


Spectrophotometer Configuration Tool CM-CT1

Ver. 1.51

En Instruction Manual

 Please read before using the instrument.



KONICA MINOLTA



Safety Precautions

Before using the software, please read this manual as well as the instruction manuals of your instrument and computer carefully to ensure safe and correct use.

Official names for applications and the like used in this manual

(Wording used in text) (Official name)

Windows 10	Microsoft® Windows® 10 Pro Operating System
Windows 11	Microsoft® Windows® 11 Pro Operating System
Bluetooth	Bluetooth®

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Notes on this Manual

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- The contents of this manual are subject to change without prior notice.
- Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions, or find an error or missing section, please contact your local sales office.
- KONICA MINOLTA will not accept any responsibility for the consequences arising from the use of the software without following the instructions in this manual.
- The screenshots included in this manual show CM-CT1 connected to a CM-17d series device. The display differs when CM-CT1 is connected to other instruments.

Introduction

This software (hereafter referred to as “CM-CT1”), is used by connecting a spectrophotometer to a computer. The CM-CT1 can be used for the following purposes.

1. [Instrument Settings](#) (*Available settings depend on the connected instrument)
2. [Export Data](#)
3. [Calibration Data Settings](#)
4. [Remote Control](#)

Software License Agreement

The terms of the license agreement of CM-CT1 are provided in the [Software License Agreement] dialog box displayed on-screen during the installation process. CM-CT1 can be installed only if you agree to all the terms of the agreement.

Notes on Use

- CM-CT1 software is an application for use with Windows 10 or Windows 11. Note that no operating system is included with CM-CT1. One of the above OS must be installed on the computer in order to install CM-CT1.

System Environment

■ Operating requirements

OS:	Windows 10 64 bit Windows 11
CPU:	2.0 GHz or more
RAM:	2 GB or more
Hard disk:	At least 10 GB of free space on the system drive
Display:	Resolution of 1024 × 720 or higher, 16-bit color or higher
Other:	USB port (required to connect the instrument)

■ Controllable Instruments

CM-26dG, CM-26d, CM-25d, CM-25cG, CM-23d, CM-17d, CM-16d, CM-700d, CM-700d-U, CM-600d, CM-5, CR-5, CM-M6

■ Display Languages

Japanese, English

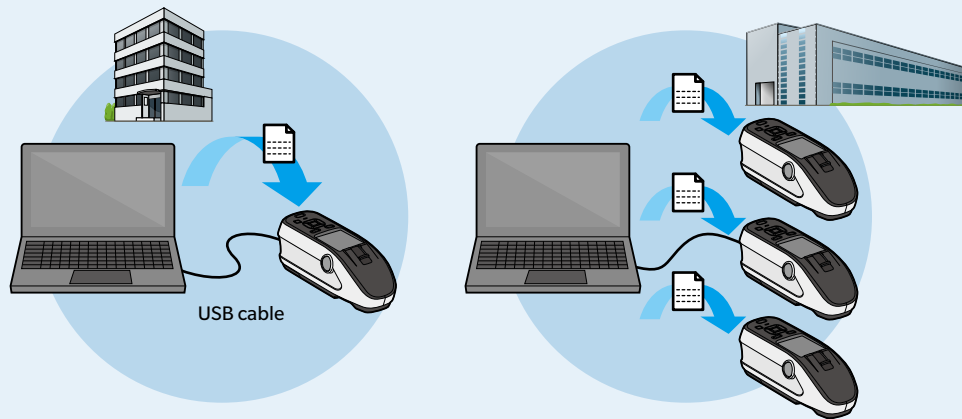
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CM-CT1 Capabilities

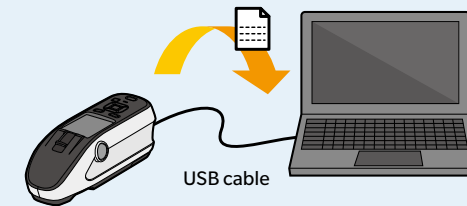
Instrument Settings

CM-CT1 allows various instrument settings, such as measurement conditions, instrument display contents, user-based instrument operation restrictions, WLAN/Bluetooth settings, etc. to be set using a computer. The software also allows setting contents to be exported to a file which can then be applied to multiple spectrophotometers.



Export Data

Data saved to a spectrophotometer (spectral reflectance data, plus gloss data for CM-26dG or CM-25cG) can be saved to a CSV file.



Remote Control

While displaying the LCD screen of the spectrophotometer* on a computer in real time, CM-CT1 enables control equivalent to key operations on the actual instrument (except for power switch and measurement area switch)

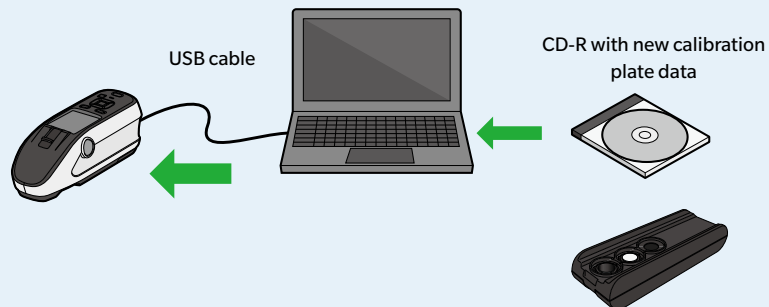
In addition, by accessing (via remote desktop, etc. over a network) a computer connected to the spectrophotometer, control of the spectrophotometer is possible even from remote locations.

* CM-26dG series, CM-25cG, CM-17d series, or CM-M6 devices only.



Calibration Data Settings

Whenever purchasing a new white calibration plate or gloss calibration plate, the calibration plate data must be saved in the instrument before measurement can be performed.



Quick Start

Starting and Exiting CM-CT1

◆ Starting the Software and Establishing Communication

- 1 Double-click the shortcut icon  on the desktop, or access the program menu and select "KONICA MINOLTA" - "Configuration Tool CM-CT1".
If SpectraMagic NX2 has been installed, CM-CT1 can be started by clicking on Config Tool in the SpectraMagic NX2 Launcher.

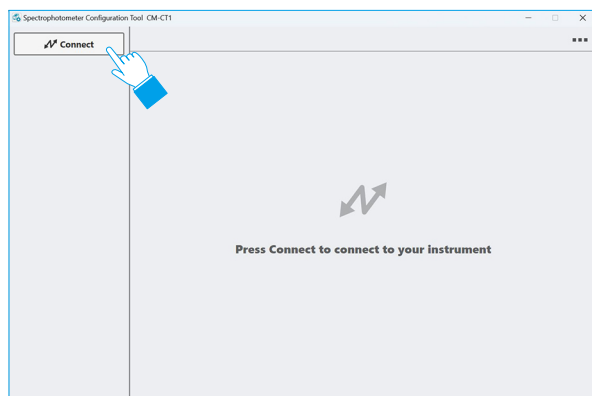
Memo Following installation, the initial display language after starting CM-CT1 is English. To change the display language to Japanese, follow the procedure under **Changing the Display Language (p.7)**.

- 2 Connect the spectrophotometer to the computer via USB cable or Bluetooth.

Memo WLAN connection cannot be used.

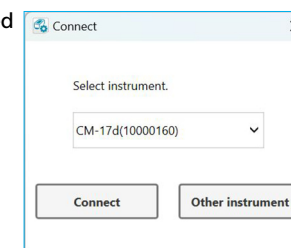
Memo USB connection is recommended. Communication via Bluetooth is possible but will be much slower.

- 3 Click the "Connect" button.



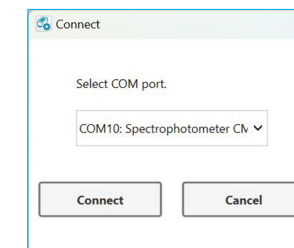
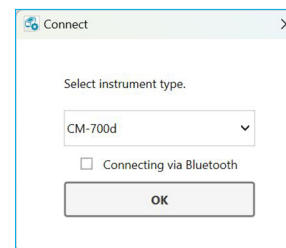
■ When using a CM-17d series, CM-26dG series, CM-25cG, or CM-M6 instrument connected via cable

1. The instruments that were automatically detected are displayed in the combo box. Select the instrument from the pulldown list and click the "Connect" button.



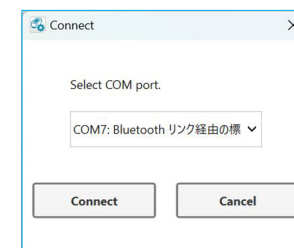
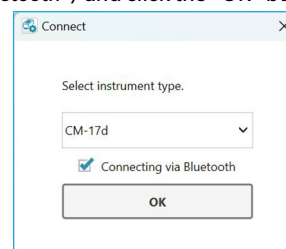
■ When using a CM-700d series instrument, CM-5, or CR-5 connected via cable

1. Select the instrument type from the pulldown list and click the "OK" button.
2. Select the COM port from the pulldown list and click the "Connect" button.



■ When connecting via Bluetooth

- Be sure that the instrument has been paired with the computer before proceeding.
1. Select the instrument type from the pulldown list, check "Connecting via Bluetooth", and click the "OK" button.
 2. Select the COM port from the pulldown list and click the "Connect" button.



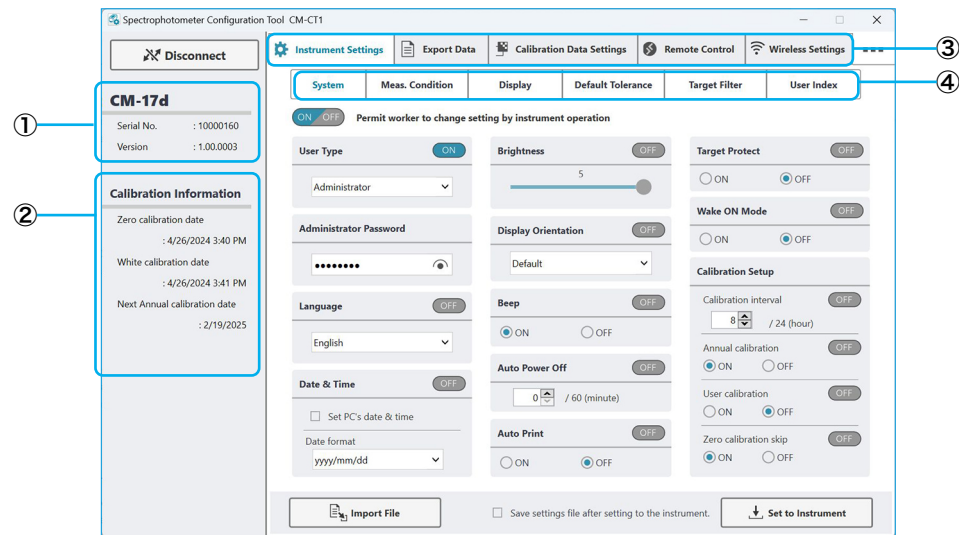
Memo If the instrument to be connected is not displayed, check the following.

- The spectrophotometer is switched on.
- The spectrophotometer and the computer are connected correctly.

Quick Start (continued)

4 Control Panel

If communication with the instrument is established normally, the settings currently configured on the instrument are displayed in CM-CT1.

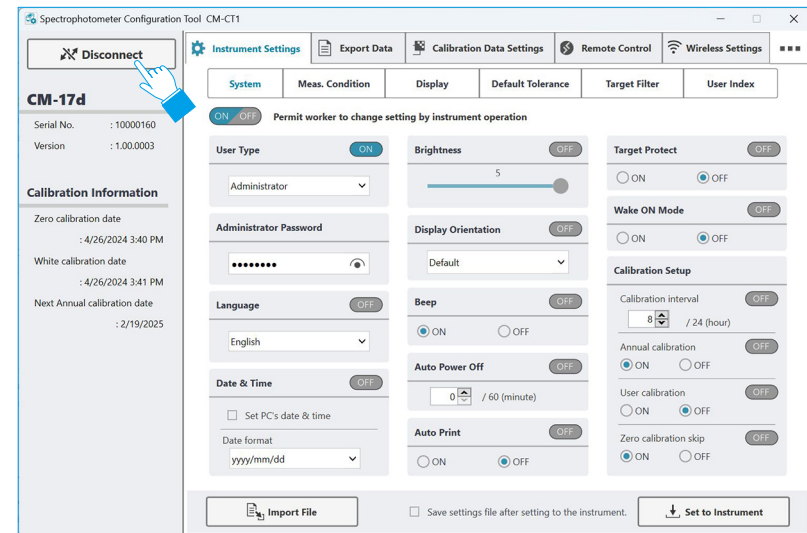


- ① Displays the serial number and the version of the spectrophotometer.
- ② Displays the calibration information of the spectrophotometer.
If a spectrophotometer is connected to CM-CT1 with no calibration performed after purchasing, only the zero calibration date will be displayed.
- ③ CM-CT1 main function tabs. Available tabs will be different for different instruments.
The screen will change whenever a new tab is selected. The text of the currently selected tab will be displayed in blue.
- ④ Sub tabs featuring items for the settings found under the currently selected function tab.
Available sub tabs will be different for different instruments.
The screen will change whenever a new sub tab is selected. The text of the currently selected sub tab will be displayed in blue.

The screenshot above shows the "Instrument Settings" tab selected with the "System" screen displayed.

Memo When CM-CT1 is connected to a spectrophotometer, "Remote" will be displayed on the spectrophotometer, and instrument-based operations will not be possible.

◆ Disconnecting and Exiting the Software



Clicking the "Disconnect" button will end communication with the spectrophotometer, and the screen will return to the dialog for connecting to a device.

Clicking "x" in the top right corner will disconnect the spectrophotometer and exit the software.

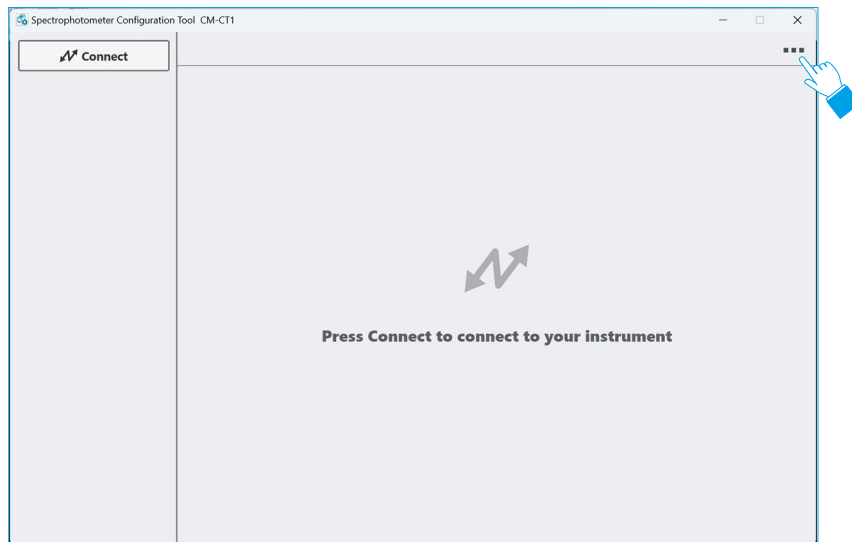
- If "Wake ON Mode" on the instrument is set to ON, the instrument will be automatically switched off when it is disconnected from CM-CT1 or CM-CT1 is exited from.

Quick Start (Continued)

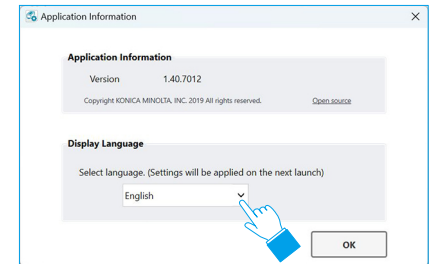
Changing the Display Language

Following installation, the initial display language after starting CM-CT1 is English. It is possible to change the display language to Japanese.

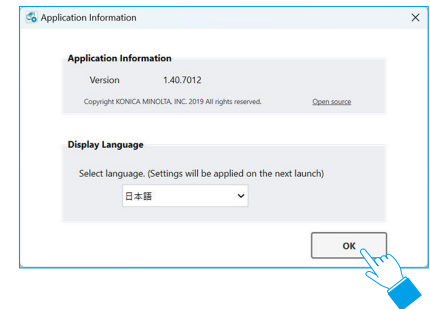
- 1 Click  in the upper-right corner of the screen to display the Application Information dialog.



- 2 Select “日本語” from the pull-down menu.



- 3 Click the “OK” button.



Exit and restart CM-CT1.

Use the same procedure to change the language from Japanese to English.

Quick Start (Continued)

Configuring Instrument Settings

◆ Procedure

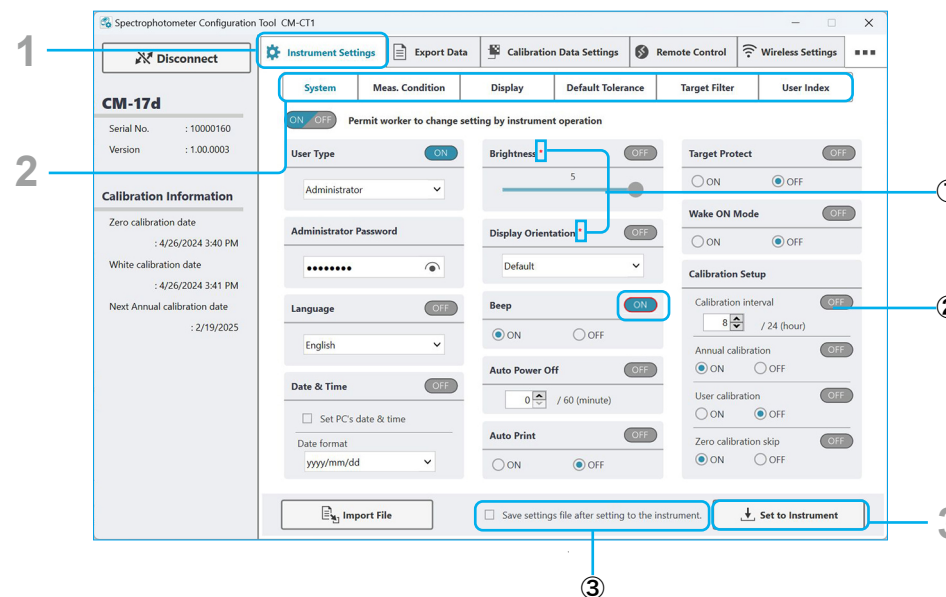
1 Select the “Instrument Settings” tab.


2 Select the sub tab for the settings to be changed.

For details on the individual settings, refer to the instruction manual for the spectrophotometer.

3 Change the settings as desired, and then click the “Set to Instrument” button.

- ① When you change the setting value, a red * is displayed next to the menu name.
- ② When you change the ON/OFF button, the outer frame of the button turns red.
- ③ To save instrument settings to a file, check “Save settings file after setting to the instrument.”, and click the “Set to Instrument” button.
The “Save instrument settings file” dialog box will be displayed after the settings are applied to the instrument. Select the save destination, and save the file under any name.



- Memo**
- Enter an 8-digit number under “Administrator Password”. Click  to show the entered values.
 - “Display Orientation” is set to “Default” when shipped.

Quick Start (Continued)

◆ User Index and User Class

- This function is available for CM-17d series, CM-26dG series, CM-25cG, CM-5, or CR-5 instruments only.
- A valid SpectraMagic NX2 license is required.

The User Index tab lets you set the user index and user class to be shown on the Custom screen of the spectrophotometer.

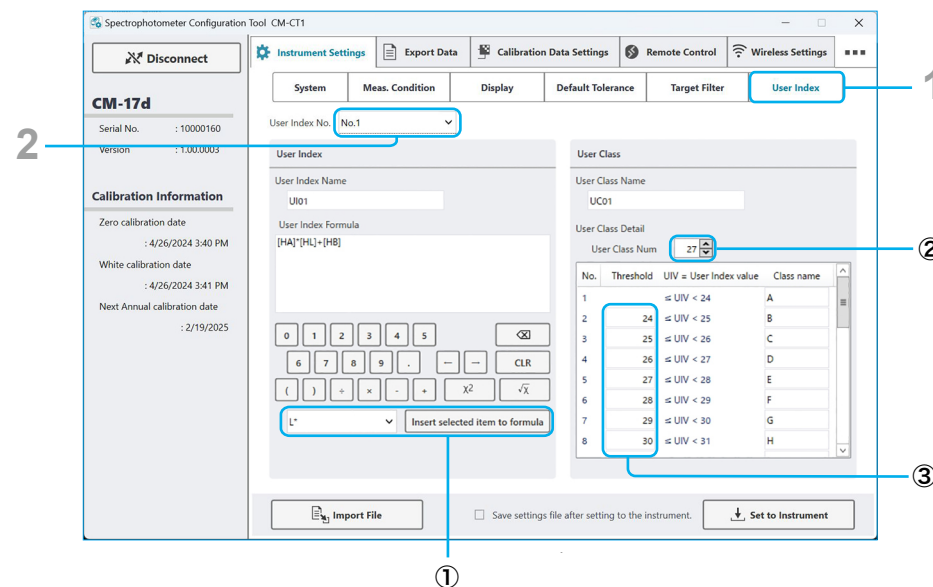
1 Select the "User Index" sub tab.

2 Select the User Index No. from the pull-down menu.

3 Set the user index and user class.

For details on available functions, refer to the appendix of the spectrophotometer's instruction manual.

- ① To add an item (value) to the formula, select the item from the pull-down menu and click the "Insert selected item to formula" button.
- ② Set the number of user classes by inputting the number directly or using the up/down buttons.
- ③ Set the upper threshold for the class. This value will also be used as the lower threshold for the next lower No. class.



Quick Start (continued)

◆ Restricting Worker Operations (ON OFF Display)

- This function is available for CM-17d series, CM-26dG series, CM-25cG, or CM-M6 instruments only.

Click / to enable or disable worker restrictions. If "Worker" is selected as the "User Type", whether contents can be changed or not using only the instrument can be configured. If "Worker" is selected as the "User Type", items marked "OFF" cannot be changed using only the instrument. By default, all settings other than "User Type" in the "System" tab are set to OFF.

Spectrophotometer Configuration Tool CM-CT1

System Meas. Condition Display Default Tolerance Target Filter User Index

OFF Permit worker to change setting by instrument operation

Measurement Mode OFF

Observer/Illuminant

Measurement Option OFF

SMC OFF

Specular Component OFF

Auto Target OFF

Output Minus ON

Import File Save settings file after setting to the instrument. Set to Instrument

Spectrophotometer Configuration Tool CM-CT1

System Meas. Condition Display Default Tolerance Target Filter User Index

OFF Permit worker to change setting by instrument operation

Default Tolerance OFF

	Obs. & Ill.1	Obs. & Ill.2
ΔL^*	1.00	1.00
Δa^*	1.00	1.00
Δb^*	1.00	1.00
ΔC^*	1.00	1.00
ΔH^*	1.00	1.00
ΔL	1.00	1.00

Warning Level 80 %

Parametric Coefficient OFF

	SCI	SCE
I(CMC)	1.00	1.00
c(CMC)	1.00	1.00
I(ΔE^*94)	1.00	1.00
c(ΔE^*94)	1.00	1.00
h(ΔE^*94)	1.00	1.00
i(ΔE^*94 Sp)	1.00	1.00
c(ΔE^*94 Sp)	1.00	1.00
h(ΔE^*94 Sp)	1.00	1.00
i($\Delta E00$)	1.00	1.00
c($\Delta E00$)	1.00	1.00
h($\Delta E00$)	1.00	1.00
i($\Delta E00$)	1.00	1.00

Import File Save settings file after setting to the instrument. Set to Instrument

Spectrophotometer Configuration Tool CM-CT1

System Meas. Condition Display Default Tolerance Target Filter User Index

OFF Permit worker to change setting by instrument operation

Display Type OFF

Custom Items OFF

Color Space OFF

Color Equation OFF

1 My

2 Mc

3 dM

4 ΔMy

5 ΔMc

6 ΔdM

7 ΔE^*94 (Special)

8 UE1:ex

9 UE2:

10 UE3:

11 UC1:none

12 UC2:

13 UC3:

14 ΔB^*GU

Import File Save settings file after setting to the instrument. Set to Instrument

Spectrophotometer Configuration Tool CM-CT1

System Meas. Condition Display Default Tolerance Target Filter User Index

OFF Permit worker to change setting by instrument operation

Target Filter OFF

Group Name OFF

No.	Group Name
1	test-1
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	

Import File Save settings file after setting to the instrument. Set to Instrument

Quick Start (Continued)

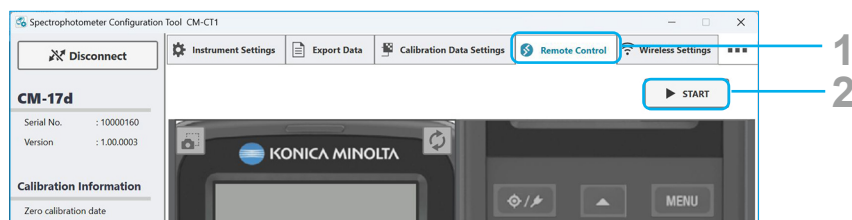
Remote Control

- This function is available for CM-17d series, CM-26dG series, CM-25cG, or CM-M6 devices only.

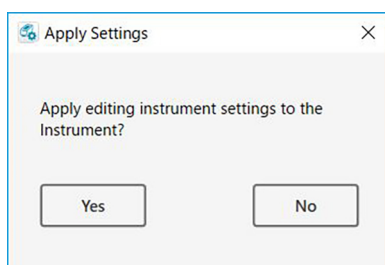
Remote control allows operations equivalent to key operations on the spectrophotometer to be performed while checking the LCD screen on the CM-CT1 software.

1 Select the “Remote Control” tab.

2 Click the “START” button.



A dialog requesting verification for applying the settings in the “Instrument Settings” tab to the instrument is displayed.



3 Click “Yes” to apply the settings, or click “No” to cancel.



- Displays the LCD screen of the spectrophotometer.
The screen will display the same content as the LCD screen on the spectrophotometer.
- Equivalent to the keys on the spectrophotometer.
Clicking the various buttons on the screen will perform the same operation as if the keys were pressed on the spectrophotometer.
The screen will display the same content as the LCD screen on the spectrophotometer.
- Equivalent to the measurement key on a spectrophotometer.
Clicking the measurement button on the screen will begin measurement.
The screen will display the same content as the LCD screen on the spectrophotometer.
- Reflect the LCD screen of the spectrophotometer to area ① of the CM-CT1 software.
During remote control communication, measurement using the instrument is possible. However, if the spectrophotometer is operated during remote control, the LCD screen of the spectrophotometer will not be reflected on the CM-CT1 software.
Click this button to refresh the CM-CT1 software display of the spectrophotometer's LCD screen after performing an operation on the spectrophotometer.
- Get a screenshot of area ① in the CM-CT1 software.
The area ① on the CM-CT1 software lights up once and is copied to the clipboard.

Memo For details of LCD contents and key operations, refer to the instruction manual for the spectrophotometer.

4 To end remote control, click the “STOP” button.

Memo “Remote” will be displayed on the LCD screen of the spectrophotometer, and instrument-based operations will not be possible.

Quick Start (Continued)

Wireless Settings

- This function is available only for CM-17d series, CM-26dG series, CM-25cG, or CM-M6 instruments that have the optional WLAN/Bluetooth Module installed and instrument firmware which is compatible with the WLAN/Bluetooth Module.

Wireless connection methods

Three types of wireless connections can be set: AdHoc, Infrastructure1 to Infrastructure4, and Bluetooth. Select the method according to your situation.

- To use AdHoc or Infrastructure1 to Infrastructure4, the computer must be equipped with wireless network adapter.
- To use Bluetooth, the computer must be equipped with a Bluetooth adapter.

AdHoc (p. 13)

When using AdHoc, the instrument acts as the access point, and the computer's wireless network adapter connects directly with the instrument.

- When using AdHoc, settings can be freely set within the range available for each setting.
- When using AdHoc, it is not possible to connect to the internet using the same wireless network adapter.

Infrastructure1 to Infrastructure4 (p. 14)

When using Infrastructure1 to Infrastructure4, the instrument connects to the WLAN access point, and the computer connects to the same WLAN access point to connect to the instrument.

- To connect the instrument to the WLAN access point, it is necessary to know certain information regarding the network that you will use to connect with the instrument. If this information is not known, check with your IT department.
- When using Infrastructure1 to Infrastructure4, connection to the internet using the same wireless network adapter used to connect to the instrument is possible.

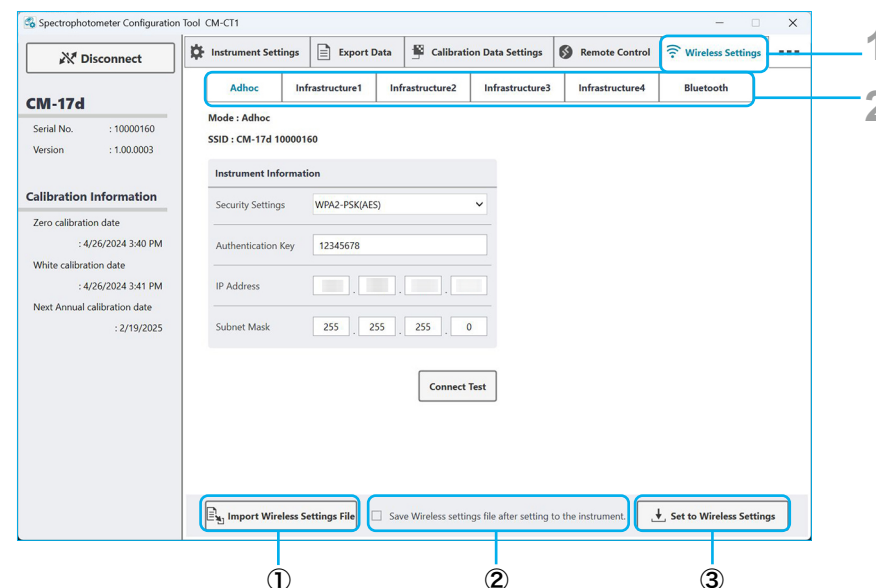
Bluetooth (p. 16)

When connecting via Bluetooth, the instrument must be paired with the computer prior to connection to the software.

- The Bluetooth communication range is much more limited than the communication range for AdHoc or Infrastructure1 to Infrastructure4, and is affected by the environment in which the instrument and computer are used.

Wireless Settings tab

- Select the "Wireless Settings" tab.
- Select the sub tab for the wireless setting for which settings will be changed.
 - To import previously saved wireless settings from a file, click the "Import Wireless Settings File" button.
 - To save wireless settings to a file after they have been set on the instrument, check "Save Wireless settings file after setting to the instrument".
 - To set the dialog wireless settings to the instrument, click the "Set to Wireless Settings" button.

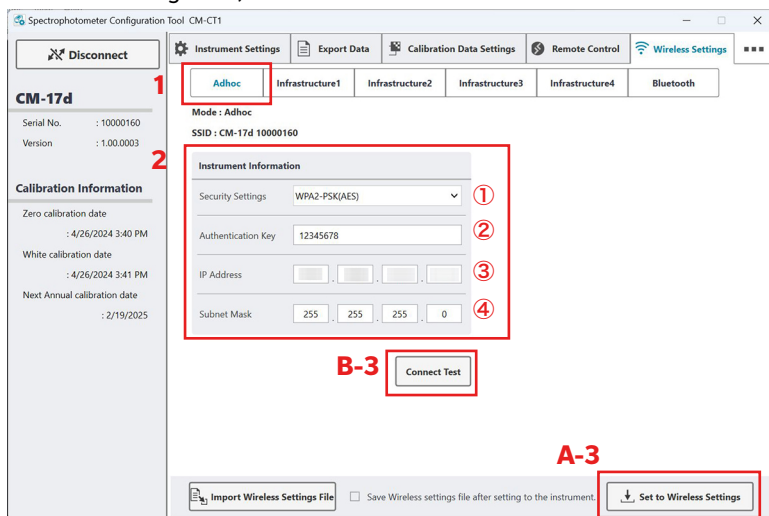


■ Adhoc

The Adhoc setting sets up the instrument as an access point which can be connected to directly from the Wi-Fi settings of the computer.

- When Adhoc connection is used, it is not possible to connect to the internet via WLAN from the same wireless adapter on the PC.

1. In the "Wireless Settings" tab, select the "Adhoc" subtab.



2. Set the **Instrument Information**.

- The default settings can be used unless other settings are desired.
- ① Select the Security Settings to use from the pulldown list.
 - "WPA-PSK(AES)" is also known as "WPA" with "AES" encryption type.
 - "WPA2-PSK(AES)" is also known as "WPA2" with "AES" encryption type.
 - ② Input the Authentication Key. This is the password that must be input on the computer when connecting to the instrument from the computer.
 - The Authentication Key must be between 8 and 63 characters in length. Until the minimum length is reached, the textbox will be pink.
 - Acceptable characters are:
! " # \$ % & ' () * + , - . / 0 1 2 3 4 5 6 7 8 9 ; : < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _ ` a b c d e f g h i j k l m n o p q r s t u v w x y z { | } ~
Characters which cannot be used will not be accepted even if typed in.

- ③ Set the IP Address.
 - Range: 0 to 255.
- ④ Set the Subnet Mask.
 - It is recommended that the subnet mask be left set to 255 255 255 0.

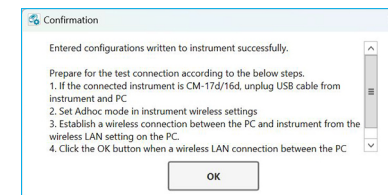
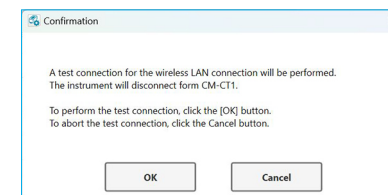
A. **To only write settings to instrument:**

- A-3. Click the "Set to Wireless Settings" button at the bottom of the dialog. The settings will be written to the instrument and the message box "Operation Completed" will appear.

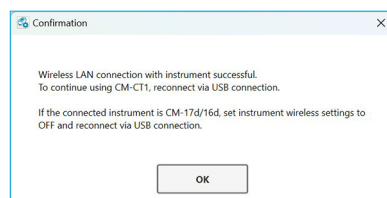
Setting the wireless settings of this tab on the instrument is complete.

B. **To write dialog settings to instrument and test whether WLAN connection using those settings is possible:**

- B-3. Click the "Connect Test" button. A message box will appear.
- B-4. Click the "OK" button to start the connection test.
- B-5. The settings in the dialog will be written to instrument, and the message box at right will appear.
 - Do not click "OK" until Step B-10.
- B-6. If the instrument is connected via USB cable, disconnect the cable.
- B-7. On the instrument, go to "Setting" > "Communication setup" > "Wireless Setting" and select "AdHoc".
- B-8. On the instrument, check the instrument's SSID by going to "Setting" > "Communication setup" > "WLAN Info."



- B-9. In the computer's Wi-Fi settings ("Settings" - "Network & Internet" - "Wi-Fi" - "Show available networks" on Windows 11), select the instrument's SSID, click the "Connect" button, and input the Authentication Key input in Step 2-② when requested.
- B-10. After the Adhoc connection between computer and instrument has been established, click the "OK" button in the message box that appeared in Step B-5.
- B-11. The Adhoc connection with instrument will be tested, and if successful the message box at right will appear.



- To continue using CM-CT1, set the instrument's Wireless Setting to "Off", reconnect the instrument and computer via USB cable or Bluetooth, and then reconnect from CM-CT1.

■ Infrastructure1 to Infrastructure4

The Infrastructure1 to Infrastructure4 settings set the instrument to enable it to connect to a WLAN access point. The instrument and computer can then be connected via the same access point.

- If both wired and wireless network connections are set in Windows, priority will be given to the wired network during network search.
- If multiple wireless networks are set in Windows, priority will be according to the Windows settings during network search.

Checking WLAN access point information

The following information is required to connect to a WLAN access point:

SSID: The name of the network

Security Setting: This may be shown on the computer as "Security type".

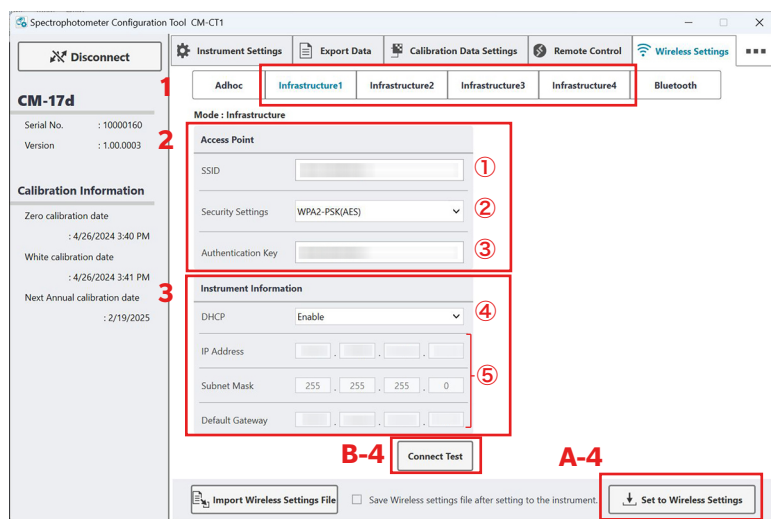
- "WPA-PSK(AES)" is also known as "WPA" with "AES" encryption type.
- "WPA2-PSK(AES)" is also known as "WPA2" with "AES" encryption type.
- "WPA3-PSK(AES)" is also known as "WPA3" with "AES" encryption type.

Authentication Key: This may be shown on the computer as "Wi-Fi security key" or "Network security key". The password for connecting to the network.

On Windows 11, this information can be found by going to "Settings" > "Network & Internet" > "Wi-Fi". These settings will be used in Step 2 on the following page.

- If the currently connected network will be used, clicking on the name of the currently connected network will show the network properties. To see the wi-fi security key (authentication key), click "View" at the right of "View Wi-Fi security key".
 - If "View Wi-Fi security key" is not shown, access to the network may be controlled differently. Contact your company's IT department.
- If a different network will be used, click on "Manage known networks" and then select the desired network from the list of SSIDs (network names) that appears. The properties of the selected network will be shown. To see the security type (security setting), click "Edit" in "Advanced Wi-Fi network properties" and then click on the "Security" tab in the network properties dialog that appears. The network security key (Wi-Fi security key or authentication key) can be viewed by checking the "Show characters" checkbox.

- In the "Wireless Settings" tab, select an "Infrastructure" subtab ("Infrastructure1" to "Infrastructure4").



- Set the **Access Point** information determined in **Checking WLAN access point information** on the previous page.
 - Input the access point's SSID.
 - Select the access point's Security Settings (Security type) from the pull-down list.
 - Input the access point's Authentication Key (Wi-Fi security key).
- Set the **Instrument Information**.
 - Select "Enable" or "Disable" for DHCP from the pull-down list. Selecting "Enable" is recommended. When "Enable" is set, the system automatically sets the instrument's IP address and the access point's Subnet Mask and Default Gateway to suitable values.
 - When "Enable" is selected, skip ⑤ below.
 - If "Disable" is selected, set the IP Address to be used for the instrument and the Subnet Mask and Default Gateway of the access point manually. This requires detailed knowledge of the network to determine values suitable for the network.

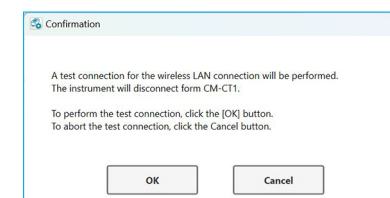
A. **To only write settings to instrument:**

- Click the "Set to Wireless Settings" button at the bottom of the dialog. The settings will be written to the instrument and the message box "Operation Completed" will appear.

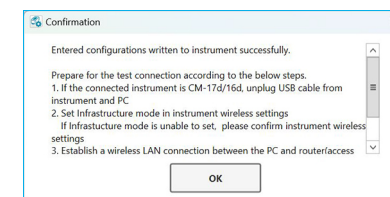
Setting the wireless settings of this tab on the instrument is complete.

B. **To write dialog settings to instrument and test whether WLAN connection using those settings is possible:**

- Click the "Connect Test" button. A message box will appear.
- Click the "OK" button to start the connection test.



- The settings in the dialog will be written to instrument, and the next message box will appear.
 - Do not click "OK" until Step B-10.
- If the instrument is connected via USB cable, disconnect the cable.
- On the instrument, set the Wireless Setting to the Infrastructure setting which was just set. The instrument will attempt to connect to the access point specified by the SSID.
 - If connection is unsuccessful, access the router's settings from the computer and disable the router's privacy separator, SSID separator, or network separation function, and try again.
- In the computer's Wi-Fi settings ("Settings" - "Network & Internet" - "Wi-Fi" - "Show available networks" on Windows 11), connect to the access point with the same SSID that was input in step 2.
- After the connections in steps B-8 and B-9 have been established, click the "OK" button in the message box that appeared in Step B-6.



B-11. Connection between the computer and instrument via the specified access point will be tested, and if successful the message box at right will appear.



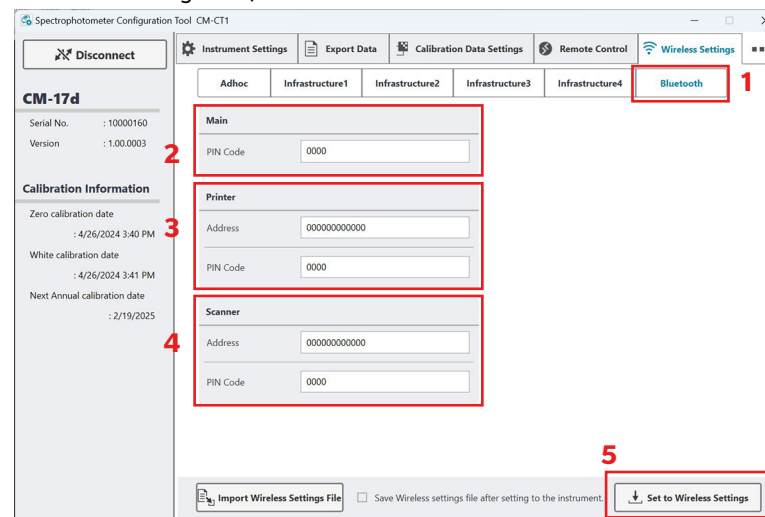
- To continue using CM-CT1, set the instrument's Wireless Setting to "Off", reconnect the instrument and computer via USB cable or Bluetooth, and then reconnect from CM-CT1.

Bluetooth

Bluetooth settings for connecting the instrument via Bluetooth to a computer, printer, or scanner can be set.

- Bluetooth settings can also be performed using the instrument controls.

1. In the "Wireless Settings" tab, select the "Bluetooth" subtab.



2. **Main**

Set the PIN Code for connecting the instrument to a computer.

3. **Printer**

Set the address and printer PIN Code of the printer.

4. **Scanner**

Set the address and PIN code of the scanner.

5. After settings have been completed, click the "Set to Wireless Settings" button at the bottom of the dialog.

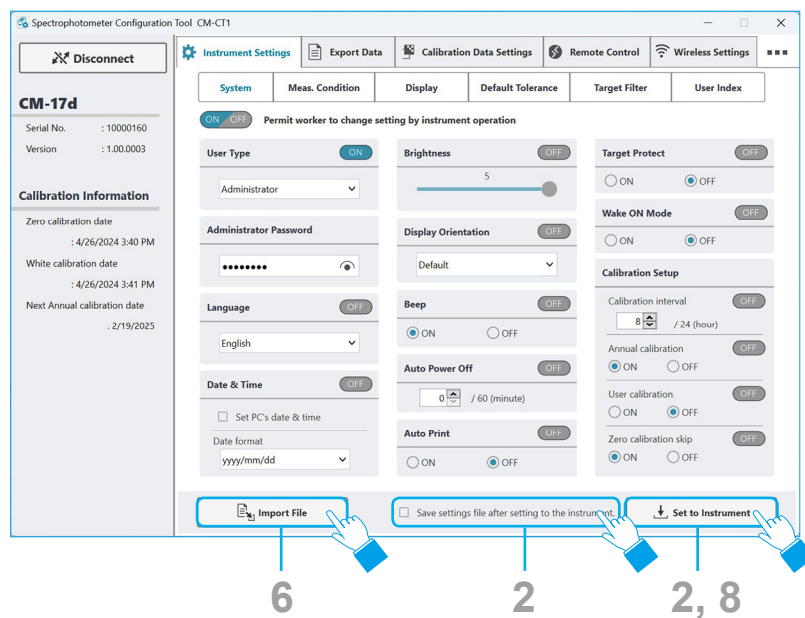
The settings will be written to the instrument and the message box "Operation Completed" will appear.

Advanced Use

Setting the Same Measurement Conditions to Multiple Instruments

The CM-CT1 software can be used to export settings configured using the software to a file, which can then be used to set the same measurement conditions to multiple instruments.

- 1 Follow the procedure under the “[Configuring Instrument Settings](#)” section (p. 8) of “[Quick Start](#)” for the first instrument.
- 2 Check “Save settings file after setting to the instrument”, and click the “Set to Instrument” button.
- 3 The “Save instrument settings file” dialog box will be displayed after the settings are applied to the instrument. Select the save destination, and save the file under any name.
- 4 Disconnect from the first instrument.



5 Connect to the second instrument.

6 Click the “Import File” button.

7 The “Select instrument settings file” dialog box will be displayed. Select the file saved in step 3.

8 Click the “Set to Instrument” button.

9 Disconnect from the second instrument.

To import the same measurement conditions to other instruments, repeat steps 5 through 9.

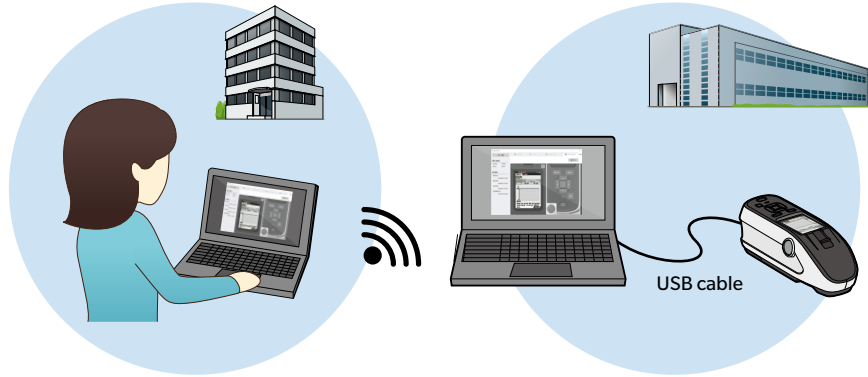
Memo Instruments must be the same type.

This function cannot be used to apply measurement conditions used in one type to instruments of a different type, or vice versa.

Advanced Use (Continued)

Remote Control Capabilities

Using a separate computer to connect the computer running the CM-CT1 software over a network enables control of the CM-26dG series, CM-25cG, or CM-M6 equivalent to using key operations on the actual device even from a remote location.



This section describes an example where operations are performed over an in-house network.

Memo OS that can be used via Remote Desktop Connection is limited. Visit the Microsoft website for information on supported OS.

Also visit the Microsoft website for detailed information on how to use the remote desktop feature.

- 1 Set the CM-CT1 software to “Remote Control” connection.**
- 2 Start Remote Desktop Connection on a separate computer.**

The computer with the CM-CT1 software installed must have remote connections enabled beforehand.
- 3 Operate the CM-CT1 software.**

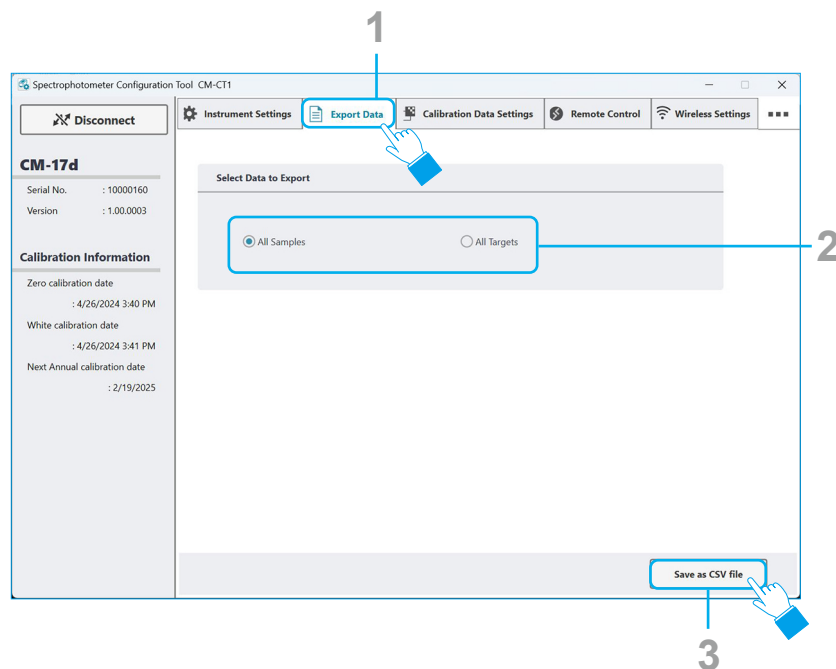
The CM-CT1 software screen on the remote computer will be displayed. To operate the CM-CT1 software, use the mouse as usual. Operations will be performed on the remote device in real time just as if the device operation keys were being used.

Advanced Use (Continued)

Export Data Capabilities

Data saved to a spectrophotometer, including measurement spectral reflectance and gloss data (CM-26dG / CM-25cG only), can be saved to a CSV file.

- 1 Select the “Export Data” tab.
- 2 Select either “All Samples” or “All Targets”.
- 3 Click the “Save as CSV file” button.



- 4 The “Export as CSV file” dialog box will be displayed. Select the save destination, and enter a name to save the file.

Format of output data

The screenshot shows an Excel spreadsheet with the following columns: Data Name, Measurement Date, Measurement Area, Measurement Mode, UV Condition, Specular Component, Group Name, 360[nm], 710[nm], 720[nm], 730[nm], 740[nm], and Gloss. The data rows show various sample measurements with their corresponding values.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Data Name	Measurement Date	Measurement Area	Measurement Mode	UV Condition	Specular Component	Group Name	360[nm]	710[nm]	720[nm]	730[nm]	740[nm]	Gloss	
1														
2	Sample0001	2016/3/3 10:00	SAV	Gloss only	UV 100%	SCE	GLOSS	---	---	---	---	---	---	0
3	Sample0002	2016/3/3 10:00	SAV	Color & Gloss	UV 0%	SCE	SCE	2	2	2	2	2	2	0
4	Sample0003	2016/3/3 10:00	MAV	Color only	UV 0%	SCI + SCE	SCI	2.44	2.44	2.44	2.44	2.44	2.44	---
5	Sample0003	2016/3/3 10:00	MAV	Color only	UV 0%	SCI + SCE	SCE	8.92	18.92	18.92	18.92	18.92	18.92	---
6	Sample0004	2016/3/3 10:00	SAV	Color & Gloss	UV 100%	SCI	SCI	8.92	18.92	18.92	18.92	18.92	18.92	50.03
7	Sample0005	2016/3/3 10:00	MAV	Color only	UV 0%	SCE	SCE	6.85	66.85	66.85	66.85	66.85	66.85	---
8	Sample0006	2016/3/3 10:00	MAV	Opacity	UV 100%	SCE	WHITE	2.95	2.95	2.95	2.95	2.95	2.95	---
9	Sample0006	2016/3/3 10:00	MAV	Opacity	UV 100%	SCE	BLACK	6.64	71.64	71.64	71.64	71.64	71.64	---
10	Sample0007	2016/3/3 10:00	MAV	Gloss only	UV 100%	SCI	GLOSS	---	---	---	---	---	---	50.06
11	Sample0008	2016/3/3 10:00	SAV	Color only	UV 100%	SCE	SCE	---	---	---	---	---	---	---

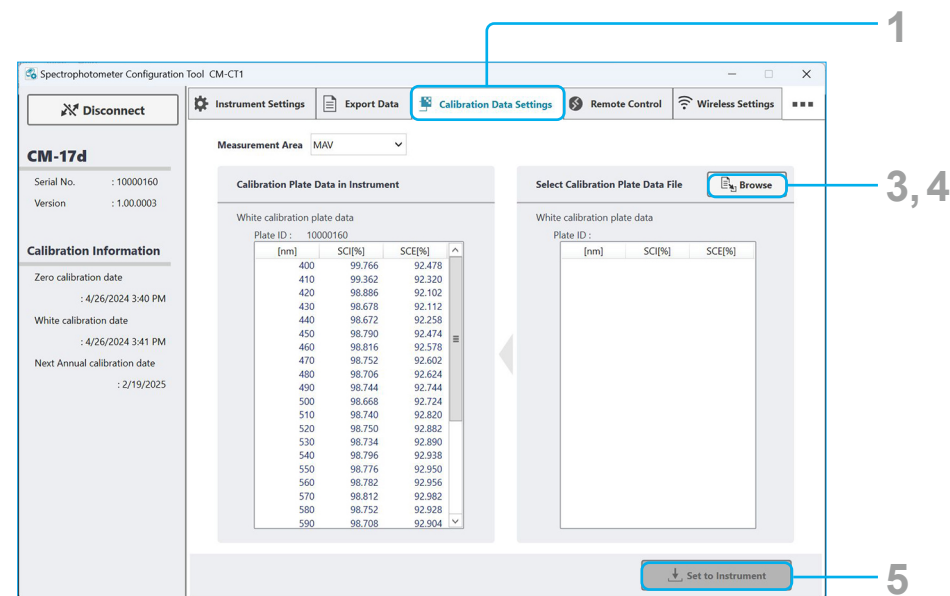
Memo To export L*a*b* values or other color values to the computer, purchase the optional SpectraMagic NX software (available for Konica Minolta spectrophotometers).

After Purchasing a New White Calibration Plate or Gloss Calibration Plate

Be sure to perform this procedure before measuring after purchasing a new white calibration plate or gloss calibration plate.

- 1 Select the “Calibration Data Settings” tab.
- 2 Insert the CD-R with the new calibration plate data into the computer.
- 3 Click the “Browse” button to display the “Calibration plate data file” dialog, and select the cwm file (white calibration plate data file) from the CD-R inserted in step 2.
- 4 Click the “Browse” button again, and select the gum file (gloss calibration plate data file) from the CD-R inserted in step 2 (CM-26dG / CM-25cG only).
- 5 Click the “Set to Instrument” button.

Memo After the settings have been applied to the instrument, the contents of the “Calibration Plate Data in Instrument” displayed on the left are updated to the newest data.



Errors and Corrective Actions

Error No.	Error	Check Point	Action
1	Failed to get instrument settings.	A) Is the instrument turned OFF? B) USB communication: Is the USB cable connected properly? C) USB communication: Is the USB cable broken? D) Bluetooth communication: Has the Bluetooth connection been lost? E) Is another application connected to the CM-26dG series device?	A) Turn ON the instrument. B) Connect the instrument to the computer correctly. C) Replace the USB cable. D) Connect via Bluetooth. E) Disconnect any other application communicating with the instrument.
2	Failed to apply instrument settings.		
3	Failed to get the data.		
4	Failed to remote control.		
5	Failed to connect to instrument.		
6	Failed to export data.		
7	Failed to write the calibration plate data.		
8	Failed to read calibration plate file. Please check that cwm file and cws file, or the gum file and gus file are in the same folder.	Are the cwm file and cws file in the same folder? Are the gum file and gus file in the same folder?	To change white calibration plate data, place the cwm file and cws file in the same folder. To change gloss calibration plate data, place the gum file and gus file in the same folder.
9	Failed to read calibration plate file. Please check that cwm file and cws file are in the same folder.	Are the cwm file and cws file in the same folder?	Place the cwm file and cws file in the same folder.
10	Failed to read calibration plate data file. File format has error.	—	The calibration data file may be corrupted. Take note of the calibration plate serial number, and contact the nearest KONICA MINOLTA indicated on the Authorized Service Facility list included with the instrument.
11	The selected file is incorrect. Please select the file dedicated to your instrument.	Is the selected calibration data correct for the calibration plate?	Verify that the serial number included in the selected file name matches the serial number on the applicable calibration plate.
12	Failed to read settings file. This file is broken. File format has error.	Was the setting file created with a newer application?	Use the newer application.
		Have the settings in the setting file changed?	File format may be corrupted. Export a new setting file.
13	No data in the instrument.	Is there data saved on the instrument?	Verify that data has been saved on the instrument
14	Failed to save a file. Please check the storage location.	Has the save destination been removed?	Select an existing folder.
		Is a file with the same name already open?	Close the file with the same name, and try saving the file again.
15	Some items loaded from the instrument are not supported on the current version of the software. The following items are set to the initial value. • Item a (a: unsupported item)	Is the CM-CT1 software the latest version?	Download the latest edition from the KONICA MINOLTA website (https://www.konicaminolta.com/instruments/download/software/color/cmct/index.html).

Please reconnect to the instrument.

Start the CM-CT1 software and reconnect.

Error No.	Error	Check Point	Action
16	<p>This instrument version does not support the following functions. Update the firmware to set the instrument.</p> <p>Unset items</p> <ul style="list-style-type: none"> •XXXX YYYY 	—	<p>If you wish to update the firmware, and contact the nearest KONICA MINOLTA indicated on the Authorized Service Facility list included with the instrument.</p>
17	<p>Unable to set "UV Control" in the UV Condition setting of the CM-26dG/26d because fluorescence coefficients are not registered in this instrument.</p> <p>To specify "UV Control", register fluorescence coefficients in the instrument.</p>	Are the fluorescence coefficients set on the instrument?	<p>Use Color Management Software SpectraMagic NX2 (Ver. 1.2 or later) to set the fluorescence coefficients to CM-26dG series.</p>



KONICA MINOLTA