AOPUTTRIVER AP-535G

AOPUTTRIVER AP-535G Portable Ammonia Gas Detector User Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the safe and effective use of the AOPUTTRIVER AP-535G Portable Ammonia Gas Detector. This device is designed to accurately measure ammonia (NH3) gas concentrations, ambient temperature, and relative humidity in various environments. Please read this manual thoroughly before operating the device to ensure proper function and safety.

Image 1.1: Overview of the AOPUTTRIVER AP-535G Ammonia Gas Detector highlighting its core functions: Ammonia Gas Monitor, Humidity, Temperature, Audible Alarm, C/F Selection.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury and avoid damage to the device:

- Do not attempt to open or modify the device. Internal components are not user-serviceable.
- Keep the device away from water and other liquids to prevent electrical shock or damage.
- Operate the device within the specified temperature and humidity ranges.
- Ensure the device is charged using the provided USB cable and a compatible power adapter.

- This device is for monitoring purposes only and should not be used as a substitute for professional safety equipment or procedures.
- Avoid exposing the sensor to extreme concentrations of gas, which may cause damage or inaccurate readings.

3. PRODUCT OVERVIEW

3.1 Package Contents

- AOPUTTRIVER AP-535G Ammonia Gas Detector
- USB Type-C Charging Cable
- User Manual

3.2 Key Features

- **Sensitive & High-Precision:** Equipped with a professional electrochemical sensor for 0-100 ppm NH3 detection with +/-5% accuracy and 0.1ppm resolution. Response time is less than 120 seconds.
- **Adjustable Alarm Settings:** Features sound and light dual alarms with customizable alarm thresholds.
- **Backlit LCD Display:** A 4.3-inch backlit LCD provides clear readings in various lighting conditions.
- **Humidity & Thermometer:** Measures indoor temperature (-10-50°C, +/-2°C accuracy) and relative humidity (0-95%). Temperature units are switchable between Celsius and Fahrenheit.
- **Versatile Placement:** Includes a hanging hole and a 180° bracket for desktop or wall mounting.

3.3 Device Layout and Display

Familiarize yourself with the device's display and button functions:

Screen & Button Description

1. Ammonia chemical formula
2. Ammonia concentration display area
3. Ammonia gas unit
4. Level 1 alarm indication
5. Level 2 alarm indication
6. Backlight display
7. Battery power indicator
8. Temperature unit
9. Temperature value display area
10. Humidity unit
11. Humidity value display area
12. Power button
13. Alarm and backlight button
14. Mode and up button
15. C/F conversion and down button

Image 3.1: Detailed view of the AP-535G's display and control buttons, with numbered labels indicating specific functions.

Table 3.1: Display and Button Functions

No.	Description
1	Ammonia chemical formula (NH3)
2	Ammonia concentration display area
3	Ammonia gas unit (PPM)
4	Level 1 alarm indication (AL1)
5	Level 2 alarm indication (AL2)
6	Backlight display indicator
7	Battery power indicator
8	Temperature unit (°C/°F)
9	Temperature value display area

No.	Description
10	Humidity unit (%RH)
11	Humidity value display area
12	Power button
13	Alarm and backlight button
14	Mode and up button
15	°C/°F conversion and down button

4. SETUP

4.1 Charging the Device

The AP-535G is equipped with a rechargeable battery. Before first use, or when the battery indicator shows low power, charge the device:

1. Connect the provided USB Type-C cable to the charging port on the side of the device.
2. Connect the other end of the USB cable to a standard USB power adapter (not included) or a computer USB port.
3. The battery indicator on the display will show charging status. A full charge typically takes several hours.
4. Once fully charged, disconnect the charging cable.

Image 4.1: The AP-535G device highlighting its USB Type-C charging port and overall dimensions.

4.2 Initial Power On

To power on the device:

1. Press and hold the Power button (12) located at the bottom left of the device.
2. The LCD display will illuminate and begin a self-calibration process.
3. Allow the device to stabilize for approximately 120 seconds for accurate readings.

5. OPERATION

5.1 Power On/Off

- **Power On:** Press and hold the Power button (12) until the display turns on.
- **Power Off:** Press and hold the Power button (12) until the display turns off.

5.2 Reading Measurements

Once powered on and stabilized, the device will continuously display:

- Ammonia concentration in PPM (2).
- Relative humidity in %RH (11).
- Temperature in °C or °F (9).

5.3 Adjusting Alarm Settings

The device features two alarm levels (AL1 and AL2) that can be set to alert you when ammonia concentration exceeds a specified threshold. When an alarm is triggered, the device will emit a beep and flash its LED light.

Image 5.1: The AP-535G illustrating its sound and light dual alarm system, which activates when preset ammonia levels are exceeded.

1. Press the Mode button (14) to cycle through display modes until 'AL1' or 'AL2' appears.
2. While 'AL1' or 'AL2' is displayed, press the Alarm button (13) to enter setting mode. The current alarm value will flash.
3. Use the Mode button (14) to increase the value and the °C/°F button (15) to decrease the value.
4. Press the Alarm button (13) again to confirm the setting and exit.

5.4 Switching Temperature Units (°F/°C)

To switch between Celsius and Fahrenheit temperature units:

- Briefly press the °C/°F button (15). The temperature unit on the display will change accordingly.

5.5 Backlight Control

The device features a backlight for improved visibility in low-light conditions.

- Briefly press the Alarm button (13) to toggle the backlight on or off.

Image 5.2: The AP-535G's 4.3-inch LCD display, demonstrating its backlight function for clear visibility in various lighting conditions.

6. MAINTENANCE

6.1 Cleaning

To maintain the device's performance and appearance:

- Wipe the exterior of the device with a soft, dry cloth.
- Do not use abrasive cleaners, solvents, or corrosive chemicals.
- Ensure no liquids enter the sensor openings or charging port.

6.2 Battery Care

- Charge the device regularly to prolong battery life.
- Avoid completely draining the battery frequently.
- If storing the device for an extended period, charge it to approximately 50% and recharge every few months.

7. TROUBLESHOOTING

If you encounter issues with your AP-535G, refer to the following common problems and solutions:

Table 7.1: Troubleshooting Guide

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 not stabilized; sensor obstruction; extreme environmental conditions	Allow 120 seconds for stabilization after power-on. Ensure sensor is clear. Operate within specified temperature/humidity.
Alarm not sounding	Alarm levels set too high; sound disabled	Check and adjust alarm thresholds (AL1, AL2). Ensure sound is enabled (if applicable).
Display is dim or blank	Backlight off; low battery	Press the Alarm button (13) to toggle backlight. Charge the device.

8. SPECIFICATIONS

Image 8.1: Technical parameters of the AP-535G Ammonia Gas Detector, including gas detection type, measuring range, resolution, and response time.
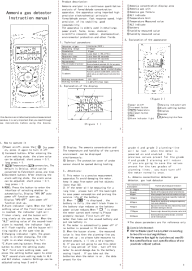
Table 8.1: Technical Specifications

Parameter	Value
Model Number	AP-535G-US
Gas Detection	Ammonia (NH3)
Measuring Range	0-100 ppm
Resolution	0.1 ppm
Accuracy	+/-5%

Parameter	Value
Response Time	Less than 120 seconds
Temperature Range	-10-50°C (14-122°F)
Temperature Accuracy	+/-2°C
Humidity Range	0-95% RH
Display	4.3-inch Backlit LCD
Power Source	Rechargeable Battery (USB Type-C)
Item Weight	0.8 Pounds (approx. 363g)
Package Dimensions	7.28 x 5.98 x 2.32 inches
Manufacturer	AOPUTTRIVER

9. WARRANTY AND SUPPORT

AOPUTTRIVER products are designed for reliability and performance. For warranty information, technical support, or service inquiries, please refer to the contact information provided with your purchase or visit the official AOPUTTRIVER website. Keep your purchase receipt as proof of purchase for warranty claims.

Related Documents - AP-535G

[AOPUTTRIVER AR8500 Ammonia Gas Detector User Manual and Technical Specifications](#)
Comprehensive instruction manual for the AOPUTTRIVER AR8500 Ammonia Gas Detector. Covers product description, technical parameters, operation, maintenance, and safety precautions for this precision measurement apparatus.

[AOPUTTRIVER AP-570C-APP Bluetooth Connection Guide](#)
Step-by-step instructions for connecting the AOPUTTRIVER AP-570C-APP clamp meter to your smartphone via Bluetooth. Includes troubleshooting tips for a seamless setup.

[Quick Start Guide - AOPUTTRIVER Infrared Thermometer AP-2732](#)
Get started quickly with your AOPUTTRIVER Infrared Thermometer (AP-2732). This guide covers battery installation, basic operation, and understanding the display readings for models like the AP-2732.

[AOPUTTRIVER AR8500 Ammonia Gas Detector User Manual and Technical Specifications](#)
Comprehensive instruction manual for the AOPUTTRIVER AR8500 Ammonia Gas Detector. Covers product description, technical parameters, operation, maintenance, and safety precautions for this precision measurement apparatus.

[Aquaread BlackBox Mk2 Instruction Manual: Water Quality Data Converter Setup & Operation Guide](#)
This comprehensive instruction manual from Aquaread Ltd. details the setup, operation, and maintenance of the BlackBox Mk2 Multiparameter Water Quality Data Converter. It covers wiring, SDI-12 and Modbus communication protocols, and compatibility with various Aquaread Aquaprobes for environmental monitoring applications.

[Aruba Instant 8.10.0.0 Release Notes](#)
Release notes for Aruba Instant 8.10.0.0, detailing new features, enhancements, resolved issues, known issues, and upgrade procedures for Aruba access points.