

UNI-T UT334E

UNI-T UT334E Gas Leak Detector

Instruction Manual

1. INTRODUCTION

The UNI-T UT334E is a portable, voice-enabled, four-in-one gas detector designed for continuous monitoring of gas concentrations. This safety device utilizes advanced integrated circuit technology, embedded microcomputer control, and high-quality imported gas sensors to provide excellent sensitivity and repeatability. It features a dot matrix LCD display with support for both English and Chinese interfaces and voice prompts, ensuring ease of use and maintenance. The robust shell is constructed from high-strength engineering plastic, offering good vibration resistance, high strength, and protection against dust, water, and explosions.



Figure 1: Front view of the UNI-T UT334E Gas Leak Detector.



Figure 2: The UT334E is capable of detecting four types of gases: EX (combustible gas), H2S (hydrogen sulfide), CO (carbon monoxide), and O2 (oxygen).

2. PRODUCT FEATURES

The UT334E gas detector incorporates several key features to ensure reliable and user-friendly operation:

- **Multi-language Support:** Switch between English and Chinese interfaces and voice prompts.
- **Quadruple Alarm System:** Provides sound, light, vibration, and screen flashing alarms for comprehensive alert notification.
- **Long-lasting Battery:** Equipped with a 2500mAh built-in high-capacity lithium battery for extended operation.
- **Data Storage:** Automatically stores detection records, which can be easily viewed and deleted.
- **Clear Display:** Features a 2.4-inch color LCD display for clear visualization of gas concentrations and device status.
- **Durable Construction:** Made from high-strength engineering plastic, offering resistance to compression, drops, and explosion-proof properties.
- **High-Precision Sensors:** Utilizes imported sensors for sensitive induction, short response time, and accurate detection.

- **Curve Drawing Function:** Supports graphical representation of gas concentration over time, aiding in observing periodic states.



Figure 3: Overview of the key features of the UT334E series gas detector.

3. SETUP

Before using your UNI-T UT334E gas detector, please follow these setup instructions:

1. **Unpacking:** Carefully remove the device and all accessories from the packaging. Inspect for any signs of damage.
2. **Initial Charge:** Connect the device to a power source using the provided MicroUSB cable. Ensure the battery is fully charged before first use. A full charge typically takes approximately 4 hours.
3. **Power On:** Press and hold the power button until the LCD screen illuminates. The device will perform a self-test.
4. **Language Selection:** If prompted, select your preferred language (English or Chinese) using the navigation buttons.



Figure 4: The UT334E charging via a MicroUSB cable, compatible with standard Android phone chargers and power banks.

4. OPERATING INSTRUCTIONS

The UT334E is designed for straightforward operation. Here are the basic steps for gas detection:

1. **Power On:** Press and hold the power button to turn on the device. Allow it to complete its startup sequence and sensor calibration.
2. **Monitoring:** Once powered on, the device will continuously monitor the ambient air for the four specified gases (EX, H₂S, CO, O₂). Real-time concentrations will be displayed on the 2.4-inch color LCD screen.
3. **Alarm Thresholds:** The device has pre-set low and high alarm points for each gas. These can often be adjusted through the device's menu settings if required.
4. **Curve Drawing:** To observe gas concentration trends, navigate to the curve drawing function via the menu. This feature displays a graphical representation of gas levels over time.
5. **Data Review:** Access the stored records through the menu to review past detection data. Records can also be deleted from this section.
6. **Power Off:** Press and hold the power button until the device powers down.



Figure 5: The curve drawing feature allows users to easily observe gas concentration and its cycle status over time.

5. ALARMS AND INDICATORS

The UT334E employs a comprehensive quadruple alarm system to alert users to hazardous gas levels:

- **Audible Alarm:** A loud buzzer will sound when gas concentrations exceed set thresholds.

- **Visual Alarm:** Indicator lights will flash, and the screen may change color (e.g., red background) to visually signal an alarm condition.
- **Vibration Alarm:** The device will vibrate, providing a tactile alert, especially useful in noisy environments.
- **Screen Flashing:** The LCD screen will flash to draw immediate attention to the detected hazard.

These alarms activate when gas levels reach either the low or high alarm points configured for each gas type.



Figure 6: Illustration of the quadruple alarm prompt system, including lights flicker, buzzer alarm, red background reminder, and body vibration.

6. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your gas detector:

- **Cleaning:** Regularly wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Sensor Care:** Avoid exposing the sensors to extreme temperatures, high humidity, or corrosive substances, as this can affect their lifespan and accuracy. The typical sensor life is 2 years.
- **Battery Management:** Recharge the battery when the low battery indicator appears. Avoid fully discharging the battery frequently to prolong its life.
- **Storage:** When not in use for extended periods, store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Calibration:** For professional applications, periodic calibration of the sensors may be required to maintain accuracy. Refer to local regulations and industry standards.

7. TROUBLESHOOTING

If you encounter issues with your UT334E gas detector, consider the following:

- **Device Not Powering On:** Ensure the battery is charged. Connect the device to a charger and try again.
- **Inaccurate Readings:** Ensure the sensors are clean and unobstructed. If readings remain inconsistent, the sensors may require calibration or replacement.
- **Alarms Not Functioning:** Check the device settings to ensure alarms are enabled. Verify that the volume and vibration settings are appropriate for your environment.
- **Screen Issues:** If the screen is blank or flickering, try restarting the device. If the problem persists, contact customer support.

For persistent issues or technical support, please refer to the contact information provided in the warranty and support section.

8. SPECIFICATIONS

Detailed technical specifications for the UNI-T UT334E Gas Leak Detector:



Figure 7: Detailed specifications for the UT334E Gas Leak Detector.

General Specifications

Parameter	Value
Manufacturer	UNI-Trend
Model Number	HY-UT334E
Item Weight	1.32 pounds (0.6 kg)
Product Dimensions	6.5 x 4.33 x 4.72 inches (165 x 110 x 120 mm)
Material	Acrylonitrile Butadiene Styrene (ABS)
Power Source	Battery Powered
Wattage	5 watts
Measurement Accuracy	±0.1%
Certifications	CE, ISO 9001, RoHS, UKCA
Battery Type	Lithium Metal (included)
Battery Capacity	2500mAh
Charging Time	4 hours
Standby Time	More than 10 hours
Sensor Life	2 years
Working Environment	Temperature: -20°C to 50°C; Humidity: <95%RH (non-condensing)

9. WARRANTY AND SUPPORT

UNI-T products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please contact your authorized UNI-T dealer or visit the official UNI-T website. Keep your purchase receipt as proof of purchase for warranty claims.