

LCR-USB2

USB通信ユニット USB Communication Unit

取扱説明書 INSTRUCTION MANUAL

三和電気計器株式会社

本社：東京都千代田区外神田2-4-4・電波ビル
郵便番号：101-0021・電話：東京(03)3253-4871㈹
大阪営業所：大阪市浪速区恵美須町2-7-2
郵便番号：556-0003・電話：大阪(06)6631-7361㈹
SANWA ELECTRIC INSTRUMENT CO., LTD.
Dempa Bldg. 4-4 Sotokanda2-Chome Chiyoda-Ku,Tokyo,Japan

VEGETABLE 植物油インキを使用しています。 01-2502 2040 2040

[2] 用途と特徴

2-1 用途

本製品はハンディ LCRメータLCR700/LCR701とLCR-USB2を接続して、測定した値や日時を専用ソフトウェアLCRLinkを使ってPC（パソコン）にデータ転送が可能です。

2-2 特徴

- ・イベント記録が可能
- ・取込間隔を最速から59分まで設定可能
- ・保存したデータ（csvフォーマット）を表計算ソフトで開けばグラフ作成も容易。

[3] LCRLinkのインストール

3-1 動作環境

CPU : 1.6 GHz以上、メモリ2 GB以上
対応OS : Windows10, Windows11

・WindowsとMicrosoft Corporationの米国およびその他の国における登録商標です。記載の会社名および製品名は、各社の商標または登録商標です。

3-2 インストールの準備

- ・動作環境（3-1 参照）を満たすPCを用意します。
- ・弊社HPより専用ソフトウェアLCRLinkをダウンロード（無償）し、PCに保存します。ソフトウェアには、インストーラー、デバイスドライバーが収納されています。

[3-3] インストール方法

- 1) JPN¥App（日本語用）フォルダにあるsetup.exe（種類：アプリケーション）をダブルクリックします。

[1] SAFETY PRECAUTIONS

- Before use, read the following safety precautions.-
- This instruction manual explains how to safely use your new USB communication unit, LCR-USB2. Before use, please read this manual thoroughly. After reading it, keep it together with the product so you can refer to it when necessary.

⚠ WARNING

- Read through the instruction manual of LCR700/LCR701 too, and use the instrument correctly and safely.
- Please note that we are not responsible for any outcome of the operation of the product.

[2] APPLICATIONS AND FEATURES

2-1 Applications

This product allows you to transfer measurement data and date/time information to your PC by connecting the LCR700/LCR701 handy LCR meter to the LCR-USB2 and using the dedicated LCRLink software.

2-2 Features

- Event recording available.
- Acquisition interval adjustable from the shortest to 59 minutes.
- Handling the saved data (CSV format) by a spread sheet application makes drawing graphs easy.

[3] INSTALLATION OF LCRLink

3-1 System Requirements

- CPU: 1.6 GHz or faster, 2 GB or more RAM
- Supported OS: Windows 10 and Windows 11
- Microsoft and Windows are registered trademarks of Microsoft Corporation in the USA and other countries. The other company names and product names in this manual are registered trademarks or brands of each company.

3-2 Preparation for Installation

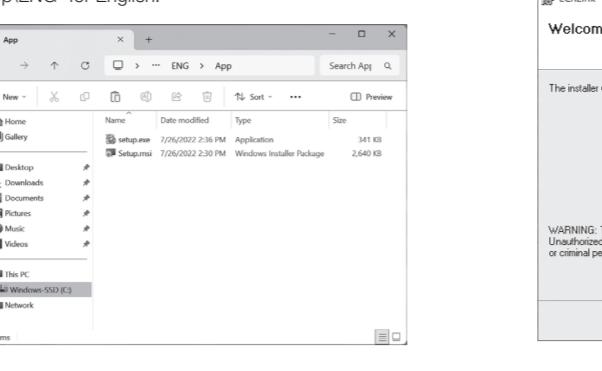
- Prepare a PC that meets the system requirements (see section 3-1).
- Download the dedicated LCRLink software (free of charge) from our website and save it to the PC. The software package includes an installer and device driver.

Contents	Folder and file names	Description
Installer	\ENG\App\setup.exe	
Device driver	\ENG\Driver	For Windows 10 and Windows 11

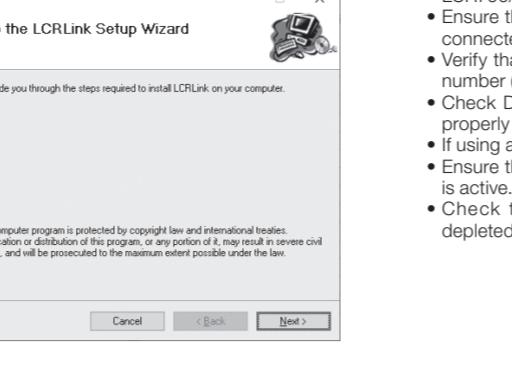
• Make sure your user account on your PC is an administrator.

3-3 Installation Procedure

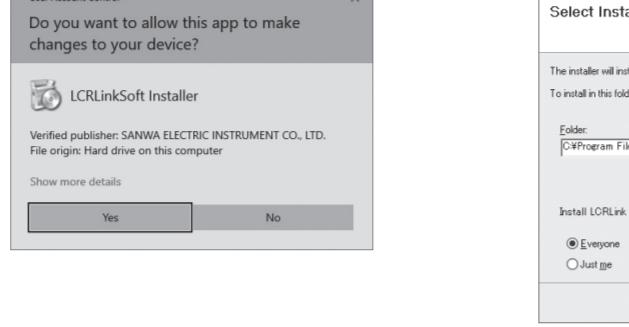
- Double-click the application "setup.exe" in the folder of "App\ENG" for English.



- The Setup Wizard window will appear. Click "Next".



- The User Account Control window will appear. Click "Yes".



- If you do not need to change the folder, click "Next".



- Make sure your user account on your PC is an administrator.

- 1 -

- 2 -

- 3 -

- 4 -

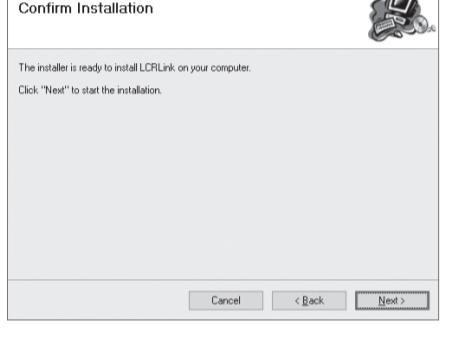
- 13 -

- 14 -

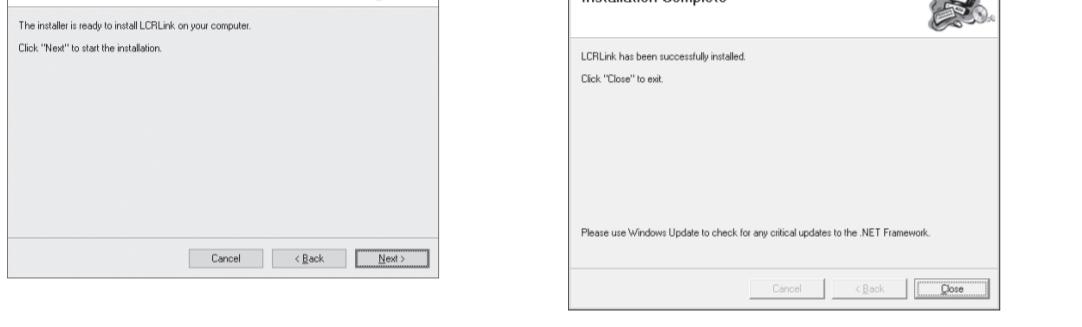
- 15 -

- 16 -

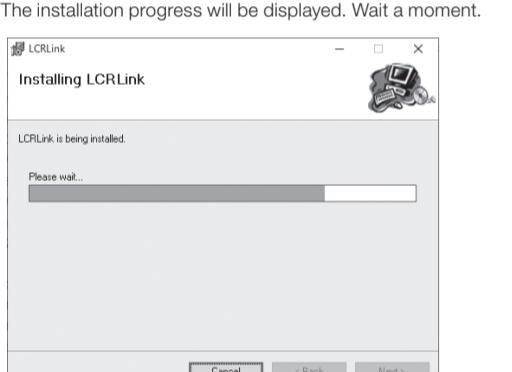
5) Click "Next" to start the installation.



7) The installation is now complete. Click "Close" to exit the window.



The installation is now complete.



6) The installation progress will be displayed. Wait a moment.

- 5 -

- 6 -

- 7 -

- 8 -

- 17 -

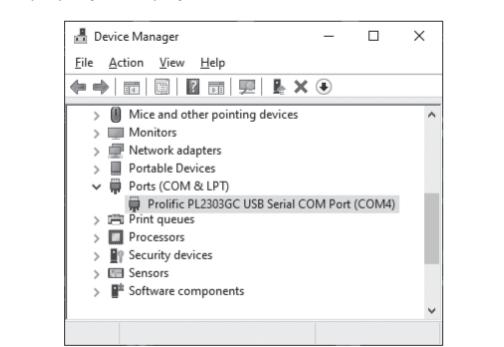
- 18 -

- 19 -

- 20 -

4-2 Confirming the Device Driver

- 1) Connect the LCR-USB2 to a USB port on your PC.
- 2) Right-click the Start button on the Windows taskbar and select "Device Manager".
- 3) Open "Ports (COM & LPT)" and double-click "Prolific PL2303GC USB Serial COM Port (COM4)".



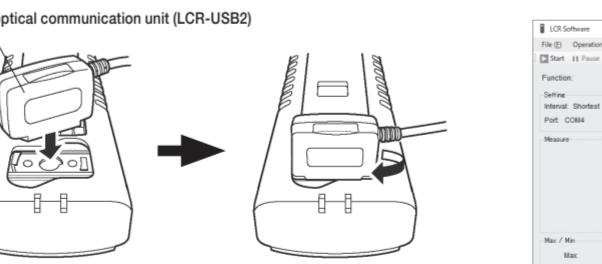
In this example, "COM4" is assigned as the COM port number. The port number may vary depending on the PC and the USB port used.

If you change the PC or the USB port, reconfigure the port number in LCRLink (see section 5-2).

5 [USAGE PROCEDURES

5-1 Connecting the LCR-USB2

When connecting the LCR-USB2 to the LCR700/LCR701, make sure that no input signal is applied to the LCR700/LCR701 and that its power is turned off.



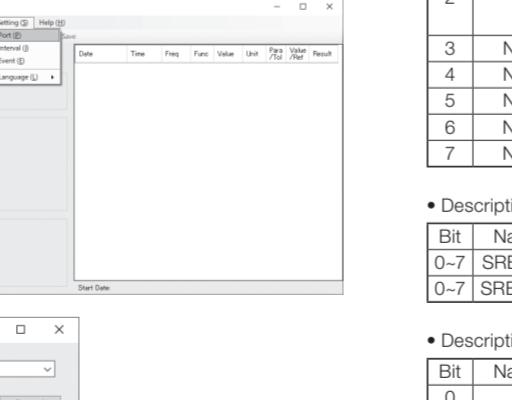
Firmly attach the LCR-USB2 to the back of the LCR700/LCR701. Connect the USB plug of the LCR-USB2 to the USB port of your PC. Turn on the power of the LCR700/LCR701, and then press the PC button to enable communication. At this time, "PC" will appear on the display of the LCR700/LCR701.

5-2 Using the LCRLink

Click "Start" → "All Programs" → "SANWA" → "LCRLinkSoft" to launch LCRLink.

First, set the port number.

Set the allocated port number by selecting "Setup" → "Select Port" in the LCRLink screen (see section 4-2).



For detailed instructions on using LCRLink, refer to the software help. You can access it by clicking "Help" → "Contents" in the software or "Start" → "All Programs" → "SANWA" → "LCRLinkHelp" in the Windows Start menu.

- 9 -

- 10 -

- 11 -

- 12 -

- 21 -

- 22 -

- 23 -

5-3 If Communication with LCRLink Fails

- Ensure that the LCR-USB2 is properly connected to the LCR700/LCR701.
- Ensure that the USB connector of the LCR-USB2 is properly connected to your PC's USB port.
- Verify that the port number set in LCRLink matches the port number (COMx) in the device driver.
- Check Device Manager to confirm that the device driver is properly installed.
- If using a USB hub, use a self-powered USB hub.
- Ensure that the PC transfer function on the LCR700/LCR701 is active.
- Check that the battery of the LCR700/LCR701 is not depleted.

6 MAINTENANCE

6-1 Maintenance and Inspection

- 1) Appearance:
• Is the instrument damaged due to falling or other cause?
- 2) Cables:
• Are the cables damaged, or are the core wires exposed? If any of the above problems exists, stop using the instrument and request repair or replace with a new unit.

6-2 Cleaning and Storage

- 1) The body is sensitive to volatile solvents. Avoid wiping it with thinner, alcohol, or similar substances. To clean the body, use a soft cloth slightly dampened with water.
- 2) The body is sensitive to heat. Do not place it near heat sources or devices that generate high temperatures.
- 3) Avoid storing the instrument in locations subject to vibration or where there is a risk of it falling.
- 4) Do not store the instrument in environments exposed to direct sunlight, extreme heat or cold, high humidity, or conditions where condensation may occur.

7 AFTER-SALE SERVICE

7-1 Repair

- 1) Before requesting repair, please check the following items again:
 - Does the LCR700/LCR701 have sufficient battery capacity? Is the battery installed with the correct polarity?
 - Are there any abnormalities in the appearance or operation of the LCR700/LCR701?
- 2) Notes on repairs:
 - Repairs will be performed for a fee only if the product's original functionality can be restored.
 - In some cases, repair and transportation cost may become higher than the price of the product. Please contact a Sanwa authorized agent, distributor, or service provider in advance.
 - The minimum retention period of service functional parts is 6 years after the discontinuation of manufacture. This retention period is the repair warranty period. Please note, however, if such functional parts become unavailable for reasons of discontinuation of manufacture, etc., the retention period may become shorter accordingly.
 - 3) Precautions when sending the product to be repaired:
 - To ensure the safety of the product during transportation, place the product in a box that is larger than the product 5 times or more in volume and fill cushion materials fully.
 - Clearly mark "Repair Product Enclosed" on the box surface.
 - The cost of sending and returning the product shall be borne by the customer.

7-2 SANWA web site

<https://www.sanwa-meter.co.jp>

E-mail: exp_sales@sanwa-meter.co.jp

8 SPECIFICATIONS

8-1 General Specifications

Interface specification	Compliant with USB Specification Rev1.1
Source voltage	5 V DC (supplied from USB bus)
Operating environment	Temperature 0 to 40°C, humidity 0 to 80% (no condensation)
Cable length	Approx. 1.3 m
Accessory	Instruction manual

8-2 Communication Specifications

This section is intended for users who develop their own communication software. Users who use LCRLink (communication software) downloaded from our website do not need to read this section. Here, we describe the communication specifications between the LCR700/LCR701 and the LCR-USB2.

Note:
We do not guarantee the operation of any program developed based on this manual, nor do we provide support for inquiries related to such programs.

• Description of MREAD1 (Block4)

Bit	Name	Description
0	N/A	Unused
1	N/A	Unused
2	N/A	Unused
3	BAT	Battery 00 : less than 5 %, 01 : less than 30 % 10 : less than 60 %, 11 : more than 60 %
4	MREAD1	Measuring frequency 000 : 100 Hz, 001 : 120 Hz, 010 : 1 kHz 011 : 10 kHz, 100 : 100 kHz
5	FREQ	
6		
7		

• Description of STATUS2 (Block5)

Bit	Name	Description
0	SORTP	Timing of data transfer • Transmission timing from the LCR700/LCR701: The LCR700/LCR701 sends data as a reading on the LCD display is updated (2 times/sec.) when RTS is active.
1	SREAD1	
2	SREAD2	
3	SSCOPE	
4	SSTATUS	
5	SMOD	
6	N/A	
7	N/A	

• Description of STATUS0 (Block3)

Bit	Name	Description
0	HOLD	1: The Data Hold (HOLD) mode is active.
1	RELRF	1: The reference value display of the relative measurement is active.
2	REL	1: The relative measurement (△) is active.
3	CAL	1: The calibration mode is active.
4	SORT	1: The sorting mode is active.
5	AUTO LCR	1: The auto LCR mode is active.
6	AMOD	1: The automatic measurement mode is active.
7	MOD	0: Series measurement 1: Parallel measurement

• Description of MMOD3 (Block6)

0	MDOT	Mode in the main display
---	------	--------------------------