

# **Data Management Software**

# **CA-S20w**

## **Installation Guide**



**KONICA MINOLTA**



## Safety Precautions

Before you use the CA-S20w software, we recommend that you thoroughly read this manual as well as the instruction manuals of your PC and the instrument.

### Formal designations of application software used in this manual

(Designation in this manual) (Formal designation)

Windows, Windows XP	Microsoft <sup>®</sup> Windows <sup>®</sup> XP Professional Operating System
Windows, Windows Vista	Microsoft <sup>®</sup> Windows <sup>®</sup> Vista Business Operating System
Windows, Windows 7	Microsoft <sup>®</sup> Windows <sup>®</sup> 7 Professional Operating System
Excel	Microsoft <sup>®</sup> Excel <sup>®</sup>
Visual Basic .NET 2003	Microsoft <sup>®</sup> Visual Basic .NET 2003
Visual Basic .NET 2005	Microsoft <sup>®</sup> Visual Basic .NET 2005
Visual Basic 2010	Microsoft <sup>®</sup> Visual Basic 2010
Visual C++ .NET 2003	Microsoft <sup>®</sup> Visual C++ .NET 2003
Visual C++ .NET 2005	Microsoft <sup>®</sup> Visual C++ .NET 2005

### Trademarks

- “Microsoft”, “Windows”, “Windows XP”, “Windows Vista”, “Windows 7” and “Excel” are registered trademarks of Microsoft Corporation in the U.S.A. and other countries.
- “Intel” and “Pentium” are registered trademarks of Intel 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.

### Notes on this manual

- No part of this manual may be reprinted or reproduced in any form or by any means without the permission of Konica Minolta, Inc.
- The contents of this manual are subject to change without notice.
- Every effort has been made to ensure the accuracy of the contents of this manual. However, should you have any questions or comments, or find an error or missing section, please contact your local sales office.
- Konica Minolta accepts no responsibility for consequences resulting from failure to follow the instructions outlined in this manual, the condition above notwithstanding.

---

## Introduction

### Software License Agreement

The terms of the license agreement of the CA-S20w 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.

### Notes on Use

- The CA-S20w application software is designed to be used with the Windows XP, Windows Vista or Windows 7 operating system. Note that neither operating system is included with this software.
- The Windows operating system must be installed on the PC before this software can be installed.
- When inserting the CD-ROM/DVD-ROM into the CD-ROM/DVD-ROM drive, note the correct orientation of the disc. Insert it gently.
- Keep the CD-ROM/DVD-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/DVD-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/DVD-ROM or subject it to strong impact.
- Keep the CD-ROM/DVD-ROM away from water, alcohol, paint thinners, and other such substances.
- Remove the CD-ROM/DVD-ROM from the CD-ROM/DVD-ROM drive while the computer is turned on.

### Notes on Storage

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

### Notes on Instruction Manual

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 → Data Management Software CA-S20w → Manual PDF file.

The Instruction Manual of 2D Color Analyzer CA-2000 Series is also included on the installation CD-ROM.

You will need Adobe Reader<sup>®</sup> from Adobe Corporation. The latest Adobe Reader<sup>®</sup> can be downloaded for free from the Adobe website. Also, it is possible to use the Adobe Reader<sup>®</sup> installer included on the installation CD-ROM.

(Example) When the CD-ROM is in D drive D:\Adobe Reader\EN

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

# CONTENTS

---

<b>1.1 System Requirements .....</b>	<b>3</b>
1.1.1 System Requirements .....	3
1.1.2 Compatible Instruments.....	3
1.1.3 Language .....	3
<b>1.2 Software Installation .....</b>	<b>4</b>
1.2.1 Installation Method.....	4
1.2.2 Uninstallation Method.....	7
<b>1.3 Connecting the CA-2000 to PC.....</b>	<b>9</b>
1.3.1 Connecting the CA-2000 for the first time (Windows XP) .....	9
1.3.2 Connecting the CA-2000 for the first time (Windows Vista).....	12
1.3.3 Connecting the CA-2000 for the first time (Windows 7) .....	13
<b>1.4 Installing Calibration Files .....</b>	<b>16</b>
1.4.1 Installation Method.....	16
1.4.2 Notes on Calibration Files .....	17
1.4.3 Hierarchy of the Installed Files .....	17
1.4.4 File Path Settings .....	18

# 1.1 System Requirements

## 1.1.1 System Requirements

<b>OS</b>	Windows XP Professional 32-bit Service Pack 3, 64-bit Service Pack 2 Windows Vista Business 32-bit, 64-bit Windows 7 Professional 32-bit, 64-bit (English, Japanese and Korean versions For Windows XP professional 64-bit, English and Japanese versions only)
<b>CPU</b>	Equivalent to Pentium 4, 2.8GHz or better
<b>Memory</b>	1024 MB or more
<b>Hard disk drive</b>	At least 80 MB of available disk space is required on the system drive (drive where the OS is installed). To install the calibration data, the following disk space is required for each lens: For a standard lens: approximately 540 MB For a wide angle lens: approximately 470 MB For a telephoto lens: approximately 1.3 GB To save measurement data on the hard disk, you need to reserve the following additional space on the hard disk: For example, approximately 110 MB is required to save 10 pieces of measurement data with 980 × 980 resolution. (Up to 1,000 pieces of measurement data can be saved.) About 1 MB is required for configuration files such as the spot setting file and measurement condition file. For protection in the event of forced termination, the CA-S20w retains measurement data in the temporary work area until the data is saved by the user. Temporary data will be stored in the following folder (assuming that the system drive is Drive C): C:\Document and Settings\ <login name="" user="">\Local Settings\Temp\mcl When the file is saved, the temporary data is deleted. The data, however, is retained temporarily until it is saved on the hard disk, or until you exit the CA-S20w normally. Consequently, when you plan to measure a large amount of data, you need to reserve a certain amount of space for the temporary evaluation area (11 GB or more when measurement at 980 × 980 resolution is performed 1,000 times). This must be considered before starting continuous measurement. Excel 2003 (required for continuous measurement with the automation function)</login>
<b>Display</b>	Display hardware capable of displaying 1280 × 1024 pixels / 65,536 colors (High Color: 16-bit color) or better
<b>Other</b>	1 CD-ROM drive Required for installation 1 DVD-ROM drive Required for installation of calibration data (As a substitute for the two drives above, 1 combo drive capable of reading CD-R media and DVD-R media can be used.) 1 USB port (Ver. 2.0, type A connector) Required for instrument Excel 2003 (when the OS is Windows XP), Excel 2007 (when the OS is Windows Vista or Windows 7) or Excel 2010 (when the OS is Windows 7) (required for continuous measurement with the automation function)

## 1.1.2 Compatible Instruments

<b>Instrument</b>	CA-2000
-------------------	---------

## 1.1.3 Language

<b>Display language</b>	English, Japanese (Select one during installation)
-------------------------	--

## 1.2 Software Installation

Install the software before connecting the CA-2000 to the PC.

The software is provided on a CD-ROM and the calibration data on a DVD-ROM. A CD-ROM/DVD-ROM drive is required to use them.

If an older version of this software has been installed, you need to uninstall it before installing this version.

### Note

*If there are any measurement data or setting files stored in the installation folder, be sure to move them to a different folder before uninstalling the older version.*

For the uninstallation procedure, refer to page 7.

To install the software, be sure to log on to the PC as an administrator.

### Tip

If you selected a user other than a user with administrator privileges, you cannot install the software.

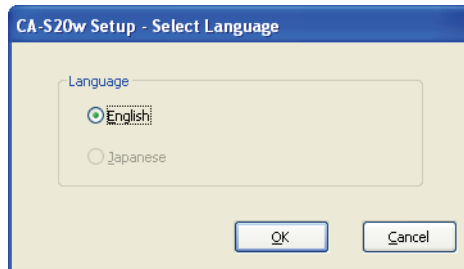
### 1.2.1 Installation Method

1. Insert the software CD into the CD-ROM/DVD-ROM drive.

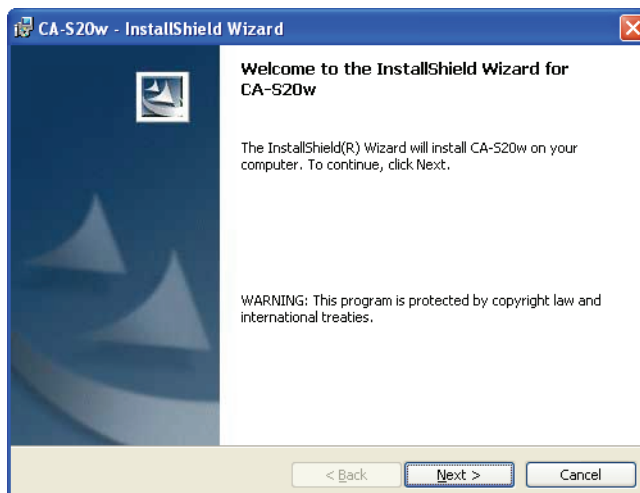
When the Select Language dialog box appears, select the language to install and click the OK button.

The procedure below assumes that English is the selected language.

The InstallShield Wizard appears.



2. Click the Next button.

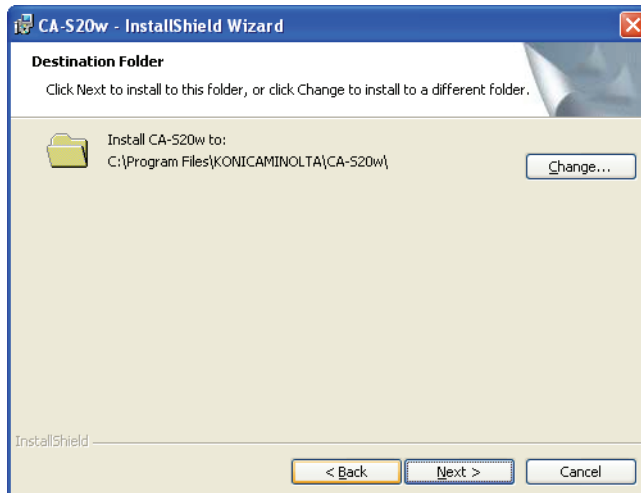


3. Read the software license agreement, select 'I accept the terms in the license agreement', and click the Next button.



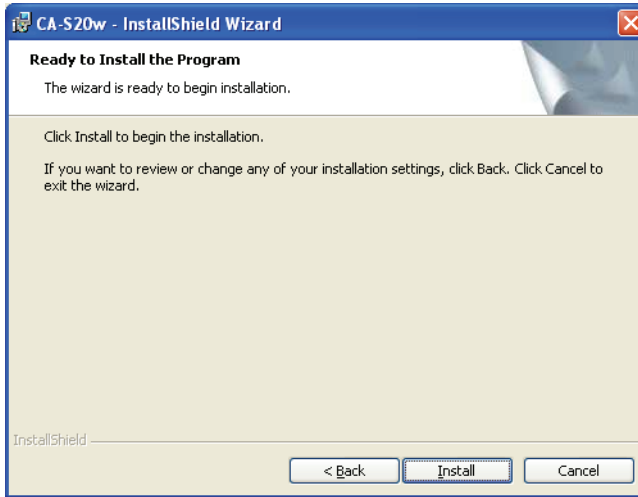
4. Check the destination folder.  
Click the Next button.

To install to a different folder, click the Change button and specify the folder.



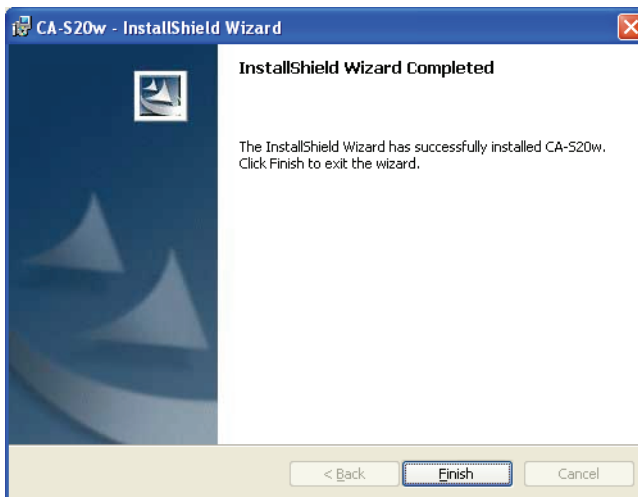
**5.** Click the Install button.

Installation starts.



**6.** Click the Finish button.

Installation is complete.

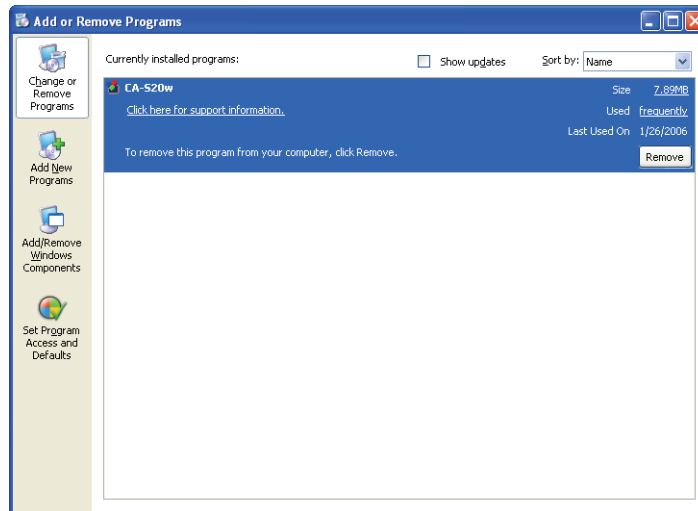




## 1.2.2 Uninstallation Method

1. In Windows, select *Start - Control Panel - Add or Remove Programs*.

In the Add or Remove Programs dialog box, a list of currently installed programs is displayed.



2. Select 'CA-S20w' from the list and click the Remove button.
3. In the Add or Remove Programs dialog box, click the Yes button.  
The uninstallation program is executed.
4. Follow the prompts to complete the uninstallation process.

### **T**ip

See pages 17 and 18 for calibration files and folders.

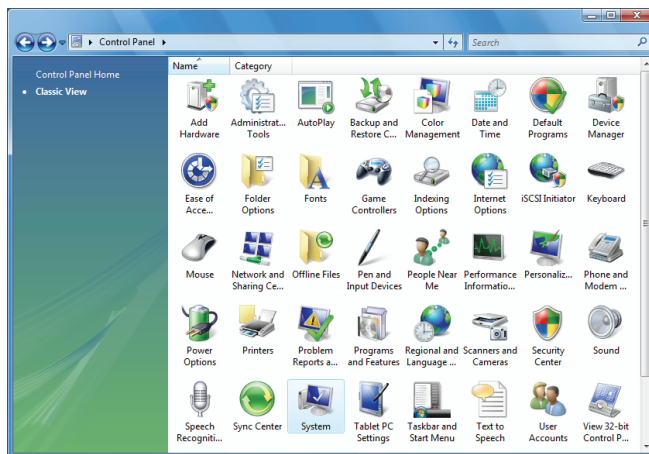
## CONTENTS

Then, for Windows Vista or Windows 7, follow the procedure below to uninstall the driver of the CA-2000.

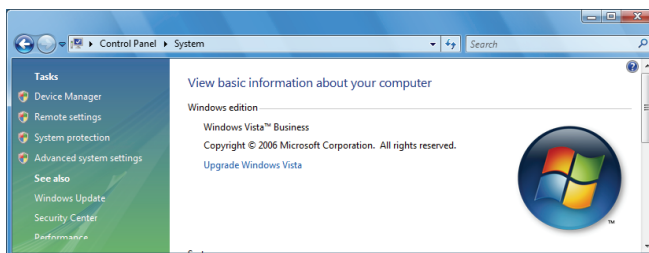
5. From the Start menu, select Control Panel. When 'Classic View' is displayed in Windows Vista, select 'Control Panel Home'.



6. From the 'System and Maintenance' menu (Windows Vista) or 'System and Security' menu (Windows 7), select 'System'.



7. Select 'Device Manager' under Tasks.



8. Right-click 'KMSE 2D Analyzer CA-2000' in 'Universal Serial Bus controllers', and click the Uninstall button.

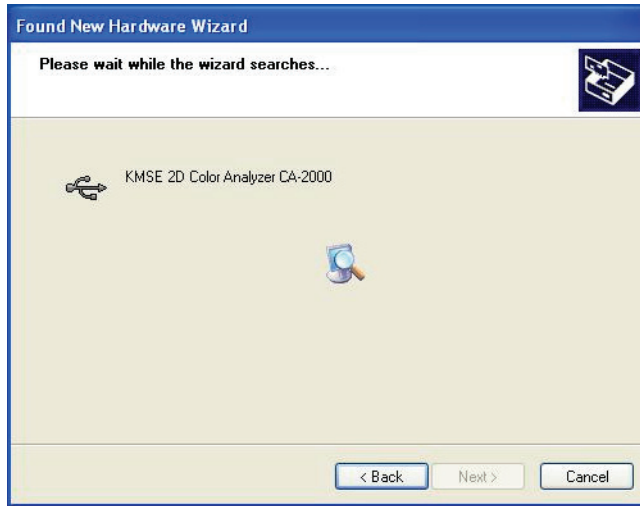
## 1.3 Connecting the CA-2000 to PC

Install the software before connecting the CA-2000 to the PC.

### 1.3.1 Connecting the CA-2000 for the first time (Windows XP)

1. After turning on the CA-2000's power, connect the USB cable to the PC and the CA-2000.

The Found New Hardware Wizard dialog box appears. Wait a while.



2. Select 'No, not this time' and click the Next button.



**3.** Select ‘Install the software automatically’ and click the Next button.

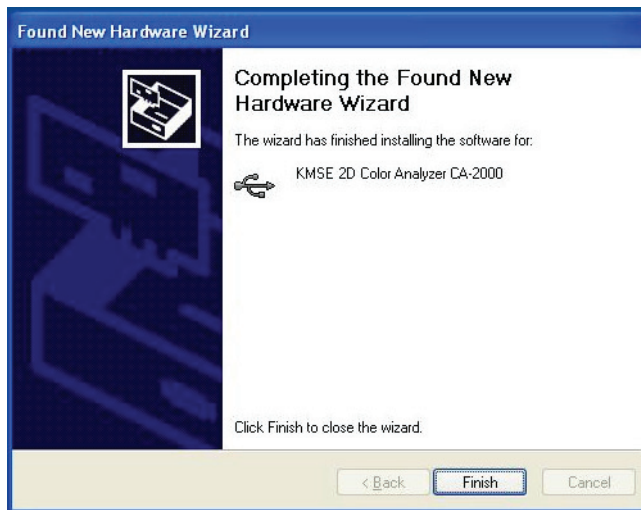
When your OS is Windows XP Professional 64-bit, you need to specify the source of the installation. Select “ca2000.inf” in the “Driver” folder in the software CD and click the Next button. The Hardware Installation dialog box appears.



4. Click the Continue Anyway button.

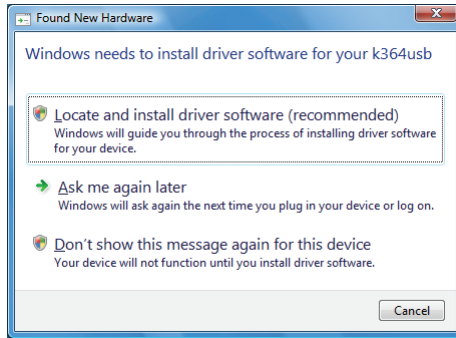


5. Click the Finish button.  
Installation is complete.

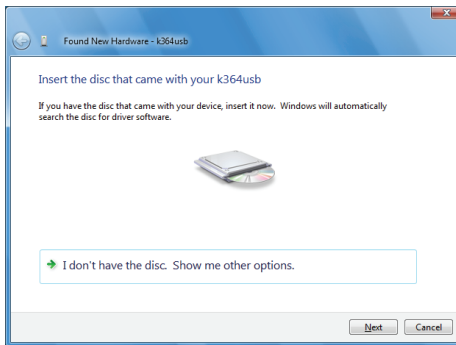


## 1.3.2 Connecting the CA-2000 for the first time (Windows Vista)

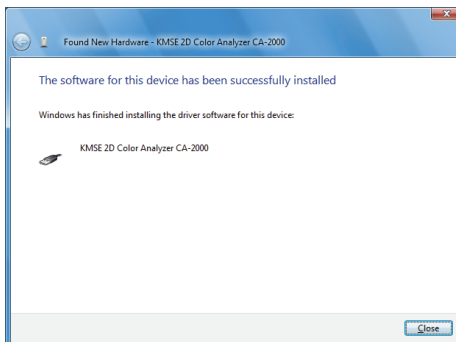
1. After turning on the CA-2000's power, connect the USB cable to the PC and the CA 2000.
  - The Found New Hardware dialog box appears.



2. Click 'Locate and install driver software'. When the dialog box which confirms User Account Control appears, select 'Continue'.
3. Insert the software CD into the drive and click the Next button.

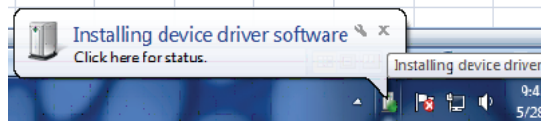


4. Click the Close button.
  - The installation of the driver software is complete.

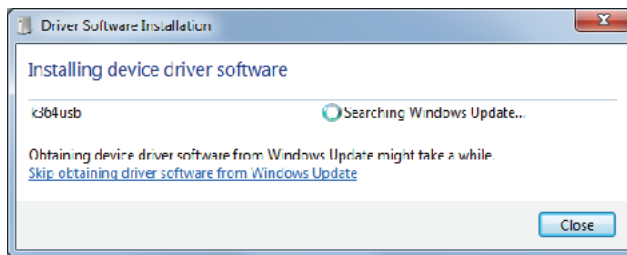


### 1.3.3 Connecting the CA-2000 for the first time (Windows 7)

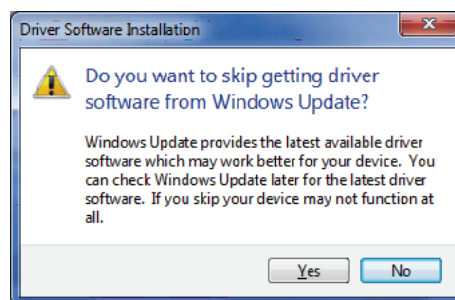
1. Insert the software CD into the drive. After turning on the CA-2000's power, connect the USB cable to the PC and the CA-2000.
  - The installation of the device driver should start automatically.
2. Select the icon showing Installing device driver software from the taskbar.



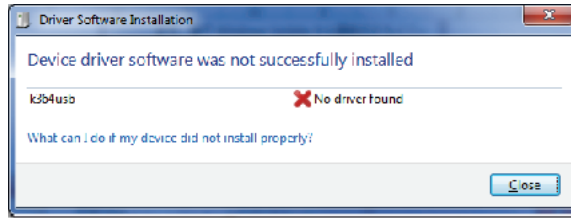
3. When the Device Software Installation dialog box appears, click 'Skip obtaining driver software from Windows Update'.



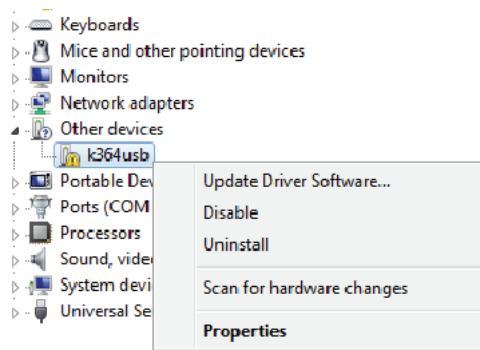
4. When the confirmation window appears, click the Yes button.



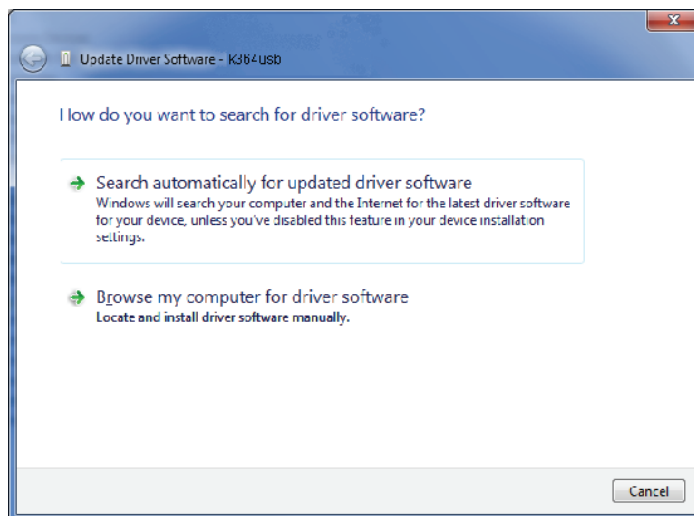
5. Wait for the screen below to appear and click the Close button.
  - Please wait for a while as this may take several minutes.



6. Right click on the 'Computer' from the Start menu and select 'Properties'.
  - The screen below will appear after clicking 'Device Manager' on the left of the Control Panel.



7. Right click on 'k364usb' and select 'Update Driver Software'.
8. Click 'Browse my computer for driver software'.

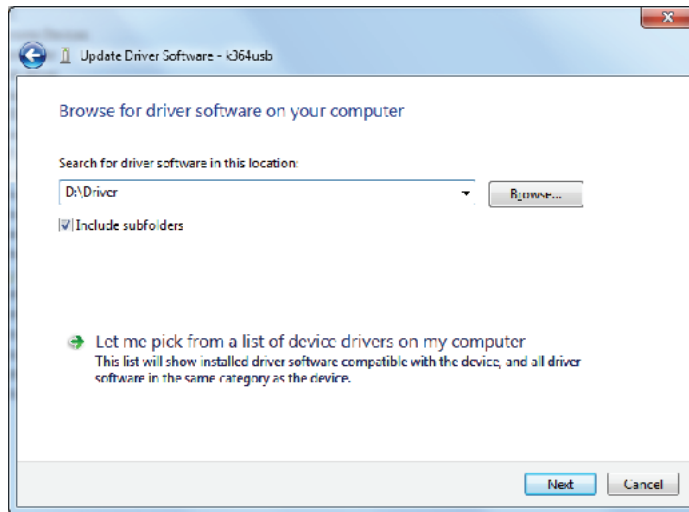




9. Designate the driver folder in the software CD and click the Next button.

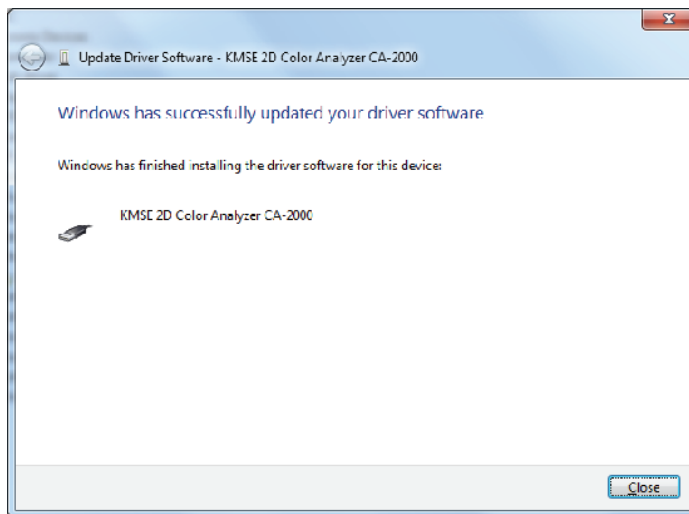
(Example) In the case of CD-ROM in D drive.

D:\Driver



10. Click the Close button.

- The installation of the driver software is complete.



# 1.4 Installing Calibration Files

The CA-2000 you have purchased comes with a calibration data DVD for each lens you selected at time of purchase.

All items on the DVD provided must be installed in order for the CA-2000 to make measurements. To install the calibration files, be sure to log on as an administrator to the PC.

**Note**

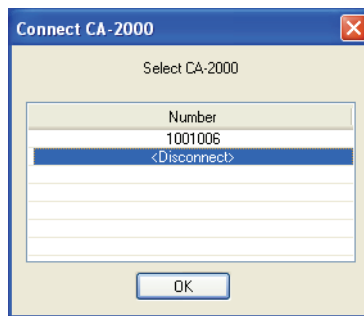
*If you selected a user other than a user with administrator privileges, you cannot install the calibration files.*

**Note**

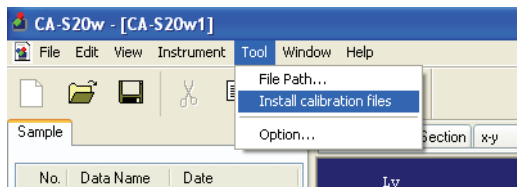
*If you are installing calibration files for the first time, you need to run the CA-S20w as an administrator. To do this, right-click 'CA-S20w' from the program menu and select 'Run as administrator'.*

## 1.4.1 Installation Method

1. Start the software.  
The Connect CA-2000 dialog box appears.
2. Select 'Disconnect' and click the OK button.



3. Select *Tool - Install calibration files* from the menu.



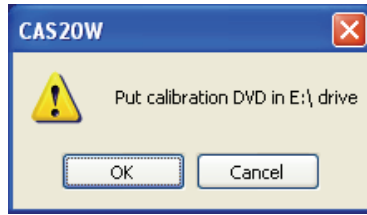
4. When the Insert calibration-DVD message dialog box appears, insert the calibration data DVD in the drive and click the OK button.

Insert the disk in the drive recognized first.

After inserting the disk, the message may be displayed several times. Click the OK button each time it appears.

Installation starts when the disk is recognized. Installation takes about 3 minutes.

This operation must be performed for each disk.



The drive name may be different depending on your PC usage environment.

**Tip**

If the disk is not recognized, check the file path of the drive for the calibration disk in “File Path Settings” below.

### 1.4.2 Notes on Calibration Files

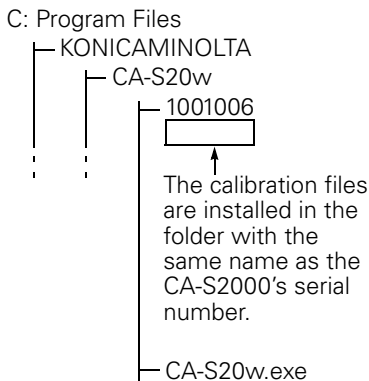
During measurement, or when connecting the PC and CA-2000, the information in the installed calibration files is compared with the information stored in the CA-2000.

You will not be able to connect, or you will not be able to select some lenses, if the calibration files are found to be out of date (because more recent calibration files exist due to re-calibration after purchase). Delete the folder containing the out-of-date files and install more recent calibration files. See the next section for folders.

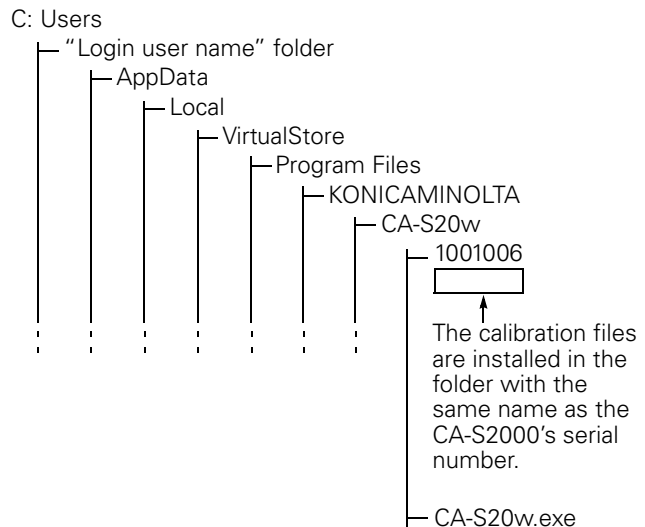
### 1.4.3 Hierarchy of the Installed Files

CA-S20w and the calibration files are installed in the following hierarchy.

When the OS is Windows XP



When the OS is Windows Vista or Windows 7



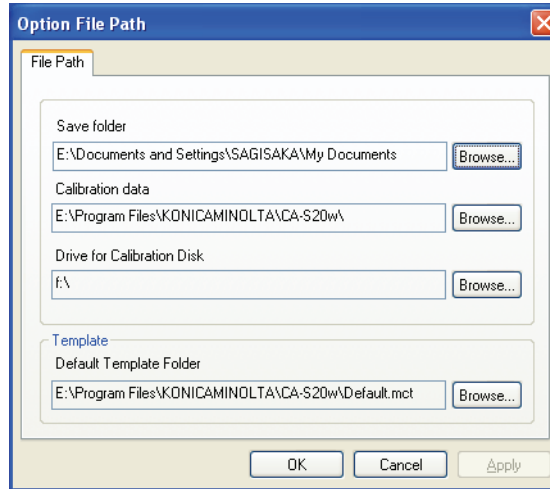
The calibration files are installed for each serial number (See page 9 “Status Bar” in the CA-S20w Instruction Manual.) of the CA-2000 to use.

## 1.4.4 File Path Settings

You can change the storage location of measurement files and calibration data and the file path of the drive for the calibration disk.

1. Select *Tool - File Path* from the menu.

The Option File Path dialog box appears.



2. Change each file path as necessary.

Click the Browse button to specify the existing file path.

In the 'Save folder' field, do not choose a location in the root directory of the hard drive (such as C:\) but specify a folder.

For 'Calibration data', specify the folder one level higher than the folder with the serial number ('CA-S20w' in the figure above).

3. Click the OK button.

If the file path setting is wrong, the Option File Path dialog box appears again. Check the file path and specify it correctly.





KONICA MINOLTA