-1500 ppm (Yellow indication)
- **Dangerous Stage:** 1500-5000 ppm (Red indication)

### 3 STAGES OF CO<sub>2</sub> CONCENTRATION



Illustrates the Normal (400-700 ppm), Warning (700-1500 ppm), and Dangerous (1500-5000 ppm) CO<sub>2</sub> concentration stages.

The device will emit an audible alarm when the detected CO<sub>2</sub> concentration exceeds the safe value you have customized. To set or adjust the alarming value, double-press the appropriate button (refer to the device's physical buttons for exact labeling, typically the 'UP' button).



The detector will alarm when CO<sub>2</sub> concentration reaches a preset value. Double-press to enter alarming value settings.

#### 4.3 Temperature Unit Selection

To switch between Celsius (°C) and Fahrenheit (°F), press the 'UP' button (often labeled with a '+' symbol) on the top of the device.

## 4.4 Charging the Device

The device is powered by a built-in 2400 mAh lithium battery. When the battery indicator shows low power, connect the device to a 5V-1A power source using the USB-C cable. Due to the presence of three sensors, continuous operation is best achieved by keeping the device plugged in.



The INKBIRDPLUS CO2 Detector features convenient USB charging with its 2400 mAh large-capacity battery.

## 4.5 Video Demonstration

Watch this video for a quick overview of the INKBIRDPLUS Air Quality Monitor's features and a demonstration of its responsiveness to air quality changes.

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Video demonstrating the INKBIRDPLUS Air Quality Monitor, highlighting its CO2 detection, temperature, humidity, and alarm features. The video shows a test with a blown-out candle to illustrate rapid air quality change detection.

## 5. MAINTENANCE

To ensure the longevity and accuracy of your INKBIRDPLUS CO2 Detector, follow these maintenance guidelines:

- **Cleaning:** Gently wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents, as they may damage the screen or casing.
- **Storage:** When not in use for extended periods, store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Regular Calibration:** While the device uses an NDIR sensor for high accuracy, periodic calibration in a fresh air environment (as described in the Setup Guide) is recommended to maintain optimal performance over time.
- **Avoid Obstructions:** Ensure the sensor vents on the device are not blocked by dust, debris, or other objects, as this can affect reading accuracy.

## 6. TROUBLESHOOTING

If you encounter issues with your INKBIRDPLUS CO2 Detector, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Inaccurate CO2/Temp/Humidity Readings	Needs calibration; sensor obstruction; extreme environmental conditions.	Perform calibration in fresh air. Ensure sensor vents are clear. Move device to a stable environment.
Device Not Turning On	Low battery; faulty charging cable/adaptor.	Charge the device fully. Try a different USB-C cable and power adapter.
Alarm Sounds Frequently	High CO2 levels; alarm threshold set too low.	Improve ventilation in the area. Adjust the alarm threshold (double-press the 'UP' button).
Display is Dim or Unresponsive	Low battery; device malfunction.	Charge the device. If problem persists, contact customer support.

If the issue persists after attempting these solutions, please contact INKBIRDPLUS customer support for further assistance.

## 7. SPECIFICATIONS

Feature	Detail
Product Model Number	PTH-9C (3-in-One)
Product Dimensions	1.57"D x 3.86"W x 3.54"H (4.72 x 3.14 x 1.57 inches; 10.58 ounces)
Power Source	Battery Powered (Built-in Lithium Battery 2400 mAh)
Input Voltage	DC 5V-1A
Sensor Type	Non Dispersive Infrared (NDIR) for CO2
CO2 Measurement Range	400-5000 ppm
Operating Humidity	Up to 95%
Alarm Type	Audible
Color	Black

## 8. WARRANTY AND SUPPORT

INKBIRDPLUS products are designed for reliability and performance. For specific warranty details and customer support, please refer to the warranty card included with your product or visit the official INKBIRDPLUS website. Our support team is available to assist with any questions or issues you may encounter. You can also find additional resources and FAQs on the [INKBIRDPLUS Store on Amazon](#).

