1. Introduction

UT336B Refrigerant Leak Detector is designed with high-sensitivity semiconductor sensor and precision circuit, features quick response, high-accuracy detection, high reliability, easy-to-use, etc. The probe light is made with creative design and synchronously follows the color change of alarm lights in device, thus the alarm status is clearly visible. It is widely used in the refrigeration industries of air-conditioner maintenance, vehicle repair, refrigeration equipment inspection, refrigerator maintenance and others need to use refrigerants.

2. Features

- With high sensitivity, and minor leak can be detected.
- Sensitivity adjustment in six levels, suitable for multiple scenarios with different leak concentration.
- Audible and visual alarm in six levels, with intuitional indication of LED in yellow, orange and red.
- Creative probe light design, clear and visible alarm.
- Auto-reset when enable the device, and the current condition is set to zero.
- Function of LED power indication.
- Simple & Easy-to-use.

3. Configurations

Refrigerant Leak Detector ----------1

User manual ---------- 1

AA Alkaline Battery ---------- 4

Please contact agency if any components are missing or damaged.

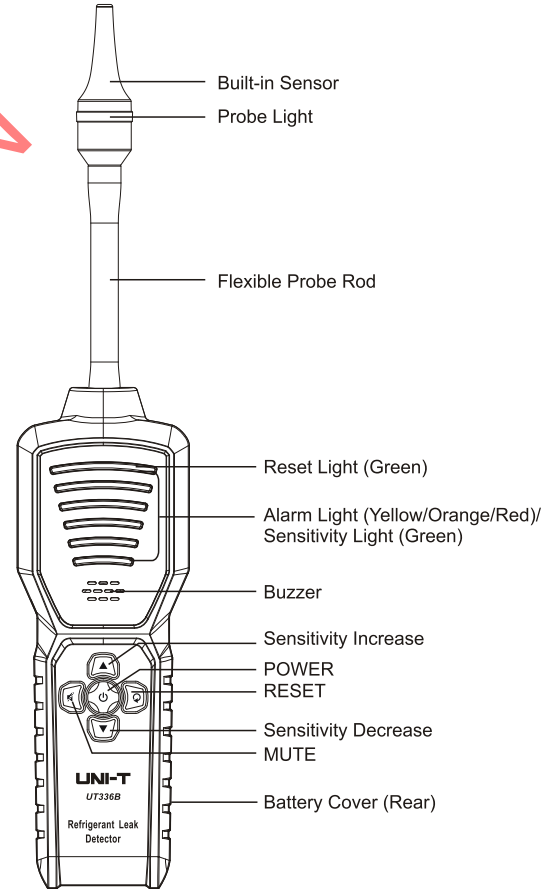
4. Safety

Please read the Safety carefully and follow these steps.

- Check the meter and accessories for any damage or abnormal phenomenon before using. Do not use the meter if the case is apparently damaged, or it is not working properly in any way.
- Do not open the meter randomly and change the internal wirings to avoid damage.
- Do not store or use the meter in high temperature, high humidity, flammable, explosive or strong electromagnetic environment.
- Use soft cloth and neutral detergent to clean the case. Do not use abrasives or solvent.
- Store the meter in a dry and clean place.

5. Components & Buttons

1) Components

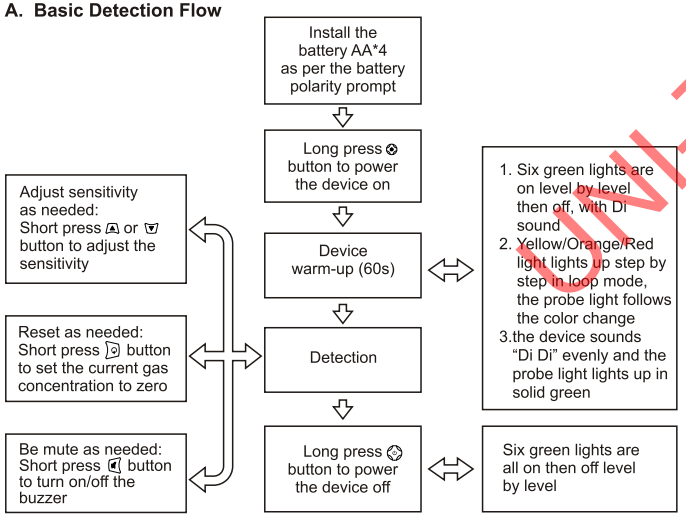


2) Buttons

Buttons	Short Press	Long Press	Lights
Sensitivity Increase	The detection sensitivity is increased	/	Green light is on level by level
POWER	/	Power on/off	Full battery: Backlight in Green Low battery: Backlight in Red Depleted battery: Flashing in Red
RESET	Set the current gas concentration to zero	/	Green light is off after 2s on
Sensitivity Decrease	The detection sensitivity is decreased	/	Green light is off level by level
MUTE	Buzzer ON/OFF	/	/

6. Operations

A. Basic Detection Flow



Notes:

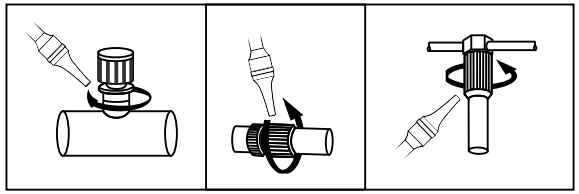
a. The default sensitivity of device is level 3.

b. Short press the RESET button to set zero if it is alarming before the leak location is detected.

c. When the refrigerant is detected, there will be with Di sound increasing in frequency, and alarm lights in Yellow/Orange/Red are on level by level as per the leak concentration.

B. Detection Methods

1. Visually inspect the refrigerating system to check if any oil and dust on the pipeline, any leak on the valve, copper welding spot or pipeline.
2. Move the probe to carefully check every possible area, along the pipeline to check and avoid any potential leak missed. Mark it down and go on the detection when any leak area is detected.
3. Move the probe to carefully check every possible area, and the speed of moving probe is ≤ 1cm/s, and the probe distance should be kept in 1-3mm. See followings:



4. ① Alarming of device identifies the approaching leak location, repeatedly detect the surroundings to check if any repeat alarm occurred.
   ② When the leak location is ensured, move the probe from different directions of non-alarm area to the alarm area to locate the leak source.
   ③ Move the device away from the leak area, then reset the device and gradually decrease the sensitivity to repeatedly locate the concrete leak source.
   ④ Mark it down then go on the detection for other parts of the whole refrigerating system when the leak location is concreted.

Notes:

a. The detection will also be effected by other pollutants, using dry cloth to cleanly wipe and dry air to blow the leak area before the redetection to avoid any inaccuracy, and then repeatedly detect to find the leak location.

b. Oil and dust is existed in most of leak conditions, we should prevent the probe from contacting any pollutants, any moisture or other solvents

c. Following is for the obvious leak detection:
Firstly, use compressed air to blow and clean the potential leak area, and repeatedly detect to locate the correct leak location. Secondly, move the probe to the environment with fresh and clean air to reset, then put the probe to the surrounding of leak location, moving probe slowly to locate the leak source.

d. Three main types of halogenated (Chlorine & Fluorine included) refrigerants of the refrigerating system and containers can be detected by the device:
CFCs R11, R12, R13, R14, R15, R500, R502……
HCFCs R22, R123, R141,R142……..
HFCs R134a, R125, R32, R410A……

7. Technical Specification

Sensor	Semiconductor sensor
Maximum Sensitivity	3g/a
Warm-Up Time	60s
Sensitivity Adjustment	6 Levels (Green light)
Alarm Light	6 Levels (Yellow/Orange/Red light)
Probe Light	Light in solid green when no alarm is detected Follow the color change of alarm lights when detects alarm
Battery Status	Supported
Battery	AA Alkaline Battery *4
Battery Life	~10h (Alkaline Battery)
Auto Power Off	Auto shutoff in 15 minutes if without any actions
Sensor Life	~2yr (Calculate as per 2.5h per day)
Operating temperature and humidity	0℃-50℃, < 80%RH (non-condensing)
Size	190x65x43mm(Not probe rod included)
Weight	282g(Not battery included)

EMC Standard: EN IEC 61326-1:2021

8. Troubleshooting

Troubles	Reasons	Solutions
Fail to enable the device	Depleted battery	Replace the new battery
No response to the known leak source	1.Low sensitivity 2.Expiration of sensor life	1.Turn up sensitivity 2.Purchase and change a new sensor
False alarm but no leak source	Humidity changed in the atmospheric condition	Press RESET button to reset to zero
When power on the device, Yellow, Orange and Red lights are all on, then all off, followed with flashing for 20s to power off	Sensor's open circuit/Sensor is not connected	Twist off the sensor cover to check if the built-in sensor is installed normally.

Note:

If the sensor is not used for a long time (7 days or more), may fail to detect the extreme condition of 3g/a due to its characteristic. Thus, when power on the device, please wait for 5min, and detect after sensor's complete warm-up.

9. Maintenance

9.1 General Maintenance

a) Pay attention to the probe cleaning to avoid any dust, moisture, oil into it.

b) Use cotton cloth or dry gas to clean the outside of soiled probe.

c) Replace the battery in time when the red light of POWER button is on or flashing, ensuring the proper use and test results of the device.

d) Store the device and probe in the dry and clean place.

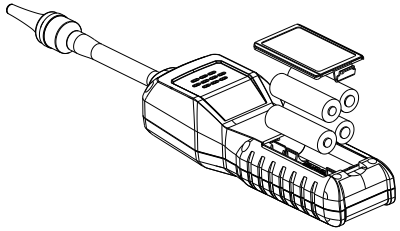
e) Remove battery when the device is not used for a long time.

f) Maintenance and service must be implemented by qualified professionals or specified departments.

UT336B UNI-T

9.2 Battery Installation & Replacement

a) Battery of 1.5 V *4 (AA), and see the followings for battery installation.
b) Facing the panel of device down, open the battery cover to install new batteries as per the battery polarity.
c) Close the battery cover.
d) Please use the same type of battery.



* Please visit https://www.uni-trend.com for details.
* The contents of this manual are subject to change without prior notice.
* Due to different batches, the materials and details of actual products may be slightly different from the graphic information, please refer to the actual product received. Experimental data provided in the page is from internal laboratory of UNI-T, but it should not be a reference for customer to place orders. Any questions, please contact the customer service, thanks!

UNI-T
UNI-TREND TECHNOLOGY (CHINA) CO., LTD.
No.6, Gong Ye Bei 1st Road,
Songshan Lake National High-Tech Industrial
Development Zone, Dongguan City,
Guangdong Province, China