Color quality control like never before:
- Unprecedented ease of use
- Pre-defined and user-definable templates
- Step-by-step navigation help
- Customized screens and reports including digital images
- Includes “Precise Color Communication” tutorial
- Available in 8 languages
Total flexibility for designing screen and print layouts that meet your QC needs

Available in 8 languages

New search function

CCS (Closest Color Search) function

ΔE_{00} (CIE DE2000) display
Navigation function for total workflow control
plus color measurement tutorial

With the exclusive Navigation function, you have total control of the flow of operations with online step-by-step instructions including picture illustrations. You can even customize this unique feature to match your individual measurement processes. The Navigation window also includes a link to the HTML version of “Precise Color Communication”, a color-measurement tutorial with numerous illustrations and explanations that contribute to a clearer understanding of the basics and technical terms related to color and color-measurement technology.

Comprehensive ease of use from various color-difference assessments to report creation

SpectraMagic™NX makes color quality control easy and comprehensive at the same time. You can choose from several types of graphs to display your measurement data and also select from among the latest color-difference formulas such as CIE 1994 or CIE DE2000 for pass/fail assessments or various industry-related indices. SpectraMagic™NX even lets you input the formulas for up to 8 user indices for your special evaluation needs. And in addition to the user-definable printing layout, objects such as graphs, data lists, etc. on the display screen can be copied directly into Excel® to provide even more flexibility.

Sophisticated QC applications

The target data of one master target (primary target) can be associated with two or more working targets (secondary targets). This allows for sophisticated QC application such as checking for color differences of the measured sample from the working targets and the master target simultaneously. It also enables managing the color differences of an entire product in sections by comparing the differences from the target color of each section.

Automatic tolerance setting in which the minimum tolerance setting which would enclose several samples is calculated automatically and set as the tolerance can be performed using three different color-difference formulas: CMC(l:c), \( \Delta E_{00} \), and \( \Delta E_{00} \), which are considered to provide results similar to visual evaluation and which are being increasingly adopted by companies and other organizations.

In addition, the tolerances set with this function on the Professional version can be transferred to the Lite version and used for pass/fail judgments there.

Input of additional information for measurements

Additional information can be set up for input and attached to measurement data. The additional information can be freely defined and could be information such as model name, item name, product number, code number, order number, color number, lot number, customer name, visual judgment result (pass/fail input), temperature, humidity, etc. The added items can then be used when organizing, sorting, or searching for data, and if the additional data is numerical, can also be displayed on a graph.

Macro function to automate work

Routine operation flows can be set up as macros using the menu screen and then run later to automate the work process. This reduces work time as well as prevents operation mistakes.

(Operational flow example)
Calibrate the instrument before measurement, repeat measurement 30 times at 10-minute intervals, and then save the data.
By using the search function, data meeting the search conditions can be quickly and easily measured. SCI and SCE, data lists of SCI only and SCE only data can be automatically extracted from the target color database. The extracted target colors can then be not only listed, but also shown on spectral graphs or color plots, and image display.

With the new CCS (Closest Color Search) function, the specified number of stored target colors can be visually judged easily thanks to an operation screen with large buttons, use of function-assigned keys instead of a mouse, the Navigation function, and the Macro function.

The hardware of the computer system to be used must meet or exceed the greater of the recommended system requirements for the compatible OS being used or the following specifications.

Specifications:

Minimum Computing Requirements

OS: Windows® 7 Professional 32 bit, 64 bit; Windows® 8.1 Pro 32 bit, 64 bit; Windows® 10 Pro 32 bit, 64 bit (English, Japanese, German, French, Spanish, Italian, Traditional Chinese, Simplified Chinese, Portuguese, and Hangul versions).

• The hardware of the computer system to be used must meet or exceed the greater of the recommended system requirements for the compatible OS being used or the following specifications.

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 of showing at least 1,024 x 768 dots/16-bit colors

Compatible Instruments


Features

Color space: L*a*b*, L*C*h, Labg*, LChg*, XYZ; Hunter Lab, Lxy*, V*, u’v’u”, v’u’w’ and their color differences; Munsell (C, D65)

Index

Color difference formula: ΔEab (CIE 1976), ΔE00 (CIE DE2000) and each component of lightness, saturation and hue, ΔE99 (DIN99), ΔE94 (CIE 1994) and each component of lightness, saturation and hue, ΔE (Hunter), ΔL*Δa*Δb* (2D/3D color difference distribution, Ml), Hunter Lab absolute value, ΔL*a*b* (color difference distribution), ΔEc (degree) (DIN 6175-2), ΔE94 (DIN 6175-2)

Observer: 2° or 10° Standard Observer

Illuminant: A, C, D50, D55, D65, D75, F6, F7, F8, F10, F11, F12, U50, U60, D50, D65, User illuminant 1 to 3

Graph display:

Spectral reflectance (transmittance), and its difference, K/S and its difference, Absorbance and its difference, ΔL*, Δa*, Δb* (2D/3D color difference distribution), ΔEab* (color difference distribution, Ml), Hunter Lab absolute value, ΔL*a*b* (color difference distribution), ΔEc (degree) (DIN 6175-2), ΔE94 (DIN 6175-2)

Image display:

Link between measured value and image data (JPEF or BMP format). Insertion of custom images

Instrument control:

Measurement/calibration:

Automatic average measurement: 2 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)
List view of data stored in the instrument (Excluding the CM-3000 Series)
List view of target/measured data (delete, sort, averaging, copy & paste, search, file merge)

Target date:

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:

Link view and editing of target/measured data (delete, sort, averaging, copy & paste, search, file merge)

Link between JPEF images and Display of statistic value and pass/fail ratio

Visual judgement result input function, Additional data information inputting/listing function

External I/O:

Loading/saving data files in original format (Extension: mes) (Several files can be loaded.)
Saving of data in text format (CSV, TXT), saving of data in XML format, Copy of listed data to the clipboard

Display languages:

English, German, French, Spanish, Italian, Japanese, Simplified and Traditional (Portuguese, and Traditional Chinese, Simplified Chinese, Portuguese, and Hangul versions)

Help function:


Other:

Screen display:

Number of files that can be opened simultaneously: 20
Number of files that can be stored in a file: Target data: 5,000, Measurement data: 5,000
Instrument status details window display

Operation:

System is a trademark of Intel Corporation in the USA and other countries.

® is a trademark of Microsoft Corporation in the USA and

® is a trademark of Microsoft Corporation in the USA and

® are trademarks or registered trademarks of Microsoft Corporation in the USA and

® is a trademark of Microsoft Corporation in the USA and other countries.

For correct use and for your safety, be sure to read the instruction manual before using the product.

SAFETY PRECAUTIONS

• Windows” and Excel” are trademarks or registered trademarks of Microsoft Corporation in the USA and other countries.

• Pentium® is a trademark of Intel Corporation in the USA and other countries.

• Bluetooth® is a trademark of Bluetooth SIG, Inc. and is used under license agreement.

The specifications given here are subject to change without prior notice.

Displays shown are for illustration purposes only.

KONICA MINOLTA, the Konica Minolta logo and symbol marks, “Giving Shape to Ideas” and SpectraMagic® are registered trademarks or trademarks of KONICA MINOLTA, INC.

©2011 KONICA MINOLTA, INC.

Professional Edition only

Windows® and Excel® are trademarks or registered trademarks of Microsoft Corporation in the USA and other countries.

Pentium® is a trademark of Intel Corporation in the USA and other countries.

Bluetooth® is a trademark of Bluetooth SIG, Inc. and is used under license agreement.