

PW8001 Data Receiver user's manual

1.Introduction

“PW8001 Data Receiver” is an application software to save the measurement data calculated by HIOKI PW8001 power analyzer on PC.

Supported models	Product name
PW8001	Power Analyzer

PW8001 Data Receiver can do the following.

- Save measurement data to PC in CSV format
- Remote control of the PW8001 instrument from PC

2.System Requirements

The following systems must be installed on your computer to use PW8001 Data Receiver.

Minimum System Requirements

Operating system	Windows 11, Windows 10 (64-bit edition) Version 21H2 or later
CPU	Intel ® Corei3 or higher or equivalent processor
Memory	4GB or more
Storage	250GB or more
Display	Display High-definition (1366 x 768) or higher
Communication Interface	LAN
Input device	Keyboard, Mouse, Touch devices

Recommended System Requirements

Operating system	Windows 11, Windows 10 (64-bit edition) Version 21H2 or later
CPU	Intel ® Corei7 or higher or equivalent processor
Memory	8GB or more
Storage	SSD 500GB or more
Display	Full high definition (1920 x 1080) or higher
Communication Interface	LAN
Input device	Keyboard, Mouse, Touch devices

PW8001 Requirements

Firmware version number	V1.61 or later
-------------------------	----------------

3.Installation

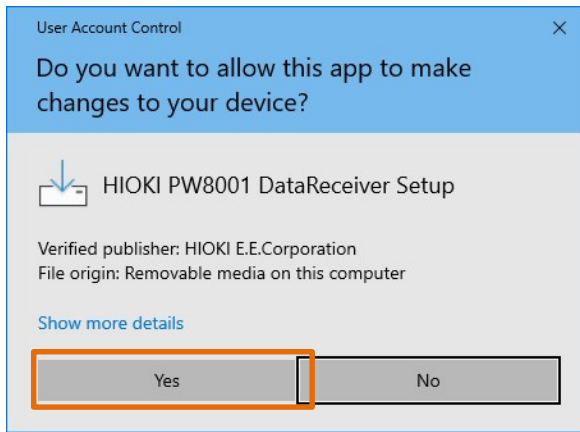
Delete the previous version of the “PW8001 Data Receiver” folder, folder by folder. If you have created a shortcut icon on the desktop, delete the shortcut icon as well.

Perform the following steps using an administrator account.

- 1. Double-click on [Setup_PW8001DataReceiver_x.xx.x.exe]



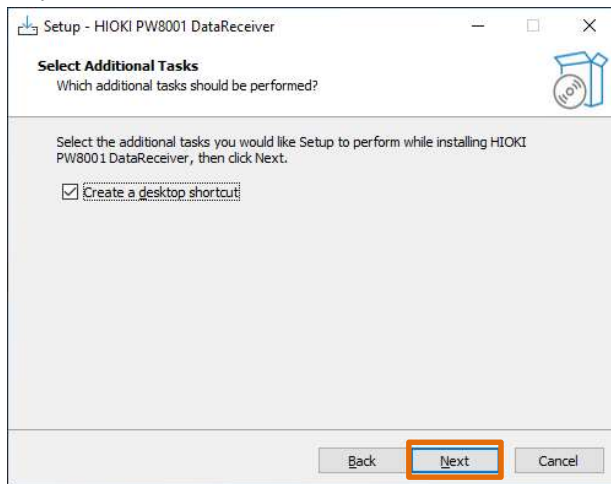
- 2. Another warning message will appear. Click “Yes” to agree to add changes to the device.
(This message may not appear depending on previously made settings.)



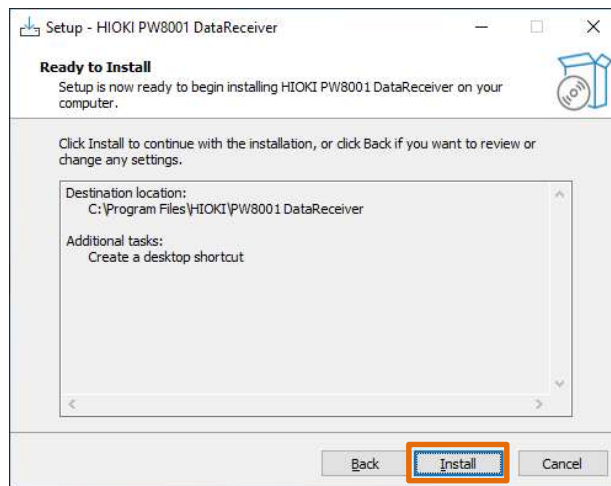
- 3. The Welcome screen will appear, and click on "Next."



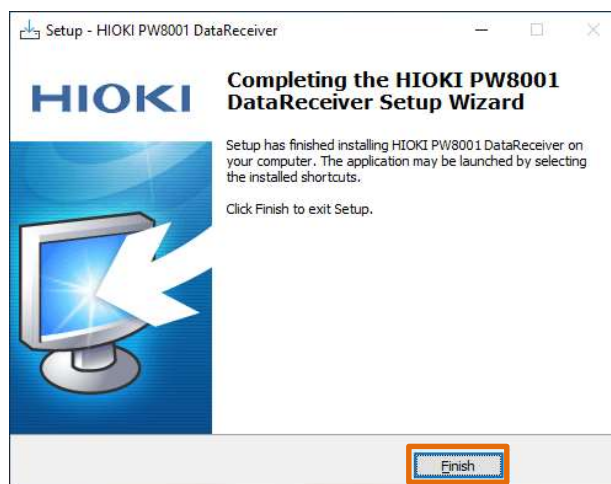
-4. Verify that the check boxes are activated as shown below, and click “Next”.



-5. Click “Install”.



-6. When the following dialog window is displayed, click “Finish”.



-7. Installation is completed.

4. Using the Software

4.1. Setting up the PW8001 instrument

Before starting the application, please set up the PW8001 instrument.

After setting up the PW8001 instrument, click the "Reload" button on the application settings screen to retrieve information on the instrument.

The PW8001 instrument wiring can be set as desired.

4.2. Connection between PW8001 and PC

Connect the PC to the PW8001 instrument via LAN.

*** Firmware version v1.61 or later is required for the PW8001 instrument.**

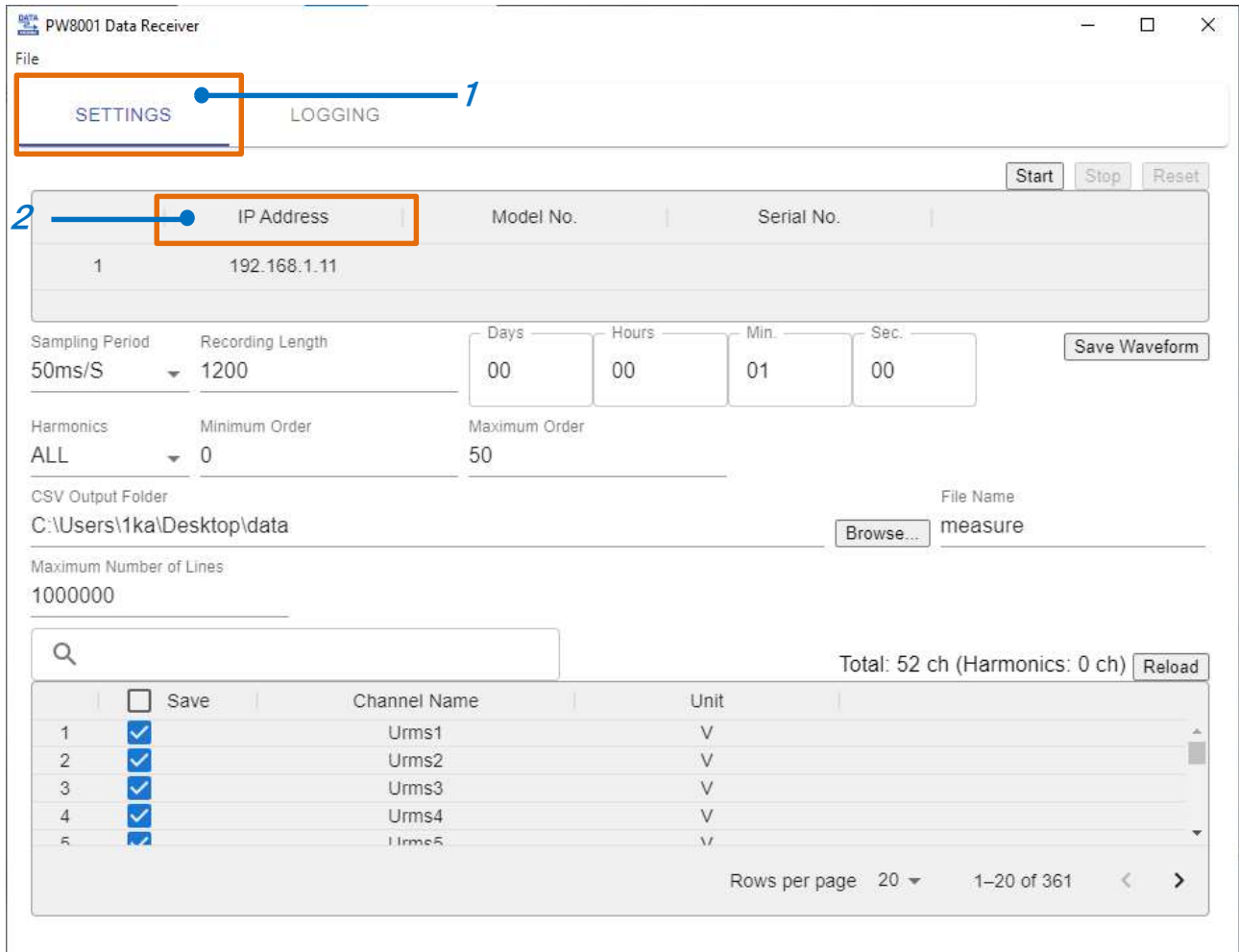
4.3. Launching the Application

To start the application, click on "HIOKI" - "HIOKI PW8001 DataReceiver" from the Start menu.



4.4. How to connect to PW8001

- First, make a communication connection between the PW8001 instrument and the PC.
- Go to the SETTINGS screen and double-click on the line under IP Address to display the configuration dialog.



Set the IP address of the PW8001 instrument.

*For details on how to recognize the IP address of PW8001, refer to the user's manual of PW8001.



- If the connection is successful, the Model No. and Serial No. information of the recognized PW8001 will be displayed.

4.5. Settings

Configure various logging settings.

The screenshot shows the 'SETTINGS' tab of the 'PW8001 Data Receiver' application. The interface includes a table for device information, a 'Start' button, and a 'Save Waveform' button. The 'Recording Length' is set to 1200. The 'Sampling Period' is set to 50ms/S. The 'Harmonics' are set to ALL, 'Minimum Order' is 0, and 'Maximum Order' is 50. The 'CSV Output Folder' is C:\Users\1ka\Desktop\data and the 'File Name' is 'measure'. The 'Maximum Number of Lines' is 1000000. A table lists channels (Urms1 to Urms5) with checkboxes for saving and units (V). A search bar and a 'Reload' button are also present.

	Item	Description
1	Sampling Period	<p>Set the recording interval.</p> <p>Selectable range: 1ms/S, 10ms/S, 50ms/S, 200ms/S, 1s/S, 2s/S, 5s/S, 10s/S, 30s/S, 1min/S</p> <p>The maximum number of channels that can be measured depends on the recording interval.</p> <p>1ms/S : Max. 50ch (Harmonic measurement items are not selectable.)</p> <p>10ms/S : Max. 500ch</p> <p>50ms/S : Max. 2,500ch</p> <p>200ms/S or later: Max. 10,000ch</p>
2	Recording Length	Sets the record length of the measurement.

		<p>You can configure the data recording time for both the number of points and duration.</p> <p>If 0 point is specified, the measurement is continuous.</p> <p>Maximum recording time is 10 days.</p>
3	Save Waveform	<p>The waveform data displayed on the PW8001 instrument's screen is saved to the PC. The data is stored in a folder named "WAVEdata" within the folder specified in the "CSV output folder" setting. The files have a ".BIN" extension.</p>
4	Harmonics	<p>Specify the type of harmonic order.</p> <p>(ALL / EVEN / ODD)</p>
	Minimum Order	<p>Please specify the minimum order of harmonics when saving the CSV file.</p>
	Maximum Order	<p>Please specify the maximum order of harmonics when saving the CSV file.</p>
5	CSV output folder	<p>Specify the folder for CSV output.</p> <p>Press the [Browse...] button to specify the folder.</p> <p>* Please create the folder you wish to specify in advance before entering a folder name.</p>
6	File Name	<p>Specify the name of the CSV output file.</p> <p>A number representing a sequential number will be added to the name entered here.</p> <p>Example: If the file name is "name", the output file name is "name_1.csv".</p>
7	Maximum number of lines	<p>Set the maximum number of lines in the CSV output file.</p> <p>If the maximum number of lines is exceeded, the file will be split.</p> <p>(Maximum 1,000,000 lines)</p>
8	Reload	<p>Connects to the PW8001 instrument via LAN to obtain a list of channel information.</p> <p>The Reload button must be pressed beforehand when starting a measurement and when connecting remotely.</p>
9	Save item list	<p>Check the checkbox in the Save column for the channels you wish to export to CSV.</p> <p>You can filter the channels to be displayed by entering a string in the search field.</p> <p>Click the checkbox to the left of "Save" to turn it on or off all at once.</p>

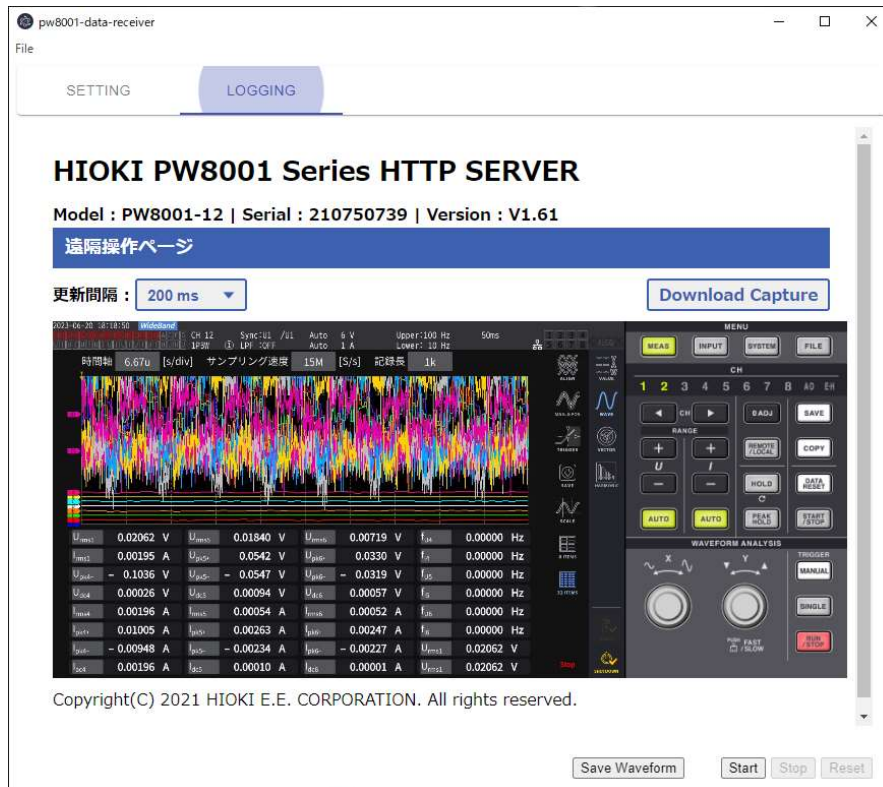
* Regarding the specified recording length, we guarantee normal operation for a maximum of 72 hours. Within this range, you can expect stable performance and proper functionality.

If longer usage exceeding 72 hours is required, please proceed at your own responsibility.

4.6. Logging Screen

On the logging screen, you can save the PW8001 instrument measurement data as a CSV file and perform remote operations on the PW8001 instrument.

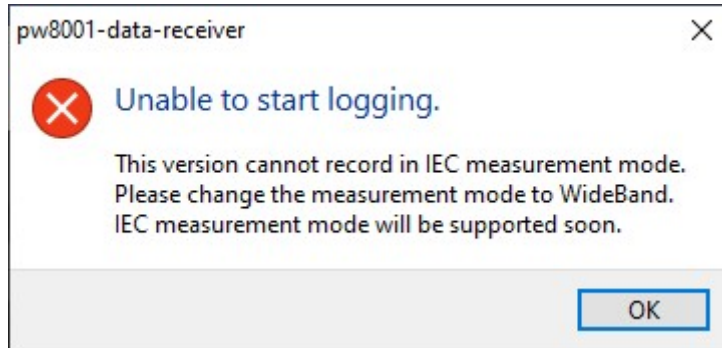
* Do not operate the remote operation screen during measurement. Also, do not operate the PW8001 instrument.



	Item	Description
1	Save Waveform	The waveform data displayed on the screen of the instrument is saved to the PC. This is the same function as the "Save Waveform" button on the settings screen.
2	Start	Press this button to start measurement.
3	Stop	Press this button to pause measurement. The next time measurement is started, and the result is appended to the previous CSV file.
4	Reset	Resets the measurement. The next time measurement is started, the result is output to a new CSV file.

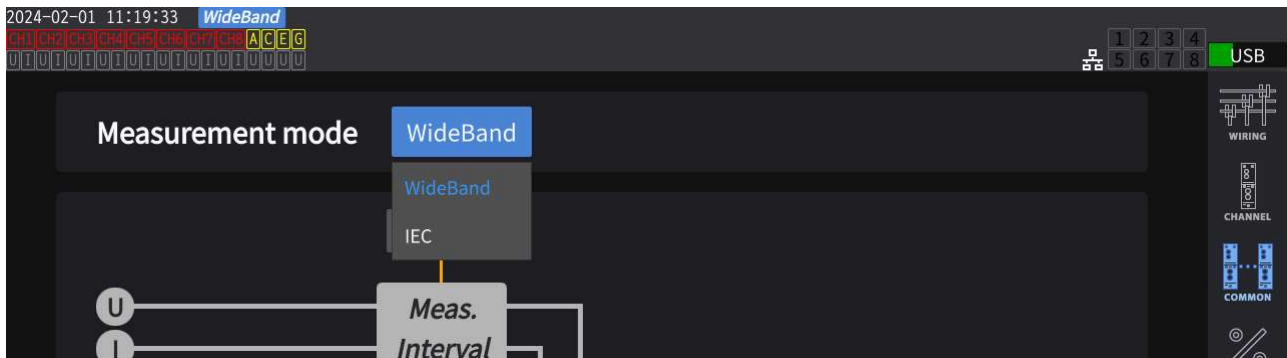
Note

When the measurement mode of PW8001 is "IEC", measurement cannot be started. An error dialog appears when starting measurement.



Please follow the procedure below to change to “WideBand” measurement mode and start measurement.

- 1. Tap the [INPUT] key → [COMMON] icon on the PW8001 to move to the setting screen.
- 2. Change the measurement mode to [WideBand].



4.7. Saving CSV data

During the measurement, the data is automatically saved in CSV format.

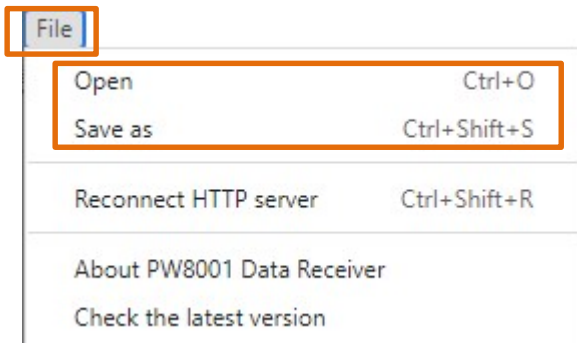
CSV data will be saved in a folder created for the time when recording started under the folder specified in the "CSV Output Folder" setting.

Example: When recording started at 12:34:56 on 09/31/2023, the data will be saved in the folder "20230931123456".

* When you resume the measurement, it will be appended to the same file. However, if you have the CSV file open in Excel or any other application, the file will be locked by Excel, preventing the application from writing to the file and causing an error. Please be careful not to have the CSV file open in Excel or any other application when starting the measurement.

4.8. Saving and loading settings

Click on the [\[File\]](#) menu in the upper left corner of the screen to display the Open / Save as menu.

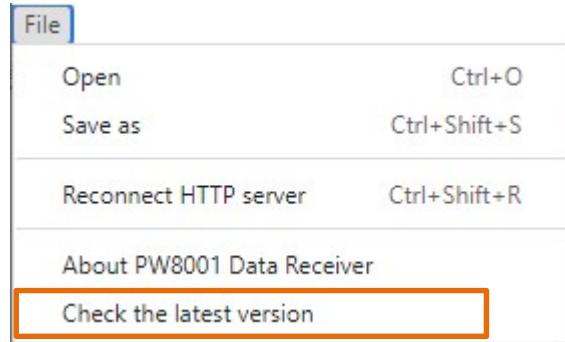


	項目	説明
1	Open	Open the app settings by specifying a JSON file.
2	Save as	Save the app settings to a JSON file.

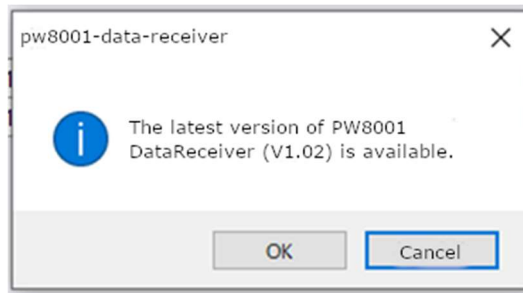
* During measurement, pause, and waveform acquisition, you cannot perform the loading and saving of settings.

4.9. Checking the latest version

Click [File] in the upper left corner of the screen to display the menu.
Click [Check for Latest Version] in the menu.



When the latest version is released:



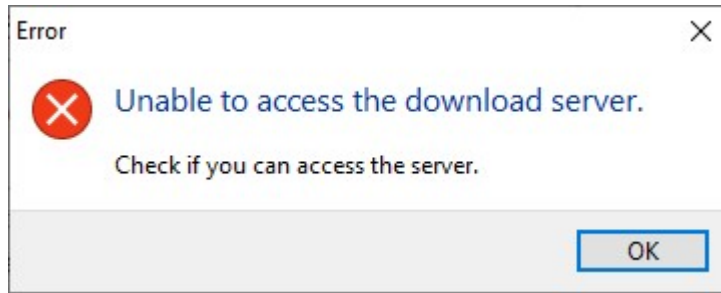
Click OK to start upgrading.

When the version was already up-to-date:



	Item	Description
1	Check for newer versions at startup.	By checking this checkbox, PW8001 Data Receiver will automatically check for the latest version release upon startup.

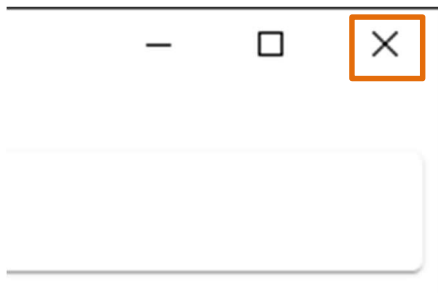
When not connected to the Internet:



An error dialog will appear. Please make sure you are connected to the Internet and execute again.

4.10. Quitting the Application

Click [X] on the top right corner of the application window to quit the application.



... and upwards