

可燃气体检漏仪

Combustible Gas Detector



用户手册
User Manual

SW-733B

中 文 ----- 01~16

English ----- 17~32

用 户 须 知

- ◆ 本手册详细介绍了产品的使用方法、注意事项以及相关事项，在使用产品之前，请详细阅读手册，以便发挥产品的最佳效能。
- ◆ 请勿近距离进行高浓度燃气测试。如需测试打火机气体（无点火无火焰开启时间小于3秒）并确保安全由远到近并且最小距离传感器5cm。
- ◆ 不要在易燃、易爆的环境中使用仪器及给仪器充电。
- ◆ 注意保护传感器，不沾水污、油污、不要硬物破坏传感器等。
- ◆ 仪器更换的废旧电池和报废的仪器不可与生活垃圾一同处理，请按国家或者当地的相关法律规定处理。
- ◆ 仪器出现任何的质量问题，或对使用仪器有任何疑问时，请及时联系当地经销商或深达威厂家，我们将第一时间为您解决。

感谢您购买  **深达威[®] 仪器** 系列产品！

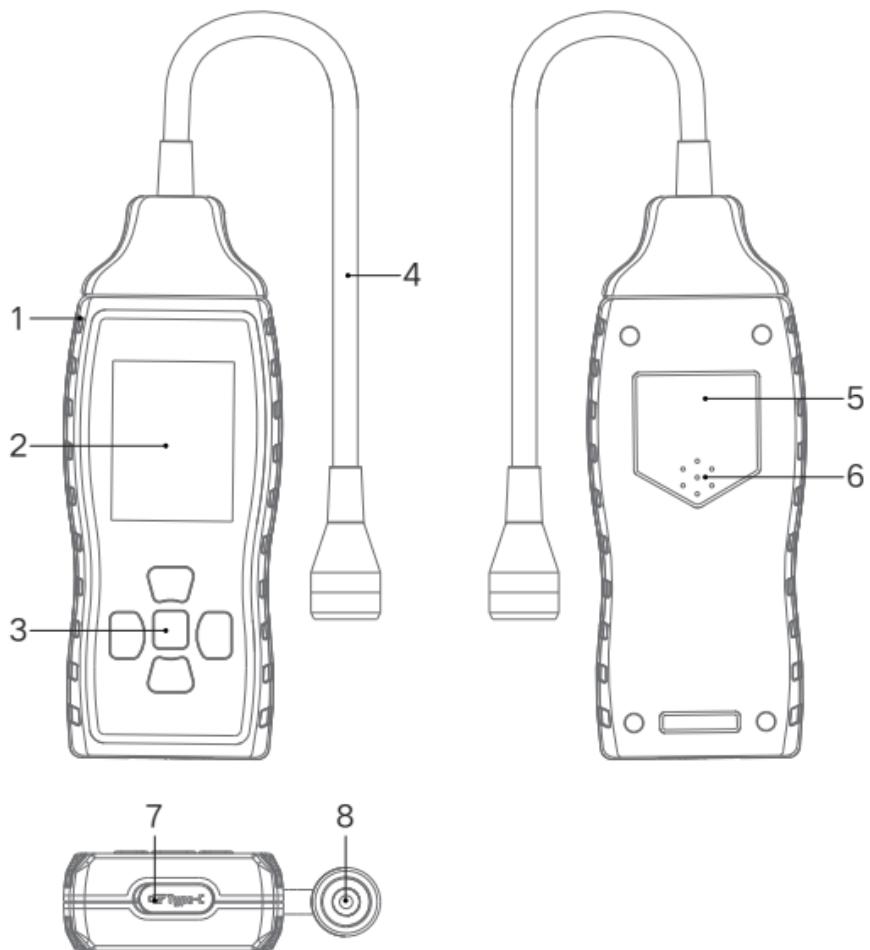
专业铸造品质 品质成就品牌

本可燃气体检漏仪（以下简称检漏仪）采用当前先进的电路技术，优质高性能传感器具有灵敏度高、可靠性好、响应速度快、稳定性高、操作简单等特点，是输气管道燃气泄漏检测最理想的仪器。使用和维护方便，外壳采用高强度工程塑料，强度高、手感好，并且防爆。

本仪器是理想的燃气泄露检测设备，能检测 $\mu\text{ mol/mol}$ 级含量，及时发现燃气微量漏气。

本产品设计、制造、检定遵守以下国家标准（标准如有升级，自动适用新版本）：

- 1、GB12358-2024《作业场所环境气体检测报警仪通用技术要求》
- 2、GB15322.3-2019《可燃气体探测器 第3部分：工业及商业用途便携式可燃气体探测器》
- 3、JJG693-2011《可燃气体检测报警器的检定规程》



1. 外壳
2. 显示屏
3. 按键
4. 万向定型管
5. 铭牌
6. 语音孔
7. Type C接口
8. 传感器、警报灯、手电筒

技术参数

项目	SW-733B
探测气体	天然气、液化石油气；适用于人工煤气，(主要成分甲烷、异丁烷等)
量程	0~9999 $\mu\text{mol/mol}$
分辨率	3 $\mu\text{mol/mol}$
基本误差	@5000~9000 $\mu\text{mol/mol}$ 相对误差 $\pm 10\%$
预热时间(T90)	3分钟
响应时间(T90)	< 30秒
采样方式	扩散式
报警值，校正	两点现场校正
工作电压	3.7V 2000mAH锂电池
充电时间	4~6小时
充电规格	Type-C DC 5V 1A
待机时间	满电可连续使用10小时以上(手电筒关闭时)
显示	LCD液晶显示器，带自动背光照明
直接读数	传感器的实时浓度读数，电池电量，浓度单位，温度，时间
报警设定	低限报警1000 $\mu\text{mol/mol}$ ，高限报警4000 $\mu\text{mol/mol}$ ，用户也可自行设置
报警	语音提示及警笛、警报灯(传感器位置部分)、振动指示报警，工作电压欠压指示
防爆标志	Ex ib IIB T3 GB
适用温湿度范围	-10°C~50°C, 20%~95%RH
存储温湿度范围	0°C~50°C, 10%~70%RH
尺寸	170*66*28.5mm(万向定型管长约260mm)
重量	约255g

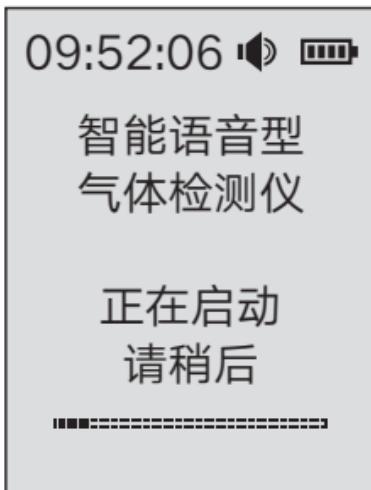


当测量值超过最大量程时，仪器会显示超量程，此时请将仪器移开被测气体，否则在停止通入气体后，仪器可能需要非常长的时间才能恢复到零点。



● 开机操作

长按  键，仪器开机，播音“正在启动请稍后”并显示智能语音型气体检测仪，正在启动请稍后，启动完成后进入主界面。开机状态下，长按  键关机。



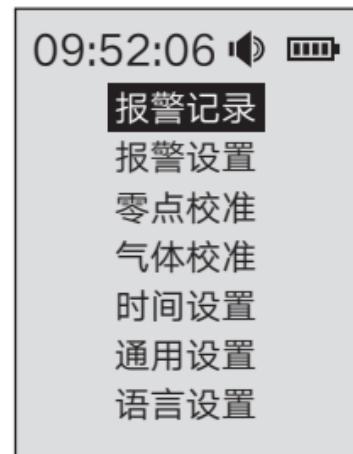
● 按键功能

	短按切换浓度单位 (PPM, $\mu\text{mol/mol}$ 和 %LEL, 三种单位切换)
	短按切换温度单位 (摄氏度与华氏度)
	短按开/关语音 长按进入调零
	短按进入菜单 长按打开手电筒
	长按开机/关机

● 菜单操作

主界面状态下，按  键进入设置菜单；

按   键移动菜单项目，按  键确认进入该项目。



● 报警设置

按   键选择报警设置，按  键确认进入该项目。



按 键修改报警值；按 键确认，切换下一个报警值设置；按 键返回。

● 零点校准

按 键选择零点校准，按 键进入零点校准状态，进度条动态推进完成后，生成调零完成页面，按 键返回至菜单。请在自然通风环境好的环境操作。



● 气体校准

按   键选择气体校准，按  键会提示请校准零点，通入零点气体或洁净空气，然后自动零点校准，待进度条推进完成后显示校准结果，成功后再通入指定浓度的标准气体，再按  键进入气体校准，进度条推进完成后，仪器会提示校准结果；按  键返回至菜单页面。没有标准气体，请勿进行此项操作。



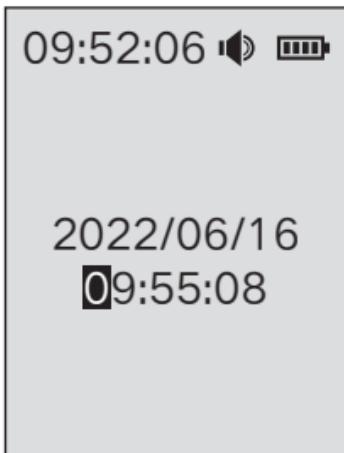
注：气体校准需要在关机时先长按  键和  键，再长按  键开机，直至语音播报完成后再松开  键和  键才能选中气体校准，没有标准气体请勿进行此项操作。

如校准失败，显示错误的因素如下：

1. 没通气； 2. 数据错误； 3. 传感器损耗完或接触不良。

● 时间设置

按 **UNIT** **▼** **°C/F** 键，选择时间设置，按 **●** **MENU** 键进入设置页，按 **UNIT** **▼** **°C/F** 键调整选项数值，按 **CAL** **●** **MENU** 键跳转位置。按 **●** 键确认并返回至菜单页面。如进入设置界面不想设置，可长按 **CAL** 键不保存直接返回菜单。



● 通用设置

按 **UNIT** **▼** **°C/F** 键，选择通用设置，按 **●** **MENU** 键进入设置页，按 **UNIT** **▼** **°C/F** 键，选择需要设置的选项，按 **●** **MENU** 键选择“开”或“关”。按 **CAL** 键退回至菜单页面；



● 语言设置

按 $\begin{array}{c} \uparrow \\ \text{UNIT} \end{array}$ $\begin{array}{c} \downarrow \\ {^{\circ}\text{C}/^{\circ}\text{F}} \end{array}$ 键，选择语言设置，按 $\begin{array}{c} \odot \\ \text{MENU} \end{array}$ 键进入设置页，按 $\begin{array}{c} \uparrow \\ \text{UNIT} \end{array}$ $\begin{array}{c} \downarrow \\ {^{\circ}\text{C}/^{\circ}\text{F}} \end{array}$ 键，选择语言类别，按 $\begin{array}{c} \odot \\ \text{MENU} \end{array}$ 键选择语言，自动返回至中文菜单页面或英文菜单页面。



以上菜单操作完毕，返回至菜单页面后，再按 $\begin{array}{c} \odot \\ \text{CAL} \end{array}$ 键则返回至主界面。

● 报警记录

按 键，选择报警记录，按 键进入页面，按 键浏览数据。

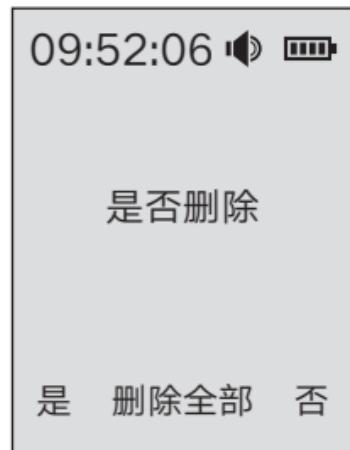


短按 键，进入删除界面，按键功能分别对应为：

键：是，确认删除当前记录；

键：删除全部，删除全部记录；

键：否，取消删除操作；



电池充电

1. 本仪器采用3.7V 2000mAh 锂电池供电。屏幕右上角的电池符号  显示电池的当前电量状况；
2. 当电池电量减少时，图标小格会随之减少，当电量耗尽时，电池符号  闪烁，并语音提示，需要给电池充电。
3. 仪器充电：通过Type-C 充电线，接入 USB 5V 电源即可给仪器充电。

维护操作

1. 只有经过专门培训，并经本公司授权的专业人员，才允许维修本仪器；
2. 在维修本仪器之前，请仔细阅读和理解本操作手册；
3. 在拆卸仪器，更换仪器元件时，必须先关闭仪器。

仪器清洁

1. 检查仪器是否干净，如果不干净，可用干的软布清洁，不得用溶剂或洗涤剂等化学溶剂；
2. 不要把仪器浸在水中或在流水中清洗。如果有必要，仪器可用湿（只能是水）布清洁。
3. 清洁前，最好把传感器盖上，这样可以避免水分、灰尘进入到传感器的进气孔，并保证过滤网不被弄脏。

注意事项

- * 仪器使用环境温度为-10°C ~ 50°C。
- * 仪器的报警为非锁定报警器：当气体浓度达到报警设定值时即报警，当读数回到正常范围时，就停止报警。
- * 仪器传感器的窗口必须保持清洁，若污染应立即清洁干净方可使用。
- * 仪器禁止在含有水蒸汽、酸性气体、碱性气体、强氧化性气体、硅胶气体、硅化合物蒸气及灰尘过高的环境中使用和储存。
- * 若仪器发生故障或污染时应立即停止使用并与有关技术人员联系进行检修维护。
- * 禁止本机从高处跌落或敲击万向定形管（传感器）。
- * 禁止将传感器直接置于高浓度气体测试。
- * 本产品是气体探测器，不是测量装置。

常见故障及其解决方法

故障现象	可能的故障原因	处理方式
无法开机	电压过低	请及时给仪器充电
	死机	长按  键恢复
	电路故障	请联系经销商或制造商维修
对检测气体没有反应	电路故障	请联系经销商或制造商维修
显示不准确	传感器超期	请联系经销商或制造商更换传感器
	长期未校准	请及时校准
当仪器在正常空气中检测，界面显示满量程	传感器故障	请联系经销商或制造商更换传感器

装箱清单

请按下列清单认真检查仪器所有附件是否完整。如不完整，
请及时联系经销商或生产厂家。

序号	名称	单位	数量	备注
1	主机	台	1	
2	Type-C线	条	1	
3	彩盒	个	1	
4	说明书	本	1	
5	布包盒	个	1	
6	保修卡	张	1	

User Instructions

- ◆ This manual introduces application method, attentions and other items about the product in detail. Please read it intently to operate the meter efficiently.
- ◆ Do not use a lighter for high concentration gas test at close range. If the test is needed (The opening time of the device without ignition and flame is less than 3 seconds) , it should be from far to near and the minimum distance from the sensor is 5cm.
- ◆ Do not use or charge the instrument in flammable or explosive circumstances.
- ◆ Pay attention to protect the sensor, do not let it touch water and oil, and do not use hard objects to damage it.
- ◆ Do not throw away the electrical waste with normal household waste, please dispose it by national or local related law and regulations.
- ◆ If there are any quality problems or any doubts about how to operate, please contact the retailer or us, we will solve it as soon as possible.

Professional casts quality and good
quality gets reputation !

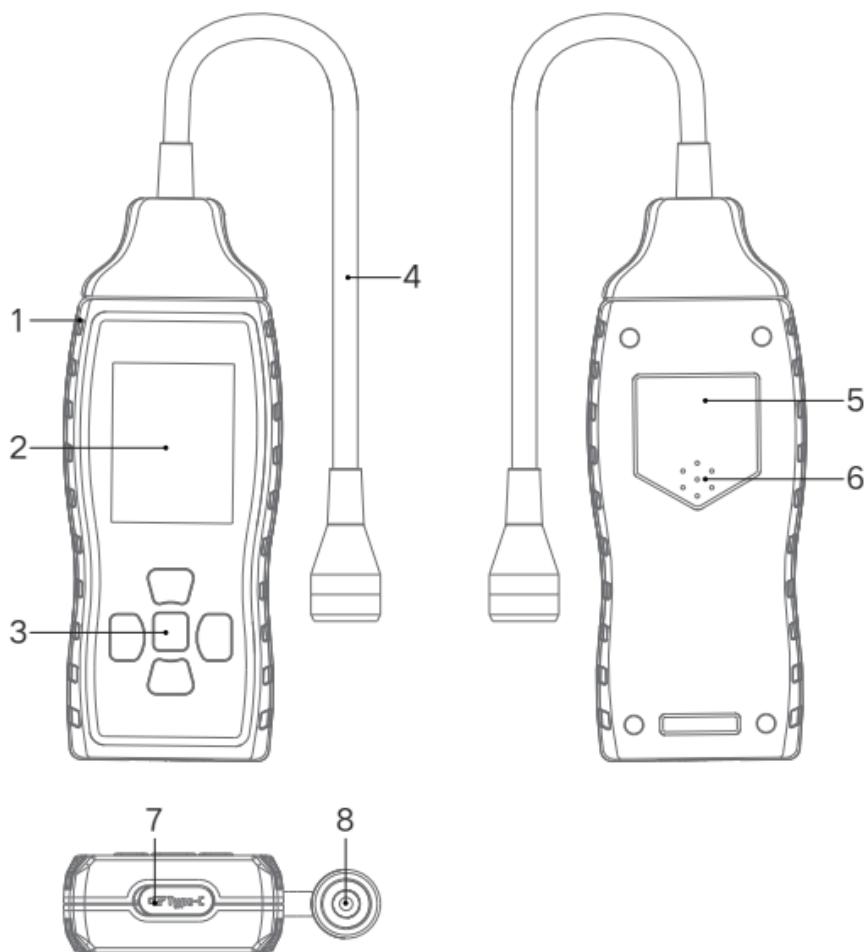
The combustion gas detector (referred to as the detector) adopts the current advanced circuit technology. The high performance sensor has the characteristics of high sensitivity, good reliability, fast response, high stability, and simple operation. It is the most ideal instrument to detect gas pipeline leakage. It is convenient to use and maintain the instrument, the shell of which is made of high-strength engineering plastics, with high strength, good hand feeling, and explosion-proof.

This instrument is an ideal gas leakage detection equipment, can detect $\mu\text{ mol/mol}$ level content, timely find the leakage of gas.

The design, manufacture and verification of this product comply with the following national standards (If the standard is upgraded, the new version automatically applies):

1. GB12358-2024 "General Technical Requirements for Environment Gas Detection & Alarm Detector in Workplaces"
2. GB15322.3-2019 "Combustible Gas Detector Part 3: Portable Combustible Gas Detector for Industrial and Commercial Use"
3. JJG693-2011 "Verification Regulations for Combustible Gas Detection Alarm Instrument"

Tester Structure



- 1. Shell
- 2. LCD
- 3. Keys
- 4. Universal shaping tube
- 5. Nameplate
- 6. Voice hole
- 7. Type C interface
- 8. Sensor, Alarm light, Flashlight

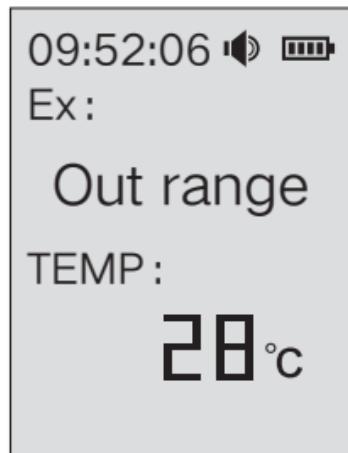
Specifications

Items	SW-733B
Application	Natural Gas, Liquefied Petroleum Gas, Artificial Gas (Main components: methane, isobutane, etc)
Measuring Range	0~9999 $\mu\text{mol/mol}$
Resolution	3 $\mu\text{mol/mol}$
Intrinsic Error	@5000~9000 $\mu\text{mol/mol}$, Relative error $\pm 10\%$
Preheating Time(T90)	3 mins
Response Time(T90)	<30s
Sample Mode	Diffused
Alarm Value, Calibration	Two points correction
Working Voltage	3.7V 2000mAH lithium battery
Charging Time	4-6h
Power Supply	Type-C DC 5V 1A
Standby Time	>10h (at full charge) When the flashlight is off
Display	LCD liquid crystal display with automatic backlighting
Direct Reading	Real-time concentration reading, Battery level, Concentration unit, Temperature, Time
Alarm Setting	Low Concentration Alarm (1000 $\mu\text{mol/mol}$); High Concentration Alarm (4000 $\mu\text{mol/mol}$). Users can set it by themselves
Alarm	Voice prompts, Warning light(sensor position), Vibration alarm, Under-voltage alarm
Explosion-proof Sign	Ex ib IIB T3 GB
Working Temperature/ Humidity	-10°C~50°C, 20%~95%RH
Storage Temperature/ Humidity	0°C~50°C, 10%~70%RH
Dimension	170*66*28.5mm(Universal shaping tube about 260mm)
Weight	About 255g

Main Display

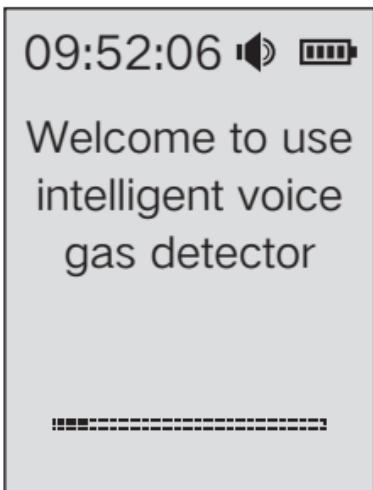


When the measured value exceeds the maximum range, the instrument will display out of range. Move the instrument away at this point, otherwise the it will take a long time to return to zero after the gas is stopped.



● Power on/off

Long press  to start the instrument. The instrument announces "Welcome to use intelligent voice gas detector..." and shows welcome on the screen. The instrument enters the main interface after started. Long press  to power off the it.



● Button Function

	Short press it to switch concentration units (PPM, μ mol/mol and %LEL)
	Short press it to switch temperature units (Centigrade/Fahrenheit degree)
	Short press it to turn on/off voice; Long press it to enter zero adjustment
	Short press it to enter menu; Long press it to turn on flashlight
	Long press it to power on/off

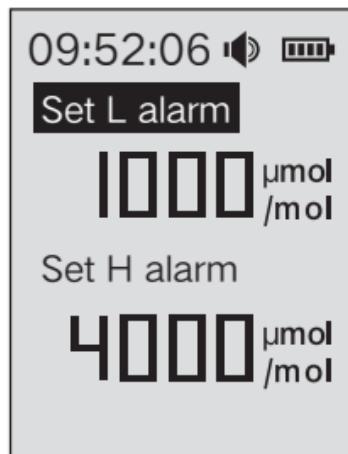
● Menu Operation

In the main interface state, press  to enter the menu setting; Press     to move the menu item, and press  to enter the item.



● Alarm Setting

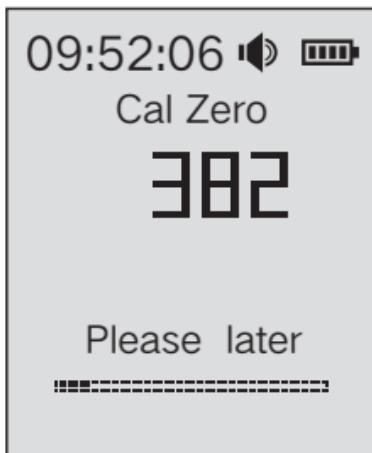
Press     to select Alarm Setting, then press  to enter the item.



Press **UNIT** **°C/F** to modify alarm value; Press **MENU** to confirm and switch the setting of the next alarm value; Press **CAL** to return.

● Zero Calibration

Press **UNIT** **°C/F** to select zero calibration and press **MENU** to enter zero calibration state. After the progress bar is dynamically advanced, a zero adjustment completion page will be generated and press **CAL** to return to the menu. Please operate in a well-ventilated environment.



● Gas Calibration

Press to select gas calibration, press to automatically conduct zero point calibration, and inject zero gas or clean air, then the instrument will display the calibration result after the progress bar is completed. After success, inject specified concentration of standard gas, and then press to enter the gas calibration, after the progress bar is completed, the instrument will prompt the calibration result; Press to return to the menu page. Do not perform this operation if there is no standard gas.



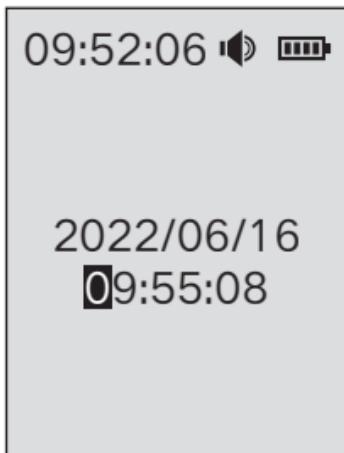
Note: For gas calibration, long press and and then long press to start the machine when the machine is powered off. Release and after the voice broadcast is completed to select the gas calibration. Do not perform this operation if there is no standard gas.

If calibration fails, its factors are as follows:

1. No ventilation; 2. Data errors;
3. Sensor loss or poor contact.

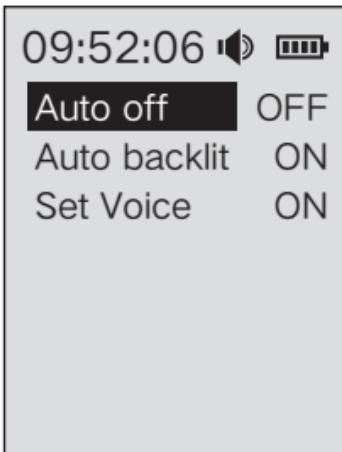
● Time Setting

Press $\begin{smallmatrix} \Delta \\ \text{UNIT} \end{smallmatrix}$ $\begin{smallmatrix} \nabla \\ ^\circ\text{C}/^\circ\text{F} \end{smallmatrix}$ to select time setting; Press $\begin{smallmatrix} \odot \\ \text{MENU} \end{smallmatrix}$ to enter the Settings page; Press $\begin{smallmatrix} \Delta \\ \text{UNIT} \end{smallmatrix}$ $\begin{smallmatrix} \nabla \\ ^\circ\text{C}/^\circ\text{F} \end{smallmatrix}$ to adjust option values; Press $\begin{smallmatrix} \odot \\ \text{CAL} \end{smallmatrix}$ $\begin{smallmatrix} \odot \\ \text{MENU} \end{smallmatrix}$ to jump position; Press P to confirm and return to the menu page. If you do not want to set after entering the setting page, you can long press $\begin{smallmatrix} \odot \\ \text{CAL} \end{smallmatrix}$ to return to the menu without saving.



● General Settings

Press $\begin{smallmatrix} \Delta \\ \text{UNIT} \end{smallmatrix}$ $\begin{smallmatrix} \nabla \\ ^\circ\text{C}/^\circ\text{F} \end{smallmatrix}$ to select Universal Settings; Press $\begin{smallmatrix} \odot \\ \text{MENU} \end{smallmatrix}$ to enter the settings page; Press $\begin{smallmatrix} \Delta \\ \text{UNIT} \end{smallmatrix}$ $\begin{smallmatrix} \nabla \\ ^\circ\text{C}/^\circ\text{F} \end{smallmatrix}$ to select the option to be set. Press $\begin{smallmatrix} \odot \\ \text{MENU} \end{smallmatrix}$ to select "on" or "off"; Press $\begin{smallmatrix} \odot \\ \text{CAL} \end{smallmatrix}$ to return to the menu page.



● Language Setting

Press to select language Settings; Press to enter the Settings page; Press to select language; Press to confirm the language and automatically return to the Chinese menu page or English menu page.



After the above settings are completed and return to the menu page, press to return to the main interface.

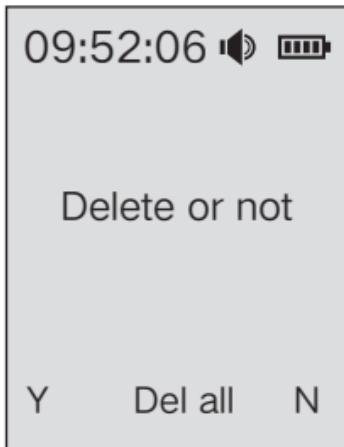
● Alarm Record

Press to select alarm record; Press to enter the page; Press to browse data.



Press to enter the deletion interface. The keys functions are as follows:

- : Yes, delete the current record ;
- : Delete all, delete all records;
- : No, cancel the deletion operation.



Battery Charging

1. The instrument is powered by 3.7V 2000mAh lithium battery. The battery symbol  in the upper right corner of the screen shows the current charge of the battery.
2. When the battery is reduced, the icon will be reduced accordingly. When the battery is exhausted, the battery symbol  flashes and the voice prompts that the battery needs to be charged.
3. Instrument charging: Connect to USB interface (5V) power supply through Type-C charging cable.

Maintenance

1. Only professionals who have been specially trained and authorized by the company are allowed to repair the instrument.
2. Please read this user manual carefully before repairing the instrument.
3. Before disassembling the instrument and replacing the instrument components, close it first.

Instrument Cleaning

1. Check whether the instrument is clean. If not, clean it with a dry soft cloth.
2. Do not immerse the instrument in water or clean it in running water. If necessary, the instrument can be cleaned with a wet (water only) cloth.
3. Before cleaning, it is best to cover the sensor, so as to avoid moisture and dust into the air inlet of the sensor, and ensure that the filter is not dirty.

- * It should be used at the ambient temperature of -10°C~50°C.
- * The alarm of the instrument is non-locking alarm: when the gas concentration reaches the alarm set value, it will alarm, and when the reading returns to the normal range, it will stop alarm.
- * The sensor window of the instrument must be kept clean. In case of contamination, it should be cleaned immediately before use.
- * It is forbidden to use and store the instrument in the environment containing too much water vapor, acid gas, alkaline gas, strong oxidizing gas, silica gel gas, silicon compound vapor and dust.
- * In case of any malfunction or contamination of the instrument, stop using it immediately and contact the relevant technical personnel for maintenance.
- * Do not drop it from high place or hit the universal shaping tube (sensor).
- * Do not place the sensor directly in a high concentration of gas to test.
- * This product is a gas detector, not a measuring device.

Common Faults and the Solutions

Faults	Reasons	Solutions
Unable to turn on	The voltage is too low	Charge it timely
	Crash	Long press  to restore
	Circuit failure	Please contact the dealer or manufacturer for repair
No response to the detection gas	Circuit failure	Please contact the dealer or manufacturer for repair
Inaccurate display	Sensor expired	Please contact the dealer or manufacturer for replacing the sensor
	Long-term uncalibrated	Calibrate it timely
When the instrument is tested in normal air, the interface displays full range	Sensor fault	Please contact the dealer or manufacturer for replacing the sensor

Packing List

Please carefully check whether all accessories of the instrument are complete according to the following list. If incomplete, please contact the distributor or manufacturer in time.

No.	Name	Unit	QTY	Remark
1	Tester	PC	1	
2	Type-C Cable	PC	1	
3	Color Box	PC	1	
4	User Manual	PC	1	
5	Cloth Box	PC	1	

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