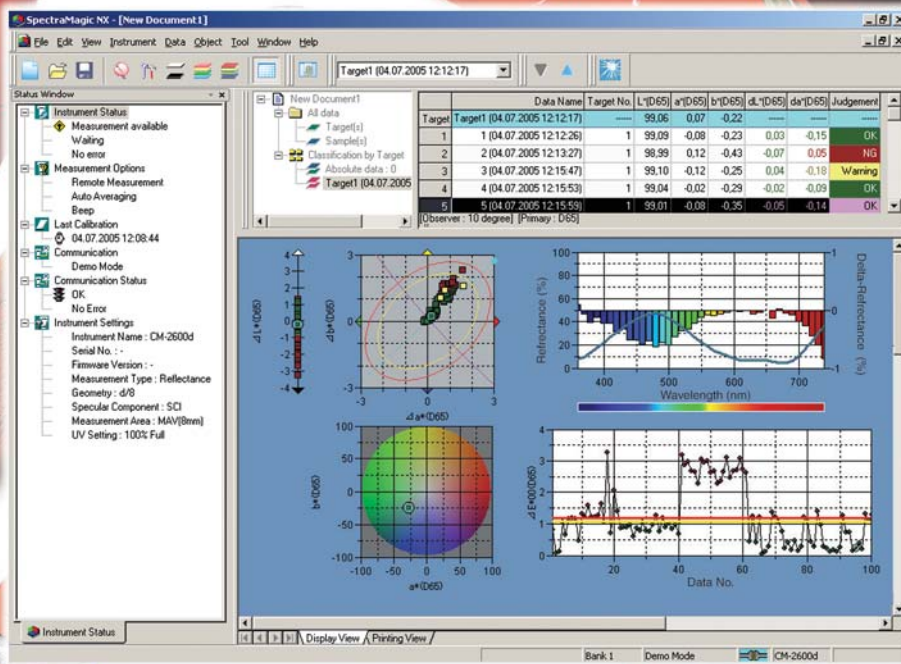




KONICA MINOLTA

Color Data Software CM-S100w SpectraMagic™ NX

Lite Edition



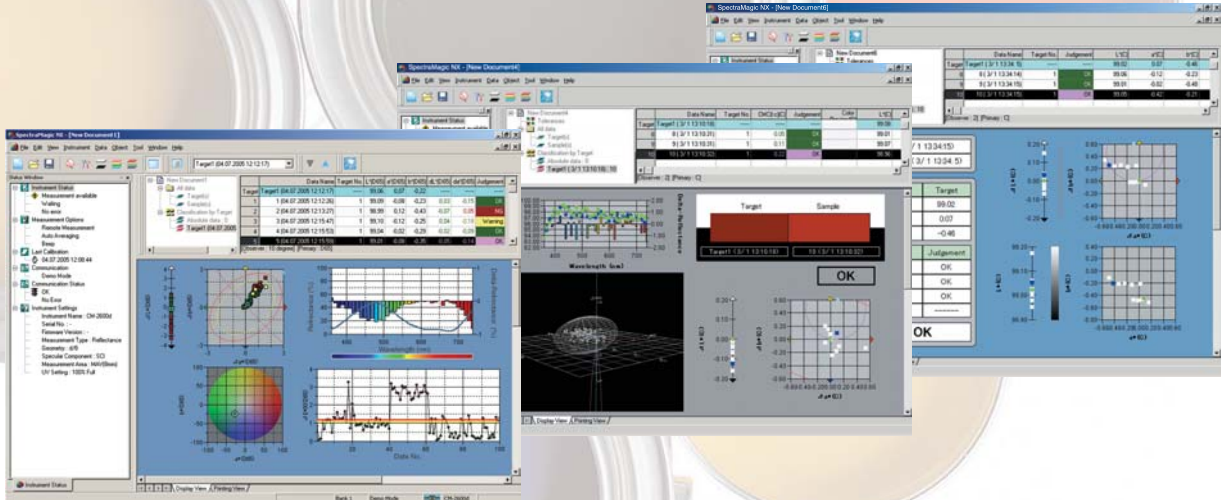
Color Quality control like never before:

- Unprecedented ease of use
- Prefixed Templates using skin technology
- Step by step Navigation help
- Customized Reports including Digital Images
- Includes "Precise Color Communication" tutorial

The essentials of imaging

Total freedom + flexibility that meets your QC needs

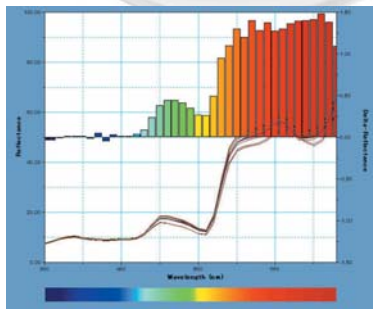
Requirements in screen layouts differ by application, from simple Pass/Fail assessment or statistic process control to detailed analysis for R&D work. Using the latest software "skin" technology, SpectraMagic™ NX comes with several pre-defined templates to choose from, or you create your own screen layout suiting your needs and application with total freedom and flexibility. Each graph type (Color, Spectral, Color-Difference or Trend) as well as the data list can be scaled to the desired size with total ease.



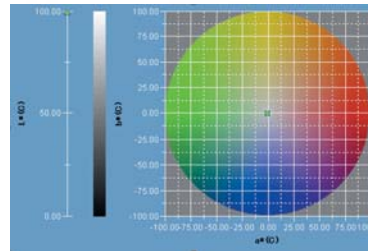
Comprehensive graphs and color difference assessments

SpectraMagic™ NX helps you to make color quality control easy and comprehensive at once. You can choose from several graphs together with the latest Pass/Fail color difference assessments equations, such as CIE 1976 or CIE DE2000 and several industry related indices. Tolerances, both in box or elliptical form can be manually adjusted to approved standards. Auto Target is an additional feature that makes QC with SpectraMagic™ NX so easy and fast.

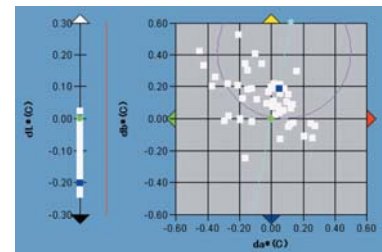
Spectral graph



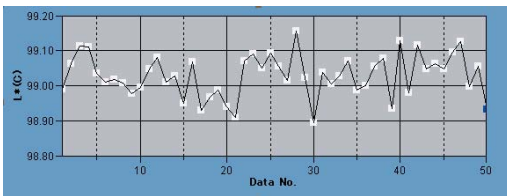
Color graph



Color difference graph

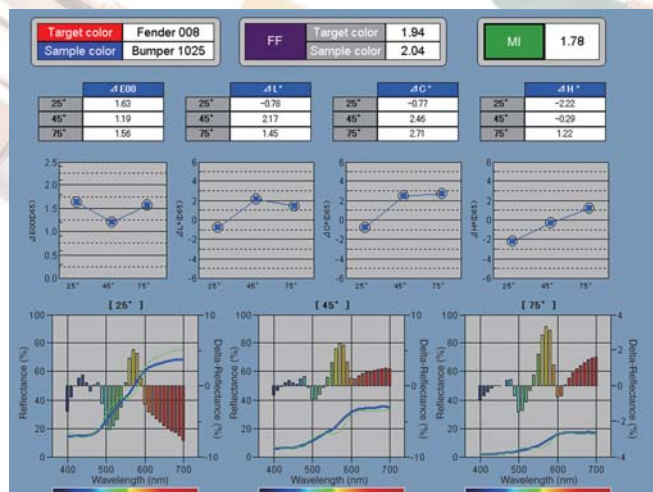


Trend graph



Multi-angle measurement result display

The SpectraMagic™ NX supports the CM-512m3, which is a multi-angle type instrument providing sample data in three directions as a result of one measurement. Consequently, it can display data in three directions simultaneously, or it can display a line graph for visual indication of the angle characteristics typical for multi-angle type instruments.

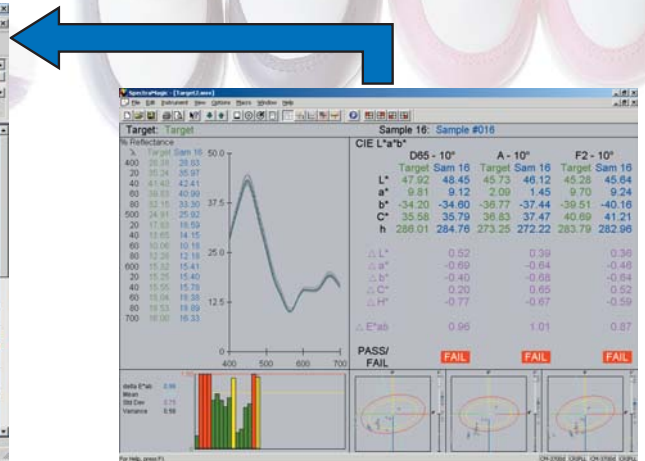


Data compatibility with the former SpectraMagic

The SpectraMagic™ NX is data-compatible with the former SpectraMagic™ software. The old data can be used without any treatment.



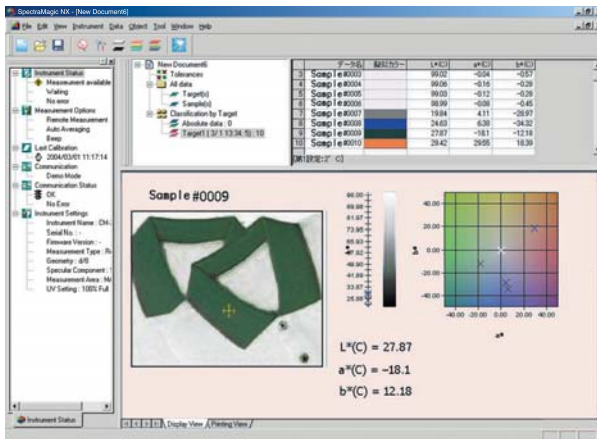
Data displayed with the SpectraMagic™ NX



Data displayed with the old SpectraMagic™

Comprehensive reporting and easy data export

SpectraMagic™ NX allows you to insert digital pictures with the measured data, opening totally new dimensions to color communications with customers. The data list view allows you to swiftly export measurement data into Excel by copy and paste function. Reports as well can be created by the user with total freedom to meet traceable evidence of color consistency demanded by customers. Furthermore, SpectraMagic™ NX can share data within a local area network (LAN) and operates under Windows® 2000 Professional and XP Professional.



Target	Data Name	Target No.	CMCI-dC	Judgment	L*	a*	b*	dL*	da*	db*
1	1 (3/1 15.32.3)	1	0.28	OK	99.04	-0.05	0.40	0.12	0.24	0.12
2	2 (3/1 15.32.3)	1	0.54	NG	99.17	-0.29	-0.10	0.25	0.36	0.18
7	7 (3/1 15.32.3)	1	0.60	OK	99.16	-0.13	0.04	0.24	0.20	0.32
8	8 (3/1 15.32.4)	1	0.12	OK	99.05	0.02	0.26	0.13	0.05	0.02
9	9 (3/1 15.32.5)	1	0.33	OK	99.07	-0.13	-0.34	0.15	-0.20	-0.06
10	10 (3/1 15.32.5)	1	0.24	OK	99.07	0.06	-0.43	0.05	-0.01	-0.15
11	11 (3/1 15.32.6)	1	0.45	OK	99.03	0.15	-0.40	0.11	-0.22	-0.12

Navigation function & Color tutorial for total workflow control

With the exclusive Navigation function, you have total control of the flow of operations with online step-by-step instructions including picture illustrations. This unique feature can be customized by the user according to his needs. The Navigation window of SpectraMagic™ NX also includes a link to the HTML version of "Precise Color Communication" with many illustrations and explanations that contribute to a clearer understanding of basics and technical terms related of color and color measurement technology.



Colorimeters excel at reporting even minute color differences.

Numerical values show the difference.

Color difference

Minute color differences are the biggest headache anywhere that color is used. But with a colorimeter, even minute color differences can be expressed numerically and easily understood. Let's use the L*a*b* and L*C*h* color spaces to look at the color difference between two apples. Using apple ①'s color (L*=43.31, a*=17.53, b*=14.12) as the standard, if we measure the difference of apple ②'s color (L*=47.34, a*=44.58, b*=15.16) from apple ①'s color, we get the results shown in displays ① and ② below. The difference is also shown on the graph in Figure 13. The diagram of Figure 14 should make color difference in the L*a*b* color space easier to understand.

Figure 13

Figure 14

SpectraMagic™ NX Color Data Software

Specifications:

Minimum Computing Requirements

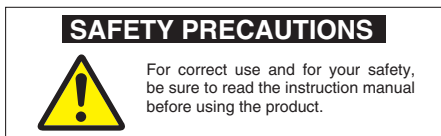
OS	Windows® 2000 Professional SP 4 Windows® XP Professional SP 2, x64 Edition Windows® Vista Business 32bit (x86), 64bit (x64) (English, Japanese, German, French, Spanish, Italian, Traditional Chinese, Simplified Chinese, and Hangul versions) For Windows® XP Professional x64 Edition, English and Japanese versions only)
CPU	Pentium® III 600 MHz or higher (recommended)
Memory	128 MB (256 MB recommended)
Hard disk	450 MB of available disk space (At least 400 MB of available space is required in the system drive.)
Display	Display unit capable showing at least 1024 x 768 dots/256 colors
Other	CD-ROM drive (required for installation), One free USB port or printer port (for protection key), One free serial port (for instrument), Internet Explorer Ver. 5.01 or later

Compatible Instruments

CM-3700d; CM-3600d; CM-3610d; CM-3630; CM-3500d; CM-700d/600d; CM-2600d/2500d/2500c;
CM-2002; CM-500 Series; CM-512m3; CR-400/410, DP-400; CR-300/CR-200 Series (The CR-300/200
Series can be used only when the main unit is version 3.0 or later and is connected via RS-232C. The unit
cannot be used together with a USB converter.)

Features

Color space	L*a*b*, L*C*h, Lab99, LCh99, Hunter Lab, Munsell, and their color differences (excluding Munsell)
Index	MI
Color difference equation	ΔE^*ab (CIE 1976), ΔE_{00} (CIE DE2000) and each component of lightness, saturation and hue, ΔE_{99} (DIN99), ΔE (Hunter)
Observer	2 degree, 10 degree
Illuminants	A, C, D50, D65, F2, F11
Graph display	Spectral reflectance/(transmittance) and its difference; L*a*b* absolute value, $\Delta L^*a^*b^*$ (2D/3D color difference distribution, MI), Hunter Lab absolute value, Hunter ΔLab (color difference distribution), Trend chart and histogram of each color space and color difference equation, Pseudo Color display
Image display	Link between measured value and image data (JPEG or BMP format), Insertion of custom images
Instrument control	Measurement/calibration Automatic average measurement: 1 to 999 measurements Manual average measurement: Any number of measurements (Standard deviation and average value are displayed in the color space selected during measurement.) Remote measurement (Excluding the CM-3000 Series) Instrument setting Upload of data stored in the instrument (Excluding the CM-3000 Series)
Target	Registration of several target colors (Automatic target color selection), Manual input and registration of colorimetric data by specifying color space, Target data download to the instrument (Excluding the CM-3000 Series)
Data list	List view and editing of target/measured data (delete, sort, averaging, copy & paste)
External I/O	Loading/saving data files in original format (Extension: mes) (Several files can be loaded.) Loading/saving template files in original format (Extension: mtp) (Several files can be loaded.) Saving of data in text format (CSV, TXT), saving of data in XML format, Copy of listed data in the clipboard
Help function	Navigation display
Other	
Screen display	Number of files that can be opened simultaneously: 20 Number of data that can be stored in a file: Target data: 5,000, Measurement data: 5,000 Instrument status details window display, "Precise Color Communication" Tutorial
Operation	Operation is easy thanks to an operation screen with large buttons, use of function-assigned keys instead of a mouse and the Navigation function.



Certificate No : YKA 0937154
Registration Date : March 3, 1995



Certificate No : JQA-E-80027
Registration Date : March 12, 1997

- The specifications and drawings given here are subject to change without prior notice.
- Windows® is a trademark of Microsoft Corporation in the USA and other countries.
- Pentium® is a trademark of Intel Corporation in the USA and other countries.

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