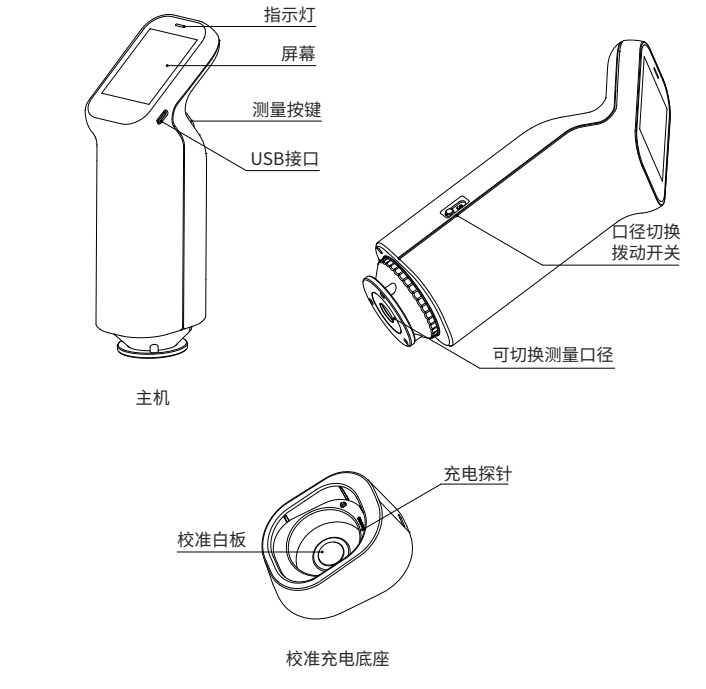




使用产品前请仔细阅读本说明书,并妥善保管



快速使用教程

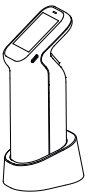
1.扫描二维码获取手机App及操作说明



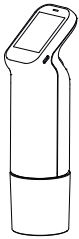
2.开机及校准



开机

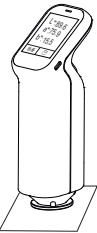


将仪器放到白校准底座上进行白校准



将仪器放到黑校准盒上进行黑校准

3.如何测色差



测标准

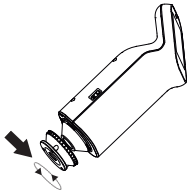


切换到色差测量界面

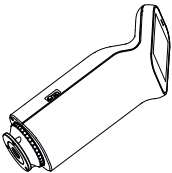


测样品,得出色差

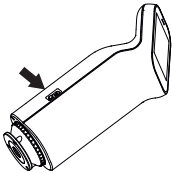
4.口径切换



旋转并取下测量口径



将测量口径旋转扣合



根据口径选择对应的MAV或SAV模式

5.关机



长按3秒

基础参数

测量结构:	D/8,SCI/SCE(漫射照明/8°方向接收,包含镜面反射/去除镜面反射)
符合标准:	符合标准CIE No.15,GB/T 3978,GB 2893 GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7
分光方式:	纳米集成光谱器件
感 应 器:	硅光电二极管阵列 双16组
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(ASTM E313-00,ASTM E313-73,CIE/ISO AATCC,Hunter,TaubeBerger,Stensby,R457) 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Milmm 孟塞尔,遮盖力,力份(染料强度,着色力)
积分球直径:	40mm
照明光源:	全波段均衡LED光源
测量口径:	稳定型: $\Phi 11mm$, $\Phi 6mm$, $\Phi 3mm$; 灵巧型: $\nabla 11mm$, $\nabla 6mm$, $\nabla 3mm$
波长间隔:	10nm
波长范围:	400-700nm(用户可查看31个波长反射率)
反射率测定范围:	0-200%
反射率分辨率:	0.01%
显示精度:	0.01
测量重复性:	$\Delta E^*ab \leq 0.03$ (仪器校正后,以5秒间隔测量白色校正板30次以MAV口径测量结果标准偏差)
测量时间:	约1秒
接 口:	USB, 蓝牙
光源条件:	A,B,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7, F8,F9,10,F11,F12,CWF,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 2°, 10°
视 场 角:	2°, 10°
屏 幕:	全彩屏幕, 2.4英寸
电池容量:	单次充电可连续测量8000次, 3.7V/3000mAh
光源寿命:	10年100万次
语 言:	简体中文, 英语
校 准:	智能自动校准
软件支持:	Android, iOS, Windows, 微信小程序
测量观察方式:	摄像头
重 量:	约260g
体 积:	180mm*60mm*51mm
准确性保证:	一级计量合格
存 储:	仪器: 1万条数据; APP: 海量存储

*参数如有修改,恕不另行通知

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、由你签收日期至保修期结束,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

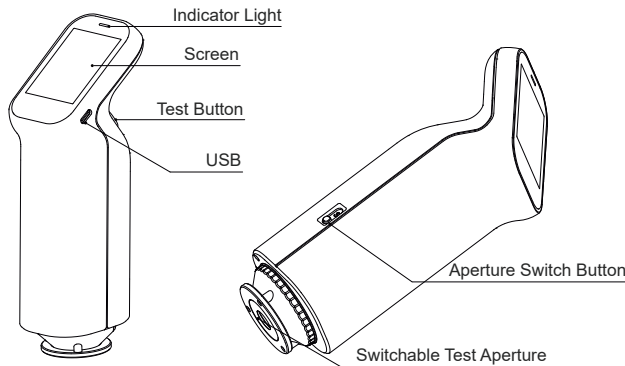
- 请勿尝试拆卸或更换仪器内部零件,如需服务请联系代理商或官方客服。
- 请勿将仪器放置于热源或直接暴露在炉火旁。
- 若任何液体不小心进入仪器,请立即关闭仪器电源。
- 本产品及内部零件,如被儿童误食可能导致窒息等危险。

性能故障表

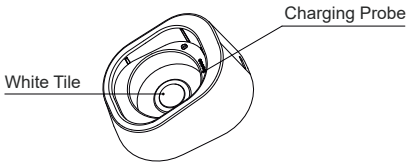
名称	性能故障
分光色差仪	1、电源指示灯不亮(电池没电除外); 2、仪器开关卡滞,不能正常开关; 3、仪器显示器无法正常显示; 4、测量光源不亮; 5、蓝牙无法连接。

Product introduction

Please read this manual carefully before using the product.



Instrument



Calibration and Charging Base

Spectral Colorimeter Operation Instruction

Quick Start

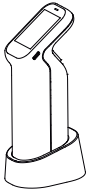
1.Scan QR code to get mobile App



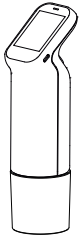
2.Power on Calibration



Power on

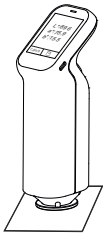


Place the instrument on the white calibration base for white calibration



Place the instrument on the black calibration box for black calibration

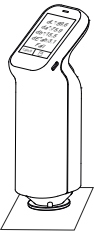
3.How to measure color difference



Measure Target



Enter into color difference measurement interface

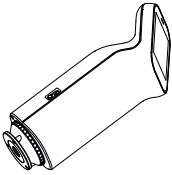


Measure sample to get the color difference

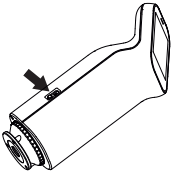
4.Change Test Aperture



Twist and take off the aperture



Twist to install the new aperture



Choose MAV or SAV according to the aperture size

5.Power off



Long press 3s

Parameters

GeoMetry and Angle:	d/8 (diffused illumination,8 degree viewing) SCI (specular component included) +SCE (specular component excluded)
Standards compliant:	Conform to standard CIE No.15, GB/T 3978, GB 2 GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7
Spectroscopic method:	Nano-integrated spectral devices
Sensor:	Silicon Photodiode Array Dual 16 Groups
Color Value:	Reflectance CIE-Lab,CIE-LCh,HunterLab,CIE-Luv,XYZ,Yxy,RGB ColorDifference(ΔE^*ab , ΔE^*cmc , ΔE^*94 , ΔE^*00) WI(ASTM E313-00,ASTM E313-73,CIE/ISO AATCC,Hunter, TaubeBerger,Stensby,R457),YI(ASTM D1925 ASTM E313-00,ASTM E313-73),Blackness (My,dM) ,Color Fastness Tint(ASTM E313-00),Color Density (CMYK(A,T,E,M)) ,Milmm Munsell,Opacity,ColorStrength
Integrating sphere diameter:	40mm
Lighting source:	Full band balanced LED light source
Measuring aperture:	3w/ plate and 3w/o plate: $\Phi 11mm$, $\Phi 6mm$, $\Phi 3mm$; $\nabla 11mm$, $\nabla 6mm$, $\nabla 3mm$
Wavelength Interval:	10nm
Wavelength Range:	400-700nm
Reflectance measurement range:	0-200%
Reflectance resolution:	0.01%
Measurement accuracy:	0.01
Repeatability:	$\Delta E^*ab \leq 0.03$ (When a white tile is measured 30 times at 5-seconds interval)
Measurement Time:	About 1s
Interface:	USB,Bluetooth
Illuminants:	A,B,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8, F9,F10,F11,F12,CWF,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
Observer Angle:	2°,10°
Screen:	Full color screen, 2.4 inches
Battery:	Rechargeable, 8,000 times continuous tests,3.7V /3000mAh
Light Source Lifetime:	10 years,1 million tests
Language:	Chinese,English
Calibration:	Automatic
Software support:	Android/iOS/Windows/WeChat applet
Camera:	Yes
Weight:	About 260g
Instrument Size:	180mm*60mm*51mm
Accuracy assurance:	Guarantee Qualification of First-level Measurement
Storage:	Instrument: 10,000 pieces of data; APP: Mass Storage

*Parameters are subject to change without notice

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
Spectral Colorimeter	1.The equipment can't power on. 2.The equipment's button can't work normally. 3.Equipment screen fails to work normally. 4.Equipment lamp fails to work normally. 5.Bluetooth can't connect.

SKU:22ADCP000410