



KONICA MINOLTA

Skin Analysis Software CM-SA Installation Guide

Software License Agreement

The terms of the license agreement of the CM-SA software are provided in the Software License Agreement dialog box displayed on-screen during the installation process. This software can be installed only if you agree to all the terms of the agreement.



Safety Precautions

Before you use the CM-SA software, we recommend that you thoroughly read this manual as well as the instruction manuals of your PC and the instrument.

Notes on Installation

- The CM-SA application software is designed to be used with the Windows XP, Windows 7 or Windows 8 operating system. Note that neither operating system is included with this software.
- One of these operating systems must be installed on the PC before this software can be installed.
- When inserting the CD-ROM into the CD-ROM drive, note the correct orientation of the disc. Insert it gently.
- Keep the CD-ROM clean and free from scratches. If the recorded surface becomes dirty or the label surface is scratched, a read error may result.
- Avoid exposing the CD-ROM to rapid temperature changes and condensation.
- Avoid leaving it in locations where it may be exposed to high temperatures from direct sunlight or heaters.
- Do not drop the CD-ROM or subject it to strong impact.
- Keep the CD-ROM away from water, alcohol, paint thinners, and other such substances.
- Remove the CD-ROM from the CD-ROM drive while the computer is turned on.

Notes on Storage

- After using the CD-ROM, return it to its case and store in a safe place.
- Avoid leaving it in locations where it may be exposed to high temperatures from direct sunlight or heaters.
- The CD-ROM should not be kept in areas of high humidity.

Every effort has been made to ensure the accuracy of the content of this software. However, should you have any questions or comments, please contact the nearest KONICA MINOLTA authorized service facility.

Package Contents

- Skin Analysis Software CM-SA Installation CD-ROM: 1
- Installation Guide (this manual)
- Authorized Service Facility

The "Instruction Manual" is also installed in PDF form with a shortcut in the start menu during the software installation. To read the manual, go to <Start Menu → All programs → KONICAMINOLTA → Skin Analysis Software CM-SA → Manual> PDF file. * For Windows 8, a shortcut to the manual is registered to a different screen. To display this screen, right-click in the Start screen, and then click "All apps". You will need the Adobe Reader[®] from Adobe Corporation. The latest Adobe Reader[®] could be downloaded for free from the Adobe website. Also, it is possible to use the Adobe Reader[®] installer included with the installation CD-ROM for installation.

(Example) When the CD-Rom is in E drive E:\Adobe Reader\EN

Formal designations of application software used in this manual

(Designation in this manual)	(Formal designation)
Windows, Windows XP	Microsoft [®] Windows [®] XP Professional Operating System
Windows, Windows 7	Microsoft [®] Windows [®] 7 Professional Operating System
Windows, Windows 8	Microsoft [®] Windows [®] 8 Pro Operating System

Trademarks

- "Microsoft", "Windows", "Windows XP", "Windows 7" and "Windows 8" are registered trademarks of Microsoft Corporation in the U.S.A. and other countries.
- Other company names and product names mentioned in this manual are the registered trademarks or trademarks of their respective companies.

System Requirements

- OS
- Windows XP Professional SP3
 - Windows 7 Professional 32bit(x86), Windows 7 Professional 64bit(x64)
 - Windows 8 Pro 32bit(x86), Windows 8 Pro 64bit(x64)
 - English and Japanese versions of the above operating systems.
 - 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.

Computer	PC equipped with a processor equivalent to Pentium III 600MHz or better
Memory	128 MB (256 MB recommended)
Hard disk drive	1000 MB of available hard disk space
Display	Display hardware capable of displaying 1024 x 768 pixels / 16-bit color or better
Others	CD-ROM drive (Required for installation) USB port or serial port (Required for connection of the instrument)

Compatible Instruments

Instruments Spectrophotometer CM-700d, CM-600d, CM-2600d, CM-2500d

Language

Display language English (Japanese can be installed when using a Japanese OS)

1. Installing the software

The CM-SA software is provided on a CD-ROM. A CD-ROM drive is required to install the software. When installing the software, you must log on to the computer as a user with Administrator privileges.

1.1 Installation procedure

Install the CM-SA software.

If your OS is Windows 7 or Windows 8, a dialog which checks User Account Control is displayed during the process.

When this dialog box is displayed, click “Continue” or “Yes”.

1. Start Windows on your computer.
2. Insert the CM-SA CD-ROM into the CD-ROM drive.

[Windows XP, Windows 7]

3. The install program will start automatically. If it does not start automatically, double-click the “setup.exe” icon.
→ Proceed to step 4.

[Windows 8]

3. In the upper right of the screen, the message “Tap to choose what happens with this disk” is displayed.
Click this message, and then click “Run setup.exe”.
If the program does not run automatically, move the mouse pointer to the bottom left corner of the screen. Right-click in the window that is displayed, and then, on the menu that appears, click “File Explorer”.
Right-click the DVD or CD drive, and then, on the menu that appears, click “Install or run program from your media”.
4. The Select Language dialog box opens. Select the appropriate language and click “OK”.
The following procedure assumes that English is selected.
5. Click “Next”.
6. Read the software license agreement carefully. If you accept the terms of the agreement, select “I accept the terms in the license agreement”, and click “Next”.
7. The set-up program asks you to choose the folder in which you want to install the software. To install the software in another location, click the “Change” button, select or type the path to the location and click “OK”.
8. Click “Next” and then click “Install”.
The set-up program will begin copying the files.
9. When the installation finishes, click “Complete”.

1.2 Creating a shortcut

When the CM-SA has been installed, a shortcut to the CM-SA is registered on the desktop. The shortcut to the CM-SA is also added to the Windows Start menu which can be accessed by selecting “KONICA MINOLTA” - “Skin Analysis Software CM-SA”. (* For Windows 8, the shortcut is placed on the Start screen.) To place a shortcut in another location, create it with Windows Explorer or another program.

1.3 To uninstall

[Windows XP, Windows 7]

1. Click the “Start” button. Select “Settings” - “Control Panel” and double-click the “Add/Remove Programs” icon.
2. Select CM-SA from the list of Change or Remove Programs and click the “Change/Remove” button.
3. A dialog box for changing, modifying or removing a program opens. Select “Remove” and then click “Next”.
4. When the file deletion confirmation dialog box opens, click “OK”. The uninstall program will start.
5. When the uninstallation is complete, click “Finish”.

[Windows 8]

1. Move the mouse pointer to the bottom left corner of the screen, and then right-click in the window that is displayed.
On the menu that appears, click “Programs and Features”.
2. In the “Programs and Features” list, select “CM-SA”, and then click “Uninstall”.
3. A dialog box for confirming that you want to uninstall the application appears. Click “Yes”.
4. A dialog box for confirming that you want to update the software appears. Click “Yes”.
5. When the uninstallation is complete, click “Finish”.

2. Connection

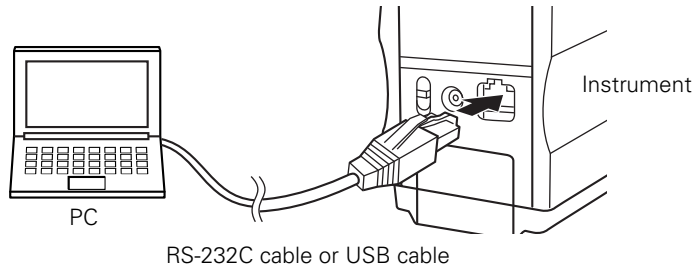
By connecting the instrument to the PC, you can control the measurement process and other operations from the CM-SA. You can use either a USB cable or a Bluetooth® adapter for the connection with the CM-700d/600d, and can use an RS-232C cable with the CM-2600d/2500d.

When a USB cable or Bluetooth® adapter is used to connect the instrument with a PC, you need to install their respective device drivers when connecting for the first time.

2.1 Connecting to a PC/Installing the USB Driver (When the RS-232C cable or USB cable is used.)

Although the USB cable can be connected/disconnected while the instrument and PC are turned ON, you need to turn them OFF in the procedure below.

1. Turn off both the instrument and the computer.
2. Connect the instrument and the computer via the RS-232C cable or USB cable as illustrated. Connect the computer end of the cable to the serial port (when the RS-232C cable is used) or USB port (when the USB cable is used) of the computer.



Notes:

- Attach the connectors securely in the correct orientation. When the RS-232C cable is used, securing the connectors with screws prevents accidental disconnection.
 - Do not touch the terminals of the connector. Keep them clean and do not apply excessive force.
 - Use a cable of sufficient length. If the cable is too short, a connection failure or disconnection may result.
 - To disconnect the cable, grip the plug or connector securely. Do not pull the cable or bend it with excessive force.
3. Turn on the instrument and the computer.
 4. Set the instrument to remote communication mode.
For the setting procedure, refer to the instruction manual for the instrument.

When the CM-700d/600d is connected, the remote communication mode is automatically set.

Continue from step 5 only when you use the USB cable for the connection between your PC and the instrument.

5. Install the instrument's USB driver for on the PC.

[Windows XP]

- 5-1. The "Found New Hardware Wizard" starts up. Select [No, not this time] and click "Next".
- 5-2. Select "Install the software automatically" as the method to search for the driver and click "Next".
- 5-3. A dialog box for confirming the Logo Test is displayed. Select "Yes". The process to install the USB driver starts.
- 5-4. When the installation is complete, click "Finish".

→ Proceed to step 6.

[Windows 7]

- 5-1. A message saying "Installing device driver software" is displayed in the taskbar at the bottom right of the screen. Wait until the driver is installed. (The driver installation process may take several minutes.)
- 5-2. A dialog box for confirming the "User Account Control" is displayed. Select "Continue".
- 5-3. The installation finishes automatically and a notification is displayed in the taskbar.

→ Proceed to step 6.

6. If you were not able to install the USB driver using the procedure above, install it from Device Manager.
From the Start menu, right-click "My Computer" or "Computer" and select "Properties" to open Device Manager. Right click "Spectrophotometer CM-700/600 Series" and select "Update Driver". Select the folder where CM-SA has been installed and specify Kmsecm700.inf.
7. Check which COM port of the PC the instrument has been assigned to.
From the Start menu, right-click "My Computer" or "Computer" and select "Properties" to open Device Manager. Click "Ports (COM & LPT)" to expand it, and the assigned COM port number is displayed.

Note: This COM port number is required when you start CM-SA and connect it to the instrument.

[Windows 8]

- 5-1. Move the mouse pointer to the bottom left corner of the screen, and then right-click in the window that is displayed.
- 5-2. On the menu that appears, click "Device Manager" to open Device Manager.
- 5-3. Right-click the instrument whose name is "Unknown device", click "Update Driver Software", and then click "Browse my computer for driver software". For the destination to search, specify the folder in which CM-SA has been installed, and then click "Next".

If the Windows security dialog box is displayed, click "Install".

6. Check which COM port of the PC has been assigned to the instrument.
Move the mouse pointer to the bottom left corner of the screen, and then right-click in the window that is displayed.
7. On the menu that appears, click "Device Manager" to open Device Manager.
Click "Ports (COM & LPT)" to expand it and display the COM port number that has been assigned to the instrument.
Note: This COM port number is required when you start CM-SA and connect it to the instrument.

2.2 Connecting to a PC/Establishing Bluetooth® Connection (When the Bluetooth® communication is used.)

1. Turn on the instrument and the PC.
2. Attach the Bluetooth® adapter to the USB port of the PC.
For the installation and operation of the Bluetooth® adapter driver, refer to the instruction manual of the Bluetooth® adapter.
3. Set the Bluetooth® communication function of the instrument to ON.
For the procedure to set the Bluetooth® communication function, refer to the instruction manual of the instrument.
When the Bluetooth® connection is recognized, the instrument will be displayed on the screen of the Bluetooth® adapter driver software. The instrument is identified with the device name "KMSEA_XXXXXXX" (XXXXXXX is the serial number of the instrument) and the device type "PDA".
4. Use the Bluetooth® adapter's driver software to check the COM port of the PC to which the instrument has been assigned.
Note: This COM port number is required when you start CM-SA and connect it with the instrument.

3. Major functions of the software (For details, refer to the Instruction Manual.)

Skin data display	Melanin Index Hb Index [Hemoglobin (oxidized and reduced) index] Hb SO ₂ Index (%) [Hemoglobin oxygen saturation index (%)]
Colorimetric value display	L*, a*, b*, Munsell value (Hue, Value, Chroma)
Graph display	Hue-Value Graph Hb Index-Melanin Index Graph
Data output	Saving/reading data in CM-SA original format Saving data in text (CSV) format [Melanin Index, Hb Index, Hb SO ₂ Index (%), L*, a*, b*, Munsell (Hue, Value, Chroma), Spectral reflectance (400-700 nm)]
Applicable instrument	Spectrophotometer CM-700d/CM-600d/CM-2600d/CM-2500d

4. Precautions for measurement

1. If there is any opening between the target and measuring head, light leaks in from the opening, resulting in a lower Melanin value.
To prevent measurement errors, ensure complete contact of the measuring head as much as possible.
2. Be careful because pressing the measuring head too hard against the skin may cause congestion in the skin.
3. Naevi (moles) in the dermis (blue naevus, naevus of Ota, etc.) cannot be measured.
4. Do not perform measurement with the specimen measuring port directed towards your eyes and closed eyelids.