

UNI-T UT334-O2

UNI-T UT334-O2 Portable Single Gas Detector User Manual

Model: UT334-O2

1. INTRODUCTION

The UNI-T UT334-O2 is a portable single gas detector designed for the accurate detection of Oxygen (O2) levels. This device utilizes a free diffusion method and incorporates high-quality, sensitive sensors to ensure precise and repeatable measurements. Its robust design, featuring a high-strength engineering plastic shell, provides durability, water resistance, dust resistance, and explosion-proof capabilities, making it suitable for various industrial safety monitoring applications.

This manual provides essential information for the safe and effective use, setup, operation, and maintenance of your UT334-O2 gas detector. Please read it thoroughly before using the device.

2. SAFETY INFORMATION

Always adhere to the following safety guidelines to prevent injury or damage to the device:

- **Read all instructions:** Familiarize yourself with the device's functions and safety precautions before operation.
- **Use in specified environments:** Operate the detector only within its specified temperature, humidity, and atmospheric pressure ranges.
- **Regular calibration:** Ensure the detector is calibrated regularly according to manufacturer recommendations to maintain accuracy.
- **Avoid physical shock:** Protect the device from drops or impacts, which can damage internal components.
- **Do not modify:** Never attempt to modify or disassemble the detector. This can compromise its safety features and void the warranty.
- **Battery safety:** Use only specified batteries. Do not mix old and new batteries or different types. Dispose of batteries properly.
- **Explosion-proof certification:** The device has explosion-proof certification. However, ensure it is used in accordance with local safety regulations for hazardous environments.

3. PRODUCT OVERVIEW

Key Features

- Equipped with high-quality and sensitive sensors for accurate detection.
- High-definition color screen display for clear readings.
- Multiple alarm methods: sound, alarm light, and vibration.
- Curve graph periodic measurement display for trend analysis.
- Explosion-proof certification for use in hazardous environments.

Components

The package typically includes the UT334-O2 Gas Detector unit and necessary accessories for operation.



Image 1: UNI-T UT334-O2 Portable Single Gas Detector. This image shows the front view of the device, highlighting its compact size and display screen.

4. SETUP

4.1 Battery Installation

1. Locate the battery compartment cover on the back of the device.

2. Open the cover by sliding or unscrewing it as indicated.
3. Insert the specified batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

4.2 Initial Power-On

After battery installation, press and hold the power button (usually located on the front or side) for a few seconds until the display illuminates. The device will typically perform a self-test upon startup.

4.3 Calibration

For optimal accuracy, it is recommended to perform an initial calibration or verify the factory calibration. Refer to the detailed calibration procedure in the full technical manual or contact UNI-T support for specific instructions. Regular calibration is crucial for reliable gas detection.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

- **To Power On:** Press and hold the power button until the screen activates.
- **To Power Off:** Press and hold the power button until a shutdown prompt appears, then confirm.

5.2 Understanding the Display

The high-definition color screen displays real-time gas concentration, unit of measurement, battery status, and alarm indicators. Consult the device's on-screen menu or full manual for detailed explanations of all display icons and readings.

5.3 Gas Detection

Once powered on, the detector continuously monitors the ambient air for Oxygen (O₂) levels. Position the detector in the area where gas detection is required. The sensor draws in air via free diffusion.

5.4 Alarm Functions

The UT334-O₂ is equipped with multiple alarm mechanisms:

- **Audible Alarm:** A loud beeping sound indicates an alarm condition.
- **Visual Alarm:** An alarm light (LED) will flash, typically red, to indicate an alarm.
- **Vibration Alarm:** The device will vibrate, providing a tactile alert.

Alarm thresholds are typically pre-set but may be adjustable via the device's menu. Refer to the full manual for details on setting alarm points.

5.5 Curve Graph Display

The device can display a curve graph of gas concentration over time, allowing users to monitor trends and identify fluctuations in O₂ levels. Access this feature through the device's menu.

6. MAINTENANCE

6.1 Cleaning

Wipe the exterior of the detector with a soft, damp cloth. Do not use abrasive cleaners or solvents, as these can damage the casing or display. Ensure the sensor inlet is clear of dust and debris.

6.2 Sensor Replacement

Gas sensors have a limited lifespan. When the sensor reaches its end of life or becomes faulty, it will need replacement. This procedure should only be performed by qualified personnel using genuine UNI-T replacement sensors. Refer to the technical service manual for detailed instructions.

6.3 Battery Replacement

Replace batteries when the low battery indicator appears on the display. Follow the battery installation steps outlined in Section 4.1.

6.4 Storage

Store the detector in a cool, dry place away from direct sunlight, extreme temperatures, and corrosive chemicals. Ensure batteries are removed if the device will be stored for an extended period.

7. TROUBLESHOOTING

If you encounter issues with your UT334-O2 detector, try the following common troubleshooting steps:

Problem	Possible Cause	Solution
Device does not power on	Dead or incorrectly installed batteries	Replace batteries; ensure correct polarity.
Inaccurate readings	Sensor contamination or out of calibration	Clean sensor inlet; perform calibration.
No alarm when gas detected	Alarm settings incorrect; speaker/vibrator fault	Check alarm thresholds in settings; contact support if hardware fault suspected.
Display not working	Battery issue; internal fault	Ensure batteries are charged/installed correctly. If problem persists, contact support.

If these steps do not resolve the issue, please contact UNI-T customer support or your local distributor for further assistance.

8. SPECIFICATIONS

Feature	Specification
Brand	UNI-T
Model	UT334-O2
Power Source	Battery Powered
Product Dimensions (D x W x H)	1.89" x 2.67" x 5.5" (48mm x 68mm x 140mm approx.)
Item Weight	1.6 Pounds (0.73 kg approx.)
Alarm Type	Audible, Visual (Light), Vibration
Detection Method	Free Diffusion

Feature	Specification
Display	High-definition color screen
Certifications	Explosion-proof certified

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact the seller directly. UNI-T products typically come with a manufacturer's warranty covering defects in materials and workmanship.

For technical support, service, or inquiries regarding replacement parts, please contact UNI-T customer service or your authorized UNI-T distributor. Contact information can usually be found on the UNI-T official website or on your purchase receipt.