

## Seektain PTH-24E

# Seektain 4-in-1 Carbon Monoxide and Natural Gas Detector User Manual

Model: PTH-24E | Brand: Seektain

## 1. INTRODUCTION

This user manual provides essential information for the safe and effective operation of your Seektain 4-in-1 Carbon Monoxide and Natural Gas Detector. This device is designed to provide real-time monitoring of carbon monoxide (CO), natural gas (LEL), temperature, and humidity, offering comprehensive safety for various environments.

Please read this manual thoroughly before installation and use, and retain it for future reference.

## 2. IMPORTANT SAFETY INFORMATION

Carbon Monoxide (CO) is an odorless, colorless, and tasteless gas that can be fatal. This detector is a crucial safety device, but it is not a substitute for proper maintenance of fuel-burning appliances, including ventilation and exhaust systems. Always ensure adequate ventilation in areas where fuel-burning appliances are used.

The detector is certified to meet safety standards including ISO 17025, UL 2034, UL 217, and UL 1484, ensuring reliable performance.

### Symptoms of Carbon Monoxide Poisoning:

- Feeling sick (nausea)
- Confusion
- Passing out
- Throwing up
- Headache
- Dizziness

**If the alarm sounds, immediately move to fresh air and call emergency services.**

## 3. PRODUCT OVERVIEW



Figure 3.1: Front and Side View of the Detector



Figure 3.2: Labeled Components of the Detector

### 3.1 Key Features:

- **4-in-1 Detection:** Monitors Carbon Monoxide (CO), Natural Gas (LEL), Temperature (°F), and Humidity (% RH).
- **Plug-and-Play:** Easy installation by simply plugging into a standard 100-220V AC outlet.
- **Large HD LCD Display:** Provides clear, real-time readings of all monitored parameters.
- **Dual Visual & Audible Alerts:** Features a flashing red light and an 85+ dB alarm for immediate notification of hazardous conditions.
- **Portable Design:** Compact and lightweight, suitable for home, RV, hotel, camping, and travel use.
- **Self-Check Function:** Built-in fault self-check ensures continuous proper operation.

# 4-IN-1 Plug-In Gas & CO Detector



**Natural Gas**  
4 stage



**Temperature**  
14°F to 122°F



**Humidity**  
0% to 95%



**Carbon Monoxide**  
0-999 ppm



Figure 3.3: 4-in-1 Detection Capabilities

## 3.2 Display and Indicators:

The detector features a vibrant LCD display that shows current readings for CO, natural gas, temperature, and humidity. A multi-color indicator light provides quick visual status updates:

- **Green Light:** Indicates safe CO concentration (0-50 PPM).
- **Orange Light:** Indicates elevated CO concentration (51-100 PPM) or natural gas presence.
- **Red Light:** Indicates dangerous CO concentration (over 100 PPM) or high natural gas levels, accompanied by an audible alarm.

# Clear Data at a Glance

Large LCD Display Shows CO, Gas, Temperature, and Humidity



Figure 3.4: Clear Data at a Glance on LCD Display

# Visual & Audible Alert

## Double Protection




Figure 3.5: Visual and Audible Alert System

## 4. SETUP AND INSTALLATION

### 4.1 Powering On:

The Seektain 4-in-1 detector is designed for plug-and-play operation. Simply plug the device directly into a standard 100-220V AC wall outlet. The device will automatically power on and begin its self-test sequence.



	Co Detector	Co Detector	Co Detector
<b>Sold By</b>	Seektain	other	other
<b>Alarm Volume</b>	4.8 ★★★★★	4.3 ★★★★☆	4.6 ★★★★★
<b>Electrochemical Sensor</b>	4.7 ★★★★★	4.1 ★★★★☆	4.3 ★★★★★
<b>Large Display Screen</b>	4.8 ★★★★★	4.5 ★★★★☆	4.4 ★★★★★
<b>Multifunctional</b>	4-IN-1	3-IN-1	CO-Only

Figure 4.1: Plug and Play Setup

#### 4.2 Recommended Placement:

For optimal performance and safety, place the detector in areas where carbon monoxide or natural gas leaks are most likely to occur, or where occupants spend significant time. Ideal locations include:

- Kitchens (near gas appliances, but not directly above them)
- Bedrooms
- Garages (especially if attached to living spaces)
- Living areas
- RV's and travel trailers
- Hotel rooms
- Tents (during camping)

Avoid placing the detector:

- Directly above heat sources or in direct sunlight.
- In areas with high humidity or steam (e.g., bathrooms).
- Near vents, doors, or windows where air currents might dilute gas concentrations.
- In dusty or dirty environments.

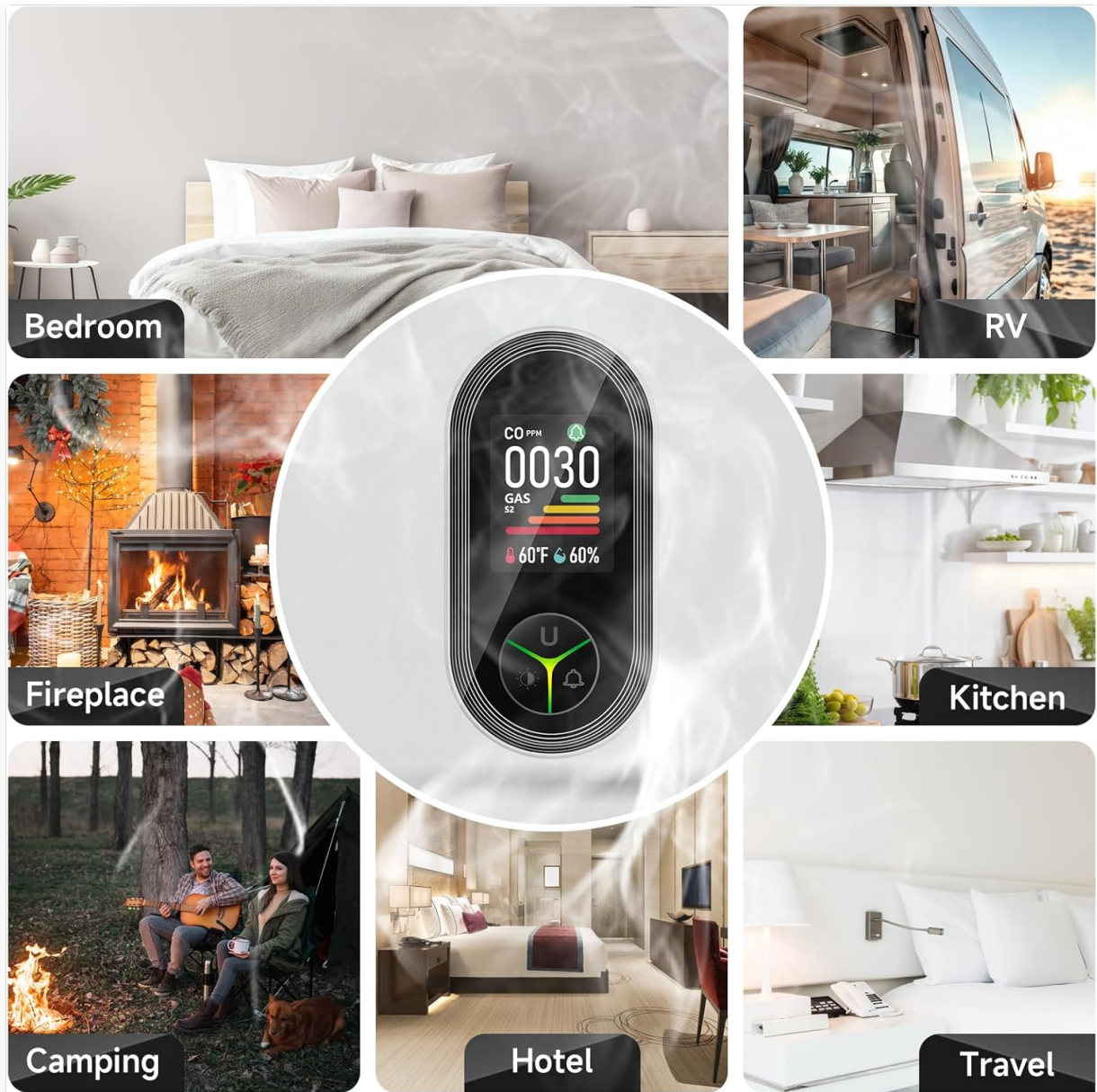


Figure 4.2: Recommended Usage Environments

## 5. OPERATING INSTRUCTIONS

### 5.1 Understanding the Display:

The LCD display provides continuous readings:

- **CO PPM:** Carbon Monoxide concentration in parts per million.
- **GAS LEL:** Natural Gas concentration as a percentage of the Lower Explosive Limit.
- **Temperature:** Current ambient temperature in degrees Fahrenheit (°F).
- **Humidity:** Current ambient relative humidity in percentage (% RH).

### 5.2 Button Functions:

The detector features three interactive buttons for various functions:

## Easy to Use



Figure 5.1: Detector Button Functions

- **"U" Button (Top):**
  - Short Press: Initiates a self-test.
  - Long Press: Toggles temperature unit between Fahrenheit (°F) and Celsius (°C).
- **Buzzer Button (Left):**
  - Short Press: Toggles sound on/off.
  - Long Press: Flips the screen display 180 degrees.
- **Screen Brightness Button (Right):**
  - Short Press: Adjusts screen brightness.
  - Long Press: Switches gas sensitivity.

### 5.3 Alarm Conditions:

The detector will activate its alarm under the following conditions:

- **Carbon Monoxide (CO):** When CO levels exceed 150 PPM.
- **Natural Gas:** When natural gas levels reach 15% LEL (Lower Explosive Limit).

Upon alarm activation, the red indicator light will flash, and an 85+ dB audible alarm will sound continuously until the gas concentration drops to a safe level.

## 6. MAINTENANCE

### 6.1 Cleaning:

To maintain optimal performance, regularly clean the exterior of the detector with a soft, dry cloth. Do not use cleaning sprays, polishes, or solvents, as these can damage the device or interfere with sensor operation.

### 6.2 Sensor Life and Replacement:

The electrochemical sensor in your detector has an approximate lifespan of 5 years. When the sensor

reaches its end-of-life, the display will indicate "Sensor life has expired," signaling that it is time to replace the unit to ensure continued protection.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Alarm sounds frequently without apparent gas leak.	False alarm due to strong odors, aerosols, or high humidity.	Ventilate the area. Avoid using sprays or strong chemicals near the detector. Relocate if consistently exposed to non-hazardous fumes.
Display shows "Sensor life has expired".	The sensor has reached the end of its operational lifespan.	Replace the entire detector unit.
No display or power.	No power from the outlet.	Check the power outlet with another device. Ensure the detector is fully plugged in.
Inaccurate temperature/humidity readings.	Placement in direct sunlight, near heat sources, or in extreme conditions.	Relocate the detector to an area with stable ambient conditions.

If troubleshooting steps do not resolve the issue, please contact Seektain customer support.

## 8. SPECIFICATIONS

<b>Brand</b>	Seektain
<b>Model</b>	PTH-24E
<b>Style</b>	4-in-1
<b>Power Source</b>	AC/Plug in (100-220V)
<b>Product Dimensions</b>	4.5"D x 4.2"W x 2.2"H
<b>Item Weight</b>	3.52 ounces
<b>Alarm Type</b>	Audible (85+ dB) and Visual
<b>Operating Humidity</b>	0%~95% RH (+5%)
<b>Temperature Detection Range</b>	14 to 122 Degrees Fahrenheit
<b>CO Detection Range</b>	0 to 999 PPM
<b>Natural Gas Detection Range</b>	0-15% LEL
<b>Sensor Type</b>	Electrochemical
<b>Material</b>	ABS
<b>Sensor Life</b>	Approx. 5 years
<b>Certifications</b>	ISO 17025, UL 2034, UL 217, UL 1484

## **9. WARRANTY AND SUPPORT**

### **9.1 Product Warranty:**

The Seektain 4-in-1 Carbon Monoxide and Natural Gas Detector comes with a 2-year warranty from the date of purchase, covering defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

### **9.2 Customer Support:**

For technical assistance, troubleshooting, or warranty inquiries, please refer to the contact information provided on the product packaging or the official Seektain website. Our customer support team is available to assist you.