

KOABBIT QP111

KOABBIT Carbon Monoxide and Natural Gas Detector (Model QP111) Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective use of your KOABBIT QP111 Combination Carbon Monoxide (CO) and Natural Gas Detector. This 2-in-1 device integrates a catalytic combustion sensor for combustible gases and an electrochemical sensor for carbon monoxide, offering sensitive and accurate detection to enhance your home safety.

2. SAFETY INFORMATION

Please read all instructions carefully before installation and operation. Failure to follow these guidelines may result in improper operation or personal injury.

- **Do not ignore alarms:** If the alarm sounds, follow the instructions in the 'Alarm Conditions' section immediately.
- **Proper Placement:** Install the detector in appropriate locations as described in the 'Setup and Installation' section. Incorrect placement can reduce effectiveness.
- **Regular Testing:** Test the detector weekly to ensure proper function.
- **Maintenance:** Keep the detector clean and free from obstructions. Refer to the 'Maintenance' section for details.
- This device is designed to detect carbon monoxide and combustible gases. It is not a smoke detector or a fire alarm.

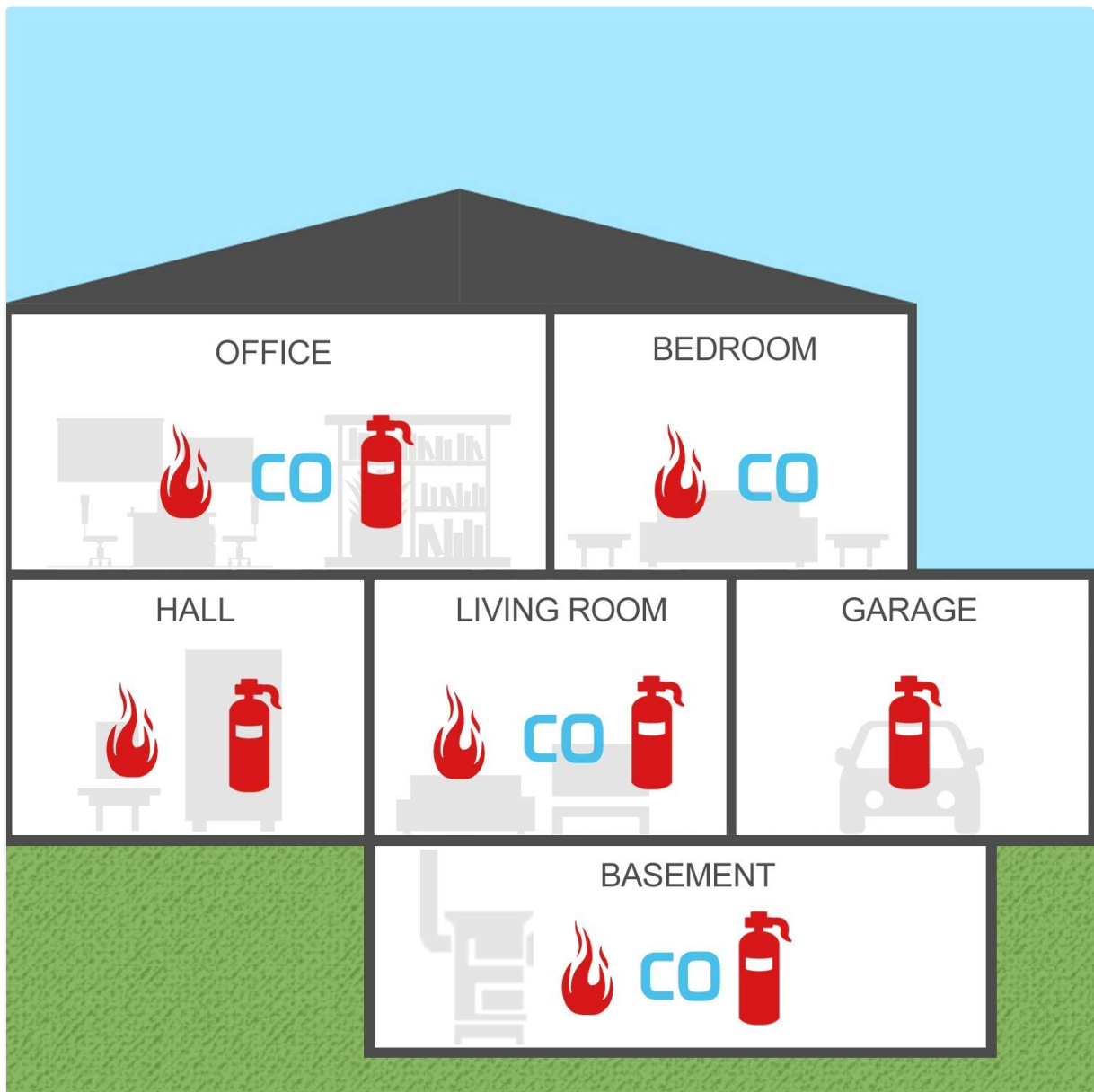


Figure 2.1: Recommended areas for Carbon Monoxide detection within a home, highlighting common spaces where CO sources might be present.

3. PRODUCT OVERVIEW

The KOABBIT QP111 detector features a clear LCD digital display, audible alarm, and indicator lights for power, fault, and alarm status. It is designed for easy plug-in installation.



Figure 3.1: Front view of the KOABBIT QP111 detector with key components labeled for identification.

Key Features:

- **Dual Sensor Technology:** Catalytic combustion sensor for combustible gases and electrochemical sensor for carbon monoxide.
- **LCD Digital Display:** Shows real-time gas concentration values (PPM for CO, % for combustible gas).
- **85 Decibel Sound Alarm:** Loud audible alarm to alert occupants to hazardous conditions.
- **Visual Indicators:** Power (green), Fault (yellow), and Alarm (red) lights.
- **Test & Reset Button:** For functional testing and silencing alarms.
- **Power Options:** AC 90-240V plug-in with 9V battery backup (battery not included).

4. SETUP AND INSTALLATION

4.1 Choosing a Location

Proper placement is crucial for the detector's effectiveness. Consider the following guidelines:

- **For Combustible Gas Detection:** Since combustible gases (like natural gas, LPG) are lighter than

air, install the detector 0.3-1 meter (1-3 feet) below the ceiling and within 1.5 meters (5 feet) of potential gas sources (e.g., gas stoves, water heaters).

- **For Carbon Monoxide Detection:** CO is slightly lighter than air and mixes readily. Install the detector at knee level or higher, but not directly on the ceiling. A common recommendation is at least 1.5 meters (5 feet) from the floor.
- **Recommended Areas:** Kitchens, utility rooms, bedrooms, living rooms, and RVs.
- **Areas to Avoid:** Directly above cooking appliances, near windows or doors where drafts can dilute gas, in areas with high humidity (e.g., bathrooms), or in direct sunlight.



Figure 4.1: Example installation of the detector in a kitchen, demonstrating suitable placement near gas appliances.

4.2 Powering the Device

The detector operates primarily on AC power and includes a backup battery option.

1. **Plug-in:** Insert the detector directly into a standard AC 90-240V wall outlet. Ensure the outlet is not controlled by a switch that could accidentally turn off power to the detector.
2. **Battery Backup:** For continuous protection during power outages, install a 9V rechargeable or ordinary battery (not included) into the battery compartment on the back of the unit. The battery will automatically engage if AC power is lost.



Figure 4.2: The detector plugged into a wall outlet, illustrating its primary power connection.

5. OPERATING INSTRUCTIONS

5.1 Initial Power-Up

Upon plugging in the detector or installing the battery, the unit will perform a self-test. The display will cycle through various indicators, and the alarm may briefly sound. The green 'POWER' light will illuminate, indicating the device is active.

5.2 Normal Operation

In normal operation, the LCD display will show '0' for both CO (PPM) and combustible gas (%). The green 'POWER' light will remain steadily lit. The detector continuously monitors the air for hazardous gas levels.

5.3 Alarm Conditions

When the detector senses a dangerous concentration of carbon monoxide or combustible gas, it will activate an alarm:

- **Audible Alarm:** An 85-decibel alarm will sound.
- **Visual Alarm:** The red 'ALARM' light will flash.
- **Digital Display:** The LCD will show the detected concentration level (PPM for CO, % for combustible gas).
- **Voice Prompt:** The detector may provide a voice prompt indicating the type of gas detected (e.g., "Carbon Monoxide detected!" or "Combustible gas detected!").

If an alarm sounds:

1. Immediately move to fresh air outdoors or open all windows and doors to ventilate the area.
2. Turn off all gas appliances and sources.
3. Do not re-enter the premises until the alarm has stopped and the area has been thoroughly ventilated.
4. Contact your gas supplier or emergency services if you suspect a gas leak.



Figure 5.1: The detector's capability to detect various gases, including Propane, Carbon Monoxide, and Natural Gas.

5.4 Testing the Detector

Press and hold the 'TEST & RESET' button for a few seconds. The detector will perform a self-test, activating the alarm and flashing the lights. This confirms the alarm and indicator lights are functioning correctly. Release the button to return to normal monitoring.

6. MAINTENANCE

6.1 Cleaning

Clean the detector regularly to prevent dust and debris from obstructing the air inlets. Use a soft, damp cloth to wipe the exterior. Do not use cleaning sprays, solvents, or abrasive cleaners, as these can damage the sensors or electronic components.

6.2 Battery Backup

If using a 9V battery for backup, ensure it is in good condition. Replace the battery annually or if the 'FAULT' light indicates a low battery. To replace, open the battery compartment on the back of the unit, remove the old battery, and insert a new 9V battery, observing polarity.

7. TROUBLESHOOTING

Refer to the table below for common issues and their solutions.

Issue	Indicator/Symptom	Possible Cause	Solution
Alarm sounds, red light flashes	Audible alarm, red 'ALARM' light, concentration displayed	High levels of CO or combustible gas detected	Follow 'Alarm Conditions' protocol: ventilate, evacuate, contact emergency services if necessary.
Yellow 'FAULT' light on/flashing	Yellow 'FAULT' light, possibly accompanied by a chirp	Sensor malfunction, low battery, or end-of-life indication	Replace 9V battery if applicable. If issue persists, contact support or consider replacing the unit.
No power/display off	No lights, no display	No AC power, dead battery backup	Check AC power supply. Ensure detector is plugged in. Replace 9V battery.
False alarms	Alarm sounds without apparent gas presence	Interference from aerosols, strong cleaning agents, or high humidity	Relocate the detector away from sources of interference. Ensure proper ventilation.

8. SPECIFICATIONS

Technical details for the KOABBIT QP111 detector.

Feature	Detail
Brand	KOABBIT

Feature	Detail
Model Number	QP111
Power Source	AC 90-240V (Plug-in), 9V Battery Backup (Battery not included)
Sensor Type	Catalytic (for combustible gas), Electrochemical (for CO)
Operating Temperature	0-50°C (32-122°F)
Operating Humidity	10%-95% RH
Alarm Volume	≥85 dB
Combustible Gas Detection	LPG (Methane), Natural Gas, Coal Gas, Gas Fuel, Artificial Gas, Liquefied Petroleum Gas, Liquefied Natural Gas
Product Dimensions	4.3 x 2.9 x 1.6 inches
Item Weight	0.15 Kilograms (approx. 5.3 ounces)

9. WARRANTY AND SUPPORT

The KOABBIT QP111 detector comes with a **1-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

For technical assistance, warranty claims, or any product-related inquiries, please contact KOABBIT customer support through the retailer's platform or the official KOABBIT website. Please have your product model number (QP111) and purchase details ready when contacting support.