



**CARING ABOUT
BLACK AND WHITE
AND EVERYTHING IN
BETWEEN**

Projector and display calibration

Image Quality, in any industry, is highly appreciated. But, in the case of the Medical Imaging Industry, it is critical. Clinics and hospitals, concerned with image quality, have implemented quality tracking and DICOM Calibration. Clearly, Image Quality has always been a top priority when it comes to making life critical decisions in the medical industry.

AcuScreen PRO 2.0 is a calibration tool based on the DICOM part 14 GSDF standard, designed to ensure maximum and DICOM compliant performance of Quality Medical Displays. It is capable of calibrating up to 8 projectors or displays connected to a single workstation to the DICOM standard and creates an ICC Monitor profile in a fast and user-friendly way.

Successfully integrated with projectors from

you can
Canon

Features

AcuScreenPRO 2.0 DICOM



- Easy to use and secure.
- Supports multiple displays.
- Creates ICM/ICC profiles.
- Supports AcuScreen measurement devices for projectors and TFT/CRT displays.
- Supports DDC/Ci 8 Bit and 10 Bit Gamma corrections.

DDC/Ci or RS232 control enables bi-directional, i2C-Bus serial communications as a standard protocol between computers and displays, using a VGA or DVI cable. Thus enabling the user to control the display through keyboard and mouse. List of various functions available via DDC/Ci serve the most demanding user.

- RS232 control support with upload of LUT or 100% Hardware Calibration. (requires DCL license)
- Brightness and Contrast can be adjusted automatically.
- Color temperature and RGB values can be changed for individual user settings.
- Upload of 10 Bit Gamma to Display Lookup Table.
- Metadata such as the serial number and date of manufacture are easily displayed.

DICOM Part14 GSDF Calibration

AcuScreen performs Calibration of Medical Displays based on the DICOM part14 Grayscale Standard Display Function (GSDF) giving a clear and accurate image. Calculates the target curve, then creates correction curve and either applies it to the graphic board or uploads it to the internal Lookup Table of the Display.

Network Calibration and cloning for multiple displays calibrations. Functions like "Network Calibration" and "cloning" make the calibration of multiple displays easier and faster. It adjusts several displays to a standard calibrated display in the same workgroup or at the same workstation.

- Calibration of all the displays connected to a network to the same black level, white level and color temperature along with DICOM calibration (patent pending).
- Cloning gives the possibility of calibrating other displays with reference to a standard calibrated display connected to the same system.

Ambient light measurement

- Ambient light (which is the external light surrounding the display) is measured during the DICOM calibration.
- The user also has the option to enter a known value.
- Uniformity for Homogeneity of Brightness over an entire screen.
- Measures uniformity of Brightness over the entire screen in compliance with DIN 6868-57 and AAPM TG18, by measuring brightness at the center and then at the 4 corners of the display.
- The results are displayed as a delta in cd/m² and %.

Luminance measurement

- White level can be adjusted to either a user-specific value or to the optimum level determined by the software.
- Measures the luminance and 'XYZ' value for color RGB and gray levels.
- Color temperature, xy coordinates, cd/m² and Lux luminance are displayed for reference.

Visual verification

- Verifies Displays DICOM part14 standard conformance.
- Displays test patterns like Briggs, SMPTE, AAPM and user-specific test patterns.

History and Reports

- This option gives the results and quality of calibration done on a certain date and time.
- Displays JND/DDL graph and JND like AAPM TG18.
- Displays previous results for the different connected displays.
- Generate Graphs for JND, Gamma Correction and Luminance response for three different categories: Previous settings, Target and the graph for the actual results obtained.

MINIMUM SYSTEM REQUIREMENTS:

- Intel Pentium III or AMD K7 processor, 256 MB of RAM, 150 MB of free hard-disk space, CD-ROM Drive
- OS: Microsoft Windows 2000 with Service Pack 3, Windows XP Professional, Windows Vista or Mac OSX
- Minimum display resolution of 1280 x 1024 pixels.
- Display Controller
- DDC/CI compatible display controller boards with a minimum of 24 bit color or 8 bit gray scale Calibration Sensor
- AcuScreen Sensor
- Projector with RS232 control for DCL-calibration (optional)