Vilfet KH218A

Vilfet Carbon Monoxide and Natural Gas Detector

Model KH218A - Instruction Manual

1. Introduction and Overview

The Vilfet KH218A is an advanced 2-in-1 detector designed to provide reliable protection against both carbon monoxide (CO) and natural gas leaks. This compact, plug-in device features dual sensors and dual alarms to ensure rapid and accurate warnings, enhancing safety in various environments.

Key Features:

- **Upgraded 2-in-1 Detection:** Integrates sensors for both natural gas and carbon monoxide into one device.
- **Rapid Response & Dual Alarm:** Activates instantly with sound (≥ 85 dB) and red flashing lights when unsafe levels are detected (CO ≥ 150 PPM or natural gas ≥ 5% LEL).
- **Energy Saving & Eco-Friendly:** Operates on 110–220V with under 2W standby power, featuring a long-life sensor to reduce waste.
- **Versatile Use:** Ideal for homes, RVs, hotels, kitchens, and cruise cabins due to its compact and space-saving design.

Figure 1: Dual Sensors for Dual Protection

2. Safety Guidelines

This detector is designed to alert you to potentially dangerous levels of carbon monoxide and natural gas. It is crucial to understand the risks associated with these gases and to respond appropriately to any alarm.

Carbon Monoxide (CO) Risks:

- CO is an odorless, colorless, and tasteless gas that can be fatal.
- Sources include gas stoves, fireplaces, portable generators, vehicle exhaust in garages, and gas water heaters.
- Symptoms of CO poisoning can include headache, dizziness, nausea, and confusion. Pets may show signs of poisoning earlier than humans.

Natural Gas Risks:

- Natural gas (methane) is highly flammable and can cause explosions.
- It is typically odorized with a sulfur-like smell for detection, but a detector provides an additional layer of safety.
- Leaks can occur from appliances, pipes, or fittings.

Figure 2: Potential Sources of Carbon Monoxide

Figure 3: Signs of Carbon Monoxide Poisoning in Pets

3. Product Features and Components

The Vilfet KH218A detector is designed for ease of use and clear indication of gas levels and alarms.

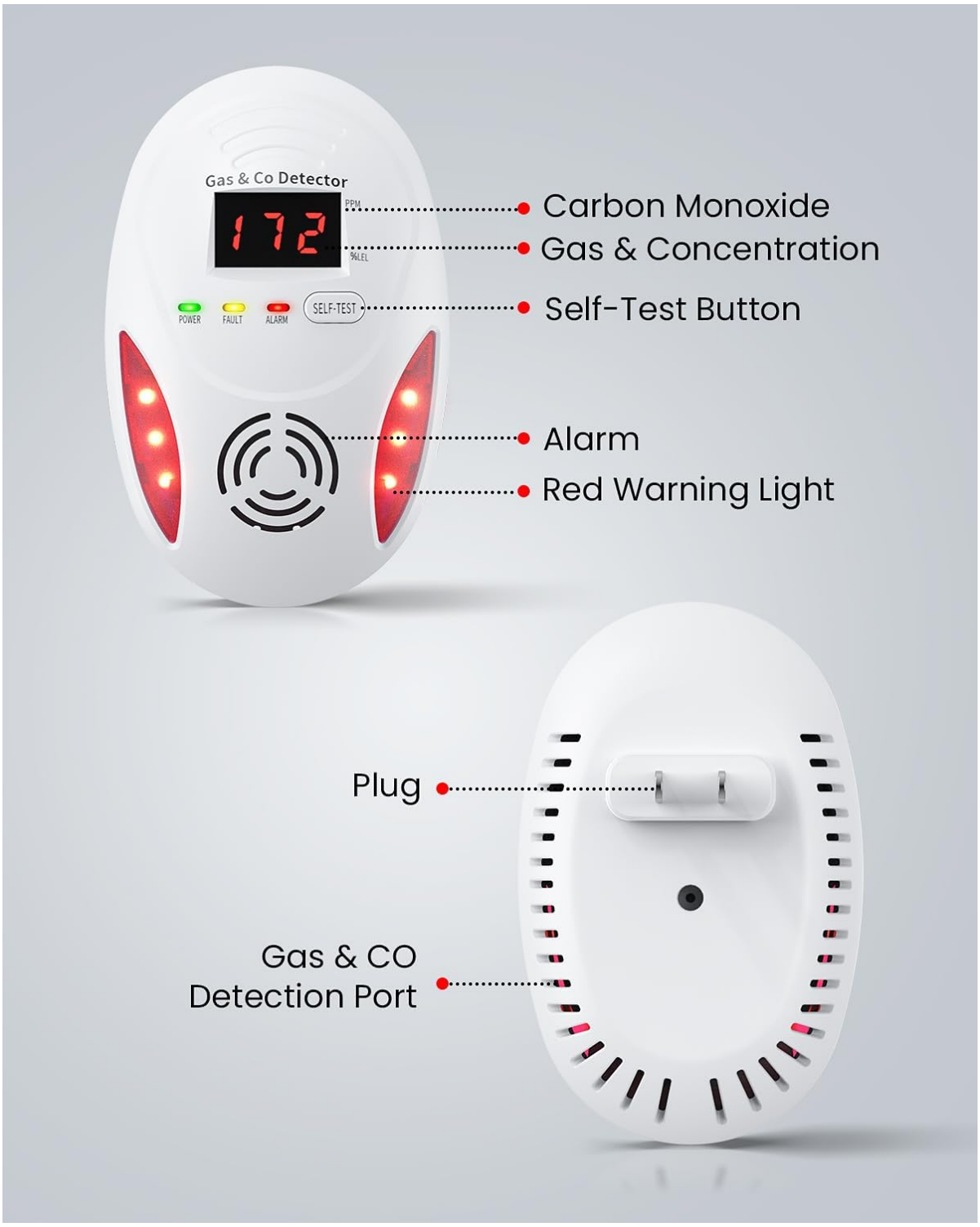

Figure 4: Vilfet KH218A Detector Components

Key Components:

- **LCD Screen:** Displays Carbon Monoxide (PPM) and Gas & Concentration (%LEL) levels.
- **Self-Test Button:** Used to verify the alarm's functionality.
- **Indicators:** Separate lights for Power (green), Fault (yellow), and Alarm (red).
- **Alarm Speaker:** Emits a loud audible alarm (≥ 85 dB).
- **Red Warning Lights:** Flashes during an alarm condition.
- **Plug:** Standard electrical plug for direct wall outlet connection.
- **Gas & CO Detection Port:** Sensor area for gas detection.

4. Setup and Installation

The Vilfet KH218A detector is designed for simple plug-and-play installation.

Initial Setup:

1. **Plug In:** Insert the detector into a standard 110–220V electrical outlet.
2. **Calibration:** After plugging in, the device will begin a 180-second calibration process. During this time, the display will count down, and the indicator lights may flash. Wait until the countdown reaches zero and the display shows '0' for both PPM and %LEL.
3. **Self-Test:** Once calibrated, press the 'Self-Test' button. The alarm should sound, and the red warning lights should flash, confirming normal operation.

Figure 5: Initial Calibration and Self-Test

Installation Video:

Video 1: This video demonstrates the unboxing, plugging in, and initial calibration process of the Vilfet 2-in-1 Carbon Monoxide and Natural Gas Detector. It shows the device speaking during startup and the self-test function.

Video 2: This video provides another perspective on setting up the Vilfet Carbon Monoxide and Natural Gas Detector, including plugging it into an outlet and performing the self-test to ensure it's working correctly.

5. Operating Instructions

Once installed and calibrated, the Vilfet KH218A continuously monitors the air for carbon monoxide and natural gas.

Normal Operation:

- The green 'Power' light will be steadily illuminated.
- The LCD screen will display '0' for both PPM (CO) and %LEL (Natural Gas) under normal, safe conditions.

Alarm Conditions:

- **Carbon Monoxide Alarm:** If CO levels reach or exceed 150 PPM, the red 'Alarm' light will flash, the device will emit a loud audible alarm (≥ 85 dB), and the LCD will display the detected CO concentration.
- **Natural Gas Alarm:** If natural gas levels reach or exceed 5% LEL, the red 'Alarm' light will flash, the device will emit a loud audible alarm (≥ 85 dB), and the LCD will display the detected gas concentration.

- **Fault Indication:** If a fault is detected with the sensor or internal components, the yellow 'Fault' light will illuminate.

Figure 6: Visual and Audible Alarm Indicators

Figure 7: 24/7 Protection

6. Maintenance and Testing

Regular maintenance and testing ensure your detector remains fully functional.

Routine Testing:

- Perform a self-test weekly by pressing the 'Self-Test' button. The alarm should sound, and lights should flash.
- To test CO detection, expose the sensor to cigarette smoke. The detector should respond with an alarm.
- To test natural gas detection, briefly expose the sensor to a small amount of gas from a lighter

(without igniting). The detector should respond with an alarm.

Figure 8: Testing CO Detection with Cigarette Smoke

Figure 9: Testing Natural Gas Detection with a Lighter

Cleaning:

Wipe the exterior of the detector with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners, as these can damage the device or interfere with sensor operation.

7. Recommended Placement

Proper placement is essential for effective gas and carbon monoxide detection.

Ideal Locations:

- **Kitchens:** Near gas stoves or other gas-burning appliances.
- **Bedrooms:** To alert occupants during sleep.
- **Living Areas:** Where family members spend significant time.
- **RVs and Cruise Cabins:** Due to enclosed spaces and potential for gas leaks.
- **Near Fireplaces or Furnaces:** To detect CO from combustion.

Locations to Avoid:

- Directly above heating or cooking appliances.
- In areas with high humidity, such as bathrooms.

- Near windows, doors, or vents where drafts could affect readings.
- In direct sunlight or areas with extreme temperatures.

Figure 10: Home Safety Product Placement Guide

8. Troubleshooting

If your detector is not functioning as expected, refer to the following common issues:

Common Issues:

- **No Power/Display Off:** Ensure the detector is securely plugged into a live electrical outlet. Check the power supply to the outlet.

- **Fault Light On:** If the yellow 'Fault' light is illuminated, the sensor may be malfunctioning or require replacement. Perform a self-test. If the fault persists, contact customer support.
- **False Alarms:** Ensure the detector is not placed near sources of high humidity, strong chemical fumes, or direct drafts that could interfere with sensor readings. Relocate the unit if necessary.
- **Alarm Sounds, No Visible Gas:** Evacuate the area immediately and contact emergency services. CO and natural gas can be undetectable by human senses.

9. Technical Specifications

Feature	Specification
Model Number	KH218A
Power Supply	110–220V AC
Standby Power Consumption	Under 2W
Alarm Sound Level	≥ 85 dB
CO Alarm Concentration	≥ 150 PPM
Natural Gas Alarm Concentration	≥ 5% LEL
Material	ABS
Dimensions	4.49 x 2.72 x 2.44 inches
Item Weight	3.2 ounces

Figure 11: Energy Efficiency and Longevity

10. Warranty and Customer Support

For any questions, technical assistance, or warranty claims, please contact Vilfet customer support through the retailer's platform or the official Vilfet website. Keep your purchase receipt for warranty validation.