



## X-Rite MA94™

Portable Multi-Angle Spectrophotometer

Color can make or break a product. Metallics, pearlescents, and other complex special effect finishes deliver limitless possibilities for enhancing product appeal. And limitless challenges as well. Duplicating complex colors from part to part is no easy task.

X-Rite has answers. Our MA94 spectrophotometer is an intelligent, hand-held tool with the power to provide reliable data on coatings for a wide range of industries.

Through a series of pressure sensors, the MA94 is able to consistently produce accurate readings on flexible and curved surfaces.

We've made it easy to use, too. There's a large color LCD screen for reading data or measurement directions, and options for USB or Bluetooth wireless data communication. A more powerful version of our MA68II device, MA94 operation is enhanced by exclusive advantages, such as X-ColorQC® software that enhances process recording, reporting, and control and a JOBS software mode that allows text or visual measurement direction to ensure consistency. All in a few keystrokes.

So now, the only limit to working with special effect finishes is your imagination.





## X-Rite MA94 Features and Advantages

**Accurate, repeatable sample positioning.** Innovative user selectable pressure sensors ensure consistent sample interface on flexible or curved surfaces.

**Portable, lightweight.** The unit weighs a little more than a kilogram, making it ideally suited for long-term use without discomfort.

**Rugged design.** Engineered to withstand demanding production environments. Supported by an unprecedented two-year warranty.

**Bundled with X-Rite's exclusive X-Color QC™ measurement and analysis software.**

**Quick reads.** Consistent measurements are achieved in 2 seconds.

**Universal functionality.** Universal menu icons simplify usage while eliminating language barrier.

**Program measurement position and sequence.** Through software JOBS mode, workers can be given text and/or visual measurement directions to ensure consistency of measurement from shift to shift.

**Increased lamp life, reduced battery consumption.** Improved illumination efficiency, results in reduced power consumption from the lamp, allowing up to 750 reads from a fully charged battery.

**Compatibility with previous X-Rite instruments.** Maintaining similar optical configurations from previous generations of X-Rite instruments provides compatibility with existing data.

**International standards ready.** Meets DIN and ASTM standards: ASTM D 2244, E 308, E 1164, E 2194; DIN 5033, 6174, 6175-2; ISO 7724; SAE J1545.

### X-RITE WORLD HEADQUARTERS

Grand Rapids, Michigan USA • (800) 248-9748 • +1 616 803-2100 • xrite.com  
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## X-Rite MA94 Specifications

<b>Measuring Geometrics</b>	
Illumination	45°
Aspecular Viewing	15°, 25°, 45°, 75°, 110°
<b>Angular Accuracy</b>	±0.15°
	Fiber Optic pick up coupled with DRS technology
<b>Measurement Area</b>	Approx. 12mm (.5 inch)
<b>Light Source</b>	Gas filled tungsten lamp
<b>Lamp Life</b>	750,000 measurements typical
<b>Spectral Range</b>	400nm – 700nm
<b>Spectral Interval</b>	10nm (31 measured points)
<b>Measurement Range</b>	0 - 400%
<b>Colorimetric Illuminants</b>	A, C, D50, D65, F2, F7, F11 & F12
<b>Colorimetric Standard Observers</b>	2° & 10°
<b>Colorimetric Scales</b>	L*a*b*, L*C*h°, ΔE*; ΔECMC; ΔE DIN6175, ΔE <sub>2000</sub>
<b>Effect Parameters</b>	Flop Index
<b>Measurement Time</b>	Approx. 2 seconds
<b>Reproducibility (Inter-instrument agreement)</b>	0.18 ΔE* avg on reference Series II BCRA tile set
<b>Repeatability</b>	0.03 avg. ΔE* on white cal plaque (20 measurements at 5 sec intervals)
<b>Power Supply</b>	Rechargeable Lithium Ion battery pack 7.4vDC @ 2400mAh
<b>AC Adapter</b>	12vDC, 2.5 amps
<b>Measurements per charge</b>	Up to 1500 measurements, Li ion dual battery packs
<b>Measurement storage</b>	250 Standards 1000 Samples
<b>Data interface</b>	USB 2.0 Bluetooth wireless (in compliant countries only)
<b>Operating Temperature Range</b>	50F to 104F (10C to 40C) 85% Relative Humidity max (non-condensing)
<b>Storage Temperature Range</b>	-4F to 122F (-20C to 50C)
<b>Dimensions</b>	3.4 x 4.5x 10.6 inches (8,7cm x 11,4cm x 26,9cm)
<b>Weight</b>	2.5 lbs 1.13 kg
<b>Standards</b>	
ASTM	D 2244, E 308, E 1164, E 2194
DIN	5033, 6174, 6175-2
ISO	7724
SAE	J1545

