



ColorHazeMeter

Software Operation Manual V1.0



Please read this manual carefully



1. ColorHazeMeter Software Introduction

ColorHazeMeter is the support software for Color haze meter. This software can realize haze, transmittance and color on-line measuring, historical data reading, exporting data in EXCEL format, and report generation, etc.

The device is equipped with a USB Type C communication interface. Connect the device with the computer by a USB cable, and start ColorHazeMeter, you can read the data in the device.

Particularly, the software has functions of report generation and printing. The software can automatically generate and print reports of measurement data. If a PDF printer is installed on your computer, you can print an electronic version of the report in PDF format. It is convenient to record and store measurement data.

You don't have to manually install the USB driver. Just connect the device with the computer, and you can realize online operation (when you connect the device with the computer for the first time, an alert will ask you to restart the computer to automatically load the driver). Currently the software supports Windows. Computer hardware configuration recommended 6th Generation Intel® Core™ i3 Processors, RAM greater than 4G.

■ Software Installation

This software does not require installation. You can start the software by clicking the exe file. You should run the program as an administrator before your first use of the software.

Setup method: Move the mouse to "ColorHazeMeter.exe", click the right mouse button, click "Properties", then select "Compatibility", check "Run as administrator", and click "Confirm".

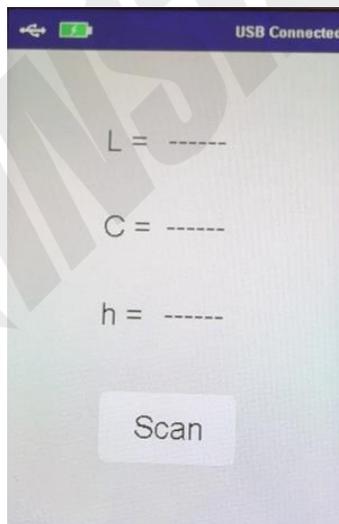


ColorHazeMeter.exe	20
ColorHazeMeter_en.qm	20
ColorHazeMeter_zh.qm	20
QtCore4.dll	20
QtGui4.dll	20
QtNetwork4.dll	20
QtSerialPort.dll	20
QtSql4.dll	20
QtXml4.dll	20

If you need to copy the software, you should copy the entire folder.

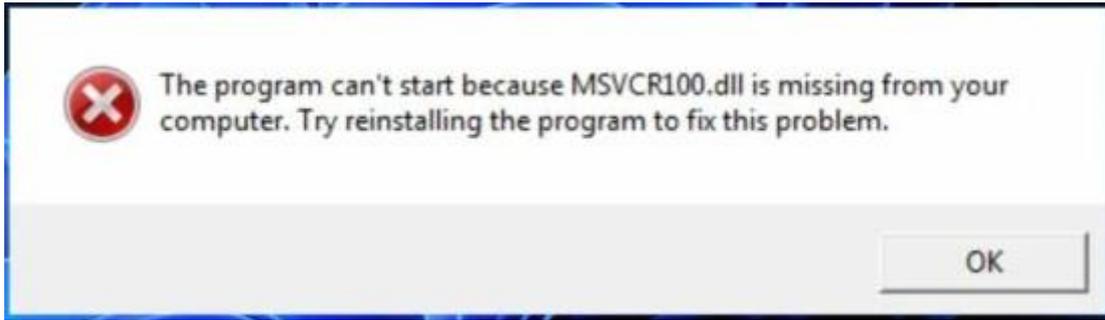
■ Hardware Connection

Connect the device and computer by plugging the cable into the USB ports thereof respectively. After connection, "USB Connected" appears at the upper right corner on the device display.



■ Error Handling

When you run the software for the first time and see the following prompt, please run "vcredist2010_x86.exe" from the installation folder and follow the on-screen instructions to complete the installation.



ColorHazeMeter.exe	20
ColorHazeMeter_en.qm	20
ColorHazeMeter_zh.qm	20
meterno.xls	20
QtCore4.dll	20
QtGui4.dll	20
QtNetwork4.dll	20
QtSerialPort.dll	20
QtSql4.dll	20
QtXml4.dll	20
vcredist2010_x86.exe	20

2. Software Interface

ColorHazeMeter V2.1

English 中文

Device information: SN: 173801294, Firmware Version: 4.06

Count: NG: 0, PASS: 7, Total: 7

Comparison measurement table:

	Standard	Sample	Δ	
L*	-----	-----	-----	-----
C*	-----	-----	-----	-----
h	-----	-----	-----	-----
ΔE	-----	-----	-----	-----

Buttons: Scan Standard, Scan Sample

Set display parameter: Lab, LCh (selected), Setup

ΔE parameter: Formula: ΔE^*_{ab} , Thresholds: 5.0, Set parameter, Read parameter

Buttons: Read comparison record, Clear, Export Excel, Spectral reflectance

NO	Test Name	DateTime	Standard			Sample			ΔE	Pass or not	Delete	Report
			L*	C*	h	L*	C*	h				
1	Comp1	2025/09/15 23:08	97.00	0.47	188.4	97.00	0.47	189.6	0.01	PASS	Delete	Report
2	Comp2	2025/09/15 23:08	97.00	0.47	188.4	97.00	0.47	188.4	0.00	PASS	Delete	Report
3	Comp3	2025/09/15 23:09	97.00	0.47	189.6	97.00	0.47	188.4	0.01	PASS	Delete	Report
4	Comp4	2025/09/15 17:15	97.00	0.47	189.6	96.99	0.46	188.6	0.02	PASS	Delete	Report
5	Comp5	2025/09/15 17:15	97.00	0.47	189.6	97.00	0.47	189.6	0.00	PASS	Delete	Report
6	Comp6	2025/09/15 17:15	97.00	0.47	189.6	96.99	0.47	189.6	0.01	PASS	Delete	Report
7	Comp7	2025/09/15 17:15	97.00	0.47	189.6	97.00	0.46	189.8	0.01	PASS	Delete	Report



- **USB Connection Status Indicator**

Normal device connection: "Green".

Abnormal or no device connection: "Gray".

- **Device Information**

It includes the SN and Firmware Version.

- **Language Selection**

"中文": click the button to switch the interface to Chinese.

"English": click the button to switch the interface to English.

- **Set Display Parameter**

It can set different parameters for measurement.

- **Set Tolerance**

It can set the tolerance of measurement parameters.

- **Count**

It includes the number of PASS, NG, and Total.

- **Function Buttons**

"Read difference record": Import the instrument's comparative measurements into the list.

"Clear": Clear all data in the data list.

"Export Excel": Export the data in the list in Excel format.

- **Data Display Area**

It contains the Test Name, Time, Standard measurement, Sample measurement, ΔE value, and PASS/NG in the difference comparison records.

- **Difference Measurement**

"Scan Standard": connect with the computer to measure the standard.

"Scan Sample": connect with the computer to measure the sample.



Display the Δ value and color deviation indicator (when Lab is selected for the setting parameter) and QC qualification parameters.

3. Software Operation

3.1 Comparison measurement

Comparison measurement

	Standard	Sample	Δ	
L*	96.99	97.00	0.01	-----
C*	0.46	0.47	0.01	
h	189.8	189.6	-0.2	
ΔE	-----		0.01	

PASS

Scan Standard Scan Sample

After the device connects with the computer, start the software to carry out online color difference comparison. Click "Scan Standard" or "Scan Sample" to obtain the corresponding data. When there are data for the standard and sample, QC will be determined according to the set tolerance value, and a record will be generated in the list.

Shortly press the button on the device, or press "Enter" on the keyboard may also trigger measurement.

3.2 Set Display Parameter

Click the "Setup" button to download the parameter settings into the device.

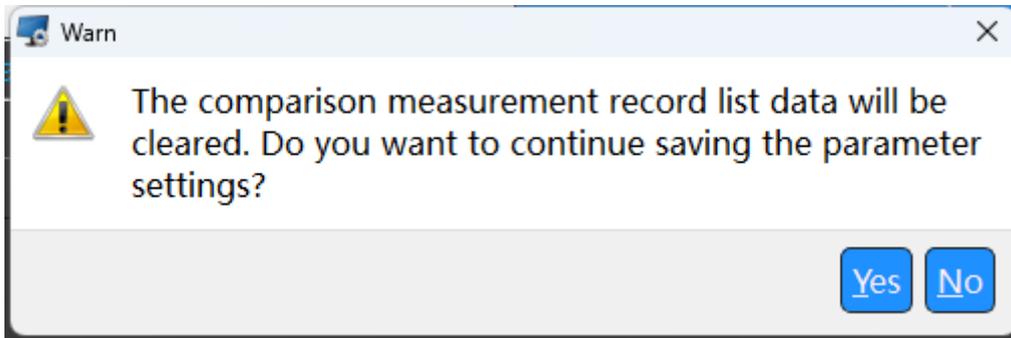
Set display parameter

Lab LCh

Setup

If the parameter setting is successful, the interface of both the instrument and the software will be updated to the measurement interface of the set parameters, and a pop-up box will

be displayed to indicate that the list data will be cleared.



3.3 Set Tolerance

ΔE parameter

ΔE Formula:

ΔE Thresholds:

Enter the tolerance value in the box and click the "Set Tolerance" button, the set tolerance will be downloaded to the instrument and the data in the software will be re-qualified for judgment and statistics.

Clicking on the "Read Tolerance" button will import the instrument's tolerance data into the software.

3.4 Operations in the list

NO	Test Name	DateTime	Standard			Sample			ΔE	Pass or not		
			L*	C*	h	L*	C*	h				
1	Comp1	2025/09/15 23:08	97.00	0.47	188.4	97.00	0.47	189.6	0.01	PASS	Delete	Report
2	Comp2	2025/09/15 23:08	97.00	0.47	188.4	97.00	0.47	188.4	0.00	PASS	Delete	Report
3	Comp3	2025/09/15 23:09	97.00	0.47	189.6	97.00	0.47	188.4	0.01	PASS	Delete	Report
4	Comp4	2025/09/15 17:15	97.00	0.47	189.6	96.99	0.46	188.6	0.02	PASS	Delete	Report
5	Comp5	2025/09/15 17:15	97.00	0.47	189.6	97.00	0.47	189.6	0.00	PASS	Delete	Report
6	Comp6	2025/09/15 17:15	97.00	0.47	189.6	96.99	0.47	189.6	0.01	PASS	Delete	Report
7	Comp7	2025/09/15 17:15	97.00	0.47	189.6	97.00	0.46	189.8	0.01	PASS	Delete	Report
8	Comp8	2025/09/15 17:16	96.99	0.46	189.8	97.00	0.47	189.6	0.01	PASS	Delete	Report

➤ **Read Comparison Record**

Click "Read comparison record" to import the instrument's comparative measurements into the list.

➤ **Clear Data**

Click "Clear" to clear the data in the list, qualification counts and the data in the difference measurement interface.

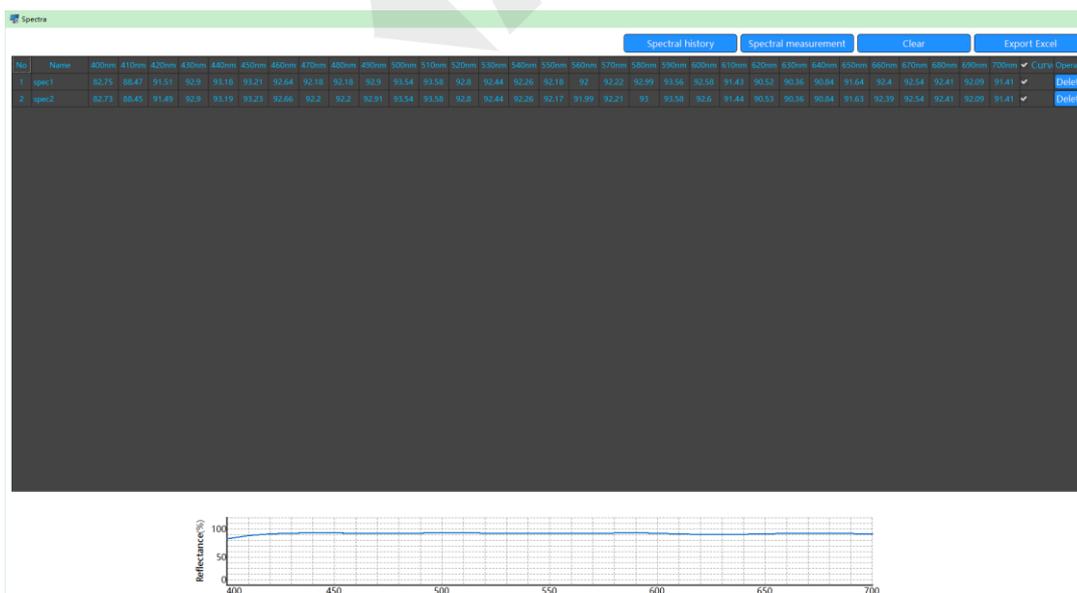
➤ **Export to Excel**

Click "Export Excel" to pop up the storage path selection box. After setting, click "Save" to export the data from the list in the Excel format. After completion, the data in the list will be cleared.

➤ **Edit Name**

The record generated by color difference measurement is named by default. If you need to change the name, you can double-click the name of the record for modification.

3.5 Spectral transmittance





➤ **Spectral Measurement**

Click "Spectral measurement" to record the spectral data in the table and display the spectral curve.

➤ **Clear Data**

Click "Clear" to clear the table data and curve data.

➤ **Export to Excel**

Click "Export Excel" to pop up the storage path selection box. After setting, click "Save" to export the data from the list in the Excel format. After completion, the data in the list will be cleared.

3.6 Report generation

Click "Print" of a single record in the list to generate the report as follows.

For header information input, click "**Information**" to enter the head information of the Company, Tester, and Auditor.



Information

Print

Test Report

Device: 5700-LS35 Colorimeter SN: 173801294

Company: _____ Sample Name: Comp2

ΔE Thresholds: 5.0 Test Time: 2025/09/15 23:08

ΔE Formula: ΔE^*ab

Test Data

	Standard	Sample	Δ
L*	97.00	97.00	0.00
C*	0.47	0.47	0.00
h	188.4	188.4	0.0
ΔE			0.00
Result			PASS

Tester: _____

Auditor: _____