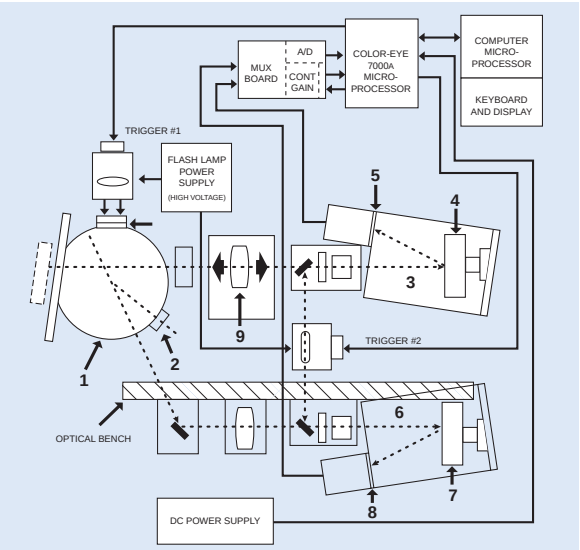
Specifications

Repeatability (white tile)	Maximum 0.01 RMS ΔE CIELab
Interinstrument Agreement (LAV)	Maximum 0.08 Avg. ΔE CIELab*
Illumination	Pulsed xenon
Number of Flashes per Measurement (normal use)	1
Measurement Time	<1 second
Spectral Range	360 nm to 750 nm
Wavelength Accuracy	0.1 nm (400 to 700)
Wavelength Precision	0.05 nm (400 to 700)
Wavelength Interval	10 nm
Band Pass	10 nm
Photometric Range	0% to 200%
Photometric Resolution	0.001%
Aperture	
Large Area View (LAV)	1" (2.54 cm)
Medium Area View (MAV)	0.6" (1.5 cm)
Small Area View (SAV)	0.3" x 0.4" (0.75 cm x 1 cm)
Very Small Area View (VSAV)	0.12" x 0.31" (0.3 cm x 0.8 cm)
Optical Configuration	Diffuse/8° (illumination/measurement) 6" (15.2 cm) integrating sphere 2 spectral analyzers
Transmission	Direct and diffuse
Dimensions	15.25" high, 11" wide, 28" deep, (38.7 cm high, 27.9 cm wide, 71.1 cm deep)
Temperature (operating)	60°F to 90°F (15°C to 32°C)
Relative Humidity	0% to 90% (non-condensing)
Power Consumption	36 watts passive 100 watts continuous use
Electrical Requirements	117 VAC/50-60 Hz 230 VAC/50-60 Hz

*Average ΔE of BCRA ceramic standards relative to GretagMacbeth standardized values under lab conditions.
Specifications subject to change without notice.



Key Performance Components

1. Sphere
2. Sphere specular insert
3. Spectral analyzer
4. Holographic grating
5. 40-element detector array
6. Reference analyzer
7. Holographic grating
8. 40-element detector array
9. Zoom lens

To learn more about the Color-Eye 7000A Spectrophotometer, contact your nearest GretagMacbeth location.

GretagMacbeth™

United States: 617 Little Britain Road, New Windsor, NY 12553-6148, Tel: 800 622 2384, 914 565 7660 (Outside USA and Canada), Fax: 914 561 0267
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Visit our new World Wide Web Site at www.gretagmacbeth.com

Part No. 982853 (6/97)

True Dual-Beam Design Provides Greater Consistency and Productivity

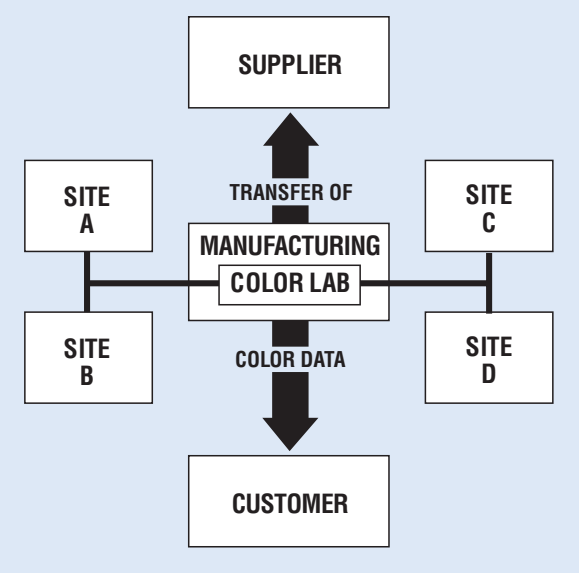
The Color-Eye 7000A has two spectral analyzers which measure the sample and the internal reference in a single flash, or multiple flashes if desired. This advanced design assures superior stability over time and provides faster readings for greater throughput.

Pulsed Xenon Light Source Ensures Measurement Accuracy

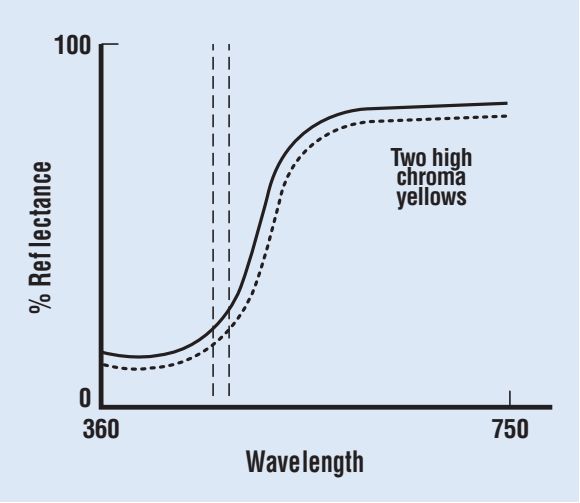
High intensity pulsed xenon ensures accurate readings, even for dark or highly saturated colors. And its high signal-to-noise ratio eliminates the effects of ambient light. The shorter duration D65 source offers extended life, produces virtually no heat, and requires no warm-up.

Exclusive Automatic Balancing Enhances Reliability

This exclusive GretagMacbeth feature employs an additional pulsed xenon light source which automatically flashes at preprogrammed intervals to balance the two spectral analyzers. These constant, routine adjustments compensate for temperature changes and power fluctuations, and prevent electronic drift.



Using a network of Color-Eye 7000A spectrophotometers, colors specified in the lab can be faithfully reproduced by satellite manufacturers.



Three-decimal-point data at 10 nm measurement intervals assure high-chroma colors with "steep slopes" are accurately characterized for precise identification of absorption points.

Color-Eye 7000A Spectrophotometer Ensures Absolute Color Measurement Precision

Building on GretagMacbeth's Color-Eye 7000, the premier reference instrument in the industry, the Color-Eye 7000A incorporates several automated functions to make operation even more efficient. The optical design is exactly the same as that found in the Color-Eye 7000, ensuring that the two instruments will produce the same color data. The Color-Eye 7000A features unsurpassed interinstrument agreement, superior precision and outstanding reproducibility over time. It is the instrument of choice for dedicated color analysis — in the lab or in a manufacturing setting.

Precise, Repeatable Measurements Allow You to Share Data Globally

With the Color-Eye 7000A you can measure samples once and then rely solely on stored numerical standards. Sharing its numerical standards ensures that products which pass manufacturers' outgoing color inspections will pass customers' incoming color inspections.

Increased Efficiency with Motorized UV Controls

With a simple selection, a motorized UV control automatically adjusts the UV content to that found in natural D65 daylight. In addition, the Color-Eye 7000A includes two user-programmable adjustments. A motorized specular insert lets you easily measure color shifts as a result of gloss or texture.

Touch Screen Display Lets You Easily View and Change Instrument Status

The unique touch screen display provides instrument status at a glance and also allows you to easily configure the instrument. By giving you the flexibility to configure the instrument via the touch screen display, you can immediately use any software that currently works with the Color-Eye 7000. When using GretagMacbeth color quality control or color formulation software, you have the option of changing the instrument status from either the instrument or the software.

Accurately Measure Both Translucent and Transparent Materials

Get precise readings on diffuse or direct transmission samples, including thin films, by using the removable sample holder. This is essential for applications using less than opaque samples. By combining the Color-Eye 7000A with GretagMacbeth's ProPalette® color formulation software, you can achieve accurate color matches at all levels of opacity.

Dual-beam design features two spectral analyzers for superior stability and greater productivity.

Easily configure the Color-Eye 7000A using the intuitive touch screen display.

Exclusive Automatic Electronic Balancing routinely calibrates and balances the spectral analyzers for maximum long-term stability.

A spacious transmission compartment allows convenient manipulation of samples to obtain the most accurate measurements possible.

Color-Eye® 7000A
Reference Spectrophotometer

Used By The World's Leading Innovators In
Plastics, Paints, Inks And Textiles

GretagMacbeth™