



Colorimeter (CD Series)

Brochure

Global Office of Lisun Electronics Inc.

<http://www.Lisungroup.com>

Lisun Group (Hong Kong) Limited

Add: Room 803, Chevalier House, 45-51 Chatham Road South, Tsim Sha Tsui, KL, HK

Tel: 00852-68852050 Fax: 00852-30785638

Email: SalesHK@Lisungroup.com

Lisun Electronics (Shanghai) Co., Ltd

Add: 113-114, No. 1 Building, Nanxiang Zhidi Industry Park, No. 1101, Huyi Road, Jiading District, Shanghai, 201802, China

Tel: +86(21)5108 3341 Fax: +86(21)5108 3342

Email: SalesSH@Lisungroup.com

Lisun Electronics Inc. (USA)

Add: 445 S. Figueroa Street, Los Angeles, CA 90071, U.S.A.

Email: Sales@Lisungroup.com

Lisun China Factory

Add: NO. 37, Xiangyuan Road, Hangzhou City, Zhejiang Province, China

Tel: +86-189-1799-6096

Email: Engineering@Lisungroup.com

Leader in Lighting & Electrical Test Instruments

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Colorimeter

Basic Introduction

Colorimeter is widely used in different industries such as plastic cement, printing, paint, weaving and dyeing. It measures the sample color data $L^*a^*b^*$, $L^*c^*h^*$, color difference ΔE and ΔLab according to CIE color space.

Product Model



CD-200



CD-300



CD-310



CD-320

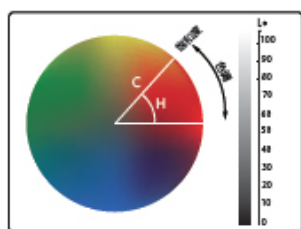
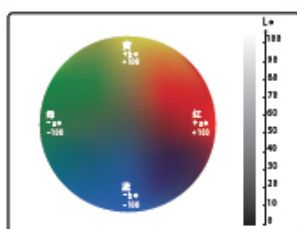
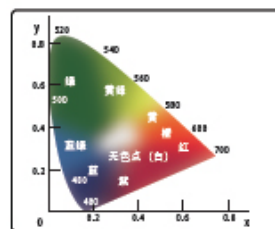
Instrument Introduction

- **National measurement certification**

Device sensor exports Japan and information processing chip is from USA, which guarantee the optical signal transfer accuracy and electrical signal stability.

- **Multiple color space display color values : $L^*a^*b^*$, $L^*c^*h^*$, Yxy**

Being the most commonly used testing device, our colorimeter with built-in color display indicators transformation program, which makes our device could be used for color testing in many different industries. And it do not need convert the measurement data by manual so it greatly improve the work efficiency.

CIE $L^*c^*h^*$ Color SpaceCIE $L^*a^*b^*$ color space

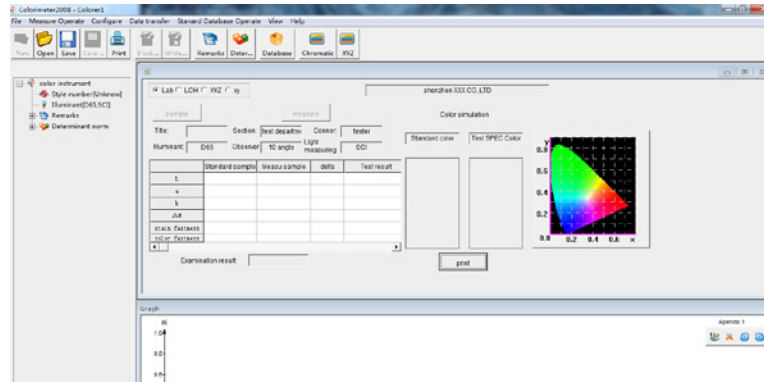
Yxy Color Space

- **Ergonomic Design**

Instrument girth radian designs according to human palm so we could test data for a long time with it. Superior leather design increases the friction in case of fingers sliding.

- **Free Color Management Software**

Real-time display of qualified or not, generate testing report, save the color data, suitable for the enterprise to evaluate color and control the color data.



- **Establish the Prototype Data $L^*a^*b^*$ by manually**

The standard samples can be manually set to meet the color difference test if there is no sample in hand.

- **Mass data storage**

The device could store 10 standard sample groups and every sample group could store 100 sample data.

Advantages

CD-200

CD-200 is the economic version colorimeter designed for the assembly line. It could meet all the test requirement for the customers and its high accuracy is also suitable for other color testing work.

CD-300

CD-300 is an upgraded version of CD-200. It improves the testing accuracy and increase function for testing yellow and whiteness. It is the highest performance-price ratio device now.

CD-310

CD-310 includes a camera for measurement spot view. Previous color measurement instrument can only align with the test spot approximately, and can easily incur errors. The CD-310 can choose the measure spot to keep the high test accuracy



CD-320

CD-320 includes specular component excluded (SCE) measurement mode, which is especially suitable for measuring and managing the color data of powder colloid materials, high-reflective materials, etc.



Technical Data

Type	CD-200	CD-300	CD-310	CD-320
Illumination system	8/d (8°/diffused illumination)			8/d, SCE
display mode	Chroma value: L*a*b, L*c*h, Yxy, ΔE*ab, XYZ, Relative RGB value. Chromatism value: Δ(L*a*b*);Δ(L*c*h*);	Chroma value: L*a*b, L*c*h, Yxy, ΔE*ab, XYZ, Relative RGB value. Chromatism value: Δ(L*a*b*);Δ(L*c*h*); Degree of Whiteness: Hunter white ness, Gantz whitness Degree of Yellowness: YI		
Testing Port Diameter	About 8mm			
Measuring conditions	CIE 10° standard observer; CIE D65 light source			
Measuring range	L*: 1-100			
Repeatability	Standard deviation within ΔE*ab*, below 0.1 (testing condition: measure the white calibration board for average)	Standard deviation within ΔE*ab*, below 0.08 (testing condition: measure the white calibration board 80 times for average)		
Storage	10 sets of standard samples; up to 100 under each standard sample	100 sets of standard samples; up to 100 under each standard sample		
Measuring time	About 0.5 seconds			
Measuring light source	LED			

Type	CD-200	CD-300	CD-310	CD-320
languages	Chinese, English			
Power	Four AA1.5V Alkaline battery or nickel-metal hydride batteries; Exclusive DC5V adapter			
Port	USB2.0 printer			
Weight	550g			
Size	77×86×210mm			

Application



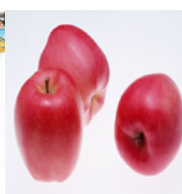
Plastic



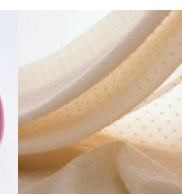
Paint



Print



Food



Textile



Car