VIHELM ZL73B

VIHELM ZL73B Gas Leak Detector

Instruction Manual

1. Introduction

The VIHELM ZL73B is a versatile combustible gas leak detector designed for accurate and reliable detection of various flammable gases. It features an LCD display, high-precision semiconductor sensors, and a flexible gooseneck probe for easy access to hard-to-reach areas. This device is suitable for household, industrial, and commercial applications, providing both gas concentration and thermohygrometer measurements.

2. Safety Information

- Always operate the device in a well-ventilated area.
- Do not attempt to repair or modify the device yourself. Refer to qualified personnel for service.
- Ensure the device is fully charged or has sufficient battery power before use to avoid interruptions during critical measurements.
- Keep the sensor clean and free from obstructions to ensure accurate readings.
- Avoid exposing the device to extreme temperatures, humidity, or corrosive environments.

3. Product Features

- **Gas Leak Detector + Professional Thermohygrometer:** Combines two essential functions in one device.
- **High-Precision Semiconductor Sensors:** Ensures accurate and reliable detection.
- **Three Types of Alarms:** Provides visual (analog bar), audible (beep), and vibration alerts for gas detection.
- **Large Color Screen Display:** Offers clear and visible readings, even in low light conditions.
- **Universal Flexible Tube:** A gooseneck hose with a protective sleeve allows for easy positioning and access to confined spaces.
- **USB-C Charging:** Convenient and modern charging interface.

- **Adjustable Sensitivity:** High and low sensitivity settings for various detection needs.
- **Temperature and Humidity Detection:** Integrated thermohygrometer function.
- **°C/°F Switch:** Allows selection of temperature units.
- **LED Flashlight:** Built-in light for illuminating dark areas during inspection.
- **Manual Zeroing:** Option to manually calibrate the zero point.
- **Sound On/Off:** Control audible alerts.
- **Automatic Shutdown:** Power-saving feature with an option to cancel.



Image: The ZL73B device highlighting its key features including the flexible tube, color screen, and charging port.

4. Components and Parts Identification

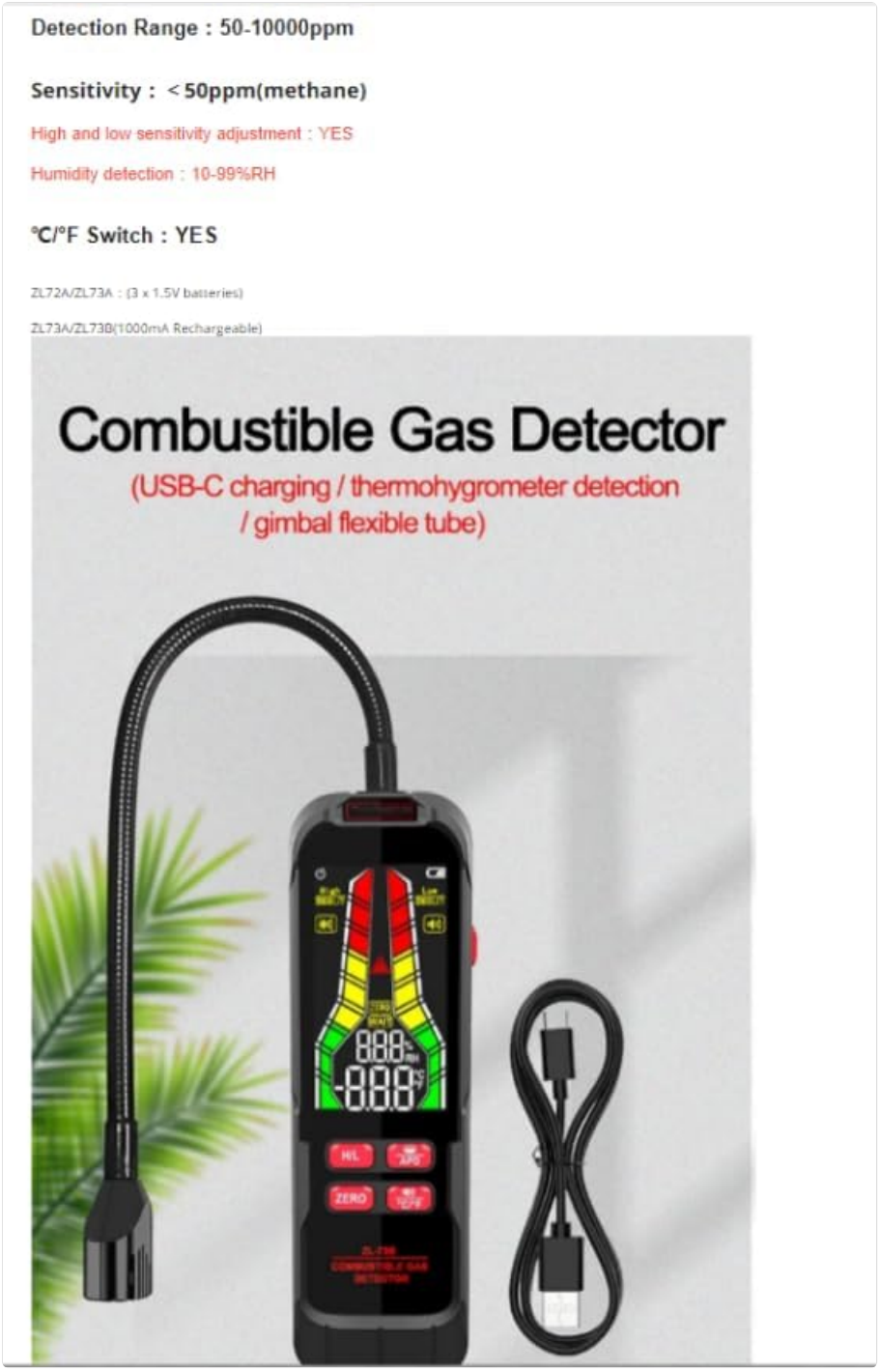


Image: Front view of the ZL73B Gas Leak Detector, showing the main unit, flexible gooseneck probe with sensor tip, LCD display, control buttons, and a USB-C charging cable.

- **Flexible Gooseneck Probe:** Extends from the main unit, housing the gas sensor at its tip.
- **Sensor Tip:** Located at the end of the flexible probe, responsible for gas detection.
- **LCD Color Display:** Shows gas concentration, temperature, humidity, battery status, and other indicators.
- **Control Buttons:** For power, mode selection, sensitivity adjustment, and zeroing.
- **USB-C Charging Port:** Located on the device for recharging the internal battery.
- **LED Flashlight:** Integrated light for illumination.

5. Setup

5.1. Initial Charging

The ZL73B model is equipped with a rechargeable battery. Before first use, fully charge the device using the provided

USB-C cable and a compatible power adapter (not included). The charging port is typically located on the side or bottom of the device. An indicator on the display will show charging status.

5.2. Powering On/Off

- **To Power On:** Press and hold the power button (usually marked with a power symbol) until the LCD screen illuminates.
- **Warm-up Time:** The device requires approximately 30 seconds to warm up and stabilize before accurate readings can be taken.
- **To Power Off:** Press and hold the power button again until the screen turns off. The device also features an automatic shutdown function to conserve battery, which can be cancelled if needed.

6. Operating Instructions

6.1. Gas Detection

1. **Power On:** Turn on the device and allow it to complete its 30-second warm-up.
2. **Manual Zeroing (Optional):** In a clean, gas-free environment, press the 'ZERO' button to calibrate the sensor to a baseline reading. This ensures accurate detection by eliminating background gas presence.
3. **Adjust Sensitivity:** Use the sensitivity adjustment buttons (High/Low) to select the appropriate detection level. High sensitivity is for detecting small leaks, while low sensitivity is for larger concentrations or general area monitoring.
4. **Position Probe:** Carefully maneuver the flexible gooseneck probe to the area suspected of a gas leak. The probe can be bent up to 180 degrees for optimal positioning.
5. **Monitor Display:** Observe the LCD display for readings. The analog bar will indicate gas concentration, and an audible beep will sound, along with vibration, if gas is detected above the threshold.
6. **Identify Gas Source:** Move the probe slowly around the suspected area. The alarm intensity and display reading will increase as you get closer to the leak source.

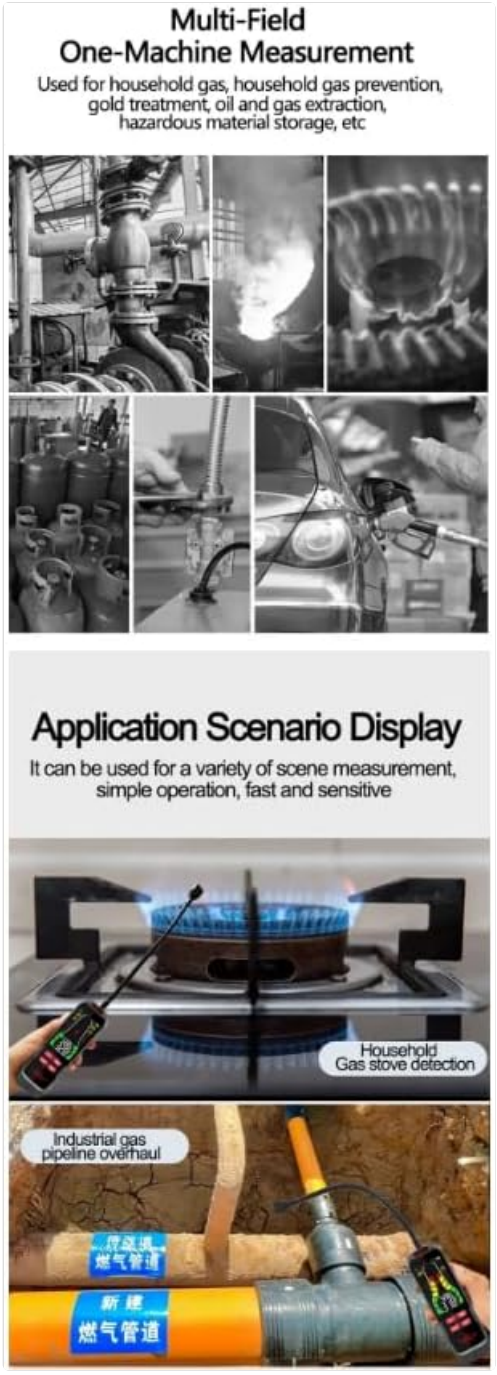


Image: Examples of the ZL73B in use for household gas stove detection and industrial gas pipeline overhaul.

6.2. Temperature and Humidity Measurement

The ZL73B can also function as a thermohygrometer. Switch to this mode using the designated button (refer to the device's specific button layout). The display will show the current ambient temperature and relative humidity. Use the °C/°F switch button to toggle between Celsius and Fahrenheit units.

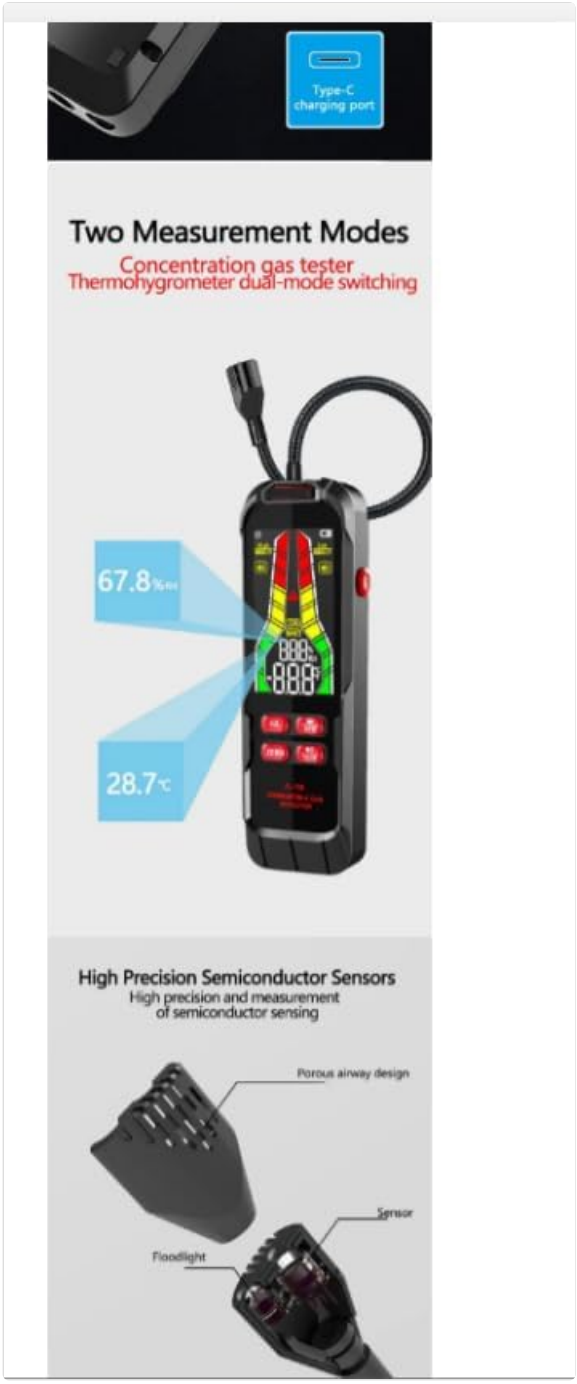


Image: The ZL73B displaying both gas concentration and thermohygrometer readings, along with a diagram of the high-precision semiconductor sensor.

7. Maintenance

- **Cleaning:** Wipe the device exterior with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure no liquid enters the sensor tip or charging port.
- **Sensor Care:** Keep the sensor tip clean and free from dust, dirt, or debris. Avoid touching the sensor directly.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Battery:** For optimal battery life, avoid fully discharging the battery frequently. Recharge when the battery indicator is low.

8. Troubleshooting

- **Device not turning on:** Ensure the battery is charged. Connect to a USB-C charger and try again.

- **Inaccurate readings:** Perform a manual zeroing in a clean air environment. Check if the sensor tip is clean and unobstructed. Ensure the warm-up time has completed.
- **No alarm for gas:** Verify that the sound is not turned off. Check sensitivity settings; increase sensitivity if needed.
- **Display issues:** If the display is dim or flickering, recharge the battery. If the issue persists, contact support.

9. Specifications (Model ZL73B)

ZL72A(Battery) ZL72B(Charging) ZL73A (Battery) ZL73B(Charging)

Model number / Function	ZL72A (Battery model)	ZL72B (Charging model)	ZL73A (Battery model)	ZL73B (Charging model)
Detection of Gases	Propane, alcohol, ammonia, benzene, gasoline, hydrogen, naphtha, natural gas, paint thinner, carbon monoxide, methane, ethylene oxide, butane, ethanol, ethylene, propylene, butene, acetylene, propyne, butyne, hydrogen sulfide, phosphine, etc			
Detection Range	50-10000ppm			
Sensitivity	<50ppm (methane)			
Precision	≤10%FS		≤5%FS	
High and low sensitivity adjustment	YES			
Response time	2 Seconds			
Warm-up time	30 Seconds			
Alarm mode	Analog Bar, Beep			
Humidity detection	10-99%RH			
Temperature detection	负10-60° C			
°C/°F Switch	YES			
Gooseneck hose (with protective sleeve)	NO		YES	
LED flashlight	NO		YES	
Manual zeroing is possible	YES			
Sound on and off	YES			
Cancel automatic shutdown	YES			
Automatic shutdown	YES			
Power supply	3 x 1.5V batteries	1000mA Rechargeable	3 x 1.5V batteries	1000mA Rechargeable
Size	177*47*27mm		207*47*27mm	
weight	125g		177g	

Image: Comparison table of specifications for ZL72A, ZL72B, ZL73A, and ZL73B models.

Feature	Specification (ZL73B)
Model Number	ZL73B
Detection of Gases	Propane, alcohol, ammonia, benzene, gasoline, hydrogen, naphtha, natural gas, paint thinner, carbon monoxide, methane, ethylene oxide, butane, ethanol, ethylene, propylene, butene, acetylene, propyne, butyne, hydrogen sulfide, phosphine, etc.
Detection Range	50-10000ppm
Sensitivity	<50ppm (methane)

Feature	Specification (ZL73B)
Precision	≤5%FS
High and low sensitivity adjustment	YES
Response time	2 Seconds
Warm-up time	30 Seconds
Alarm mode	Analog Bar, Beep
Humidity detection	10-99%RH
Temperature detection	10-60°C
°C/°F Switch	YES
Gooseneck hose (with protective sleeve)	YES
LED flashlight	YES
Manual zeroing is possible	YES
Sound on and off	YES
Cancel automatic shutdown	YES
Automatic shutdown	YES
Power supply	1000mA Rechargeable
Size	207 x 47 x 27mm
Weight	177g

10. Warranty and Support

For warranty information and technical support, please refer to the contact details provided with your purchase or visit the official VIHELM website. Keep your purchase receipt as proof of purchase for warranty claims.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question