产 品 说 明 书
User's Guide

型号 / MODEL: CT-8022 ; CT-8022L

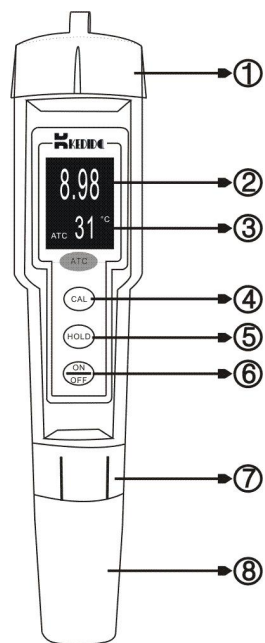# 温馨提示

1.敬请在使用此仪表前，详细阅读此说明书

2.仪表的玻璃电极为易碎品，取下保护帽要小心使用，因为任何破损或擦毛都可能使电极失效!

3.玻璃电极的保质期为一年，出厂一年以后，不论使用与否，其性能都会有所老化，应及时更换。

4.玻璃电极在干燥状态下是无法正常使用的，请使用前用蒸馏水或纯净水浸泡玻璃电极10~30分钟活化再使用。

5.仪表开机时会显示产品型号，随后进入测量模式

序　号	描　　述
1	电池区
2	数据显示区
3	温度显示区
4	CAL/校正键
5	HOLD/数据锁定键
6	ON/OFF 开关机键
7	固定电极环
8	电极部分

特点

➢ 测量范围　±1200mV	➢ **LCD 液晶双显示: mV值和温度值**
➢ 电极可拆卸，更换简单方便	➢ **显示锁定功能 (HOLD)**
➢ 全防水设计，体积小，重量轻	➢ **°C/°F温度单位可选**
➢　10分钟自动关机功能	➢ **1.5 V 电池 (LR44, BAT) x 4 PCs**

➢ 产品型号末尾带"**L**"有智能**LED**背光，感应系统可根据周围光线明暗自动开启或关闭。

➢ 产品广泛应用于环保，食品，卫生，地质探矿，冶金，地面水，工业废水，饮用水，酸雨等检测

技术参数

➢ 显 示 屏	➢ **LCD, 尺寸 : 20 mm x 27 mm**
➢ 测量范围	➢ **±1200mV**
➢ 分辨率	➢ **1mV**
➢ 精 度	➢ **± 2mV**
➢ 工作温度	➢ **0～50°C(32～122 °F)**
➢ 精 度	➢ **1°C / 2°F**
➢ 自动补偿温度	➢ **0～50°C**
➢ 尺寸	➢ **188 x 38mm**
➢ 重量	➢ **82 g (包括电极).**

操作指南

使用前请用力拨下仪表下方的电极保护帽，请勿旋动!

一、恢复出厂设置

    1.按下"ON/OFF"键开机（如已开机，可省略)

    2.长按"HOLD"键，直到显示屏显示CLR符号后，才可放起按键（确认仪表不能在锁定状态下)

    3.仪表再次校正后可正常使用。

二、°C / °F单位转换（出厂有仪表默认温度单位：°C)

    1.仪表在关机状态下，同时按住CAL键+ON/OFF键（切记不要放起)

    2.等待显示屏右侧出现°C或者°F符号时，同时放开CAL键+HOLD键

    3. 点按"CAL键"进行温度单位选择°F或者°C

    4.按"HOLD键"保存，并显示屏会显示 "SA"符号

    5.随后仪表进入正常测量模式。

三、自动温度补偿（ATC)

    在显示屏左下角有ATC符号出现，表示仪表处于自动温度补偿工作模式中。

四、锁定功能

    按"ON/OFF键"开机后待仪表进入测量模式，按下"HOLD键"锁定液晶显示屏上的当前数据并且在显示屏上会出现闪烁的"hold"符号，再次点按"HOLD 键"即解除锁定模式。

五、超量程显示

当mV值低于-1200或者高于 +1200时，ORP显示区会显示："- - -"。

当温度低于0°C或高于50°C时，温度显示区会显示：符号 'Ｌ' 或符号 'Ｈ' 。

六、低电压提示

当电池符号显示或显示屏闪烁时，表示电池电压已不足，请尽快更换新电池，切记新旧电池不要混用。

七、产品保修

产品购买之日起，免费保修一年 (不包含电池和玻璃电极)

在下列情况下不属于保修范围：

使用不当造成损坏 (如电池漏液、摔坏、进水等) ；工作温度超过50°C，外观受到损坏、超过保修时间以及产品被自行拆装；

八 、温馨提示

1. ORP计属于专业仪表，非专业人士请在专业人士指导下进行操作，以免造成仪器故障!

2. 首次使用前请把电极用清水浸泡10分钟左右，

3.在正常使用情况下，电极感应器也会有附着物或者其它污物，这样会影响电极感应器与被测介质的接触面积，进而影响测试灵敏度和准确度。使用前请用先注意清洁干净的感应片，保持电极表面干净光亮后再进行测试。每次使用完毕后，请一定注意保持电极感应器干净光亮，盖上电极保护套，放置阴凉通风处。
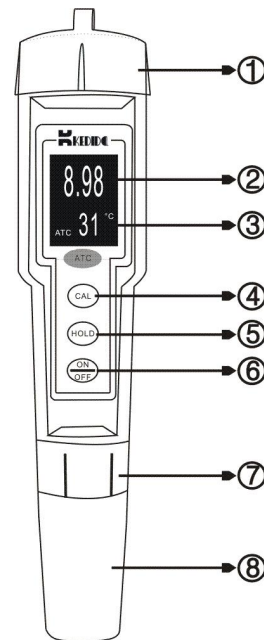
Tips:

1. Please read this manual carefully before using this instrument

2. The glass electrode of the instrument is fragile, so be careful when removing the protective cap, as any damage

or rubbing may cause the electrode to fail!

The shelf life of glass electrodes is one year. After one year from the factory, their performance will deteriorate regardless of whether they are used or not, and they should be replaced in a timely manner.

4. Glass electrodes cannot be used normally in a dry state. Please soak the glass electrodes in distilled or purified water for 10-30 minutes before use to activate them.

When the instrument is turned on, it will display the product model and then enter the measurement mode

No,	Description
1	Battery Area
2	Data Display Area
3	Temperature Area
4	CAL key
5	HOLD key
6	ON/OFF key
7	Fixed electrode ring
8	Electrode Part

Specification

➢ **Measurement range ± 1200mV**	➢ **LCD dual display: mV value and temperature value**
➢ **The electrode is detachable and easy to replace**	➢ **Display lock function (HOLD)**
➢ **Fully waterproof design, small size, light weight**	➢ **Temperature units of °C/°F are optional**
➢ **10 minute automatic shutdown function**	➢ **1.5 V (LR44, BAT) x 4 PCs**
➢ **The product model ends with an "L" and has an intelligent LED backlight. The sensing system can automatically turn on or off according to the brightness of the surrounding light.**	
➢ **The product is widely used in environmental protection, food, hygiene, geological exploration, metallurgy, surface water, industrial wastewater, drinking water, acid rain and other testing**	

Features

➢ **LCD**	➢ **LCD, Size : 20 mm x 27 mm**
➢ **Measurement Range**	➢ **± 1200mV**
➢ **Resolution**	➢ **1mV**
➢ **Accuracy**	➢ **± 2mV**
➢ **Working Temperature**	➢ **0 ～ 50°C(32 ～ 122 °F)**
➢ **Resolution**	➢ **1°C / 2°F**
➢ **ATC**	➢ **0 ～ 50°C**
➢ **Size**	➢ **188 x 38mm**
➢ **Weight**	➢ **82 g (包括电极).**

Operational Guidelines

Before use, please forcefully remove the electrode protection cap under the instrument panel and do not rotate it!

A、Restore factory settings

    1. Press the "ON/OFF" button to turn on the device (if it is already turned on, it can be omitted)

    2. Long press the "HOLD" button until the CLR symbol is displayed on the screen, then release the button (confirm that the instrument cannot be locked)

    3.After recalibration, the instrument can be used normally.

B、°C/°F unit conversion (default temperature unit for instruments at the factory: °C)

    1. When the instrument is turned off, Keep to press the CAL key+ON/OFF key at the same time (remember not to put it up)

    2. When the °C or °F symbol appears on the right side of the display screen, release the CAL and HOLD keys simultaneously

    3. Press the "CAL" key to select the temperature unit as °F or °C

    4. Press the "HOLD" key to save, and the "SA" symbol will be displayed on the screen

    5. Subsequently, the instrument enters normal measurement mode.

C、Automatic Temperature Compensation (ATC)

    The ATC symbol appears in the lower left corner of the display screen, indicating that the instrument is in automatic temperature compensation mode。

D、Hold Function

Press the "ON/OFF" button to turn on the device and wait for the instrument to enter measurement mode.

Press the "HOLD" button to lock the current data on the LCD screen and a flashing "hold" symbol will appear on the screen. Press the "HOLD" button again to unlock the mode.

E、Over range display

When the mV value is below -1200 or above +1200, the ORP display area will show: "---"。

When the temperature is below 0 °C or above 50 °C, the temperature display area will show the symbol 'L' or symbol 'H' 。

F、Low Voltage Indication

When the battery symbol displays or the display screen flashes, it indicates that the battery voltage is insufficient. Please replace the new battery as soon as possible and remember not to mix old and new batteries。

G、Product Warranty

Free one-year warranty from the date of purchase (excluding battery and glass electrode)

The following situations are not covered by the warranty:

Damage caused by improper use (such as battery leakage, breakage, water ingress, etc.); The working temperature exceeds 50 °C, the appearance is damaged, the warranty period has expired, and the product has been disassembled by oneself;

H、Remind

1. ORP meters are professional instruments. Non professionals are advised to operate them under the guidance of professionals to avoid instrument malfunctions!

2. Before the first use, please soak the electrode in clean water for about 10 minutes,

3. Under normal use, electrode sensors may also have attachments or other contaminants, which can affect the contact area between the electrode sensor and the measured medium, thereby affecting the sensitivity and accuracy of the test. Before use, please use a sensor that has been cleaned thoroughly and keep the electrode surface clean and shiny before testing. After each use, please make sure to keep the electrode sensor clean and bright, cover it with an electrode protective cover, and place it in a cool and ventilated place.