

Aicevoos FC-Rechargeble

Aicevoos FC-Rechargeble Natural Gas Detector User Manual

Model: FC-Rechargeble

1. INTRODUCTION

This manual provides essential instructions for the safe and effective use of your Aicevoos FC-Rechargeble Natural Gas Detector. This device is designed to detect the presence of various combustible gases, including natural gas and propane, in residential and recreational vehicle environments. Please read this manual thoroughly before operating the device and retain it for future reference.

2. SAFETY INFORMATION

WARNING: This device is a gas leak detector and not a substitute for proper gas appliance maintenance or professional gas leak detection services. Always prioritize your safety. If you suspect a significant gas leak, evacuate the area immediately, contact your gas provider, and do not attempt to locate the leak yourself.

- Do not expose the device to extreme temperatures, humidity, or corrosive environments.
- Keep the device away from water and other liquids.
- Do not attempt to disassemble or modify the device. This will void the warranty and may cause malfunction.
- Ensure the device is fully charged before use to maintain optimal performance.
- Perform regular checks as described in the Maintenance section.

3. PRODUCT OVERVIEW

3.1. Features

- High-sensitivity sensor for various combustible gases (natural gas, propane, methane, ethane, etc.).
- Rapid response time of approximately 0.5 seconds.
- Flexible 14-inch sensor neck for reaching confined spaces.
- Audible and visual alarm indicators.
- LCD display showing gas concentration, ambient temperature, and humidity.

- Rechargeable lithium-ion battery (3.7V).

3.2. Device Components

Appearance



Figure 1: Aicevoos FC-Rechargeable Natural Gas Detector with labeled components. Key components include the LCD Display, Charging Port, Gas Sensor Head, On/Off button, Alarm Volume Adjustment Knob, Mode Key, Unit Selection button, Reduce key, Charging indication lamp, Piezo buzzer, and LCD Alarm Indication.

- **LCD Display:** Shows gas concentration, temperature, humidity, and other status indicators.

- **Gas Sensor Head:** Located at the end of the flexible probe, detects gas.
- **On/Off Button:** Powers the device on or off.
- **Mode Key:** Cycles through different display modes or settings.
- **Unit Selection Button:** Changes the unit of measurement for gas concentration (e.g., %LEL, ppm).
- **Charging Port:** USB port for recharging the internal battery.
- **Piezo Buzzer:** Emits audible alarm sounds.
- **Charging Indication Lamp:** Indicates charging status.





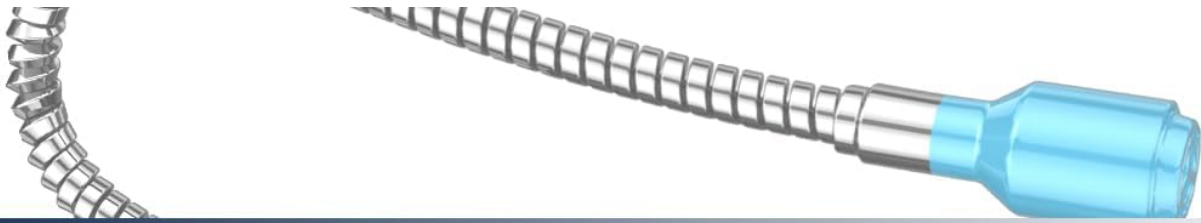
Figure 2: Front view of the Aicevoos FC-Rechargeable Natural Gas Detector, showcasing its display and flexible probe.

4. SETUP

4.1. Charging the Device

The device is powered by an internal 3.7V rechargeable lithium-ion battery. Before first use, or if the battery indicator is low, charge the device using the provided USB cable.

1. Connect the USB charging cable to the device's charging port.
2. Connect the other end of the USB cable to a standard USB power adapter (not included) or a computer USB port.
3. The charging indication lamp will illuminate during charging. It will change color or turn off when charging is complete.



APPLICABLE SCENARIO



gas pipeline



coal gas



Rv Propane Tank



Water Heater

Figure 3: The Aicevoos FC-Rechargeable Natural Gas Detector being charged via its USB port, highlighting its rechargeable lithium battery.

4.2. Powering On/Off

Press and hold the On/Off button for a few seconds to power the device on or off.

4.3. Initial Warm-up and Calibration

Upon powering on, the device will undergo a warm-up period of approximately 20 seconds. During this time, ensure the device is in a clean, gas-free environment to allow for proper calibration to a zero baseline. The display will show a countdown or indicator during this process.

5. OPERATING INSTRUCTIONS

5.1. Gas Detection Process

1. After the warm-up period, the device is ready for use.
2. Direct the flexible sensor head towards the area where a gas leak is suspected. Move the sensor slowly along pipes, connections, and appliance surfaces.
3. Observe the LCD display for gas concentration readings. The device will show values in units such as %LEL (Lower Explosive Limit) or ppm (parts per million), depending on the selected unit.
4. The device will emit an audible alarm and provide a visual indication on the LCD when the gas concentration reaches a preset alarm threshold. The alarm intensity may increase with higher gas concentrations.

operation

Range
0~100%LEL

resolving power
0.1%LEL

1

Start up and warm up for 20s

You can set whether to shut down automatically

2

Place in combustible gas environment

Read the concentration of combustible gas in the environment, and the instrument will beep when it reaches the alarm value



Figure 4: Operational steps for the gas detector, including warm-up and placing the sensor in a combustible gas environment.

5.2. Interpreting Alarms

The device features both audible beeps and visual indicators (on the LCD) to alert you to gas presence.

USD **B** LITHIUM BATTERY

LITHIUM BATTERY

Rechargeable

3.7V
li-ion battery



Figure 5: The gas detector displaying both audible (beeps) and visual (analog bar on screen) alarms when gas is detected.

A rising gas concentration reading and an active alarm indicate the presence of combustible gas. The higher the reading and the more frequent/intense the alarm, the greater the concentration of gas detected.

5.3. Unit Selection

Use the 'UNIT' button to cycle through available measurement units for gas concentration, typically %LEL and ppm.

5.4. Applicable Scenarios

The Aicevoos FC-Rechargeble Natural Gas Detector is suitable for detecting leaks in various locations:

- Gas pipelines and connections.
- Gas appliances (stoves, ovens, water heaters).
- RV propane tanks and associated lines.
- Areas where coal gas or other combustible gases might be present.



Figure 6: Examples of common areas where the gas detector can be used, such as gas pipelines, coal gas appliances, RV propane tanks, and water heaters.

6. MAINTENANCE

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure the sensor head is

kept clean and free of debris.

- **Battery Care:** Recharge the battery when the low battery indicator appears. Avoid fully discharging the battery frequently to prolong its lifespan. If storing the device for an extended period, charge it periodically.
- **Storage:** Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Sensor Protection:** The flexible sensor neck is durable, but avoid excessive bending or sharp angles that could damage internal wiring.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Battery is depleted.	Charge the device fully using the USB cable.
No gas detection or inconsistent readings.	• Sensor head is dirty or obstructed. • Device not properly warmed up/calibrated. • Gas concentration is below detection threshold.	• Clean the sensor head gently. • Ensure the device completes its 20-second warm-up in a clean air environment. • Confirm the presence of gas with another method if possible (e.g., soapy water for visible bubbles on connections).
Alarm sounds continuously in clean air.	Sensor may be contaminated or requires recalibration.	Power off the device, move to a known clean air environment, and power on again to allow for proper warm-up and baseline calibration. If the issue persists, contact customer support.
Display is dim or unreadable.	Low battery.	Recharge the device.

8. SPECIFICATIONS

Feature	Specification
Brand	Aicevoos
Model Number	FC (Style: FC-Rechargeble)
Detection Range	0-100% LEL
Resolving Power	0.1% LEL
Response Time	Approximately 0.5 seconds
Sensor Neck Length	14 inches
Power Source	Rechargeable 3.7V Lithium-ion Battery
Alarm Type	Audible and Visual
Display	LCD with gas concentration, temperature, humidity

Feature	Specification
Item Weight	1.54 pounds (0.7 kg)
Package Dimensions	9.65 x 4.92 x 2.13 inches

9. WARRANTY AND SUPPORT

Aicevoos products are designed for reliability and performance. For warranty information, technical support, or service inquiries, please refer to the contact information provided with your product packaging or visit the official Aicevoos website. Please have your model number (FC-Rechargeble) and purchase date available when contacting support.