



# TracePro 780 User Manual

## 1. Product Introduction

Thank you for purchasing the TracePro 780 infrared leak detector. Please read this manual carefully before use to ensure safe operation and prevent any potential hazards caused by improper handling.

The TracePro 780 infrared leak detector is a high-precision instrument utilizing infrared spectroscopy technology. It is specifically engineered to swiftly identify refrigerant leaks in refrigeration systems, including air conditioners, cold storage units, and cold chain equipment. Its primary advantages include non-contact detection, high sensitivity, and exceptional anti-interference capabilities. This device is well-suited for leak detection and environmental monitoring across various industries, including heating, ventilation, and air conditioning (HVAC), industrial applications, and the automotive sector.

## 2. Safety Precautions





1. This product contains an integrated lithium battery. Do not expose it to high temperatures or fire to prevent the risk of explosion.
2. Ensure the filter component is properly installed and clean before use to prevent sensor damage.
3. Do not allow water or other liquids to enter the probe rod's air inlet.
4. When using the ultraviolet lamp, avoid direct eye exposure to the ultraviolet (UV) light.
5. The instrument is equipped with a rechargeable lithium battery inside. Please do not replace it with any other battery models.
6. Avoid inhaling the refrigerant, as excessive exposure can pose severe health risks, including unconsciousness or fatality.
7. In the event of product damage, contact the manufacturer immediately. Unauthorized disassembly may result in further damage or pose a risk of battery combustion or explosion.

## 3. Environmental Protection

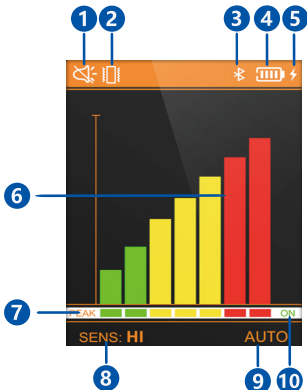
1. At the end of its service life, dispose of the product in accordance with local recycling regulations to minimize environmental impact.
2. Used batteries should be recycled in strict compliance with local regulations.

## 4. Overview



	Long press: Turn on/off. Short press: Turn on/off and mark the maximum leakage.
	Long press: Access settings menu. Short press: Switch between auto/manual mode.
	Long press: Reset (in manual mode) Short press: Switch sensitivity (in auto mode).
	Long press: Turn on/off bluetooth. Short press: Turn on/off the buzzer and vibration.

## 5. Display



1. Buzzer indication
2. Vibration indication
3. Bluetooth indication
4. Battery level indication
5. Charging indication
6. Leakage indication
7. Leakage Peak Record
8. Sensitivity Levels
9. Mode indication
10. Peak value record switch

## 6. Specifications

Detection Principle	Infrared spectrum absorption
Sensitivity	Four-level sensitivity adjustment Super: 1g/a High : 3g/a Medium : 7g/a Low : 14g/a (g/a: grams of leakage per year)
Detectable gases	CFCs, HFCs, HCFCs,HFOs (R134a, R410a, etc.)
Alarm method	TFT display,audible alarm,Vibration alarm and Flashing light alarm
Operating environment	Temperature: -10 ℃ – +52 ℃ Humidity: ≤90% (non-condensing)

## 7. Operation Guide

The ILD series detects refrigerant leaks by analyzing variations in refrigerant concentration within the surrounding environment. It determines leakage points by comparing concentration levels at different locations. When the refrigerant leaks, the concentration of the refrigerant near the leakage point will be significantly higher than that in the surrounding environment.

### Operation Modes

The automatic reset mode and the manual reset mode are two distinct operational methods employed for resetting the system following the detection of refrigerant leakage.

**Automatic Reset Mode:** Automatically resets after an alarm is triggered. Ideal for environments with minimal interference.

**Manual Reset Mode:** Requires manual reset via button press. Maximum sensitivity in this mode is 10 g/a, and the preheating time is 10 minutes. Suitable for high-interference environments.

### Operating Steps

1.Power On: Press the power button to turn on the device. It will take approximately 30 seconds to preheat.

2.Press to adjust to the desired sensitivity level. The default sensitivity level is high.

### Detection Process:

Keep the probe approximately 6mm (0.25 inches) from the suspected leak area.Move the probe slowly (about 75mm/sec or 0.25ft/sec).

### **Leakage detection indicators:**

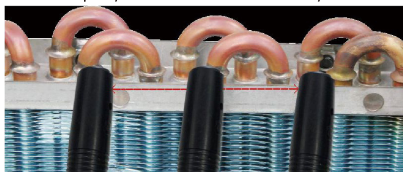
Buzzer: Increasing beep frequency corresponds to greater leakage intensity.

LCD Display: The bar graph height increases with higher leak intensity.

Searchlight: Rapidly flickering.

Vibration motor: Emitting vibrations.

An example diagram of the query method is as follows for your reference:



## **8. Instrument Maintenance**

### **Battery Care**

Charger specifications: 5V/2A

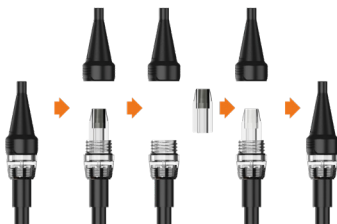
Avoid prolonged charging and excessive discharge.

Charge in a well-ventilated, cool environment.

### **Filter Element Replacement**

The filter element removes contaminants and moisture to prevent false alarms.

Replace the filter when it appears blackened or clogged.



## 9. Set of Accessories

- |                           |    |
|---------------------------|----|
| 1. Infrared Leak Detector | *1 |
| 2. Charging Cable         | *1 |
| 3. UV Lamp                | *1 |
| 4. Filter Elements        | *5 |
| 5. User Manual            | *1 |
| 6. Blow-molded Case       | *1 |

## 10. For more details

Scan the QR code for instructions in your language



## 11. Family Products

### Elitech Tools

