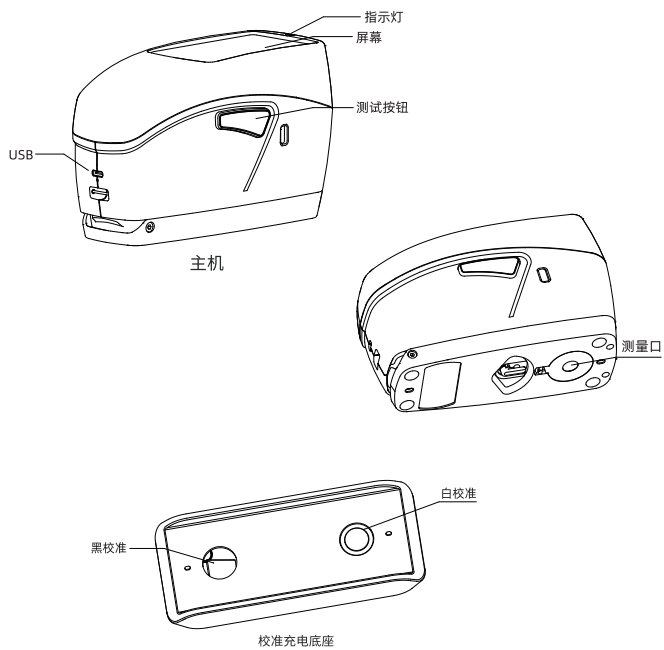


# 分光测色仪 使用说明书

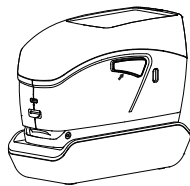
## 产品介绍

使用产品前请仔细阅读本说明书,并妥善保管

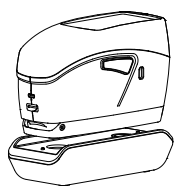


## 快速使用教程

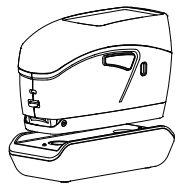
### 1. 开机及校准



开机



将仪器放到校准底座进行白校准



将仪器放到黑校准盒上进行黑校准

### 2. 如何测色差



测标准

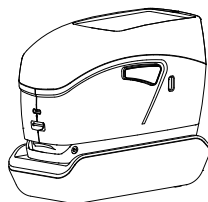


切换到色差测量界面



测样品,得出色差

### 3. 关机



长按3秒

## 基础参数

测量结构※	D/8,SCI+SCE
SCI+SCE同时测量	支持
一体式物理定位孔	支持
测量重复性※※	dE*ab≤0.02
显示精度	0.01
照明光源	全波段均衡LED光源
口径	Φ11mm
测量指标	光谱反射率,CIE-Lab,CIE-LCh,HunterLab,CIE-Luv,XYZ,Yxy,RGB 色差(ΔE*ab,ΔE*cmc,ΔE*94,ΔE*00),白度 (ASTME313-00,ASTME313-73,CIE,ISO2470/R457,AATC-C,Hunter,TaubeBerger Stensby)黄度(ASTM D1925,ASTM E313-00,ASTM E313-73)黑度(My,dM),沾色牢度,变色牢度,Tint(ASTM E313-00)色密度CMYK(A,T,E,M),同色异谱指数Milm,孟塞尔,遮盖力,力份(染料强度,着色力)
光源条件	A,B,C,D50,D55,D65,D75F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12CW-F,U30,U35,DLF,NBF,TL83,TL84,ID50,ID65,LED-B1,LED-B2,LED-B3,LED-B4LED-B5,LED-BH1,LED-RGB1,LED-V1,LED-V2 Andriod,iOS,Windows,微信小程序,鸿蒙
软件支持	保证计量合格
准确性保证	2°, 10°
视场角	40mm
积分球直径	CIENo.15,GB/T3978,GB2893,GB/T18833,I-SO7724-1,ASTME1164,DIN5033Teil7
符合标准	高精度纳米分光器件
分光方式	硅光电二极管阵列双16组
感应器	10nm
波长间隔	400-700nm
波长范围	0-200%
反射率测定范围	0.01%
反射率分辨率	约1秒
测量时间	USB, 蓝牙
接口	全彩屏幕, 3.5英寸
屏幕	单次充电可连续测量8000次, 7.2V/3000mAh
电池容量	500万次
光源寿命	简体中文, 英语
语言	仪器: 10000条; APP: 海量存储
存储	178mm*73mm*108mm
体积	约680g
重量	

※漫射照明/8°方向接收, 包含镜面反射光/去除镜面反射光

※※白板校准后以5秒间隔测量白板30次以MAV口径测量结果标准偏差

## 保修说明

本产品售后服务严格依据《中华人民共和国消费者权益保护法》、《中华人民共和国产品质量法》实行售后三包服务,服务内容如下:

- 1、自您签收日起7日内,本产品出现《产品性能故障表》所列性能故障的情况,经由本司售后服务中心检测确定,可免费享受退货或换货服务;
- 2、自您签收日起8-15日内,本产品出现《产品性能故障表》所列性能故障的情况,经由本司售后服务中心检测确定,可免费享受换货或维修服务;
- 3、由您签收日起至保修期结束,本产品出现《产品性能故障表》所列性能故障的情况,经由本司售后服务中心检测确定,可免费享受维修服务。

### 提示信息

因运输过程中需用包装箱保证产品运输安全,建议自签收日起至少保留包装箱30天。

### 非保修条例

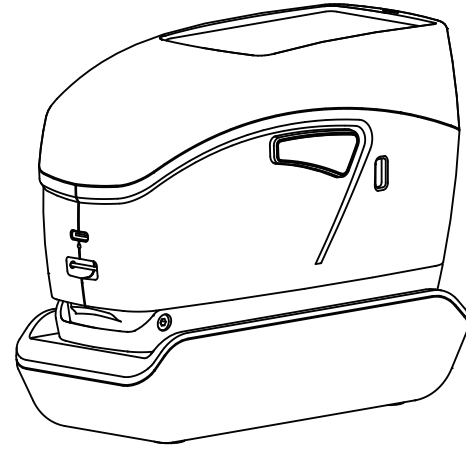
- 1、未经授权的维修、误用、碰撞、疏忽、滥用、进液、事故、改动、使用非本产品配件,或撕毁涂改标签、防伪标记;
- 2、已超过三包有效期;
- 3、因不可抗力造成的破坏;
- 4、不符合《产品性能故障表》所列性能故障的情况;
- 5、因人为原因导致非本产品及其配件产生《产品性能故障表》所列性能故障。

## 警告

- 请勿尝试拆卸或更换仪器内部零件,如需服务请联系代理商或官方客服。
- 请勿将仪器放置于热源或直接暴露在炉火旁。
- 若任何液体不小心进入仪器,请立即关闭仪器电源。
- 本产品及内部零件,如被儿童误食可能导致窒息等危险。

## 性能故障表

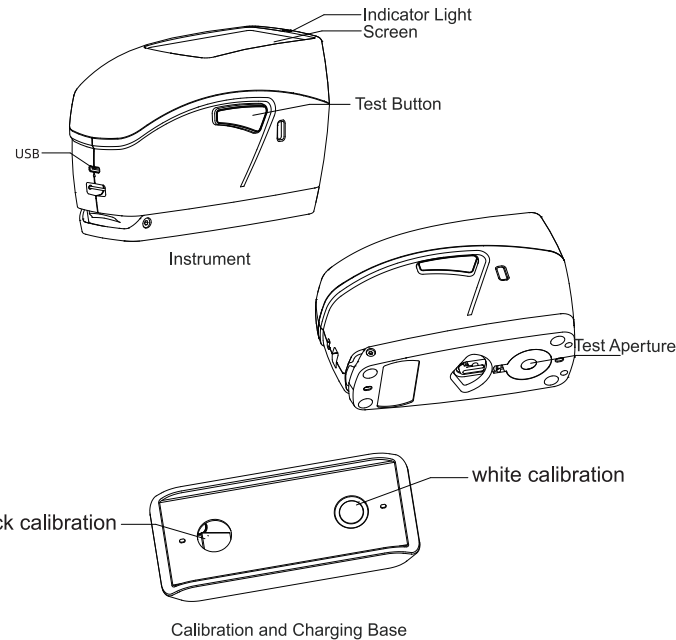
名称	性能故障
分光测色仪	1、电源指示灯不亮(电池没电除外); 2、仪器开关卡滞,不能正常开关; 3、仪器显示器无法正常显示; 4、测量光源不亮; 5、蓝牙无法连接。



## Spectrophotometer Operation instruction

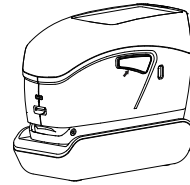
### Product introduction

Please read this manual carefully before using the product.

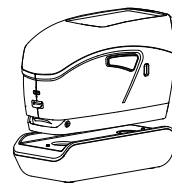


### Quick Start

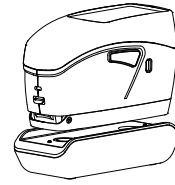
#### 1. Power on and Calibration



Power on

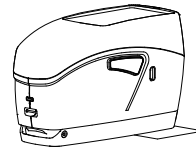


Put the instrument into the calibration base for white calibration.

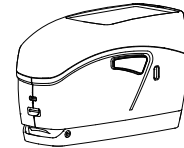


Place the instrument on the black calibration box for black calibration

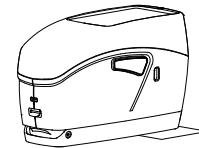
#### 2. How to measure color difference



Measure Target



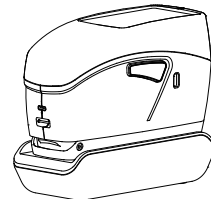
Enter into color difference measurement interface



Measure sample to get the color difference

dL\*:-  
da\*:-  
db\*:-  
dE\*ab:-

#### 3. Power off



Long press 3s

### Parameters

Measurement structure	D/8,SCI+SCE
SCI+SCE simultaneous measurement	support
Integrated physical positioning holes	support
Measurement Repeatability	dE*abs0.02
Display accuracy	0.01
lighting source	Full-band balanced LED light source
caliber	Φ11mm
measurement standard	Spectral reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE-Luv, XYZ, Yxy, RGB color difference (ΔE*ab, ΔE*cmc, ΔE*94, ΔE*00), whiteness (ASTME313-00, ASTME313 -73, CIE, ISO2470/R457, AATCC, Hunter, TaubeBerger Stensby) yellowness (ASTM D1925, ASTM E313-00, ASTM E313-73) blackness (My, dM), stain fastness, color fastness, Tint (ASTM E313-00) Color density CMYK (A, T, E, M), metamerism index Milm, Munsell, hiding power, strength (dye strength, tinting strength)
Light source conditions	A,B,C,D50,D55,D65,D75F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12CW F,U30,U35,DLF,NBF,TL83,TL84,ID50,ID65,LED-B1,LED-B2,LED-B3,LED-B4,LED-B5,LED-BH1,LED-RGB1,LED-V1,LED-V2 Andriod, iOS, Windows, WeChat applet, Hongmeng
software support	Ensure measurement is qualified
Accuracy guaranteed	2°, 10°
field of view	40mm
Integrating sphere diameter	CIENo.15,GB/T3978,GB2893,GB/T18833,ISO7724-1,ASTME1164,-
Standards compliant	DIN5033Teil7
	High-precision nano spectroscopic device
Spectral method	Silicon photodiode array dual 16 groups
sensor	10nm
wavelength interval	400-700nm
Wavelength range	0-200%
Reflectivity measurement range	0.01%
Reflectance resolution	about 1 second
measure time	USB, Bluetooth
interface	Full color screen, 3.5 inches
Screen	Can continuously measure 8000 times on a single charge,
battery capacity	7.2V/3000mAh
Light source life	5 million times
language	Simplified Chinese, English
storage	Instrument: 10,000 items; APP: Mass storage
volume	178mm*73mm*108mm
weight	About 680g

※ Diffuse lighting/8° direction reception, including specular reflected light/removing specular reflected light

※※ After whiteboard calibration, measure the whiteboard 30 times at 5-second intervals and measure the standard deviation of the results with MAV caliber.

### Warranty

#### Reminder

It is recommend that keep the packing box for at least 30 days as the packing box is required to ensure the safety of transportation.

#### Non warranty regulations

- 1.Unauthorized repair,misuse,accident,modification,use of nonofficial accessories.
- 2.Instrument is out of warranty.
- 3.Damage caused by force.
- 4.Not the performance failure listed in the product performance failure table.
- 5.Performance failure caused by human factors.

### Warning

- .Do not attempt to disassemble or replace any part of the equipment. Please contact the agent or official customer service for after sales service.
- .Do not place the equipment near heat source or directly expose to the fire.
- .If any liquid enters the equipment,please power off the equipment immediately.
- .This product contains small parts.It may cause suffocation and other hazards,if swallowed by children.

### Product Performance Failure Table

Name	Performance failure
Spectrophotometer	<ol style="list-style-type: none"> <li>1.The equipment can't power on.</li> <li>2.The equipment's button can't work normally.</li> <li>3.Equipment screen fails to work normally.</li> <li>4.Equipment lamp fails to work normally.</li> <li>5.Bluetooth can't connect.</li> </ol>