



# X-RiteColor<sup>®</sup> Monitor Optimizer<sup>®</sup>

True CIE-based  
Colorimeter For  
Accurate Monitor  
Calibration  
And Profiling



## Tethered Desktop Colorimeter For Monitor Calibration

Is your monitor displaying colors accurately? There is one way to make sure. Calibrate and profile your monitor in just a few minutes with the X-RiteColor<sup>®</sup> Monitor Optimizer.<sup>®</sup>

It's the only true CIE-based colorimeter available for desktop color use. It has a wide-band four-channel design that boasts advantages over competitive devices.

- It is more accurate than single-filter meters or ordinary three-filter calibrators labeled as colorimeters.
- It is also more accurate than common spectrophotometers that claim accuracy when used in monitor calibration.

Only the Monitor Optimizer can be used to measure and calculate a wide variety of indices and colorimetric data using its internal microprocessor.

## Finally, Monitor Precision

The Monitor Optimizer is the best way to achieve and maintain color accuracy among multiple monitors in your work flow. It is fast, reliable and simple to use.

## Using The Monitor Optimizer

Simply connect the Monitor Optimizer to your Macintosh or Windows serial port and install the monitor calibration software (included with the Monitor Optimizer system). Press the instrument to attach it to your monitor. Select the calibration settings for your system, click calibrate, and click save. The software displays test colors that are measured by the instrument. You can even create ICC profiles for use in any application that supports ICC compatible color management.

## Widely Supported

X-Rite<sup>®</sup> has won accolades for our intuitive software, which is useful for monitor calibration\* and ICC profile creation on your Macintosh or Windows computer.

The X-Rite Monitor Optimizer is widely supported by many software packages for use in prepress, graphic design, photography, medical and broadcast applications. For use with third-party software applications, the Monitor Optimizer instrument can be ordered separately. This configuration does not include software, but does offer optional interface cables for all major computing platforms including Sun, SGI, Macintosh and Windows systems.

## Monitor Optimizer System

Monitor Optimizer system includes everything needed to connect and begin using it in minutes:

- Accurate, true CIE colorimeter
- Monitor calibration\* and ICC profile creation software
- Computer interface cables and AC adapters for Macintosh and Windows computers
- Complete electronic documentation for immediate online access
- Allows user to set predefined gamma response curves.\*
- Offers color temperature setting from 2856° to 9300° Kelvin.\*

## Monitor Optimizer Instrument

The instrument-only configuration includes everything you need to work with leading third-party imaging systems and software:

- Accurate, true CIE colorimeter
- Computer interface cables for Macintosh, Windows, Sun and SGI computers and instrument AC adapters
- Instrument connection documentation
- Platform and application independent
- Compatible with third-party color management and calibration software



\*Note for Windows users: Monitor calibration requires Windows 98 or 2000 or later and a PC 98 or later compliant video card.

## Specifications

### Measuring Area

Diameter: .57in (14.5mm)

### Receiver

Blue enhanced silicon photodiodes

### Sample Characteristics

Target: 1.25in x 1.25in min. (3cm x 3cm)  
Monitor radius: 22.6in min.

### Measurement Time

< 2 seconds per measurement

### Output

Colorimetric data, color temperature, RGB, luminance, and video frequency

### Measuring Range

0 to 150 ft•lamberts  
(0 to 500 cd/m2[nits])  
40-150 Hz refresh rate  
(interlaced or non-interlaced)

### Linearity

Within 2% over range (typical)

### Accuracy

Chroma: ±.003 x,y (Typ.)  
Luminance: ±4% Y  
White point calibration within 4% of NIST standards

### Repeatability

±0.002 x,y ±0.01 or 1% Y

### I/O Connection

Mini DIN 8-pin Plug  
- DB9 Socket Adapter  
- DB25 Plug Adapter  
USB

### Data Interface

Interface:  
- RS-232 serial interface with baud rates from 1200 to 19.2k  
- USB  
Protocol: X-Rite RCI commands

### Power Requirements

Voltage:  
+5VDC min./ +12VDC max.  
Current:  
60mA nominal/100 mA maximum  
USB Low Power Class Device

### Environmental

Operational Range:  
+10°C (50°F) to 35°C (104°F);  
30% to 60% RH  
Storage Range:  
0°C (32°F) to 46°C (115°F);  
5% to 85% RH  
RH ratings are non-condensing

### Physical Dimensions

Height: 5.36cm (2.11in)  
Width: 5.64cm (2.22in)  
Length: 10.29cm (4.05in)

### Weight

178g (6.25 oz)

### System Requirements: Monitor Optimizer System Macintosh:

- A PowerPC G3 or newer processor
- Mac OS 8.6, 9.x, or 10.1 Classic
- CD-ROM drive
- 2 MB of RAM
- 3 MB of free disk space
- 8 bit color monitor or better:  
24 bit recommended for calibration
- Available Serial or USB port

### Windows:

- A Pentium Class processor
- Windows 98SE, NT4.0 SP5 or higher, or 2000
- CD-ROM drive
- 2 MB of RAM
- 5 MB of free disk space
- 16 bit color monitor or better:  
24 bit recommended for calibration
- Available Serial or USB port

### System Requirements: Monitor Optimizer Instrument

- Macintosh, Sun, SGI, and Windows computers
- Available serial or USB port
- A supporting third-party software application

For the most recent list of supporting third-party software, see X-RiteColor Enabled Partner literature item (L11-031A and L11-031B) or web page under our Support & Training Page at [www.x-rite.com](http://www.x-rite.com). This product covered by U.S. and foreign Patents and Patents Pending. Specifications and design subject to change without notice.

## Benefits

- Fast and simple to use.
- Automates the entire monitor calibration and profiling process.
- Can be used to help match multiple monitors to each other, at the same location or remotely.
- Saves time and effort by improving preview accuracy to color materials.
- Enables materials savings through soft-proofing with Apple ColorSync or Windows ICM compatible software.
- Supported by virtually every color calibration and color management solution available today.

## Features

The Monitor Optimizer Instrument

- Measures with true CIE response, making it the most accurate and affordable monitor characterizer.
- Includes built-in processor for fast and accurate measurement data.
- Uses X-Rite's patented two-way serial communication technology.
- Suited to a wide range of applications like graphic arts, photography, digital imaging, biomedical displays, video and broadcast.



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ISO 9001  
Certified

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