

LED Video Panel Correction System
VisionCAL-M™



Applications

- Optimize LED video panel visual appearance during manufacture
- Restore LED video panel brightness and color uniformity at rental warehouses
- Match color gamuts to user targets

Benefits

- Achieve the best possible LED video screen visual appearance
- Keep rental LED video screens looking their best with regular panel recalibrations
- Reduce manufacturing cost
- Save time by having immediate access to all the methods developed in years of LED video screen correction
- Start fast with world-class training and technical support

Better-looking LED video screens happen with VisionCAL™ corrected panels

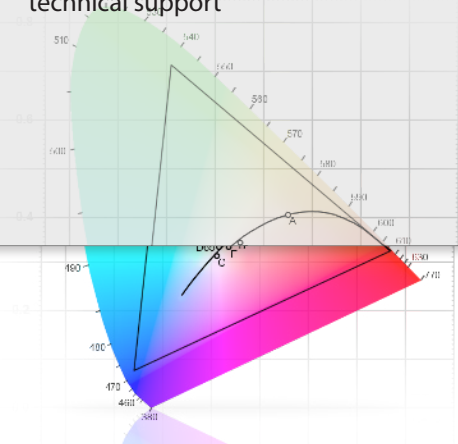
When LED video screens are not properly adjusted for luminance (brightness) and color uniformity, every imperfection is visible. Modules do not match, pixel-to-pixel variation results in scintillation, and colors are wrong — shifted away from true white and often oversaturated. In LED screen manufacturing and for rental screens this can occur when LED screen panels are built or used under different conditions.

So, what can be done to reliably and predictably improve the visual appearance of an LED screen panel? Plenty! Radiant Imaging's VisionCAL-M™ panel correction system (formerly known as PM-LEDC) integrates comprehensive LED panel measurement, analysis and correction tools to allow LED panels to be corrected to identical targets, reliably and repeatably. Based on over 5 years of experience correcting hundreds of thousands of panels, the VisionCAL system uses a high-resolution ProMetric® Imaging Colorimeter to simultaneously measure the brightness and color of individual LEDs in a panel and computes correction coefficients to optimize the screen appearance. If a video controller that supports correction is available for the panel, the coefficients can be downloaded directly to it. And VisionCAL provides native support for the VisionLINK processor, so any LED video panel can be corrected.

VisionCAL automates the correction process, including pixel registration, panel control, measurement, correction coefficient calculation, and uploading correction coefficients to the LED video screen controller or VisionLINK. Used in a controlled correction environment, VisionCAL™ allows LED panels to meet customer-specified brightness and color targets, and color gamuts, so that the panels match when assembled into a full video screen.

How good are the results? The VisionCAL correction system allows you to match panels to the same performance targets and color gamut. This is the same technology that Radiant Imaging uses for our VisionTUNE LED video screen and panel correction services. By incorporating years of experience correcting thousands of screens around the world, you can use VisionCAL with confidence to optimize the visual appearance of your LED video screen.

Tell us what we can do for you by contacting sales@radiantimaging.com.





Key Features

- Complete measurement system for LED video panel correction
- ProMetric® Imaging Colorimeter measures the brightness and color of all LEDs in the screen
- VisionCAL™ software manages the correction process, including: autoregistration, data acquisition, computations, and direct download of correction parameters to the video controller
- Fully integrated support for VisionLINK™ processor

Specifications*

Hardware Components

PM-1423F-1 or PM-1433F-1
Imaging Colorimeter

14-bit dynamic range (>16K grey levels)
3072 x 2048 pixel resolution (PM-1433F-1)
1536 x 1024 pixel resolution (PM-1423F-1)
Cooled, full frame CCD
Integrated CIE matched color filters
Integrated ND 0, 1, and 2 filters
Precision fixed focal length lens

Spectroradiometer

Heavy duty tripod with geared pan-tilt head

Software Components

VisionCAL

LED panel measurement, analysis, and correction
Enables full automation of the correction process

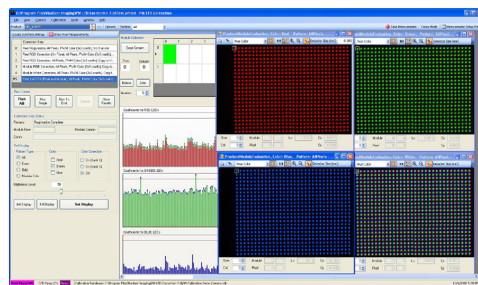
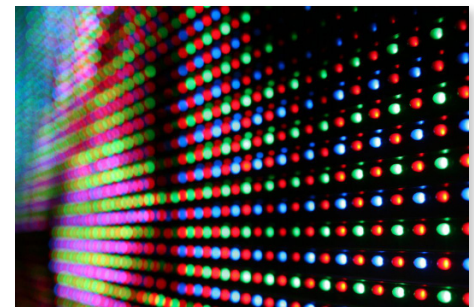
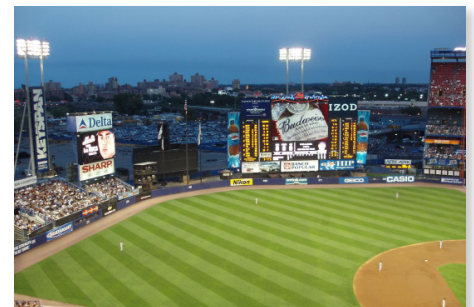
Support

Training on imaging colorimeter and correction software operation

Optional LED video controller integration

Technical support hot-line

2 year warranty for imaging colorimeter



* Specifications subject to change without notice

System Requirements

- Windows® XP or Vista (32-bit)
- 2.0 GHz or faster processor
- 3GB or greater RAM
- SXGA or larger monitor
- Ethernet port
- USB 2.0 interface