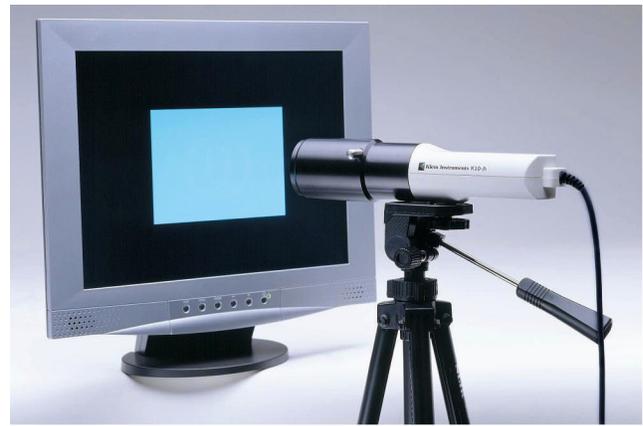


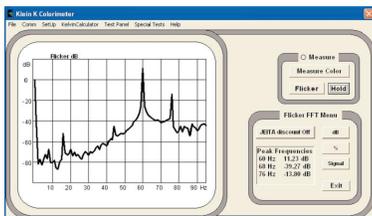
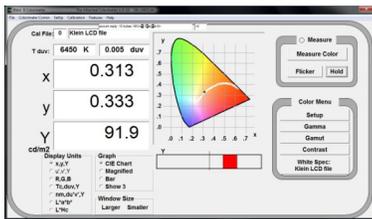
# Klein K Colorimeter K10-A

Optimized for  
Post Production and Cinema.  
3 times the low light sensitivity of our  
popular K-10 colorimeter.



# KLEIN INSTRUMENTS CORPORATION

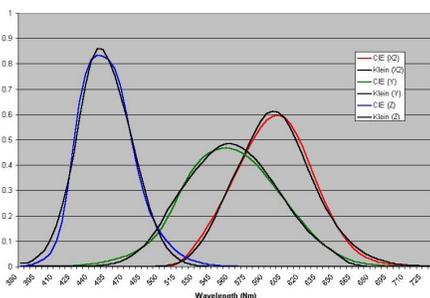
## Klein K10-A Features



The Klein K10-A tri-stimulus CIE Colorimeter Probe was designed specifically for use on all display types. It is unmatched in sensitivity, stability and speed. It connects directly to a PC's USB port, and runs with the companion Klein PC application.

- Large Photodiodes. Diodes that are 5mm x 5mm each, along with thermally stable components, are combined to report the highest degree of accuracy.
- Exceptionally Accurate Filters. Not only is the f1' of Y critical, but the accuracy of X and Z as well. See the actual Klein vs. CIE graph, below, left.
- Quick Measurements. The head takes 256 measurements per second even at low light. For readability 8 measurements per second is displayed.
- FFT FlickerMeter. Probe measures & integrates Y data in the head, and streams in realtime to the pc, and a Fast Fourier Transform is performed. JEITA approved method.
- Klein pc Program. Create calibration files & set measuring parameters. Then data log, graph and export. The pc program manages the data in an easy to use interface.
- 8 Bright LED's. LED's projecting through a 12ft (~4m) focal length optical system for the K10-A, and focusing on a screen, define the measurement area. Acceptance angle is  $\pm 5$  degrees.
- Rugged Construction. The K10-A's auto ranging is solid state and the case is impact resistant to hold up to 24 hours a day, 7 days a week required usage.

## Product Specifications



(Actual X, Y, Z filter data)

- Measuring Function:** Colorimetric; x y Y, u v Y, RGB, Tc duv Y  
**Measuring Range:** .00002 - 2919 fL; .00006-10,000 cd/m<sup>2</sup> (candelas/sq. meter)  
**Measurement Area/Distance:** 22mm diameter /110mm from display,  
**Display Intervals:** .1 sec. auto ranging; 6 ranges, ea. channel independently  
**Filtering:** 20Hz low pass 3 pole analog filter, 14-bit A/D Cnvr.; digital averaging  
**Accuracy (Illuminant A):** Chroma  $\pm 0.002$  x, y (displayed value  $> .33$  cd/m<sup>2</sup>)  
 Luminance  $\pm 1\%$  Y,  $\pm 1$  LSB (displayed value  $> .01$  cd/m<sup>2</sup>)  
**Repeatability:** Chroma  $\pm 0.002$  x, y (displayed value  $> .33$  cd/m<sup>2</sup>)  
 Luminance  $\pm 1\%$  Y,  $\pm 1$  LSB (displayed value  $> .01$  cd/m<sup>2</sup>)  
**Data Interface:** USB Communication to PC. Virtual Comm port for programming.  
**Output Connectors:** USB connector  
**Size:** 10.5" Long x 2.375" Diameter (267mm x 60mm)  
**Power Supply:** 5 volts, 75mA nominal (175mA max w/LED's On).  
**Operating Requirements:** Temperature: 0-40 C;  
 Humidity: below 85% RH non-condensation  
**Materials:** Platinum colored high-impact plastic & Black anodized aluminum  
**Weight/Shipping Weight:** net 19oz (591g.); gross 3 pounds  
**Included Accessories:** Carrying Case, Small Tripod, Rubber Boot.

## Ordering Information

For more detailed information, or to place your order, contact **SpectraCal** by phone at (206) 420-7514 or email sales@spectracal.com. Talk to a SpectraCal representative about special pricing when you bundle the K10-A with **CalMAN™** Display Calibration Software.