



COLORIMETER BKH-401

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This is a handheld multifunctional colorimeter with a 3.5 inch IPS color capacitive touch screen for an excellent experience. The instrument integrates many color cards, which can be matched to the nearest color card number for the sample color. It also has a color comparison function, a variety of color difference formulas to choose from, allowing for quick QC testing.



Spectral sensor with fitting algorithm to provide good repeatability
Equipped with an advanced spectral sensor, the instrument has a unique set of intelligent algorithms to analyse the 8 wavelengths of visible light to ensure accuracy.

Full spectrum LED light source

The instrument uses a full spectrum balanced LED light source to avoid the problem of white LEDs missing the spectrum in specific wavelengths, making measurements more accurate.

Adopting D/8 international common lighting method, widely applied

The instrument uses the D/8 international universal illumination method, including specular reflected light (SCI), for a wide range of applications.

Conforms to the national Grade 1 colorimeter standards.

SPECIFICATIONS

Model	BKH-401
Illumination Geometry	D/8, specular component include (SCI)
Illumination Light Source	Full spectrum LED light source
Spectral Range	400-700nm
Spectral Interval	10nm
Measuring Aperture	8mm
Measurement Conditions	Light source D65, field of view 10°
Measuring Time	About 1s
Color Space	CIE Lab, Luv, LCh, Yxy, CMYK, RGB, Hex, WI-98, WI-Ganz, WI-R457, WI-Hunter, YI-98, Reflectance
Color Difference Formula	ΔE^*ab , ΔE^*uv , ΔE^*94 , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, ΔE^*00 , $\Delta E^*cmc(1.4:1)$
Repeatability	Standard deviation ΔE^*ab is within 0.03 (Measurement condition: the average value of 30 measurements on the whiteboard at an interval of 3s after calibration)
Inter-Instrument Agreement	$\Delta E^*ab \leq 0.4$, based on avg. of 12 BCRA series II tiles
Dimension	179mm * 64.5mm * 93mm
Weight	About 325g
Power Supply	Rechargeable lithium battery 3.7V@4000mAh, can measure 10,000 times continuously under full charge
Display	480 * 320 dot matrix IPS color screen
Language	Simplified Chinese, English, Turkey
Charging Port	USB (Type-C)
Operating Temperature Range	0~45°C, 0~85%RH (no condensation)
Storage Temperature Range	-25~55°C, 0~85%RH (no condensation)
Alt Name	Colorimeter

FEATURES

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wavelengths, making measurements more accurate.

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Extended the functions via mobile app

App connection for color sharing on the app.

Support data import and export with PC software

With PC software, it has a stronger statistical analysis function of color difference and can import and export the stored data of the instrument at the same time.

3.5 inch large touch screen

3.5 inch capacitive touch screen for a good human-machine interface.

Quick matching of color cards

It includes multiple electronic color cards to quickly match the nearest color card number, with matching accuracy of over 90%.

QC function

QC function allows users to quickly assess color accuracy against existing standards and realize rapid batch inspection.

Rich color index

Supports a wide range of color measurement index to meet the needs of various CIE certifications including CIE Lab, Luv, LCh, Yxy, CMYK, RGB, Hex, WI-98, WI-Gauz, WI-Hunter, WI-R457, YI-98, Reflectance.

Spectral reflectance curves

Provides professional spectral reflectance curves from which the user can obtain information on the hue, saturation and shade of the sample color.

APPLICATIONS

The instrument employs full spectrum LED light source and spectral sensor, adopting D/8 illumination geometry with high measurement accuracy. It is widely used in the industries of automotive paint, hardware processing, stone, decorative materials, and plastic.



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